Application of San Diego Gas & Electric Company (U902M) for Authority, Among Other Things, to Increase Rates and Charges for Electric and Gas Service Effective on January 1, 2012.	A.10-12-005 (Filed December 15, 2010)
Application of Southern California Gas Company (U904G) for authority to update its gas revenue requirement and base rates effective on January 1, 2012.	A.10-12-006 (Filed December 15, 2010)

Application: A.10-12-006
Exhibit No.: SCG-202

PREPARED REBUTTAL TESTIMONY OF
GINA OROZCO-MEJIA
ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

OCTOBER 2011

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PREPARED REBUTTAL TESTIMONY OF

GINA OROZCO-MEJIA

ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY

I. INTRODUCTION

This testimony presents Southern California Gas Company's (SCG's) review and rebuttal to the following interested parties' testimonies of September 1 and September 22, 2011:

- Division of Ratepayer Advocates (DRA) – Exhibits DRA-44 and DRA-45
- The Utility Reform Network (TURN) – Exhibit TURN-Marcus-SCG
- Center for Accessible Technology (CforAT) – Exhibit CforAT-Hopper

Addressed herein are the differences between the Gas Distribution Operating and Maintenance (O&M) and Capital forecasts I sponsored in my Revised Direct Testimony (Exhibit SCG-02-R, July 22, 2011), and the direct testimony of each interested party.

This testimony is organized as follows:

- Section II – Summary of Rebuttal Arguments
- Section III – Gas Distribution O&M Rebuttal– DRA and TURN
- Section IV – Gas Distribution Capital Rebuttal – DRA and TURN
- Section V – Comments on Testimony of CforAT
- Section VI – Conclusion

In the timeframe available to respond to DRA and intervenor testimonies, SCG does not address each and every DRA and intervenor proposal. However, it should not be assumed that failure to address any individual issue implies any agreement by SCG with the DRA or intervenor proposals.

II. SUMMARY

In total, SCG requests the Commission adopt its 2012 Test Year (TY2012) forecast of $132,337,000 for total Gas Distribution O&M expenses, which is composed of $131,182,000 for non-shared service activities and $1,155,000 (booked expense) for shared service activities. SCG also requests the Commission adopt its forecast of capital expenditures for 2010, 2011, and 2012 of $187,825,000, $224,217,000, and $212,576,000, respectively. Both DRA and TURN have each proposed significant reductions to SCG's Gas Distribution O&M non-shared service expense and Capital expenditure requests. Reply to these proposals is presented in this Rebuttal Testimony. In Exhibit SCG-224, SCG witness Mr. Edward Reyes will address the recommendations of DRA and TURN to reduce SCG's overall shared services request.

The table below summarizes parties' proposed reductions to SCG's Gas Distribution request.

Table SCG-GOM-1-R

(Shown in Thousands of 2009 Dollars)

Southern California Gas Company TY2012 General Rate Case Proceeding Gas Distribution Comparison of Positions	SCG Requested	DRA Reductions 1/	TURN Reductions 2/ 3/
TY 2012 O&M Shared Services	1,155	Not addressed here	
TY 2012 O&M Non Shared Services	131,182	(38,356)	(43,553)
2010 Capital	187,825	-	(25,162)
2011 Capital	224,217	(47,508)	(49,994)
2012 Capital	212,576	(41,914)	(53,077)

1/ Total O&M reductions shown in DRA's summary Table 44-1(page 2) reads $38,353. Displayed above is the sum of the elements as shown in DRA's individual section tables. There appear to be some rounding differences in the DRA elements for Measurement & Regulation (page 17), Cathodic Protection (page 29), and Main Maintenance (page 33.)

2/ Total O&M reductions of $43.4 million referenced in TURN's Introduction is not consistent with data presented on TURN Table 1 and paragraphs immediately proceeding this table. The total shown in this above summary table displays the sum of all elements shown in TURN Table 1.

3/ Total 2010 Capital reductions are based on 2010 Actual information as provided in response to DRA Data Response DRA-SCG-073-KCL-REVISED, Q1.

In contrast to the claims and proposals by the interested parties, SCG has, through Revised Direct Testimony (Exhibit SCG-02-R), workpapers (Exhibits SCG-02-WP and SCG-02-CWP-R), and responses to numerous data requests, provided the Commission with substantial justification to adopt SCG's forecast. The subsequent sections of this rebuttal testimony provide a detailed review of each DRA and TURN position; however, in general, the parties' proposals should be rejected due to:

- Use of 2010 recorded data.
- Use of inappropriate forecasting methodology.
- Misunderstanding of operational issues.

- Failure to recognize information provided by SCG.

During any review or comparison of SCG's forecast and the intervenors' proposals, it is important to note the following overall observations.

1. The introduction of 2010 recorded data for forecast development is inappropriate because it creates imbalances between parties' presentations, general inconsistencies between witness treatment of the data, and disparate treatment of forecast development.

As requested, 2010 recorded adjusted data was made available to parties in formats consistent with previously provided historical information. Both DRA and TURN rely upon the 2010 data for their forecast development. In some cases, DRA and/or TURN have recommended TY2012 spending levels equal to the 2010 level. TURN often incorporates this data in the calculations of three-, five-, or six-year averages in development of the O&M and capital projections. Finally, both DRA and TURN use the 2010 actual data as a point of reference for attempted validation of their proposals.

However, the Commission's Rate Case Plan explicitly denies applicants the opportunity to update their case except for very limited reasons – which do NOT include new annual cost information. If interested parties were allowed to introduce new data, the applicant should also be allowed to reevaluate and potentially update its forecast. Allowing 2010 data into this application without an overall evaluation of interrelated operating conditions denies the applicant the ability to: examine the new data points relative to operational issues, evaluate the data as it might relate to longer-term operational changes and potentially incorporate recent changes to operations, and address influences of external factors that may have arisen over the past year. To begin to incorporate new data at this time is analogous to beginning a new proceeding. If so, then SCG should be provided an opportunity to re-evaluate the **entire** cost structure. Such an

approach would, however, result in a never-ending proceeding that is constantly being updated for the most recent data.

Also, the introduction of 2010 data is not advisable because it is difficult to determine if all witnesses incorporated this data in the same manner. SCG Distribution operations face new and different challenges daily, managing priorities to maintain quality of service, and therefore, costs are not always incurred as "planned." While 2010 data might have been part of the historical analysis of Gas Distribution's activities by certain DRA and TURN witnesses, it might not have been included within other portions of their showing, or may have been selectively applied only to some of the cost categories but not others.

If 2010 data is allowed, it should be presented on equal terms for ALL elements of the case. For example, in its capital showing TURN chooses to incorporate 2010 data into its averaging methodology. However, TURN does not present a discussion on Main Replacements; but rather accepts SCG's forecast based on the five-year average 2005-2009. The problem being 2010 actual spending in this category was $44.0 million. Had this year's information been incorporated into the five-year average methodology, the forecast for Main Replacements would have been approximately $4 million HIGHER than the current proposal. TURN provides no discussion as to why it chose not to review Main Replacements in the same manner it reviewed all other categories of spending. This same limited review occurred in capital Pipeline Relocations – Franchise. In this case the 2010 Actual data was $11 million – nearly $2 million higher than the 2009 Actual. Incorporating 2010 data into any averaging analysis would have again resulted in a higher forecast value than that forecast by SCG. If 2010 data it to be examined, it must be examined within all categories of spending, and for all witnesses.

The presentation of SCG's 2010 forecast does not always facilitate a direct comparison to 2010 actual data. Caution is required in drawing conclusions from any comparison of the 2010 forecast to 2010 actual costs. In preparing the O&M and Capital forecasts, SCG first conducted an analysis that included the review of historical 2005 to 2009 spending and the consideration of the underlying cost drivers. Dependent on future expectations for underlying cost drivers, SCG selected an overall forecast methodology and then, where applicable, applied additions to reflect incremental work elements not captured in the base forecast. This concept is described in my revised direct testimony.[1] However, the focus was on determining the reasonable estimate for TY2012 or expenditures over the three year capital period and not the interim years. Thus, there is not a clear comparison between SCG Gas Distribution's 2010 forecast and 2010 actual spending.

SCG's forecast for Gas Distribution TY2012 O&M requirements, and forecasts for 2010, 2011, and 2012 Capital expenditures represents its best evaluation of future funding requirements given the information available at the time. It addresses a variety of non-homogenous activities, completed under operating conditions that can vary daily, and face many external market influences each with its own impacts. Priorities continually shift within field distribution work elements and between company departments in order to maintain customer and pipeline safety and ensure reliable deliveries of natural gas.

Even given these concerns regarding differences in data used in forecasting and accuracy in comparisons, my revised direct testimony,[2] associated workpapers,[3] and this rebuttal testimony provide ample information and data for the Commission to adopt SCG's requests.

[1] Exhibit SCG-02-R, pp. GOM-11 – GOM-12.
[2] Revised Direct Testimony of Gina Orozco-Mejia, Exhibit SCG-02-R, July 22, 2011.
[3] Exhibits SCG-02-WP and SCG-02-CWP-R.

2. SCG's base forecast was determined after a careful analysis of the past, current, and future cost drivers.

SCG's O&M base level forecast methodologies were identified after a thoughtful examination of the five-year (2005-2009) historical spending. In preparing its projections of the TY2012 Gas Distribution requirements, each identified workgroup was independently analyzed, taking into account the underlying cost drivers and an assessment of operational conditions that were embedded within the past five years. Dependent on future expectations for these underlying cost drivers, a primary forecast methodology was selected. The methods evaluated included:

- Forecast based on historical averages.
- Forecast based on simple trending of historical data.
- Forecast based on 2009 adjusted recorded spending.

The outcome is a base level forecast that provides a TY2012 estimate representative of SCG's best assessment of the base level of future operating conditions.

The Commission can be assured that SCG did not simply choose a methodology that presented the best outcome for SCG. In fact, in 11 out of 12 O&M areas, SCG did not select the forecast methodology that would produce the highest TY2012 base forecast and, in three areas, SCG actually selected forecast methodology that would produce the lowest TY2012 forecast. SCG's selected forecast methodology produced a TY2012 base forecast that was less than or equal to the five-year (2005-2009) average in 10 of 12 of the O&M areas.

Thus, SCG has presented the Commission with a balanced assessment of base level spending of expenses.

3. TURN's proposals are patently unreasonable. TURN's Capital and O&M recommendations are both well below historical spending levels.

On its surface the Commission should be suspect of TURN's proposals for overall O&M and Capital spending. TURN's showing has data inconsistencies, calculation errors, and analysis dependent on 2010 actual spending. As a result, TURN's resulting proposal for TY2012 O&M spending is actually LESS than 2010 recorded actual spending by approximately $1 million. This is not logical given the challenges outlined in the opening sections of my Revised Direct Testimony.[4] It is also not reasonable to think that field operations will be changing so significantly to have such productivity efficiency over a two year period to have REAL costs go down.

A similar result is seen in Capital. TURN's proposal on Capital expenditures in 2012 is $3.2 million below the 2010 actual spending. TURN implausibly expects SCG to be in a position to be spending at a rate LOWER than 2010. On its face, these forecasts are not credible and should be closely scrutinized.

4. DRA's and TURN's opposition to SCG's request for funding of new activities not reflected in historical spending levels is shortsighted.

SCG provided the Commission and intervenors in revised direct testimony,[5] workpapers,[6] and associated data requests, with complete information regarding new challenges it is experiencing since the 2009 base year period. These were well documented and fully justified.

These incremental increases include such matters as: increased training efforts to accommodate new technologies and enhance the company's ability to respond to emergencies;

[4] Exhibit SCG-02-R, pp. GOM-4 – GOM-8.
[5] Exhibit SCG-02-R.
[6] Exhibits SCG-02-WP and SCG-02-CWP-R.

new external cost drivers such as cities/municipalities and environmental agency requirements; maintenance of aging gas facilities to promote safety for employees and the public; pipeline system growth; and economic recovery.

DRA (and TURN implicitly) argue that SCG has provided incomplete information regarding new challenges it is experiencing since the 2009 base period. However, SCG provided workpapers outlining the underlying assumptions and calculations used to derive these incremental costs. Furthermore, DRA objects to many of these additions, claiming SCG was unable to provide historical tracking of spending in each of the incremental areas identified. However, in responses to DRA's data requests (for example DRA-SCG-057-DAO, question 4) SCG explained that these areas did not have a detailed tracking method to accumulate the data requested. DRA requested historical data on specific tasks that are part of the overall activity, SCG cannot track every task associated with completing a single gas distribution field activity. Also, some of these incremental items generally represent new requirements, so historical data back to 2005 would not exist – even if it could be tracked separately. To obtain a projection for future spending in these new areas, SCG relied upon the first-hand knowledge and experience of its field supervisors. These individuals are the closest to the issues at hand, and are SCG's best resource when more formalized data analysis methods are not readily available. Just because a specific task cannot be individually tracked does not mean that it does not exist or will not increase in cost.

SCG thoughtfully evaluated the incremental additions to see if they were necessary and incremental to the base forecast, and put forth only necessary additions required to safely and effectively run the Gas Distribution operation in TY2012.

It is not reasonable to suggest that all future operating conditions are reflected within historical spending profiles. SCG continually faces new operating constraints and, with an aging infrastructure, must undertake additional maintenance activities in order to maintain existing levels of safety and reliability. The analysis of experienced SCG operational personnel and their assessments of future needs should be given great weight by the Commission in its evaluation of the TY2012 forecasts.

The Commission has been provided substantial justification to adopt SCG's incremental requests.

5. TURN's direct testimony contains many inconsistencies in the data it presents, adding confusion to any review.

TURN's testimony on Gas Distribution is inconsistent in its presentation of its proposal. Data displayed in summary Table 1[7] does not conform to data and recommendations made later in testimony. It took SCG analysts significant time to reconcile some of the data issues to confirm TURN's proposal. SCG identified seven places where the data shown by TURN does not match other elements within its testimony. For example, TURN displays SCG's TY2012 forecast in "measurement and regulating" as $37,024[8], yet SCG's forecast is actually $35,725 (stated in thousands). In another instance, in forecasting for Measurement and Regulation, TURN uses the 2010 figure of $9,428[9] in its averaging calculations. The correct figure would be $9,940 (stated in thousands).[10] These errors result in overstating the difference between SCG and TURN presentations. In Attachment A to this rebuttal testimony, I provide a side-by-side

[7] Exhibit TURN-Marcus-SCG, p. 3.
[8] Exhibit TURN-Marcus-SCG, p. 5, Table 3.
[9] Exhibit TURN-Marcus-SCG, p. 3, Table 1 and p. 5, Table 3.
[10] Data Request DRA-SCG-065-DAO, question 2.

comparison of SCG's, DRA's and TURN's TY2012 O&M forecast values, attempting to correct for TURN's display errors. SCG's adjustments to reflect such errors are footnoted within Attachment A. In capital, TURN's showing for 2010 actual costs[11] does not match the data SCG provided in its response to data request DRA-SCG-073-KCL-REVISED, or elements as provided to TURN in response to data requests TURN-SCG-DR-12 and TURN-SCG-DR-17. The appropriate data comparison is shown in Table SCG-GOM-20-R on page GOM-118 within this rebuttal testimony. Again, SCG has done its best to "correct" TURN's presentation in these rebuttal comparison tables. However, these errors should cause the Commission to question the completeness of TURN's showing.

III. GAS DISTRIBUTION O&M REBUTTAL – DRA AND TURN

My revised direct testimony supports TY2012 non-shared services O&M expenditures of $131.2 million.[12] SCG developed this forecast based on a review of historical spending, and in consideration of new or incremental changes in activities, not reflected in historical spending levels, which will impact future revenue requirements.

In its presentation, DRA is recommending a reduction of $38.4 million from SCG's forecast, or approximately 29% from SCG's request. DRA contends that SCG has not shown sufficient support for its requested incremental additions. TURN agrees with DRA on its proposed reductions, and proposes further reductions of $5.2 million, generally the result of preparing a base level forecast which incorporates 2010 actual spending into its forecast calculations.

[11] Exhibit TURN-Marcus-SCG, p. 33, Table 27.
[12] Exhibit SCG-02-R.

One of the incremental increases DRA recommended against is the City/Municipality Requirements. SCG requested funds to address these increasingly stringent external impacts including paving, permitting, night work, engineered traffic control plans, and limits on construction hours. These incremental increases impact all work categories where construction work is performed in the public right of way. Specifically, within my revised direct testimony, incremental increases were requested for: Locate and Mark, Measurement and Regulation, Cathodic Protection, Main Maintenance, and Service Maintenance.[13] My revised direct testimony provided the background on this need in the "Challenges to Operations" section. An excerpt from this section is shown below:

> *For example, in the area of administration, recent changes in municipality requirements have led to increases for SCG in construction permit and other associated costs. SCG's average O&M cost per permit has increased by 33% since 2005, well in excess of general non-labor inflation. Additionally, city requirements for engineered traffic control plans as a condition of permitting construction and maintenance also contribute to increased expenditures. Cities are citing safety concerns as the reason for this additional requirement. Historically, only projects having special circumstances related to traffic control required engineered traffic plans. These specialized engineered plans must be prepared by a contract engineering firm, thus increasing costs to the operations. Based on experience in SCG's Technical Planning office, during 2009 the percentage of jobs requiring these plans rose from 3% to 10%. Most recent experience indicates that this trend will continue into the future.*
>
> *SCG is facing additional paving repair requirements imposed by municipalities that impact field construction practices and therefore result in increased costs. These include requiring T-Cuts, grinding for steel plate installation, and paving repair size that exceeds the actual cut size. From 2005 to 2009 SCG's average cost per paving order increased by 65%. SCG anticipates this significant cost increase in paving will continue in future years.*
>
> *Another example of restrictions affecting construction costs is the growing number of municipalities requiring the removal of paint markings used to identify substructures during construction projects. In these instances, the onus is on the entity requesting the Underground Service Alert (USA) locate-and-mark ticket to remove markings placed on sidewalks and streets by all utilities responding to the*

[13] Exhibit SCG-02-R, Section II.B.1, starting on p. GOM-13.

request. As part of its own construction activities, SCG requests other utilities mark their underground facilities. Thus, SCG field personnel will be responsible to remove these marks utilizing a variety of methods.

Finally, cities are also imposing restricted work hours resulting in more days to complete work. As urban centers become more congested with vehicular traffic, more cities are restricting the hours when construction work can be performed during the day or even requiring some work to be completed at night. This growing trend toward restricted working hours reduces the time available to complete work, impacting field productivity.

Even though SCG works diligently with these agencies to find solutions that will be in the best interest of ratepayers and agencies, often these rules result in cost increases.[14]

These increases are real. Following are several examples of changes implemented in 2011[15] by municipalities throughout SCG's service territory which further increase the cost of completing both O&M and Capital construction activities:

- Los Angeles County Department of Public Works increased its permit fee from $180 ($52 issuance and $128 service cuts) to $866 ($141 issuance, $258 processing and $467 for service cuts), a **381% increase**.
- The city of Stanton increased its permit fee from $220 for an encroachment permit to $975 for the same permit, a **343% increase**.
- The city of Santa Monica increased its Use of Public Property Permit from a fixed cost of $73.99 to a variable rate of $109.78 to $154.93. This represents an average increase of 79%. Furthermore, this city increased its Utility Excavation Permit from $82.56 to $683.32, a **728% increase**.
- The city of Montebello increased its Permit Issuance Fee from $85 to $121.48, a **43% increase**.

[14] Exhibit SCG-02-R, pp. GOM-6 – GOM-7.
[15] All changes listed in this section were implemented in 2011 except for the change in the City of Azusa, which was implemented in September of 2010.

- The city of Beverly Hills established a new fee of $250, titled Engineering Plan Check Fee. This is a completely **new requirement** that did not previously exist.
- The City of Azusa increased its permit fee from $183 to $475 per cut under 100 square feet, plus $205 for each additional 100 square feet. In addition, prior to September of 2010, the City allowed SCG to include multiple service replacements under one permit if they were located on the same block (3-4 cuts maximum) which is no longer allowed. This represents a **160% increase** for cuts less than 100 square feet.
- The City of Rancho Cucamonga charged $30,783 in permit extension fees for completed jobs whose permits they would not finalize or close until the USA paint markings had been removed. The City demanded the markings either be sandblasted or power washed. SCG now hires an outside contractor at a minimum of $197 per hour with a four hour minimum to sandblast delineation markings including other utility markings that may be within the SCG markings. This is a **new requirement** that did not previously exist for this City.
- The City of Lancaster implemented a new fee for review of Traffic Control Plans in the amount of $566 per 1,000 linear feet. This is a **new requirement** that did not previously exist for this City.

As seen from the examples of recent changes listed above, SCG continues to experience an upward trend in requirements from cities/municipalities incrementally increasing the cost of O&M and Capital construction activities.

The sections that follow address the specific arguments presented by DRA and TURN and confirm that SCG's forecasts remain reasonable and should be adopted. Within each section

is an introductory table listing the expenditure amounts proposed by each of the parties. For convenience, the complete table of all workgroups is produced in Attachment A to this rebuttal testimony.

A. Field O&M – Locate and Mark

Table SCG-GOM-2-R

Comparison of Positions in Case
TY2012 Estimates -- Gas Distribution O&M
(Thousands 2009 $)

	Position of Party			Reductions to SCG	
Additions	**SCG**	**DRA**	**TURN**	**DRA<SCG**	**TURN <SCG**
Base	9,866	9,427		(439)	(439)
Federal Stimulus	83	-	Accepts	(83)	(83)
Los Osos	181	60	DRA	(121)	(121)
Paint Removal	230	-		(230)	(230)
City/Muni Requirements	197	-		(197)	(197)
Subtotal Locate & Mark	**10,557**	**9,487**	**9,487**	**(1,070)**	**(1,070)**

To avert damages caused by third-party excavators working near gas underground substructures, SCG is required to locate and mark its facilities. Utilizing an electronic pipe-locating device, substructure maps, and service history records, employees will determine the location of the gas facilities. Color-coded markings are then placed over the substructures to visually identify the locations. In addition, SCG conducts job observations of other parties excavating in close proximity to SCG's critical and high pressure pipelines. A third damage prevention activity within this workgroup is referred to as "depth checks" which entails excavating over SCG's pipelines to determine the elevation of the pipeline.

SCG's forecast for expenditures on Locate and Mark activities was based on the five-year average (2005-2009) spending plus additional costs resulting from new work requirements due to projects stemming from: the use of Federal Stimulus funds; the City of Los Osos' sewer project;

requirements for removal of location painting markings; and increased city/municipal construction restrictions.

In total, SCG's requested $10.6 million in TY2012 for this area.

1. Rebuttal to DRA

DRA proposes a $1.1 million reduction to $9.5 million in TY2012 funding for this area. DRA contends that 2010 actual performance is a better representation of the base level of funding required in this area. It cites a continued decline in the number of Locate and Mark tickets and apparent lack of improved economic conditions as justification for its proposed use of the 2010 spending. Furthermore, DRA argues that SCG has not shown sufficient evidence to warrant the incremental costs. Each of DRA's positions is addressed below.

a. Base Forecast Level

SCG does cite improving economic conditions in support of the use of a five-year average to determine the base forecast level of spending. However, DRA has misunderstood SCG's use of the IHS Global Insight index as a proxy for "economic conditions." DRA attempted to draw a one-to-one correlation between unemployment levels and locate and mark spending. SCG's intent on introducing the index was purely to assess the general direction of the economy – not as a strict correlation measure. At the time of preparing this forecast, IHS Global Insight projected the rate of change in non-farm employment to be comparable to that seen in the 2005-2006 period. This was the best information available when preparing this forecast. However, even the more recent IHS Global Insight forecast, as referenced by DRA, continues to

show positive growth and therefore continues to support SCG's assumption of an overall upward direction for the economy. The table below compares these two forecast projections.[16]

Table SCG-GOM-3-R

Nonfarm Employment Index

"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 and Ventura counties.

Source: Global Insight Regional Forecast

	Feb. 2010 Forecast		Feb. 2011 Forecast	
	(millions)	(%change)	(millions)	(%change)
2000	6,918		6,918	
2001	7,000	1.2%	7,000	1.2%
2002	6,982	-0.3%	6,982	-0.3%
2003	7,003	0.3%	7,003	0.3%
2004	7,111	1.5%	7,111	1.5%
2005	7,249	1.9%	7,249	1.9%
2006	7,410	2.2%	7,410	2.2%
2007	7,444	0.5%	7,444	0.5%
2008	7,305	-1.9%	7,305	-1.9%
2009	6,995	-4.2%	6,838	-6.4%
2010	6,961	-0.5%	6,720	-1.7%
2011	7,089	1.8%	6,775	0.8%
2012	7,272	2.6%	6,899	1.8%
2013	7,445	2.4%	7,046	2.1%
2014	7,549	1.4%	7,171	1.8%
2015	7,615	0.9%	7,282	1.5%

Furthermore, DRA's use of tickets to justify its recommendation is flawed on two counts. First, the number of tickets is not a complete indication of the level of work required. As described in my revised direct testimony, a single locate and mark ticket can range in scope from a construction project entailing a single excavation, to a project comprised of thousands of feet of

[16] Data Requests DRA-SCG-086-DAO, question 1 and DRA-SCG-095-DAO, question 1.

construction requiring extensive effort to appropriately mark the location of gas facilities throughout the length.[17] Thus, a single ticket may require multiple markings, and thus more time. Second, DRA points to the continued recent decline in tickets as if to suggest this trend should continue. DRA has focused only on years of decline, yet the years 2005 and 2007 show higher levels of activity. While this historical data includes two years of decline, it also includes two years of growth. Hence, to help guide the selection of a base forecasting methodology, SCG looked to a reputable consulting firm to provide its expert view of future economic conditions.

Furthermore, the time to complete a ticket (as calculated from data provided to the DRA) is increasing as evidenced by the increase in the cost per ticket shown in the table below.[18] The time requirements can be influenced by either the number of elements requiring marking or the length of the job to be marked. This variability in the Locate and Mark work was included within the five-year average SCG used for its base level forecast.

Table SCG-GOM-4-R

Year	Thousands of 2009$	Ticket Count	Cost / Ticket	% Increase
2005	7,362	579,368	$ 12.71	
2006	7,812	563,082	$ 13.87	9.2%
2007	8,201	574,977	$ 14.26	2.8%
2008	7,794	540,079	$ 14.43	1.2%
2009	7,723	492,975	$ 15.67	8.6%

DRA's choice of supporting evidence is therefore flawed and its recommendation based on a single year's level of spending (the lowest in recent history) does not reflect the expectation of future growth, but rather assumes stagnant economic activity. The Commission therefore

[17] Exhibit SCG-02-R, p. GOM -15, lines 5-8.
[18] Data Request DRA-SCG-057-DAO, information from tables provided in response to questions 1 and 2.

should reject DRA's proposed reduction of $439,000 and adopt the five-year average (2005-2009) base forecast as presented by SCG.

b. New Incremental Additions

i. Federal Stimulus

SCG requests incremental funding in TY2012 of $83,000 to locate and mark facilities which conflict with street and highway construction activities facilitated through the use of Federal Stimulus funding. DRA does not deny the existence of federal stimulus funding, but states that SCG has provided insufficient evidence to justify the request.

Historical expense data was not available because: a) reporting systems did not track costs by whether they were the result of Federal Stimulus funding (see discussion in Section II, point 4 above) and b) this is a new work factor for which historical spending data does not exist. Thus, in this instance, SCG relied upon information provided by its field supervisors regarding the levels of expected activity. These individuals are the closest to the issues at hand, and are SCG's best resource when more formalized data analysis methods are not readily available. In its response to data request DRA-SCG-057-DAO, question 4, SCG clearly explained why additional expense data could not be provided. An excerpt from the response is shown below.

> ***Data Request DRA-SCG-057-DAO, Question 4****:*
>
> *What was the 2010 recorded expenses for the Federal Stimulus Funding projects?*
>
> ***SoCalGas Response (Excerpt):***
>
> *With respect to specific Federal Stimulus Funded projects, SCG has historically recorded its costs for O&M work by cost center and FERC accounts corresponding to the major activity completed. Federal stimulus funding is a factor influencing the total cost of completing Locate and Mark activities. The expense associated with each factor that may influence a single activity has not been tracked separately, or at a level of specificity sufficient to produce the 2010 recorded expense. In addition, there is rarely notification from the cities or*

agencies as to which municipal Transportation projects were funded specifically through the Recovery Act as opposed to those funded by other means.

SCG's request for the incremental expense associated with federal stimulus funding projects represents a forecast that can be reasonably anticipated due to this work.

While DRA does not deny the existence of Federal Stimulus funding, it proposes no incremental funding in this area, stating that "there is no evidence to show that local and state agencies will be able and/or willing to spend additional money on street and highway improvement projects during the TY2012 GRC cycle".[19] However, the web link www.recovery.gov provides clear evidence that funding for California transportation projects has been granted. SCG provided this information to DRA in response to data request DRA-SCG-079-DAO, question 1, which included the web link: http://www.recovery.ca.gov/html/funding/transportation/transportation.shtml (link has been changed to www.recovery.gov). As noted in the response, "California has spent approximately 20% of the potentially available Federal funding as of April 28, 2011. In 2011 and 2012 SoCalGas expects increases in transportation projects as more of the awarded stimulus dollars become available to the State."

SCG has provided the Commission with substantial evidence to support the need for funding incremental locate and mark activities due to Federal Stimulus-related construction work. The Commission therefore should reject DRA's proposed reduction.

ii. Los Osos Sewer Project

SCG requests incremental funding in TY2012 of $181,000 to complete distribution field work in response to the City of Los Osos' efforts to replace its city sewer system. In its review, DRA concludes that because the Los Osos project appears to be delayed and a firm completion

[19] Exhibit DRA-44, p. 10, lines 17-19.

date is not known, SCG's TY2012 request should be "normalized" to more appropriately reflect expenditures over future years. DRA's proposed funding in this area is $60,000 in TY2012, a $121,000 reduction.

First, DRA's proposal is incomplete in its analysis. If DRA is to "normalize" project costs, it must recognize the entire project costs for the Locate and Mark workgroup – not just the 2012 expenditures. DRA took just the 2012 forecasted cost and mistakenly assumed this would be the cost necessary for the entire three-year project. The correct way to allocate costs would be to take the total project costs and spread them over the project's duration.

More importantly, DRA does not acknowledge SCG's work must commence **in advance of** the city's construction activity. SCG must locate and mark its facilities before the city is to begin construction work to prevent potential damage and identify larger conflicts. Additionally, job observations and depth checks will continue throughout the duration of the project. According to information on the San Luis Obispo County website, construction is scheduled to start in May 2012. SCG's locate and mark work must begin well before that date.[20]

Therefore SCG's request for funding for TY2012 is quite realistic and should be adopted by the Commission.

iii. Removal of Paint Markings

SCG requests incremental funding in TY2012 of $230,000 for the removal of paint markings made in the process of locating SCG's pipelines. DRA does not deny that increased costs exist, but claims that, because SCG could not provide five years of historical spending on this task, and had limited analytical support for the assumed percentage increase in work, the entire incremental request should be rejected. As stated above, SCG cannot track every task

[20] http://www.slocounty.ca.gov/PW/LOWWP/DOCS/Current_Documents.htm

associated with completing a single gas distribution field activity and it would not be reasonable to expect this. The lack of such detailed cost tracking does not mean that these costs do not exist.

