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-209

PREPARED REBUTTAL TESTIMONY OF
GILLIAN A. WRIGHT
ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

OCTOBER 2011

SCG Doc# 260048

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PREPARED REBUTTAL TESTIMONY OF
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I. INTRODUCTION

The following rebuttal testimony regarding Customer Services and Information activities, addresses the intervener testimony dated September 2011 of:

- Division of Ratepayer Advocates ("DRA"), Exhibit DRA-49, Witness Gomberg – September 1, 2011;
- The Utility Reform Network ("TURN"), Witness Nahigian – September 22, 2011;
- The Joint Parties, Exhibit JP-1, Witnesses Canty, Bautista, and Corralejo – September 22, 2011; and
- Center for Accessible Technologies ("CforAT"), Witness Belser – September 22, 2011.

SCG's rebuttal of TURN and DRA is addressed together for the Customer Services and Information non-shared activities, which include Research, Development and Demonstration ("RD&D"), Communications, Research and e-Services, Customer Assistance and Nonresidential Markets in Section II. Section II also includes rebuttal to the Joint Parties and CforAT. The rebuttal to DRA for shared services activities and the Sustainable SoCal program is addressed in Section III. Table GAW-Rebuttal-1 below provides summary and comparison between SCG's TY2012 forecasts for Customer Services & Information with DRA and TURN's proposals. Specifically, my testimony rebuts the following points:

- DRA recommends disallowing SCG's entire RD&D funding request, $13.186 million, proposing to close down SCG's longstanding and successful RD&D program that has advanced Commission and state policy for more than 30 years, or to allow only the gas operations portion of the program, a reduction of $10 million, with no justification or explanation for this reversal of state and Commission policy, as well as DRA's past GRC recommendations.

- TURN states it generally supports DRA's recommendation, but TURN recommends continuing and expanding only the gas operations portion of the program, funding RD&D at $5.588 million for a reduction of $7.412 million.
- TURN recommends ending the equity and royalty sharing mechanism in the RD&D program, which shares net proceeds from successful equity and royalty investments 60% ratepayers, 40% shareholders.
- DRA and TURN recommend disallowing the majority of SCG's incremental request to support communications, research and e-services, a reduction of $1.257 million, based on unsupported and incorrect assumptions about SCG's customers and their use of and preference for electronic channels.
- CforAT recommends that SCG continue to focus on making its website, emergency notifications, and written communications as accessible as possible, including providing notifications in alternative formats according to customer preferences, and using multiple alternative channels. SCG generally concurs with CforAT's positions, which focus on communications and outreach to the disabled community. In the detailed discussion below, SCG highlights where CforAT's perspective on customer needs and preferences is significantly different from that of DRA and TURN.
- The Joint Parties recommend a nuclear education and community preparation campaign be undertaken by Sempra, without definition of which company(ies) are to undertake this campaign, the recommended funding or any specifics.

- DRA recommends disallowing all of SCG's incremental requests for nonresidential markets, $0.480 million, and customer assistance, $0.675 million, while TURN recommends using 2010 recorded costs for these areas, a reduction of $0.764 million for nonresidential markets and $1.972 million for customer assistance, and does not address SCG's incremental requests (as explained later, TURN incorrectly interprets most of SCG's incremental request for nonresidential markets as a typographical error).
- DRA recommends disallowing a portion of SCG's incremental requests for shared services, NGV and Environmental Affairs specifically, based on inaccurate assertions regarding the need and purpose of the requested funding.[1]
- DRA recommends denying SCG's proposal for the Sustainable SoCal program, $11.272 million in capital and $606,000 O&M expense sponsored by SCG witness Stanford, based on significant misunderstanding of the program proposal, its benefits and costs, the environmental attributes of biogas and biomethane, and the regulatory environment.

Table GAW-Rebuttal-1
Customer Services & Information Expenses for TY2012
(Thousands of 2009 dollars)

	SCG Proposed	DRA Recommended	TURN Recommended	Difference DRA vs SCG	Difference TURN vs SCG
Non-Shared Services	$34,806	$19,208	$23,451	($15,598)	($11,355)
Shared Services	$6,730	$5,606*	$6,730**	($1,124)	0
Total	$41,536	$24,182	$30,181	($16,722)	($11,355)

***DRA's stated total of $4,974 does not match individual disallowances, SCG has relied on the individual amounts.**
****TURN does not submit specific recommendations for shared services.**

[1] TURN did not provide any detailed review of Customer Services and Information shared services forecasts. TURN Witness Marcus recommends a total $750,000 reduction for all shared services, with no specific account reduction recommendations. The rebuttal to this proposal is addressed in the testimony of SCG Witness Ed Reyes.

My testimony is organized as follows:

- **Section II – Non-Shared Services Rebuttal**;
- **Section III – Shared Services and Capital Rebuttal**;
- **SUMMARY AND CONCLUSION; and**
- **ATTACHMENTS**
    - **Attachment A – Application A.06-12-010, DRA Exhibit 32 (Excerpts);**
    - **Attachment B - California Energy Commission Support Letter;**
    - **Attachment C – San Joaquin Valley Air Pollution Control District Support Letter;**
    - **Attachment D – DRA-SCG-Informal-DR-06-MZX;**
    - **Attachment E – J.D. Power and Associates, 2011 Gas Utility Residential Customer Satisfaction Study;**
    - **Attachment F – TURN-SCG-DR-34;**
    - **Attachment G – DRA-SCG-DR-006-MZX;**
    - **Attachment H – DRA-SCG-DR-044-MZX;**
    - **Attachment I – DRA-SCG-DR-023-MZX Question 5;**
    - **Attachment J – Imperial County Air Pollution Control District Support Letter;**
    - **Attachment K – Southern California Alliance of Publicly Owned Treatment Works Support Letter;**
    - **Attachment L – Mojave Desert Air Quality Management District Support Letter**

II. NON-SHARED SERVICES REBUTTAL

DRA and TURN's recommendations for Customer Services and Information disregard established Commission and state policy, including reversing past DRA and TURN positions, without explanation or justification for the change. DRA, with support from TURN, also demonstrates significant misunderstanding of SCG's customer makeup and preferences. DRA has a highly unusual approach to technology, recommending that utilities not offer or support communication channels and technological tools that are widely adopted and used worldwide, including by the Commission, DRA, and other interveners in this proceeding. DRA offers no analysis to support their recommendations, and raises no objections to SCG's forecasting methodology. The majority of DRA's recommended disallowances challenge the legitimacy of the activities SCG proposes to fund, rather than the proposed amount of the funding. TURN recommends different forecasting methodologies for activities without explanation for the differences. This includes a 5 year average for Communications, Research and e-Services, zero base plus unexplained incremental costs for Gas Operations RD&D, and 2010 recorded costs for Customer Assistance, Nonresidential Markets, and Technology Development (non-refundable costs associated with RD&D). Table GAW-Rebuttal-2 below summarizes SCG's TY2012 forecasts, DRA's and TURN's proposals for non-shared activities. As described in detail below, both DRA's and TURN's recommended disallowances misunderstand Commission and state policy, SCG's customers, and the current state of technology adoption, and in certain cases misunderstand SCG's proposals. For these reasons, both DRA's and TURN's recommendations should be rejected.

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Table GAW-Rebuttal-2
Summary of CS&I Nonshared Services
(Thousands of 2009 dollars)

	SCG's TY2012 Forecasts	DRA Proposal	TURN Proposal
RD&D	$13,000	$0*	$5,588
Customer Communications, Research and eServices	$7,919	$6,662	$6,662
Customer Assistance	$5,199	$4,524	$3,227
Nonresidential Markets	$8,502	$8,022	$7,738**
Technology Development Support	$186	$0	$236
Total Nonshared	$34,806	$19,208	$23,451

* DRA recommends disallowance for $13 million RD&D request, but would support $3 million gas operation RD&D funding if the Commission does not adopt full disallowance.
** TURN recommends using 2010 recorded costs as TY2012 for Nonresidential Markets, but erroneously entered $889 in Table 4 page 14 of witness Nahigian's testimony. TURN's workpaper issued on 10/3/2011 (TURN_SEUDR01_Nahigian_wrkppr.xls) corrected this error.

A. Research Development & Demonstration ("RD&D") Rebuttal – DRA and TURN

DRA proposes to entirely discontinue funding SCG's RD&D program, dismantling a successful and well-established program that has been in place in its current form since 1997, and in slightly different form since at least the early 1980's, with a strong policy basis in statute and at least 29 years of Commission precedent. DRA states in its testimony, "DRA contends that a ratepayer-funded RD&D program is neither necessary nor reasonable."[2] DRA suggests that at the most, RD&D should be limited to gas operations.[3] TURN indicates that "in many ways TURN agrees with DRA's arguments concerning RD&D", but TURN's recommendation is fundamentally opposed to DRA's in that TURN opposes dismantling SCG's RD&D program, in fact TURN recommends additional RD&D funding for Gas Operations Technologies (especially distribution technologies) in the range of $2.0 million, provided those funds are only spent on the RD&D activities classified as Gas Operations, for a total of $5.588 million per year. DRA raises

[2] Exhibit DRA-49 p.11, at 10-11.
[3] Exhibit DRA-49 p.13, at 16- 19.

multiple, speculative concerns about the increasing cost of RD&D, its pressure on rates, and inadequate vetting and cost controls.[4] TURN does not echo DRA's concerns and proposes to continue and expand certain elements of SCG's RD&D program, accepting SCG's forecast for those elements including a proportionate share of SCG's forecast project management costs.[5] DRA does not oppose SCG's proposal to continue the existing equity and royalty sharing mechanism with a 60/40 ratepayer/shareholder split. TURN recommends ending the sharing mechanism based on a misunderstanding of the function and purpose of the mechanism and its results for ratepayers. DRA also did not challenge SCG's forecast for RD&D funding, explicitly adopting SCG's forecasts for the elements of RD&D it supports continuing.

DRA and TURN's radical and unsupported recommendation to eliminate or reduce significantly the requested funding for SCG's RD&D program should be rejected, and SCG's proposal should be adopted in full.

DRA and TURN's Recommendation is a Radical Departure from Commission and State Policy, and Past DRA Recommendations

The California Public Utilities Code explicitly allows ratepayer-funded RD&D. P.U. Code section 740 states, "For purposes of setting the rates to be charged by every electrical corporation, gas corporation, heat corporation or telephone corporation for the services or commodities furnished by it, the commission may allow the inclusion of expenses for research and development." DRA observes that "a review of the projects in SCG's RD&D proposal illustrates that safety and reliability are not the driving forces," noting that SCG also proposes

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[4] Exhibit DRA-49 p.13, at 4 – 11.
[5] Exhibit TURN Testimony-Nahigian-SCG-092211-1, p. 18.

research in clean generation, clean transportation, solar thermal technologies and bioenergy.[6] Similarly, TURN states that it "believes that the Gas Company has no business using its ratepayer funds to develop clean electric generation and clean transportation."[7] In the 1990 GRC decision, the Commission directed SCG to expand RD&D activities to address air quality and environmental initiatives: "We believe that there may be a need to develop low NOx burners, to develop heavy duty CNG vehicles and related technology, to develop technology designed to reduce emissions from gas burning equipment, and to develop new conversation technologies."[8] The Commission also directed SCG to look for "some high return projects that are considerably less certain to produce near term benefits."[9] In addition, Public Utilities Code section ("§") 740.1(e) lists the following objectives for utility-based RD&D:

§740.1 The commission shall consider the following guidelines in evaluating the research, development, and demonstration programs proposed by electrical and gas corporations:

(e) Each project should also support one or more of the following objectives:

(1) Environmental improvement.

(2) Public and employee safety.

(3) Conservation by efficient resource use or by reducing or shifting system load.

(4) Development of new resources and processes, particularly renewable resources and processes which further supply technologies.

(5) Improve operating efficiency and reliability or otherwise reduce operating costs.

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[6] Exhibit DRA-49, p. 12, at 9- 11.
[7] Exhibit TURN Testimony-Nahigian-SCG-092211-1, p. 17.
[8] D.90-01-016, p. 92.
[9] Ibid.

It is not clear why DRA and TURN apparently believe that SCG's RD&D portfolio should *not* meet three of the five CPUC objectives listed above. The Commission adopted these guidelines for RD&D funding requests and directed that utility RD&D funding proposals be reviewed in GRCs in D.82-12-005. DRA and TURN make no reference to these long-established policies, and provide insufficient justification for the radical reversal of policy that their proposal represents. DRA suggests that the Commission and other governmental institutions supply needed technologies through their regulatory activities,[10] failing to recognize that regulation generally follows the invention of technologies, which the Commission and the state recognized in setting their policies around the focus for utility RD&D. Regulation can encourage technology development in a particular direction, but regulators do not create technologies out of thin air, nor do they invest in manufacturing or marketing those technologies. TURN does not adopt DRA's unusual view of government in technology development, but TURN states that "the Commission should only authorize RD&D funding that has the greatest potential to reduce ratepayer costs."[11] While the discussion above makes clear that the Commission has a broader view of the appropriate focus for RD&D, TURN also fails to recognize that energy efficient equipment and expansion of new uses for gas both help reduce ratepayer costs, through lower individual bills and through lower overall rates.

SCG's proposal is entirely consistent with Commission policy, as demonstrated in SCG's extensive direct testimony. For ease of reference, the relevant testimony elements supporting each policy guideline are identified below:

[10] Exhibit DRA-49, p. 12, lines 5 – 7.
[11] Exhibit TURN Testimony-Nahigian-SCG-092211-1, p. 17.

