SED EVALUATION REPORT

FOR INDEPENDENT GAS STORAGE AND LOCAL DISTRIBUTION COMPANIES

2018 LEAK ABATEMENT COMPLIANCE PLAN

Alpine Natural Gas,
Central Valley Gas Storage,
Gill Ranch Storage,
Lodi Gas Storage,
West Coast Gas, and
Wild Goose Storage

I) EXECUTIVE SUMMARY

On March 15, 2018, jurisdictional gas utilities submitted their Methane Leak Compliance Plans, as directed by Commission decision (D.) 17-06-015 in R. 15-01-008, the Rulemaking to Adopt Rules and Procedures Governing Commission-Regulated Natural Gas Pipelines and Facilities to Reduce Natural Gas Leakage Consistent with Senate Bill 1371.[1] Six of the gas companies as a group account for less than 0.5% of the total methane emissions in the baseline inventory established in the *Analysis of the Utilities' June 17, 2016, Methane Leak and Emissions Reports Required by SB 1371* ("2015 Baseline Leak Inventory"), and these companies were identified as Class C (lower emissions) operators in the decision. Class C operators may claim exemption from certain best practices.

Pursuant to D. 17-06-015, the Commission's Safety and Enforcement Division (SED), in cooperation with the California Air Resources Board (CARB), has evaluated the Compliance Plans and provides this written response encompassing the six companies in the Class C Category: Alpine Natural Gas, Central Valley Gas Storage, Gill Ranch Storage, Lodi Gas Storage, West Coast Gas, and Wild Goose Storage.

SED approves the six Compliance Plans with some observations and exceptions as follows.

<u>Exemptions from Best Practices</u>

Decision D. 17-06-015 allows exemptions to certain Best Practices for Class C companies due to their smaller scale of operations and low reported methane emissions. These Best Practices apply to things like large transmission operations, specialized labor forces, and broad distribution networks. All six of the Class C companies have decided to claim those exemptions in their Compliance Plans, as detailed later in this report. SED accepts these claimed exemptions.

<u>Some Best Practices are Not Applicable</u>

West Coast Gas and Alpine Natural Gas are local distribution companies, which do not operate pipelines above 60 psig. These companies requested exemption from Best Practices BP-3 through BP-7. SED

[1] The Plans are available online at http://www.cpuc.ca.gov/riskassessment/

agrees that BP-3 through BP-7 do not apply to local distribution systems operating below 60 psig. SED grants the requested exemptions.

Emission Reduction Estimates

The Decision requires that Respondents estimate the emission reduction expected by 2020 and their strategy for achieving a 40% reduction by 2030. Most of the Plans do not specify the expected reduction in 2020 or discuss the 40% goal directly but do describe their emission control practices and plans. SED expects the companies to address the 2030 goal in their 2020 Compliance Plan.

II) INTRODUCTION

BACKGROUND: D. 17-06-015 ordered jurisdictional gas pipeline operators to file a Biennial Compliance Plan, detailing how they would adopt the Decision's 26 Best Practices for methane emissions detection, quantification and reduction, as well as for operations and training. The Compliance Plans were required to be part of the operator's annual Gas Safety Plan under CPUC General Order (GO) 112-F. Some of the Best Practices included allowance for Pilot or R&D programs to evaluate the cost-effectiveness of potential methods and technologies and application to the utility's specific operating conditions before adoption.

EVALUATION APPROACH: SED reviewed the Compliance Plans in collaboration with California Air Resources Board (CARB). Elements of the Compliance Plans which raised concerns or require modification will be discussed in detail in below.

III) COMPLIANCE PLAN REVIEW

The Decision ordered that the "Compliance Plans shall include information on how each Respondent plans to achieve a 40% reduction of emissions below 2013 levels by 2030, what level of reduction would be achieved by 2020, and how they plan to achieve the 2020 reduction level." (D.17-06-015, ¶6(c) at p. 160). D.17-06-015 established that the 2013 baseline will be represented by the 2015 emissions inventory as reported in the annual Leak Inventory.

