

DRA DATA REQUEST
DRA-SCG-095-DAO
SOCALGAS 2012 GRC – A.10-12-006
SOCALGAS RESPONSE
DATE RECEIVED: MAY 31, 2011
DATE RESPONDED: JUNE 17, 2011

Exhibit Reference: SCG-2, Gas Distribution O&M

Subject: Follow-Up to Data Requests number 86 and 87

Please provide the following:

1. Please provide a copy of IHS Global Insight forecast for February 2011.

SoCalGas Response:

SoCalGas Area Employment: February 2011 forecast

"SCG6" is the aggregated "Big 6" counties that account for about 90% of economic activity in SoCalGas' service area: Kern, Los Angeles, Orange, Riverside, San Bernardino, Ventura.

<u>Year</u>	<u>Nonfarm Employment (millions)</u>	<u>Nonfarm Employment (% change)</u>
2000	6.918	
2001	7.000	1.2%
2002	6.982	-0.2%
2003	7.003	0.3%
2004	7.111	1.5%
2005	7.249	1.9%
2006	7.410	2.2%
2007	7.444	0.5%
2008	7.305	-1.9%
2009	6.838	-6.4%
2010	6.720	-1.7%
2011	6.775	0.8%
2012	6.899	1.8%
2013	7.046	2.1%
2014	7.171	1.8%
2015	7.282	1.5%
2016	7.371	1.2%
2017	7.452	1.1%
2018	7.527	1.0%
2019	7.595	0.9%
2020	7.672	1.0%

Source: Global Insight, Feb. 2011 Regional forecast

31-May-11

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DRA-SCG-095-DAO
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2. In SCG's response to DRA-87, question number 2, SCG stated the following:

Question no. 2: Please identify the "changing laws, regulations, and rules," stated on page GOM-39 requiring 4 new positions. Please also explain in detail if these 4 positions are newly created work activities or if the positions are created to support or to expand existing work activities.

SoCalGas Response:

"Ms. Lisa Gomez is the policy witness for environmental issues and has described in detail the changing laws, regulations and rules that SoCalGas will need to address for Green House Gas (GHG) and Stormwater Construction Permits in her direct testimony (Exhibit SCG-15; pages LPG-7-11, 14).

"The requested 4 new positions will support the field operations to ensure compliance with these new regulations, in addition to reasonably foreseeable modifications to existing regulations."

- a. Please identify the number of positions, by distribution region, that currently support field operations and specifically assigned to ensure compliance with governmental regulations.
- b. Please identify the number of positions, by distribution region, that supported field operations and were specifically assigned to ensure compliance with governmental regulations each year from 2005-2011 YTD.
- c. Please explain why SoCalGas needs one new position for each distribution region, beginning in 2012, as stated on page GOM-39.
- d. Is it SoCalGas' operational policy to assign Field Environmental Compliance Specialists by distribution region? If yes, please explain the rationale.
- e. Please explain in detail how SoCalGas has documented the need for the 4 new positions in 2012 and provide a copy of all supporting documents.

a. Please see item b.

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DRA-SCG-095-DAO
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SoCalGas Response to 2 (Continued)

- b. Below are the O&M FTEs by Operating Region that supported field operations and were specifically assigned to ensure compliance with governmental regulations.

Environment Compliance Specialist
O&M FTEs
2005 - 2011

Operating Region	2005	2006	2007	2008	2009	2010	2011
South Inland Region	.92	.37	.36	.89	.92	.63	**
Northern Region	.45	.89	1.61	1.77	1.63	1.67	**
Orange Coast Region	1.03	.95	.99	.60	.72	1.07	**
Pacific Region	*	*	*	.79	.66	.97	**
Total O&M FTEs	2.40	2.21	2.96	4.04	3.93	4.34	**

* Orange Coast and Pacific Region utilized shared FTEs.

** SoCalGas has not yet finalized the review and any associated adjustments to its 2011 data, and is therefore unable to provide 2011 FTE information at this time.

- c. SoCalGas has requested dollars to fund the equivalent of four FTEs of work. These FTEs would support daily compliance monitoring, reporting and record keeping of compliance programs and assist in proactively addressing day to day environmental issues associated with new and existing compliance regulations. Since the required support work elements are distributed throughout the service territory, to enable accessibility to local management on compliance issues and deliver training to field personnel, the incremental resource support was assumed to be distributed equally to each of the operating region headquarter facilities.
- d. SoCalGas does not have a policy with regard to the assignment of Field Environmental Compliance Specialists. Please see response to 2c above for distribution of FTEs.
- e. The four new FTEs will provide the additional environmental oversight required to ensure compliance at our facilities and ongoing field operations activities with new regulations. Inasmuch, they will provide the assistance required in collecting and providing quality assurance for Greenhouse Gases Emissions requirements in the operating regions. In order to comply with local air agency regulations, these FTEs will support facilities management with record keeping, monitoring and testing requirements. New storm water discharge requirements will require these FTEs to monitor storm water plans and best management practices throughout the distribution regions and at all operating bases.