Table GAW-Rebuttal-3
RD&D Guidelines and Testimony Cross References

Guideline	Exhibit SCG-9 Testimony Reference
(a) Projects should offer a reasonable probability of providing benefits to ratepayers.	Appendix B – Key Accomplishments (2006 – 2009) Appendix C – Equity Investments Appendix D – Cost Benefit Analysis
(b) Expenditures on projects which have a low probability for success should be minimized.	Appendix D – Cost Benefit Analysis
(c) Projects should be consistent with the corporation's resource plan.	GAW- 45
(d) Projects should not unnecessarily duplicate research currently, previously, or imminently undertaken by other electrical or gas corporations or research organizations.	GAW–48 to GAW-49 Appendix E – Letters of Support
(e) Each project should also support one or more of the following objectives: (1) Environmental improvement.	GAW-53 to GAW-54, GAW-57 to GAW-65 GAW-A4, A14 to A16, A24 to A33 Appendix B – Key Accomplishments (2006 – 2009)
(2) Public and employee safety.	GAW-51 to GAW-52, GAW-A4
(3) Conservation by efficient resource use or by reducing or shifting system load.	GAW-52 to GAW-55 GAW-A6 to A13 Appendix B – Key Accomplishments (2006 – 2009)
(4) Development of new resources and processes, particularly renewable resources and processes which further supply technologies.	GAW-55 to GAW-57, GAW-60 to GAW-64 GAW-A14 to A24, GAW-A29 to A33 Appendix B – Key Accomplishments (2006 – 2009)
(5) Improve operating efficiency and reliability or otherwise reduce operating costs.	GAW-50 to GAW-52

DRA’s recommendation to eliminate the SCG's RD&D program is also a radical departure from DRA’s own past policies and without appropriate explanation or justification. DRA has supported the continuation of SCG RD&D Program since at least 1990, including as recently as DRA’s 2008 GRC report.[12]

SCG’s RD&D Funding is Necessary to Obtain the Benefits of Government and Private Research Funding

DRA asserts that the RD&D activities that have historically been funded through the SCG's RD&D program should be left to government agencies, universities and other private industry.[13] TURN, states that, “Investor owned utilities have neither the resources nor the expertise to undertake RD&D efforts in the same manner as other entities.”[14] The logic of these assertions is flawed. State and Federal RD&D programs such as those administered by the California Energy Commission (“CEC”) and the Department of Energy (“DOE”) generally require 25 to 50% co-funding for all their projects, necessitating the involvement of private funding sources such as SCG’s RD&D program. Private research collaboratives, such as the Gas Technology Institute and the Pipeline Research Council International are member driven and have high levels of co-funding among participants. Similarly, the Department of Transportation will not fund RD&D projects for areas with common interest, such as in pipeline integrity, without significant utility participation and co-funding. DRA’s suggestion that SCG’s customers can in essence free-ride on the research these entities would undertake without SCG’s participation would have limited feasibility in practice.

[12] See Attachment A, Application A.06-12-010, DRA Exhibit 32, pp. 33-39.
[13] Exhibit DRA-49, p. 11, lines 11 – 13.
[14] Exhibit TURN Testimony-Nahigian-SCG-092211-1, p. 16.

As explained in my direct testimony, SCG's RD&D complements the CEC's Public Interest Energy Research ("PIER") program. The Commission created the PIER program to address areas of research *not* covered by utility and other private sector RD&D: "Public interest R&D activities are those directed towards developing science or technology, the benefits of which accrue to California citizens and are not adequately addressed by competitive or regulated entities."[15] The CEC submitted a letter of support for the SCG TY2012 RD&D program funding request.[16] The CEC letter states in part, "We believe your utility's RD&D program complements the State's Public Interest Energy Research ("PIER") Program. Both of our organizations' staffs have a long history of working closely on projects and programs that have ratepayer benefits." The CEC also stated, "The utility program also focuses on developing technologies related to utility operations and specific customer needs unique to its service territory. These programs emphasize near term research with results that can be used directly in utility rebate and emerging technologies programs. The Energy Commission's programs are driven by legislative and state energy priorities and policies and focus on public energy needs that have statewide economic, energy security and environmental benefits and impacts. Additionally, the PIER program funds earlier phases of project development when project proponents face difficulty in securing outside investors. As research products get closer to commercialization, PIER funding decreases and funding from venture capitalists and utilities assist in getting the products into the marketplace."

TURN asserts that "[t]he role utilities should take in the field of research development and demonstration is to monitor the status of research on technologies and demonstrate whether those new technologies can be incorporated into utility operations in manner that results in

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[15] D.04-08-010, Finding of Fact 19 p. 46.
[16] See Attachment B, also available in Exhibit SCG-09-WP, pp. 271-272.

ratepayer benefits."[17] SCG's RD&D program focuses on helping to develop technologies and accelerate commercialization. As stated in my direct testimony, "SCG's RD&D activities range from analytical technology assessments to royalty-bearing technology development contracts and, in some cases, equity investments in technology startup companies."[18] Below are two examples of RD&D projects, described in the workpapers to my direct testimony in Appendix B, where SCG's co-funding has helped to influence the development of technologies that are critical to our gas operations:

- <u>Tensile Strain Limits for Strain-Based Designs[19]</u>

One project that SCG supported was developing the enhanced tensile strain limit models to support strain-based pipelines design procedures for areas subject to large ground movements (e.g. earthquakes, landslides, etc.). Since earthquakes are a major concern for California, this type of safety project is critical to ensure the safety of our pipelines. SCG seeks to develop RD&D in this project because of the greater benefits that it can provide for our service territory and other areas that may be subject to tensile strain in its gas pipelines.

- <u>Large Diameter Pipeline Inspection System[20]</u>

This project was co-funded with Northeast Gas Association and the Department of Transportation in the development of an innovative robotic inspection system for large diameter transmission pipelines. This system can be used to inspect internal corrosion in un-piggable pipeline segments, due to bends, plug valves, cased pipe or

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[17] Exhibit TURN Testimony-Nahigian-SCG-092211-1, p. 16.
[18] Exhibit SCG-9, p. GAW-46
[19] SCG Exhibit SCG-09-WP, p. 220.
[20] SCG Exhibit SCG-09-WP, pp. 221 - 222.

other conditions. Unlike a conventional pig, this robotic system would be self powered, deployed without shutting down the pipeline, and able to navigate bends. In addition, magnetic flux leakage and remote field eddy current sensors were developed, which are used to detect anomalies and capable of collapsing and expanding in size. Currently, this system has been working as a commercial prototype. If successful, this would be a first of its kind accomplishment for promoting safety inspections in large pipelines and would provide a significant benefit to the industry.

SCG's RD&D Program is Necessary to Meet Southern California's Unique Needs

As discussed in my direct testimony, Southern California faces particular challenges with respect to air quality requirements. SCG's service territory is home to two of the most challenging areas in the United States for air quality. As noted above in the 1990 GRC decision, the Commission directed SCG to expand RD&D activities to address air quality and environmental issues.[21] Due to the very strict air quality mandates in southern California, our customers need equipment that is specifically developed to meet these extremely tight requirements. The California Air Resources Board ("CARB"), for example, and South Coast Air Quality Management District ("SCAQMD") emissions requirements for gas-fired distributed generation ("DG") and combined heat and power energy systems ("CHP") require products specifically developed for Southern California. The same is true for other natural gas applications for residential use (water and space heaters), commercial (cooking and space heating), industrial (boilers and processes heaters) and natural gas vehicles. Development of ultra low emission gas-fired equipment is necessary to insure that natural gas equipment options,

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[21] D.90-01-016, p. 92.

with their lower operating costs and lower associated Greenhouse Gas ("GHG") emissions, continue to be available to our residential, commercial and industrial customers in the future. Below are two examples of RD&D projects meeting this purpose, described in the workpapers to my direct testimony (Exhibit SCG-09-WP) in Appendix B:

- Residential Furnace NOx Emissions[22]

  This project is to develop new designs for residential furnaces to meet new SCAQMD requirements. There are no products currently on the marketplace that can meet the emissions levels set by the new emissions requirements. The initial evaluation determined what emissions levels could realistically be achieved. The subsequent phase will focus on encouraging manufacturing partners to develop prototypes and further development for commercialization.

- Super Boiler[23]

  This project was co-funded with the Department of Energy, Gas Technology Institute's Utilization Technology Development and the manufacturer, Cleaver Brooks. Current SCAQMD standards require existing and new boilers to meet ultra-low NOx standards. This project is developing a high efficiency boiler that can achieve < 5ppm NOx. The super boiler has been going through field tests since 2009 and both efficiency and emission targets were consistently achieved.

SCG's efforts to ensure continuous improvement of natural gas technologies to meet increasingly stringent air emissions standards in Southern California are clearly in the interests of

[22] SCG Exhibit SCG-09-WP, pp. 223 -224.
[23] SCG Exhibit SCG-09-WP, p. 231.

ratepayers. Supporting the development and commercialization of these technologies not only provides environmental benefits to ratepayers in the form of cleaner air, but also helps to prevent the adverse rate impacts that would result from declining natural gas throughput necessitated by inability to meet air emission standards. The value of SCG's RD&D in clean natural gas technologies has been recognized by air regulators. Subsequent to SCG's filing of the TY2012 GRC application, SCG received a letter of support from the San Joaquin Valley Air Pollution Control District ("SJVAPCD").[24] The letter from Executive Director Sayed Sadredin states, "Continued funding of SCG's RD&D programs will help to further research in many areas that are critical to meeting District and SCG goals."

DRA's Unsupported Assertions that SCG's RD&D Program is Unreasonable Are Contradicted by the Evidence

DRA asserts that funding for the RD&D program has increased steadily since its original approval in 1997,[25] that the program has a disproportionate influence on management due to its size and that the program lacks adequate spending controls.[26] DRA cites no evidence to support these assertions, and presents them as "scenarios," but nonetheless bases its recommendation on its unsupported speculation. DRA's assertions are incorrect. From 1998 through 2010, authorized expenditures were relatively flat, and were in the range of $7.2 - $8.9 million for 10 years, increasing to $10 million in 2008 as shown in Table GAW-Rebuttal-04 below. Table GAW-Rebuttal-04 also shows that RD&D expenditures have represented less than one percent of SCG's annual authorized base margin revenues for each of the last 13 years, generally varying

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[24] See Attachment C.
[25] Exhibit DRA-49, p. 11, at 3-4.
[26] Exhibit DRA-49, p.13, at 4 – 11.

between 0.43% and 0.63%. The proposed $13 million per year request represents 0.62% of SCG's total TY2012 rate case request.

Table GAW-Rebuttal-04
Annual Authorized RD&D Expense as Percentage of Authorized Base Margin Revenue

Year	CPUC Decision Authorizing Expenditure Level and Revenue Requirement	Authorized Expenditures ($,000)*	Annual Authorized Base Margin Revenues ($ 000)	Expenditures as a % of Authorized Base Margin Revenue
1998	D.97-07-054	8,160	$1,825,814	0.45%
1999	D.97-07-054	7,197	$1,671,672	0.43%
2000	D.97-07-054	7,690	$1,471,024	0.52%
2001	D.97-07-054	7,895	$1,412,150	0.56%
2002	D.97-07-054	8,134	$1,469,525	0.55%
2003	D.97-07-054	8,459	$1,479,035	0.57%
2004	D.04-12-015	8,935	$1,580,278	0.57%
2005	D.04-12-015	8,935	$1,613,896	0.55%
2006	D.04-12-015	8,935	$1,643,841	0.54%
2007	D.04-12-015	8,935	$1,616,054	0.55%
2008	D.08-07-046	10,000	$1,586,584	0.63%
2009	D.08-07-046	10,000	$1,594,112	0.63%
2010	D.08-07-046	10,000	$1,801,694	0.56%
TY2012**	Not Available	13,000	$2,107,000	0.62%

* RD&D annual expenditure amounts reflect annual authorized amounts including NGV RD&D and merger credit from 1998 to 2003 and exclude Public Purpose RD&D of $500,000 annually from 1998 to 2004 for consistency.
** Proposed amounts in this GRC application (A.10-12-006)

The SCG RD&D program has strong budgetary control processes in place, has operated within program spending limits throughout its life, and has specific screening criteria in place to ensure that all projects funded meet the guidelines of PU Code 740.1. This is demonstrated by the cost benefit analysis provided in support of my direct testimony,[27] the royalty and equity

[27] Exhibit SCG-09-WP, RD&D Appendix D in workpapers, pp. 260 – 270.

proceeds from RD&D investments also documented in my direct testimony,[28] and the screening process followed by the RD&D group, for which an illustration was provided to DRA in data request DRA-SCG-Informal-DR-06-MZX.[29] DRA makes no reference to the cost benefit analysis provided in support of my direct testimony, which finds an overall benefit to cost ratio of 1.4 for SCG's RD&D portfolio while using the narrowest definition for benefits, which counts only energy and equipment cost savings and does not attempt to account for other benefits such as improved safety, reliability, system integrity and environmental benefits. As a last fiscal control, RD&D funding is subject to one way balancing account treatment, which means the funding can only used for RD&D activities, subject to the criteria and controls detailed above, or be returned to ratepayers.

DRA makes a general assertion that approving expenditures like RD&D undermines affordable utility service.[30] No assessment or examination of gas transportation rates is provided to confirm this statement. The most recent JD Power customer satisfaction survey indicates that SCG's customers see SCG's rates as affordable, and SCG's costs as well managed. Specifically, SCG ranked first among our peer set of large gas utilities in the West in residential customer satisfaction, based on **price,** billing and payment and customer service. SCG also ranked as one of the top natural gas utilities in the country in terms of "Manages Its Business Costs Effectively."[31] Excerpts of the JD Powers results are attached to this testimony as Attachment E.

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[28] Exhibit SCG-09-WP, RD&D Appendix C in workpapers, pp. 254 – 259.
[29] See Attachment D.
[30] Exhibit DRA-49, p.12, line 26 to p. 13, lines 1 – 3.
[31] See Attachment E, JD Power & Associates, 2011 Gas Utility Residential Customer Satisfaction Study, p. 12, 44.

TURN Inaccurately Characterizes the Purpose and Results of Investment and Royalties Sharing

TURN recommends the Commission no longer allow SCG to make RD&D equity investments with funding from ratepayers.[32] TURN's recommendation would eliminate a useful tool to build a balanced RD&D portfolio achieving both short and long term benefits for ratepayers. As previously noted, in the 1990 GRC decision the Commission indicated, "SoCalGas should consider a portfolio of RD&D program to include not only low risk projects that are certain to produce ratepayer benefit but some high return projects that are considerably less certain to produce near term benefits."[33] SCG does not "**play the stock market**" with its RD&D equity investments as TURN asserts.[34] These investments are aimed at accelerating the commercialization of emerging, innovative technologies of strategic value to our customers and advancing more efficient and reliable operations. Equity investment provides an alternative to project-based funding. The choice of equity versus project funding is assessed case by case, based on which is a more effective means of supporting technology advancement and likely to provide the greatest benefit to ratepayers. Historically, about 20% of RD&D funding has been provided in the form of equity investment. One of the advantages of investing in these companies is that, as observers on their Boards of Directors, SCG gains unique perspective on market and technology development, and can guide companies in development of products and services that maximize the benefits of the finished product for ratepayers.