Alpine Natural Gas

Alpine did not provide an estimate of reductions for the next two years or discuss specifically how they will achieve a 40% reduction by 2030. However, Alpine already has a "Find-It/Fix-It" leak repair policy which repairs all Grade 3 leaks within 15 months rather than three years. And their entire distribution pipeline is polyethylene pipe which is less likely to leak than older vintage materials. Alpine has adopted the Best Practices that apply to its operation and has claimed exemption from the others.

Alpine is a small local distribution company. The 2016 reported emissions were 244 MCF, 93% of which were estimated from the number of customer meter sets times the CARB emission factor. The Alpine contribution to the 2015 Leak Inventory is 0.0037%.

With respect to BP-15, Alpine has proposed to continue a five-year leak survey interval but states the benefit of a three-year survey is under review. SED notes that Class C utilities may claim exemption from BP-15.

SED approves the Alpine Natural Gas Compliance Plan. However, SED expects Alpine to discuss their approach for reaching the 40% reduction target, including challenges and opportunities, in their 2020 Compliance Plan.

Central Valley Gas Storage

The 2016 Leak Inventory report credits Central Valley (CVGS) with a 45% reduction from the 2015 baseline emissions. The CVGS Compliance Plan expects they will achieve at least a 33% reduction from their 2013 level by 2020. While the level of emissions for storage operations can change year-to-year due to business demands, it appears CVGS is already close to meeting the 2030 goal. SED notes that the CVGS contribution to the 2015 Baseline Leak Inventory is 0.012%.

SED approves the CVGS Compliance Plan.

Gill Ranch Storage

Gill Ranch (GRS) provides several details about current projects underway to reduce emissions and points out their facilities are modern, low-emission designs. Two current projects account for an estimated 15.3% reduction from the 2015 Baseline. GRS cites sections of the Decision that discuss whether a 40% reduction target should be applicable to the very low emissions produced by independent storage providers (ISPs). Gill Ranch states that they are taking many steps to reduce emissions but expect achievement of a 40% reduction will be very challenging. The GRS contribution to the total 2015 baseline is 0.05%.

SED notes that the 40% reduction goal is a soft target and not a firm requirement. As GRS points out, the Decision states that based on the March 2018 filing, the “Commission will be able to rely on its review of ISP compliance plans to ensure ISPs are taking appropriate feasible and cost effective measures to continue to minimize methane emissions and leaks”. SED has reviewed the GRS plan and is satisfied the ISPs including Gill Ranch are taking appropriate measures but expects all gas operators to continue to work towards the 40% goal where feasible and cost effective.

SED approves the GRS Compliance Plan but expects that GRS will discuss the opportunities and challenges for meeting the 40% reduction goal in their 2020 Compliance Plan.

Lodi Gas Storage

Lodi Gas Storage (LGS) anticipates lower emissions by 2020 due to adoption of best practices, but requests that the commission find that the 40% goal should not apply to them because their entire facilities were recently constructed with the goal of eliminating sources of emissions from the start. LGS points out that many features of the pipeline and storage field design, operational practices, and compliance with other emission regulations already provide effective emission control.

SED appreciates that LGS' modern design and currently adopted practices may limit the reductions possible in the future to less than a 40% reduction from the 2015 baseline. the 2016 LGS reported emission of 1635 MCF is only 0.025% of the total 2015 Leak Inventory. However, SED notes that the 40% reduction target is a goal rather than an absolute requirement.

SED approves the LGS Compliance Plan but expects that LGS will discuss the opportunities and challenges for meeting the 40% reduction goal in their 2020 Compliance Plan.

<u>West Coast Gas (WCG)</u>

The WCG Compliance Plan does not estimate reductions for the next two years or how they will achieve a 40% reduction by 2030. However, they have adopted better-than best practices of an annual leak survey (instead of three years) and a policy to repair Grade 3 leaks within 15 months (instead of three years), so SED expects they will achieve some level of emissions reductions. Indeed, the WCG change in reported emissions from 2015 to 2016 is 23% according to the Leak Inventory report data compiled by SED. Staff notes that the WCG contribution to the total 2015 Leak Inventory is 0.01%.

Staff notes that the 23% reduction figure may not be an accurate indication of systematic reductions. There have been changes in the way that emissions have been reported from 2015 to the present, which affect the reduction calculations. And the emission variation from year to year can be significantly influenced by third-party pipeline or meter set damage.

