

October 16, 2013

Richard Bode
Chief – Greenhouse Gas Emission Inventory Branch
California Air Resources Board
1001 I Street
Sacramento, CA 95812-2828

Re: Pacific Gas and Electric Company’s Comments on the Air Resources Board 45-day Amendments to the Mandatory Reporting Regulation

Dear Mr. Bode:

Pacific Gas and Electric Company (PG&E) welcomes the opportunity to submit these comments on the Air Resources Board’s (ARB) 45-day amendments to the Mandatory Reporting Regulation (MRR).

I. INTRODUCTION

PG&E’s comments on the staff proposals are detailed in Section II below. The following summarizes the key issues:

- Reporting Entities Should Include An Active Electricity Service Agreement Number Or Other Appropriate Electricity Financial Contract Identifier
- ARB Should Allow Reasonable Emissions Data Report Modifications
- ARB Should Include A Reasonable Engineering Estimation For Calculating Vented Emissions For Natural Gas Distribution Systems
- ARB Should Allow Engineering Estimates When Direct Leak Measurements Cannot Be Collected Safely
- ARB Should Modify its Measurement Accuracy Requirements
- The MRR Should Not Be Amended to Require Reporting of Toxic Air Contaminants and Criteria Pollutants
- PG&E Requests MRR Data Be Presented in a Way that Facilitates Ease of Comparison to Cap-and-Trade Program Allowance Budgets
- PG&E Requests ARB Make Aggregated CHP Data Publicly Available
- Double-counting Should Be Prevented in Instances of “Reverse Wheeling”
- Pipeline Main Emissions Should Be Listed as a Source Category for Distribution Systems
- Natural Gas Suppliers Should Not Be Required To Report Customers’ ARB ID Numbers
- ARB Should Clarify Section 95103(j)(3)

A. Section 95103. Reporting Entities Should Include An Active Electricity Service Agreement Number Or Other Appropriate Electricity Financial Contract Identifier

We appreciate staff's decision to require entities to report their "natural gas supplier service account identification number or primary account identifier." This additional requirement will further ensure PG&E's ability to accurately distribute revenues and costs associated with its Cap-and-Trade compliance obligation as a supplier of natural gas.

For the electric revenue return immediately at hand however, PG&E encourages ARB to require entities to identify an active electric service agreement as well. During the June 26 workshop, staff proposed an amendment that would require reporting entities eligible for Cap-and-Trade auction revenue from the CPUC to report a primary electricity service agreement into which revenue should be deposited. PG&E recommends staff include an amendment consistent with this discussion.

The California Public Utility Commission's (CPUC) Energy Division is developing an interim solution until the MRR amendments become effective, but the Energy Division Final Staff Proposal¹ on revenue allocation methodologies for Emissions Intensive Trade Exposed (EITE) customers mentions the following: "In addition to data that ARB already collects or has in its possession, Energy Division will need covered entities to report which primary utility account they wish to have credited with allowance revenue. This information is not currently collected via MRR, but we feel that MRR is the most efficient means of collecting this information on an ongoing basis. We recommend that ARB consider adding to its MRR requirements a new data field that represents the reporting facility's primary electricity account identifier. This data field should be a required input for any facility that qualifies for a direct allocation of GHG allowances from ARB and that is also a customer of one of California's IOUs."

To accommodate the CPUC's request, ARB could add the following language to Section 95103(a):

(1) Facility name, assigned ARB identification number, physical street address including the city, state and zip code, air basin, air district, county, geographic location, natural gas supplier name, natural gas supplier customer identification number, an active natural gas supplier service agreement or other financial contract identifier, an active **electric service agreement number or other appropriate financial contract identifier**, and annual billed MMBtu (10 therms = 1 MMBtu).

¹ Section 9.1 (page 100):

<http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M071/K162/71162253.PDF>

B. Section 95131. ARB Should Allow Reasonable Emissions Data Report Modifications

PG&E appreciates staff's amendments to Section 95131(b)(9). However, we remain concerned that verifiers are still allowed too much discretion in the regard and that the regulation does not include an acceptable accuracy band. PG&E recommends the following changes:

~~Section 95131(b)(9) Emissions Data Report Modifications. As a result of data checks by the verification team and prior to completion of a verification statement(s)~~ **Provided the reporting entity receives notice from the verification team at least 10 days prior to the verification deadline, the reporting entity must make a reasonable effort to fix all correctable errors that affect result in a greater than one percent change in reported ~~make any possible improvements or corrections to covered emissions, non-covered emissions, or covered product data in the submitted emissions data report, and submit a revised emissions data report to ARB. Failure to do so will result in an adverse verification statement. Failure to make a reasonable effort to fix correctable errors that do not affect covered emissions, non-covered emissions, or covered product data~~ represents a non-conformance with this article but does not, absent other errors, result in an adverse verification statement.**

