

2023 Natural Gas Leak Abatement (NGLA) Technical Working Group

10:00am-2:15pm

Thursday, September 28, 2023



California Public
Utilities Commission

Welcome, Introductions, and Agenda

CPUC




California Public
Utilities Commission

Housekeeping Notes

- **Audio**

- Please mute your microphone unless you are speaking

- **Format: Technical Working Group**

- No binding decisions will be made
- CPUC staff will moderate discussion
 - Click the hand next to your name in the participant list to raise hand → 

- **Timing**

- We will try to stick to times outlined in the agenda for each question and presentation

Attendees

Staff from the following companies and agencies:

- CPUC (ED and SPD)
- CARB
- PG&E
- Southwest Gas
- Sempra (SoCalGas and SDG&E)

Purpose of the Workshop

Resolution G-3595 (page 15):

“Given the questions about the cost effectiveness of the leak abatement program as a whole, and concerns about increasing rate pressure, we find that the Technical Working Group should be convened by September 30, 2023, to receive input and find balance between the dual priorities of the NGLA program: achieving maximum methane emission reductions and cost-effectiveness.”

Detailed Agenda

PARTICIPANTS	TOPIC	TIME
CPUC	Agenda Review and Introductions	10:00-10:10am
CPUC	Overview of Workshop Questions	10:10-10:20am
All Participants	Question #1	10:20-10:40am
All Participants	Question #2	10:40-11:00am
All Participants	Question #3	11:00-11:20am
All Participants	Question #4	11:20-11:40am
All Participants	General Discussion	11:40am-12:00pm
-	Lunch	12:00-1:00pm
Sempra	Safety Component to Cost Effectiveness	1:00-1:20pm
All Participants	Discussion of Sempra Presentation	1:20-1:40pm
All Participants	General Discussion	1:40-2:00pm
CPUC	Closing Thoughts and Next Steps	2:00-2:15pm

Workshop Questions

1. What are the challenges of determining the cost effectiveness of measures? Including:
 - a. Quantification of the social cost of methane
 - b. Quantification of other benefits, such as safety
2. What are the challenges of improving the cost effectiveness of measures?
3. What are appropriate cost effectiveness goals for the measures? Is a breakeven cost effectiveness a reasonable expectation?
4. Are the current compliance plan format and emissions reporting templates achieving the right level of reporting on cost effectiveness and reduction measures? Are there any suggested improvements?

D.19-08-020 Cost Effectiveness Ordering Paragraphs

1. As directed by this decision and the California Public Utilities Commission (CPUC) Safety and Enforcement Division, Pacific Gas and Electric Company, Southern California Gas Company, San Diego Gas & Electric Company, and Southwest Gas Company are directed to **use the Utility Proposed Cost-Effectiveness Methodology to provide useful information when evaluating proposed methane reduction measures** and for evaluating the Biennial Methane Leaks Compliance Plans, while maintaining full discretion for the CPUC to also consider qualitative factors and policy goals as detailed in this decision.
2. As directed in this decision, Pacific Gas and Electric Company, Southern California Gas Company, San Diego Gas & Electric Company, and Southwest Gas Company shall use two cost-benefit tests in future Compliance Plans, for information and comparison purposes.
 - a. The first test shall **calculate the cost-benefits of individual proposed methane reduction measures, and the Compliance Plan as a whole**, by determining the ratio of all reasonably quantifiable benefits to costs. In addition, methane reduction measures that together are intended to reduce one type of emission may be grouped together for purposes of the cost-benefit calculation, if this is most appropriate.
 - b. The second cost-benefit test shall be the same as above but shall also **include as a benefit the avoided social costs of methane**, using the Interagency Working Group's average value with a 3 percent discount rate.
3. All cost-effectiveness calculations and cost-benefit tests shall **include avoided Cap-and-Trade costs as a benefit**, using the Emission Conversion Factor and Proxy greenhouse gas Allowance Price used for the gas utilities' forecast revenue requirements pursuant to Decision 15-10-032.

