ARB/CPUC Hosted Workshop on Targets, Compliance and Enforcement for R15-01-008

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April 12, 2016 workshop is the first after the staff report on the SB 1371 best practices proposal, and ruling on annual reporting requirements…

Targets, compliance and enforcement should follow from those implementation documents
DISCLAIMER: The views and opinions expressed herein are made for the purpose of stimulating discussion and inquiry. EDF reserves the right to change any or all portions of the arguments contained at any time.
Principles for target setting

• SB 1371 requires the CPUC to minimize leaks, so targets must not limit the amount of reductions made

• Setting targets will require accurate and comparable measurements of emissions, which we will not have until the next reporting period

• When possible, targets should be based on direct measurements of leaks and emissions
Questions for discussion today

- How should the targets be set up?
- Should small utilities have a different target?
- Should storage companies have a different target?
- How can we go further than a 40% reduction?
- Should there be interim targets?
- Prioritizing emission reductions in disproportionately impacted communities?
How should the targets be set up?

By emission source / equipment type

Leak target’s established in 15-01-008 should comport to the text of the enacting legislation that says:

“reduce emissions of natural gas … maximum extent feasible” and with due consideration of cost.
How should the targets be set up?

By emission source / equipment type

Nothing presented in this proceeding, or in any experience EDF has had with leaks would indicate that it is technologically infeasible to fix any one leak.

- Some are harder and more expensive than others, in fact, some may be tremendously hard to fix, but we have never seen a case where it is impossible.

- In some situations, replacing the equipment is an option for leak repair.
How should the targets be set up?

By emission source / equipment type

If it is technologically feasible to fix every leak, the question becomes the “due consideration of cost” or “cost-effective,” and what is a best practice 975(e)(4)

Result: Targets should be set up to require every leak to be fixed unless cost considerations clearly outweigh the benefits

Targets are most effective, relevant at equipment source / equipment type level
How should the targets be set up?

By emission source / equipment type

Cost effectiveness test that should be applied:

Whether there are higher benefits than costs

Choice of test matters
How should the targets be set up?

By emission source / equipment type

Looking at targets through the lens of cost effectiveness, several potential cost-effectiveness tests available

- **Total Resource Cost Test** - Compares the program benefits of avoided supply costs to costs for administering a program

- **Ratepayer Impact Test** - Does the program result in higher energy service costs for customers

- **Utility Cost Test** – Do avoided supply costs exceed utility costs

- **Participant Test** - Compares bill savings against incremental costs

- **Societal Cost Test** – Looks at all quantifiable benefits attributable to a program, such as avoided pollutants and other non-energy benefits.
How should the targets be set up?

By emission source / equipment type

SB 1371 is environmental legislation, minimizing leaks as a hazard to the environment.

The utilities have proposed evaluating things such as the GHG impact of leak, this should not be deemed a typical cost-effectiveness calculation.

The societal cost test is the most relevant test.
How should the targets be set up?

By emission source / equipment type

In a societal cost test framework, the \textit{examination of benefits should be expanded}.

Benefits = avoided cost plus non-energy benefits 
(sales value/energy savings, greenhouse gas, ancillary services, reliability, safety, social / environmental)

Costs = program administration and customer costs 
(cost of repair)
How should the targets be set up?

By emission source / equipment type

CONCLUSION:

In setting targets and thresholds, all emission sources / equipment types must be repaired – **repair threshold by which an action becomes infeasible on C/E grounds must be established**

And, the **test to establish the threshold must include the full range of factors in the benefits calculation.**

Although traditional CPUC C/E tests have declined to include the full range of benefits, SB 1371, as an environmental matter, requires it. The utilities have also recognized this – arguing GHG impacts should be considered in C/E
How should the targets be set up?

By emission source / equipment type

CONCLUSION:

Proper application of C/E test should have all leaks above certain size thresholds get fixed – and allow for de minimis size leaks to be considered independently or in classes

Avoided greenhouse gas costs should include consideration of the societal impact of methane – using best scientific information on technical warming potentials, social cost of methane
How should the targets be set up?

**Industry wide targets**

An informative piece of information to track rule implementation, and not a compliance based.

However – it should inform whether the implementation of the utility leak practices are sufficient to reduce emissions and meet the goals of protecting the climate.

Should be compared to climate warming potential and sector targets established in statute.
How should the targets be set up?

Company targets

Is another informative piece of information, to track rule implementation, and utility practices, but not compliance based

Should be compared to the best achievable emission rate observed –and comparison to other companies both in California and out
Should small utilities have a different target?

No: If targets are based on emission source / equipment type, there is no need to treat any one utility differently – regardless of size. All leaks to be repaired unless they fall under the threshold determined by the C/E test.

Also, since targets for the industry and by company are informative (not for compliance but for tracking and evaluation against goal setting) – there is no need to change treatment based on size.
Should storage companies have a different target?

No – All leaks to be repaired unless under the threshold as determined in C/E test.

As identified by the South Coast AQMD and CPUC / DOGGR, NG storage fields are leak prone. Yet they can be leak free. Also, as shown at Aliso Canyon, NG storage is a higher risk category, making the avoided costs associated with leak elimination very high.

Application of C/E test likely yields mandatory repair of all leaks.
207 leaks repaired in 10 days

<table>
<thead>
<tr>
<th>Storage Provider or Utility</th>
<th>Number of leaks discovered</th>
<th>Number of leaks repaired</th>
<th>Grade</th>
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<tr>
<td>Southern California Gas Company</td>
<td>106</td>
<td>106</td>
<td>Non minor non-hazardous or minor non-hazardous</td>
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<tr>
<td>Wild Goose Storage</td>
<td>27</td>
<td>21</td>
<td>3(High priority) 8(Medium priority) 16(Low priority)</td>
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<tr>
<td>Lodi</td>
<td>0</td>
<td>0</td>
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<td>Central valley Gas Storage</td>
<td>2</td>
<td>2</td>
<td>1 (Grade 2) 9 (Grade 3)</td>
</tr>
<tr>
<td>Gil Ranch</td>
<td>10</td>
<td>1</td>
<td>1 (Grade 2) 9 (Grade 3)</td>
</tr>
<tr>
<td>PG&amp;E</td>
<td>84</td>
<td>77</td>
<td>8 (Grade 1) 18 (Grade 2) 58 (Grade 3)</td>
</tr>
</tbody>
</table>
How can we go further than a 40% reduction?

Requiring repair of all leaks — and applying a C/E test that looks at societal costs get you there.

At present - the 40% reduction target is not a statutory target to the sector— but rather a target that is applied as a goal to the value chain. In fact, CA doesn’t have that as a target yet — and in some cases, a 40% target is not enough.

The goal should be to minimize leaks — possibly even lower than 40%
How can we go further than a 40% reduction?

Also…

Continuing to improve leak detection technology, improve repair timelines, updating best practices as new technologies and procedures become available, and requiring transparency in the entire process!
Should there be interim targets?

Yes – there should be interim targets, and based on the information gained in the reports from June 2016.

Informative targets should be updated as utilities better understand their emissions – when utilities begin quantifying emissions it is important to ensure that.
Prioritizing emission reductions in disproportionately impacted communities?

• Mapping of leaks ensures the public and utilities know where leaks are

• CPUC should consider Cal Enviroscreen to ensure leaks are not left in overly burdened communities

• Applying targets to require every leak to be fixed unless cost considerations prevent - ensures that no area of California is disproportionately impacted by emissions from the transmission and distribution systems