As discussed in my revised direct testimony, a growing number of municipalities are requiring the removal of paint markings.[21] Following is a recent example also noted above of the action taken by one city to enforce the paint markings removal requirements. In this case, the additional requirements impacted both SCG's permit costs as well as the removal of the paint markings.

- The City of Rancho Cucamonga charged $30,783 in permit extension fees for completed jobs whose permits they would not finalize or close until the USA paint markings had been removed. The City demanded the markings either be sandblasted or power washed. SCG now hires an outside contractor at a minimum cost of $197 per hour with a four hour minimum to sandblast delineation markings including other utility markings that may be within the SCG markings. This is a **new requirement** that did not previously exist for this City.

As explained in the Summary paragraph of this rebuttal, Section II, point 4, SCG has relied upon the working knowledge of its field supervisors for an assessment of the future need to remove these markings. Due to their daily interactions with the municipalities, these front-line personnel are in the best position to assess the future direction of such work requirements. These field experts were polled to determine the impact of this requirement in their districts. The opinions of these experts should not be dismissed, or SCG's projection rejected simply because

[21] Exhibit SCG-02-R, pp. GOM-16 – GOM-17.

SCG was not able to track historical spending on this discrete task for the last five years. The Commission should therefore adopt SCG's request.

iv. Increased City/Municipality Requirements

SCG requests incremental funding in TY2012 of $197,000 for increasing permit costs and numerous construction requirements (such as: engineered traffic control plans, additional paving requirements, and a growing trend toward restricted working hours) when excavating to identify the elevation of SCG facilities in public Rights-of-Way. Once again, DRA does not deny the existence of these incremental costs, but asserts that any increase in demands from city/municipality requirements would be offset by a decrease in the units of work (tickets). This is not correct. The decrease in the units of work pertains to USA Locate and Mark tickets. It is the depth check activity itself, not USA Locate and Mark work, that is impacted by these requirements. As such, the decline in the number of USA tickets has no affect on depth check activity. Furthermore, as explained above, the count of USA tickets is not even a complete indication of the level of Locate and Mark work. Based upon its flawed analysis, and because SCG could not provide historical spending, DRA claimed there was insufficient information to support any increases.

SCG provided DRA with the 2005-2009 average historical numbers of completed jobs, an assessment of the number of jobs that would likely be impacted by these more restrictive conditions, and the resulting additional time requirements which determined the estimate of future expenditures.[22] The only method to obtain a forecast of the requirements in this area is to rely upon those employees dealing with daily operations. SCG relied upon the information provided by its field supervisors, using their assessment to determine the number of jobs that

[22] Exhibit SCG-02-WP, pp. 21-23 of 234, lines 4, 8, 12, 16, 20, 27, 31, and 35.

would be impacted and the additional time requirements. These managers and supervisors have first-hand knowledge of the changing city/municipality requirements. It was through polling those employees and further discussions with them that the increase in these requirements was estimated.

However, in addition to this information, DRA requested the historical amount spent on the specific city/municipal construction requirements related to locate and mark activities. As was stated in the response to this data request, SCG does not separately track costs for each of the tasks or components within any given overall activity. [23]

However, SCG does have the historical information pertaining to permits and paving fee activities which are items related to these increased municipal requirements in total (although not specifically related to the locate and mark activity). As noted in my revised direct testimony, "SCG is facing additional paving repair requirements imposed by municipalities that impact field construction practices and therefore result in increased costs. These include requiring T-Cuts, grinding for steel plate installation, and paving repair size that exceeds the actual cut size. From 2005 to 2009 SCG's average cost per paving order increased by 65%."[24] With respect to permit costs, from 2005-2009 SCG's average cost per permit increased by 33%. The tables below provide the annual data.

[23] Data Request DRA-SCG-057-DAO, question 10.
[24] Exhibit SCG-02-R, p. GOM-6, lines 22-26.

Table SCG-GOM-5-R

O&M Paving Costs in 2009$

	O&M Paving Costs	# of Jobs Impacted	Average Cost/Job	2005-2009 % Change
2005	$ 1,331,477	4,687	$ 284	
2006	$ 2,279,563	6,066	$ 376	
2007	$ 2,592,047	5,871	$ 442	
2008	$ 2,334,461	6,070	$ 385	
2009	$ 2,614,018	5,556	$ 470	65.62%

Table SCG-GOM-6-R

O&M Permit Costs in 2009$

	O&M Permit Costs	# O&M Permits	Average Cost per Permit	2005-2009 % Change
2005	$ 666,147	4,412	$ 151	
2006	$ 689,446	4,533	$ 152	
2007	$ 930,104	4,487	$ 207	
2008	$ 813,911	3,591	$ 227	
2009	$ 1,023,485	5,081	$ 201	33.41%

The introductory remarks to this O&M rebuttal section include several specific examples where different cities have increased their requirements over time for permits and paving. These examples affect all work categories that require permits and paving including the depth check activity within the Locate and Mark work category.

DRA claims that "SCG's Locate and Mark work and associated expenses have been steadily declining for the past 4 years. Even if there is an increase in demands and costs from city/municipality requirements, the continued decrease in the unit of work should offset any anticipated increases."[25] The expense pattern for the Locate and Mark activity from 2005 to 2009 has some years of higher expenditures than the five-year average (2005 and 2007) and

[25] Exhibit DRA-44, p. 14, lines 20-24.

years of lower expenditures (2006, 2008 and 2009). SCG chose the five-year average to account for annual fluctuations in the level of activity, which is the appropriate method for forecasting this work. It is unrealistic to assume, as DRA has, that work levels and impact factors will remain static at the 2010 level.

SCG has provided the Commission with substantial information supporting this incremental request and its forecast should be approved.

2. Rebuttal to TURN

TURN did not provide testimony on Locate and Mark.

B. Field O&M – Leak Survey

Table SCG-GOM-7-R

Comparison of Positions in Case
TY2012 Estimates -- Gas Distribution O&M
(Thousands 2009 $)

	Position of Party			Reductions to SCG	
Additions	**SCG**	**DRA**	**TURN**	**DRA<SCG**	**TURN <SCG**
Subtotal Leak Survey	**4,145**	**4,145**	**4,048**	**-**	**(97)**

Leak survey activities are conducted in compliance with federal pipeline safety regulation 49 C.F.R. §192.723 (Distribution systems: Leakage surveys). These surveys are performed at various time intervals depending on the pipe material involved, the operating pressure, and the proximity of the facilities to various population densities. SCG pipelines are leak surveyed at intervals of one, three, or five years. Examples of annual surveys are business districts which are defined as a principal business area in a community where large numbers of people regularly congregate to engage in business activities such as: purchasing, sales, manufacturing of commodities, or public service establishments such as schools, churches, and hospitals. Three-year survey cycles are used for all cathodically unprotected mains and services. Five-year

survey cycles are typically used for plastic and cathodically protected steel mains and services installed in residential areas.

SCG's footage surveyed and the associated expenses have risen steadily between 2005 and 2009. As SCG continues to experience growth in its system, survey requirements will increase. Therefore, SCG has forecasted the TY2012 requirements based upon a five-year trend for the period 2005 through 2009. In total, the incremental expense necessary to fund leak surveys for TY2012 is $414,000 over the 2009 adjusted recorded base.

1. Rebuttal to DRA

DRA does not oppose the forecasted funding for Leak Survey.[26]

2. Rebuttal to TURN

TURN recommends a $97,000 reduction to $4.0 million in TY2012 funding for this area. While adopting the SCG trending forecast methodology, TURN introduced 2010 data into the forecast calculations. TURN reviewed the results of the 2005-2010 trend versus the 2006 – 2010 trend and proposes using the 2005-2010 trend as it yields a higher result, and also because TURN recognizes the importance of leak survey work.[27]

a. Base Forecast Level

SCG objects to TURN's use of the 2010 expense data in its base forecast. As stated previously in Section II, point 1, if interested parties are allowed to introduce new data, then the applicant should also be allowed to reevaluate and potentially update its forecast. This is not allowed, however, because a GRC would never finish if cost data is constantly updated. TURN's use of 2010 cost data therefore should be rejected.

[26] Exhibit DRA-44, p. 15, lines 22-24.
[27] Exhibit TURN-Marcus-SCG, p. 4.

SCG has demonstrated, and both DRA and TURN concur, that leak survey activity is trending upward from 2005-2009.[28] As such, the Commission should adopt SCG's forecast.

C. Field O&M – Measurement and Regulation

Table SCG-GOM-8-R

Comparison of Positions in Case
TY2012 Estimates -- Gas Distribution O&M
(Thousands 2009 $)

	Position of Party			Reductions to SCG	
Additions	**SCG**	**DRA**	**TURN**	**DRA<SCG**	**TURN <SCG**
Base	10,830	10,830	10,546	-	(284)
Replace MSA	122	-		(122)	(122)
Replace Regulators	371	-		(371)	(371)
Regulatory Requirements	539	-	Accepts	(539)	(539)
City/Muni Requirements	162	-	DRA	(162)	(162)
Vault Maintenance	22	-		(22)	(22)
Pedestrian Access	179	-		(179)	(179)
Odorization Testing	58	-		(58)	(58)
Reduced Chart Maintenance			(226)	-	(226)
NERBA	23,442	27	- 3/	(23,415)	(23,442)
Subtotal Measurement & Regulation	**35,725**	**10,857**	**10,320**	**(24,868)**	**(25,405)**

3/ TURN states it agrees with DRA in "denying all increases" (pg. 4 first sentence M&R). However DRA did recommend $27,000 for GHG compliance. TURN appears to have left this out of their analysis.

Measurement and Regulation (M&R) activities focus primarily on maintaining and operating SCG's approximately 2,000 regulator stations used to reduce gas pressure entering the distribution system, and approximately 95,000 medium and large customer meter set assemblies (MSAs) used in the accurate measurement and regulation of gas flow at the customer premise.

To account for fluctuations in the various operations and maintenance work, SCG's forecast is based on the five-year average (2005-2009) spending. This determination of base spending is $332,000 less than the 2009 recorded value. Added to the five-year average is the cost to complete incremental activities not reflected in this historical period – including items to address aging infrastructure, new regulatory or agency requirements, and necessary changes in field operational practices. Collectively, these incremental amounts total $24.9 million,

[28] Exhibits DRA-44, p. 15, line 24 to p. 16, line 2 and TURN-Marcus-SCG, p. 4.

including an estimated $23.4 million to implement the Environmental Protection Agency's new subpart W, 40 C.F.R. §98.230, to the Greenhouse Gas Mandatory Reporting Rule, 40 C.F.R. §98. SCG proposes two-way balancing account treatment of these regulatory-related costs.

In total, SCG requests $35.7 million in TY2012 for this area, $23.4 million of which would be subject to the two-way balancing account treatment.

1. Rebuttal to DRA

DRA recommends a $24.9 million reduction to $10.9 million in TY2012 funding for this area. DRA does not take issue with SCG's use of the five-year average (2005-2009) to determine the base spending requirement. However, DRA contends that SCG has not provided sufficient justification of the funding required for nearly all of its incremental work elements. It also recommends against the use of a two-way balancing account to address potential environmental compliance requirements and instead recommend SCG be provided only $27,000 of incremental funding for this work. Each of DRA's contentions is addressed below.

a. Base Forecast Level

DRA does not oppose the forecasted base level funding for Measurement and Regulation.[29]

[29] Exhibit DRA-44, p. 17, lines 15-17.

b. New Incremental Additions

i. Aging Infrastructure – Replacement of Medium and Large MSAs

SCG requests incremental funding in TY2012 of $122,000 for the replacement of medium and large MSAs that are aging. DRA opposes all funding of this incremental request. It appears DRA misunderstands gas operations in this area.

DRA contends that SCG's request is merely an acceleration of meter replacement work that is currently performed.[30] The presumption then is that this work is captured in base spending and incremental funding would not be required. As I stated in my revised direct testimony, these medium and large sized MSAs are aging and require more frequent field meter tests and adjustments to keep registration accuracy within prescribed regulatory tolerance.[31] SCG's request is for the replacement of this older, obsolete, more maintenance-intensive equipment not captured in historical spending.

DRA further contends that SCG did not provide evidence to support its claim that meters need to be replaced at 20 years. This is not the case. First, it is important to recognize that SCG only replaces the meter as it begins to show increased maintenance costs and/or accuracy problems. SCG provided DRA historical data showing the average age of those meters being replaced. This ranged from 21.1 to 25.5 years.[32] Furthermore, to determine the incremental number of meters to be replaced, SCG reviewed its listing of all meters in service, the age of each and, after deducting for some meters that would be changed early due to functional

[30] Exhibit DRA-44, p. 18, lines 17-19.
[31] Exhibit SCG-02-R, p. GOM-20, lines 10-14.
[32] Data Request DRA-SCG-077-DAO, question 1c.

problems, determined that at a rate of 650 change-outs per year it would still take approximately 10 years to remove the over 6,600 older meters currently in the system.[33]

In addition, as time passes, the meters will age to the point where more failures will occur, forcing the need for replacement. Implementing a proactive and systematic approach allows SCG to better utilize its resources by scheduling the work instead of reacting to emergency replacements, ensure the integrity of the equipment by replacing it before it fails, minimize disruption to customers, and ensure compliance with applicable measurement accuracy standards prescribed by the Commission.[34]

SCG has provided the justification to show that the population of meters is aging, that the relative age for replacement is approximately 20 years, and given a population of over 6,600 older meters in its distribution system, SCG should be granted the incremental funding to address the needed replacements.

ii. Aging Infrastructure – Replacement of Regulators at Regulator Stations

SCG requests incremental funding of $371,000 to replace aging regulators within regulator stations. DRA opposes funding this incremental request because, it claims, SCG has not shown sufficient evidence to support: a) the number of regulators being inspected, maintained, or replaced,[35] b) the reason that the regulators must be replaced at an accelerated rate,[36] and c) how SCG derived the annual number of regulators needing replacement.[37] However, SCG provided DRA with responses to its data requests addressing these issues.

[33] Data Request DRA-SCG-077-DAO, questions 1d and e.
[34] CPUC General Order 58-A.
[35] Exhibit DRA-44, p. 20, lines 1-2.
[36] Exhibit DRA-44, p. 19, lines 20-22.
[37] Exhibit DRA-44, p. 20, lines 2-4.

First, in response to data request DRA-SCG-077-DAO question 2(a), SCG responded to DRA's specific request to provide the number of regulators inspected, maintained, replaced, and the annual expenses incurred each year from 2005-2011. SCG responded:

> *The table below provides the number of distribution regulators that were inspected, maintained and/or replaced and annual expenses for the period of 2005 through March 2011. 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.*

Regulator Inspection and Maintenance							
Year	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**Mar YTD 2011**
Regulator Count	17,333	17,639	18,118	17,427	17,468	16,917	4,268
Expenses in 2009$ (000)							
Labor	1,101	1,169	1,106	1,066	1,111	1,052	NA
Non-Labor	730	919	941	1,250	1,357	1,026	NA
Total	1,831	2,088	2,047	2,316	2,468	2,078	NA

Second, in my revised direct testimony and in response to data request DRA-SCG-077-DAO questions 2(b) and (c), SCG clearly addressed the issues of why these regulators must be replaced. SCG stated in its response to the data request:

> *The obsolete regulator models all belong to the family of Grove 80-BA. They became obsolete in 1997 due to product discontinuation. Their spare parts that need to be replaced during routine maintenance have become scarce and costly. In addition, the maintenance work requires the removal of a piece of pipe of the regulator station and it is time consuming. Because of their antiquated design, servicing these regulators requires awkward body positioning that can easily cause body injury. The count 1,668 is the actual number of regulators of these obsolete models as reported in SoCalGas' meter and regulator records as of September 2009.*

If, during the annual inspection and maintenance, a regulator is found malfunctioning it is subject to immediate repair or replacement. So while historical spending in this area does

include expenses not only for general maintenance but also immediate replacements, these replacements are not all related to the physical conditions noted above. As stated in my revised direct testimony, SCG has identified 1,668 regulators at regulator stations as obsolete; yet only replaces an average of 13 per year. Without this additional funding, it will take SCG approximately 120 years to replace these older, obsolete regulators. Of course, these regulators will likely malfunction and be replaced long before then in response to system problem rather than in a proactive and systematic fashion prior to failure.

Finally, DRA recommends against SCG's request since, in its view, justification to complete these replacements was based solely on "management judgment." DRA has taken SCG's response to a data request out of context. The question reads: "Please describe in detail how SCG determined the time frame of 5 years as the replacement period for these regulators. Include a copy of all calculations and or supportive documents used."[38] In the response, the reference to "management judgment" was with respect to the timeframe upon which to replace the 1,668 problematic regulators, not to the fundamental justification of such replacement efforts.

As a prudent gas distribution system operator, SCG must anticipate potential problems with its pipeline system and take the appropriate actions to ensure its integrity. The proactive and systematic replacement of these regulators will remove obsolete equipment increasingly prone to failure from the system. The benefits of proactive replacements include: 1) improved safety for employees servicing these regulators because of easier access; 2) better utilization of SCG's workforce by scheduling the work instead of reacting to emergency replacements; 3) ensuring the integrity of the system; and 4) minimizing disruption to customers.

[38] Data Request DRA-SCG-077-DAO question 2(d).

As shown in the paragraphs above, SCG has provided substantial evidence to support its request for incremental funding to replace aging regulators within regulator stations and as such its forecast should be adopted.

iii. Regulatory Requirements – MSA Rebuilds from Load Surveys

SCG requests incremental funding of $539,000 to support the rebuilding of an incremental 800 customer MSAs per year as a consequence of more targeted load surveys. Customer meters are surveyed to confirm that the meter sizing is appropriate for the level of usage. Incorrect sizing leads to inaccurate gas measurement and incorrect billings. DRA opposes funding this incremental request because, in its view, SCG's base forecast already includes this proposed level of rebuilds based on a greater number of surveys.

SCG acknowledges DRA's concern that SCG's request might appear to be double counting of costs. However, there are two key factors DRA has overlooked. First, while SCG has been completing roughly 860 rebuilds annually due to load surveys in the more recent history (2008-2009), the previous three years within the five-year average were at a rebuild rate of approximately 250 rebuilds per year. Thus, the funding to complete the rebuilds at the current rate is not fully reflected within the base five-year average forecast.

More importantly, the method by which the survey is now being conducted is to target customers where usage has changed, and there is a higher likelihood that the customer will require a meter rebuild.[39] From the data in the table below, it is evident that these focused load surveys are resulting in a higher rate of MSA rebuilds.

[39] Exhibit SCG-02-R, p. GOM-21, lines 5-9.

Table SCG-GOM-9-R[40]

Distribution MSA Rebuilds and Load Survey Ratio							
Year	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**Mar YTD 2011**
MSA Rebuilds	303	258	203	711	1,012	969	258
Load Surveys Conducted	2,438	2,395	2,721	2,361	3,238	1,601	711
Rebuilt/LS Conducted Ratio	12%	11%	7%	30%	31%	61%	36%

SCG has shown that the rebuilds are now occurring at a higher rate, and that historical spending levels would not support the anticipated higher levels of maintenance work. SCG's request for incremental funding for this activity has therefore been fully justified and should be adopted.

iv. Increased City/Municipality Requirements

SCG requests incremental funding of $162,000 in response to increased construction restrictions on the hours that SCG can use the public right-of-way to conduct required inspection and maintenance activities. DRA recommends against this funding, contending that SCG has not provided sufficient evidence to justify this request, that SCG's responses to DRA data requests were broad, and that they lacked factual information.

SCG provided DRA with the 2005-2009 average historical number of orders worked for medium MSAs, large MSAs and district regulator stations, an assessment of the number of orders that would be impacted by these more restrictive hours of operations, and the additional time requirements, which determined the forecast of future expenditures.[41] However, even with this historical perspective, the only method to obtain a valid forecast of the requirements in this area is to rely upon those employees dealing with daily operations. SCG relied upon the

[40] Data Request DRA-SCG-077-DAO, question 3(f).
[41] Exhibit SCG-02-WP, p. 51 of 234, lines 21, 22, and 23.

information provided by its field supervisors of their assessment of the number of orders that would be impacted and additional time requirements. These managers and supervisors have first-hand knowledge as to the changing city/municipality requirements. It was through polling and further discussions that the increase in these requirements was estimated.

In addition, the introductory remarks to this O&M rebuttal section include several specific examples where different cities have increased their requirements over time for permits and paving. These examples impact all work categories that require permits and paving including measurement and regulation work.

SCG has provided the Commission with substantial evidence supporting this incremental request and its forecast should be approved.

v. New Environmental Regulatory Balancing Account

SCG requests two-way balancing account treatment for incremental funding of $23.4 million to survey various SCG pipeline facilities in compliance with Subpart W of the Environmental Protection Agency's Greenhouse Gas Rules. DRA recommends against the use of a two-way balancing account to address potential environmental compliance requirements and instead proposed SCG be provided only $27,000 of incremental funding for this work, a reduction of $23.4 million from SCG's forecasted amount.

SCG acknowledges the issuance of a "final" rule, but also reiterates that further clarification on definitions within the rule are required before SCG can assess the operational impacts of this final rule. SCG clearly stated in response to data request DRA-SCG-107-DAO, question 2 that it is "supporting the American Gas Association who is working with EPA to gain greater clarity on the rulings and its requirements for Subpart W as it applies to SoCalGas' business operations." In fact, revisions to the GHG Rules continue into the present. For more

information on the timing of the implementation of Subpart W of the Environmental Protection Agency's Greenhouse Gas Rules, please refer to the rebuttal testimony of Ms. Haines, Exhibit SCG-215.

In its interpretation of the final rule, DRA concludes that SCG will only need to visit 90 incremental sites to remain in compliance. This figure is based on SCG's data response that, under SCG's own definition, 90 sites would be categorized as "custody transfer gate stations." However in response to the data request, SCG specifically qualified its response (as DRA quoted in its testimony): "without the greater clarity requested of the EPA, SoCalGas provides the following interpretation."[42]

DRA's conclusion that $27,000 should adequately fund this activity is speculative given that SCG is still trying to gain clarification and formal revisions to the rule are still underway. This continued uncertainty over the scope of the rules reinforces SCG's proposed recommendation for a two-way balancing account and confirms SCG's original estimate as a reasonable and responsible position. With the two-way account, should SCG ultimately find that such expenditures are not required, the costs will be credited back to ratepayers. The Commission should reject DRA's proposal in this regard and approve SCG's forecast.

vi. Regulator Station Lid and Vault Maintenance

A large number of SCG's regulator stations are installed in underground vaults in order to protect them from tampering, vehicular damage, and to address space constraints. The lids of a regulator station, if not maintained, can pose a serious safety threat to the SCG technician performing maintenance as well as to the public. SCG requests incremental funding of $22,000 to repair an increasing number of regulator station vaults and lids that are worn, warped, cracked,

[42] Exhibit DRA-44, p. 27, lines 14-15.

and/or showing general deterioration. SCG's intent is to address these lids and repair the vault before they become a safety hazard. DRA recommends against this funding, contending that SCG has not provided sufficient evidence to justify the incremental funding request.

In retrospect, it is evident that, in replying to DRA's data request, SCG responded too narrowly when asked for support to the statement, "These facilities are increasingly requiring more repairs or the rebuilding of worn, warped, or cracked vaults and lids caused by general deterioration or long-term exposure to heavy traffic."[43] In preparing my revised direct testimony, SCG did gather "feedback from the field operating personnel" as DRA notes. However, these individuals do maintain records of facilities requiring attention. During routine maintenance inspections, the M&R technicians note any abnormal conditions of the vault and lid, and report this to their supervisors. If the abnormal condition found at the vault or lid poses safety issues to the public, it will be repaired immediately. If the vault or lid is found with deficiencies that need attention such as cracks on the walls, difficult to operate lid, or broken springs, it is added to the list of vault and lids needing repair. A sample of the inspection review sheet is provided in Attachment B to this rebuttal testimony. The supervisor uses this information to determine what future follow-up is necessary. Unfortunately, this detailed reporting was not provided in the response to DRA. As these facilities age and are exposed to vehicular traffic and weather elements, the number of lids requiring attention will continue to increase above the base average. The table below provides the identification numbers for those regulator stations currently needing attention based on examination by field personnel.

[43] Data Request DRA-SCG-077-DAO, question 5.

Table SCG-GOM-10-R

Southern California Gas Company Gas Distribution Regulator Station ID Numbers				
2B	460	1009	2005	2629
59	463	1086	2054	2638
163	497	1103	2060O	2647
170M	500B	1133	2060P	2681
268	514	1184	2086	3370
301	523	1260	2091	5043
303	551	1312	2113	6234
325	564	1365	2161	6326
350P	593	1444	2355	
350O	612	1453	2359	
440	637	1705	2626	

Given this information from field reports, the Commission should reject DRA's proposal in this regard and approve SCG's forecast.

vii. Pedestrian Access at Construction Sites

SCG requests incremental funding of $179,000 for the incremental time required in the set-up and dismantling of new equipment used at job sites to facilitate pedestrian access around construction activity. These new procedures will impact M&R and distribution crew work that may obstruct access to sidewalks and/or driveways, such as operations and maintenance work at regulator stations and MSAs.

DRA argues that SCG's request should be denied since: a) SCG has been doing these activities since the last GRC settlement and therefore the spending is reflected in the base year; b) the required ramps have already been purchased so the request is not necessary; c) field training has already been conducted in June 2009; and d) SCG has not provided historical recorded costs for this O&M work. DRA's understanding of the facts is incorrect.

First, since conclusion of the TY2008 proceeding, SCG has been working with Disability Rights Advocates to establish the procedures, develop training materials, and conduct field audits. It was not until late 2009 that these practices were integrated into field operations. Therefore, the incremental costs incurred by SCG in the set-up and dismantling of the new equipment was not included in the 2005-2009 historical average or even the base year.

Second, SCG is not requesting funding for the purchase of barricades as DRA assumes. My revised direct testimony[44] and workpapers[45] describe the elements related to this incremental request. The only element impacting the TY2012 request is incremental amounts for set-up and dismantling of the equipment and annual review training. There are no costs forecasted for purchase of barricades.

Third, while initial training was conducted in 2009, and SCG will have additional employees to train over the coming years, the only training amount SCG is requesting for pedestrian access at construction sites in 2012 is for annual review training to continually reinforce with its field employees the importance of these procedures. The incremental request for annual review training is included within the Field Support section of my revised direct testimony.[46]

Finally, as discussed in the Summary paragraph of this rebuttal (Section II, point 4 above), these are specific new tasks being completed within a larger activity. SCG does not keep cost information on every task completed, and because this is new work, such data would not exist in any event. For this reason, the information that DRA requested on expenditures in this area for the period 2009 to current is not available.

[44] Exhibit SCG-02-R, GOM-22, lines 7-11.
[45] Exhibit SCG-02-WP, p. 48 of 234.
[46] Exhibit SCG-02-R, p. GOM-35, lines 15-25.

Given that all of DRA's objections to SCG's funding request are unfounded, and that SCG has provided substantial evidence within revised direct testimony and workpapers to support its request, the Commission should reject DRA's proposal and approve SCG's forecast.

viii. Incremental Odorization Testing

To enhance public safety, SCG recently introduced a procedure calling for more stringent application of odorant testing during MSA installation. SCG requests incremental funding of $58,000 to complete future odorant testing consistent with these new procedures. DRA does not contest the need for such testing, but nevertheless recommends against this request, claiming that: a) SCG has not provided any previous operating standards for comparison; b) SCG could not identify recent recorded annual expenses for odorant testing; and c) this testing is already part of the expenses to rebuild the MSA, thus SCG is already receiving funding.

This testing is a newly formalized procedure and therefore previous standards do not exist. This was clearly noted in response to data request DRA-SCG-077-DAO where SCG stated: the "operating standard for odorization testing was introduced in late 2010. It is applicable to all MSA installations. Since it is relatively new, there have been no previous editions available for comparison."[47] Also, since this is a new activity, historical cost data would not include any spending for completing these new procedures.

DRA unfortunately misunderstood the information provided by SCG. The Commission therefore should reject DRA's proposal in this regard and approve SCG's forecast.

2. Rebuttal to TURN

TURN recommends a $25.4 million reduction to $10.3 million in TY2012 funding for this area. TURN advocates the use of the 2006 - 2010 five-year average to determine the base

[47] Data Request DRA-SCG-077-DAO, question 7.

spending requirement. TURN agrees with DRA's proposed denial of SCG's request for funding for new activities, and recommends further reductions in maintenance expense due to the installation of additional electronic pressure monitors which are assumed to replace chart recorders and eliminate the manual collection of pressure reads.

a. Base Forecast Level

SCG would first point out incorrect data elements reported by TURN that bias its testimony. TURN states that "SoCal spent only $9.4 million on measurement and regulation in 2010. Despite all these rationales for cost increases, SoCal still spent $184,000 less on labor and a startling $1,218,000 less on non-labor costs than the baseline five-year average."[48] This is simply not true. Had TURN used the correct data, it would have found the overall difference in SCG's 2010 actual spending and the historical 2005- 2009 average is not the $1.4 million as alleged by TURN ($184,000 plus $1.218,000), but rather a difference of $891,000. TURN's characterization of 2010 spending is understated by more than $500,000. The incorrect statement of 2010 actual costs also impacts TURN's five-year (2006-2010) average forecast proposal. The table below provides a comparison of the cost items. While the difference may not be substantial, this is just another example of data errors contained within TURN's showing.

[48] Exhibit TURN-Marcus-SCG, p. 4.

Table SCG-GOM-11-R

Measurement and Regulation Costs
(2009$, 000)

		Labor	Non-labor	Total
TURN's Reported 2010	1/	8,624	804	9,428
Corrected 2010	2/	8,105	1,835	9,940
2005-2009 Avg	1/	8,809	2,022	10,831
TURN 2006-2010 Avg	1/	8,744	1,802	10,546
Corrected 2006-2010	3/	8,640	2,008	10,648
Delta 2010 to 2005-2009 Average				
TURN Reported		(185)	(1,218)	(1,403)
Corrected Information		(704)	(187)	(891)

1/ As shown in TURN Table 3, page 5
2/ As made available to parties in Data Response DRA-SCG-065-DAO, Q2.
3/ Recalculated from Corrected 2010 data

SCG reiterates its objections to the use of new information as stated in Section II, point 1. The incorrect statement of 2010 actual data presented in this category exemplifies why this Commission should not allow the introduction of this data. Since TURN's base forecast for M&R relies upon the inclusion of the 2010 expense and a flawed analysis of that expense data, its proposal should be rejected and SCG's request should be adopted.

b. New Incremental Additions

TURN and DRA agree on their proposed reductions to the new incremental additions within Measurement and Regulation.[49] Please see the rebuttal discussion above in response to DRA's recommendations.

