CPUC Hosted Workshop on Phase 2 Implementation of R15-01-008

- Cost effectiveness topic

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Finding the ways that work

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High level take-away

- Compelling evidence demonstrates that large natural gas leaks, and degraded system integrity presents a risk for public safety, the environment and utilities
- Methane emissions management programs improve overall system integrity and safety
 - yields overlapping benefits.
- <u>Cost-effectiveness should not be</u> <u>considered solely on \$ per MCF reduced</u>
- BPs should not be considered individually

Cost-effectiveness should take into account multiple values

- Traditional costs for program implementation
- Future reduced leak repair costs
- Reduced gas lost to leakage
- Avoided social costs of methane
- Shifting from emergency to planned work
- Safety improvements
- System reliability improvements
- Lower insurance costs
- Reduced tech. acquisition and operation costs
- Other values as appropriate

Cost-effectiveness should use a portfolio approach

- Portfolio: view mandatory best practices as group, not individually
- Comprehensive: consider all costs and benefits from a societal perspective
- Avoid atomism (purposeful separation of benefits and costs into discrete parts)
 - Misses societal values, notably social cost of methane
 - Misses non-market values, such as reliability gains and safety benefits

Example of How Cost Per MCF Reduction Criteria is Too Narrow

 SoCalGas Exemption from 3-Year Survey Cycle Based on Cost per MCF Reduction Compared to Five Year Survey Cycle

- SoCalGas Cost, 3 Year Cycle: \$15,264,918 (exemption approved through 1371 Advice Letter)
- PG&E Cost: \$26,236,160 (approved through GRC)

Example of How Cost Per MCF Reduction Criteria is Too Narrow (SCG 3-year survey example)

- Stochastic variation of leaks means some portion of leaks discovered will be major emissions sources, or present safety concerns
- More rapid detection and repair of major emitters reduces safety impacts – not considered in decision granting 5 year proposal

EDF Proposed Framework for Evaluation

• CPUC evaluate cost-effectiveness of the portfolio of BPs including all benefits

 – e.g., value of MCF avoided, environmental impact of avoided methane, system reliability, safety improvements, etc.

In essence – a modified societal cost test

EDF Proposed Framework for Evaluation cont.

• CPUC evaluate cost-effectiveness taking into account use of best available technology

– e.g., use of predictive analytics, more effective leak detection technology

• Eliminate Recovery for LUAF To Better Align Incentives and Reflect Cost to Ratepayers

Application of EDF Proposed C/E Framework

- Proper application of C/E test would likely have all leaks above certain size thresholds get fixed – and allow for de minimis size leaks to be considered independently or in classes
- Technology adoption would take into account ability to find and respond to super-emitters quickly due to obvious safety and system integrity benefits