A major change in reporting from 2015 concerns meter set assembly (MSA) leaks. In 2015, WCG reported only the actual MSA leaks discovered by annual survey: 20 leaks accounted for 2.7 MCF of the 509 MCF reported emissions. In 2016, a reporting template change for all gas utilities required an estimate of MSA emissions based on the meter set population count, plus information on the actual MSA leaks in the population. WCG reported 7 MSA leaks for 0.84 MCF in 2016, which were not included in 2016 emissions reporting. Instead, the estimated MSA emissions based on the total number of MSAs times the authorized CARB emission factor accounted for 2016 MSA emissions of 194 MCF: a large portion of the total 391 MCF reported for 2016. SED notes that if the calculated MSA estimate is retroactively applied to the 2015 baseline, the reduction in 2016 would be 44%.

However, the primary factor in the change from 2015 to 2016 was the emission from third-party damages. In 2015 there were two reported damage events with an estimated 364 MCF emission. By 2016 those leaks had been repaired and there were no new damages. Since the total reported emissions in 2016 was 391 MCF, the absence of damage leaks is a big change in the total emissions. SED assumes the same damage prevention programs have been in place during those years so the reduction in damages may not have been influenced by actions taken by WCG, and such damage could occur in the future with corresponding swings in emissions.

SED approves the WCG Compliance Plan. Although WCG has adopted more aggressive best practices than required and is making progress with reductions, SED expects WCG to discuss its strategy for meeting the 40% reduction goal, including challenges and opportunities, in their 2020 Compliance Plan.

Wild Goose Storage

Wild Goose (WGS) anticipates some emissions reduction by 2020 and expects that implementation of the best practices and analysis of results will guide them to identify specific reduction targets to achieve the overall reduction goal in the years to come. WGS points out that the major sources of emission from storage operations are highly dependent on the level of methane injections and withdrawals from year to year. No specific estimates of reductions are stated in the Compliance Plan. SED notes that the WGS contribution to the 2015 Baseline Leak Inventory is 0.36%.

SED approves the WGS Compliance Plan but expects WGS to discuss more specific reduction estimates in their 2020 Compliance Plan.

IV) BEST PRACTICES EXEMPTIONS

Exemptions allowed in the Decision

The Decision allows exemptions from certain Best Practices that may not be feasible or appropriate for the six low-emission "Class C" gas utilities due to burdensome costs and minimal anticipated emission reductions and considering their smaller organizational scale. The six utilities have all decided to take these exemptions. The exempt BP's are:

Best Practice	**Title**	**Comment**
BP-14	Formal Job Classification	Small util. workers are generally not specialized
BP-15	Gas Distribution Leak Surveys	Increase survey intervals from 5 to 3 years
BP-16	Special Leak Surveys	More surveys for leak-prone segments
BP-17	Enhanced Methane Detection	Measurement sensitivity/Mobile/Aerial surveys
BP-18	Stationary Methane Detectors	Intended for large gas facilities
BP-19	Above Ground Leak Surveys	Intended for large emission sources
BP-20a	Quantification	Improve volumetric measurements of leaks
BP-20b	Geographic Leak Tracking	Intended for broad distribution networks
BP-21	"Find-It/Fix-It"	3-year backlog limit for Grade 3 leaks
BP-22	Pipe Fitting Specifications	Adopt tighter pipe fitting specifications
BP-24	Dig-Ins / Public Education Program	Expand Public Awareness campaigns
BP-26	Dig-Ins / Repeat Offenders	Monitor, train, and report frequent offenders

Additional Exemption Requests

Best Practices 3 through 6 only apply to pipelines operating above 60 psig. Best Practice 7 is a policy requiring the bundling of work to reduce venting, which is impractical for the scale of West Coast Gas and Alpine Natural Gas operations. Both companies operate below 60 psig. SED agrees these BPs are not applicable to West Coast Gas and Alpine Natural Gas and grants the requested exemptions.

V) PILOT AND R&D PROGRAMS

Ordering Paragraph 10, part b, of Decision 17-06-015 requires that justifications for proposed R&D and Pilot projects are consistent with criteria in Pub. Util. Code Section 740.1.

None of the six companies have proposed pilot or R&D projects.

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