Within the context of describing SCG's various incremental additions, TURN refers to SCG's forecast as including "lots and lots and lots of overtime."[50] SCG clearly identified in its workpapers the rates used to calculate the incremental costs. Furthermore, in response to data

[49] Exhibit TURN-Marcus-SCG, p. 4.
[50] Exhibit TURN-Marcus-SCG, p. 4.

request TURN-SCG-DR-05, question 3a, SCG explained why these overtime rates were used and clearly noted the alternatives to overtime that would be evaluated as necessary to perform work that is incremental to existing work. It was by no means an attempt to inflate the forecast estimate as TURN may want the Commission to believe.

SoCalGas Response to Question 3:

a) Forecasted incremental labor hours are for activities performed in addition to existing tasks/jobs. Given that today's level of staffing is just sufficient to perform the existing activities, incremental work must be performed by using overtime, adding new personnel or using contract crews.

By forecasting incremental work with the use of overtime, SoCalGas has the flexibility to determine if overtime can be managed to complete the tasks at hand, whether contract crews should be used or if the utility should commit to the longer-term hiring of employees. Since these decisions depend on future operating conditions which cannot be forecast, the use of overtime rates captures the additional expense associated with contractor rates or the additional expense associated with hiring new employees that would otherwise not be covered by SoCalGas' GRC request should those decisions be made.

In the very following sentence, TURN states: "SoCal's witness even blames some of the costs on Disability Rights Advocates' settlement with SoCal."[51] SCG did not "blame" any party for cost increases. With each request for incremental funding SCG merely attempted to provide the Commission with background information to place the request in context and to identify cost drivers. SCG's description of the costs related to pedestrian access at construction sites simply describes the increased costs for these new procedures in a factual, straightforward manner. TURN improperly suggests that identifying the cause of a cost increase requires finding someone to "blame."

In addition, TURN proposes additional reduction of $226,000 representing a decrease in maintenance expense due to the installation of additional electronic pressure monitors (EPMs)

[51] Exhibit TURN-Marcus-SCG, p. 4.

which are assumed to replace chart recorders and eliminate the manual collection of paper chart pressure records. TURN's conclusion is based on the chart maintenance expenses, as provided in the response to data request TURN-SCG-DR-17, question 3. However, while maintenance costs associated with paper charts are decreasing, there are also increases in O&M expenses associated with the installation of EPMs. The primary expense is for data communication service. EPMs transmit real-time pressure information via communication networks – telephone land lines or cellular services. This incurs monthly service charges from communication carriers. As more EPMs are installed to replace the mechanical chart recorders, the data communication costs will increase.

The EPM replacement program was not justified based on O&M savings. The primary purposes of the EPM network are system safety and compliance with 49 C.F.R §192.741 (Pressure limiting and regulating stations: Telemetering or recording gauges).[52]

TURN's proposal to reduce O&M expenses further due to the installation of EPMs is faulty in that it does not account for the incremental cost increases associated with the installation of EPMs. Therefore, the Commission should reject TURN's proposal and approve SCG's request.

[52] Exhibit SCG-02-R, p. GOM-83, lines 15-28.

D. Field O&M – Cathodic Protection

Table SCG-GOM-12-R

Comparison of Positions in Case
TY2012 Estimates -- Gas Distribution O&M
(Thousands 2009 $)

	Position of Party			Reductions to SCG	
Additions	**SCG**	**DRA**	**TURN**	**DRA<SCG**	**TURN <SCG**
Base	2,102	2,102		1	1
Federal Stimulus	33	-	Accepts	(33)	(33)
Pedestrian Access	87	-	DRA	(87)	(87)
City/Muni Requirements	725	-		(725)	(725)
Subtotal CP Field	**2,946**	**2,102**	**2,102**	**(844)**	**(844)**

Cathodic protection (CP) is one method for mitigating external corrosion on steel pipelines. Maintenance work is generally completed either due to the observed condition of the system or in reaction to third-party actions – including activities of municipalities, other utilities, and construction firms as they complete projects of street reconstruction, widening, resurfacing or sewer and water line maintenance and replacement. These externally driven projects often require SCG to excavate a job site and repair broken anode wires, replace test stations, or clear electrical interference on the CP system.

To account for fluctuations in the levels of operations and maintenance work, SCG's forecast is based on the five-year average (2005-2009) spending. Added to the five-year average is the cost to address incremental project work and new field operating conditions. In total, SCG requested $2.9 million in TY2012 for this activity.

1. Rebuttal to DRA

DRA does not take issue with SCG's use of the five-year average (2005-2009) to determine the base spending requirement. DRA contends that, because SCG has not provided sufficient justification for funding any of the incremental work elements, funding of $2.1 million

for TY2012 should be adopted, which is a reduction of $844,000 from SCG's forecast of $2.9 million. Each of DRA's arguments is addressed below.

a. Base Forecast Level

DRA does not oppose the forecasted base level funding for CP.[53]

b. New Incremental Additions

i. Federal Stimulus

SCG requests incremental funding in TY2012 of $33,000 to address potential failures in the CP system resulting from the increased construction activities facilitated through the use of Federal Stimulus funding. This includes attention to CP vault lids that might be paved over by new construction activities, potential interference with CP wiring, and potential shorting of the system. Since SCG could not provide evidence of a recent increase in construction activities or historical spending, DRA states that it is not convinced that SCG requires the incremental funding.

The data DRA requested was not available because: 1) as stated in SCG's response to data request DRA-SCG-079-DAO, question 2, reporting systems did not track this information separately; and 2) this is a new work factor for which historical spending data does not exist. This is discussed in more detail Section II, point 4 above. Thus, in this instance, SCG relied upon the information provided by its field supervisors to develop the forecast of future activity. These individuals are the closest to the issues at hand, and are SCG's best resource when more formalized data analysis methods are not readily available.

DRA states that "there is no evidence to show that local and state agencies will be able and or willing to spend additional money on street and highway improvement projects during the

[53] Exhibit DRA-44, page 28, lines 17-18.

2012 GRC cycle".[54] However, as noted above, the web link www.recovery.gov provides clear evidence that funding for California transportation projects has been granted. SCG provided this information to DRA in response to data request DRA-SCG-079-DAO, question 1, which included the web link: http://www.recovery.ca.gov/html/funding/transportation/transportation.shtml (link has been changed to www.recovery.gov). As noted in the response: "California has spent approximately 20% of the potentially available Federal funding as of April 28, 2011. In 2011 and 2012 SoCalGas expects increases in transportation projects as more of the awarded stimulus dollars become available to the State."

SCG has provided the Commission with substantial evidence to support the need for funding incremental CP activities due to Federal Stimulus-related construction work. The Commission therefore should reject DRA's proposed reduction and approve SCG's forecast.

ii. Pedestrian Access at Construction Sites

SCG requests incremental funding of $87,000 for the incremental time required in the set-up and dismantling of new equipment used at the job sites to facilitate pedestrian access around construction activity. These new procedures will impact CP work that may obstruct access to sidewalks and/or driveways.

DRA recommends against this funding, providing the same objections to this incremental request as those presented within Section III.C.1.b.vii, page GOM-39 of this rebuttal testimony. SCG's response to DRA's recommendation is also the same. This activity is not embedded within the base spending levels; the monies requested as part of this case were never intended for the purchase of barricades and/or ramps; and funding for initial training is not being requested in

[54] Exhibit DRA-44, page 30, lines 14-16.

TY2012. The only training amount SCG is requesting for pedestrian access at construction sites in 2012 is for annual review training to continually reinforce with its field employees the importance of these procedures. The incremental request for annual review training is included within the Field Support section of my revised direct testimony.[55]

The Commission therefore should reject DRA's proposal and approve SCG's forecast.

iii. Increased City/Municipality Requirements

SCG requests incremental funding in TY2012 of $725,000 for increasing permit costs and construction requirements, such as engineered traffic control plans, additional paving requirements, and a growing trend toward restricted working hours, all of which increase SCG's expenses for completing CP maintenance work. DRA claims that SCG did not provide any evidence to justify this request, and therefore concludes there was insufficient information to recommend any increases.

SCG provided DRA with the 2005-2009 average historical number of orders worked, an assessment of the number of orders that could be impacted by these more restrictive conditions, and the additional time requirements which were used to determine the estimate of future expenditures.[56]

However, even with this historical perspective, the only method to obtain a valid forecast of the requirements in this area is to rely upon those employees dealing with daily operations. SCG relied upon the information provided by its field supervisors as to their assessment of the number of orders that would be affected and the additional time requirements. These managers and supervisors have first-hand knowledge as to the changing city/municipality requirements. It

[55] Exhibit SCG-02-R, p. GOM-35, lines 15-25.
[56] Exhibit SCG-02-WP, pp. 67-70 of 234, lines 3, 7, 11, 15, 19, 26, 30, and 34.

was through polling and further discussions with these employees that the increase in these requirements was estimated.

SCG does not normally maintain records for each of the tasks or other components associated within each given activity. However, SCG does have the historical information pertaining to permits and paving fees which are items related to these increased municipal requirements in total (although not specifically identified as CP activity). As noted in my revised direct testimony: "SCG is facing additional paving repair requirements imposed by municipalities that impact field construction practices and therefore result in increased costs. These include requiring T-Cuts, grinding for steel plate installation, and paving repair size that exceeds the actual cut size. From 2005 to 2009 SCG's average cost per paving order increased by 65%."[57] With respect to permit costs, from 2005 to 2009, SCG's average cost per permit increased by 33%. See Table SCG-GOM-5-R on page GOM-25 and Table SCG-GOM-6-R on page GOM-25 of this rebuttal testimony.

In addition, the introductory remarks to this O&M rebuttal section include several specific examples where different cities have increased their requirements over time for permits and paving. These examples affect all work categories that require permits and paving, including CP.

SCG has provided the Commission with substantial evidence supporting this incremental request and its forecast should be approved.

2. Rebuttal to TURN

TURN agrees with DRA's recommended funding of $2.1 million for TY2012. However, again TURN chose to include the 2010 expense in developing its forecast, noting that in this case

[57] Exhibit SCG-02-R, GOM-6, lines 22-26.

its method only results in $36,000 below DRA's proposal. TURN states that "We do not make this small adjustment to DRA's position, but we underline that it shows that SoCal's increases for permitting, paving, traffic, pedestrians, restricted working hours, stimulus, and overtime for all new work are suspect."[58] While SCG does agree that, in this instance, the inclusion of 2010 data has negligible impact, SCG objects to the suggestion that somehow this makes all of SCG's justifications for the incremental costs seem "suspect."

a. Base Forecast Level

TURN, like DRA, does not oppose the forecasted base level funding for Field O&M Cathodic Protection.[59]

b. New Incremental Additions

TURN and DRA agree on their recommended reductions to the new incremental additions within Field O&M Cathodic Protection.[60] Please see the rebuttal discussion above in response to DRA's recommendations.

E. Field O&M – Main Maintenance

Table SCG-GOM-13-R

Comparison of Positions in Case
TY2012 Estimates -- Gas Distribution O&M
(Thousands 2009 $)

	Position of Party			Reductions to SCG	
Additions	**SCG**	**DRA**	**TURN**	**DRA<SCG**	**TURN <SCG**
Base	6,662	6,662		-	-
Federal Stimulus	66	-	Accepts	(66)	(66)
Pedestrian Access	33	-	DRA	(33)	(33)
Los Osos	523	174		(349)	(349)
City/Muni Requirements	648	-		(648)	(648)
Subtotal Main Maintenance	**7,931**	**6,836**	**6,836**	**(1,095)**	**(1,095)**

[58] Exhibit TURN-Marcus-SCG, p. 6.
[59] Exhibit TURN-Marcus-SCG, p. 5-6.
[60] Exhibit TURN-Marcus-SCG, p. 5-6.

The primary activities within main maintenance include leak evaluations, leak repairs, franchise alterations, compliance maintenance and other miscellaneous main maintenance work. This work is generally corrective in nature, and is designed to meet federal (49 C.F.R. §192) and state (CPUC General Order 112-E) pipeline safety regulations and to extend the life of distribution main pipelines and related infrastructure.

To account for fluctuations in the levels of operations and maintenance work, SCG's forecast is based on the five-year average (2005-2009) spending. Added to the five-year average is the cost to complete activities not reflected in this historical period to address incremental project work and new field operating conditions. In total, SCG requests $7.9 million in TY2012 for this area.

1. Rebuttal to DRA

DRA does not contest SCG's use of the five-year average (2005-2009) to determine the base spending requirement. DRA contends SCG has not provided sufficient justification for funding many of the incremental work elements. As such, DRA proposes funding of $6.8 million for TY2012, which is a reduction of a $1.1 million from SCG's forecast of $7.9 million. Each of DRA's arguments is addressed below.

a. Base Forecast Level

DRA does not oppose the forecasted base level funding for Main Maintenance.[61]

b. New Incremental Additions

i. Federal Stimulus

SCG requests incremental funding in TY2012 of $66,000 to complete incremental main leak repairs as a result of increased survey work performed ahead of street improvement projects

[61] Exhibit DRA-44, p. 32, lines 23-24.

funded by Federal Stimulus monies. DRA concludes that because SCG could not provide evidence of an increase in survey work levels, the increased funding should not be authorized.

In its response to data request DRA-SCG-080-DAO, question 1a, SCG explained why additional leak surveys and main leak repairs must take place ahead of street improvement projects. An excerpt from this response is shown below:

> *When street improvement projects are completed, governing municipalities will often impose moratoriums that limit the access utilities have to their facilities located in the newly paved streets for several years. If SoCalGas discovers an underground leak that needs to be repaired while the street is under a moratorium, the paving costs associated with the repair are very costly since the municipality often requires a restoration of the street that significantly exceeds the actual cut size to match aesthetic conditions prior to excavation. This repair can include the restoration of an entire lane of traffic, several lanes or curb to curb for any length requested by the municipality. To prevent costly leak repairs in newly paved streets, SoCalGas surveys its pipeline and facilities in the impacted area for leakage and makes repairs ahead of street improvements.*
>
> *SoCalGas expects to see an increase in the number of street and highway improvement projects in upcoming years as municipalities receive federal stimulus funding. This increase in municipal work will generate the need for additional leakage survey being completed by SoCalGas.*
>
> *As a result of the increased leak surveys, SoCalGas will locate and repair more leaks ahead of street improvement projects. In this manner, SoCalGas is avoiding higher repair costs should a hazardous leak be identified at a later date when the moratorium is in place.*

As noted above, Federal Stimulus funding is available and DRA does not dispute this fact. Nor does DRA dispute that Federal Stimulus spending on transportation projects will require incremental work by SCG. Indeed, this was also documented in response to data request DRA-SCG-080-DAO, question 1a. SCG provided DRA with the web link to determine the status of funding: http://www.recovery.ca.gov/html/funding/transportation/transportation.shtml (link has been changed to www.recovery.gov). As noted in the response, "California has spent approximately 20% of the potentially available Federal funding as of April 28, 2011. In 2011

and 2012 SoCalGas expects increases in transportation projects as more of the awarded stimulus dollars become available to the State."

DRA also indicates that SCG did not "provide any comparison and/or analysis to substantiate" an increase in main leak repairs.[62] SCG stated this data was not available because: 1) reporting systems did not track this information separately (see discussion in Section II, point 4 above), and 2) this is a new work factor for which historical spending data does not exist. Thus, in this instance, SCG relied upon the information of its field supervisors for the levels of future activity. These individuals are the closest to the issues at hand, and are SCG's best resource when more formalized data analysis methods are not readily available.

SCG has provided the Commission with substantial evidence to support the need for funding incremental main leak repair activities due to incremental municipality construction activities. The Commission therefore should reject DRA's proposed reduction and approve SCG's forecast.

ii. Pedestrian Access at Construction Sites

SCG requests incremental funding of $33,000 for the incremental time required in the set-up and dismantling of new equipment used at job sites to facilitate pedestrian access around construction activity. These new procedures will impact main maintenance work that obstructs access to sidewalks and/or driveways.

DRA recommends against funding in this area, providing the same objections to this incremental request as those presented within Section III.C.1.b.vii, page GOM-39 of this rebuttal testimony. SCG's response to DRA's arguments is also the same. This activity is not embedded within the base spending levels; the funding requested in this application was never intended for

[62] Exhibit DRA-44, p. 33, lines 15-18.

the purchase of barricades and/or ramps; the monies requested are for the time required in the set-up and dismantling of new equipment used at the job site; and funding for initial training is not being requested in TY2012. The only training amount SCG is requesting for pedestrian access at construction sites in 2012 is for annual review training to continually reinforce with its field employees the importance of these procedures. The incremental request for annual review training is included within the Field Support section of my revised direct testimony.[63]

The Commission therefore should reject DRA's proposal and approve SCG's forecast.

iii. Los Osos Sewer Project

SCG requests incremental funding in TY2012 of $523,000 to complete distribution field work in response to the City of Los Osos' efforts to replace its city sewer system. DRA does not dispute the need for incremental funding. In its review, however, DRA concluded that because the Los Osos project appears to be delayed and a firm completion date is not known, SCG's TY2012 request should be "normalized" to more appropriately reflect expenditures over future years. DRA recommends incremental funding of only $174,000, a reduction of $349,000 from SCG's forecast.

First, DRA's proposal is incomplete in its analysis. DRA did not recognize the entire project costs necessary for any "normalization" but instead included only the 2012 expenditures. DRA took the 2012 forecasted cost only and assumed this would be the entire cost necessary for the three-year project. The correct way to allocate (or "normalize") costs would be to take the total costs for the entire duration of the project and spread them over that duration.

More importantly, what is seemingly not understood by DRA is that SCG's work must commence **in advance of** the city's construction activities. For example, main alteration projects

[63] Exhibit SCG-02-R, p. GOM-35, lines 15-25.

must be identified and new facilities installed prior to the city's construction to ensure that the subsequent sewer construction work is not in conflict. According to information on the San Luis Obispo County website, construction is scheduled to start in May 2012.[64]

Therefore, SCG's request for funding in TY2012 is realistic and should be adopted by the Commission.

iv. Increased City/Municipality Requirements

SCG requests incremental funding in TY2012 of $648,000 for increasing permit costs and construction requirements, such as engineered traffic control plans, additional paving requirements, and a growing trend toward restricted working hours, all of which increase SCG's expenses for completing main maintenance activities. DRA contends that SCG could not provide any comparison and/or analysis to support its forecast.

As discussed within the Cathodic Protection Section III.D.1.b.iii on page GOM-49 of this rebuttal testimony, SCG provided DRA with the 2005-2009 average historical number of orders worked, an assessment of the number of orders that could be affected by these more restrictive conditions, and the additional time requirements which were used to determine the estimate of future expenditures.[65]

DRA does not contend that cities and municipalities are not in fact imposing additional and more restrictive construction conditions, but only maintains that SCG cannot justify the exact funding request to DRA's satisfaction. Although SCG does not normally maintain records for each of the tasks or cost elements within any given activity, SCG does have the historical information pertaining to permits and paving fees which are items related to these increased municipal requirements. As noted in my revised direct testimony, "SCG is facing additional

[64] http://www.slocounty.ca.gov/PW/LOWWP/DOCS/Current_Documents.htm
[65] Exhibit SCG-02-WP, pp. 82-85 of 234, lines 1, 5, 9, 13, 17, 24, 28, and 32.

paving repair requirements imposed by municipalities that impact field construction practices and therefore result in increased costs. These include requiring T-Cuts, grinding for steel plate installation, and paving repair size that exceeds the actual cut size. From 2005 to 2009, SCG's average cost per paving order increased by 65%."[66] With respect to permit costs, from 2005 to 2009, SCG's average cost per permit increased by 33%. See Table SCG-GOM-5-R on page GOM-25 and Table SCG-GOM-6-R on page GOM-25 of this rebuttal testimony.

Even with this historical perspective, the only method to obtain a valid forecast of the requirements in this area is to rely upon those employees dealing with the daily operations. SCG relied upon the information provided by its field supervisors based upon their assessment of the number of orders that would be impacted and the additional time requirements. These managers and supervisors have first-hand knowledge as to the changing city/municipality requirements. It was through polling and further discussions with these employees that the increase in these requirements was estimated.

In addition, the introductory remarks to this O&M rebuttal section above include several specific examples where different cities have increased their requirements for permits and paving. These examples impact all work categories that require permits and paving including the Main Maintenance work category.

SCG has provided the Commission with substantial evidence supporting this incremental request and its forecast should therefore be approved.

2. Rebuttal to TURN

TURN did not provide testimony on Main Maintenance.

[66] Exhibit SCG-02-R, p. GOM-6, lines 22-26.

F. Field O&M – Service Maintenance

Table SCG-GOM-14-R

Comparison of Positions in Case
TY2012 Estimates -- Gas Distribution O&M
(Thousands 2009 $)

	Position of Party			Reductions to SCG	
Additions	**SCG**	**DRA**	**TURN**	**DRA<SCG**	**TURN <SCG**
Base	9,560	9,560	9,204 2/	-	(356)
Federal Stimulus	47	-	Accepts	(47)	(47)
Pedestrian Access	183	-	DRA	(183)	(183)
Los Osos	252	84	84 2/	(168)	(168)
City/Muni Requirements	675	-	Accepts	(675)	(675)
Obsolete Regulators	159	-	DRA	(159)	(159)
Subtotal Service Maintenance	**10,876**	**9,644**	**9,288**	**(1,232)**	**(1,588)**

2/ Text at page 6 indicates addition of DRA's recommendation on Los Osos project. However TURN Table 1 does not reflect this addition of $84,000. TURN Table 4 also includes dollars for Los Osos project.

The primary activities within service maintenance include: evaluation and repair of service leaks, service alterations, meter set assembly (MSA) alterations, meter guard replacements, and other miscellaneous service maintenance work. This work is generally corrective in nature, and is designed to meet federal (49 C.F.R. §192) and state (CPUC General Order 112-E) pipeline safety regulations and to extend the life of the distribution service pipeline system.

To account for fluctuations in the various operations and maintenance work, SCG's forecast is based on the five-year average (2005-2009) spending. Added to the five-year average is the cost to complete incremental activities not reflected in this historical period to address incremental project work and new field operating conditions. In total, SCG requested $10.9 million in TY2012 for this area.

1. Rebuttal to DRA

DRA recommends a $1.2 million reduction to $9.6 million in TY2012 funding for this area. DRA does not dispute SCG's use of the five-year average (2005-2009) to determine the

base spending requirement. However, DRA contends that SCG has not provided sufficient justification for funding many of the incremental work elements. Each of DRA's proposals is addressed below.

a. Base Forecast Level

DRA does not oppose the forecasted base level funding for Service Maintenance.[67]

b. New Incremental Additions

i. Federal Stimulus

SCG requests incremental funding in TY2012 of $47,000 to complete incremental service leak repairs as a result of increased survey work performed ahead of street improvement projects funded by Federal Stimulus monies. DRA concludes that, because SCG could not provide evidence of an increase in leak survey work levels to its satisfaction, the increased funding should not be authorized at all.

As noted above, Federal Stimulus funding is available and DRA does not dispute this fact. Nor does DRA dispute that increased transportation projects will result in increased work for SCG. Documentation was provided to DRA in response to data request DRA-SCG-081-DAO, question 1. SCG provided DRA with the web link to determine the status of funding: http://www.recovery.ca.gov/html/funding/transportation/transportation.shtml (link has been changed to www.recovery.gov). As noted in the response, "California has spent approximately 20% of the potentially available Federal funding as of April 28, 2011. In 2011 and 2012 SoCalGas expects increases in transportation projects as more of the awarded stimulus dollars become available to the State."

[67] Exhibit DRA-44, p. 37, line 11.

In its response to data request DRA-SCG-081-DAO, question 1, SCG explained why additional leak surveys and service leak repairs must take place ahead of street improvement projects. Similar to the discussion as presented within the Main Maintenance Section III.E.1.b.i. on page GOM-52 of this rebuttal testimony, SCG's position is that an increase in street/highway repair work will generate the need for additional leakage surveys, which will result in incremental locating and repairing of service leaks ahead of the street improvement. In this manner, SCG is avoiding higher repair costs should a hazardous leak be identified at a later date when a street moratorium is in place.

DRA also indicates that SCG did not "provide any comparison and/or analysis to substantiate" an increase in the level of survey work driving service leak repairs.[68] This data was not available because: 1) reporting systems did not track this information separately (see discussion in Section II, point 4 above), and 2) this is a new work factor for which historical spending data does not exist. Thus, in this instance, SCG relied upon information provided by its field supervisors for the levels of future activity. As noted above, these individuals are the closest to the issues at hand, and are SCG's best resource when more formalized data analysis methods are not readily available.

SCG has provided the Commission with substantial evidence to support the need for funding incremental service leak repair work due to incremental municipality construction activities. The Commission therefore should reject DRA's proposed reduction and approve SCG's forecast.

[68] Exhibit DRA-44, p. 38, lines 13-16. DRA mistakenly referenced "main leak repairs". SCG is confident they intended to reference "service leak repairs".

ii. Pedestrian Access at Construction Sites

SCG requests incremental funding of $183,000 for the incremental time required in the set-up and dismantling of new equipment used at the job sites to facilitate pedestrian access around construction activity. These new procedures will impact service maintenance work that obstructs access to sidewalks and/or driveways.

DRA recommends against funding in this area, providing the same objections to this incremental request as those presented within Section III.C.1.b.vii, page GOM-39 of this rebuttal testimony. SCG's response to DRA's arguments is also the same. This activity is not embedded within the base spending levels; the funds requested in this application were never intended for the purchase of barricades and/or ramps; the monies requested are for the time required in the set-up and dismantling of new equipment used at the job sites; and funding for initial training is not being requested in TY2012. The only training amount SCG is requesting for pedestrian access at construction sites in 2012 is for annual review training to continually reinforce with its field employees the importance of these procedures. The incremental request for annual review training is included within the Field Support section of my revised direct testimony.[69]

The Commission therefore should reject DRA's proposal and approve SCG's forecast.

iii. Los Osos Sewer Project

SCG requests incremental funding in TY2012 of $252,000 to complete distribution field work in response to the City of Los Osos' efforts to replace its city sewer system. DRA agrees that incremental funding is necessary, but at a lower level. In its review, DRA concluded that because the Los Osos project appears to be delayed and a firm completion date is not known, SCG's TY2012 request should be "normalized" to more appropriately reflect expenditures over

[69] Exhibit SCG-02-R, p. GOM-35, lines 15-25.

future years. DRA recommended funding of only $84,000, a reduction of $168,000 from SCG's forecast.

First, DRA's proposal is incomplete in its analysis. To "normalize" costs properly, DRA must include the entire project costs – not just the 2012 expenditures. DRA took the 2012 forecasted cost only and assumed this would be the cost necessary for the three-year project. The correct way to allocate costs would be to take the total costs for the entire duration of the project and spread (or "normalize") them over that duration.

More importantly, what is seemingly not understood by DRA is that SCG's work must commence **in advance of** the city's construction activity. As an example, proposed routing of the sewer lines may require alterations of service locations. This service maintenance work needs to be completed prior to the city's construction to ensure that the subsequent sewer construction work is not in conflict.

According to information on the San Luis Obispo County website, construction is scheduled to start in May 2012.[70]

Therefore, SCG's request for funding in TY2012 is realistic and should be adopted by the Commission.

iv. Increased City/Municipality Requirements

SCG requests incremental funding in TY2012 of $675,000 for increasing permit costs and construction requirements, such as engineered traffic control plans, additional paving requirements, and a growing trend toward restricted working hours, that all increase SCG's expenses for completing service maintenance activities. DRA contends that SCG could not

[70] http://www.slocounty.ca.gov/PW/LOWWP/DOCS/Current_Documents.htm

provide any comparison and/or analysis to support its forecast and recommends against any funding in this area.

As discussed within the Cathodic Protection Section III.D.1.b.iii on page GOM-49 of this rebuttal testimony, SCG provided DRA with the 2005-2009 average historical number of orders worked, an assessment of the number of orders that could be affected by these more restrictive conditions, and the additional time requirements which were used to determine the estimate of future expenditures.[71]

SCG does not normally maintain records for each of the tasks or cost elements within any given work activity. However, SCG does have the historical information pertaining to permits and paving fees which are items related to these increased municipal requirements. As noted in my revised direct testimony, "SCG is facing additional paving repair requirements imposed by municipalities that impact field construction practices and therefore result in increased costs. These include requiring T-Cuts, grinding for steel plate installation, and paving repair size that exceeds the actual cut size. From 2005 to 2009, SCG's average cost per paving order increased by 65%."[72] With respect to permit costs, from 2005 to 2009 SCG's average cost per permit increased by 33%. See Table SCG-GOM-5-R on page GOM-25 and Table SCG-GOM-6-R on page GOM-25 of this rebuttal testimony. DRA does not dispute that the costs per paving order are increasing.

Even with this historical perspective, as with CP and certain other new work elements, the only method to obtain a valid forecast of the requirements in this area is to rely upon those employees dealing with the daily operations. SCG relied upon the information provided by its field supervisors to provide their assessment of the number of orders that would be impacted and

[71] Exhibit SCG-02-WP, pp. 109-111 of 234, lines 2, 6, 10, 14, 18, 25, 29, and 33.
[72] Exhibit SCG-02-R, p. GOM-6, lines 22-26.

the additional time requirements. These managers and supervisors have first-hand knowledge as to the changing city/municipality requirements. It was through polling and further discussions with these employees that the increase in these requirements was estimated.

In addition, the introductory remarks to this O&M rebuttal section include several specific examples where different cities have increased their requirements for permits and paving. These examples impact all work categories that require permits and paving, including service maintenance.

DRA also states that "the non-labor component, which comprises permit costs, had been negative between 2006 and 2008."[73] DRA seems to have overlooked the fact that the non-labor cost is composed of several elements, including permits, paving, collectible work, and third party damages. Customers are charged for the collectible work activity and third-party damages; therefore, the credits found in this workgroup are not for these specific work elements such as paving and permitting. These credits are independent of the incremental increase associated with city/municipality requirements for paving and permitting.

SCG has provided the Commission with substantial information supporting this incremental request, and its forecast therefore should be approved.

v. Aging Infrastructure – Replace Obsolete Regulators

SCG requests incremental funding in TY2012 of $159,000 to replace obsolete regulators that have internal relief capabilities. DRA contends that SCG could not provide adequate support for its request. DRA indicates that "since SCG could not identify the costs associated

[73] Exhibit DRA-44, p. 41, lines 21-22.

with replacing the specific regulators with internal relief, DRA is not convinced that its proposed increase can be supported."[74] Thus, DRA argues against adopting any funding at all.