TURN states that ratepayers have "put up close to $32 million and in return have received back $7.45 million or approximately 25% of their investment."[35] This is incorrect. The

[32] Exhibit TURN Testimony-Nahigian-SCG-092211-1, p. 20.
[33] D.90-01-016, p. 92.
[34] Exhibit TURN Testimony-Nahigian-SCG-092211-1, p. 19.
[35] Ibid.

sharing mechanism only applies to any proceeds from exits that are above the amount initially invested by the ratepayers. In other words, the ratepayers are made whole before the sharing mechanism comes into play. Therefore, the ratepayers received $9.3 million in addition to the $7.45 million cited above, for a total of $16.75 million in those projects SCG successfully exited. In addition, the $32 million total investment includes $9.5 million in investments that are still active, with the possibility that future additional revenues/royalties may accrue.

It should also be noted that even companies that SCG has exited continue to expand applications, and provide additional benefits to ratepayers. Plug Power sells fuel cells that were developed during the time of our investment into the forklift, telecommunications, and small commercial markets. This technology allows our customers to use clean burning natural gas to produce high quality power onsite, with a greatly reduced emissions footprint than power generated for the grid. Even a company that did not survive financially should be considered a successful investment if the intellectual property that they were developing is acquired and commercialized by another company. H2 Gen manufactured and sold on-site hydrogen generation systems. Its intellectual property was acquired by Chicago Bridge and Iron and Air Liquide, who are now selling these units to customers. Pentadyne's intellectual property for flywheels (for electricity storage to pair with distributed generation) was acquired by Beaver Aerospace and Kinetic Traction Systems. When commercialized, SCG anticipates these technologies will provide continued benefits to our ratepayers.

TURN states that "SoCalGas has not provided a single word, forecast, or explanation indicating how it intends on investing ratepayer funds in RD&D equity investments in the future".[36] SCG's direct testimony described the policy areas of priority, and as explained above, SCG is evaluating companies and technologies for project or equity investment based on those

[36] Exhibit TURN Testimony-Nahigian-SCG-092211-1, p. 19.

priorities. Specifically, SCG is looking for potential investments in the areas of clean generation, air quality improvement, solar thermal and biogas technologies, and efficient equipment. However, SCG will only make the investments if we find technologies and companies meeting our criteria, and where equity investment has the best potential. We are currently evaluating investments in Concentrated Solar Thermal, Combined Heat and Power, and Waste Heat Recovery companies.

TURN Misstates the Percentage in Its Proposal to Maintain Existing Revenue Sharing Structure for Existing Projects

TURN recommends that "for any past equity investments…the Commission should maintain the existing sharing mechanism and split those revenues equally between shareholders and ratepayers."[37] TURN is inadvertently generous and would provide more revenue to shareholders for investments after 2008 than the current mechanism actually allows. On the technical issue, for past investments the correct sharing percentages are 50/50 for investments made between 1997 and 2007, and 60/40 ratepayer/shareholder for investments made in 2008 and later.

Since the RD&D sharing mechanism was already litigated and approved 3 separate times (in D.97-07-054, D.04-12-015, and D.08-07-046), and continues to provide a valuable tool in advancing RD&D, the Commission should continue the existing RD&D revenue sharing mechanism.

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[37]Exhibit TURN Testimony-Nahigian-SCG-092211-1, p. 20.

B. Customer Communications, Research and eServices Rebuttal – DRA, TURN, CforAT, and Joint Parties

SCG requested TY2012 funding for Customer Communications, Research and eServices organization of $7.919 million, reflecting an incremental increase of $2.264 million over the 5-year average of $5.655 million. DRA accepted the 5-year average base forecast, but recommended that the incremental request amount of $2.264 million be reduced by $1.257 million as shown in Table GAW-Rebuttal-05 below. TURN concurs with DRA's recommendation. Of note, TURN did not apply 2010 actual costs as its recommended forecast for this category of non-shared services. The 2010 recorded spending was $7.706 million, $0.852 million higher than SCG's 2010 GRC forecast, $0.944 million higher than DRA's TY2012 forecast, and only $0.213 million less than SCG's TY2012 forecast. TURN's selective use of 2010 actual costs as a forecast amount in other instances is clearly purposeful. For the purposes of this discussion, from this point forward SCG will only refer to DRA testimony in referencing the shared position of DRA and TURN.

DRA based its recommendation on its perception that SCG's forecast exceeds what is necessary to meet basic customer needs, its belief that SCG's request would target the needs of more affluent customers, and disallowed all of SCG's request for new and expanded website/mobile services, social media and eCommunications, and customer research. DRA's recommendation is in conflict with the Center for Accessible Technology ("CforAT"), who recognizes and recommends continued improvements to communications, websites and other alternative formats, including text and social media, to reach people with disabilities. DRA also recommends disallowing SCG's request for expanded safety communication based on an unsupported statement that SCG's current multilingual safety communication is deficient, and therefore SCG's shareholders should be required to absorb the costs of expanded communications. As discussed in detail below, DRA and TURN's recommendation should be rejected and SCG's request should be adopted.

Table GAW-Rebuttal-5
Customer Communications, Research and e-Services
TY 2012 Incremental Program Expenditures
(Thousands of 2009 dollars)

Activity	SCG's Incremental Request	DRA & TURN Proposal	Amount DRA < SCG
Enhanced Website Usability/Accessibility	$631	$631	$0
Website/Mobile E-Services	230	0	(230)
Social Media/e-Communications Channels	431	0	(431)
Online Content/Editing/ Translation	376	376	$0
Research – Online Panels	128	0	(128)
Safety Communications	468	0	(468)
Total	$2,264	$1,007	($1,257)

DRA's Definition of Basic Customer Communications Needs Excluding Mobile Devices and Social Media is Too Limited and Does Not Reflect Customer Preferences

DRA's proposes to disallow $230,000 requested for operating and improving SCG's website and supporting new and expanded mobile-based e-services offerings, as well as $431,000 for supporting social media communications. DRA asserts that SCG's requests are unnecessary since the company should only provide basic natural gas transportation services. "DRA's central concern with SCG's CCR request is that it exceeds what is necessary to meet basic customer needs and strives to meet the desire of more affluent customers using high-end technologies."[38] DRA's characterization of the customers that would benefit from SCG's expanded communications activities cites no source or basis, and is in stark contrast to the

[38] Exhibit DRA-49, p. 4, lines 22 – 24.

evidence presented in my direct testimony, as well as additional studies released since the direct testimony was filed in this proceeding.

For example, DRA stated that mobile users are a subset of customers.[39] According to a recent survey by the Public Policy Institute of California, nearly all Californians (93%) have cell phones, and 39% of these say they have a Smartphone. Similarly, 41% say they pay for a data plan for their cell phones.[40] As noted in my direct testimony, an increasing percentage of US households can only be reached by cell phone, and Smartphone sales are expected to exceed basic cell phone sales by the end of 2011.[41]

In addition, a recent study by Pew Research Center finds widespread adoption of cell phone and Smartphone usage by minorities:[42]

- Nearly two-thirds of African-Americans (64%) and Latinos (63%) are wireless internet users, and minority Americans are significantly more likely to own a cell phone than their white counterparts (87% of blacks and Hispanics own a cell phone, compared with 80% of whites). [43]
- While Hispanics overall are no more likely than whites to use their cell phones to access the internet, a relatively high share of Hispanics use their cell phones in lieu of a home internet connection. Some 6% report that they have no home internet connection but access the internet from their cell phone. The number is

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[39] Exhibit DRA-49, p. 4, line 30.

[40] Baldassare, Mark, Dean Bonner, Sonja Petek, and Jui Shrestha. "Californians & Information Technology." *Public Policy Institute of California Statewide Survey*. (2011): 3. http://www.ppic.org/main/publication.asp?i=985 (accessed September 10, 2011).

[41] Exhibit SCG-09, at p. GAW-18, lines 26 – 27 and p. GAW-19, lines 1 – 5.

[42] Smith, Aaron. Pew Research Center, "Technology Trends Among People of Color." Accessed September 10, 2011. http://www.pewinternet.org/Commentary/2010/September/Technology-Trends-Among-People-of-Color.aspx.

[43] Smith, Aaron. Pew Research Center, "Mobile Access 2010." Accessed September 10, 2011. http://www.pewinternet.org/Reports/2010/Mobile-Access-2010.aspx.

> the same for blacks (6%). A lower share of whites—1%—lacks home internet but accesses the internet from a cell phone. These findings lend some support to the notion that mobile technologies may help to narrow the digital divide by providing an alternative on-ramp to the internet for groups that have historically lagged behind others in web access.[44]

DRA states that, "It is further worth noting that many mobile device users have access to the internet through their mobile device and can already access the information referenced above on their mobile device."[45] However, a key purpose of SCG's request for mobile services is to ensure that the website is accessible and readable on mobile devices. For example, SCG's current web sites are formatted to higher resolution monitors with bigger screens, and contain visual features that are not conducive to use and navigation on mobile browsers designed for smaller, lower resolution mobile device screens. SCG needs to provide services and information for the mobile web user community that is easy to find, easy to use, and easy to understand. Many utilities and state agencies have already created mobile versions of their sites or Smartphone applications "apps" to accommodate mobile users, for example:

- The state of California has a mobile web site (m.ca.gov) allowing for mobile access to programs and services, along with many (10+) mobile apps that operate on the Smartphone.
- The Contractors State License Board ("CSLB") has a mobile version of its website.

CforAT recommends that SCG should have the capability to make emergency notifications to disabled customers through a "variety of alternative formats, including, but not limited to, the use of text message, email and/or voice notifications."[46] If SCG does not utilize

[44] Smith, Aaron. Pew Research Center, "Mobile Access 2010." Accessed September 10, 2011. http://www.pewinternet.org/Reports/2010/Mobile-Access-2010.aspx.

[45] Exhibit DRA-49, p. 5, lines 2 – 4.
[46] Testimony of Dmitri Belser, Center for Accessible Technology, pp. 7 -8.

commonly used channels of communications, it will leave a significant number of customers, often those who would otherwise be underserved, without the information on services, safety and emergencies that are critical to their wellbeing. This is reinforced in the finding of JD Power and Associates 2011 national survey of gas utility customers, where 82% of gas utility customers indicate they would like their utility to spend more on communications.[47]

The purpose of expanding SCG's channels and presence in Social Media/E-Communications is driven by the need to reach the growing segment that favor e-communication over general, mass media for receiving information. DRA asserts that social media is targeted only at the tech-savvy portion of SCG's customer base.[48] DRA ignores the evidence provided in direct testimony and discovery that social media users are a large and growing portion of the US population, and that Facebook and Twitter use is very rapidly increasing.[49] In fact, social media are widely embraced by lower income and minority populations, according to some recent research findings. The Pew Research Center found that social media communications promise to reach a wider, more diverse customer population.

> "Among internet users, seven in ten blacks and English-speaking Latinos use social networking sites—significantly higher than the six in ten whites who do so. Indeed, nearly half of black internet users go to a social networking site on a typical day. Just one third of white internet users do so on a daily basis[50]. The same is true for status update services like Twitter—one quarter of online African-Americans use these services, significantly higher than the 15% of white internet users who do so (English-speaking Latinos are right in the middle, with 20% of such internet users using these sites)."[51]

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[47] See Attachment E, JD Power & Associates, 2011 Gas Utility Residential Customer Satisfaction Study, p. 48.
[48] Exhibit DRA-49, p. 5, lines 6 – 7.
[49] Exhibit SCG-09, p. GAW-19, lines 2 – 3, and DRA- Informal- SCG-DR-6-MZX question #4 (Attachment D).
[50] Smith, Aaron. Pew Research Center, "Technology Trends Among People of Color." Accessed September 10, 2011. http://www.pewinternet.org/Commentary/2010/September/Technology-Trends-Among-People-of-Color.
[51] Smith, Aaron. Pew Research Center, "Technology Trends Among People of Color." Accessed September 10, 2011. http://www.pewinternet.org/Commentary/2010/September/Technology-Trends-Among-People-of-Color.aspx.

> "Minority attitudes towards social media also diverge notably from those of whites. For example, minority Americans were very active using social technologies to share information during the 2008 election campaign. And when we asked about government outreach using social media, minority respondents were significantly more likely than whites to say that this type of outreach 'helps people be more informed about what government is doing' and 'makes government more accessible.' They are also much more likely than whites to say it is 'very important' for government agencies to post information and alerts on social networking sites."[52]

During the recent electricity blackout on September 8, 2011 in southern California, SDG&E saw a significant increase in Twitter followers overnight, from 1,600 to 17,500, as customers sought the latest information available. As SCG notes on this State of California webpage[53], even DRA recognizes the value of reaching out to its customer base via social media channels, boasting both a Facebook page and a Twitter account. TURN also sees the value in reaching out to its constituents via a number of electronic channels, including its website (http://turn.org/), where it provides links to its blog, email alerts, Twitter, Facebook, flickr and YouTube. In fact, on September 28, 2011, the CPUC tweeted, "We look forward to talking to and hearing from other PUCs and PSCs about the challenges and uses of **social media** in our work"(emphasis added). In addition, the JD Power 2011 national customer satisfaction survey of gas utility customers showed that customers communicating through social media channels have the highest satisfaction.[54]

Expanding e-communications may also generate additional cost savings as additional My Account users sign up for paperless billing. SCG has nearly 264,000 My Account users who have elected to continue to receive the paper bill. In focus groups, customers who don't

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[52] Smith, Aaron. Pew Research Center, "Technology Trends Among People of Color." Accessed September 10, 2011. http://www.pewinternet.org/Commentary/2010/September/Technology-Trends-Among-People-of-Color.aspx.
[53] http://www.ca.gov/CaSearch/Agencies.aspx
[54] See Attachment E, JD Power & Associates, 2011 Gas Utility Residential Customer Satisfaction Study, p. 52.

regularly log into their email accounts have told us that the number one reason they have elected to continue receiving paper bills by traditional mail is that the paper bill serves as a reminder to them to go online and pay. They also stated that if they could receive a reminder through a text message, they would be much more likely to forego receiving a paper bill. At today's postage rate, combined with billing form and envelope savings, ratepayers save $4.20 per customer that elects to forego paper bills. If SCG were to convert just 25% of these particular My Account customers to paperless due to the availability of text messages, ratepayers would realize a savings of over $1.1 million[55] over the four-year GRC cycle. These savings would increase as postage rates increase.