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3. With reference to LPG-7, please provide a citation to and a copy of the GHG Mandatory Reporting Rule (“MRR”).
 - a. Please provide a copy of the “first emissions report” SCG submitted to EPA in March, 2011.
 - b. Please provide the data collected since January 2011 pursuant to the current Subpart W of the MRR. Please explain in detail the process used to collect the data, and the personnel used for this process.
 - c. With reference to LPG-8, please provide a citation to and a copy of the so-called “GHG Tailoring Rule.” Has EPA undertaken another rulemaking to discuss how the programs should impact smaller sources?
 - d. With reference to LPG-9, has CARB adopted a final cap-and-trade regulation?
 - e. With reference to LPG-10:
 - i. Please provide a citation to and a copy of CARB’s mandatory GHG reporting regulations adopted in December 2008.
 - ii. Please provide the voluntary reports SCG has made to the California Climate Action Registry and/or The Climate Registry since 2004, and any reports SCG has made to CARB.
 - iii. Please explain in detail the process SCG will undertake to prepare and submit annual GHG inventories. Please explain in detail, with citations to AB 32, the statement “annual GHG inventories required by AB 32.”
 - iv. Please provide a citation to and a copy of the CEQA Guidelines that were amended in February 10 “to address GHG emissions.”
 - f. With reference to LPG-11, please explain in detail the requirement of “two additional air quality environmental specialists (FTEs) at SoCalGas beginning in 2012.” Please explain which “new GHG programs” and “new air quality programs” require these additional FTEs, and quantify how many FTEs are attributed to each new GHG program

SoCalGas Response:

- a. No emission report has been submitted to the Environmental Protection Agency (EPA) at this time. On Thursday, March 17, 2011, the EPA announced that it would extend the deadline for the submission of greenhouse gas emissions reports required under the Mandatory Reporting of Greenhouse Gases Rule (“Mandatory Reporting Rule” or MRR) for the 2010 compliance year to September 30, 2011.

DRA DATA REQUEST
DRA-SCG-095-DAO
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SoCalGas Response to 3 (Continued)

- b. Year to date, SoCalGas has worked with industry groups like the American Gas Association (AGA) and the Environmental Protection Agency (EPA) to more clearly define Subpart W rule language for terms like “Above ground meters and regulators at custody transfer city gate stations” found in Section 98.232(i)(1). Without clear guidance for these terms the SoCalGas distribution workload would be severely impacted. Leak testing of this equipment as required by the rule will be completed by the end of the year. Environmental services, transmission, storage and distribution personnel worked with the consultant firm of Innovative Environmental Solutions, Inc. to compose company compliance plans. As allowed by the rule these plans will be updated and modified through the year.



LDC GHG
MONITORING PLAN.p

Also, in our efforts to comply with the Subpart W requirements pipeline main and service line leaks information is being tracked and will be summarized and reported by the end of the year.

- c. Below is the citation to and a copy of the “GHG Tailoring Rule”.

40 CFR Parts 51, 52, 70, and 71

<http://www.gpo.gov/fdsys/pkg/FR-2010-06-03/pdf/2010-11974.pdf#page=1>



EPA Tailoring
Rule

By the end of April 2015, EPA will complete a study on the remaining Greenhouse Gas (GHG) permitting burdens that would exist if they applied the program to smaller sources. They will consider the results of the study to complete a rule by April 30, 2016 further addressing Clean Air Act permitting for these facilities. In that rule they may decide that successful streamlining will allow for the phase in of more sources, but they may also decide that certain smaller sources need to be permanently excluded from permitting.

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DRA-SCG-095-DAO
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SOCALGAS RESPONSE
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SoCalGas Response to 3 (Continued)

d. California Air Resources Board (CARB) has not adopted the final cap-and trade regulation to date. The original schedule outlined by CARB projected a fall 2011 finalization with implementation by the end of December. CARB will provide a report to the Board in July on the status of finalizing the regulation and implementing the cap-and-trade program.

e.

i. Below is the citation to and a copy of CARB’s mandatory GHG reporting regulations adopted in December 2008. The direct URL to this document is <http://www.arb.ca.gov/regact/2007/ghg2007/frofinoal.pdf>



AB32 Final MRR
Rule

ii. Below are the voluntary reports SoCalGas has made to the California Climate Action Registry and/or The Climate Registry since 2004, and any reports SoCalGas has made to CARB.



