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

Subject: Operations Management and Training

Please provide the following:

1. With regard to SCG's request for an additional Technical Services Manager position and the Technical Services administrative assistant position on page GOM-47, please identify the total number of employees assigned to Gas Distribution O&M work activities, the number of new hires and their positions, the number of employees laid off, terminated, and/or retired, and their positions, each year from 2005-2011 YTD.

SoCalGas Response 1:

Please note that per the following email, this question has been revised.

From: Phan, Dao A. [mailto:dao.phan@cpuc.ca.gov]

Sent: Friday, May 27, 2011 12:10 PM

To: Girard, Peter G.

Cc: Kenny, Claudia; Marchesini, Charles Subject: RE: GRC, SCG DAO-093 Q1

Pete:

I see the problem that my question has caused and I appologize for the confusion. Please disregard that question. Instead, could we substitue the following question instead?

1. Please identify the number of Technical Services Manager positions and Technical Services Administrative assistant positions each year from 2005-2011. If the number of staff changed from year to year, please identify the reason(s) for the differences, such as the staff was laid off, terminated, hired, and/or retired, if possible.

Please let me know if this is workable for you guys. Thanks.

Dao Phan

DATE RECEIVED: MAY 20, 2011 DATE RESPONDED: JUNE 15, 2011

SoCalGas Response to Question 1 (Continued):

Generally, there is one Technical Services Manager and one Administrative Associate for each Gas Distribution operating region. Please see the table below for the requested data for 2005 through April 2011.

Number of SoCalGas Gas Distribution Technical Services Managers and Administrative Associates as of December 31st of Each Year

Row Labels	12/31/05	12/31/06	12/31/07	12/31/08	12/31/09	12/31/10	04/30/11
SCG Gas Distribution	5	5	4	5	6	6	6
Northern Region	1	2	2	2	2	2	2
Admin Assoc - 4 LA / 5 LA	0	1	1	1	1	1	1
Techl (Technical) Svcs Mgr	1	1	1	1	1	1	1
Pacific Region	2	2	2	2	2	1	1
Admin Assoc - 4 / 4 LA	1	1	1	1	1	0	0
Techl (Technical) Svcs Mgr	1	1	1	1	1	1	1
Orange Coast Region	0	0	0	0	0	1	1
Techl (Technical) Svcs Mgr	0	0	0	0	0	1	1
Inland Region	2	1	0	1	2	2	2
Admin Assoc - 4 LA	1	0	0	0	1	1	1
Techl (Technical) Svcs Mgr	1	1	0	1	1	1	1

The count is as of December 31st and may reflect temporary vacancies as of that date. As discussed in testimony (GOM-47), the incremental increase is to align with the organization structure that is further discussed in the policy testimony of Ms. Anne Smith, Exhibit SCG-01.

DATE RECEIVED: MAY 20, 2011
DATE RESPONDED: JUNE 15, 2011

- 2. With regard to SCG's request for \$536,000 for instructional design services on pages GOM-47 to GOM-49, please provide the following:
 - a. Please provide the amount spent by the Training department to track revisions made to gas maintenance and construction field procedures for each year from 2005-2011 YTD;
 - b. Please identify the number of "instructional design experts" hired by SCG each year from 2005-2011 YTD;
 - c. Please provide the job description for the "instructional design expert" position;
 - d. Please provide the labor costs and tracking account(s) for the "instructional design experts" hired each year from 2005-2011 YTD.

SoCalGas Response 2:

a. SoCalGas has interpreted this question to include the cost and time spent by the Gas Operations Services Training department to track revisions to Gas Standards and make the necessary corrections to applicable training modules.

Prior to 2008, instructional design work was performed by Human Resources, who supported multiple departments throughout the company, and their time was not segregated by services or department supported. For this reason, the portion of instructional design time and costs related to Gas Operations' Training is not known for the years 2005 through 2007. In 2008 this function as it relates to technical field skills training transitioned to Gas Operation Services. Due to the informal tracking process used prior to October 2009, the hours spent to track and make corrections to Gas Operations' training modules is not available for 2008 and part of 2009.