Contrary to DRA's Assertion, External Research Cannot Replace SCG's Research

DRA recommends disallowing $128,000 for additional targeted customer research because it claims there is sufficient external research available, in addition to SCG's Voice of the Residential Customer study from 2010, without SCG conducting additional primary research. DRA suggests that a single study conducted in 2010 will meet SCG's research needs through the rate case period.[56] Broad research conducted in 2010 will not provide the timely feedback on new information or services. DRA is correct that SCG makes extensive use of industry research to understand trends and general market changes. SCG's own updated research is necessary because it focuses on SCG's customers and SCG's service offerings and communications. As emphasized in my direct testimony, this research tool provides targeted research with quick timely feedback on particular offerings and clarity of information, "to match the pace of technological change."[57] The results of this research would benefit the ratepayers by assuring

[55] $1.1 million = 264,000 accounts x 25% x $4.20 (annual paperless cost savings/customer) x 4 years.
[56] Exhibit DRA-49, p. 6, lines 10 – 11.
[57] Exhibit SCG-09, p. 21, lines 8 – 12.

SCG allocates resources correctly when deciding on the proper electronic technologies to target and allows SCG to measure the effectiveness of electronic communication tools.

DRA Mischaracterizes SCG's Past Performance in Multi-lingual Safety Communications

DRA recommends disallowing $468,000 for expanded multilingual safety communications. In a novel approach, DRA theorizes that SCG is deficient ("behind the curve") in its current multilingual communications, and therefore recommends not funding additional communications. DRA states, "Placing this cost on SCG will give the utility an incentive to ensure future safety communications reach all of its customers." [58] DRA cites no Commission requirement for a certain level of multilingual communication, and no authority to require SCG shareholders to bear this expense according to the criteria discussed.

However, even if there were such authority, which SCG submits there is not, the premise of DRA's unusual recommendation is wrong. SCG is not "behind the curve" in multi-lingual safety messaging. Almost half of SCG's 2010 communications budget was spent targeting ethnic groups. SCG is, and has been, responsible in reaching out to its diverse customer base, including ethnic groups. In December 2008, SCG conducted a major pipeline safety awareness survey with a total of 1,244 mail responses. The survey results showed approximately an 18% recall rate (i.e., percentage of respondents who recalled seeing or hearing SCG's pipeline safety information). Based on the survey result, SCG believes there is an opportunity to raise this recall rate by doubling the length of the pipeline safety campaign from 3 weeks to 6 weeks. This fall, SCG has launched a comprehensive, integrated mass media campaign in English, Spanish, Chinese, Vietnamese and Korean focusing around the importance of being able to identify and detect natural gas leaks by using one's senses.

[58] Exhibit DRA-49, p.7, lines 4 – 5.

In summary, SCG does not believe this recommendation is consistent with standard practices relating to CPUC penalties, and DRA has provided no evidence to support its claims regarding SCG's safety messaging performance.

CforAT Recommendations Are Consistent with SCG's Request for Enhanced Website Usability and Accessibility, and Expanding Electronic Communication Channels

CforAT is generally pleased with the progress SCG has made in web accessibility and in compliance with 2008 MOU agreement between Disability Rights Advocates, San Diego Gas and Electric, and SCG. CforAT further identifies several areas that will require additional improvements and ongoing efforts to maximize information accessibility for customers with disabilities and seniors. These improvements include:[59]

- Creating web accessibility standards, and ensuring adequate training on web accessibility standards are provided to web teams.
- Ongoing monitoring of accessibility standards.
- Ensuring PDF documents posted on website are accessible PDFs or available in alternate formats.
- Provide emergency communications through appropriate communication channels including Text Telephone ("TTY"), text message, and e-mail.
- Ensure written communications are accessible to customers with disabilities and seniors.

SCG generally concurs with CforAT's positions, which focuses on communications and outreach to the disabled community. As discussed in my direct testimony, [60] SCG requested $631,000 in incremental funding in support of enhanced website usability and accessibility. As discussed above, SCG's request also include expanding e-communication channels including text

[59] Testimony of Dmitri Belser, Center for Accessible Technology, pp. 6-12.
[60] Exhibit SCG-09, pp. GAW-16 to GAW-21.

messaging, which will be used for emergency notification, as well as general outreach communications. Furthermore, SCG is currently conducting a complete website PDF inventory and review in an effort to ensure PDFs are available in an accessible format. As stated in CforAT witness Belser testimony, [61] the settlement agreement from R.10-02-005 already addressed the specific written communications requirements for customers with disabilities, and these should not be re-addressed in this proceeding.

The Joint Parties Recommendation of a Nuclear Safety Campaign Makes No Sense for a Gas-Only Utility

The Joint Parties recommend "major nuclear community education and, if necessary, a community preparation campaign."[62] The campaign is not defined further and no cost forecast is provided, but the Joint Parties recommend funding of the as yet undefined campaign come 80% from ratepayers, 20% from shareholders.[63] Because they reference Sempra generally it is not clear whether they mean to include SCG in the recommendation. In case Joint Parties are suggesting that SCG should also provide a nuclear education communication campaign, SCG strongly opposes this recommendation. As a gas utility that does not operate nuclear power plants, with no nuclear power plants within its service territory, it makes no sense for SCG to do communications about nuclear safety, any more than it would make sense for an electric only utility to provide communication about gas pipeline safety. Any such communications that the Commission deems appropriate and necessary should be carried out by the electric utilities that operate the plants: Southern California Edison in the case of the San Onofre plant. SCG would have to rely on these utilities to obtain the information, and communication on nuclear safety by

[61] Testimony of Dmitri Belser, Center for Accessible Technology, p. 10.
[62] Exhibit JP-1, Witnesses Canty, Bautista, and Corralejo, at p. 22.
[63] Ibid.

SCG would create customer confusion, and could lead to customers seeking information from the wrong utility in the event of an emergency.

C. Customer Assistance Rebuttal – DRA and TURN

SCG requested TY2012 funding for the Customer Assistance organization of $5.199 million, reflecting an incremental increase of $3.475 million over the 5-year average of $1.724 million. The incremental costs are to support increased activities in NGAT and Medical Baseline, and a new program for bill education to customers with limited English proficiency per R.10-02-005. DRA concurs with the 5 year-average base forecast and supports the incremental funding request for NGAT, agrees with the bill education program funding request but recommends the California Alternate Rates for Energy program ("CARE") as the funding source, and also recommends disallowing the Medical Baseline program incremental request of $550,000. TURN recommends using 2010 recorded costs of $3.227 million as the basis for the TY2012 forecast for Customer Assistance without further adjustment. DRA also recommends eliminating SCG's NGAT memorandum account. Below is the detailed discussion of why DRA's and TURN's recommendations should be rejected and SCG's proposed funding request of $5.199 million should be accepted in its entirety.

Clarification Regarding NGAT Memorandum and Bill Education Program Funding Source

DRA recommends eliminating the existing NGAT memorandum account, which was established pursuant to D.10-12-002 to track unanticipated and unforeseen NGAT costs associated with implementing D.08-11-031 and the "implied authorized level of NGAT funding" from D.08-07-046 (2008 GRC decision). The NGAT funding authorized under D.08-07-046 was specific to the GRC cycle 2008 -2011, and therefore not applicable to NGAT costs in this proceeding. However, per D.10-12-002, recorded costs in the NGAT memorandum account will be disposed of in the next GRC or other appropriate proceeding.

Separately, DRA agrees with SCG's TY2012 forecast for the bill education program, but recommends that the costs for this activity to be funded from CARE program. SCG would like to clarify that the bill education program, referred to as the TEAM Collaborative program for energy utilities in my direct testimony at GAW-30 and GAW-31, is now called Community Help and Awareness with Natural Gas and Electricity Services ("CHANGES") program. In 2009, the CPUC Customer Services and Information Division ("CSID") approached the utilities about conducting a pilot program that was similar to the TEAM Collaborative for telecommunications companies, with the objective of providing "Outreach, Education and Need and Dispute Resolution services" to Limited English Proficient ("LEP") energy consumers in the State of California. Services will be targeted to LEP consumers; however English speaking consumers seeking services will not be turned away. These services will be handled by the existing TEAM network of Community-Based Organizations ("CBOs"). In November 2010, the Commission issued Resolution CSID-004 authorizing a 1-year pilot program and directing that CSID to determine both any continuation of this program and its source of funding, if continued. SCG believes the GRC is the most appropriate cost recovery mechanism as the program is intended to support a wider range of customer segments, rather than just CARE customers.

DRA is Making Incomplete and Unsupported Recommendation Regarding SCG's Medical Baseline Incremental Outreach Request

DRA disagrees with SCG's incremental funding request for additional outreach efforts to increase the recruitment and enrollment of qualifying Medical Baseline ("MBL") Program customers. DRA proposes that CBOs should be used instead of the addition of 2 FTEs and incremental non-labor costs of $400,000 to perform the activities described in my testimony Exhibit SCG-09, pages 28 – 29. DRA states, "[t]here is no need for SCG to incur additional expenditures when CBOs, not SCG, have the best on-the-ground networks to reach out to MBL customers."[64]

First and foremost, DRA's proposal is incomplete because DRA makes no provision for incremental funding to support increased the level of services from CBOs. Although CBOs are generally not-for-profit organizations, they too require adequate funding to maintain and expand their operations and services to the communities. Since CBOs are not currently used for Medical Baseline recruitment and enrollment, DRA's proposal of utilizing existing CBO networks would require additional funding to support their efforts. The incremental funding would be required to enable CBOs to conduct adequate training and provide sufficient staffing for the new activities.

Second, DRA's assertion that CBOs have "the best on-the-ground networks to reach out to MBL customers"[65] is completely unfounded, without facts or analysis. DRA ignores one unique characteristic of the medical baseline customer segment, and that is they require medical certification as a qualification criteria. For many customers, the need to get a doctor's signature on the form becomes a significant hurdle to completing the MBL application. This is the primary reason why SCG proposes to engage health care professionals (doctors, nurses, pharmacists, patient advocates, et al.) both in the general outreach activities and as a direct channel to enroll eligible Medical Baseline customers. SCG believes this is the most effective approach to increase enrollment of medical baseline customers, as health care professionals have the direct link to potential medical baseline customer segments. The health care professionals

[64] Exhibit DRA-49, p. 8, lines 22 – 23.
[65] Exhibit DRA-49, p. 8, line 23.

can provide eligible patients with the application and sign the form during the office visit, removing this hurdle to program participation.

TURN's Recommendation to Use 2010 Recorded Costs as the Basis for the Customer Assistance TY 2012 Forecast is Inappropriate and Inadequate.

TURN recommends using unadjusted 2010 recorded costs of $3.227 million rather than the 5-year average forecast, which DRA supports. TURN does not address SCG's incremental requests to fund additional Medical Baseline outreach and CHANGES, implicitly disallowing these costs without explanation. Furthermore, TURN's proposal underfunds 2012 NGAT activity, which would restrict SCG's ability to provide required services to its special needs customers and fulfill the Commission's mandates for low income programs.

SCG believes it is inappropriate to use 2010 recorded cost information, which was not available to SCG at the time of its GRC submission, as a proxy for test year funding in isolated instances for several reasons. Firstly, selective updating ignores the fact that while certain costs may be lower than expected, other costs may be higher than expected and there is no provision to reflect those instances. Secondly, the Rate Case Plan is very prescriptive regarding the types of information that may be updated in a general rate case and the proposal by TURN contravenes this intent. Thirdly, the revenue requirement associated with this department must reflect the level of activity that SCG expects to occur over the 2012-2015 period. The proposal by TURN would base the revenue requirement for an amount that is not consistent with funding needs as described in my direct and rebuttal testimonies.

While TURN agrees with SCG NGAT unit forecasted activities in 2012, TURN makes the incorrect assumption that Customer Assistance's 2010 recorded costs are representative of TY2012 costs. As TURN indicated, the single largest component to this increase to Customer Assistance expenses is $2.8 million in incremental funding to cover a higher volume of NGAT tests. SCG forecasted 120,083 as the average annual number of NGAT units to be completed in TY2012, as detailed in the table GAW-Rebuttal-6 below.

Table GAW-Rebuttal-6
SCG's Calculation of TY2012 NGAT Units

a	b	c	d	e	f
2009	2010	2011	Total 2009-2011 Cycle (a+b+c)	Annual Average (d/3)	TY2012 Unit Forecast with 90% Requiring NGAT (e x 90%)
110,864*	143,540*	145,874*	400,278	133,426	120,083

* Annual Number of Homes Treated Under Low Income Energy Efficiency Program Per ordering paragraph #48 of D.08-11-031 (SCG-9-WP, page 95)

In response to data request TURN-SCG-DR-34 question 8,[66] SCG showed that the 2010 recorded NGAT costs of $2.715 million (in 2009 constant $) reflect 97,033 NGAT units. This is clearly much lower than the 143,540 NGAT units TURN implied that SCG completed in 2010, and which was used as the basis for its flawed funding justification. Furthermore, TURN's recommendation completely ignores other costs incurred within the Customer Assistance organization for activities in Medical Baseline, the Gas Assistance Fund, and Low Income Home Energy Assistance Programs in support of low income and special needs customer segments. SCG has fully addressed DRA's concerns and recommendations for Medical Baseline and CHANGES program above.

D. Nonresidential Markets Rebuttal – DRA and TURN

SCG requested TY2012 funding for Nonresidential Markets of $8.502 million, reflecting an incremental increase of $480,000 over 5-year average $8.022 million. DRA supports SCG on the five-year average base forecast of $8.022 million, but recommends disallowance of the

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[66] See Attachment F.

incremental request of $480,000 for CHP and air quality support activities. DRA believes the requested activities are beyond the scope of services reasonably funded by ratepayers. TURN recommends using 2010 recorded costs of $7.738 million with no adjustments as the TY2012 forecasts, a disallowance of $764,000. As discussed in detail below, DRA's assertion that CHP and air quality support activities are beyond the scope of services reasonably funded by ratepayers is misguided, and TURN's recommendation is inappropriate, is based on an incorrect comparison between 2010 recorded costs and TY2012 forecasts, and fails to account for increasing activity levels.

DRA is Confused Regarding the Nature of CHP Assistance and Air Quality Support Activities SCG is Requesting.