CCAR 2004



CCAR 2005



CCAR 2006



CCAR 2007



CCAR 2008



CCAR 2009



ARB 2008 Honor
Rancho



ARB 2008 Aliso



ARB 2008 Blythe



ARB 2008
Newberry Springs



ARB 2008 South
Needles



ARB 2009 Honor
Rancho



ARB 2009 Aliso



ARB 2009 Blythe



ARB 2009
Newberry Spring



ARB 2009 South
Needles



ARB 2010 Honor
Rancho



ARB 2010 Aliso



ARB 2010 Blythe



ARB 2010
Newberry Springs



ARB 2010 South
Needles



2008 SCG AB32
Admin Fee Report



2009 AB32 Admin
Fee Report

iii. Below is the process SoCalGas will undertake to prepare and submit annual GHG inventories. Please explain in detail, with citations to AB 32, the statement “annual GHG inventories required by AB 32.”

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DRA-SCG-095-DAO
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SoCalGas Response to 3e (Continued)

The first step is data collection. For AB32 SoCalGas' Environmental Services GHG staff will work with facility contacts at each of the five facilities that have exceeded 25,000 metric tonnes (MT) of carbon dioxide in the past to obtain all equipment fuel readings for days and months of the calendar year. In addition, staff will collect the same type of fuel consumption data for all fuels and locations within the company to determine if usage levels will exceed the 25,000 MT thresholds and obtain information necessary for entity reporting.

Second, staff would then collect all available daily and monthly High Heating Value and/or Carbon Content records/information for each facility exceeding the rule threshold for AB32 and all other sources under The Climate Registry requirements.

The third step would be to compare fuel totals summaries with other publically reported and audited documents. This check helps to insure accuracy and consistency within a company of this size. If there is an anomaly, the data is revisited for additional QA/QC of meter reads, daily, monthly and yearly totals and calculation methodologies.

Step Four has been to evaluate the appropriate calculation methodology and emission factors to be used from each protocol and/or rule requirement. Since the company is reporting to multiple agencies and protocol requirements differ this step is essential. For example Reporting to the California Climate Action Registry (CCAR) or The Climate Registry requires that all fugitives, electricity consumption, stationary and mobile combustion, refrigerant use, sulfur hexafluoride (SF6), electricity generation and purchases are reported where applicable for all sources in an entity. The state and federal reporting regulations have requirements with specific thresholds and are divided by industrial and business categories.

The steps to the remaining data collection process must be completed before numbers are summarized or categorized. These steps require the collection of following data:

- Fleet fuel consumption details by fuel
- Mileage by vehicle type and model year
- Facility electricity consumption by power provider and accounts
- Refrigerant use by facility and equipment
- Vented process emissions by facility and activity
- Department of Transportation pipe replacement and leak repair data for transmission and distribution
- Telecomm fuel use and equipment changes
- R1 and R2 reports from accounting
- FERC reports
- Broken and blowing gas data

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SoCalGas Response to 3e(iii) (Continued)

Draft emission calculations are then created for stationary, mobile, fugitive, process, indirect and de minimis categories.

To determine stationary combustion emissions the five AB32 facilities monthly fuel consumption is multiplied by a specific emission factor that is determined by the range of the high heating value for the month per piece of equipment and each month is totaled, after which a yearly summation of each month is calculated by equipment and summarized for carbon dioxide, methane and oxides of nitrogen.

CCAR reports required a similar, but different process. Annual fuel for each piece of equipment is multiplied times a selected default emission factor for CO₂, N₂O and CH₄ to calculate tonnes of CO₂ equivalents.

Mobile combustion emissions are calculated by taking the totals for each fuel consumed times the fuel specific emission factor for CO₂ from the CCAR General Reporting Protocol 3.1. N₂O and CH₄ is determined by multiplying the mileage from each specific vehicle type and model year times the given emission factors for N₂O and CH₄ for that category and summing all the totals. The CO₂ totals are then added to N₂O and CH₄ after they have been multiplied by their global warming potential to derive a total CO₂ equivalent for all three gases.

Fugitive emissions calculations are required for entity reporting and we have traditionally used the CCAR Natural Gas Transmission and Distribution Entity Reporting Protocol to estimate our fugitives with data and emission factor for the following:

- Distribution Pipe Oxidation, CH₄ and Process Emissions
- Transmission Pipe Oxidation, CH₄ and Process Emissions
- Metering and Regulation Station Emissions
- Compressor leaks Transmission and Distribution
- Well Heads
- Customer Meters
- Compressor Stations
- Storage Stations
- Vehicle Refrigerants

Process emissions calculations are required for entity reporting and SoCalGas has traditionally used the CCAR Natural Gas Transmission and Distribution Entity Reporting Protocol, Interstate Natural Gas Association of America (INGAA) Greenhouse Gas Emission Estimation Guidelines and the Gas Resource Institutes/U.S. Environmental Protection Agency (GRI/EPA). Methane Emissions from the Natural Gas Industry, Volume 12: Pneumatics Devices, June 1996 to estimate process emissions with data and emissions factor for the following:

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SoCalGas Response to 3e(iii) (Continued)

- Gas Pneumatics
- Dehydration Units
- Vented Emissions
- Broken and Blowing Emission

Indirect emissions are calculated by collecting and summarizing all the MWh's of electricity consumed in our facilities and buildings company-wide times a Generation Resource Integrated Database e-Grid emission factors from Western Electricity Coordinating Council (WECC) region.