Starting in late 2009, Gas Operations' Training kept a log of all Gas Standards revisions that they reviewed and all training modules that were modified, as a result of revisions to Gas Standards. For the years 2009 through 2011, SoCalGas **estimated** the time spent tracking revisions to Gas Standards and making corrections to training modules in the following way:

• <u>Instructional Design Hours</u>: The estimated time to revise each training module was calculated by multiplying the estimated number of pages in each module by the estimated time to review each page (4 hours). These times were then summed to estimate the total number of Instructional Design hours each year.

DRA DATA REQUEST DRA-SCG-093-DAO

SOCALGAS 2012 GRC – A.10-12-006 SOCALGAS RESPONSE

DATE RECEIVED: MAY 20, 2011 DATE RESPONDED: JUNE 15, 2011

SoCalGas Response to Question 2a (Continued):

- <u>Subject Matter Expert Hours</u>: The estimated time to review each revised Gas Standard (1 2 hours per affected training module) was summed to estimate the total number of Subject Matter Expert hours in each year.
- <u>Technical Specialist Hours</u>: Technical specialists spend an estimated 4 hours per week prepping, logging, researching, tracking, and following-up on Gas Standard revisions.

The total cost for each year was then estimated by multiplying the current average hourly rate (in 2009\$) for each position by the estimated number of hours for each year. Please see the table below for the **estimated** hours and costs for the years 2009 through 2011 year-to-date.

Year	Instructional Designer Hours (\$41.62/hr - 2009\$)	Subject Matter Expert Hours (\$38.79/hr - 2009\$)	Technical Specialist Hours (\$31.79/hr) 2009\$)	Total Hours	Total Estimated Cost (2009\$)
2005 1	0	0	0	0	\$ -
2006 1	0	0	0	0	\$ -
2007 1	0	0	0	0	\$ -
2008 2	Not Tracked	Not Tracked	Not Tracked	N/A	N/A
2009 ³	330	24	52	406	\$ 16,319
2010	1184	686	208	2078	\$ 82,500
May 2011 YTD	876	118	84	1078	\$ 43,709

- 1. Prior to 2008, Instructional Design activities were performed by the Human Resources department, so there were no Instructional Design hours or costs in the Gas Operations Services Training department.
- 2. In 2008, Gas Operations did not monitor time spent tracking and making corrections to training modules.
- 3. Prior to October 2009, there was no formal tracking process in the Gas Operations Services Training department, therefore the data shown for 2009 only represents a partial year.

DRA DATA REQUEST DRA-SCG-093-DAO SOCALGAS 2012 GRC – A.10-12-006 SOCALGAS RESPONSE

DATE RECEIVED: MAY 20, 2011 DATE RESPONDED: JUNE 15, 2011

SoCalGas Response to Question 2 (Continued):

b. Please see the table below for the instructional designers hired each year by Training. This includes both full time employees and contract agents.

Year	Instructional Designers Hired by Training	Instructional Designers in Training
2005 1	0	0
2006 1	0	0
2007 1	0	0
2008	1	1
2009	1	2
2010	0	2
May 2011 YTD	2	4

- 1. Prior to 2008, Instructional Design activities were performed by the Human Resources department, therefore there were no Instructional Designers within the Gas Operations Training department.
- c. Please see the attached job description for Instructional Designer below.



DATE RECEIVED: MAY 20, 2011 DATE RESPONDED: JUNE 15, 2011

SoCalGas Response to Question 2 (Continued):

d. The costs for Instructional Design activities are a subset of costs recorded to cost center 2200-0614, under FERC account 870.5. The table below shows the amounts recorded within this cost center and account for employee labor and contractor non-labor expenses of only Instructional Designers for the years 2005 through 2010.

Year	Labor ¹		Non-Labor - Contractors ¹		Total ¹	
2005 2	\$	-	\$	-	\$	-
2006 2	\$	-	\$	-	\$	-
2007 2	\$	-	\$	-	\$	-
2008	\$	-	\$	76,384	\$	76,384
2009	\$	45,862	\$	84,630	\$	130,492
2010	\$ 1	100,984	\$	46,767	\$	147,752

- 1. Amounts are shown in 2009 dollars; including vacation and sick allocation for all company labor.
- 2. Prior to 2008, Instructional Design activities were performed by the Human Resources department, therefore there were no Instructional Designers within the Gas Operations Services Training department.