DRA states that, "SCG's requests are beyond the scope of services reasonably funded by ratepayers," and further states that the state government has the responsibility to enact policies to help encourage the installation of more CHP systems.[67] DRA appears to be mixing up the creation of policies with their implementation. As discussed in my direct testimony exhibit SCG-09, pages GAW-39 to GAW-40, CHP polices and goals have already been created. On a statewide level this includes CARB's AB32 scoping plan. For the CPUC, the ongoing Rulemaking 08-06-024, where Decisions[68] have already been issued by the CPUC, concerns the greater use of combined heat and power pursuant to AB1613. Also, CPUC's most recent decision (D.11-09-015) for the Self-Generation Incentive Program reaffirms the Commission's commitment to expand the CHP program in support of GHG reduction goals. SCG's proposal is

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[67] Exhibit DRA-49, p. 9, line 22 to p. 10, line 7.
[68] D.09-12-042, and subsequent related decisions include: D.10-04-055, D.10-12-055, D.11-01-010 and D.11-04-033.

to address customers' increasing demand for assistance as they explore CHP implementation options, which is precisely due to market adoption in response to state and CPUC policies.

The policies of the state of California and the CPUC are the driving force behind SCG's need for this added funding, which is supplemental to SCG's current activities in assisting customers on CHP. As described in my direct testimony, meeting California's 2020 greenhouse gas reduction goals will require the installation of 4,000 MW of new CHP capacity. This is a highly ambitious goal. The CEC has identified that the greatest future technical potential for new CHP is for smaller CHP systems less than 5 MW[69]. As noted in my direct testimony, CEC's projections of new CHP capacity expected by 2014 translates to 20 – 100 new CHP systems, with the largest number under 5 MW in size. In order to achieve 20 – 100 systems installed will require 4 – 5 times that number of evaluations.[70]

Irrespective of project size, any potential CHP system requires a complex site analysis to determine feasibility and economics, considering the correct sizing, thermal and electric load characteristics, rates and incentives, physical requirements, and gas and electric connections. SCG currently provides this technical assistance, and the instant GRC funding request only seeks to expand the level of service to meet the demand. SCG is uniquely positioned to provide this technical assistance because it is vendor neutral, has strong knowledge of gas and electric rates and incentives, and a strong knowledge of thermal loads. SCG also administers the Self Generation Incentive Program ("SGIP"). SCG believes that without its technical assistance, in all likelihood this segment would continue to grow well below its potential and making it very difficult for the 2020 CHP goal to be met.

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[69] See Exhibit SCG-09, p. GAW-39 starting at line 19.
[70] See Exhibit SCG-09, p. GAW-40 starting at line 4.

Similarly, DRA also recommends disallowing SCG's requested incremental funding for Air Quality Support in anticipation of greater demand on SCG to address many new and more stringent air quality regulations, including AB32. DRA assumes this funding would be used to support air quality compliance for large commercial and industrial ("C&I") customers, but the activities are not limited to C&I customers, and are not focused on compliance. These changes in air quality regulations have cross-cutting impact on all classes of SCG customers including residential customers. For example, changes in SCAQMD Rule 1111 will directly impact natural gas fired residential central furnaces. SCG, via its Environmental Affairs staff, plays a key communications link between regulating agencies and SCG customers. This communication channel is highly efficient and effective. Without SCG's Environmental Affairs staff's involvement in this communication chain, customers must do their research efforts individually to get updates and be informed about new changes in air quality regulations. This is an extremely burdensome effort, especially for smaller customers as they lack resources and technical knowledge for such efforts. This burden on smaller nonresidential and residential customers will only increase as new and more stringent air quality regulations are proposed and implemented.

TURN's Recommendation is Inaccurate, Inappropriate and Not Accounting for Increased Activities

SCG offers three clarifying points before addressing TURN's proposal for TY 2012 funding.

First, in the prepared testimony of Jeffrey A. Nahigian on behalf of TURN, Table 4 on page 14 shows TURN's recommended amount for Capacity Products of $889,000. On page 15 of the same testimony, TURN recommends using 2010 recorded costs for Capacity Products and

Planning. The 2010 recorded costs for this workgroup is $1.030 million, not $889,000. SCG notes that TURN subsequently corrected this error in errata testimony served on October 12, 2011.

Second, as mentioned on page 13 and discussed at footnote 4, TURN claims that SCG made a typographical error that overstates the TY2012 forecast by $450,000. TURN is wrong in this conclusion. SCG's direct testimony, tables and workpapers all in fact correctly show the total TY2012 forecast of $34.806 million, and the Nonresidential Markets TY2012 forecast of $8.502 million. Perhaps TURN did not review the testimony at pages GAW-38 through GAW-41, which explains and justifies the incremental request of $480,000 over the 5-year average of $8.022 million, of which $30,000 is reflected as an increase in 2010, and the remaining $450,000 is forecasted to occur in 2012, as shown in the workpapers, Exhibit SCG-09-WP, page 179.

Third, TURN mischaracterized that SCG's 2010 forecast represents a 13% increase over 2009 recorded, while in fact it is only an increase of 9.7% as shown in Table GAW-Rebuttal-7 below.

Table GAW-Rebuttal-7
Nonresidential Markets
(Thousands of 2009 dollars)

	2009 Recorded	2010 Forecast	Difference 2010 Forecast vs. 2009 Recorded	2010 Recorded	Difference 2010 Forecast vs. 2010 Recorded
NonResidential Markets	$7,337	$8,052	9.7%	$7,738	4.1%

SCG requests the Commission deny TURN's request to substitute 2010 recorded expenses for TY 2012 funding. As discussed above in Section II.C. regarding Customer Assistance costs, SCG objects to the selective use of more recent information than available at the time of preparing its forecasts. Firstly, selective updating ignores the fact that while certain costs may be lower than expected, other costs may be higher than expected and there is no provision to reflect those instances. This was noted earlier with respect to the Communications, Research and e-Services department, which experienced 2010 recorded costs at a level 12.4% higher than the 2010 GRC forecast. Secondly, the Rate Case Plan is very prescriptive regarding the types of information that may be updated in a general rate case and the proposal by TURN contravenes this intent. Thirdly, the revenue requirement associated with this department must reflect the level of activity that SCG expects to occur over the 2012-2015 period. TURN's recommendation of using 2010 recorded costs completely ignores the expected higher activity levels for both CHP and air quality support in TY2012 as discussed in detail above in my rebuttal to DRA for these areas.

III. REBUTTAL TO DRA FOR SHARED SERVICES AND SUSTAINABLE SOCAL PROGRAM

SCG requested total incurred costs of $6.392 million for shared service activities within the Customer Services and Information functional area. This reflects $1.728 million incremental incurred costs to support expanded activities for the NGV program, Capacity Products and Planning, Biofuel Market Development and Environmental Affairs. On a booked expense basis (which reflects the inflows and outflows of shared service billings), SCG forecasted TY2012 expenses of $6.730 million. DRA recommends $4.974 million for shared services, or a reduction of $1.756 million from SCG's TY2012 forecast. However, as demonstrated in table GAW-Rebuttal-8 below, DRA's recommended amount of $4.974 million is inconsistent with individual disallowances as discussed in Exhibit DRA-49, page 14 – page 16. Based on DRA's detailed discussion and recommendations for the NGV program, Capacity Products and Planning, Biofuel Market Development, and Environmental Affairs activities, SCG estimates DRA's recommended booked expense amount should be correctly stated as $5.606 million. As discussed in detail below, the SCG's level of requested funding for proposed activities is reasonable and should be adopted in its entirety.

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Table GAW-Rebuttal-8
Shared Services – SCG vs. DRA Summary
(Thousands of 2009 dollars)

	Base Forecasts	Change from Base	TY 2012 Forecasts	% Allocation to SDG&E	DRA Proposal
Incurred Costs (100% Level)					
A. NGV Program	1,396	860	2,256	N/A	1,550
B. Capacity Products & Planning	2,279	488	2,767	N/A	2,579
C. BioFuel Market Development	257	120	377	N/A	257
D. Environmental Affairs	216	260	476	N/A	346
E. Emerging Technology	123	0	123	N/A	123
F. VP Customer Solutions	393	0	393	N/A	393
Incurred Costs Sub-Total	4,664	2,059	6,392	N/A	5,248
Allocations Out To SDG&E					
A. NGV Program	144	52	227	10.3%	160
B. Capacity Products & Planning	137	42	167	6.0%	155
C. BioFuel Market Development	13	-63	13	5.0%	13
D. Environmental Affairs	81	123	181	37.7%	130
E. Emerging Technology	34	-22	35	28.0%	34
F. VP Customer Solutions	185	14	184	47.0%	185
Allocations Out To SDG&E SubTotal	594	146	807		677
Retained by SCG					
A. NGV Program	1,252	808	2,028	N/A	1,390
B. Capacity Products & Planning	2,142	745	2,600	N/A	2,424
C. BioFuel Market Development	244	183	364	N/A	244
D. Environmental Affairs	135	144	295	N/A	216
E. Emerging Technology	89	24	88	N/A	89
F. VP Customer Solutions	208	9	209	N/A	208
SCG Retained Sub-Total	4,070	1,913	5,584	N/A	4,571
Billed-In From SDG&E	846	300	1,146	N/A	1,035
SCG Book Expense		$2,213	$6,730	N/A	$5,606

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In addition, my direct testimony sponsors the business cases for three capital projects[71]: Sustainable SoCal Program, California Producer, and Next Generation Envoy.

DRA does not oppose the California Producer and Next Generation Envoy projects, but recommends denying SCG's proposal for the Sustainable SoCal program, $11.272 million, based on significant misunderstanding of the program proposal, its benefits and costs, the environmental attributes of biogas and biomethane, and the regulatory environment. It is also important to note that no other interveners oppose SCG's proposal for the Sustainable SoCal program. SCG provides additional clarifications to address DRA's issues below and recommends the Commission's approval of this request to reaffirm the Commission's commitment to the development of biogas and renewable energy resources in California.

A. Natural Gas Vehicle ("NGV") Program

SCG requested total incurred costs of $2.256 million for the SCG natural gas vehicle ("NGV") customer information, education and training program, reflecting $0.860 million incremental funding over 2009 base year expenses of $1.396 million to support a dramatic increase in the NGV customer segment. DRA recommends funding be set at $1.55 million for the NGV program. DRA's recommendation is based on incorrect assumptions and ignores evidence provided in direct testimony. DRA's recommendation should be rejected and SCG's request should be adopted.

DRA's NGV Program Recommendation Conveniently Ignores Evidence

DRA ignores evidence and incorrectly states, "SCG's assumptions about the continued growth of the NGV market are questionable," and, "SCG did not offer any analysis on whether NGV would continue its growth as fleet customers and others begin to consider electric

[71] See Exhibit SCG-09, p. GAW 89 – GAW96.

vehicles".[72] On the contrary, SCG testimony provided significant evidence of long-term historical and future NGV market growth both from utility records and state agency forecasts. As stated in GAW-72, lines 3-7, "Over the past ten years, the use of natural gas as a vehicle fuel by customers that operate NGVs and/or NGV refueling stations has grown at an average annual rate of 14.8% in the combined service territories of SCG and SDG&E," and "the CEC/CARB AB 1007 Natural Gas Scenario forecasted statewide use of natural gas as vehicle fuel at growth rates ranging from 6.4% to 14.6% through 2022." In addition, in response to data request DRA-SCG-006-MZX question 14, [73] SCG provided annual meter counts from 2005 to 2009, which clearly showed a 21% historical growth in meter counts for the period. SCG further discussed historical growth based on SCG's records in my direct testimony, Exhibit SCG-09, page GAW-73, lines 5-8, "Over the past ten years…the number of customers on the G-NGV tariff increased by 112%. However, from 1995 to 2008 when the NGV program was refundable, NGV Program authorized funding remained static at $1.55 million." The incremental SCG funding request relies upon the "moderate" future forecast[74] of NGV market growth provided by CEC/CARB, which is actually lower than the historical rate of growth.

DRA incorrectly states, "[N]early half of SCG's proposed increase would be for market outreach activities. If the NGV program has strong growth as claimed, there would not be a need for market outreach because potential customers' vendors and suppliers would seek out SCG for information without outreach efforts."[75] Although the SCG incremental funding request includes funding for developing and delivering outreach materials to new customers, the majority of the

[72] Exhibit DRA-49, p. 15, lines 4 -5.
[73] See Attachment G.
[74] Exhibit SCG-09, p. 72, lines 9 – 13.
[75] Exhibit DRA-49, p. 14, lines 20 – 23.

SCG incremental request includes funding for existing account management and support, and customer training courses (focused on safety).

In D.05-05-010, the Commission recognized the importance and necessity of Low Emission Vehicle ("LEV") customer information, education and training programs: "While called discretionary programs, the utilities do not carry these programs out at their own discretion. In fact, the utilities play a unique and vital role by engaging in these programs. For example, growing volumes of customer calls to utilities on such LEV matters as tariff explanation, hook up concerns and fueling safety issues are to be expected and will increase as the adoption of these technologies increases."[76]

The incremental funding request includes four FTEs for account management and staff support in order to maintain standard levels of services to NGV customers, given the strong growth already experienced. A detailed description of NGV account management work activities is provided in my direct testimony on pages GAW-70 and GAW-71. NGV staff will provide analysis and support to account management personnel and customers related to all NGV-specific information. For example, NGV staff will gather information on all applicable federal, state, and local sources of funding (i.e., applicable incentive programs and tax credits), package the information in an understandable manner, and provide to the account management team to distribute to existing and potential customers. Funding information changes constantly and without a high level of support from the utility, many customers will not be aware of potential funding opportunities that could impact decisions to purchase and operate NGVs and NGV refueling stations. Absent the incremental funding, SCG will be unable to provide all of the NGV customer information, education and training services provided to customers in the past and will severely reduce NGV customer outreach and promotion activities. This directly

[76] D. 05-05-010, p.8.

conflicts with legislative requirements in Public Utilities Code 740.3 that the "Commission…implement policies to promote the development of equipment and infrastructure needed to facilitate the use of electric power and natural gas to fuel low-emission vehicles."

A Successful NGV Program Delivers Ratepayer Benefits

With respect to utility alternate fuel vehicle programs, Public Utilities Code 740.3 (c) states, "The commission's policies…shall ensure that the costs and expenses of those programs are not passed through to electric or gas ratepayers unless the commission finds and determines that those programs are in the ratepayers' interest." Importantly, Public Utilities Code 740.8 defines "ratepayers' interest" as, "…direct benefits that are specific to ratepayers in the form of safer, more reliable, or less costly gas or electrical service, **consistent with Section 451, and activities that benefit ratepayers and that promote energy efficiency, reduction of health and environmental impacts from air pollution, and greenhouse gas emissions related to electricity and natural gas production and use, and increased use of alternative fuels.**" (emphasis added).