In instances where a facility is owned or operated by the electricity provider and/or natural gas provider, the proposed requirements included in Section 95131(b)(8)(F)(1) may prove difficult to meet due to the non-standard bills that are created. Therefore, PG&E recommends the following change to the proposed language:

1. For facilities that combust natural gas, natural gas provider, account identification number, where available, and annual MMBtu of natural gas delivered, reported pursuant to section 95115(k);

In addition, to ensure that the definition of "correctable errors" is sufficiently broad to address any error resulting from the use of reasonable calculation methods, PG&E recommends the following clarifying change to Section 95102:

(107) "Correctable errors" means errors identified by the verification team that affect covered data, non-covered emissions data, or covered product data in the submitted emissions data report that result from a non-conformance with this article. Differences that, in the professional judgment of the verification team, are the result of differing but reasonable methods **including of** truncation or rounding or averaging, where a specific procedure is not prescribed by this article, are not considered errors and therefore do not require correction.

C. Section 95153. ARB Should Include A Reasonable Engineering Estimation For Calculating Vented Emissions For Natural Gas Distribution Systems

Section 95152(i)(5) requires reporting entities to measure and report emissions from equipment and pipeline blowdowns in natural gas distribution systems. The current methodology provided in Section 95153(g) will require a significant commitment of time and resources without commensurate benefits in terms of reporting accuracy. This will be particularly true in the case of calculating the unique piping volume in a natural distribution system.

Despite allowing the use of engineering estimates to calculate unique piping volumes, ARB still requires reporting entities to maintain a detailed record of all natural gas distribution system blowdowns as stated in item 4 of the Petroleum and Natural Gas Systems (Subarticle 5): Emissions Reporting Guidance². As a result, reporting entities will be required to track the unique piping volumes to match the recorded number of distribution system blowdowns. Developing a system to track the unique piping volumes and maintain a record of the associated number of blowdowns for natural gas distribution assets is impractical and unduly burdensome given the 42,000 miles of distribution main and 2,800 regulator stations PG&E operates. Furthermore, when testing or replacing these facilities, PG&E minimizes the length of pipe to be evacuated (typically a city block or less) to reduce the impacts to customers. Consequently, the volume of gas released during a distribution blowdown is small as compared to the distribution system fugitive emissions.³

Moreover, reporting of this particular subset of natural gas emissions is redundant. Distribution blowdown emissions are embedded in each natural gas supplier's compliance obligation under Section 95122, which is based on Subpart NN of 40 CFR Part 98 and involves mass-balance calculations for the amount of gas entering and leaving the gas distribution system. In addition, this requirement is inconsistent with United States Environmental Protection Agency (U.S. EPA) regulations, which do not require facilities to report emissions from blowdowns on the gas distribution segment.

PG&E therefore recommends removing the requirement to report equipment and pipeline blowdowns for natural distribution systems. To the extent ARB still deems it advisable to require independent reporting of vented emissions from natural gas distribution systems, PG&E

² <http://www.arb.ca.gov/cc/reporting/ghg-rep/guidance/subarticle-5-guidance.pdf>

³ The U.S. EPA provided a breakdown of emissions sources and their relative contributions to their respective segment emissions as part of their technical support documentation for Subpart W of 40 CFR 98. For the distribution segment, the vented distribution system for pipeline blowdowns accounted for 0.18% of the distribution sector emissions. See Appendix A: Segregation of Emissions Sources using the Decision Process in the Greenhouse Gas Emissions Reporting From The Petroleum and Natural Gas Industry, Background Technical Support Document. (<http://www.epa.gov/ghgreporting/documents/pdf/2009/Background-TSD-posted-4-12-10-EPA-HQ-OAR-2009-0923-0027.pdf>)

requests staff introduce a new provision in Section 95153(g) that enables reporting entities to use conservative assumptions and annual summary data of replacement and maintenance activities performed to estimate vented emissions associated with such work. PG&E recommends the following addition to Section 95153(g):

(3) For natural gas distribution systems, use aggregated event data, rather than unique physical volumes, including but not limited to pipeline and meter replacements and other event categories that result in gas vented from the entity's natural gas distribution system. The information shall be categorized by pipeline or equipment size. Reporters in this category may, but are not required to, use Equations 13 or 14. In lieu of using Equations 13 or 14, average distribution system pressures, and temperatures, and gas composition (i.e., percent methane and CO₂), can be applied to report the annual volume of equipment and pipeline blowdowns in metric tons of CO₂ equivalent emissions.