DRA appears to have misunderstood the purpose of this activity. SCG provided DRA with additional information on the program as well as information on the number of service regulators replaced from 2005 to 2011 YTD. Below is an excerpt from SCG's response to data request DRA-SCG-081-DAO, question 7:

> *SoCalGas has not previously had a targeted replacement program for service regulators with internal relief. These regulators have been replaced mainly by Customer Services personnel as performance issues are encountered in the field.*
>
> *In 2010, SoCalGas identified that replacement of regulators with internal relief should be proactively managed to avoid an unplanned surge in replacements as the regulators age and decline in effectiveness. SoCalGas is developing a systematic program to target regulators for replacement based on age, performance, or obsolescence. SoCalGas does not currently have enough detailed data on the replaced service regulators to correlate the vintage and model of regulator with the regulators which have been replaced for performance issues. SoCalGas is currently collecting the necessary data to identify specific vintage and makes of aging regulators for targeted replacement.*
> *The table below summarizes service regulator replacements for 2005- 2011 YTD.*

Regulator Changes								
	2005	**2006**	**2007**	**2008**	**2009**	**2010**	**2011 Mar YTD**	**TOTAL**
Without Internal Relief	30,671	42,450	35,597	25,792	53,058	50,476	6,062	244,106
With Internal Relief	9,396	16,893	17,230	14,380	13,504	14,661	4,008	90,072
Total	40,067	59,343	52,827	40,172	66,562	65,137	10,070	334,178

> *The cost of replacements of service regulators either with or without internal relief is not available since most replacements of regulators were performed in conjunction with other activity at the site.*

[74] Exhibit DRA-44, p. 42, lines 24-26.

SCG explained that this is an incremental activity to proactively manage the replacement of service regulators. Furthermore, SCG explained that the cost of replacements of service regulators is not available as this activity is performed in conjunction with other activity at the site.

As a prudent gas distribution system operator, SCG must anticipate where in its systems failures could occur, creating a potential safety hazard. SCG has identified that it is necessary to establish proactive measures to manage the replacement of regulators similar to the current program to replace aging meters. Regulators provide the last line of defense to prevent overpressure situations at homes and businesses. The efforts SCG will undertake will track the performance of regulators and proactively create a replacement schedule for those families of regulators that do not meet pre-established performance criteria.

SCG has provided the Commission with substantial evidence supporting this incremental request and its forecast should be approved.

2. Rebuttal to TURN

TURN agrees with DRA's use of a five-year average, but introduces the 2010 expense to reach the conclusion that the 2006-2010 average is a more appropriate forecast to "give weight to recent information."[75] TURN recommends funding of $9.3 million for TY2012 which is a reduction of $1.6 million for this area.

a. Base Forecast Level

While SCG and TURN agree on the general use of a historical averaging methodology for forecasting the base level of spending in this area, TURN chooses to introduce the 2010 actual data into the calculations. This shift in forecast years results in a base forecast of $9.2

[75] Exhibit TURN-Marcus-SCG, p. 6.

million, a reduction of $356,000 in this area. SCG has previously stated its objections to the introduction of this new information into forecast calculations (Section II, point 1).

b. New Incremental Additions

TURN and DRA agree on their recommended reductions to the new incremental additions within Service Maintenance.[76] Please see the rebuttal discussion above in response to DRA's recommendations.

G. Field O&M – Field Support

Table SCG-GOM-15-R

Comparison of Positions in Case
TY2012 Estimates -- Gas Distribution O&M
(Thousands 2009 $)

	Position of Party			Reductions to SCG	
Additions	**SCG**	**DRA**	**TURN**	**DRA<SCG**	**TURN <SCG**
Base	15,098	14,411	14,626	(687)	(472)
ARSO	459	-		(459)	(459)
Wireless Fees	290	-	Accepts	(290)	(290)
Misc. Support	23	-	DRA	(23)	(23)
Pedestrian Access	8	-		(8)	(8)
Support New Tech	2,731	277	- 4/	(2,454)	(2,731)
Subtotal Field Support	**18,609**	**14,688**	**14,626**	**(3,921)**	**(3,983)**

4/ TURN states their forecast is $215,000 higher than DRA. (pg. 7 second paragraph) But TURN's calculation in testimony apparently neglected to include DRA's recommendation of $227,000 for support resource. This error is corrected in this table. The difference between DRA and TURN is correctly stated at <$62,000>

The activities in the Field Support category are comprised of:

- Field Supervision: Supervisory positions provide daily management of the frontline employees and inspection of contractors that work directly on the gas distribution system as well as interact directly with customers, public agencies, and the general public.

[76] Exhibit TURN-Marcus-SCG, p. 6.

- Clerical Support: Clerical support ensures that all maintenance projects are accurately reconciled and that work orders are documented and maintained properly in SCG's records. They also maintain payroll for the entire gas distribution field and management workforce.
- Dispatch Operations: Dispatch Operations employees work in coordination with field supervision, field employees, technical planning, third-party contractors, cities, and counties to distribute work to the SCG and contractor field workforce. The coordination with other departments and agencies is necessary for the completion of field operations and maintenance work.
- Off production Time: Off-production time refers to those hours that are paid while field employees are not actively involved in the operations and maintenance activities. An example of such time includes attending skills training classes.
- Materials Support: Materials support includes expenses for miscellaneous equipment and services which provide essential administrative and logistics assistance to all activities within the Field Operations and Maintenance workgroups.

Generally, the services provided within the Field Support group are driven by the level of field maintenance work to be completed, the need for contractor support, complexity of jobs, and the number of employees. SCG projected the TY2012 base level requirements equal to the 2005 – 2009 five-year historical average. A five-year average was selected to recognize periods of future higher work requirements, consistent with improving economic conditions which will result in increased levels of work. To this base level of expenditure, SCG is requesting incremental funding for new activities supporting dispatch operations, field communications,

miscellaneous support activities, and various field training activities. In total, SCG requests funding of $18.6 million for TY2012.

1. Rebuttal to DRA

DRA states:

> *For TY 2012, DRA recommends $15.3 million in expenses for Field Support. DRA's estimate is based on using the 2009 recorded costs of $14.4 million, plus $910,000 in incremental expenses for training costs in support of new technology. DRA's recommendation is $3.3 million lower than SCG's forecast of $18.6 million.*[77]

This statement is clearly not consistent with the information presented in summary tables[78] and other text within the document.[79] Based on SCG's interpretation of the information provided, DRA is recommending a $3.9 million reduction to $14.7 million in TY2012 funding for this area. DRA disagrees with SCG's use of a five-year average for the base forecast. Its recommendation is derived from the 2009 recorded costs plus limited funding of incremental expenses for training costs in support of new technology.

a. Base Forecast Level

DRA proposes a forecast of $14.4 million in TY2012, a reduction of $687,000 to the base forecast. DRA's primary objection to SCG's base forecast is the number of field support employees SCG expects by TY2012 which is driven by economic conditions. DRA's reasoning is based on IHS Global Insight's February 2011 forecasts of employment levels which it finds to be "quite different for the 2011-2012 period compared to the 2005-2006 levels."[80] As stated previously, DRA has misunderstood SCG's use of the IHS Global Insight index as a proxy for

[77] Exhibit DRA-44, p. 44, starting on line 4.
[78] Exhibit DRA-44, p. 2, Table 44-1 and p. 44, Table 44-12A.
[79] Exhibit DRA-44, p. 48, lines 1-21.
[80] Exhibit DRA-44, p. 43, lines 19-21.

"economic conditions". DRA attempts to draw a one-to-one correlation between employment levels and Field Support spending. SCG's use of the index was purely to assess the general direction of the economy – not as a strict correlation measure.

SCG used the 2005-2009 five-year average for its base forecast as it was representative of the range of costs that could occur under various economic conditions. In comparing the parties' forecast methodologies, SCG looked to a reputable consulting firm (IHS Global Insight) to project future economic conditions from which to base its forecast. By contrast, DRA's recommendation is based on a single year's level of spending (the lowest in recent history) which does not address the potential for future growth, but rather assumes stagnant future economic activity.

DRA's simple selection of the 2009 recorded expenses as the base forecast – essentially the lowest point – is shortsighted and lacks any future growth expectations. On this basis the Commission should reject DRA's base reduction of $687,000 due to the selective choice of an unrealistic base forecast methodology and adopt the five-year average (2005-2009) base forecast as presented by SCG.

b. New Incremental Additions

i. Area Resource Scheduling Organization (ARSO)

SCG requests an increase of $459,000 above the base year level to support the new Area Resource Scheduling and Dispatch organization. Six incremental O&M Scheduling Advisors are needed to support the scheduling and dispatch of field maintenance and inspection and construction activities utilizing technology and communication devices made available through the OpEx 20/20 Program Forecasting, Scheduling, and Dispatch (FSD) technology.

DRA contends that SCG has not provided any basis for its forecast other than discussions with consultants and management to support such additions. Furthermore, DRA asserts that SCG has not shown why the scheduling and dispatch work activities cannot continue to be carried out by the same employees as before, and recommends that "SCG provide training on the OpEx process and systems to the existing field supervisors to reduce the manual aspects of the process."[81] Finally, in an attempt to support its proposal, DRA states that "SCG could not identify specific savings and/or efficiencies achieved" for this work.[82] Therefore, DRA concludes that SCG has not shown adequate evidence to support this incremental activity.

SCG has not previously had in place a centralized system and process by which to schedule and dispatch Distribution inspection and maintenance orders, and construction packages. That makes determining the number of Scheduling Advisors required to support this new system and process an inexact science. SCG worked with consultants who have had years of experience implementing these types of systems for companies of similar size and functional requirements to estimate the level of on-going support required to achieve the benefits envisioned. Full deployment of the system was completed in 2011 and the total number of Scheduling Advisors currently projected to manage the work is 14. SCG's request here for six Advisors is thus reasonable.

The scheduling and dispatch work activities cannot continue to be carried out by the same employees. The system implemented in the OpEx 20/20 project is complex and requires specialized training for proficiency. Additionally, continuous "hands-on" experience is required to maintain proficiency to effectively and efficiently schedule work and manage resources. If SCG continued to rely on the current supervisors to schedule and dispatch work in the new

[81] Exhibit DRA-44, p. 45, lines 16-17 and p. 46, lines 10-12.
[82] Exhibit DRA-44, p. 46, lines 5-7.

system, more than 60 supervisors would require extensive training. Turnover in these positions would also require significant ongoing training. Additionally, because their use of the system to schedule and dispatch would be limited, their proficiency would also be limited.

Another planned benefit of this system and the centralized scheduling organization is the ability to schedule work to crews across "supervisor" boundaries, an activity that cannot be performed if every supervisor is scheduling work to their crews within their geographic borders. As a result, a centralized organization is required to effectively manage the field resources to achieve the associated benefits.

In its response to data request DRA-SCG-082-DAO, question 1(a), SCG explained the inherent efficiency gains of having only six employees schedule the work that was previously scheduled by the field supervisors in 51 operating districts. An excerpt from this response is shown below:

> *Previously scheduling and dispatching of work was done independently by field supervisors within the 51 operational bases and across over 800 field employees. Although resources are being added to support the process changes and fully utilize the tool, business improvements are anticipated in the coordination of the execution of work elements, effective cross district boundary utilization of field employees, and improved routing of work. This change will enhance the availability of local supervision for employee coaching, skills development and general oversight.*

The treatment of benefits achieved through implementation of the various OpEx 20/20 Program elements is discussed in the direct testimony of SCG witness Mr. Phillips (Exhibit SCG-13). Mr. Phillips provides the benefits associated with FSD in TURN's data request, TURN-SCG-DR-06, question 4b. DRA is willing to accept the OpEx 20/20 benefits identified by Mr. Phillips, but not the ongoing expenses (and therefore incremental expenses) to support OpEx 20/20 technologies and tools needed to achieve these associated OpEx 20/20 benefits.

DRA's recommendation demonstrates a misunderstanding of the ARSO benefits and an erroneous assumption that the new technology would or should allow supervisors of each of the 51 operating bases to schedule their own district's work. The Commission therefore should reject DRA's recommendation for no increase above the base year level in this sub-category and approve SCG's forecast.

ii. Wireless Fees

SCG requests incremental funding of $290,000 for wireless fees associated with mobile data terminals (MDTs) to be installed on 730 vehicles. In response to DRA's request for SCG to identify the number of vehicles that are currently equipped with MDT computers, SCG responded that, as of May 13, 2011, there were 893 MDTs, of which approximately 88 units are spare MDTs.[83] Additionally, each of the 893 units has a monthly wireless service plan. Since SCG did not respond with the number of vehicles, but rather the number of MDTs outfitted for wireless, DRA states that if the MDTs are not installed on field service personnel's vehicles and not being used, ratepayers should not be asked to pay for unnecessary monthly data plans. DRA concludes that SCG has not adequately supported this request, and proposes no increase for this activity.

To clarify, as of July, 2011, SCG has 823 MDTs with monthly wireless service plans. These terminals are assigned to field employees and supervisors and not all of them are permanently mounted in vehicles. In this manner, the MDT may be utilized by employees not assigned to a specific vehicle but rather can be used with any vehicle.

MDTs with the ability to communicate through a wireless network are a key component of the systems and applications installed as a part of the OpEx 20/20 program. OpEx-related

[83] Data Request DRA-SCG-082-DAO, question 2(a).

benefits cannot be achieved without the capabilities that this technology provides. DRA's proposal is based on an incorrect presumption of mobility of these devices. Given this clarification, DRA's proposed reduction is incorrect and the Commission has substantially evidence to adopt SCG's request for incremental funding.

iii. Miscellaneous Support Activities

During the execution of many work elements, Dispatch Operations remains the hub among the field personnel, technical experts, contractor representatives, and city officials for communication, coordination, and scheduling of work. Increasing work hour restrictions imposed by local municipalities, incremental work resulting from the availability of Federal Stimulus funds, and requirements to remove USA paint markings will create more phone calls between Dispatch Operations and field employees and/or with city officials. SCG requests $23,000 in TY2012 to support these new expanded efforts within Dispatch operations.

DRA contends that "SCG's request for each of these areas is unsupported and unnecessary"; therefore, the associated increase of $23,000 above the base year level for this sub-category also should be rejected.[84]

First, as discussed extensively above, my revised direct testimony, workpapers, and SoCalGas' data response clearly validate the increases in work requirements SCG is facing.[85] Second, SCG's workpapers provided the supporting calculations for the requested level of spending, including an assessment of the percentage of work requiring additional dispatcher attention and the amount of time required for each order.[86]

[84] Exhibit DRA-44, p. 47, 17-18.
[85] Exhibit SCG-02-R, p. GOM-35, lines 5-14.
[86] Exhibit SCG-02-WP, p. 127 of 234.

SCG has provided substantial evidence to support the incremental work requirements driving this support need, and therefore the Commission should approve SCG's request in its entirety.

iv. Pedestrian Access at Construction Sites

SCG requests incremental funding of $8,000 for the incremental time required for field employees to complete the formal annual review of the policy and procedures for ensuring pedestrian access around construction sites. DRA provides the same objections to this incremental request as those presented within Section III.C.1.b.vii, page GOM-39 of this rebuttal testimony. SCG's responses to DRA's arguments also are the same as detailed above: 1) this activity is not embedded within the base spending levels; 2) the amount requested for TY2012 was never intended for the purchase of barricades and/or ramps; 3) funding for initial training is not being requested in TY2012; and 4) the only training amount SCG is requesting for pedestrian access at construction sites in 2012 is for annual review training to continually reinforce with its field employees the importance of these procedures.

The incremental funding requested here is for annual review training, which is described in the Field Support section of my revised direct testimony.[87] Since these new procedures were only implemented in late 2009, the incremental time (and associated cost) to complete an annual formal review of these construction procedures is not included within SCG's base forecast request. These are ongoing expenses that SCG incurs to continually reinforce with its field employees the importance of general accessibility and proper construction site procedures. The Commission should therefore adopt SCG's request for incremental funding for this annual review training effort.

[87] Exhibit SCG-02-R, p. GOM-35, lines 15-25.

v. Supporting New Technology

SCG requests an increase of $2.7 million for TY2012 to train approximately 1,000 employees on the new OpEx 20/20 program. DRA concludes that, based on SCG's spending on training in 2010 and 2011, SCG's 2012 forecast is excessive. DRA provides an estimate for the TY based on the annualized average actual spending recorded for the period January 2010 through May 2011. Furthermore, DRA proposes that, since training is to be completed in 2012, the average should be normalized over the ratemaking period. DRA recommends incremental funding of only $277,000 in TY2012, a reduction of $2.5 million for this area.

DRA states that: "Training for OpEx has been ongoing for the past few years and is not an expense item newly identified for the TY."[88] Although the OpEx team has been working on the development of several tools, the tools impacting Gas Distribution field personnel rolled out in 2010; therefore, training for field Gas Distribution employees did not start until 2010, after the base year period. SCG spent $1.4 million in OpEx training for Gas Distribution employees in 2010. As of May 2011 YTD, SCG had spent $120,000 and as of August 2011 YTD, SCG has spent $366,000 on OpEx 20/20 training for Gas Distribution employees. OpEx 20/20 training is provided to employees as specific applications, modules, and/or new system functionality are deployed. As such, OpEx 20/20 training costs were not based on trends or averages, but rather the numbers and types of employee classifications that will be impacted by the deployment of this new technology. In fact, the bulk of the outstanding training will be conducted in 2012 for the OpEx Construction system. Beginning in 2012, all construction planning activities and management of job status will migrate to a new, more robust work management system which includes planning tools with new design work elements and job cost estimating procedures.

[88] Exhibit DRA-44, p. 48, lines 14-16.

Additionally, all construction work will be electronically dispatched to, and recorded by, field personnel via MDT. The cost increase in 2012 is based on one week of training for approximately 1,000 employees to implement this new technology. This information was provided in a supplemental workpaper.[89]

In data request DRA-SCG-083-DAO, DRA asked for clarification on the 2010 and 2011 actual training but failed to consider any of the calculations for the 2012 forecast shown in the workpapers. These calculations reflect the increase in training requirements into 2012.

SCG has provided substantial justification for the Commission to adopt its forecast for this incremental request. Full OpEx 20/20 benefits can only be achieved if the OpEx 20/20 technologies are fully deployed and employees are proficient in their use.

2. Rebuttal to TURN

TURN recommends a $4.0 million reduction to $14.6 million in funding for TY2012 for this area. TURN uses the 2008 – 2010 three-year average to project spending in this area.

a. Base Forecast Level

TURN proposes a three-year (2008-2010) average forecast base of $14.6 million, a reduction of $472,000 to the base forecast. SCG has previously (Section II, point 1) explained its objections to the use of 2010 data as a factor in forecasting. In addition, TURN's statement that "We remind the Commission that TURN's forecast of building permits is 49% below SoCal's in 2012"[90] leads SCG to believe that TURN misunderstands SCG's forecast. SCG used the IHS Global Insight economic projections as a general indicator of future economic growth. It should also be noted that SCG forecasted 2010 expenditures to remain constant at the 2009 adjusted recorded base level. This was to account for the lag between experiencing economic

[89] Exhibit SCG-02-WP, p. 129.
[90] Exhibit TURN-Marcus-SCG, p. 7.

growth and the subsequent need for increased field support. Added to this were projected incremental costs that are applicable through TY2012. The incremental costs are due to requirements (by other entities or business decisions such as OpEx 20/20) that affect SCG's work practices and are not directly connected to economic conditions.

The Commission should approve SCG's forecast and reject TURN's proposal because of TURN's continued use of 2010 data in development of the forecast, and TURN's inappropriate conclusion based on a flawed analysis.

b. New Incremental Additions

TURN and DRA agree on their recommended reductions to all but one of SCG's incremental additions within Field Support.[91] DRA recommends funding $277,000 for support of the integration of new technologies. However, TURN's proposed funding did not recognize this addition and remained silent on this entire issue. Between TURN's testimony and summary tables, it is difficult to determine if this item was an oversight on TURN's part, or if TURN intended to oppose SCG's request, but just provided no supporting justification.

This is just another instance where TURN's analysis appears incomplete and unclear. The Commission should reject TURN's proposal and approve SCG's forecast.

[91] Exhibit TURN-Marcus-SCG, p. 7-8.

H. Field O&M – Tools, Fittings, and Materials

Table SCG-GOM-16-R

Comparison of Positions in Case
TY2012 Estimates -- Gas Distribution O&M
(Thousands 2009 $)

	Position of Party			Reductions to SCG	
Additions	**SCG**	**DRA**	**TURN**	**DRA<SCG**	**TURN <SCG**
Base (5-yr Avg)	10,112	8,215	Accepts	(1,897)	(1,897)
Safety Vests	33	-	DRA	(33)	(33)
Subtotal Tools/Fittings	**10,145**	**8,215**	**8,215**	**(1,930)**	**(1,930)**

This workgroup captures the costs for the purchase of small tools, small pipe fittings, miscellaneous pipeline materials and miscellaneous installing materials used during construction and maintenance activities. SCG's forecast is based on the five-year average (2005-2009) spending. SCG believes that fluctuations in spending need to be considered because the expenses in this workgroup will vary as levels of work increase or decrease, the mix of activities change and inventory will need to be replenished. To this base level of spending SCG requests additional funding in support of the purchase of safety vests in compliance with new standards on visibility. In total, SCG requests funding of $10.1 million for TY2012.

1. Rebuttal to DRA

DRA recommends using the 2010 recorded expense of $8.2 million for TY2012 which is a reduction of $1.9 million from SCG's request. DRA states that "the 2010 level represents the most recent spending by SCG and, if expenses keep declining in 2011, there should be enough funding remaining to cover any modest increases in TY2012."[92]

[92] Exhibit DRA-44, p. 50, lines 6-8

a. Base Forecast Level

DRA's recommendation is based on a single year spending level, which does not represent future expectations and changes in requirements, but rather assumes stagnant economic activity at the lowest level of spending SCG has seen in the past six years. SCG has provided the Commission with a forecast of future economic recovery from a highly regarded consulting firm (IHS Global Insight). SCG has shown that more work elements should be expected in TY2012 for Gas Distribution.

SCG's recommendation for a five-year historical average captures years with both higher and lower levels of field activity. The Commission should reject DRA's unrealistic proposal based on a forecast of stagnant economic activity and approve SCG's forecast.

b. New Incremental Additions

i. Safety Vests

SCG forecasts an additional $33,000 annually to cover costs above historical spending levels to purchase new safety vests that meet the newly revised standard of the American National Standard for High Visibility Safety Apparel and Headwear (ANSI/ISEA 207-2004). This standard requires that the utilities use higher visibility garments, i.e., more square inches of background materials and additional square inches of reflective materials. In order to comply with the new ANSI/ISEA 107 standard, the vests must be replaced when the color and retro-reflective qualities diminish as a result of wear, use and laundering. Depending on the level of use and laundering, the new vests may only last 6 months.[93] It is SCG's experience that approximately 2,700 vests will need to be purchased annually in order to have a sufficient level of stock on hand for the employees who must wear the vests for safety reasons.

[93] Data Request TURN-SCG-DR-05, question 9a.

DRA does not challenge the need for the new safety vests, but rather dismisses this issue by claiming without justification that the "2010 expense level is reasonable and should cover the incremental cost to purchase additional safety vests."[94] SCG disagrees with DRA's conclusion that 2010 spending would provide sufficient funding for future years. Cal/OSHA adopted the ANSI standard in 2009. However, the standard required that the vests be made of man-made materials that are suspected of generating levels of static electricity that would be unacceptable for use in potentially gaseous atmospheres. For this reason, SCG applied for and received a permanent variance from Cal/OSHA which allowed for the use of cotton due to this static electricity concern. This factor, combined with the length of time it took to find a supplier that met SCG's needs, resulted in the vests not being purchased until 2011. Thus, the 2010 actual recorded amount would not reflect incremental expenditures to meet the new code requirement. In fact, in 2011, approximately 5,600 of the new-style safety vests were purchased at an *incremental* cost of over $110,000.

DRA's recommendation is incomplete in its logic. The Commission should adopt SCG's request based on its substantial justification.

2. Rebuttal to TURN

TURN did not provide testimony on Tools, Fittings, and Materials.

[94] Exhibit DRA-44, p. 50, lines 12-13. Sentence has been corrected to eliminate duplicate wording.

I. Asset Management – Pipeline O&M Planning

Table SCG-GOM-17-R

Comparison of Positions in Case
TY2012 Estimates -- Gas Distribution O&M
(Thousands 2009 $)

	Position of Party			Reductions to SCG	
Additions	**SCG**	**DRA**	**TURN**	**DRA<SCG**	**TURN <SCG**
Base	6,777	6,777	6,539	-	(238)
CP Specialists	346	173	173	(173)	(173)
Subtotal Pipeline O&M Planning	**7,123**	**6,950**	**6,712**	**(173)**	**(411)**

The expenditures in Pipeline O&M Planning are in support of many technical and administrative services needed for the successful and timely completion of SCG's distribution pipeline O&M activities (e.g. main maintenance, service maintenance). Within these services is the need to ensure compliance with changing environmental laws, regulations and rules. This includes: project environmental pre-screening; monitoring of construction activities; recordkeeping; reporting and implementation of compliance programs; and employee training on compliance requirements.

Thus, in order to maintain the level of services offered today and ensure continued compliance with environmental regulations, SCG's forecast was based on the 2009 spending plus the addition of four environmental compliance specialists. In total, SCG requested $7.1 million in TY2012 for this area.

1. Rebuttal to DRA

DRA proposes a $173,000 reduction in this area to $7.0 million in TY2012. DRA does not take issue with SCG's use of the 2009 recorded levels as the base forecast for TY2012. DRA contends that SCG has not provided sufficient justification for two of the four additional Environmental Compliance Specialists. DRA reaches this conclusion based on: 1) a delay or

unresolved outcome of the Greenhouse Gas Rules; and 2) previous annual fluctuations in staffing in the Compliance Specialist positions.

a. Base Forecast Level

DRA does not oppose the forecasted base level funding for Pipeline O&M Planning.[95]

b. New Incremental Additions

i. Compliance Specialist

SCG forecasted incremental funding in TY2012 of $346,000 for four Field Environmental Compliance Specialists. These Field Environmental Compliance Specialists will support daily compliance monitoring, recordkeeping, project environmental pre-screening, reporting, and implementation of compliance programs. They will also deliver training to field personnel and local management needed for new or modified compliance requirements.

DRA proposes funding of only $173,000 in TY2012, a 50% reduction in this area, based on only two Compliance Specialist instead of SCG's forecasted four. SCG's estimate of four specialists was not simply based on the Greenhouse Gas Rule and expected data collection, reporting and field training efforts related to this rule, but was also based on changes in regulations regarding stormwater discharge, and foreseeable modifications to other existing regulations. These two efforts were also referenced in SCG's response to DRA's data request DRA-SCG-087-DAO, question 2.

However, DRA's discussion focuses on various other new environmental rulings, including AB-32 Cap-and-Trade.[96] Nowhere in my revised direct testimony was there mention of resources to support any efforts of the proposed Cap-and-Trade program. DRA's entire discussion on Cap-and-Trade is therefore irrelevant to SCG's request in this area. DRA argues

[95] Exhibit DRA-44, p. 51, lines 11-13
[96] Exhibit DRA-44, p. 53, starting on line 10.

that implementation dates on many of these new environmental regulations have been extended, and therefore support resources are not required at this time.[97] However, the only rule cited by DRA that directly impacts field activities for Gas Distribution is the Environmental Protection Agency's issuance of the Greenhouse Gas Mandatory Reporting Rule. In response to DRA data request DRA-SCG-095-DAO, question 3(a), SCG explained that these reporting requirements have been delayed to September 30, 2011. The new environmental regulatory requirements that these four specialist positions will support have not gone away, and the timing of reporting still remains within the TY2012 forecast.

Finally, the number of O&M FTEs reported to the Environmental Compliance Specialist position has ranged over time from 2.21 to 4.34 FTEs as DRA points out. However, it should also be noted that this has been increasing over time in response to compliance needs. These increases reinforce SCG's forecast that the need to respond to environmental compliance issues is ever-mounting.

With the introduction of new regulations and more complex and stringent regulations, SCG's forecast for the addition of four Environmental Compliance Specialists should be adopted.

2. Rebuttal to TURN

TURN proposes a $411,000 reduction in this area to $6.7 million in TY2012. Although SCG and DRA are aligned on the use of the 2009 recorded levels as the basis for the TY2012 forecast, TURN takes issue with this, citing the fact that 2010 recorded levels did not follow the upward trend. TURN is in agreement with DRA's proposal of reducing SCG's request for 4 additional Environmental Compliance Specialists and only allowing SCG an increase of 2 FTEs.

[97] Exhibit DRA-44, pp. 50-54.

a. Base Forecast Level

TURN's proposal to shift the base forecast period to include 2010 spending reduces the base forecast by $238,000 to $6.5 million. TURN states that even though 2010 data showed a decline in spending, SCG chose to use 2009 because "it was the highest year in a set of costs trending up. But the 2010 data break the upward trend."[98] The recommendation of TURN is to use a three-year average of 2008 – 2010, but gives no reasoning as to why this cost period averaging was chosen. Nor did TURN explain why is it reasonable to assume that a single data point can break a trend. It is also questionable why TURN did not use the five-year averaging it uses in so many other areas, but rather chose the period of 2008 – 2010, "including 2009 as the peak and two lower years on either side." Furthermore, 2009 was not the highest year in the data set; 2007 was higher. I have stated in Section II, point 1 of my rebuttal testimony why 2010 data is not appropriate. Given the labor intensive nature of this activity, SCG anticipates the need for a workforce at the 2009 level to ensure it can provide the appropriate level of service to field operations. Therefore, TURN's proposal to reduce the base forecast should be rejected and SCG's forecast should be adopted.

b. New Incremental Additions

TURN and DRA agree on their recommended reductions to the new incremental additions within Pipeline O&M Planning.[99] Please see the rebuttal discussion above in response to DRA's recommendations.

[98] Exhibit TURN-Marcus-SCG, p. 8.
[99] Exhibit TURN-Marcus-SCG, p. 8.

J. Operations Management and Training

Table SCG-GOM-18-R

Comparison of Positions in Case
TY2012 Estimates -- Gas Distribution O&M
(Thousands 2009 $)

	Position of Party			Reductions to SCG	
Additions	**SCG**	**DRA**	**TURN**	**DRA<SCG**	**TURN <SCG**
Base	8,003	7,772		(231)	(231)
GOS Traditional	1,093	-		(1,093)	(1,093)
GOS New	1,474	919	Accepts	(555)	(555)
Engineering Rotation	390	-	DRA	(390)	(390)
TSM	93	93		-	-
Training Materials	536	82		(454)	(454)
Educational Aids	62	62		-	-
Training Video	500	-		(500)	(500)
Subtotal Ops Mngt & Training	**12,151**	**8,928**	**8,928**	**(3,223)**	**(3,223)**

Operations Management and Training activities include operations leadership, field management, operations support, and field technical skills training, all of which are necessary for SCG to provide customers with safe and reliable service.

SCG's forecast for labor expenditures on Operations Management and Training was based on the 2009 adjusted recorded expense, which represents the base level of leadership, management, support, and training personnel necessary to maintain current operations. The type of service provided by employees within the Operations Management and Training workgroup fluctuates from year to year – e.g. the number of training classes and the quantity of materials required for class assignments. For this reason, a five-year (2005 – 2009) historical average of the recorded non-labor expenditures was determined to be most representative of ongoing non-labor requirements.[100]

[100] Exhibit SCG-02-R, p. GOM-43, lines 9-17.