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

- 3. On page GOM-48, SCG states: "This formalized tracking of the standards facilitates a structured review of training and evaluation materials; and modification to these materials can now be made formally", please provide the following:
 - a. Please define and explain in detail the differences between "formalized" tracking of the standards and "informalized" tracking, and provide the differences in costs;
 - b. Please define and explain in detail the differences between making modification to the materials "formally" and "informally", and provide the differences in costs;
 - c. When did SCG first begin to track the standards formally?
 - d. When did SCG first begin to make changes to the standards formally?

SoCalGas Response 3:

- a. & b. The informal process for tracking and modifying training documents is described in testimony (Exhibit SCG-02, Page GOM-48).
 - "... To date, SoCalGas has relied upon the dedication of individual instructors to monitor the posting of procedural changes and informally incorporate these changes within their discussion materials. This informal process to training and evaluation has left formal materials incomplete."

With the formal process, all revised and new Gas Standards are reviewed and logged by a Technical Specialist, who provides a brief description of the changes to a Training Supervisor. The supervisor assigns all Gas Standards that might affect training materials to the appropriate instructor for their review. The instructor then works with the Instructional Designers to ensure the necessary changes are made to the training modules, test materials, and Operator Qualification materials. Throughout the process, a log is maintained that shows the progress of all training documents being revised and the responsible Instructional Designer. This formal process provides a structured and centralized system which improves the monitoring and coordination of both the review of revised Gas Standards and the integration of any changes into training material.

SoCalGas estimated the cost for formally tracking and modifying training documents together, and did not separate the costs related to each.

SoCalGas Response to Question 3a & b (Continued):

SoCalGas' estimate of the difference between informal and formal training document modification and tracking was based on the anticipated number of hours spent on these activities in each year. The anticipated annual hours to track and modify training documents can be found in Table SCG-GOM-20 on page GOM-49, and is equal to 4,280 hours. These hours were multiplied by the estimated contractor rate of \$100 per hour to give a total annual estimate of \$428,000 (2009\$).

(4,280 hours) * (\$100 / hour) = \$428,000

Please see the response to Question 6 of this data request for details on the estimate of the annual hours.

c. & d. SoCalGas started formally tracking and modifying training materials in October of 2009. Before this, the process was an informal one.

DATE RECEIVED: MAY 20, 2011 DATE RESPONDED: JUNE 15, 2011

4. Please identify the rationale and explain why the assumption of 300 revisions to the Gas Standards each year was used in SCG's forecast for Instructional Design Services on pages GOM-48 and GOM-49.

SoCalGas Response 4:

For the responses to Questions 4, 5, and 6 of this data request, the term "Gas Standards" represents SoCalGas Field Operations Gas Standards excluding those relating only to Customer Services. Revisions made to this subset of Gas Standards are expected to impact training materials.

SoCalGas' Gas Operations Training department based their estimate of 300 annual revisions to Gas Standards on a historical representation of the number of revisions to Gas Standards. Information provided by the Gas Engineering department (responsible for publishing the new Gas Standards) showed there were 395 revisions to the Gas Standards during 2008. Information prior to 2008 was not available at the time of preparing the forecast for this Application. However it was felt that 2008 was a reasonable approximation of the level of work anticipated into the future. SoCalGas further adjusted this figure to 300 revisions as a more conservative estimate.

This estimate was confirmed in 2010 using the number of revisions tracked by the Gas Operations Training department during approximately seven months using the formal tracking process implemented in late 2009. Between 11/18/09 and 06/29/10, there were 262 Gas Standard revisions tracked. This indicated that there would likely be more than 300 revisions to Gas Standards in the year 2010.

Please see the table provided in response to Question 5 for the total estimated number of revisions to Gas Standards each year.

DATE RECEIVED: MAY 20, 2011 DATE RESPONDED: JUNE 15, 2011

5. Please provide the number of revisions to the Gas Standards each year from 2005-2011 YTD.

SoCalGas Response 5:

Please see the table below for the **estimated** number of new or revised Gas Standards published each year.