The definition of ratepayer benefits for utility alternate fuel vehicle programs established by the legislature must be incorporated into any evaluation of SCG's incremental request. SCG's incremental request will allow SCG to offer needed NGV customer information, education and training services to a dramatically growing set of customers operating NGVs and NGV refueling stations. As stated in my direct testimony at GAW-72, lines 14-21, "Federal and state legislation and regulation continue to emphasize the use of alternate transportation fuels, including natural gas, to improve air quality and reduce GHG emissions. An illustrative example is the CARB Low Carbon Fuel Standard, which mandates a 10% reduction in the carbon intensity of transportation fuels used in California by 2020. Natural gas, when used as a motor vehicle fuel, has a carbon intensity that is 28% less than traditional petroleum based fuels, such as gasoline and diesel." The operation of additional NGVs will reduce air pollution and greenhouse gas emissions while increasing the use of alternative fuels within the state, clearly meeting the ratepayer benefits definition established by the Legislature.

B. Capacity Products and Planning

SCG requested total incurred costs of $2.767 million for the four shared services cost centers within the Capacity Products and Planning organization, reflecting $488,000 of incremental funding over the 5-year average of $2.279 million. DRA agrees with SCG on the 5-year average base forecast and supports the $300,000 incremental costs related to three FTEs, but recommends the disallowance of $188,000 for incremental costs associated with upgrading storage valuation software. DRA does not believe there is a sufficient business case to justify this software upgrade.

SCG would like to clarify that the incremental funding associated with storage valuation software upgrade is $168,000, not $188,000 as DRA stated. The remaining $20,000 is associated with non-labor employee expenses for the three additional FTE's that DRA does not oppose.[77] The $20,000 incremental employee expenses should be approved as part of the approval of the three FTE positions described above, and not be lumped-in with incremental costs to upgrade storage valuation software as described by the DRA report. As discussed below, SCG believes there is sufficient business case to justify the storage valuation software upgrade, therefore, SCG's TY2012 forecast for this organization should be adopted.

Upgrading Storage Valuation Software is Essential for Ratepayers to Capture the Potential Value of the Off-System Storage Sales

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[77] See Direct Testimony Exhibit SCG-09, p. GAW-80, lines 6 to 10.

As discussed in my direct testimony, Exhibit SCG-09, page GAW-35, line 6, SCG's Storage Products and Hub Services generated a $38.9 million benefit to ratepayers in 2009. Storage products and services are clearly profitable and beneficial to ratepayers, and this incremental software upgrade represents a *de minimis* cost relative to large potential benefit to ratepayers.

The issuance of D.11-03-029 in March 2011 expanded Off-System Delivery ("OSD") service and is expected to increase the opportunity for sale of storage services to upstream customers served from the interstate pipeline systems that interconnect with the SCG system. Effective pricing of storage services sold to OSD customers will maximize revenues from incremental OSD and Storage product sales. In anticipation of increased sale opportunities, SCG plans to purchase software licenses for two users instead of the one license currently used by the company. Furthermore, the current storage valuation software does not have the capability to consider factors relevant to pricing services to upstream customers located in different markets and different time zones. As described in my direct testimony, the analytic capability of SCG's storage valuation software will be enhanced to consider these factors when pricing storage services to OSD customers.

C. Biofuel Market Development

SCG requested total incurred costs of $377,000 for the Biofuel Market Development activity, reflecting $120,000 incremental funding over the 2009 base year expense of $257,000.[78] DRA recommends no incremental funding for this activity because it believes the production of biogas, like the production of natural gas, should be left to the natural evolution of competitive markets, and should not be subsidized by ratepayers. DRA also objects to SCG's funding request for the Sustainable SoCal program for similar reasons.

[78] Note SCG did not use the 5 year average forecast for Biofuel Market Development because there was not sufficient historical data available.

SCG believes California is lagging behind the Commission's and the state's goals in tapping into this renewable resource. As discussed in my direct testimony, Exhibit SCG-09, starting on page GAW-89, SCG can leverage its long experience in natural gas processing technology and its distribution infrastructure to help and promote the biogas market development in California. See the rebuttal to DRA's recommendation regarding the Sustainable SoCal Program in Section III.H below for a detailed discussion of the Commission's and the state's policies to encourage the development of biogas resources in California. SCG's proposed funding request for Biofuel Market Development supports these policies and should be adopted.

D. Environmental Affairs

SCG requested total incurred costs of $476,000 for the Environmental Affairs activity, reflecting $260,000 incremental funding over the 5-year average of $216,000. DRA supports SCG on the 5-year average base forecast but recommends reducing the incremental request by $130,000 because SCG does not provide justification for why large customers should have their compliance activities subsidized by ratepayers. DRA mischaracterized the nature of air quality support, and DRA's recommendation is arbitrary and should be rejected. SCG's proposed funding request of $476,000 incurred costs should be accepted in its entirety.

DRA's Recommendation is Arbitrary Without Support or Analysis, and DRA Mischaracterized the Nature of the Air Quality Support Program

DRA stated, "SCG does not provide justification for why large customers should have their compliance activities subsidized by ratepayers."[79] DRA provides no supporting analysis to indicate why 50% of SCG's incremental request is more reasonable than the full request. As previously explained in the discussion of Nonresidential expenses in Section II above, Environmental Affairs staff act as liaisons to governmental agencies that regulate air quality and

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[79] Exhibit DRA 49, p. 16, lines 11 –12.

provide an important communications link between regulating agencies and all SCG customer classes, including residential customers, and this communication channel is highly efficient and effective. As air quality regulators in SCG's territory strive to meet very challenging health-based ambient air quality standards, the "low hanging" air pollution emission reductions are nearly exhausted, and more and more equipment at small and minority owned businesses, and residential appliances such as furnaces and water heaters are targeted for new regulation. Yet, there are few if any advocates for small or minority owned businesses during the regulatory process to develop new standards for natural gas equipment and appliances.

The SCG air quality program managers are able to utilize the insight and knowledge gained from interaction with the numerous industry and customer organizations to assist the regional air districts when they develop new regulations affecting small and minority businesses. SCG will also be able to advocate that agency-provided incentives are made available to all affected sources, especially small and minority owned businesses. In addition, the relationships SCG has with the communities we serve provide valuable opportunities to receive information on customer needs, and distribute information on upcoming regulations which can have negative financial impacts on small and minority business.

Large nonresidential customers' compliance activities are not the sole focus of SCG's Environmental Affairs staff, as asserted by DRA. As described in my direct testimony page GAW-83, Environmental Affairs staff assists nonresidential customers with air quality permitting and compliance through a fee-based service called the Permit Works program. In short, large nonresidential customers are no more subsidized for air quality support than small nonresidential or residential customers for that matter. More importantly, DRA fails to recognize that assisting large nonresidential customers with air quality issues will ensure continuation of business operations and natural gas equipment uses in California which in turn translates to maintaining low gas transportation rate for all customers.

E. Sustainable SoCal Program

SCG requests incremental funding of $11.272 million in capital for the Sustainable SoCal Program, with associated O&M expenses of $606,000. Specifically, the proposed funding levels are sponsored by SCG witness Stanford.[80] DRA recommends disallowing the Sustainable SoCal program on a conceptual level, but does not oppose the specific funding requested. No other interveners oppose this program. DRA also misunderstands key elements of the Sustainable SoCal proposal, as described in detail below. In fact, SCG's proposal supports Commission and state policies, is well-timed to advance a valuable resource for the region and for SCG's customers, and its cost is in the range of other renewable technologies. SCG proposes Sustainable SoCal to take on a leadership role to advance development of biomethane in California, which will reduce GHG emissions both from biogas sources in California and from the natural gas that biomethane would displace.

The Sustainable SoCal Program consists of installing four biogas conditioning systems at small to mid size wastewater treatment facilities ("WWTF") for the purpose of capturing raw biogas and converting it to pipeline quality biogas (biomethane). This project will advance the market development efforts associated with producing pipeline quality biogas from raw biogas (also called digester gas) generated from small to mid size WWTF's. SCG's primary role in this project will be to design, install, own and operate biogas conditioning systems at biogas producer sites having raw gas volumes in the range of 200 to 600 standard cubic foot per minute (scfm).

SCG proposes to lease a small space (approximately 2,500 square feet) from a participating host facility to house the required gas conditioning system and pipeline

[80] Exhibit SCG-05 R, pp. RKS 24 – RKS 26 for O&M, and pp. RKS 83 – RKS 84 for capital.

interconnection facilities onsite. Leasing space from a host site is consistent with other Investor Owned Utility ("IOU") renewable energy programs such as SDG&E's *Sustainable Communities Program*[81] and SCE's *Solar Rooftop Program*[82]. SCG will have a long term contract (10 – 15 years) to take the raw biogas from the host facility at a minimal cost (leasing cost), and process it through the biogas conditioning system.

DRA states the following in explaining their objections to Sustainable SoCal:

> "[N]atural gas is a deregulated commodity, and SCG provides no rationale why customers of its regulated transportation service must subsidize unregulated production activities."(DRA-49 p. 17, at 8-11)

> "[G]as production is a deregulated market and SCG does not produce gas. SCG never explains why it is necessary for natural gas transportation customers to subsidize unregulated gas producers."(DRA-49, p. 18, at 8-11)

> "Another problem with the Sustainable SoCal project is that it inequitably places 100% of the costs onto SCG's ratepayers. While SCG claims that this is because ratepayers will allegedly receive 100% of the biogas benefits, this claim ignores the inherent subsidy to the participating wastewater treatment facilities (WWTF). As SCG notes, 'Currently a small to mid size wastewater treatment plant can flare their biogas to the atmosphere with minimal cost to the facility owner/operator.'32 Despite this regulatory oversight, flaring methane contributes to GHG emissions and the WWTF's and their ratepayers should take some responsibility for reducing GHG emission by converting their methane into biomethane. Without a cost sharing role for the WWTF's SCG's proposal effectively cross-subsidizes wastewater ratepayers by gas ratepayers. In order to make Sustainable SoCal equitable, SCG should have negotiated cost sharing contracts with the WWTF's." (DRA-49 p. 18-19, at 24 – 30 and 1 – 6)

DRA's several misconceptions reflected in these statements are corrected below.

Sustainable Socal Hosts Would Not be Natural Gas Production Companies

DRA's references to "unregulated production activities," and "unregulated gas producers" suggests that DRA may believe that Sustainable SoCal hosts would be natural gas production companies.

[81] http://www.sdge.com/documents/environment/ces_factsheet.pdf.
[82] http://www.sce.com/solarleadership/solar-rooftop-program/default.htm?from=solarrooftop.

To be clear, small to medium size wastewater treatment plants are the "biogas producers" that Sustainable SoCal is targeting. As described in my direct testimony, "many wastewater treatment plants have digesters as part of their treatment process, and produce biogas (also called digester gas) as a byproduct."[83]

Sustainable SoCal Would Not Subsidize the Hosts

Sustainable SoCal would not subsidize the host facilities, as explained in SCG's response to DRA's data request DRA-SCG-006 –MZX:[84]

> 18. Why does SCG believe it is reasonable to subsidize these producers through contributions from other ratepayers? (See GAW-88-89)
>
> SoCalGas Response:
>
> SoCalGas does not propose "to subsidize these producers through contributions from other ratepayers." SoCalGas proposes that all ratepayers contribute to the cost of facilities to be owned by SoCalGas which will produce biomethane at a cost higher than the cost of natural gas that would otherwise be used in company facilities and fleet vehicles. The estimated cost of the biomethane at GAW-90 reflects the cost of the biogas conditioning process and equipment, which would be owned by SoCalGas and paid by ratepayers.
>
> The benefit to the producers, small to midsize wastewater treatment plants that are funded by local taxpayers, would be a reasonable lease payment for the space required for the biogas conditioning equipment, and in certain situations, potential cost savings from avoided air quality permit fees from reduced flaring of raw biogas. The lease payment should not be construed as a subsidy to the biogas producers, but rather fair compensation for the right to use its asset.

The wastewater treatment facilities would receive no compensation for the biogas. They would only be compensated for the use of space to house the conditioning equipment. As noted in the data response, it is possible that certain facilities could face lower costs for air quality permit fees related to emissions of criteria pollutants such as nitrogen oxides ("NOx") or sulfur oxides ("SOx") regulated under the Clean Air Act. However, Southern California air quality

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[83] Exhibit SCG-09, page 90, lines 11 – 12 .
[84] See Attachment G.

regulations require flaring of methane for safety reasons, and most wastewater treatment facilities can flare their biogas at minimal cost. SCG explained this in its response to data request DRA-SCG-044-MZX:[85]

> 4. Does SCG plan on asking the sites to contribute to the costs of the BioEnergy units?
>
> SoCalGas Response:
>
> No, SoCalGas does not plan on asking the sites to contribute to the costs of the biogas conditioning systems. Currently, a small to mid size wastewater treatment plant can flare their biogas to the atmosphere with minimal cost to the facility owner/operator. The Sustainable SoCal Program proposes that all of the benefits of the biomethane and GHG credits go to SoCalGas ratepayers, and thus believes it unlikely the WWTP would contribute to the cost of the biogas conditioning system.

Therefore, SCG expects that Sustainable SoCal would be essentially a wash for the hosts in terms of financial impact, imposing no new costs on the hosts but providing no significant benefits either. The inherent subsidy that DRA identifies is in the air quality regulations, not in Sustainable SoCal, because air quality regulators charge minimal or no fees to wastewater treatment plants for their emissions of criteria pollutants. The hosts would be facilities where the costs of biogas conditioning make it uneconomic for the facility to install, and where air quality restrictions have limited the ability to make other productive use of raw biogas. The air quality regulations that create the incentive to burn biogas in a flare rather than use the energy to produce electricity or heat appear counterproductive, but to the extent they push the development of conditioning and pipeline injection, regional air quality will improve and the availability of renewable energy will expand.

[85] See Attachment H.

Biogas and Biomethane Do Not Create GHG Emissions

DRA has confused references to criteria pollutant emissions with GHG emissions. Both biogas and biomethane are carbon neutral fuels. As noted above, wastewater treatment facilities are not allowed to emit methane to atmosphere, it must be combusted. Like biomass, the CO_2 produced from combusting biogas and biomethane does not add to GHG because it is part of the active carbon cycle. "When natural materials are burned for energy, they are called biofuels. As these are within the carbon cycle, and burning them simply carries on the cycle, they are carbon neutral." [86] To reiterate SCG's direct testimony, the current practice of flaring biogas does not create GHG emissions. However, eliminating the majority of the flaring reduces criteria pollutant emissions, and displacing natural gas usage using the biomethane from Sustainable SoCal, reduces GHG emissions.