Added to this base are incremental work elements not reflected in the base forecast that are necessary to adequately fund Operations Management and Training needs, challenges, and new activities.

In total, SCG forecasted $12.2 million in TY2012 for this area.[101]

1. Rebuttal to DRA

DRA proposes a $3.2 million reduction in this area, to $8.9 million.[102] DRA and SCG agree on the base level for the labor forecast. However, DRA proposes using the 2009 recorded non-labor spending as the base level for the TY2012 non-labor forecast, citing as justification that: 1) non-labor costs did not fluctuate from year to year; 2) non-labor costs have been on the decline from 2006 to 2009; and 3) total costs have remained relatively stable the past four years (2007 to 2010).[103] Furthermore, DRA argues against some of the incremental increases, and proposes that others be reduced due to, in its view, a lack of supporting evidence or double-counting of expenses. Each of DRA's contentions is addressed below.

a. Base Forecast Level

SCG's base forecast level for non-labor costs was based on the five-year historical average non-labor cost for the entire period between 2005 and 2009, which does in fact fluctuate, as can be seen in SCG's workpapers.[104] DRA was able to show a decline in non-labor costs by selectively excluding the 2005 non-labor expenses but gave no reason for ignoring the data from that year. As discussed in my revised direct testimony, a five-year average for the base forecast

[101] Exhibit SCG-02-R, p. GOM-41, table SCG-GOM-19.
[102] Exhibit DRA-44, p. 56, table 44-15A.
[103] Exhibit DRA-44, p. 55, lines 13-21.
[104] Exhibit SCG-02-WP, p. 158 of 234.

level was determined to be appropriate due to the fact that the types of services provided by this workgroup fluctuate from year to year.[105]

DRA is correct that the non-labor expenses have declined in recent years; however, the non-labor expense is not expected to remain at this lower 2009 level. This decline is partially the result of some of Gas Operations Services' (GOS) resources dedicating their time to the OpEx 20/20 Program starting in 2007.[106] As these resources transition back to the traditional staff role within GOS and incremental employees are hired into other departments within Operations Management and Training to meet incremental work elements, non-labor expenses are expected to exceed the lower levels seen in recent years.

DRA's proposal for non-labor is based on a single year's level of spending (the lowest in recent history) and does not capture the fluctuating services provided by this workgroup from year to year as well as the fluctuating non-labor levels associated with the number of employees in the workgroup. For these reasons, the Commission should reject DRA's proposed reduction of $231,000 due to the choice of an incorrect non-labor forecast methodology and should instead adopt the five-year average (2005 – 2009) non-labor as forecasted by SCG.

b. New Incremental Additions

i. <u>Gas Operations Services Traditional Support Resource Base</u>

SCG forecasted incremental funding in TY2012 of $1.1 million for the reassignment of GOS personnel that were dedicated to the OpEx 20/20 Program in recent years back to their traditional functions in GOS.[107] Beginning in 2007, support activities not critical to daily

[105] Exhibit SCG-02-R, p. GOM-43, lines 11-15.
[106] Exhibit SCG-02-R, p. GOM-45, lines 1-9.
[107] Exhibit SCG-02-R, p. GOM-45, lines 11-14.

operational safety were temporarily reprioritized, as a number of GOS' subject matter experts dedicated their time and expertise to various activities completed under the OpEx 20/20 Program. Since many of the business processes were being redesigned to reflect the new OpEx 20/20 technologies, it was the best use of existing resources to move these experienced GOS persons to work on the OpEx 20/20 Program. The expectation is that these resources will transition back to their traditional work supporting the operating regions as their assignment on OpEx 20/20 ends. By TY2012, the resource base will again reflect the 2006 historical level.[108]

DRA proposes no increase in funding above the base year level for this sub-category,[109] stating that the requested funding would amount to double-counting of the expenses for these employees,[110], as funding for their salaries has been accounted for and is embedded in rates.[111]. DRA has based its proposal on misinterpreted information, as explained in further detail below.

It appears that DRA misunderstood SCG's response to data request DRA-SCG-088-DAO, questions 1 and 2. The table provided in the data response showed the total spending in GOS from 2006 through 2010, how those numbers declined from 2006 through 2009, and how the resources redeployed due to the OpEx 20/20 Program were estimated. The FTEs and costs DRA cites in its testimony[112] are actually the FTEs and costs remaining in GOS, not those redeployed to the OpEx 20/20 Program. The referenced table and explanation from data request DRA-SCG-088-DAO, question 1 are shown in the excerpt below.

> *SoCalGas estimated the resources redeployed to support the OpEx 20/20 program to be equal to the difference between the Gas Operations Services (GOS) level of funding prior to the implementation of OpEx 20/20 (in 2006) and the*

[108] Exhibit SCG-02-R, p. GOM-45, lines 1-12.
[109] Exhibit DRA-44, p. 58, lines 3-4
[110] Exhibit DRA-44, p. 57, lines 14-18.
[111] Exhibit DRA-44, p. 57, line 27 – p. 58, line 2.
[112] Exhibit DRA-44, p. 57, lines 5 – 10.

funding in subsequent years. Please see the table below for an estimate of the annual expenses and FTEs of the GOS resources redeployed due to OpEx 20/20.

Description	Cost Center	2006		2007		2008		2009		2010	
		Total	FTEs	Total	FTEs	Total	FTEs	Total	FTEs	Total	FTEs
NEW BUSINESS	2200-0615	$ 14,224	0.0	$ 7,356	0.0	$ 86,060	1.1	$ 131,174	1.7	$ 51,290	0.5
DART REPORTING - DISTRIBUTION	2200-0616	$ 173,291	2.4	$206,579	2.7	$135,214	1.7	$ 21,316	0.3	$ 7,462	0.1
PROJECT MANAGERS	2200-0801	$ 656,983	6.9	$450,736	5.0	$ 93,644	1.0	$ 4,270	0.0	$ 44,470	0.1
FIBRE IN GAS ADMIN COSTS & REVENUE	2200-2122	$ 27	0.0	$ -	0.0	$ -	0.0	$ 143	0.0	$ 122	0.0
GAS TRANS & DISTR SERVICES DIR	2200-2144	$ 216,852	2.0	$ 78,829	0.9	$ (34,953)	0.4	$ 57,971	0.4	$253,319	1.6
DISTRIBUTION FIELD SERVICES STAFF	2200-2345	$ -	0.0	$ -	0.0	$ -	0.0	$ -	0.0	$210,267	2.6
Total Adjusted Recorded (Nominal)		**$1,061,377**	**11.3**	**$743,500**	**8.6**	**$279,965**	**4.2**	**$ 214,874**	**2.4**	**$566,930**	**4.9**
Total Adjusted Recorded (2009$ with V&S)		**$1,342,032**	**13.4**	**$909,723**	**10.2**	**$351,025**	**5.0**	**$ 248,562**	**2.9**	**$638,981**	**5.8**
Estimated GOS Resources Redeployed Due to OpEx 20/20 Program (2009$ with V&S) (Difference from 2006 Level of Funding)		$ -	0.0	$432,309	3.2	$991,007	8.3	$1,093,470	10.5	$703,050	7.6

Using the last row from the table, it can be seen that an estimated 29.5 FTEs and $2.5 million were redeployed from GOS due to the OpEx 20/20 Program between 2006 and 2010, not 37.3 FTEs and $3.5 million, as cited in DRA's testimony.[113]

In addition, it appears that DRA misunderstood SCG's response to data request DRA-SCG-088-DAO question 3. DRA states, "…SCG is requesting additional ratepayer funding to pay for these employee's salaries even though they have been paid for already. This request would amount to double-counting the expenses for these employees."[114] This statement is not accurate. The GOS employees and costs redeployed to the OpEx 20/20 Program since 2007 have been charged to the OpEx 20/20 Program and, as such, do not show up in the historical data for the Operations Management and Training area. While they do show up in the historical data for the OpEx 20/20 Program, they were not used to create the TY2012 forecast for the OpEx 20/20 Program, which was not based on historical recorded data, but was instead zero-based. (Please refer to the revised direct testimony and workpapers of SCG witness Mr. Phillips, Exhibit SCG-13.) The OpEx 20/20 Program forecast was based only on the funds and FTEs required to continue building the remaining OpEx 20/20 Program tools, and excluded FTEs and costs

[113] Exhibit DRA-44, p. 57, lines 9 – 10.
[114] Exhibit DRA-44, p. 57, lines 15 – 18.

associated with those employees returning to GOS.[115] For this reason, these employees and costs are not double counted. The historical FTEs and costs do appear in the OpEx 20/20 Program historical spending levels, but the forecasted FTEs and costs only appear in Operations Management and Training.

This incremental funding is necessary to reassign the GOS personnel from the OpEx 20/20 Program back to GOS as some of the phases of the OpEx 20/20 Program are completed to ensure activities critical to the long-term success of Gas Distribution are addressed, including performance metrics, compliance activities, resource utilization, and operations troubleshooting.

Therefore, DRA's proposal to deny funding above the base year level should be rejected, since it is based on inaccurate information, and an apparent misunderstanding of the information provided to DRA, and SCG's forecast should be approved.

ii. Gas Operations Services Support of New Technologies

SCG forecasts incremental funding in TY2012 of $1.5 million to support the new technology and associated business processes implemented by the OpEx 20/20 Program.[116] The OpEx 20/20 Program introduces new procedures for completing work elements, new processes for communicating information, new technology for recording and extracting information, and access to data never available before to support business management. The GOS organization inherits a new responsibility for ensuring the longer- term success of integrating three key OpEx 20/20 solutions – Maintenance and Inspection, Construction Management, and Geographic Information System – into the business environment affecting nearly 1,600 Gas Distribution employees in their daily operations.[117]

[115] Data Request DRA-SCG-088-DAO, question 3.
[116] Exhibit SCG-02-R, p. GOM-46, lines 20-21.
[117] Exhibit SCG-02-R, p. GOM-45, lines 16-22.

DRA proposes to extrapolate the recorded May 2011 expense to a full year of funding of $919,000 for the forecast for TY2012,[118] a reduction of $555,000 in this area, stating that SCG did not provide sufficient supporting calculations or documents or an adequate description of how the FTEs will be utilized.[119] These statements are not accurate, as explained below. In addition, DRA states that it is not convinced SCG needs the forecasted level of staffing as many of the OpEx 20/20 Program projects have already been completed and have been put to use in prior years.[120] While some phases of the OpEx 20/20 Program may be completed before TY2012, SCG explains below why this does not directly affect the funding requested for Support of New Technologies.

DRA now chooses to introduce 2011 data as the basis for its proposal, extrapolating five months of actual expense data to a full year of funding. As noted above (Section II, point 1), SCG objects to the use of 2010 cost data for forecasting, and SCG reiterates the same objections for the use of 2011 data.

DRA's proposed extrapolation of 2011 data, moreover, does not account for the additional employees GOS will add during 2011 and in 2012 as more OpEx 20/20 Program tools are rolled out. Without the requested 16 incremental FTEs, GOS will not be able to fully support the integration of the OpEx 20/20 Program tools, technologies, and associated business process as they are rolled out.

[118] Exhibit DRA-44, p. 59, lines 23-26. Please note that there is a discrepancy in DRA's proposal. On page 56, line 12 and page 60, line 1, DRA proposes $382,800, but in Table 44-15A and page 59, lines 23-26, DRA proposes $919,000, based on an extrapolation of the May 2011 partial amount of $382,800. SCG believes DRA intended its recommendation to be $919,000.
[119] Exhibit DRA-44, p. 59.
[120] Exhibit DRA-44, p. 59, lines 19-22.

DRA states that no supporting calculations or supporting documents were offered to sufficiently justify SCG's forecast.[121] As stated in SCG's response to data request DRA-SCG-089-DAO:

> *In order to support the new technology and associated business processes implemented by the OpEx 20/20 Program, through discussions with previous staff managers and directors it was determined that approximately 1 to 2 analysts, advisors and/or project managers per region per application would be required to support the new tools, resulting in an incremental forecast of 16 FTEs.*[122]

SCG based its FTE forecast on recommendations provided by previous staff managers and directors, who had the best understanding of OpEx 20/20 Program support needs. As such, there were no extensive calculations to support the 16 FTEs, but there were calculations showing how the forecasted expenses were determined. These can be found in the supplemental workpaper table provided in SCG's Operations Management and Training workpapers.[123]

DRA also states that SCG included additional positions in its workpapers that were not mentioned in testimony.[124] In my revised direct testimony, I stated that SCG anticipated the need for 1 to 2 analysts, advisors, and/or project managers on average per region per application.[125] There are four regions and three OpEx 20/20 Program applications (Maintenance and Inspection, Construction Management, and Geographic Information System)[126]; accordingly, 1 to 2 analysts, advisors, and/or project managers on average per region per application would be between 12 and 24 FTEs, which includes all 16 of the Managers, Project Managers, Advisors, and Analysts shown in the workpapers.[127]

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[121] Exhibit DRA-44, p. 59, lines 8 – 9.
[122] Data Request DRA-SCG-089-DAO, question 2, excerpt.
[123] Exhibit SCG-02-WP, p. 173 of 234.
[124] Exhibit DRA-44, p. 58, lines 17-21.
[125] Exhibit SCG-02-R, p. GOM-46, lines 19-21.
[126] Exhibit SCG-02-R, p. GOM-45, lines 18-22.
[127] Exhibit SCG-02-WP, p. 173 of 234.

DRA's statement that SCG does not explain how the requested FTEs will be utilized in supporting the integration of the OpEx 20/20 Program applications into the business environment[128] is also not accurate. In my revised direct testimony[129] and SCG's response to data request DRA-SCG-089-DAO, question 2, SCG provided a broad description of the anticipated GOS Support of New Technology work activities to integrate the OpEx 20/20 Program into Distribution operations. Below is an excerpt from the response to this data request:

> *Given its designed support role, the Gas Operations Services (GOS) organization inherits a new responsibility for ensuring the longer term success of integrating three key OpEx 20/20 solutions – Maintenance and Inspection, Construction Management, and Geographic Information System (GIS) – into the business environment affecting nearly 1,600 Gas Distribution employees in their daily operations.*
>
> *GOS will need to work with the operating organizations to determine proficiency gaps that need addressing, clearly identify data requirements that support the business operations and determine methods for extracting this information from the new systems, and formulate reports addressing both standard and ad hoc informational needs.*
>
> *GOS responsibilities include establishing a process for ongoing business data extraction, analysis, and reporting as well as the resulting business process enhancement recommendations. In addition, GOS is responsible for the resources necessary to keep the OpEx applications synchronized with the business needs. This effort includes keeping track of the work flow processes and their relationship to the SAP and Click Applications (core systems within the new OpEx 20/20 solutions); working with the operating organizations on training needs for new users; finding new opportunities to derive benefits from new uses of the applications; and enhancing the applications as the business needs change.*
>
> *These enhancements require defining new/changes to different systems implemented by OpEx 20/20 (Click Mobile - mobile computer system used by field personnel, Click Scheduling, Routing and Dispatching, GIS, Work Management, GWD – graphical work design, and the related SAP module) and supporting Information Technologies (IT) in testing and implementation. These processes also require maintaining a liaison between the operating groups and IT to define requirements and establish priorities for application configuration and/or integration changes and enhancements.*

[128] Exhibit DRA-44, p. 59, lines 10 – 14.
[129] Exhibit SCG-02-R, pp. GOM-45 – GOM-46.

While some of the OpEx 20/20 phases may be completed prior to TY2012, that does not affect the funding requirements for this group. The GOS Support of New Technologies group is not involved in building the OpEx 20/20 Program tools, but is instead responsible for integrating those tools into Distribution gas standards, policies, procedures, forms and operations and facilitating the understanding of the tools to optimize the work, as described in my revised direct testimony.[130]

Therefore, DRA's proposal to deny funding in this area is not appropriate and should be rejected by the Commission. SCG's forecasted incremental funding is necessary to fully support the new OpEx 20/20 Program tools, technology, and associated business processes and should be approved.

iii. Engineering Rotation Program

SCG forecasts incremental funding in TY2012 of $390,000 to hire new engineers that will begin their assignments in the Engineering Development Program.[131] Newly recruited college graduate engineers have a steep learning curve since they not only have to become adept and proficient at applying their engineering discipline, they must also be knowledgeable about the ever-expanding regulations that govern the natural gas industry as well as the company's own internal policies. The Engineering Development Program places new engineers in specific engineering jobs within the Company, providing them mentoring and a broader portfolio of engineering skills, thus accelerating their knowledge and understanding of operations. These individuals will thereby be better prepared to make the safety-sensitive decisions that are required of them, which increases the value they bring to SCG, customers, and the public.[132] The

[130] Exhibit SCG-02-R, p. GOM-45 – GOM-46.
[131] Exhibit SCG-02-R, p. GOM-47, lines 15-16.
[132] Exhibit SCG-02-R, p. GOM-46 – GOM-47.

Engineering Development Program is not just a training program; new engineers are performing necessary engineering work in each of their rotational assignments, and thus the driver for this increase is the vital need for additional engineers.

DRA recommends no increase for the Engineering Development Program,[133] stating that SCG showed a lack of support for the requested additional FTEs, did not identify any specific needs in any particular department, and that funding should already be embedded in historical costs.[134]

SCG disagrees with DRA's statement that SCG "shows a lack of support" in its proposal to deny funding of Engineering Development Program.[135] My revised direct testimony and additional information in SCG's response to data request DRA-SCG-090-DAO provided substantial support for this request and articulate the value of the program. What is important and not acknowledged by DRA is that engineers need to be ready to work and address the new regulations to assure timely compliance. My revised direct testimony[136] and SCG's subsequent response to data request DRA-SCG-090-DAO demonstrated this. However, DRA ignored the clear need for SCG to have additional engineers.

It appears DRA misunderstood my revised direct testimony[137] and the response to data request DRA-SCG-090-DAO. This funding is for necessary additional engineers that will start their employment in the Engineering Development Program. For this reason, the funding is incremental and not embedded in SCG's historical expenses. This funding is not for a

[133] Exhibit DRA-44, p. 60, lines 23-24.
[134] Exhibit DRA-44, p. 60, lines 11-18.
[135] Exhibit DRA-44, p. 60, lines 10-11.
[136] Exhibit SCG-02-R, p. GOM-46 – GOM-47.
[137] Exhibit SCG-02-R, p. GOM-46 – GOM-47.

"program," but rather for needed additional engineers. This was explained in SCG's response to data request DRA-SCG-090-DAO, question 2:

> *In anticipation of future replacement needs due to retirements and/or other related position changes; growing local, state and federal regulatory oversight regarding pipeline safety; customer's service requirements such as additional pressure or transportation service; and the need for project managers to handle the many projects SoCalGas must take on every year, SoCalGas is proposing to hire more engineers to support its operations. These individuals will be hired and initially placed within the Engineering Development Program. This "program" is a formalized approach to introduce new engineers into the utility. The approach provides these new hires an overview of the operations, opportunities to be coached and mentored by veteran engineers, and time to build their understanding of operations prior to their regular assignment. (Additional details of the approach are described in the scope document provided in response to Question 1a of this Data Response).*
>
> *The six additional positions were established based on feedback from managers of interested departments – including Region Operations, Transmission, Storage, Engineering, Environmental, and Capacity Planning and in consideration of the departments work requirements, age and maturity of existing employee base, and time required to gain proficiency within their areas. It was concluded that positions could generally be distributed one within each of the four operating regions, one within Transmission and/or Storage and/or other areas, and one within the Engineering department. Even if SoCalGas did not have this Engineering Development Program, the utility would still need these 6 incremental FTEs to meet workload and replacement requirements.*

As stated in the response to question 1 of the same data request, SCG had already hired or extended offers to 12 new engineers[138] in anticipation of the future replacement needs.

As a prudent natural gas pipeline operator, SCG must prepare for the departure of experienced engineers. As SCG looks ahead at the potential for departure of experienced engineers, it is necessary to take proactive measures to ensure that this void can be filled. A brand new engineer cannot be expected to take over the responsibilities of an experienced engineer the day that veteran employee leaves the position or Company. The safety risks associated with the work for which these employees are responsible are too great and cannot be

[138] Data Request DRA-SCG-090-DAO, question 1c.

left in the hands of inexperienced employees. DRA does not dispute the fact that a new engineer cannot just be hired to step into the shoes of an experienced engineer.

Therefore, DRA's recommendation of no incremental funding above the base year level for this sub-category is not reasonable and should be rejected by the Commission. SCG must have skilled engineers in place in preparation for the inevitable departure of experienced engineers and as work requirements continue to grow to address increasing regulatory change and system integrity.

iv. Technical Services Field Management

SCG forecasts incremental funding in TY2012 of $93,000 for a Technical Services Manager and a Technical Services administrative assistant.[139]

DRA does not oppose the forecasted funding for Technical Services Field Management.[140]

v. Formal Field Instructional Materials

SCG forecasted additional funding in TY2012 of $536,000 for incremental instructional design services for training module maintenance and development, Operator Qualification document maintenance, and written test maintenance.[141] In late 2009, the Training department implemented a process to formally track revisions made to the numerous gas maintenance and construction field procedures (Gas Standards) with the intention of having instructional design experts systematically incorporate the changes into formal training materials.[142]

[139] Exhibit SCG-02-R, p. GOM-47, lines 18-27.
[140] Exhibit DRA-44, p. 61, line 4.
[141] Exhibit SCG-02-R, p. GOM-49, line 9-10.
[142] Exhibit SCG-02-R, p. GOM-48, lines 9-11.

DRA proposes adopting the 2010 recorded expenses of $82,500 as the TY2012 forecast for this subcategory,[143] a reduction of $454,000 in this area. DRA states that SCG's forecast of nine new training modules per year had no historical basis,[144] that SCG is forecasting a continuation of historical work levels while claiming that additional expenses are necessary,[145] and that funding previously allocated to Human Resources for instructional design should be re-allocated to Distribution.[146] In the paragraphs below, SCG explains why certain of DRA's statements are inaccurate or irrelevant.

While DRA is correct that SCG could not identify the number of training modules developed prior to 2011 and had to estimate them, this historical number is not relevant in the calculation of the incremental work and expense for this area. SCG based the forecasted number of new training modules on the actual known backlog of 36 training modules.[147] A May 2011 update of this backlog was provided to DRA in response to data request DRA-SCG-093-DAO, question 10(d).

DRA's statement that SCG is forecasting a continuation of historical work levels while claiming that additional expenses are necessary is not accurate. While it is true that SCG assumed approximately 300 Gas Standards would be revised or created each year, SCG is not forecasting incremental expenses for revisions to these Gas Standards. Instead, SCG is forecasting the instructional design work resulting from these Gas Standard revisions, because formal field instructional materials must be updated to reflect the changes.[148] Prior to late 2009,

[143] Exhibit DRA-44, p. 63, lines 8-10.
[144] Exhibit DRA-44, p. 62, lines 3 - 6.
[145] Exhibit DRA-44, p. 62, lines 24 - 26.
[146] Exhibit DRA-44, p. 63, lines 3 – 7.
[147] Exhibit SCG-02-R, p. GOM-48, lines 22-26.
[148] Exhibit SCG-02-R, p. GOM-48, lines 15-18.

this work was only performed informally, as described in my revised direct testimony.[149] The funding requested here is the incremental expense related to a formal process for tracking and modifying training documents. This process is described in SCG's response to data request DRA-SCG-093-DAO, question 3:

> *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' 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.*
>
> *SoCalGas started formally tracking and modifying training materials in October of 2009. Before this, the process was an informal one.*

[149] Exhibit SCG-02-R, p. GOM-48, lines 4-8.

Prior to 2008, Instructional Design activities for the Gas Operations Services Training department were performed by Human Resources, which supported multiple departments.[150] The Gas Operations Services Training Instructional Design activities were not being completed in a timely manner, since Human Resources was handling requests from multiple departments. For this reason, the Human Resources expenses allocated to work for Gas Operations Services Training prior to 2008 would not be an accurate representation of ongoing Instructional Design needs. It is also for this reason that Gas Operations Services started performing its own Instructional Design services related to technical skills field training in 2008. In addition, there would have been no costs allocated to Human Resources for Gas Operations Services Training materials in 2009, as Gas Operations Services took over that work in 2008. Since the Operations Management and Training labor forecast was based on the 2009 recorded base, the historical labor expenses related to Human Resources Instructional Design employees would not have affected the Operations Management and Training forecast.

As demonstrated above, DRA's proposed reduction is not reasonable and should be rejected by the Commission and instead, SCG's forecast should be adopted.

vi. Educational Aids and Equipment for Field Technical Skills Training

SCG forecasted incremental funding in TY2012 of $62,000 to purchase props and equipment, which are needed to help students learn how to operate, maintain, and troubleshoot gas measurement, regulation, and instrumentation systems.[151]

DRA does not oppose the forecast for educational aids and equipment for field technical skills training.[152]

[150] Data Request DRA-SCG-093-DAO, question 2(a).
[151] Exhibit SCG-02-R, p. GOM 49, lines 12-20.

vii. Video Embedded System Instruction

SCG requests incremental funding in TY2012 of $500,000 for Video Embedded System Instructions (VESIs) that will supplement field binders and system instructions by refreshing training and reinforcing safe practices.[153] A video embedded within the system instruction will be accessible to field employees through their MDTs (laptops) to demonstrate the proper, safe method to perform the task with a visual demonstration and narration. By reinforcing safe practices in the video, VESIs will help maintain SCG's high quality and safety standards.[154]

DRA proposes no increase in funding above the base year level,[155] stating that SCG has not established a convincing reason why the project is necessary, demonstrated why the project must be completed in the next four years, or demonstrated that the product will be used or useful.[156] DRA instead proposes a pilot study be completed prior to producing the videos and incorporating them into field materials.[157]

As discussed in SCG's response to DRA-SCG-094-DAO, question 1, SCG based the four-year timeframe on SCG's internal resources, the vendor's capability to produce 500 videos, and the desire to deploy the video embedded system instructions on a timely basis to promote customer and employee safety. SCG plans to continue creating video embedded system instructions after the four-year period. Four years was just the estimate to complete the first 500 videos.

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[152] Exhibit DRA-44, p. 63, lines 14-15.
[153] Exhibit SCG-02-R, p. GOM-50, lines 20-22.
[154] Exhibit SCG-02-R, p. GOM-50, lines 12-15.
[155] Exhibit DRA-44, p. 64, lines 15-16
[156] Exhibit DRA-44, p. 64.
[157] Exhibit DRA-44, p. 64, lines 25-27.

Video enhanced training is becoming an industry standard, and educators across the country are using such videos to enhance classroom and other training.[158] VESIs are the logical next step to enhance training and enforce safe work habits, as MDTs (laptops) are being deployed to field crews. The potential safety benefits discussed in my revised direct testimony justify starting this project before the next GRC:

> *Video Embedded System Instructions (VESIs) will supplement the field binders and system instructions by refreshing training and reinforcing safe practices. With the new VESIs, field employees will no longer be forced to rely strictly on their memory, field manuals, and supervisor assistance to safely perform various technical tasks. The employee will be able to use his/her MDT to access the system instruction. A video embedded within the system instruction will also be accessible to demonstrate the proper, safe method to perform the task with a visual demonstration and narration. By reinforcing safe practices in the video, VESIs will help maintain SoCalGas' high quality and safety standards.*
>
> *Many experienced technicians are retiring and/or moving to other positions; hence, SoCalGas' newer workforce and supervisors are less experienced. With the new VESIs, employees will have the confidence to complete their tasks safely without needing to rely solely on paper manuals or other personnel for guidance.*[159]

SCG has demonstrated the need to take this valuable next step in the use of proven technology which will enhance the way employees are trained and access reference materials. VESI takes advantage of newly deployed technology by which field employees will be able to see proper techniques for performing work while at the job site. As a result of this new technology, the public will benefit from better trained and equipped Gas Distribution employees.

The Commission should approve SCG's request for funding for embedded videos, as they enhance training and will help reinforce safe work habits, benefiting both employees and the public.

[158] http://www.thirteen.org/edonline/ntti/resources/video1.html
[159] Exhibit SCG-02-R, p. GOM-50, lines 8-19.

2. Rebuttal to TURN

TURN did not provide testimony on Operations Management and Training.

K. Regional Public Affairs

Table SCG-GOM-19-R

Comparison of Positions in Case
TY2012 Estimates -- Gas Distribution O&M
(Thousands 2009 $)

	Position of Party			Reductions to SCG	
Additions	**SCG**	**DRA**	**TURN**	**DRA<SCG**	**TURN <SCG**
Subtotal Reg. Public Affairs	**3,907**	**3,907**	**-**	**-**	**(3,907)**

The activities in the Regional Public Affairs (RPA) category are comprised of:

a. Promoting local regulatory uniformity throughout SCG's service territory on matters affecting distribution operations by engaging in education, conflict resolution, and issue clarification with governments where existing or proposed local ordinances or regulations may conflict with state laws, regulations, or franchise agreements, or impose unnecessary costs on SCG operations and ratepayers.

b. Coordinating and resolving local government permitting requirements by helping to obtain unique and difficult-to-negotiate locally-mandated permits that enable operations to construct, maintain, replace, or relocate facilities in a timely, cost-efficient manner, thereby maintaining SCG's high level of reliability.

c. Coordinating SCG's operational activities with electric, cable, and telephone utilities to coordinate activities in the public right-of-way to mitigate operational costs.

d. Coordinating emergency planning and response activities between SCG and the cities and counties in SCG's service territory.

e. Planning and executing "first responder" workshops that bring together fire and police personnel for briefings on SCG's pipeline system, system safety, and system security issues.

f. Providing information to government officials and others about operational matters, rates and program offerings, responding to local media inquiries, and handling customer complaints in support of operations.

SCG forecasts zero increase over the 2009 adjusted recorded base for TY2012 funding requirements in Regional Public Affairs activities, as 2009 maintains the level of services currently offered and expected to continue into this GRC period. In total, SCG forecasted $3.9 million in TY2012 for this area.

1. Rebuttal to DRA

DRA does not oppose the forecasted funding for Regional Public Affairs.[160]

2. Rebuttal to TURN

TURN recommends zero funding for Regional Public Affairs.[161] TURN's recommendation is not based on its own analysis, but rather on a portion of testimony prepared by another intervenor, UCAN, for another utility, without consideration of my revised direct testimony.

[160] Exhibit DRA-44, p. 65, line 17.
[161] Exhibit TURN-Marcus-SCG, p. 9.

TURN alleges that the Commission directed SCG in its last rate case decision to "…document and justify public affairs costs."[162] TURN further alleges that SCG did not follow this directive. TURN misapplies the Commission's directive in D.08-07-046 by making an overly-broad interpretation. TURN's gross misunderstanding of D.08-07-046 should be rejected, along with its recommended disallowance.

If RPA's budget is not set to zero, TURN recommends a reduction of $122,000. TURN argues that a forecasting adjustment which reduces RPA expenses 3.1% follows TURN's approach of using a three-year average of 2008-2010 whenever there is under-spending in 2010.

a. Base Forecast Level

TURN's forecast methodology is incorrect and its recommendation should be rejected.