Year	Revisions to SoCalGas Field Operations Gas Standards (Excluding Revisions Related to Customer Services)
2005 1	170
2006 1	228
2007 1	241
2008 2	498
2009	454
2010	436
May 2011 YTD	82

- 1. Information prior to 2008 was not available at the time of preparing the forecast for this application; however SoCalGas' Engineering department has been able to identify the number of revisions to the Gas Standards within each of these years for this data response.
- 2. Since providing the revisions used to prepare the forecast included within this application (395), SoCalGas' Engineering department completed a second review of the year 2008 (along with counts for other years) and provided an updated figure. The adjusted figure is shown in the table above.

DATE RECEIVED: MAY 20, 2011 DATE RESPONDED: JUNE 15, 2011

6. Please explain in detail and provide a copy of all calculations and documents used in determining the estimated 4,280 hours of instructional design each year

SoCalGas Response 6:

Table SCG-GOM-20 on page GOM-49 in Exhibit SCG-02 shows an overview of the calculations used to determine the hours of instructional design each year. The total time was estimated to be 5,360 hours, including 4,280 hours of document modifications and 1,080 hours of training module development. A copy of this table is shown below.

Table SCG-GOM-20
Gas Distribution O&M Non-Shared Services
Hours Required for Instructional Design Services

Instructional Design Activity	Impacted Documents	Hours per Unit	Annual Hours
Training module maintenance	300	12	3,600
Operator Qualification document maintenance	30	8	240
Written test maintenance *	110	4	440
Total Document Modifications			4,280
New training module development	9	120	1,080
Total Hours per Year			5,360

The number of impacted documents in the second column was estimated in the following way:

• Training Module Maintenance: The number of impacted documents was estimated to be equal to the anticipated number of new or revised Gas Standards. Each revised Gas Standard needs to be reviewed, and based on this review, training modules might need to be modified. While some revisions to Gas Standards will not affect any training modules, others will affect multiple modules and take more time. On average, it was estimated that approximately 12 hours would be spent on each revised Gas Standard, including both the review of the Gas Standard, and any resulting changes made to training modules. Please see the response to Question 4 of this data request for details on the estimated number of Gas Standard revisions.

300 Gas Standard Revisions = 300 Impacted Documents

Response to Question 6 (Continued):

Operator Qualification Document Maintenance: The annual number of Operator Qualification document revisions was estimated to be equal to 10% of the number of Gas Standards reviewed. Based on discussions with training supervisors and instructional designers, it was estimated that approximately one in ten Gas Standard reviews would lead to revisions in Operator Qualification documents, resulting in 30 impacted Operator Qualification documents each year.

300 Gas Standard Revisions * 10% = 30 Operator Qualification Documents

• Written Test Maintenance: The annual number of written test document revisions was calculated by assuming that approximately 20% of SoCalGas' 580 tests would be reviewed and modified each year. In this way, all tests are reviewed on a rotating schedule every five years.

580 Tests * 20% = 116 Written Test Documents (This number was rounded down to 110 in Table SCG-GOM-20.)

• New Training Module Development: The number of new training modules was based on SoCalGas' plan to address approximately 25% of the training module backlog each year. With a backlog of 36 training modules (Exhibit SCG-02, Page GOM-48), this resulted in 9 new training modules each year.

36 Training Modules in Backlog * 25% = 9 New Training Modules

The hours per unit shown in the third column were estimated based on conversations with training supervisors and instructional designers. These are the estimated hours necessary to make the required document revisions and module development.

The number of impacted documents in the second column was multiplied by the hours per unit in the third column to arrive at an estimated annual number of hours for each instructional design activity. These were summed to give a total of 5,360 hours per year of instructional design activity.

7. For each year from 2005-2011YTD, provide the number of hours spent to incorporate changes to the Gas Standards into training and qualification materials.

SoCalGas Response 7:

Please see the table in response to Question 2a of this data request for the hours spent incorporating revisions to Gas Standards into training and qualification materials.

DATE RECEIVED: MAY 20, 2011 DATE RESPONDED: JUNE 15, 2011

8. For each year from 2005-2011 YTD, provide the number of hours spent to review and update formal test materials.

SoCalGas Response 8:

Please see the table below for the **estimated** number of hours spent reviewing and updating formal test materials. The total time for each year was estimated by multiplying the actual number of tests reviewed or created by the estimated hours spent on each test, and summing the hours. The estimated hours spent on each test were based on conversations with training supervisors and instructional designers.