D. Section 95154. ARB Should Allow Engineering Estimates When Direct Leak Measurements Cannot Be Collected Safely

Sections 95154(a)(1) through (5) provide the approved methods for conducting leak detection(s) of equipment leaks as required under Sections 95153(i), (m), (n), and (o). Sections 95154(a)(1) and (4) state that “an optical gas imaging instrument must be used for all source types that are inaccessible and cannot be monitored without elevating the monitoring personnel more than 2 meters above the support surface.” There is no provision that allows for engineering estimates for when there is a safety issue that prohibits a reporter to conduct direct leak measurement even with an optical gas imaging instrument.⁴ Where there are safety issues that prohibit direct leak measurements to be taken, PG&E recommends that ARB allow engineering estimates to be used. Therefore, PG&E recommends the following addition to Section 95154(a):

(6) In cases where measurements cannot be collected due to safety concerns the facility operator may utilize engineering estimates to report leaks.

E. Section 95103. ARB Should Modify its Measurement Accuracy Requirements

Section 95103(k)(6)(A)(1)(b) requires that the primary element (e.g. orifice plate) “be photographed on both sides prior to any treatment or cleanup of the element to clearly show the condition of the element as it existed in the pipe.” This requirement is not part of PG&E’s meter maintenance standard S4300, whose inspection frequency requirements are comparable to and whose accuracy requirements are more stringent than the $\pm 5\%$ specified in the MRR (95103 (k)).

⁴ Note that ARB’s existing guidance document, Petroleum and Natural Gas Systems (Subarticle 5): Emissions Reporting Guidance, does not allow engineering estimates, but rather requires that an optical gas imaging instrument be used and makes reference to Section 95154(a)(4).

Requiring a photograph of the orifice plate, given the robustness of PG&E's standard S4300, is superfluous.

Pipeline quality natural gas, which is subject to strict standards for entrained liquids and other materials, is unlikely to foul an orifice plate to the extent it would push meter accuracy outside the $\pm 5\%$ window. Routine meter inspection, maintenance, and calibration as specified in PG&E's standard S4300 will ensure timely corrective action for any rare instance of fouling that may occur. Therefore, PG&E strongly recommends that flow meters measuring natural gas be exempt from the requirement to photograph their orifice plates.

F. Section 95104. The MRR Should Not Be Amended to Require Reporting of Toxic Air Contaminants and Criteria Pollutants

We request Section 95104(e) be removed. This section largely duplicates many aspects of the long established programs put in place and administered by either the numerous local Air Districts in California and/or the U.S. EPA. It is unclear why ARB feels it is required or necessary to expand the MRR program to include additional air pollutants, particularly when the regulation is entitled "Mandatory Reporting of *Greenhouse Gas Emissions*." Layering on additional and potentially conflicting data collection and recordkeeping and reporting requirements and timelines for the regulated community should not be imposed without additional conversations with stakeholders and a clear outline of ARB's rationale for this change. Administration and verification of this expanded effort is no small task - unintended consequences of which could include delays in verification or even reduction in the number of positive opinions which could seriously jeopardize the MRR and Cap-and-Trade programs without commensurate benefit to either. PG&E recommends ARB share its GHG data with local air districts to allow them to form this complete picture.

G. PG&E Requests MRR Data Be Presented in a Way that Facilitates Ease of Comparison to Cap-and-Trade Program Allowance Budgets

PG&E requests that MRR data be presented in a way that provides full transparency as to the categories of emissions that will be covered in each compliance period of cap-and-trade for each reporting entity. In releasing the "[2011 GHG Facility and Entity Emissions Detailed Spreadsheet](#)" ARB took an important step in this direction by presenting a "covered emissions" column. This spreadsheet defines covered emissions as follows:

"Covered emissions" which are computed by ARB, mean all emissions included in a compliance obligation under section 95852 through 95852.2 of the cap-and-trade regulation, regardless of whether the cap-and-trade regulation imposes a compliance obligation for the data year. Covered emissions are equal to the Total CO₂e emissions minus emissions from sources or substances that are not considered covered emissions

(such as biofuels). Covered emissions are only displayed for reports subject to the cap-and-trade requirements, and a value of "0" (zero) is displayed for reports which do not have covered emissions under the cap-and-trade program, such as facilities emitting <25,000 metric tons of covered CO₂e emissions that are not opt-in facilities.