First, and most simply, TURN's forecast methodology is arbitrary. Buried in a FOOTNOTE[163] to its testimony regarding RPA, TURN recommends that a forecasting adjustment which reduces expenses 3.1 percent would follow its principle of using a three-year average of 2008-2010 when there is under-spending in 2010. TURN's recommended forecast methodology is arbitrary, as discussed in Section II, point 1 of this rebuttal testimony, and TURN's recommendation should be rejected.

TURN calls into question SCG's 2009 base year forecast methodology, inaccurately stating that, "2009 was a peak spending year…" for RPA.[164] It was not. My revised direct testimony clearly demonstrates that 2005 and 2006 were peak spending years, and that 2009 spending was significantly lower than both of those years.[165] SCG did not use 2005 and 2006 in

[162] Exhibit TURN-Marcus-SCG, p. 9.
[163] Exhibit TURN-Marcus-SCG, p. 9, footnote number 8.
[164] Exhibit TURN-Marcus-SCG, p. 9, footnote number 8.
[165] Exhibit SCG-02-WP, p. 176 of 234.

its forecasting methodology for RPA, as those years did not accurately reflect expected operating requirements.

SCG chose its forecast methodology because the "Base year methodology is used as it best reflects current and future operating requirements."[166] TURN's forecast methodology does not take these factors into account. In addition, during 2010, RPA experienced labor vacancies that resulted in lower-than-forecast labor and non-labor spending. Had RPA been fully staffed, TURN's recommended three-year 2008-2010 average forecast methodology would be insufficient to cover RPA labor and non-labor expenses.

Further, as stated by DRA regarding RPA's base year forecast methodology, "DRA does not take issue with SCG's forecast."[167] Consequently, since TURN's forecast method is inaccurate, and DRA itself took no issue to SCG's forecast, TURN's recommendation should be rejected.

Secondly, TURN objects to the SCG request based on its interpretation of the Commission directive in D.08-07-046. TURN has misapplied this directive. TURN alleges that the Commission directed SCG in its last rate case decision to "…document and justify public affairs costs," and that SCG did not follow this directive.[168] TURN misapplies the CPUC's directive in D.08-07-046, taking an overly broad approach and recommending a 100 percent disallowance based on this misapplication.

D.08-07-046 was not entirely clear as to the definition of 'public affairs,' as referenced. In fact, the record that led to this decision makes no mention of, and raises no concern about, SCG's Regional Public Affairs department engaging in outreach to enhance corporate image.

[166] Exhibit SCG-02-WP, p. 176 of 234.
[167] Exhibit DRA-44, p. 65, line 17.
[168] Exhibit TURN-Marcus-SCG, p. 9.

The record on outreach to enhance corporate image was specific to the Community Relations department. Given this record, SCG took a reasonable interpretation of 'public affairs' as meaning Community Relations. Based on this interpretation, SCG complied with the CPUC's directive in D.08-07-046 and provided information on outreach activities as part of SCG witness Cheryl A. Shepherd's workpapers.[169]

Even if the directive was interpreted as applying to SCG's Regional Public Affairs department, it still does not require SCG to document and justify each and every Regional Public Affairs expense. Indeed, the Commission's directive regarding "public affairs" expenses in D.08-07-046 was strictly within the context of 'Corporate Image Enhancement,' and it was limited to providing some information on general outreach activities only. This was so the Commission could assess whether such activities "…demonstrate genuine customer benefit that outweighs any incidental corporate image enhancement."[170]

TURN omitted from its testimony any explanation of the context and the limited nature of the Commission's directive. Or, perhaps TURN is under the false impression that 100 percent of RPA's activities are within the context of corporate image enhancement.

RPA's focus is supporting regional field operations, not outreach for corporate image enhancement. As stated in my revised direct testimony, "Regional Public Affairs' (RPA) primary focus is supporting field operations through its work with regional and local governments on issues regarding proposed regulations, permitting, franchises and emergency

[169] Exhibit SCG-23-WP-R, Supplemental Workpapers for Workpaper 2200-2339.000, starting at page 29 of 84.
[170] D.08-07-046, p. 74, 15.4, Corporate Image Enhancement

preparedness and response."[171] These activities help SCG achieve its goal of maintaining a safe and reliable system at the lowest reasonable cost.

TURN may have misconstrued RPA's activities due to a lack of understanding of the actual work performed by RPA and of the clear benefits of these efforts. To help clarify this matter, the following examples are provided of work that has been performed by this cost center and a brief description of the benefit to ratepayers. While most of these examples involve local governments, the activities can best be described as part of RPA's day-to-day business in areas where SCG has facilities and serves customers. These activities should not be construed as general outreach.

> *RPA promotes local regulatory uniformity throughout SCG's service territory on matters affecting distribution operations by engaging in education, conflict resolution, and issue clarification with governments where existing or proposed local ordinances or regulations may conflict with state laws, regulations, or franchise agreements, or impose unnecessary costs on SCG operations and ratepayers. This is a major focus for RPA as cash-strapped local governments are increasingly proposing new ordinances, enacting new fees or raising existing ones, modifying general plans or zoning rules, and modifying traffic control requirements.*[172]

For instance, in March 2011, RPA successfully negotiated with the City of Vernon to decrease incremental fees proposed under Ordinance 1175, which established a new encroachment fee and deposit schedule, a license fee schedule and a franchise fee schedule. The negotiated fees that will be imposed on SCG will be based on the actual amount of time spent on plan review. In addition, deposits, surety bonds, and liability insurance for encroachment permits and license requirements were waived. Additional exemptions protecting SCG's franchise agreements were noted in the Ordinance and favorable specific language suggested by RPA was included. The anticipated cost avoidance for SCG is approximately $75,000 per year.

[171] Exhibit SCG-02-R, p. GOM-50, lines 30-32.
[172] Exhibit SCG-02-R, p. GOM-52, lines 15-21.

In June 2011, RPA worked with the City of Temecula to limit incremental street paving costs. Initially, the City wanted to charge SCG approximately $450,000. RPA's involvement resulted in a compromise with a new cost to SCG of approximately $117,000 – a cost avoidance of over $300,000.

In September 2011, RPA assisted District Operations with resolution of an invoice from Riverside County for $31,000 for a four-foot by four-foot pothole. The County Contractor was seeking unnecessary repairs to sidewalks and the street that were not associated with SCG's pothole. RPA met with the County Engineer to resolve the overbilling, resulting in a $30,000 cost avoidance.

> *RPA also coordinates and resolves local government permitting requirements by helping to obtain unique and difficult-to-negotiate locally-mandated permits that enable operations to construct, maintain, replace, or relocate facilities in a timely, cost-efficient manner, thereby maintaining SCG's high level of reliability.*[173]

For example, in February 2011, RPA secured approval from the City of Redondo Beach for a street closure to facilitate pipeline retrofit work. The work required weekend extended hours and traffic control by local police officers. Had the street closure been denied, SCG would have had to develop an alternative, which would have delayed work for a minimum of one week, at a cost of approximately $150,000.

In March 2011, RPA conducted meetings on SCG's Sewer Lateral Inspection Program (SLIP) with the cities of Whittier and Pico Rivera and facilitated an agreement in principal to allow blanket permits for the inspection work – a breakthrough in these two cities that had previously resisted this type of permit, which saves time, avoids costs, and allows operations to get the work done.

[173] Exhibit SCG-02-R, p. 52, lines 22-25.

In June 2011, RPA negotiated a proposed permit inspection fee for a major pipeline project in the City of Delano. Operations involved RPA after the City initially wanted to charge three percent of the $2.25 million job, which would have been $67,500. Instead, RPA reached agreement with the city to pay actual city inspection costs of $71 for every two site inspections. It is estimated that the three-month job will require about 130 site inspections, for a total cost of approximately $4,615 in permit fees. RPA's involvement resulted in avoiding more than $60,000 in costs.

Working with local government is critical to SCG's operating needs. It minimizes cost shifting from municipalities to ratepayers and helps ensure system reliability. These activities also represent RPA's primary function, and these activities could not remotely be construed as general outreach or corporate image enhancement.

In the absence of RPA, operations staff would be required to spend a significant amount of time, effort and expense working with local jurisdictions. Required maintenance work would be more costly and take longer to complete, thereby negatively impacting ratepayers. As stated in my revised direct testimony:

> *In addition to supporting operations by working with governments, RPA coordinates SCG's operational activities with other utilities by participating in inter-utility coordinating committees. Meeting regularly with electric, cable and telephone utilities to coordinate activities in the public right-of-way, RPA helps minimize street-cut activities, which decreases the inconvenience of street closures, increases public safety, and reduces operational costs.*[174]

For example, in August 2011, RPA with Southern California Edison Company (SCE), Cox Communications and Irvine Ranch Water District requested that the City of Irvine officially document in the Utility Coordination Meeting minutes that the city had agreed to revoke its previous demand for utilities to slurry seal curb-to-curb upon completion of work. The city

[174] Exhibit SCG-02-R, p. GOM-52, lines 26-30.

agreed and the statement is in the official record. Estimated yearly cost avoidance associated with this activity is $474,000.

RPA currently serves as co-chair of the San Gabriel Valley Inter-Utility Coordinating Committee and has regularly scheduled meetings with SCE, Verizon and AT&T. The Committee meets with area cities that have recently adopted strict and costly paving requirements to ensure that these cities understand the impact of these requirements on their residents – utility ratepayers – and works with the cities to limit these requirements, resulting in cost avoidances for SCG.

RPA also participates in the Metro (Los Angeles) Inter-Utility Coordinating Committee.

Teaming with other utilities and cities to coordinate project work saves time, resources and avoids costs that would otherwise be incurred by Operations, all of which ultimately inure to the benefit of ratepayers. Again, as stated in my revised direct testimony:

> *RPA plays a critical role in coordinating emergency planning and response activities between SCG and the cities and counties in SCG's service territory. RPA serves as a member of the Los Angeles, Orange, and San Bernardino County emergency operations centers (EOCs), as well as the Los Angeles City EOC. RPA participates in EOC drills and is required to report to these EOCs during an emergency. RPA is on call for this duty 24 hours a day, seven days a week. RPA similarly performs a vital function in SCG's internal EOCs. In the event of an emergency that could impact the system, designated RPA personnel are deployed to SCG's central EOC and regional GECs to provide support to operations and to city and county EOCs. In addition, RPA hosts a number of "first responder" workshops each year, bringing together fire and police personnel for briefings on SCG's pipeline system, system safety, and system security issues.*[175]

In December 2010, RPA responded to the activation of Riverside County Office of Emergency Operations after the Governor had declared Riverside County in a 'State of Emergency' with over 40 road/highway closures and 12 cities affected by massive flooding, mud and debris flows. RPA worked closely with emergency management teams, advising them of

[175] Exhibit SCG-02-R, p. GOM-52, line 31 – p. GOM-53, line 9.

SCG's response to flooding and infrastructure storm damage occurring throughout the County. RPA also coordinated with District Operations, reporting specific road closures and hazard areas.

During this same emergency, RPA also reported to the City of Highland's Emergency Command Post, at the request of Cal Fire and the city. For more than four days, RPA reported to the City's Command Post and kept Cal Fire, the City Manager, the County of San Bernardino, and other first responders updated on SCG-related activities in the area, providing updates about the status of repairs and projected service restoration time.

Also in 2010, immediately following a 7.1 Easter earthquake, RPA manned the Imperial County Emergency Operations Center providing emergency responders and city and county officials up-to-date information on SCG service. RPA also briefed District Operations on road closures and reported outages, and responded to media inquiries about what customers should do following an earthquake.

RPA also plays an essential role in SCG's own emergency operation centers. In the event of an emergency that could impact SCG's system, RPA is required to report to the utility emergency operations centers to provide support to operations.

For instance, in July 2011 RPA reported to the regional Gas Emergency Center (GEC) in response to a high pressure leak in Twenty-Nine Palms. In this capacity, RPA coordinated activities of operations with emergency responders and government officials to help ensure community safety, and provided status updates regarding outages as well as estimated restoration time. Also, in August 2011, RPA reported to the regional GEC in response to a leak in Riverside and performed similar duties.

In addition, RPA works with fire/police agencies to provide them with first responder training on SCG's pipeline system, system safety, and system security issues.

In September 2011, RPA worked with Alhambra and Pasadena Field Operations to bring fire department personnel and crews from Los Angeles County Fire, cities of Alhambra, Arcadia, Monrovia, Monterey Park, San Gabriel, and Pasadena as well as city emergency coordinators from Rosemead, San Gabriel, and Temple City to participate in the Emergency Response Safety Briefing on gas operations, emergency services, pipeline integrity and network, as well as SCG's procedures for responding to an incident. The briefing was held at SCG's Pasadena Base and 35 first responders attended.

In April 2011, RPA facilitated a similar training session at the Glendale Fire Dept Training Facility for over 100 members of the Glendale Fire Department. RPA similarly facilitated training in February for approximately 50 members of the San Luis Obispo County Fire Department.

These activities are critical to maintaining safe and reliable service for ratepayers, particularly in light of recent natural gas pipeline incidents in other areas of the Country.

RPA also provides information to government officials and others about operational matters, rates and program offerings, responds to local media inquiries, and handles customer complaints in support of operations.

Each year, RPA conducts federally-mandated pipeline safety communications with public officials in High Consequence Areas (HCAs), pursuant to the Pipeline Safety Improvement Act of 2002. RPA is further responsible for providing pipeline safety information to public school districts, public colleges, and universities every two years and to public officials in areas designated as non-HCAs as well. This communication helps ensure ratepayer safety and reliable service.

RPA also conducts periodic communication with public officials and others about SCG's customer assistance and energy efficiency programs to increase awareness of, and participation in, utility programs and services that have been developed specifically to benefit ratepayers.

RPA's presence in the field and knowledge of operational issues sometimes puts RPA on the front line as SCG's spokesperson when a media representative is not immediately available and newsworthy events occur. In May 2011, RPA responded to local media in Ventura County regarding a natural gas odor in a Camarillo neighborhood. RPA conveyed critical information about leak detection and response, as well as a reminder for customers to call Underground Service Alert (8-1-1) before digging.

RPA similarly handles any number of customer complaints regarding operations and other aspects of service.

In July 2011, RPA received a call from a resident of Huntington Beach requesting gas service be turned back on, after SCG had discovered that a corroded section of gas pipe on the property needed to be replaced by the resident. RPA coordinated with operations to assist the resident's plumber on leak testing and reactivation of the gas service to the satisfaction of the resident.

In August 2011, RPA was contacted by Riverside County's Chief Field Inspector regarding a trench failure on a major thoroughfare. County inspectors could not determine if Verizon or SCG was the responsible party because the utilities were working at a joint location. RPA worked with District Operations to clarify that SCG was not responsible for the trench failure and communicated this to the County officials.

SCG has fully demonstrated that the activities performed by RPA – appearing before local governmental bodies regarding existing or proposed operations, participating on joint-

utility councils, coordinating emergency preparedness activities, providing information to government officials and others, responding to local media inquiries, and resolving customer complaints in support of Operations – provide direct and significant benefits to ratepayers. These activities are vital to mitigating operational costs, which would otherwise put upward pressure on customer rates.

In summary, TURN misapplies the CPUC's directive in D.08-07-046, making an overly broad interpretation and recommending a 100 percent disallowance based on this misapplication. TURN's recommendation would, if adopted, result in a necessary increase of expenses elsewhere at SCG to fulfill obligations and functions of Regional Public Affairs, and would not result in a reduced expense level overall. RPA's activities are critical to SCG's operating needs, minimizing cost shifting from municipalities to ratepayers. They also serve to enhance public safety. As such, these activities provide substantive ratepayer benefits.

In addition, TURN's forecast methodology should be rejected, as it is arbitrary and does not accurately reflect RPA's current and future operating requirements.

The Commission therefore should accept SCG's forecast of RPA expenditures in full.

IV. GAS DISTRIBUTION CAPITAL REBUTTAL – DRA AND TURN

My revised direct testimony supports capital expenses of $187.8 million in 2010, $224.2 million in 2011, and $212.6 million for 2012 for gas distribution activities.[176] DRA accepts SCG's proposed expenditures for 2010 based on its finding that, "The actual/recorded total expenditures in Gas Distribution, Underground Storage and Gas Engineering are almost $24 million lower than the SCG forecast, but the overall actual/recorded expenditures for SCG Plant are about $9 million higher than the SCG forecast. The difference is likely attributed to a timing

[176] Exhibit SCG-02-R, p. GOM-62.

difference."[177] However, DRA proposes reductions of $47.5 million to SCG's forecast for 2011 and $41.9 million for 2012. TURN proposes the adoption of 2010 actual expenditures for a reduction of $25.2 million in 2010, and reductions of $50.0 million to SCG's forecast for 2011 and $53.1 for 2012. SCG has previously stated its objections to the continued introduction of 2010 cost information into forecast calculations (Section II, point 1). This section of the rebuttal testimony addresses these parties' proposed reductions. The tables below summarize by category of spending SCG, DRA and TURN recommended spending and their differences.

[177] Exhibit DRA-45, p. 3, lines 13-17.

Table SCG-GOM-20-R

Comparison of Positions in Case Forecasts -- Gas Distribution Capital (Thousands 2009 $)

	2010				2010	
	SCG	DRA	TURN		DRA<SCG	TURN<SCG
New Business (NB plus Trench)	31,395	31,395	12,350		-	(19,045)
29 Palms Marine Base	2,800	2,800	400		-	(2,400)
Pressure Betterment	10,936	10,936	9,341		-	(1,595)
Supply Line	3,180	3,180	1,237		-	(1,943)
Main Replacement	32,063	32,063	43,982		-	11,919
Service Replacement	11,639	11,639	11,458		-	(181)
Main & Service Abandonment	4,022	4,022	2,515	1/	-	(1,507)
Regulator Station Projects	6,319	6,319	3,831		-	(2,488)
Cathodic Protection	4,192	4,192	3,362		-	(830)
Pipeline Relocation - Freeway	2,207	2,207	1,740		-	(467)
Pipeline Relocations - Franchise	9,260	9,260	11,016	1/	-	1,756
Mobil Home Parks	67	67	-		-	(67)
Other Distribution Capital Projects	3,448	3,448	2,653		-	(795)
Meter Guard Installations	984	984	1,227		-	243
Meter and Regulators	24,797	24,797	20,501	1/	-	(4,296)
Equipment / Tools	2,193	2,193	2,401	1/	-	208
Field Support	38,323	38,323	34,649	1/ 2/	-	(3,674)
Total Gas Distribution Capital	187,825	187,825	162,663		-	(25,162)
					0%	-13%
New Business Forfeitures	(4,856)	n/a	(12,331)		n/a	(7,475)

1/ In data response DRA-SCG-73-KCL- **Revised**, Q1, SCG provided the 2010 Historical spending on a consistent basis with data shown in this proceeding. SCG's figures are shown here. In the review of TURN testimony the following discrepancies were found:

	TURN
Main & Srvs Aband.	2,335
Relocations- Franchise	10,247
Meter & Regulators	19,958
Equipment/Tools	1,959
Field Support	34,712
	69,211

2/ Only adjustment to SCG's showing TURN appears to have made to the Equipment/Tools is for the purchase of Multi-gas Leak Detectors. The TURN recommended reductions have been taken from the SCG total to determine an overall TURN recommendation for this category of spend.

Table SCG-GOM-21-R

Comparison of Positions in Case Forecasts -- Gas Distribution Capital (Thousands 2009 $)

	2011			2011	
	SCG	DRA	TURN	DRA<SCG	TURN<SCG
New Business (NB plus Trench)	37,945	15,178	11,835	(22,767)	(26,110)
29 Palms Marine Base	10,200	10,200	4,600	-	(5,600)
Pressure Betterment	13,306	13,306	11,720	-	(1,586)
Supply Line	3,164	3,164	2,612	-	(552)
Main Replacement	31,873	31,873	31,873	-	-
Service Replacement	11,529	11,529	11,529	-	-
Main & Service Abandonment	4,022	4,022	2,953	-	(1,069)
Regulator Station Projects	7,186	7,186	6,000	-	(1,186)
Cathodic Protection	4,328	3,782	3,788	(546)	(540)
Pipeline Relocation - Freeway	2,196	2,196	2,196	-	-
Pipeline Relocations - Franchise	9,477	8,516	9,477	(961)	-
Mobil Home Parks	67	67	67	-	-
Other Distribution Capital Projects	3,448	3,448	3,073	-	(375)
Meter Guard Installations	1,097	1,097	1,097	-	-
Meter and Regulators	26,219	22,791	22,815	(3,428)	(3,404)
Equipment / Tools	17,953	7,253	17,848	(10,700)	(105)
Field Support	40,207	31,101	30,740	(9,106)	(9,467)
Total Gas Distribution Capital	224,217	176,709	174,223	(47,508)	(49,994)
				-21%	-22%
New Business Forfeitures	(4,856)	n/a	(7,691)	n/a	(2,835)

Table SCG-GOM-22-R

Comparison of Positions in Case Forecasts -- Gas Distribution Capital (Thousands 2009 $)

	2012			2012	
	SCG	DRA	TURN	DRA<SCG	TURN<SCG
New Business (NB plus Trench)	43,854	17,546	16,629	(26,308)	(27,225)
29 Palms Marine Base	4,800	4,800	-	-	(4,800)
Pressure Betterment	13,200	13,200	11,636	-	(1,564)
Supply Line	3,139	3,139	2,592	-	(547)
Main Replacement	31,598	31,598	31,598	-	-
Service Replacement	11,408	11,408	11,408	-	-
Main & Service Abandonment	4,022	4,022	2,953	-	(1,069)
Regulator Station Projects	7,424	7,424	6,250	-	(1,174)
Cathodic Protection	4,464	3,782	3,788	(682)	(676)
Pipeline Relocation - Freeway	2,179	2,179	2,179	-	-
Pipeline Relocations - Franchise	9,660	8,516	9,660	(1,144)	-
Mobil Home Parks	67	67	67	-	-
Other Distribution Capital Projects	3,448	3,448	3,073	-	(375)
Meter Guard Installations	1,210	1,210	1,210	-	-
Meter and Regulators	31,016	27,461	24,697	(3,555)	(6,319)
Equipment / Tools	1,393	1,393	1,393	-	-
Field Support	39,694	29,469	30,366	(10,225)	(9,328)
Total Gas Distribution Capital	212,576	170,662	159,499	(41,914)	(53,077)
				-20%	-25%
New Business Forfeitures	(4,856)	n/a	(7,691)	n/a	(2,835)
				-	-

A. New Business

The New Business forecast includes field construction costs for the installation of main, service and meter set assembly, and associated regulator stations necessary to provide service to new residential, commercial, and industrial customers. In conjunction with the installation of these gas facilities, a trench into which pipe is placed must be excavated. If SCG digs the trench, the costs are included with the construction expenses. If the customer provides the trench, SCG reimburses the customer for the cost. The materials cost of meters and regulators are addressed under Section IV.K below, "Meters and Regulators."

The forecast for New Business activity is highly dependent on projections of construction activity. In preparing this Application, SCG relied upon the then-available projections of

construction activity. SCG's forecast was developed based on an assessment of future new meter sets and associated unit costs for each of the years 2010, 2011, and 2012. Each year's forecast expenditure was determined independently; that is, years 2010, 2011, and 2012 were not based on incremental changes from 2009, but rather by independent point estimates for construction units and costs per unit. Reimbursements to customers for the development of the trench were forecasted at the five-year average of trench reimbursement payment to total construction costs.

SCG is requesting funding for installation and customer trench reimbursement payments of $31,395,000, $37,945,000, and $43,854,000 in the years 2010, 2011, and 2012, respectively.

1. Rebuttal to DRA

DRA proposes reductions to SCG's forecast of $22,767,000 and $26,308,000 in years 2011 and 2012, respectively. It recommends that each year be reduced by a single scaling factor equaling the relationship of 2010 actual costs to SCG's 2010 forecast expenditures. By this method, DRA implicitly contends that SCG's projections of 2011 and 2012 expenditures are overstated by the same relationship as the 2010 experience. DRA provides no evidence at all to show why the future point estimates as provided by SCG should be scaled in a like fashion as the 2010 experience. SCG's estimates for new construction are consistent with the forecasts of customer growth as presented by SCG witness Mr. Wilder (exhibit SCG-30). Even DRA's own witness, Mr. Renaghan (Exhibit DRA-42), presents a forecast for active customers similar to that of Mr. Wilder, thus supporting SCG's Gas Distribution capital forecast. To reduce SCG's future capital requirements as proposed by DRA would not recognize SCG's need to respond to future customer needs.

SCG provided an estimated forecast for New Business requirements based on a point estimate for growth requirements. DRA's unsupported proposal to reduce SCG's 2011 and 2012 requests for funding based on a simple ratio of 2010 actual costs to forecast costs is a shortsighted and incomplete analysis. The Commission should therefore reject DRA's proposal for these years and adopt SCG's forecast.

2. Rebuttal to TURN

While DRA applied a blanket reduction to the total New Business spending, TURN addressed construction costs and trench reimbursements individually. In total, TURN proposes reductions to SCG's forecast of $19,045,000, $26,110,000, and $27,225,000 in years 2010, 2011, and 2012, respectively.

Using the methodology advocated by SCG, TURN presents its own forecast for new business construction costs based on an alternative forecast of meter installations and unit cost factor. TURN's forecast is much lower than that proposed by SCG. TURN developed this forecast base after incorporating more recent information than was available for this GRC application. TURN's assumption of new meter sets averages 49% lower than SCG's forecasted level. TURN's projection of unit cost for 2011 and 2012 is based on the 2008-2010 average cost per meter.[178] This average reflects a period of time when new business activity was at its lowest.

Similarly, in the development of the trench reimbursement component of New Business expense, TURN relies upon the average expense in the three lowest years to project future requirements in 2011 and 2012.[179]

TURN again includes updated information into its forecast methodology. SCG recognizes that the growth in the new housing market has been less than anticipated. However,

[178] Exhibit TURN-Marcus, p. 17.
[179] Exhibit TURN-Marcus, p. 19.

the Commission should not reduce funding in this area. Connecting new customers is a priority and obligation of SCG. Any forecast must be sufficient to meet customer needs. Also, the Commission must consider a balanced approach to incorporating new information. While it might be tempting to make a drastic reduction to the New Business forecast, other areas of spending within this application may have increased and yet SCG has not been able to address this in its showing. (See Section II, point 1 for example.) Or similarly, if new business costs were now expected to be much higher than SCG forecasted, the Commission's Rate Case Plan would not permit SCG to update its forecast. Any attempt to do so would be met with strong opposition from DRA and TURN. Intervenors should likewise be precluded from providing forecasts based on new or updated information.

B. Forfeitures

New Business forfeitures reimburse SCG for the cost of unused and/or underutilized facilities constructed at the request of a new business customer. They represent residual portions of Customer Advances for Construction as described under Rule 20 – Gas Main Extensions and Rule 21 – Gas Service Extensions. The Capital workpaper[180] was included within Gas Distribution's showing in order to effectively document all data provided as input to the Results of Operations model. These amounts are not displayed on the Capital Summary Tables SCG-GOM-4 or SCG-GOM-27 within my revised direct testimony,[181] but rather the data is a component to the calculations of rate base.

Forfeiture amounts are dependent on customer gas throughput levels incurred over a 3 to 10 year period after commencement of service. Because of the inherent complexity to track each customer construction job and the associated throughput over a period of time, SCG forecasted

[180] Exhibit SCG-02-CWP-R, p. GOM-CWP-4-R.
[181] Exhibit SCG-02-R, pp. GOM-10 and GOM-62.

Forfeitures based on the historical five-year average (2005- 2009). This methodology allows SCG to capture years of high as well as years with low forfeiture amounts.

SCG is forecasting forfeiture credits of $4,856,000 for each of the years 2010, 2011, and 2012.

1. Rebuttal to DRA

DRA's direct testimony did not address Forfeitures.

2. Rebuttal to TURN

Please refer to the rebuttal testimony of SCG witness Mr. Garry Yee (Exhibit SCG-226) for response to TURN's proposal on Forfeiture amounts.

C. Twenty-Nine Palms Marine Base

SCG proposes installing new business main and completing pressure betterment in providing service to the U.S. Marine Corp Base located in Twenty-Nine Palms just outside of Palm Springs, California. The project is being completed in response to SCG's obligation to serve in accordance with Commission Line Extension rules. SCG's forecasts were based on preliminary project plans.

SCG is requesting funding for this project of $2,800,000, $10,200,000, and $4,800,000 in the years 2010, 2011, and 2012, respectively.

1. Rebuttal to DRA

DRA does not oppose the Twenty-Nine Palms Marine Base capital forecast for 2011 and 2012.[182]

[182] Exhibit DRA-45, p. 5 lines 5-9 and pp. 5-6, Tables 45-4 and 45-5.

2. Rebuttal to TURN

TURN proposes significant reductions in the funding requirements to complete this customer-specific project.[183] SCG provided TURN with the most recent construction schedule. Based on this information, SCG would not oppose TURN's recommended reduction of $2,400,000, $5,600,000, and $4,800,000 in 2010, 2011, and 2012, respectively for this new business activity.

D. Pressure Betterment

Pressure betterment projects are performed in areas where there is insufficient capacity or pressure to meet load growth. These projects are necessary to maintain reliable service to existing customers as new load is added to the gas distribution system. Once a pipeline system is designed and installed, the available capacity remains relatively fixed. However, as load increases over time due to population expansion or increased density, as well as larger businesses, the existing pressure decreases which reduces the available capacity for customers. If the diminishing pressure is not addressed, gas service to customers could be interrupted.

For the year 2010, SCG identified some of the necessary system requirements and determined there would be no incremental increases to the 2009 adjusted recorded base expenditures. However, because SCG's gas infrastructure is a large, dynamic system of pipelines, with continual changes in customer load, it is difficult to identify and estimate specific betterment projects more than a year into the future. Therefore, for the years 2011 and 2012, estimated expenditures were based on a historical average of recorded expenditures for the years

[183] Exhibit TURN-Marcus-SCG, p. 25.

2005 through 2009. This average captures the yearly variations in system pressure betterment requirements.[184]

SCG is requesting funding for pressure betterment of $10,936,000, $13,306,000, and $13,200,000 in the years 2010, 2011, and 2012, respectively.

1. Rebuttal to DRA

DRA does not oppose the Pressure Betterment capital forecast for 2011 and 2012.[185]

2. Rebuttal to TURN

TURN proposes reductions to SCG's forecast of $1,595,000, $1,586,000 and $1,564,000 in years 2010, 2011 and 2012, respectively. The proposed reductions are based on information showing that recent spending in this area has been lower than 2005 and 2006 levels. Based on this, TURN mistakenly assumes that Pressure Betterment projects are needed only when load is growing rapidly and new customers are being added so, for 2011 and 2012, it proposes a three-year average of 2007-2009 to provide for modest economic improvement and growth in customers.[186]

While it is true that Pressure Betterment projects are often necessary when new load is added to the system, the number of projects and level of spending is much more dependent on where the load is being added. This was discussed in SCG's response to TURN-SCG-DR-12, question 9, parts b and c. An excerpt is shown below.