De minimis emissions are generally emissions that are calculated by means that are not specifically defined within a protocol. Most are derived from scientific estimates, modeling or calculations with quantification that may have some extrapolation. All de minimis emission where they are allowed must fall with a percentage outlined within reporting guidelines. SoCalGas has used the de minimis category to calculate refrigerant and telecomm emissions as they typically 0.01 to 0.5% of the company overall emissions.

Refrigerant emissions are calculated by summing all added, removed or recycled refrigerant from each location. Very little GHG qualifying refrigerant is used within SoCalGas at this time.

Telecomm emissions have also been extremely small and due to the extreme site locations and very slight fuel use estimations emission were extrapolated for the approximate 94 facilities in the SoCalGas system.

Other natural gas related activities at very small source combustion, such as portable generators, lawnmowers, chainsaws, and other small equipment have been modeled from company-wide surveys and again represent a small emission percentage of entity reporting.

Once each category of calculations has been completed and checked then reporting must take place in the individual reporting tools at the voluntary, state and federal levels. The reporting tools have and will range from the following:

- CCAR CARROT Reporting Tool (2004 to 2009)
- TCR CRIS Reporting Tool (2010 first reporting year)
- ARB GHG Reporting Tool (2008 to present)
- EPA e-GGRT Reporting Tool (2010 first reporting year)

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SoCalGas Response to 3e(iii) (Continued)

Once GHG inventory emission reports have been successfully uploaded in the individual tools the “Third Party Verification” process begin for voluntary and state emissions. This process normally takes five to seven months for a single company to complete for both the voluntary and state programs.

The AB32 regulation has an annual reporting requirement, ((3) “Annual” means with a frequency of once a year; unless otherwise noted, annual events such as reporting requirements will be based on the calendar year). Section 95103(b) Reporting Schedule – Existing Facilities. Operators of the facilities and entities listed in section 95101(b), except as provided in section 95103(e), that are operational as of January 1, 2008, must submit emissions data reports to CARB in 2009 and each subsequent calendar year.

The report is required by the AB32 regulation, ((66) “Emissions data report” or “greenhouse gas emissions data report” or “report” means the report prepared by an operator each year and submitted by electronic means to CARB that provides the information required by this article).

The regulation speaks to the maintenance of GHG Inventory programs in section 95104 (b), ((b) Maintaining the GHG Inventory Program. To facilitate annual compilation of the emissions data report, the operator shall maintain a greenhouse gas inventory program that ensures that emissions calculations and electricity transactions information are transparent, accurate, and independently verifiable. The operator shall establish, document, implement, and maintain data acquisition and handling activities for the calculation and reporting of greenhouse gas emissions. Such activities shall include measuring, monitoring, analyzing, recording, processing and calculating the parameters specified by this article). The AB32 emission data collection and quality assurance related activities are outlined in CCR 17 §95100 to §95133.

- iv. Below is the citation and a copy of the CEQA Guidelines that were amended in February 10 “to address GHG emissions.”

Amendments to the CEQA Guidelines Addressing Greenhouse Gas Emissions mandated by Senate Bill 97 (Chapter 185, Statutes 2007; Pub. Resources Code, § 21083.05).

Also, see CEQA Guidelines Section’s 15126, 15130 and 15064.



GHG CEQA
Guidance

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SoCalGas Response to 3e (Continued)

- f. The primary responsibilities for the two new air quality environmental specialist will be to provide analytical and data management support for SoCalGas GHG reports as required by United States Environmental Protection Agency GHG Mandatory Reporting Rule (MRR), which includes reports to comply with Subpart C – General Stationary Fuel Combustion Sources, Subpart W – Petroleum and Natural Gas Systems and Subpart NN – Suppliers of Natural Gas and Natural Gas Liquids. In addition to the federal GHG reporting requirement mentioned above, these specialists will also support the data collection and quality assurance activities to comply with CARB mandatory reporting requirements as required by California Assembly Bill 32, the Global Warming Solutions Act. These environmental specialists will provide the necessary support to coordinate the third party verification required in the CARB reporting process.