Year	Number of Operator Qualification Tests (Est. 4 hrs/test)	Number of Knowledge Tests - Revised (Est. 4 hrs/test)	Number of Knowledge Tests - New (Est. 15 hrs/test)	Total Estimated Hours
2005 1	30	13	23	517
2006 1	30	30	78	1,410
2007 1	30	3	6	222
2008	30	19	8	316
2009	30	28	14	442
2010	30	95	25	875
May 2011 YTD	183 ²	22	13	466

- 1. Prior to 2008, Instructional Design activities were performed by the Human Resources department, therefore there were no Instructional Design hours or costs in the Gas Operations Services Training department. However, the actual number of tests reviewed or created each year was tracked, therefore the total hours spent by Human Resources in the years 2005 through 2007 could be estimated.
- 2. The Operator Qualification tests completed in 2011 were for smaller elements, therefore they were estimated at 1 hour per test.

DRA DATA REQUEST DRA-SCG-093-DAO SOCALGAS 2012 GRC – A.10-12-006 SOCALGAS RESPONSE

DATE RECEIVED: MAY 20, 2011 DATE RESPONDED: JUNE 15, 2011

9. For each year from 2005-2011 YTD, the number of new training modules developed each year. Also, please provide a copy of all supporting documents that would confirm the actual number of hours spent on developing a new training module.

SoCalGas Response 9:

The number of new training modules created each year prior to 2011 was **estimated** based on discussions with Instructional Design employees who have worked in the Gas Operations Services Training department since 2008. Since instructional design activities were provided by Human Resources prior to 2008 (see response to Question 2 of this data request), the number of modules created in the years 2005 through 2007 is not readily available. Starting in the year 2011, Gas Operations Services Training started tracking the number of new training modules created and in progress. Please see the table below for the estimated or actual number of new training modules created each year since 2008.

Year	Number of New Training Modules Created
2008	20
2009	20
2010	20
May 2011 YTD	30 1

1. The total for 2011 includes 13 completed training modules and 17 that are in progress. This number is not an estimate, but is the actual number of new training modules tracked by Gas Operations Services Training.

The following website provides some information on estimating the number of hours to develop training material. A copy of the information is also provided in the attached document below. According to this estimate, it takes approximately 34 hours to develop one hour of instructor-led training. Since most of Gas Operations' training modules have a duration longer than 4 hours, with some modules as long as 40 days, 120 hours to develop a new training module is a reasonable estimate.

http://www.nwlink.com/~donclark/hrd/costs.html#hours



Gas Operations Training does not track the number of hours to create new training modules, therefore the actual number of hours is not available.

DRA DATA REQUEST DRA-SCG-093-DAO SOCALGAS 2012 GRC – A.10-12-006 SOCALGAS RESPONSE

DATE RECEIVED: MAY 20, 2011 DATE RESPONDED: JUNE 15, 2011

- 10. On page GOM-48 SCG states: "Currently, there are 36 backlogged requests for training materials, including classes..." please provide a detailed explanation for the backlog.
 - a. When did the backlog first occur?
 - b. When did SCG become aware of the backlog?
 - c. What is SCG currently doing to address this backlog?
 - d. Provide the number of backlogged requests for training and/or classes each year from 2005-2011YTD.

SoCalGas Response 10:

- a. The backlog of requests for training materials has always existed, in some form. Prior to 2008, Human Resources maintained a list of requests for training material, including training related to Gas Operations Services.
- b. SoCalGas had previously been aware of a backlog of training requests, however it was first formally documented in the Gas Operations Training department in 2009.
- c. SoCalGas is implementing a formal tracking process to monitor the backlog, prioritize requests, and record progress. In addition, SoCalGas plans to complete an incremental 9 new training modules each year addressing approximately 25% of the training module backlog each year (Exhibit SCG-02, Page GOM-48).
- d. The backlog that SoCalGas keeps is constantly changing. Historical versions of the backlog are not kept, therefore the historical number of backlogged requests for each year is not known.

The number of backlogged requests was 36 when the testimony was written in mid-2010 (Exhibit SCG-02, Page GOM-48). The current backlog shows 30 requests pending or in progress. A copy of the current May 2011 backlog is attached below.