> *Pressure Betterment expenditures vary from year to year, depending on where new load is added in the system, and whether that part of the system is approaching its maximum capacity...*
>
> *It is because of this variation that SoCalGas based the Pressure Betterment forecast for 2011 and 2012 on a five-year historical average.*

[184] Exhibit SCG-02-R, p. GOM-65 – GOM-66.
[185] Exhibit DRA-45, p. 5 lines 5-9 and pp. 5-6, Tables 45-4 and 45-5.
[186] Exhibit TURN-Marcus-SCG, p. 26.

Pressure Betterment work is indirectly related to gas demand and the number of customers added to the system; however, as stated in the response to part b of this question, the need for Pressure Betterment depends on where that load is added to the system. If new load is added to the system in an area with available capacity, no new Pressure Betterments are necessary. If, on the other hand, the new load is added in an area that has limited capacity available, Pressure Betterment will likely be required.

In the same data request, in SCG's response to question 12(c), the following graphs were provided to TURN. These graphs show that pressure betterment is not directly related to customer growth. Even though New Business spending and new meter sets were declining between 2006 and 2009, Pressure Betterment spending was not.

Figure SCG-GOM-1-R

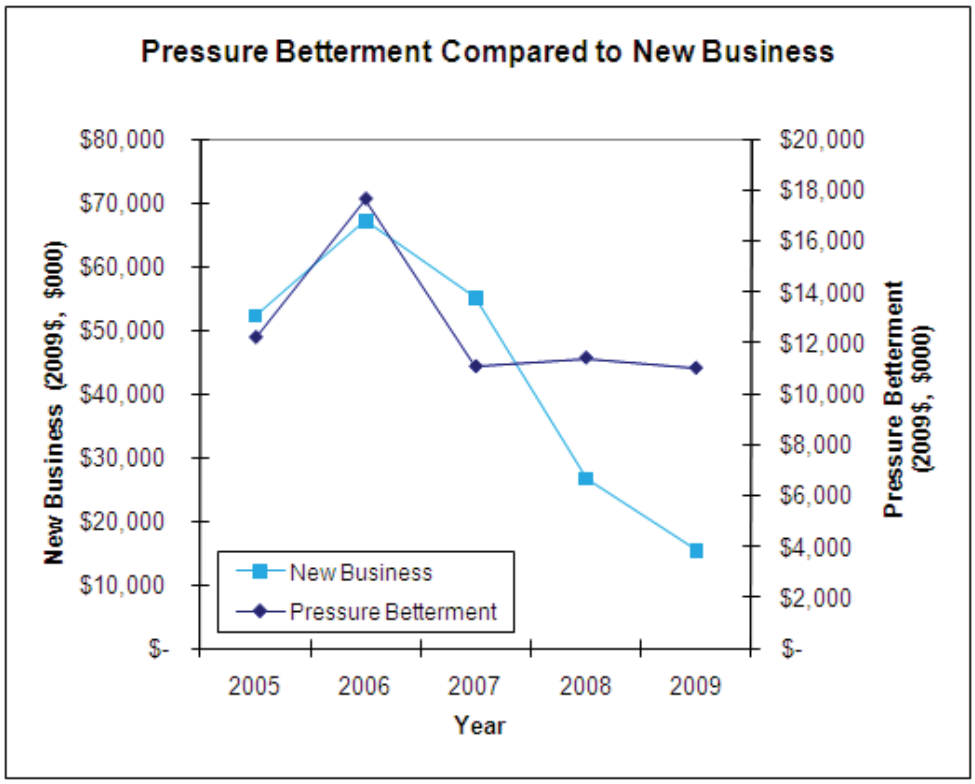
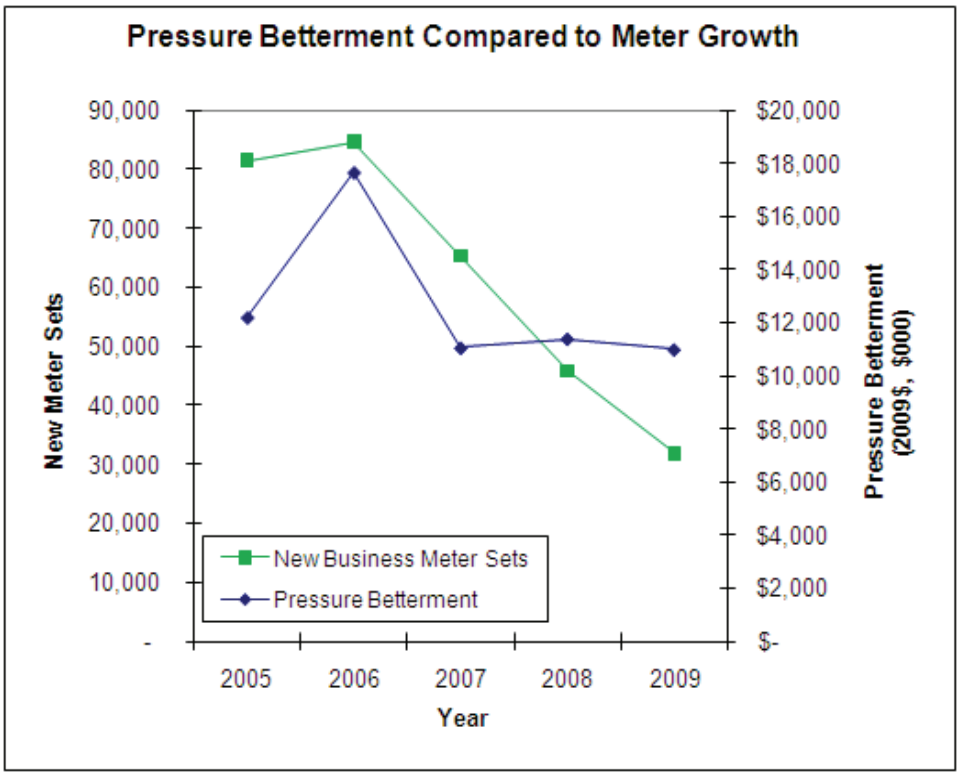


Figure SCG-GOM-2-R



In summary, a five-year (2005-2009) average is an appropriate forecast for Pressure Betterment spending for the following reasons:

- Pressure Betterment spending fluctuates from year-to-year and is difficult to estimate more than a year into the future.[187] A five-year average captures years with both high and low levels of spending.
- Pressure Betterment is not directly tied to New Business growth or spending, therefore the forecast should not be tied to forecasted economic growth as TURN suggests.

A three-year average that excludes the years with the highest Pressure Betterment activity would not adequately fund SCG's Pressure Betterment needs in future years. SCG's requested

[187] Exhibit SCG-02-R, p. GOM-65, line 29 – p. GOM-66, line 2.

funding for this entire category is needed to maintain reliable service to customers. For this reason, the Commission should approve SCG's forecast.

E. Supply Line Replacements

SCG's distribution supply line system is comprised of approximately 3,400 miles of pipeline constructed between the early 1920s and the present that range in diameter from 2-inch to 30-inch. These supply lines normally operate at pressures higher than 60 psig. Gas pressure from these lines is reduced to 60 psig or less through district regulator stations to service the distribution system. Supply line replacement work is performed when deteriorating conditions are found on a supply line. Replacements are based on a variety of factors, including pipe condition, leakage history, operating history, construction methods, system demands, proximity to known potential geologic hazards, and consequence of potential failure.[188]

Supply line replacement spending varies from year to year, and due to the detailed planning requirements and required permits, specific timing of supply line projects is difficult to predict. For this reason, SCG forecasted funding for supply line replacements based on a historical five-year average. In addition, SCG reviewed its list of pending supply line projects to validate the forecast. The estimated cost of those projects was approximately $13.4 million, which exceeded the forecast based on a five-year average.[189]

SCG requests funding for supply line replacements of $3,180,000, $3,164,000, and $3,139,000 in the years 2010, 2011, and 2012, respectively.

[188] Exhibit SCG-02-R, p. GOM-67.
[189] Exhibit SCG-02-R, p. GOM-67, lines 15-22.

1. Rebuttal to DRA

DRA does not oppose the Supply Line Replacements capital forecast for 2011 and 2012.[190]

2. Rebuttal to TURN

TURN proposes reductions to SCG's forecast of $1,943,000, $552,000 and $547,000 in years 2010, 2011, and 2012, respectively. TURN's projection for 2011 and 2012 is based on incorporation of the 2010 spending in its calculation of a five-year average (2006-2010).[191] SCG has previously stated its objections to the continued introduction of this new information into forecast calculations (Section II, point 1).

While SCG did not spend as much as forecasted on supply lines in 2010, the forecast was based on the funding needed across all three years. SCG still expects to need at least as much as was forecasted for the combined years, and supply line spending in 2011 and 2012 is expected to exceed the original forecasted level for those years. In June of 2011, SCG provided TURN with an updated list of pending supply line projects, and the estimated remaining cost on those projects totaled approximately $13.8 million, which exceeded even SCG's original forecast.[192] In light of the need to maintain safety and reliability of the distribution system, TURN's proposed reductions may restrict funding for replacements of high pressure pipelines with deteriorating conditions. SCG's projection, based on the five-year average, provides for a more conservative approach for this critical replacement work.

[190] Exhibit DRA-45, p. 5 lines 5-9 and pp. 5-6, Tables 45-4 and 45-5.
[191] Exhibit TURN-Marcus-SCG, p. 30.
[192] Data Request TURN-SCG-DR-12, question 20(b).

Through my revised direct testimony, workpapers,[193] and responses to TURN's data request,[194] SCG has provided substantial justification for its forecast. Therefore, the Commission should reject TURN's proposed reductions and adopted SCG's forecast.

F. Main and Service Abandonments

Abandonment of mains and services occur primarily when the pipeline is no longer needed for current system operations and it is not expected to be needed in the future. Abandonments of mains occur primarily to render the pipeline inactive due to its condition or location. Service lines are deactivated due to replacement with new service, relocation of the meter set to a different location, cancellation of gas service due to building demolition, or when temporary service is terminated.

Due to the unscheduled and unpredictable nature of this work, the forecasted expenditures were determined by using a historical five-year (2005 - 2009) average of abandonments.

SCG requests funding for main and service abandonments of $4,022,000 for each of the years 2010, 2011, and 2012.

1. Rebuttal to DRA

DRA does not oppose the Main and Service Abandonments capital forecast for 2011 and 2012.[195]

2. Rebuttal to TURN

TURN proposes reductions to SCG's forecast of $1,507,000, $1,069,000 and $1,069,000 in the years 2010, 2011, and 2012, respectively. TURN chooses to use a three-year average

[193] Exhibit SCG-02-CWP-R, p. GOM-CWP-35-R – GOM-CWP-36-R
[194] Data Request TURN-SCG-DR-12, question 20.
[195] Exhibit DRA-45, p. 5 lines 5-9 and pp. 5-6, Tables 45-4 and 45-5.

(2008-2010) to estimate the 2011 and 2012 expenditures in this area. The only justification provided for the use of this shortened period appears to be a presumption about SCG's resource management in the earlier years. Without any support or documentation whatsoever, TURN claims that higher spending in the earlier years "would suggest that use of more expensive staff and contractor labor."[196] Higher level of spending are driven by increased work elements, timing of projects, other field construction requirements, job skills requirements, complexity of jobs, and/or job locations. TURN's statement is absolutely unfounded and its use as the justification for its proposed forecast is inappropriate. SCG indicated that these expenditures do vary and thus the selection of a longer term period averaging. TURN's choice of a three-year average, and no validation for its purported "justification," strongly suggests selective forecasting on its part. The Commission should reject TURN's proposal based on its incomplete analysis and approve SCG's forecast.

G. Regulator Station Projects

Regulator stations are key pieces of control equipment on the SCG pipeline network. They are installed to reduce the pressure of gas entering the distribution system from high-pressure pipelines to provide the lower pressures used on the distribution pipeline network, which ensures continued reliable operating conditions to the customer. These facilities reduce and control the pressure of the gas entering the distribution system from higher-pressure pipelines. Failure of a regulator station could result in over-pressurizing the gas distribution system, resulting in reduced service to customer and/or jeopardizing public safety. Expenditures are for the upgrade, relocation, and replacement of regulator stations.

[196] Exhibit TURN-Marcus-SCG, p. 27.

The average life expectancy of a regulator station is approximately 35 years. Approximately 700 stations in the SCG system are over 35 years old. While SCG's operating and maintenance practices have allowed these stations to exceed their useful lives, it is prudent to continue to replace them prior to failure. SCG is addressing this aging infrastructure by targeting those stations that have known maintenance, reliability, or design obsolescence, before operations and safety issues arise. Historically, SCG has addressed between 11 and 24 stations in any one year. In projecting the 2010, 2011, and 2012 capital expenditures, SCG is proposing to address 21, 24, and 25 units, respectively. Costs for completing this work were estimated based on the five-year (2005 - 2009) average cost per station project.

SCG requests funding for regulator station replacements of $6,319,000, $7,186,000, and $7,424,000 in the years 2010, 2011, and 2012, respectively.

1. Rebuttal to DRA

DRA does not oppose the Regulator Station Projects capital forecast for 2011 and 2012.[197]

2. Rebuttal to TURN

TURN proposes reductions to SCG's forecast of $2,488,000, $1,186,000, and $1,174,000 in the years 2010, 2011, and 2012, respectively. TURN's 2011 and 2012 forecast adopts SCG's forecast for the number of regulator station replacements, but proposes using the **six year** (2005-2010) unit cost per station. TURN points to an error in SCG's average cost calculation and appears to justify the use of the six-year averaging period because the 2010 actual cost per unit was below SCG's original estimate.

[197] Exhibit DRA-45, p. 5 lines 5-9 and pp. 5-6, Tables 45-4 and 45-5.

The type of regulators installed per year vary in size and complexity so that, in some years, the complexity of regulator station installations is greater than in other years, which causes the variation in unit cost per regulator station in any give year. For this reason, SCG determined that using the five-year average was the best approach for calculating regulator station unit cost.

SCG would not object to using TURN's averaging methodology to calculate the unit cost for the Regulator Station replacements. However, SCG believes that the appropriate averaging period is 2005 – 2009 and continues to object to the use of 2010 data in preparing a forecast, as stated in Section II, point 1. In addition, TURN provides no clear justification for the selection of a six-year (2005-2010) period for averaging.

In addition, TURN made an error in the calculation of its proposed average cost per unit. TURN states that it based its proposal on a "six-year average cost per station from 2005-2010 (sum of all costs divided by the number of stations replaced) rounded up to the next $1,000."[198] Had TURN calculated the six-year average unit cost per station properly, it would have been $264,000 per station instead of $250,000, as alleged by TURN.[199] The table below shows the historical spending and calculation of the six-year average cost per station.

[198] Exhibit TURN-Marcus-SCG, p. 29, footnote number 13.
[199] Exhibit TURN-Marcus-SCG, p. 29.

Table SCG-GOM-23-R

(Shown in Thousands of 2009 Dollars)

Year or Range of Years	Total Units Installed	Total Historical Spending	Average Cost / Unit
2005	11	$4,159	$378
2006	15	$5,657	$377
2007	20	$4,526	$226
2008	24	$4,327	$180
2009	11	$3,864	$351
2010	19	$3,831	$202
6-Year 2005-2010 Average (Corrected)	100	$26,364	$264

Based on the information provided for the need to replace these aging regulator stations, the calculation error in TURN's proposed funding, the lack of information to justify its selected period for averaging, and the continued objections to the introduction of the 2010 data, the Commission should reject TURN's proposal and adopt SCG's funding recommendations.

H. Cathodic Protection (CP) Capital

As described in my revised direct testimony, buried steel pipelines will revert back to their natural state as an iron oxide (corrode) without proper intervention.[200] Corrosion on pipelines increases the potential for leaks, and may reduce the useful life of the pipelines. CP is one method for mitigating external corrosion on steel pipelines. CP combats corrosion by imposing an electric current flow toward the surface of the pipeline, which keeps the pipeline negatively charged (cathodic) with respect to the surrounding soil. This results in reduced corrosion on the pipeline system. Because of experienced and anticipated continued increases in contractor costs for deep well drilling, and an existing aging infrastructure, SCG projects future

[200] Exhibit SCG-02-R, p. GOM-72, lines 24-25.

expenditures to follow the most recent historical (2005-2009) trend. Historical expenditures are shown in the table below.

Table SCG-GOM-24-R

All years stated in DIRECT $000 2009 Dollars and Includes V&S

	Adjusted Historical				
	2005A	**2006A**	**2007A**	**2008A**	**2009A**
History					
labor	183	289	343	336	286
nonlabor	3,151	3,416	3,740	3,507	3,661
Total	**3,334**	**3,705**	**4,083**	**3,843**	**3,947**
FTEs	2.7	4.3	4.6	4.6	3.8

SCG is requesting funding for CP of $4,192,000, $4,328,000, and $4,464,000 in the years 2010, 2011, and 2012, respectively.

1. Rebuttal to DRA

DRA proposes reductions to SCG's forecast of $546,000 and $682,000 in 2011 and 2012, respectively. In contrast to SCG's forecasting methodology, DRA's proposal is based on the historical (2005-2009) average. DRA contends that the average is appropriate since it observed no significant upward trend in the data.

However, DRA did not challenge or even acknowledge the driving factors of contractor rates and infrastructure age which caused SCG to select a trend to produce its forecast. These factors cannot be ignored in preparing a forecast of future expenditures. This information was provided in my revised direct testimony:

> *This methodology was chosen to best capture the expected continued increase in contractor expenses and the replacement requirements of an aging infrastructure.*
>
> - *SCG has experienced a 17% real increase in contractor costs for deep well drilling over the period 2005 to 2009. The average cost per well drilled in 2005 (adjusted for standard inflation) was $31,700. In 2009, the average cost per well had risen to $37,100. This trend is expected to continue as the demand for services on deep well drillers increases based on a limited number of service providers.*

- *The life expectancy of the anode beds is approximately 20 to 25 years. Many of these beds were installed beginning in the 1970s, therefore with this aging infrastructure SCG can anticipate having to complete more replacements as the materials effectiveness declines.*[201]

DRA's analysis is incomplete in its lack of consideration of all cost elements presented by SCG. The Commission should reject DRA's simplistic proposal and adopt SCG's forecast instead, which incorporates all operational issues facing it.

2. Rebuttal to TURN

TURN proposes reductions to SCG's forecast of $830,000, $540,000, and $676,000 in the years 2010, 2011, and 2012, respectively. TURN's 2011 and 2012 forecast is equal to the five-year 2006 -2010 average spending. It contends this methodology is justified since the 2010 actual was well below SCG's 2010 forecast, in fact more approximating the 2005 actual, and the data provides no evidence of a statically significant trend.[202]

TURN dismisses SCG's evidence of higher contractor costs[203] simply because the 2010 total spending was lower than previous years' levels. This conclusion is completely unfounded. TURN did not attempt to consider other reasons why spending could have been lower in a single year, including factors such as fewer jobs and/or complexity of work elements. SCG never claimed to have chosen the trending method because of a statistical regression of the entire cost data points. Rather, as stated in my revised direct testimony: "This methodology was chosen to best capture the expected continued increase in contractor expenses and the replacement requirements of an aging infrastructure."[204] In this instance, the introduction of the 2010 data (see also SCG's arguments presented in Section II, point 1) coupled with TURN's lack of

[201] Exhibit SCG-02-R, p. GOM-73, lines 7-16.
[202] Exhibit TURN-Marcus-SCG, p. 28.
[203] Exhibit SCG-02-R, p. GOM-73, lines 9-13; and response to TURN-SCG-DR-12, question 17(c).
[204] Exhibit SCG-02-R, p. GOM-73, lines 7-8.

complete research results in misleading conclusions. The Commission therefore should reject TURN's proposal and adopt SCG's forecast.

I. Pipeline Replacements -- Franchise

Franchise work is driven by external agencies, such as cities, counties, or the state. As specified under the provisions of SCG's franchise agreements, it is required to relocate or alter facilities that, if left in their current location, would interfere with the construction or reconstruction of roads or railway systems.

SCG's projected expenditures in this area were based on the five-year (2005 – 2009) historical trend in spending to capture the future requirements attributed to these governmental requirements.

SCG requests funding for pipeline replacements under franchise agreements of $9,260,000, $9,477,000, and $9,660,000 in the years 2010, 2011, and 2012, respectively.

1. Rebuttal to DRA

DRA proposes reductions to SCG's forecast of $961,000 and $1,144,000 in years 2011 and 2012, respectively. DRA's projections for 2011 and 2012 are based on the five-year (2005-2009) average since, DRA states, there appears to be volatility in historical spending and no clear upward trend.[205]

DRA's proposal to average the historical expenditures is not appropriate. As noted in my revised direct testimony, this category of spending is driven by the expected actions of external third parties.[206] SCG expects to see a growth in requests from municipalities for the relocation and/or alteration of SCG facilities based on the following factors:

- Improving economic conditions.

[205] Exhibit DRA-45, p. 8, lines 15-18.
[206] Exhibit SCG-02-R, p. GOM-75, lines 1-8.

- Availability of federal funding to municipalities.
- Population growth and density.
- Age of infrastructure.

These factors are described in more detail in my revised direct testimony.[207]

SCG selected the trend methodology to capture the impacts of future spending by local governments on projects for which funds have already been provided by the federal government to stimulate the economy, yet these factors are ignored by DRA. DRA did not challenge or even acknowledge these driving factors.

DRA's analysis is incomplete in its lack of consideration of all cost elements presented by SCG. The Commission therefore should reject DRA's simplistic proposal and adopt SCG's forecast using a five-year trend which incorporates these cost factors.

2. Rebuttal to TURN

TURN does not oppose the Franchise Pipeline Replacements capital forecast for 2011 and 2012.[208]

J. Other Distribution Capital Projects

"Other Distribution Capital" includes expenditures on a wide variety of capital work elements. Examples of these are contained in my revised direct testimony.[209] The vast majority of historical cost is driven by property owners requesting SCG to move its facilities from their property. Over the five-year period from 2005 to 2009, spending in 2006 was the highest at $4.4 million while spending in the most recent year (2009) declined to $2.8 million. To capture the

[207] Exhibit SCG-02-R, beginning on p. GOM-75, line 13.
[208] Exhibit TURN-Marcus-SCG, p. 25.
[209] Exhibit SCG-02-R, p. GOM-78, lines 5-13.

variability of work elements and reflect the anticipated improvement in economic conditions, the five-year historical average (2005 – 2009) spending was used to derive this forecast.

SCG is requesting funding for other distribution capital projects of $3,448,000 for each of the years 2010, 2011, and 2012.

1. Rebuttal to DRA

DRA does not oppose the Other Distribution Capital Projects forecast for 2011 and 2012.[210]

2. Rebuttal to TURN

TURN proposes reductions to SCG's forecast (prior to collection of Contributions In Aid of Construction) of $795,000, $375,000, and $375,000 in the years 2010, 2011, and 2012, respectively. TURN's forecast for 2011 and 2012 is equal to the three-year average (2008-2010) spending. It contends this methodology is justified since the 2010 actual cost was below SCG's 2010 forecast, and the three years removes the influence of an "economic boom." SCG again points the Commission to Section II, point 1 for a discussion of its objections to using the 2010 data. In addition, SCG never characterized future economic conditions as an "economic boom." As described in my revised direct testimony, SCG desired a directional indicator of future economic conditions in support of its forecast development:

> *Field experience indicates that more favorable economic conditions lead to increases in various work requirements. Gas Distribution has chosen employment growth, as reported by IHS Global Insight, as a directional indicator for general economic conditions and potential economic growth. This IHS Global Insight employment forecast is shown in the SCG cost escalation workpapers of witness Mr. Scott Wilder, Exhibit SCG-31-WP. In general, IHS Global Insight forecasts that the Southern California area's non-farm employment growth rate hit a low in 2009, with 2010 marking a transitional year. It is projecting*

[210] Exhibit DRA-45, p. 5 lines 5-9 and pp. 5-6, Tables 45-4 and 45-5.

a rebound in employment growth through 2012, with forecasted employment in 2011 and 2012 near what was seen in 2005 through 2006.[211]

Finally, the five-year average was selected to approximate the effect of two factors: economic conditions and the variability on work elements. My revised direct testimony clearly identifies the various heterogeneous activities that are recorded to this category of spending.[212] TURN completely dismisses the influence of this second cost driver.

The Commission therefore should adopt SCG's forecast based on a five-year average spending (2005-2009) as a reasonable projection of this capital work which includes a variety of elements that can be influenced by economic conditions.

K. Meters and Regulators

Included in this capital category are the costs for the purchase of gas meters, pressure regulators, electronic pressure and temperature correction equipment, and electronic pressure monitors. Meters are purchased for two primary purposes: new business installations and meter replacements. These purchases and the subsequent installations ensure accurate billing and continued safe and reliable service to customers. Gas regulators are used by SCG to reduce the pressure of gas entering the distribution system from high-pressure pipelines to provide the lower pressures used on the distribution pipeline network and further reduce pressure at the customer's meter set. As such, they are the principal protective devices to ensure employee and public safety and to protect physical assets in alignment with CPUC/DOT regulations. In accordance with CPUC General Order 58-A and to ensure accurate accounting and billing, volumetric and pressure recording instruments are used to correct gas measurement for delivery pressures and temperatures for larger industrial customers that require non-standard delivery pressures and

[211] Exhibit SCG-02-R, p. GOM-5, lines 18-25; emphasis added.
[212] Exhibit SCG-02-R, p. GOM-78, lines 5-13.

compensation for varying gas temperature effects on measurement. Finally, electronic pressure monitors are used by SCG to remotely monitor distribution pipeline pressures in support of gas system capacity analysis, and for alarming of over- or under-pressure events.

SCG's projection of expenditures for all of these items was based on an assessment of the number of units required in each of these areas and each instrument's unit cost. For all elements included within the work category, SCG requests funding of $24,797,000, $26,219,000, and $31,016,000 in the years 2010, 2011, and 2012, respectively. The table below provides an overview of the various component parts to this capital group and the positions of DRA and TURN.

Table SCG-GOM-25-R

Comparative of Gas Distribution Capitial Recommendation
(Shown in Thousands 2009 dollars)

Capital Group	CWP Page	2010 SCG	2010 DRA	2010 TURN		2010 DRA<SCG	2010 TURN<SCG
Meters and Guages	6	19,351	19,351	15,937		-	(3,414)
Regulator Purchases	8	3,535	3,535	3,731	1/	-	196
Elect.Measurement Devices -- New	10	241	241	78		-	(163)
Elect.Measurement Devices -- Repl.	12	719	719	308		-	(411)
Elect. Pressure Monitors -- New	14	904	904	403	2/	-	(501)
Elect. Pressure Monitors -- Repl.	16	47	47	44	2/	-	(3)
Total Meter and Regulators		24,797	24,797	20,501		-	(4,296)

1/ Data as included with totals shown in DRA-SCG-073-KCL-Revised.
2/ Total as provided to TURN in response TURN-12, Q11c. Rounding issue.

		2011 SCG	2011 DRA	2011 TURN	2011 DRA<SCG	2011 TURN<SCG
Meters and Guages	6	19,431	16,003	16,868	(3,428)	(2,563)
Regulator Purchases	8	4,894	4,894	4,200	-	(694)
Elect.Measurement Devices -- New	10	254	254	107	-	(147)
Elect.Measurement Devices -- Repl.	12	640	640	640	-	-
Elect. Pressure Monitors -- New	14	910	910	910	-	-
Elect. Pressure Monitors -- Repl.	16	90	90	90	-	-
Total Meter and Regulators		26,219	22,791	22,815	(3,428)	(3,404)

		2012 SCG	2012 DRA	2012 TURN	2012 DRA<SCG	2012 TURN<SCG
Meters and Guages	6	20,198		17,674	(3,555)	(2,524)
Regulator Purchases	8	7,047	7,047	3,396	-	(3,651)
Elect.Measurement Devices -- New	10	296	296	152	-	(144)
Elect.Measurement Devices -- Repl.	12	1,328	1,328	1,328	-	-
Elect. Pressure Monitors -- New	14	1,970	1,970	1,970	-	-
Elect. Pressure Monitors -- Repl.	16	177	177	177	-	-
Total Meter and Regulators		31,016	27,461	24,697	(3,555)	(6,319)

1. Rebuttal to DRA

DRA proposes reductions to SCG's forecast of $3,428,000 and $3,555,000 in years 2011 and 2012, respectively. DRA accepts SCG's forecasts with the exception of meter purchases (Capital Category 163). In this area, DRA proposes reductions to reflect reduced levels of new business activity. Similar to the approach taken in the New Business area above, DRA proposes that the 2011 and 2012 forecasts each be reduced by a single scaling factor equaling the relationship of 2010 actual to SCG's 2010 forecast expenditures. By this method, DRA

implicitly contends that SCG's projections of 2011 and 2012 expenditures are overstated by the same relationship as the 2010 experience. Yet DRA provides no reasons for its proposal to extrapolate 2011 and 2012 activity levels based simply on 2010 experience. DRA has not raised any objections to SCG's forecast of future units of new construction (see also discussion on New Business, Section IV.A.1) or planned meter change-out requirements. DRA's simplistic scaling methodology ignores the various reasons that meters and regulators are purchased. For example, DRA's methodology would not account for inventory requirements. Over 10,000 meters were drawn from inventory during 2010 which reduced new meter purchases in that year required to support meter operations. This is a non-sustainable event as meter inventories must remain at a level which can support operational logistics and minor supply chain interruptions. SCG cannot base its 2011 and 2012 forecasts on perpetual use of existing inventory to offset purchases; nor can it support extrapolated forecasts which are based on this assumption.

Based on the information provided, the Commission should reject DRA's proposal and adopt SCG's forecast.

2. Rebuttal to TURN

TURN proposes reductions to SCG's forecast of $4,296,000, $3,404,000, and $6,319,000 in years 2010, 2011, and 2012, respectively. TURN accepts SCG's forecast for 2011 and 2012 expenditures with the exception of the meter purchases, regulator purchases, and purchase and installation of new pressure corrector equipment. In these areas, TURN's reductions are generally reflective of lower expectations for new business activity.

- **Meter Purchases**

Using the methodology adopted by SCG – projected units multiplied by average cost – TURN developed its own forecast of meter purchases incorporating a lower level of new meter

sets (as used in TURN's forecast of New Business projections; see Section IV.A above). TURN utilized the average cost per meter implied within SCG's forecast to derive the forecast expenditures for 2011 and 2012. Because of the widely differing forecasts for new meter growth, TURN presents its forecast for meter purchases that is much lower than that recommended by SCG.

TURN's forecast of meter sets averages 49% lower per year than SCG's assumed level. In developing this meter forecast, TURN again includes 2010 information into its forecast methodology. SCG recognizes that the growth in the new housing market has been less than anticipated. Serving new customers is a priority and obligation of SCG. Any forecast must be sufficient to meet customer needs.