SCG Compared Sustainable SoCal's Biomethane Price to a Range of Renewable Energy Sources

DRA states,"[w]hen DRA asked SCG whether it had compared the biomethane production cost to the production costs of other renewable sources, SCG stated that it had not."[87] This is not correct. SCG did compare the cost of biomethane to other renewable technologies including solar thermal, wind, geothermal and biomass, as stated in the first sentence of the data response, not included in DRA's quote: "The cost to produce biomethane for the Sustainable SoCal Program can also be compared to other renewable technologies such as solar thermal, PV track, geothermal, wind and biomass."[88] And SCG provided DRA with comparative premiums for other technologies, both in a summary table and in the source report which was attached to

[86] http://www.eejitsguides.com/environment/carbon-cycle.html.
[87] Exhibit DRA-49, p. 17, lines 21 – 23.
[88] See Attachment I, data request DRA-SCG-023-MZX response to Question 5.

the data response. The summary table is copied below in Table GAW-Rebuttal-9.[89] SCG does continue to believe that PV thin film is the most relevant comparison, because it is relatively early in its market development, and the Commission and Legislature have made policy commitments to support PV thin film, including small scale installations through the California Solar Initiative. In judging whether the proposed biomethane premium is reasonable, PV is a logical comparison point. Finally note that biomethane does not have subsidies, but is compared to PV with subsidies in the form of tax credits (PTC refers to production tax credits and ITC to investment tax credits).

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[89] SCG recently discovered that the column headings for the table included in data response DRA-SCG-023- MZX were inadvertently dropped in the final data response. However, the data response specifically described that the table came from Figure 1-1 in the RETI Phase 2B report, which was also attached to the data response. A corrected data response has been provided to DRA.

Table GAW-Rebuttal-9
Comparison of Sustainable SoCal Renewable Premium vs. Other Renewable Energy Options

		Cost of Generation ($/MWh)											
	Sustainable SoCal Program	Solar Thermal Low	Solar Thermal High	PV Track Low	PV Track High	PV Thin Film Low	PV Thin Film High	Geothermal Low	Geothermal High	Wind Low	Wind High	Biomass Low	Biomass High
Total Production Cost	$14.31	$195	$226	$135	$214	$138	$206	$65	$140	$60	$116	$100	$151
Comparable Energy Cost*	$10.00	$98.19	$98.19	$98.19	$98.19	$98.19	$98.19	$98.19	$98.19	$98.19	$98.19	$98.19	$98.19
Renewable Premium (includes PTC's and ITC's)**	43%	99%	130%	37%	118%	41%	110%	-34%	43%	-39%	18%	2%	54%
Renewable Premium (excludes PTC of $21//MWh)	Not Applicable	Variable						-12%	64%	-18%	40%	23%	75%

* Comparable Energy Cost includes cost of GHG
Natural Gas - average of 2010 California Gas Report and 2009 MPR Model between 2012-2026
Electricity Cost - 2009 Market Price Reference Model assumes "Project Start Date" of 2012, "Contract Term" of 15 Years
2009 MPR Model Link: http://www.cpuc.ca.gov/NR/rdonlyres/1406475F-6F1E-4A3F-85AF-6EA53419BA01/0/2009_MPR_Model.xls

** The Sustainable SoCal figure of 43% does not include any incentives. PTC and ITC only apply to renewable generation projects.

As indicated by the letters of support attached in Attachment J – Attachment L to this testimony, Sustainable SoCal addresses a key barrier to development of bioenergy resources, which the state of California and state and federal environmental regulators have identified as a priority resource to be developed. Biogas and biomethane are renewable energy resources, many of which currently cost more than conventional energy sources. In my direct testimony and responses to data requests, I have made clear that the premium that ratepayers would pay for biomethane produced by Sustainable SoCal is generally in the lower range of comparable renewable technologies. PV thin film is the most appropriate comparison, however, Sustainable SoCal compares favorably with other solar technologies, and is within the range of the premiums for other renewable technologies, e.g. wind, geothermal and biomass.[90] A key goal of Sustainable SoCal is to help reduce the costs of smaller scale biogas conditioning.

The State of California Has Made Policy Commitments to Bioenergy

There is not an explicit mandate requiring SCG to procure biomethane, however, biogas and biomethane comply with the state's Renewable Portfolio Standard for electric utilities,[91] the California Air Resources Board's Cap and Trade Program[92] and the Low Carbon Fuel Standard ("LCFS")[93] to reduce greenhouse gas emissions. The 2011 Bioenergy Action Plan states, "The economics of biomass development should be enhanced through a series of state incentives that recognize the benefits of biomass."[94] Biomethane offers key advantages as a renewable energy resource, particularly because it can be stored, can be transported in existing natural gas pipelines, can be combined with natural gas, and can be used to produce electricity, or burned directly in place of or blended with natural gas, including for transportation fuel. Sustainable SoCal is similar to other Commission clean energy policies, where all or the majority of ratepayers pay to support technologies like solar water heating, energy efficiency, and distributed generation, with the ultimate goal of accelerating adoption and reducing costs for these technologies.

Sustainable SoCal is Not Premature

DRA states, "the lack of bioenergy market development shows that absent a legislative/regulatory mandate and prior to the implementation of a cap and trade program,

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[90] RETI Phase 2B report, attached to SCG data response DRA-23 Q5.
[91] RPS Eligibility Guidebook, Section II.B.2 (Page 18), http://www.energy.ca.gov/2010publications/CEC-300-2010-007/CEC-300-2010-007-CMF.PDF.
[92] Proposed Modifications to section 95852, Emissions Categories Used to Calculate Compliance Obligations, Page 2, http://www.arb.ca.gov/regact/2010/capandtrade10/res1042attB.pdf.
[93] CARB Staff Report: Initial Statement of Reasons Proposed Regulation to Implement the Low Carbon Fuel Standard, Volume 1 March 5, 2009, http://www.arb.ca.gov/regact/2009/lcfs09/lcfsisor1.pdf.
[94] 2011 Bioenergy Action Plan http://www.energy.ca.gov/2011publications/CEC-300-2011-001/CEC-300-2011-001-CTF.PDF, p. 3.

biogas projects will not be cost-effective and are premature. SCG should not be allowed to spend $11 million in ratepayer dollars for a project that is premature." (DRA-49, page 19, at lines 13 - 16.) As described above, there are numerous examples of Commission and state policies supporting biomethane, including the Renewable Portfolio Standard, Executive Order S-06-06, the Bioenergy Action Plan, and the Low Carbon Fuel Standard. Most recently, the SGIP decision adopted in September 2011, states "using renewable biogas and developing California's biogas industry remain important objectives as California transitions to a low-carbon future."[95] SCG proposes Sustainable SoCal precisely because the bioenergy market has not developed, and there are multiple barriers to be addressed to make this resource available.

SCG is well positioned to undertake this effort at a cost lower than other entities, because SCG already manages a large gas portfolio and can avoid the transaction costs of selling the initially small quantities of biomethane. The biomethane used to fuel SCG's natural gas vehicle fleet would have value immediately under the LCFS, and SCG has the option of retaining those LCFS credits without expiration for use within the LCFS market.

DRA also inaccurately states, "It also serves as a new technology/RD&D type project that should be conducted by government or competitive private firms"[96]. Biogas conditioning equipment is not considered a "new technology," as it is commercially available and is widely in operation in various countries throughout the world. According to a report published by IEU Bioenergy, as of 2009, there are approximately 100 biogas upgrading plants in the world, with the majority of them being in Europe.[97]

For the reasons identified above, SCG's requested funding for the Sustainable SoCal program should be approved.

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[95] D. 11-09-015, p. 22.
[96] Exhibit DRA-49, p. 17.
[97] http://biogasmax.info/media/iea_2biogas_upgrading_tech__025919000_1434_30032010.pdf, p. 4.

IV. SUMMARY AND CONCLUSION

SCG's TY2012 request for Customer Services and Information is based on sound forecasting methodology, aligns with Commission and state policy, and customer needs and preferences. DRA recommends total O&M disallowances of $16.722 million, and a capital disallowance of $11.272 million for the Sustainable SoCal program. TURN recommends O&M disallowances for nonshared services of $11.355 million, no specific disallowances for shared services and no changes to capital projects. DRA and TURN's recommended disallowances would limit SCG's ability to communicate effectively to our customers, to support the programs serving low income and disabled customers, and to advance Commission and state policies particularly on RD&D, CHP, alternative transportation and renewable energy.

For the majority of Customer Services and Information costs, DRA does not oppose SCG's forecasting methodology: 5 year average plus incremental costs. DRA also does not oppose many of SCG's forecast incremental cost amounts, but opposes utilities doing certain activities. Unlike DRA, TURN selectively applies 2010 actual costs as its preferred forecasting methodology, and makes no comment on most of SCG's incremental cost forecasts. TURN has generally applied 2010 actuals where costs are the same or less than 2009 actuals. SCG believes the 5-year average should be the preferred forecasting methodology because it captures a range of business conditions, and averages out anomalies in a particular operating year. Consistent use of a single year's data for the forecast would exaggerate the significance of that particular year's conditions, but at least it would capture an aggregate picture of the organization. Inconsistent application of 2010 actual data as TURN has done is not aimed to produce a reasonable overall forecast, but is seeking an outcome, and is updating data outside the strict requirements of the rate case plan. SCG's rebuttal to the specific recommendations of DRA and TURN are summarized below.

Non-Shared Services Recommendations

DRA's proposal to eliminate SCG's RD&D program, and TURN's recommendation to reduce SCG's request from $13 million to $5.558 million are contrary to Commission and state policy that explicitly supports utility-based RD&D, specifically P.U. Code section 740.1. SCG has provided extensive evidence to demonstrate that its RD&D program produces significant benefits, is prudently managed, does not put pressure on gas rates, and has helped to commercialize technologies that reduce costs and produce environmental benefits.

TURN's proposal to eliminate the 60/40 sharing mechanism for RD&D is based on an incorrect interpretation of the purpose of the mechanism and of its results to date. The purpose of the mechanism is to encourage investment in promising technologies for the ultimate purpose of advancing those technologies. The sharing mechanism has been litigated and adopted in several prior Commission proceedings, including the 2004 and 2008 rate cases. SCG is currently evaluating investments aligned with the focus of SCG's successful RD&D program. The purpose and performance of the mechanism have not changed since the prior approvals, and the mechanism should be continued again.

DRA and TURN's proposal to disallow $1.257 of SCG's incremental funding request for Customer Communications, Research and e-Services would restrict SCG's ability to communicate through mainstream channels widely adopted and preferred by our customers, and would unreasonably limit the effectiveness of our communications. TURN notably does not propose using 2010 actual costs for this area. DRA's unsupported assertion that mobile devices and social media are limited to affluent tech savvy customers is contradicted by multiple surveys of the U.S. and California residents, CforAT's testimony, and DRA, TURN and the Commission's own extensive use of social media. DRA's recommendation to require SCG's shareholders to pay for expanded multilingual safety communications based on an undocumented and unsubstantiated deficiency in current safety communications has no basis in fact and no support in Commission policy, and should be disregarded. If the Joint Parties intended their recommendation of a nuclear safety education and community preparation campaign to include SCG, it should be rejected, and any such requirement should apply to the appropriate entities.

DRA and TURN's recommendations for Customer Assistance would limit SCG's ability to serve its special needs and low income customers. DRA recommends disallowing SCG's incremental costs to expand outreach for Medical Baseline eligible customers, and to support the costs of low English proficiency customer outreach (CHANGES/TEAM), for a total reduction of $675,000. TURN proposes not to fund any incremental costs, including underfunding NGAT costs, for a total disallowance of $1.972 million. TURN would limit NGAT funding to the actual 2010 costs, though TURN does not challenge SCG's forecast of 2012 NGAT activity, which is approximately 124% of 2010 NGAT activity. DRA and TURN's recommendations should be rejected and SCG's forecast be adopted to ensure that SCG can meet the Commission's requirements and goals for special needs and low income customers.

DRA's proposal to disallow $0.480 million of incremental costs for nonresidential markets, and TURN's proposal to limit nonresidential markets to 2010 actual costs, a reduction of $0.764 million, would hamper the Commission's goals to expand adoption of CHP and deprive SCG customers of needed support and advocacy in air quality.

Shared Services Recommendations

DRA's recommended disallowance for shared services of $1.124 million[98] (in booked expenses) should be rejected. DRA ignores evidence provided in direct testimony and discovery supporting the requests, Commission policies supporting the activities, and the potential value to

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[98] See Table GAW-Rebuttal-1.

ratepayers of enhancing the value of storage assets, expanding NGV markets, and supporting the continued operation of existing customers, all of which help to reduce rates.

Sustainable SoCal Recommendation

DRA's recommendation to disallow the SCG's proposal for the Sustainable SoCal program, disallowing the $11.272 million in capital costs and $606,000 in O&M costs sponsored by SCG witness Stanford, would not result in "producers" producing and conditioning biogas at their own cost, as DRA expects. Sustainable SoCal is intended to expand commercial use of small scale systems for biogas conditioning, with the goal of seeing costs drop for these systems as scale increases and manufacturers focus on reducing the cost of smaller scale equipment. Sustainable SoCal supports Commission and state policies, is well-timed to advance a valuable resource for the region and for SCG's customers, and has cost that is in the range of other renewable technologies.

SCG received the highest customer satisfaction rating for gas utilities in the Western Region from JD Powers and Associates in 2011, with customers' satisfaction with their average monthly bills as a major driver. The same survey also indicated that customers value additional communication, and that they have confidence in SCG's management's control of business costs. SCG's Customer Services and Information request is strongly aligned with customer preferences and Commission policies and priorities, and continues SCG's track record of reasonable rates and cost management. SCG's request for Customer Services and Information should be approved in full.

This concludes my prepared rebuttal testimony.

ATTACHMENT A

Application A.06-12-010, DRA Exhibit 32 (Excerpts)

Applications	:	A.06-12-009 / 010
Exhibit Number	:	DRA-32
Commissioner	:	Bohn
ALJ	:	Long
Witness	:	Chia

DIVISION OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION

Report on the Results of Operations for San Diego Gas & Electric Company Southern California Gas Company General Rate Case

Test Year 2008

SoCalGas Customer Services Operations and Information
Operation & Maintenance Expenses
and Capital Expenditures

San Francisco, California
July 6, 2007

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TABLE OF CONTENTS (CONTINUED)

CHAPTER 2

SOUTHERN CALIFORNIA GAS COMPANY CUSTOMER SERVICES AND INFORMATION OPERATION AND MAINTENANCE EXPENSES AND RESEARCH, DEVELOPMENT & DEMONSTRATION EXPENSES

I. INTRODUCTION

This chapter presents DRA's analysis and recommendations regarding SCG's Non-Shared Services Customer Services and Information (CS&I) operation and maintenance (O&M) expenses and Research, Development and Demonstration (RD&D) expenses for Test Year 2008 (TY2008).