Cost Effectiveness Calculations

Standard Cost Effectiveness:

$$\frac{AARR - \text{Cost Benefits}}{\text{Emissions Reductions}}$$

Cost Effectiveness with Avoided Cap and Trade Costs:

$$\frac{AARR - \text{Cost Benefits} - \text{Avoided Cap \& Trade Costs}}{\text{Emissions Reductions}}$$

Cost Effectiveness with Avoided Social Cost of Methane and Cap and Trade Costs:

$$\frac{AARR - \text{Cost Benefits} - \text{Avoided Cap \& Trade Costs} - \text{Social Cost of Methane}}{\text{Emissions Reductions}}$$

AARR = "Average Annual Rate Requirement"

Question #1

What are the challenges of determining the cost effectiveness of measures? Including:

- a. Quantification of the social cost of methane
- a. Quantification of other benefits, such as safety

Social Cost of Methane Value Changes?

Social Cost of Methane (2007 \$ per metric ton)

	5%	3%	2.5%	High Impact
Year	Average	Average	Average	(3% 95th)
2010	370	870	1,200	2,400
2015	450	1,000	1,400	2,800
2020	540	1,200	1,600	3,200
2025	650	1,400	1,800	3,700
2030	760	1,600	2,000	4,200
2035	900	1,800	2,300	4,900
2040	1,000	2,000	2,600	5,500
2045	1,200	2,300	2,800	6,100
2050	1,300	2,500	3,100	6,700

Table ES-2: Social Cost of CH₄, 2020 – 2050 (in 2020 dollars per metric ton of CH₄)

Emissions Year	Discount Rate and Statistic			
	5% Average	3% Average	2.5% Average	3% 95 th Percentile
2020	670	1500	2000	3900
2025	800	1700	2200	4500
2030	940	2000	2500	5200
2035	1100	2200	2800	6000
2040	1300	2500	3100	6700
2045	1500	2800	3500	7500
2050	1700	3100	3800	8200

- Currently adopted through D.19-08-020
- From Study performed in 2009 by US Government Interagency Working Group
- Approximately \$21/MCF in 2020 using 3% discount rate
- Updated in 2021 by US Government Interagency Working Group
- Adjusted for inflation using 2020 Dollars
- Approximately \$27/MCF in 2020 using 3% discount rate

Question #1

What are the challenges of determining the cost effectiveness of measures? Including:

- a. Quantification of the social cost of methane
- a. Quantification of other benefits, such as safety

Question #2

What are the challenges of improving the cost effectiveness of measures?

Question #3

What are appropriate cost-effectiveness goals for measures? Is a breakeven cost effectiveness a reasonable expectation?

Question #4

Are the current compliance plan format and emissions reporting templates achieving the right level of reporting on cost effectiveness and reduction measures? Are there any suggested improvements?

General Discussion

1. What are the challenges of determining the cost effectiveness of measures? Including:
 - a. Quantification of the social cost of methane
 - b. Quantification of other benefits, such as safety
2. What are the challenges of improving the cost effectiveness of measures?
3. What are appropriate cost effectiveness goals for the measures? Is a breakeven cost effectiveness a reasonable expectation?
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Lunch Break

Please return at 1:00pm



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Sempra Presentation

Safety Component to Cost Effectiveness

Safety Benefit Discussion

1. Should a safety component be incorporated into the cost-effectiveness calculations of submitted compliance plans?
2. Should a safety component be considered for all measures presented in a compliance plan, or just a select number?
3. Should the safety component be included in the standard cost-effectiveness calculation (and therefore applied to all cost-effectiveness calculations)? Should an additional cost-effectiveness calculation be developed?
4. Should a safety component be weighted against other components of the cost-effectiveness calculation?

General Discussion

Closing Comments

Thank you for your participation

For additional questions or comments, please contact:

Gary Ermann

Utilities Engineer, Safety Policy Division

California Public Utilities Commission

[505 Van Ness Ave, San Francisco, CA 94102](https://www.cpuc.ca.gov/locations/505-van-ness-ave)

(415) 703-1429 (Office) / (916) 709-4031 (Mobile)

Gary.Ermann@cpuc.ca.gov



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