However, this presentation may have generated some confusion for the following reasons:

- Covered emission values for natural gas suppliers were not presented as the subset of emissions which generate a compliance obligation beginning in the second compliance period of cap-and-trade (i.e., there was no netting to account for fuel supplied to other covered entities).
- It is not always clear if entities were electricity importers (covered beginning in the first period) or fuel suppliers (covered beginning in the second period).

PG&E requests that future detailed MRR spreadsheets include columns that explicitly identify “Narrow Scope Covered Emissions” and “Broad-Scope Covered Emissions” for each reporting entity with an ARB ID number. If possible, the 2011 dataset should also be updated to reflect these categories. Clarity in presentation of this information is critical to market participants’ ability to accurately track emission trends driving the fundamentals of the Cap-and-Trade market.

H. PG&E Requests ARB Make Aggregated CHP Data Publicly Available

PG&E supports the 2012 amendments to Sections 95102 and 95112 that further clarify reporting of electrical and thermal output of cogeneration facilities. The modified requirements enhance ARB’s ability to collect the necessary data to evaluate efficiency and GHG performance of cogeneration systems and better understand when thermal energy is being utilized rather than being vented or discharged without use.

Efficiency and GHG performance is the essential driver of cogeneration/combined heat and power (CHP) policy in California. We ask that ARB make use of this data by developing and publicly presenting aggregated CHP efficiency information collected through the Mandatory Reporting Regulation and developing a system to cross-check the data with similar information reported to the Energy Information Administration, Federal Energy Regulatory Commission, and the California Energy Commission. We believe that this approach will help inform the implementation of CHP policies, assist with future updates to ARB’s Scoping Plan, and support California’s AB 32 GHG reduction goals.

I. Section 95102. Prevent Double-counting in Instances of “Reverse Wheeling”

PG&E believes ARB does not intend energy sourced inside of California, wheeled out, and then back into the state to be included in import calculations as this would qualify as “double

counting.” This generation should already be reported by the in-state generating facility. However, the current MRR language does not mention the e-Tag’s origin which may lead entities to report these trades as imports with an associated GHG obligation. To remedy this issue, PG&E recommends the following modification to the definition of “electricity importers” in Section 95102:

For electricity that is scheduled with a NERC e-Tag **that has a first point of receipt outside the state of California** to a final point of delivery inside the state of California...

J. Section 95152. Pipeline Main Emissions Should Be Listed as a Source Category for Distribution Systems

A comparison with EPA’s list of GHG reporting requirements for distribution systems (40 CFR 98.232(i)(5)) indicates that Section 95152(i) of the MRR does not list pipeline main emissions as one of the required source categories. Therefore, PG&E recommends the following modification to the list that appears in Section 95152 to ensure consistency between the two regulations:

(i) For natural gas distribution, the operator must report CO₂, CH₄, and N₂O emissions from the following sources:

...

(5) Equipment and pipeline blowdowns;

(6) Pipeline main equipment leaks

(7) Service line equipment leaks;

(8) Report under section 95150 of this article the emissions of CO₂, CH₄, and N₂O emissions from stationary combustion sources following the methods in 95153(y); and

(9) Flare stack emissions.

K. Section 95122. Natural Gas Suppliers Should Not Be Required To Report Customers’ ARB ID Numbers

A proposed amendment to Section 95122(d)(2)(E) would require suppliers of natural gas to include ARB ID numbers when reporting customers receiving at least 188,500 MMBtu a year. First, PG&E does not have access to its customers’ ARB ID numbers. Second, any requirement to match external identifiers at the facility level to individual meters would prove unduly burdensome. PG&E therefore recommends removal of this requirement. As amended, 95122(d)(2) would read:

(E) ~~For each customer, In lieu of reporting the information specified in 40 CFR §98.406(b)(7), local distribution companies including intrastate pipelines that report under 40 CFR §98.406 (b)(7) must report the annual volumes in Mscf, annual energy in MMBtu, and customer information required in 40 CFR §98.406(b)(12), and ARB ID~~

number if available for all end-users registering supply equal to or greater than 188,500 MMBtu during the calendar year.

L. ARB Should Clarify Section 95103(j)(3)

PG&E would appreciate a clarification from ARB that Section 95103(j)(3) is not applicable for de minimis data.

II. CONCLUSION

Thank you for the opportunity to submit these comments. PG&E recommends ARB carefully review these suggestions and incorporate the recommended changes. We look forward to continuing our work with ARB to ensure the successful implementation of the MRR.

Very truly yours,

/s/

Claire E. Halbrook

cc: David Edwards, via email
Joelle Howe, via email
Syd Partridge, via email