TURN contends that if new business activity were to "experience slightly more rapid growth"[213] than reflected in TURN's proposal, SCG's inventory holdings would be sufficient to meet the increased need. TURN may not appreciate the operational issues of maintaining an inventory. SCG must keep a reserve inventory of meters in the event of interruptions in supplier production and/or deliveries or the rejection of meters shipments by SCG due to quality assurance inspection. SCG has made a proactive effort to optimize its meter inventory over the past few years and, from an operational standpoint, SCG believes it has reached an optimum operating inventory level at this time. TURN's conclusion that SCG could simply work off inventory is simply not practical.

The Commission must consider a balanced approach to incorporating any 2010 data for analysis in this proceeding. While it might be tempting to make a drastic reduction to SCG's recommended funding level for meter purchases, other areas of spending within this application

[213] Exhibit TURN-Marcus-SCG, top of p. 22.

will have increased and yet SCG has not been able to address this in its showing. (See Section II, point 1 for example.) In addition, any reductions to inventory are not practical for addressing significant growth in new business. For these reasons, the Commission should reject TURN's proposed reduction to SCG's meter purchase forecast.

- **Regulator Purchases**

TURN proposes reductions to regulator purchases to: 1) reflect TURN's lower expectation for new business growth, and 2) exclude the purchase of meters for a systematic replacement of equipment. It appears that TURN derived the reduction in new business regulators in 2011 and 2012 by applying the ratio of SCG's forecasted new business regulator purchases to SCG's forecasted new business meters to TURN's projections of new meter sets. Furthermore, TURN objects to the incremental replacement purchases since Mr. Fong,[214] testifying for customer services field activities, makes no mention of the potential increase in field work requirements.[215] TURN's forecast appears to be based on SCG's forecasted regulator spending in 2011 and 2012 multiplied by the ratio of TURN's total projected regulators to SCG's total forecasted regulators.

First, TURN's representation of 2010 actual purchases is in error. TURN's Table 16 on page 23 of its testimony reflects a figure of $3,190,000. However, the actual figure should read $3,731,000. As compared to SCG's 2010 forecast of $3,535,000, the actual recorded spending exceeds the forecast by $196,000. This error reinforces SCG's continued objections to the introduction of 2010 data.

TURN appears to have overlooked SCG's expressed intentions with respect to the identified inventory purchases. It is true that Mr. Fong did not mention field services

[214] Exhibit SCG-07-R, p. EF-25,
[215] Exhibit TURN-Marcus-SCG, top of page 23.

requirements associated with this replacement activity in his testimony (Exhibit SCG-07-R). However, SCG purposely did not outline incremental labor requirements as this work will generally be performed in conjunction with meter changes which are already planned for the year through the course of normal business and/or in coordination with module installations scheduled for the Advance Meter Initiative program. As I stated in my direct testimony: "to avoid an unplanned surge in replacements as units decline in effectiveness, beginning in 2012 SCG is instituting a systematic approach to replacing regulators. This effort will streamline the scheduling of these replacements to efficiently utilize the service technicians' time while visiting the meter for other scheduled work."[216] When a meter is being changed, the incremental labor to replace an aging regulator at that time ranges from five to ten minutes. It is the more effective use of resources if SCG replaces an aging infrastructure in conjunction with the initial installation of the module than to make a return visit at a later date. During 2013, SCG plans to address over 300,000 meter locations. The forecasted expenditure is to secure sufficient inventory ahead of these anticipated change-outs. For example, curb meter regulators require a manufacturer's special production run; it is imperative that these units be readily available for installation. Moreover, SCG does not share TURN's assessment that every unit purchased in 2012 must be installed in that year with no inventory carry-over. Such an approach for working stock would leave any utility with considerable risk of supply chain interruption and the associated inability to safely and reliably serve its customer via installation of pipe, fittings, meter, regulators, and appurtenances.

[216] Exhibit SCG-02-R, p. GOM-81, lines 9-13.

TURN's proposed reductions to SCG's forecast should be rejected since TURN's figures are incorrect, its analysis is flawed, and SCG's forecast should be adopted as it provided complete justification for the incremental inventory purchase.

- **Purchase and Installation of New Pressure Corrector Equipment**

TURN proposes reductions reflective of TURN's lower forecast for new business growth.[217] It appears that TURN derived the reduction in pressure correctors in 2011 and 2012 by applying the ratio of SCG's forecasted new pressure correctors to SCG's forecasted new business meters (0.17%) to TURN's projections of new meter sets. TURN then multiplied this reduced pressure corrector forecast by the average cost per pressure corrector implied within SCG's forecast. Because of the widely differing forecasts for new meter growth, TURN presents its forecast of expenditures on the purchase and installation of pressure corrector equipment that is nearly 50% lower than that recommended by SCG.

Once again, SCG reiterates its objections (stated in above under Meter Purchases) to the use of TURN's forecast of new meter sets and the 2010 actual data. For these reasons, the Commission should reject TURN's proposed funding reduction and adopt SCG's forecast.

L. Equipment/Tools

The Equipment/Tools capital category includes expenditures for the purchase of tools and equipment used by distribution field personnel in the maintenance and repair of the system. For 2011, SCG forecasts funding for the purchase of optical scanning equipment used to survey facilities leakage in compliance with Subpart W of the Greenhouse Gas Mandatory Reporting Rule. Because of the uncertainty in this rule at the time SCG's revised direct testimony was

[217] Exhibit TURN-Marcus-SCG, p. 24.

prepared, SCG proposed that O&M and Capital costs associated with the cost to implement this new regulation be recorded to a two-way balancing account.

SCG is requesting funding for distribution capital equipment and tools of $2,193,000, $17,953,000, and $1,393,000 for the years 2010, 2011, and 2012, respectively.

1. Rebuttal to DRA

DRA's only proposed reduction of $10,700,000 in year 2011 is for the purchase of this specialized optical scanning equipment. After reviewing the final rules, DRA concludes that "the new rule that became effective on November 8, 2010 is far less stringent on the types of sites and number of sites that require monitoring. The number of sites is expected to be greatly reduced."[218] This is the extent of DRA's justification for a $10.7 million reduction to SCG's forecast.

SCG acknowledged the issuance of a "final" rule, but also reiterated that further clarification on definitions within the rules is required before SCG can assess the final business/operational impact. SCG provided the following response to data request DRA-SCG-107-DAO, question 2:

> *SoCalGas is currently supporting the American Gas Association who is working with EPA to gain greater clarity on the rulings and its requirements for Subpart W as it applies to SoCalGas' business operations. Until more specific guidance is received SoCalGas is not in a position to provide an updated cost estimate.*

For more information on the timing of the implementation of Subpart W of the Environmental Protection Agency's Greenhouse Gas Rules, please refer to the rebuttal testimony of Ms. Haines, Exhibit SCG-215.

The continued uncertainty in this regard just reinforces the need for the Commission to adopt SCG's recommendation for a two-way balancing account and confirms SCG's original

[218] Exhibit DRA-45, p. 10, lines 17-20.

estimate as reasonable and responsible for meeting compliance requirements for Subpart W. With the two-way balancing account, should SCG ultimately find that such expenditures are not required, the under spent costs will be refunded back to ratepayers.

2. Rebuttal to TURN

TURN proposes an increase of $208,000 in SCG's 2010 forecast reflective of 2010 actual expenditures and an offsetting reduction of $105,000 in 2011 to align with SCG's most recent expectation on the replacement of the Multi-gas Leak Detection equipment.[219] This equipment purchase is described in my revised direct testimony.[220] In response to a data request,[221] SCG provided TURN with a revised purchase schedule. Based on this information, SCG would not oppose TURN's recommendation for reductions in this work category.

M. Field Capital Support

Field Capital Support includes labor and non-labor funding for a broad range of services to support Gas Distribution field capital asset construction. Activities performed include: project planning, local engineering, clerical support and field dispatch, field management and supervision, and off-production time for support personnel and field crews that install the Gas Distribution capital assets. As described in my revised direct testimony, these activities will fluctuate with the level of capital construction activity.[222] Because of this relationship, SCG forecasted expenditures based on the level of historical costs as a percentage of construction costs incurred.

[219] Exhibit TURN-Marcus-SCG, p. 31.
[220] Exhibit SCG-02-R, pp. GOM-85 – GOM-86 and capital workpaper SCG-02-CWP-R, pp. GOM-CWP-45-R – GOM-CWP-46-R.
[221] Data Request TURN-SCG-DR-17, question 7.
[222] Exhibit SCG-02-R, p. GOM-88.

SCG requests funding for field capital support of $38,323,000, $40,207,000, and $39,694,000 for the years 2010, 2011, and 2012.

1. Rebuttal to DRA

DRA did not oppose SCG's forecast methodology, but proposed reductions for 2011 and 2012 by applying this methodology to DRA's proposed expenditures in the applicable DRA-adjusted construction categories. DRA's proposal results in reductions to SCG's forecast of $9,106,000 and $10,225,000 in years 2011 and 2012, respectively.

However, DRA's proposal contains a calculation error. The table below is an extract from SCG capital workpaper for this category.[223] It displays the derivation of SCG's forecast for 2011 and 2012 in comparison to DRA's recommendations. Under its proposal to apply SCG's forecast method to DRA's capital construction cost proposals, DRA's resulting reductions to SCG's forecasts for 2011 and 2012 should be $6.9 million and $7.9 million, respectively. These are in contrast to DRA's proposed reductions of $9.1 million and $10.2 million. Part of the error is due to DRA's treatment of the New Business Trench Payments, which should be excluded from the initial calculations. SCG has not been able to reconcile the remaining difference.

Since spending in this category is a function of overall capital spending, the Commission should adopt SCG's capital construction forecasts and should likewise adopt SCG's projection for Field Capital Support.

[223] Exhibit SCG-02-CWP-R, p. GOM-CWP-50-R.

Table SCG-GOM-26-R

Field Capital Support Costs
Ratio Computation - Forecast
Dollars in Thousands

		2011	2012	2011	2012
		SCG Forecast		DRA Forecast	
a	**Construction Costs (Forecast) ***	127,552	134,193	105,100	107,849
	* Construction costs include only the work categories requiring field suport.				
	- Franchise	9,581	9,848	8,516	8,516
	- Freeway	2,219	2,219	2,219	2,219
	- Service Repl.	11,841	11,841	11,841	11,841
	- Main Repl.	32,325	32,325	32,325	32,325
	- Pressure Betterment	13,434	13,434	13,434	13,434
	- New Business exc. Trench	34,734	40,557	13,894	16,227
	- Supply Lines	3,193	3,193	3,193	3,193
	- Reg Station	7,263	7,565	7,263	7,565
	- Cathodic Protection	4,328	4,464	3,782	3,782
	- Main & Service Abandonments	4,022	4,022	4,022	4,022
	- Other Dist Projects	3,448	3,448	3,448	3,448
	- Mobile Home Parks	67	67	67	67
	- Meter Guards	1,097	1,210	1,097	1,210
b	**Field Support Ratio**	31.0%	30.0%	31.0%	30.0%
c=a*b	**Field Support Labor Costs (Forecast)**	**39,541**	**40,258**	**32,581**	**32,355**
d	Savings due to Technology Changes	-	(1,230)	-	(1,230)
e	Costs to Achieve Technology Savings	306	306	306	306
f=c+d+e	Net Labor Support Forecast	39,847	39,334	32,887	31,431
g	Non-Labor Component	360	360	360	360
h=f+g	**Total Field Capital Support**	**40,207**	**39,694**	**33,247**	**31,791**
	Change			**(6,960)**	**(7,903)**

2. Rebuttal to TURN

TURN proposes reductions to SCG's forecast of $3,674,000, $9,467,000, and $9,328,000 in the years 2010, 2011, and 2012, respectively.

TURN recommends the use of 2010 actual costs in contrast to the SCG projection. Forecasts for 2011 and 2012 expenditures utilize SCG's methodology relating construction

activities to support requirements, but base the calculation on TURN's forecast of capital.[224] As discussed in this Capital section, SCG has described how TURN's forecasts are not reasonable, nor provide sufficient objection to SCG's overall capital recommendations. Presuming the Commission adopts SCG's construction estimates, it should likewise accept SCG's projection for Field Capital Support.

V. COMMENTS ON CENTER FOR ACCESSIBLE TECHNOLOGY EXHIBIT

As described in the direct testimony of SCG witness Mr. Andrew Steinberg (Exhibit SCG-41), SCG entered into a Memorandum of Understanding (MOU) with the Disability Rights Advocates addressing, among other topics, pedestrian accessibility around utility construction job sites. Mr. Steinberg's testimony outlines the various conditions of the MOU and SCG's timely and complete response actions.[225] In this proceeding, Mr. Hopper presents testimony on behalf of The Center for Accessible Technology (CforAT), focusing on follow-up measures to ensure the implemented procedures and processes are "cemented into field work." Mr. Hopper suggests that compliance monitoring be put in place either through an outside consultant or internal processes.

SCG finds that such a formal audit process is not necessary. The conditions of the MOU included working in concert with an expert in the field of accessibility to:

- identify any gaps in SCG's construction job site procedures;
- develop new and/or revise formal job site procedures consistent with the Public Rights-of-Way Access Advisory Committee's (PROWAC) recommended standards;

[224] Exhibit TURN-Marcus-SCG, p. 33.
[225] Exhibit SCG-41, p. AES-10, beginning at line 25.

- train all impacted employees on these new/revised construction site procedures; and
- provide for consultant review of service operations.

The Disability Rights Advocates was engaged throughout the development of these procedures and training materials. The MOU included dates by which SCG would provide the Disability Rights Advocates with copies of materials and gather its feedback. While providing limited feedback, the Disability Rights Advocates, did not express concerns with the materials being developed. As a final condition of the MOU, an independent review was conducted of various job sites to confirm SCG's compliance with its new procedures. In his testimony, Mr. Hopper points out that "the Sempra Utilities have adopted new standards and practices to avoid or minimize any temporary barriers created by construction in the pedestrian right of way."[226] Furthermore, SCG is pleased to report that Mr. Hopper found SCG's actions to show a commendable level of attention to accessibility.

While not a condition of the MOU, to ensure the ongoing reinforcement of these new/revised procedures, SCG requires effected field employees to complete an annual review of the new/revised procedures. This is not an informal exercise, but rather is formal, documented, and observed to enforce the importance of the review process. Presented in testimony is SCG's request for incremental funding of $8,000 related conducting these ongoing formal reviews. Finally, a Technical Advisor and training staff are available to respond to supervisor or employee questions should they arise during training and/or on the job site.

It is clear from SCG's actions that it has taken these new procedures very seriously. SCG completed the development of new procedures and training materials; the partners to the MOU

[226] Exhibit CforAT-Hopper, p. 7, A6.

had no issues with SCG's actions; an independent field expert provided a complete and favorable initial audit report of SCG's construction site procedures; and ongoing formal annual reviews are conducted to reinforce compliance and solidify it in the habits of SCG's employees. Any more formal actions are simply not necessary.

However, if the Commission still finds it necessary to adopt CforAT's recommendation, then in order to minimize future expenses, the Commission should allow for these audits to be completed by an internal process as offered by CforAT's expert witness.[227] These audits could be integrated with other job site observations and formal documentation created. Such documents could then be provided to interested parties as necessary.

VI. CONCLUSION

My revised direct testimony, workpapers and SCG's responses to numerous data requests provide substantial justification for the Commission to authorize SCG's Gas Distribution Capital and O&M request in full as outlined in Exhibit SCG-02-R. As described in this rebuttal testimony, the proposals of the intervenors to reduce funding are based on inappropriate forecasting methodology, inaccurate assumptions, incomplete understanding of SCG's natural gas pipeline operations, and/or discounting of information presented by SCG. It is important to note the following overall observations:

- The introduction of 2010 recorded data for forecast development is inappropriate since it introduces inconsistencies between witness treatment of the data and an inability to update all related cost elements.
- SCG's base forecast was determined after a careful analysis of the past, current, and future cost drivers.

[227] Exhibit CforAT-Hopper, p. 7, A6.

- TURN's proposals are patently unreasonable. Both Capital and O&M recommendations are below historical spending levels.
- DRA's and TURN's dismissal of SCG's request for funding of activities not reflected in historical spending levels is shortsighted.
- TURN's direct testimony contains many inconsistencies in the data presented adding confusion to the review thereof.

SCG faces a number of challenges affecting both the physical operation of the pipeline system and cost management aspects of its business that contribute to the forecasts presented in my revised direct testimony. These challenges include:

- System Expansion – SCG's pipeline system continues to expand as new construction adds to the customer base and the necessary pipeline infrastructure.
- Aging Infrastructure – SCG's long history in the delivery of natural gas also means that a significant portion of the pipeline infrastructure has been in service for over 50 years.
- Economic Conditions – As a utility, SCG has an obligation to provide customers within its service territory natural gas services in accordance with tariff rules. As the customer base grows and expands, new demands are placed on the existing infrastructure. SCG is projecting a rebound in employment growth and, therefore, economic growth through 2012.
- Trained Workforce – Maintaining a skilled workforce is critical to success. It is only through the efforts of these employees that SCG is able to continue to deliver valued service to its customers and maintain its pipeline infrastructure.

- Agency Requirements – The construction, operation, and maintenance of SCG's vast pipeline system require interaction and compliance with numerous agencies. These agencies continue to impose new and often more stringent administrative, planning, and field construction operating conditions that can result in increased cost pressures to maintain the gas distribution system.

- Environmental Compliance – In addition to the many environmental regulations that SCG must comply with in its daily field operations, there are new and pending laws and regulations that are anticipated to impact SCG during this rate case cycle.

- Integration of Technology – SCG is implementing a program of technology-based systems and processes to improve operations and provide more tools and information for supervisors and employees.

The forecasted funding requested in my revised direct testimony support Gas Distribution's fundamental philosophy of maintaining operational excellence while providing safe, reliable delivery of gas energy at the lowest reasonable cost to customers.

SCG's TY2012 forecast is a reasonable estimate of future requirements and should be adopted by the Commission.

This concludes my prepared rebuttal testimony.

ATTACHMENT A

Comparison of Interested Parties Recommendations for TY2012 -- SCG Gas Distribution

(Thousands of 2009 Dollars)

	Position of Party			Reductions to SCG	
Additions	**SCG**	**DRA**	**TURN**	**DRA<SCG**	**TURN <SCG**
Base	9,866	9,427		(439)	(439)
Federal Stimulus	83	-	Accepts	(83)	(83)
Los Osos	181	60	DRA	(121)	(121)
Paint Removal	230	-		(230)	(230)
City/Muni Requirements	197	-		(197)	(197)
Subtotal Locate & Mark	**10,557**	**9,487**	**9,487**	**(1,070)**	**(1,070)**
				-	-
Subtotal Leak Survey	**4,145**	**4,145**	**4,048**	**-**	**(97)**
					-
Base	10,830	10,830	10,546	-	(284)
Replace MSA	122	-		(122)	(122)
Replace Regulators	371	-		(371)	(371)
Regulatory Requirements	539	-	Accepts	(539)	(539)
City/Muni Requirements	162	-	DRA	(162)	(162)
Vault Maintenance	22	-		(22)	(22)
Pedestrian Access	179	-		(179)	(179)
Odorization Testing	58	-		(58)	(58)
Reduced Chart Maintenance			(226)	-	(226)
NERBA	23,442	27	- 3/	(23,415)	(23,442)
Subtotal Measurement & Regulation	**35,725**	**10,857**	**10,320**	**(24,868)**	**(25,405)**
Base	2,102	2,102		1	1
Federal Stimulus	33	-	Accepts	(33)	(33)
Pedestrian Access	87	-	DRA	(87)	(87)
City/Muni Requirements	725	-		(725)	(725)
Subtotal CP Field	**2,946**	**2,102**	**2,102**	**(844)**	**(844)**
				-	-
Base	6,662	6,662		-	-
Federal Stimulus	66	-	Accepts	(66)	(66)
Pedestrian Access	33	-	DRA	(33)	(33)
Los Osos	523	174		(349)	(349)
City/Muni Requirements	648	-		(648)	(648)
Subtotal Main Maintenance	**7,931**	**6,836**	**6,836**	**(1,095)**	**(1,095)**
Base	9,560	9,560	9,204 2/	-	(356)
Federal Stimulus	47	-	Accepts	(47)	(47)
Pedestrian Access	183	-	DRA	(183)	(183)
Los Osos	252	84	84 2/	(168)	(168)
City/Muni Requirements	675	-	Accepts	(675)	(675)
Obsolete Regulators	159	-	DRA	(159)	(159)
Subtotal Service Maintenance	**10,876**	**9,644**	**9,288**	**(1,232)**	**(1,588)**

ATTACHMENT A (Continued)

Comparison of Interested Parties Recommendations for TY2012 -- SCG Gas Distribution

(Thousands of 2009 Dollars)

	Position of Party			Reductions to SCG	
Additions	**SCG**	**DRA**	**TURN**	**DRA<SCG**	**TURN <SCG**
Base	15,098	14,411	14,626	(687)	(472)
ARSO	459	-		(459)	(459)
Wireless Fees	290	-	Accepts	(290)	(290)
Misc. Support	23	-	DRA	(23)	(23)
Pedestrian Access	8	-		(8)	(8)
Support New Tech	2,731	277	- 4/	(2,454)	(2,731)
Subtotal Field Support	**18,609**	**14,688**	**14,626**	**(3,921)**	**(3,983)**
Base (5-yr Avg)	10,112	8,215	Accepts	(1,897)	(1,897)
Safety Vests	33	-	DRA	(33)	(33)
Subtotal Tools/Fittings	**10,145**	**8,215**	**8,215**	**(1,930)**	**(1,930)**
				-	-
Base	6,777	6,777	6,539	-	(238)
CP Specialists	346	173	173	(173)	(173)
Subtotal Pipeline O&M Planning	**7,123**	**6,950**	**6,712**	**(173)**	**(411)**
Subtotal Cathodic Protection	**7,067**	**7,067**	**7,067**	**-**	**-**
Base	8,003	7,772		(231)	(231)
GOS Traditional	1,093	-		(1,093)	(1,093)
GOS New	1,474	919	Accepts	(555)	(555)
Engineering Rotation	390	-	DRA	(390)	(390)
TSM	93	93		-	-
Training Materials	536	82		(454)	(454)
Educational Aids	62	62		-	-
Training Video	500	-		(500)	(500)
Subtotal Ops Mngt & Training	**12,151**	**8,928**	**8,928**	**(3,223)**	**(3,223)**
Subtotal Reg. Public Affairs	**3,907**	**3,907**	**-**	**-**	**(3,907)**
GRAND TOTAL SPEND	**131,182**	**92,826**	**87,629**	**(38,356)**	**(43,553)** 1/

ATTACHMENT A (Continued)

Comparison of Interested Parties Recommendations for TY2012 -- SCG Gas Distribution

Footnote References for Table in Attachment A

1/ CORRECTIONS TO TURN TABLE 1: In TURN Table 1, total shown for SCG Measurement and Regulation Request should be $35,725 (shown in thousands). The SCG>TURN difference shown on TURN Table 1 should be $35,475 (shown in thousands) .

Also In TURN Table 1, total shown for DRA Field Support should be $14,688 (shown in thousands. The DRA>TURN difference shown on TURN Table 1 should be $5,281. It appears TURN overlooked DRA's recommendation of $277,000 incremental.

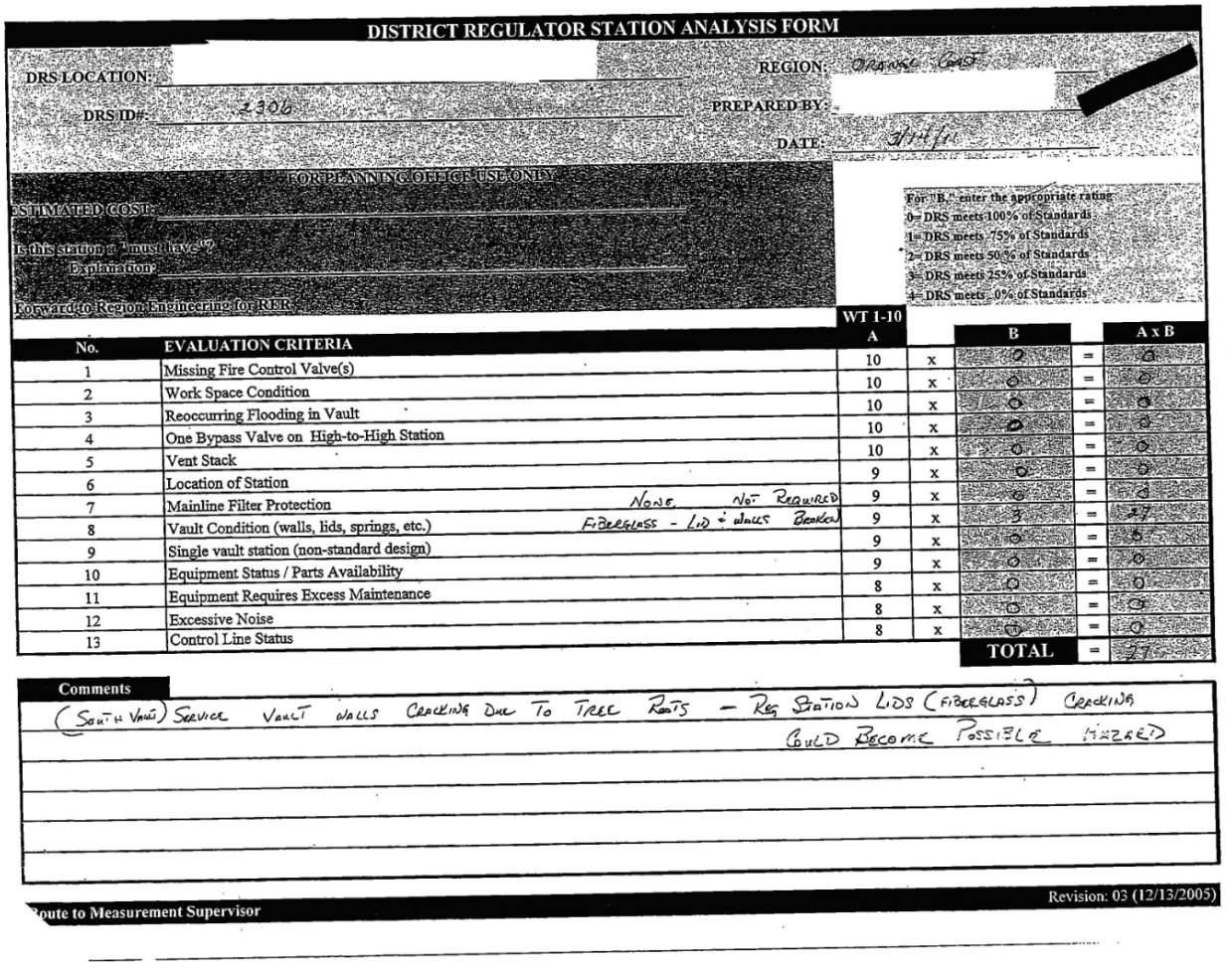
2/ Text at page 6 indicates addition of DRA's recommendation on Los Osos project. However TURN Table 1 does not reflect this addition of $84,000. TURN Table 4 also includes dollars for Los Osos project.

3/ TURN states it agrees with DRA in "denying all increases" (pg. 4 first sentence M&R). However DRA did recommend $27,000 for GHG compliance. TURN appears to have left this out of their analysis.

4/ TURN states their forecast is $215,000 higher than DRA. (pg. 7 second paragraph) But TURN's calculation in testimony apparently neglected to include DRA's recommendation of $227,000 for support resource. This error is corrected in this table. The difference between DRA and TURN is correctly stated at <$62,000>

ATTACHMENT B

District Regulator Station Analysis Form Examples



DISTRICT REGULATOR STATION ANALYSIS FORM

DRS LOCATION:

DRS ID#: 2306

REGION: ORANGE COAST

PREPARED BY: [redacted]

DATE: 3/14/11

FOR PLANNING OFFICE USE ONLY

ESTIMATED COST:

Is this station a "must have"?

Explanation:

Forward to Region Engineering for RER

For "B," enter the appropriate rating:
0= DRS meets 100% of Standards
1= DRS meets 75% of Standards
2= DRS meets 50 % of Standards
3= DRS meets 25% of Standards
4= DRS meets 0% of Standards

No.	EVALUATION CRITERIA		WT 1-10 A		B		A x B
1	Missing Fire Control Valve(s)		10	x	0	=	0
2	Work Space Condition		10	x	0	=	0
3	Reoccurring Flooding in Vault		10	x	0	=	0
4	One Bypass Valve on High-to-High Station		10	x	0	=	0
5	Vent Stack		10	x	0	=	0
6	Location of Station		9	x	0	=	0
7	Mainline Filter Protection	NONE NOT REQUIRED	9	x	0	=	0
8	Vault Condition (walls, lids, springs, etc.)	FIBERGLASS - LID + WALLS BROKEN	9	x	3	=	27
9	Single vault station (non-standard design)		9	x	0	=	0
10	Equipment Status / Parts Availability		9	x	0	=	0
11	Equipment Requires Excess Maintenance		8	x	0	=	0
12	Excessive Noise		8	x	0	=	0
13	Control Line Status		8	x	0	=	0
					TOTAL	=	27

Comments

(SOUTH VAULT) SERVICE VAULT WALLS CRACKING DUE TO TREE ROOTS - REG STATION LIDS (FIBERGLASS) CRACKING COULD BECOME POSSIBLE HAZARD

Route to Measurement Supervisor

Revision: 03 (12/13/2005)

ATTACHMENT B (Continued)

District Regulator Station Analysis Form Examples

DISTRICT REGULATOR STATION ANALYSIS FORM

DRS LOCATION: [redacted]
REGION: Orange Coast
DRS ID#: 1170
PREPARED BY: [redacted]
DATE: 6-10-11

FOR PLANNING OFFICE USE ONLY
ESTIMATED COST:
Is this station a "must have"?
Explanation:
Forward to Region Engineering for RER:

For "B" enter the appropriate rating:
0 = DRS meets 100% of Standards
1 = DRS meets 75% of Standards
2 = DRS meets 50 % of Standards
3 = DRS meets 25% of Standards
4 = DRS meets 0% of Standards

No.	EVALUATION CRITERIA	WT 1-10 A		B		A x B
1	Missing Fire Control Valve(s)	10	x	1	=	10
2	Work Space Condition	10	x	1	=	10
3	Reoccurring Flooding in Vault	10	x	0	=	0
4	One Bypass Valve on High-to-High Station	10	x	NA	=	NA
5	Vent Stack	10	x	0	=	0
6	Location of Station	9	x	0	=	0
7	Mainline Filter Protection	9	x	1	=	10
8	Vault Condition (walls, lids, springs, etc.)	9	x	0	=	0
9	Single vault station (non-standard design)	9	x	4	=	36
10	Equipment Status / Parts Availability	9	x	0	=	0
11	Equipment Requires Excess Maintenance	8	x	0	=	0
12	Excessive Noise	8	x	0	=	0
13	Control Line Status	8	x	0	=	0
				TOTAL	=	120

Comments

Throated Vault. Broken hinges

Form Completed from Memory after the fact

Route to Measurement Supervisor

Revision: 03 (12/13/2005)