SCG sets forth its request for Non-Shared Services O&M expenses for CS&I and RD&D in Exhibit SCG-8. The CS&I O&M expenses are recorded in FERC Account 908 and the RD&D expenditures are recorded in FERC Account 930.2.

II. SUMMARY OF RECOMMENDATIONS

The following summarizes DRA's recommendations:

1. DRA is recommending $13.566 million for FERC Account 908, which is an adjustment of $7.007 million to SCG's request.
2. DRA is recommending $8.935 million for FERC Account 930.2, which is an adjustment of $1.202 million from SCG's request.
3. DRA recommends that SCG continue to track RD&D expenditures via a one-way balancing account which will then be trued-up at the end of the GRC cycle.
4. DRA recommends that language be added explicitly to specify that any over-collection of RD&D funds at the end of the GRC cycle be refunded to ratepayers.
5. DRA recommends that royalties and gains on sale of securities related to SCG's RD&D program be 100% credited to ratepayers instead of the current 50/50 split between ratepayers and shareholders.

6. DRA recommends that the RD&D funding that the Commission authorizes should not be subject to annual escalation as proposed by SCG.

Table 32-20 compares DRA's recommended with SCG's proposed estimates for Test Year (TY) 2008:

Table 32-20
Customer Services & Information Expenses
and RD&D Expenses
(in Thousands of 2005 Dollars)

Description (a)	DRA Recommended (b)	SCG Proposed[68] (c)	Amount SCG>DRA (d=c-b)	Percentage SCG>DRA (e=d/b)
908-Customer Assistance Expense	$13,566	$20,573	$7,007	51.7%
930.2-RD&D	$8,935	$10,137	$1,202	13.5%

III. DISCUSSION / ANALYSIS

A. FERC Account 908 – Customer Services and Outreach

FERC Account 908 records expenses related to services to customers, delivery of CPUC-approved programs and associated communications to ensure compliance with adopted CPUC rules and regulations and to enhance the safety, satisfaction, and efficient use of natural gas.

SCG is requesting $20.573 million for Customer Services and Information O&M expenses for FERC Account 908, which is a 74% increase over 2006 adjusted recorded O&M expenses. DRA recommends a forecast of $13.566 million for FERC Account 908, which is an adjustment of $7.007 million. DRA recommends using the two-year average of recorded adjusted expenses for CS&I O&M expenses. DRA's TY2008 recommendation provides SCG an increase of $1.735 million above 2006 recorded adjusted expenses. Table 32-21 presents SCG's adjusted recorded

[68] Exhibit SCG-8, page PEB-3

expenses for FERC Account 908 from 2003 to 2006 and SCG's and DRA's TY2008 forecasts.

Table 32-21
SCG's Recorded Adjusted Expenses
FERC Account 908[69]
Customer Service & Information
(in Thousands of 2005 Dollars)

2003	2004	2005	2006	SCG 2008 Forecast	DRA 2008 Recommended 2 year average
$16,143	$14,864	$15,300	$11,831	$20,573	$13,566

The requested incremental funding for customer services and information is significantly higher than the historical recorded adjusted expenses. DRA recommends using SCG's historical adjusted recorded expenses as a reasonable benchmark to forecast future expenses. Customer information expenses are discretionary and controllable. SCG has a duty to provide information to its customers, but it also has a duty to provide information at a reasonable cost. SCG has well established customer information programs for its residential customers, small business customers, and large commercial, industrial, and government customers.

DRA recommends that SCG's expenditures for customer service information should be maintained close to historical expenditures. SCG has not supported its TY2008 request to increase O&M expenses by 74% over the most recent adjusted recorded 2006 expenses. Table 32-21 shows the recorded adjusted expenses for customer service information have been decreasing from $16.143 million in 2003 to $11.831 million in 2006. DRA recommends using the two year average of recorded adjusted expenses of $13.566 million to forecast O&M expenses in FERC Account 908. DRA recommends an adjustment of $7.007 million to SCG's request.

[69] SoCalGas/SDG&E O&M Summary Files for DRA provides the adjusted recorded expense for 2001 to 2003 (email received on 8/1/06) and 2006 Adjusted Recorded Expense data (email received on 3/27/07)

B. FERC Account 930.2 – Research, Development, and Demonstration

SCG is requesting \$10.137 million to fund base margin Research, Development, and Demonstration (RD&D) programs and Natural Gas Vehicle (NGV) RD&D in FERC Account 930.2. DRA is recommending \$8.935 million for FERC Account 930.2 for SCG's base margin RD&D programs and NGV RD&D.[70] This is based on maintaining the current authorized RD&D level of \$8.835 million and an additional \$100,000 for project management costs of the NGV RD&D program.

SCG's current authorized RD&D programs are \$8 million for base margin RD&D programs and \$835,000 for NGV RD&D programs. In Decision 04-12-015, the Commission authorized base margin RD&D activities of \$8 million per year for the 2004 to 2007 cost of service cycle.[71] Decision 05-05-010 approved continued NGV RD&D funding at a level of \$935,000 per year with a sunset clause directing SCG to request NGV RD&D funding in its next GRC.[72] SCG proposes RD&D funding for TY2008 as set forth in Table 32-22:

Table 32-22
SCG's RD&D TY2008 Funding Proposal[73]
FERC Account 930.2
(in Thousands of 2005 Dollars)

RD&D Program Area	SCG Request
Operations	\$2,996
Customer-Focused Energy Efficiency	2,179
Advanced Power Generation	2,772
Natural Gas Vehicle	835
Project Management & Program Administration	1,355
Total	\$10,137

[70] Exhibit SCG-8, page PEB-83, Table SCG-NSS-PEB-18

[71] Exhibit SCG-8, page PEB-27, Table SCG-NSS-PEB-16

[72] Exhibit SCG-8, page PEB-74

[73] Exhibit SCG-8, page PEB-84, Table SCG-NSS-PEB-19

Exhibit DRA-32

SCG's proposed TY2008 RD&D funding request increase above recorded 2005 expenses is primarily due to the following: [74]

- An increase in funding of $380,000 for Operations RD&D that partially compensates for the loss of funding resources from the Gas Research Institute (GRI) pipeline surcharge program.
- An increase of $1 million for Commissioning and Automated Commissioning and Fault Detection, Diagnostics and Optimization (CFDDO), a new energy efficiency program area to reflect a growing emphasis on developing effective energy efficiency and demand response resources.
- An increase of $320,000 in project management and program administrative costs.

DRA finds that the current authorized level of funding for base margin RD&D programs and NGV RD&D programs at $8.935 million should be maintained. Although SCG based its base margin RD&D funding request by three program areas (Operations, Customer-Focused Energy Efficiency, and Advance Power Generation), use of the RD&D funding for the three categories in the RD&D program area are interchangeable. During this upcoming 5-year GRC cycle from 2008-2012, SCG will have access to $44.675 million to fund RD&D projects.[75] The following provides SCG's proposal and DRA's recommendation on the treatments of the RD&D balancing account and revenue treatment:

1. SCG proposes to continue to track RD&D expenditures via a one-way balancing account which will be trued-up at the end of the GRC cycle.[76] DRA recommends that language be added to specify that any over-

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[74] Exhibit SCG-8, page PEB-83

[75] Total RD&D funding at $8.935 million per year for 5 years

[76] Exhibit SCG-8, page PEB-84

collection of RD&D funds at the end of the GRC cycle be refunded to ratepayers.

2. SCG proposes to maintain the revenue treatment that royalties continue the sharing mechanism for net revenues (royalties, sale of securities) related to the RD&D program where they are split equally between ratepayers and shareholders.[77] DRA recommends that royalties and gains on sale of securities related to the RD&D program be 100% credited to ratepayers instead of the current 50/50 split between ratepayers and shareholders. Ratepayers are providing all of the funding for RD&D activities as well as the funding of the administration of the RD&D program. Prior to the implementation of SCG's Performance Base Ratemaking,[78] royalties attributable to RD&D projects were 100% credited to ratepayers. Also, SDG&E is proposing to restore an electric RD&D program in which SDG&E proposes to refund any royalties or gains on sale as a result of electric RD&D programs at 100% to ratepayers.[79] DRA recommends that royalties and gains on sale of securities related to SCG's RD&D program be 100% credited to ratepayers.
3. SCG proposes that expenditures be subject to annual escalation factors for labor and non-labor expenses (as discussed in Exhibit SCG-8). The current authorized RD&D funding is not subject to annual escalation factors for labor and non-labor expenses as adopted in the 2004 Cost of Service proceeding. The treatment of ratepayer funding of SCG's RD&D program can be different than O&M expenses which are subject to annual escalation factors for labor and non-labor expenses. RD&D expenditures are tracked through a one-way balancing account and there are no

[77] Exhibit SCG-8, page PEB-84

[78] Decision 97-07-054, page 89 and finding of fact #73 on page 96

[79] Exhibit SDG&E-10, page JSV-44

restrictions on the amount SCG chooses to use for the three categories in the RD&D program area. DRA recommends that the RD&D funding that the Commission authorizes should not be subject to escalation factors as proposed by SCG.

ATTACHMENT B

California Energy Commission Support Letter

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET, MS 39
SACRAMENTO, CA 95814-5512
www.energy.ca.gov

July 7, 2010

Mr. Hal Snyder
Vice President of Customer Solutions
Southern California Gas Company
555 West Fifth Street
Los Angeles, CA 90013-1040

Mr. James Avery
Senior Vice President Power Supply
San Diego Gas & Electric
8330 Century Park Court
San Diego, CA 92123-1530

Dear Messrs. Snyder and Avery:

The California Energy Commission supports Southern California Gas Company (SCG) and San Diego Gas and Electric's (SDG&E) proposed Research, Development, and Demonstration (RD&D) proposals for the 2012 General Rate Case filings. We believe your utility's RD&D program complements the State's Public Interest Energy Research (PIER) Program. Both of our organization's staffs have a long history of working closely on projects and programs that have ratepayer benefits.

Energy Commission staff reviewed the draft testimony from both utilities to determine the potential for collaboration and coordination with your proposed research program and the Public Interest Energy Research (PIER) program. Generally, both utilities propose research and development programs that is either unique to your service territory, or offers an extension of PIER programs. Several Sempra projects build on projects that PIER pioneered or incorporate PIER research and development into the utilities' operations. For example, both utilities propose natural gas initiatives for clean transportation that follow PIER's Natural Gas Vehicle Research Roadmap. In addition both utilities propose energy efficiency programs associated with appliances, commercial heating and cooling, cooking and industrial processes and builds off of existing PIER research or focuses on new areas not in PIER. Both utilities focus their renewable energy research and development on maximizing renewable energy resources within their service territory such as solar hot water and space conditioning systems.

SCG and SDG&E programs also focus on developing technologies related to utility operations and specific customer needs unique to its service territory. These programs emphasize near term research with results that can be used directly in utility rebate and emerging technologies programs. The Energy Commission's programs are driven by legislative and state energy priorities and policies and focus on public energy needs that have statewide economic, energy security and environmental benefits and impacts. Additionally, the PIER program funds earlier phases of project development when project proponents face difficulty in securing outside investors. As research products get closer to commercialization, PIER funding decreases and funding from venture capitalists and utilities assist in getting the products into the marketplace.

Combining the PIER and utilities' RD&D programs leverage the limited amount of research funds. This includes the many research centers throughout California, such as the California Lighting Technology Center, Western Cooling Efficiency Center, and the Center for the Built Environment. While these centers were established for the benefit of all Californians, utilities, in particular, have used these research centers to help them with technology issues specific to their service area and customers. Additionally, the results from these centers have fed directly into the utility emerging technologies programs.

Inclosing, we wish to recognize the active participation of SCG and SDG&E in advisory committees to ensure effective coordination of our agencies complementary research programs. We support the proposed SCG and SDG&E programs and believe that they fill an important role in meeting the state's energy policy goals that is not covered by PIER.

For any questions, please contact Kenneth Koyama at (916) 654-3838.

Sincerely,

Melissa Jones / for

MELISSA JONES
Executive Director

ATTACHMENT C

San Joaquin Valley Air Pollution Control District Support Letter

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

March 21, 2011

Mr. Hal Snyder
Vice President of Customer Solutions
Southern California Gas Company
555 West Fifth Street
Los Angeles, CA 90013-1040

RE: Letter of Support for Southern California Gas Company Research, Development & Demonstration proposal for the 2012 General Rate Case Filing

Dear Mr. Snyder:

The San Joaquin Valley Air Pollution Control District (District) supports Southern California Gas Company's (SCG) Research, Development, and Demonstration (RD&D) proposal for the 2012 General Rate Case filing. We believe SCG's RD&D program complements the District's Technology Advancement Program (TAP) and the need for new emissions reduction technology in the San Joaquin Valley.

The primary goal of the District's TAP is to advance technology and accelerate the deployment of innovative clean air technologies that can reduce criteria pollutant and precursor emissions as rapidly as practicable in the San Joaquin Valley. With the initiation of this program in 2010, the District is funding six research projects with that goal in mind, including solar thermal energy storage technology to enable zero-emission agricultural pumps in remote locations not served by electrical infrastructure; advanced selective catalytic reductions system for use on dairy biogas; and an innovative gas turbine system with high tolerance for low-quality gas, enabling the use of mildly treated landfill gas and biogas.

Given the District's direction and goals for the TAP, SCG's RD&D program, as presented to the California Public Utilities Commission (CPUC) in January 2010, provides potential opportunities for collaboration and coordination of activities between our organizations for the benefit of natural gas customers and improvement of air quality in the Valley.

Many of SCG's program benefits align with the District's very near-term goals, including focus on developing low-emission, energy efficient combustion systems; development and adoption of solar thermal and bioenergy systems; and the development of clean transportation systems for customers.

SCG Doc#260048 GAW-C1

The District acknowledges SCG's previous RD&D program contributions including funding assistance to help develop low-nitrogen oxide (NOx)-producing residential water heaters, advance commercial kitchen equipment, and improve efficiency of industrial boilers to greatly reduce both natural gas use and criteria pollutant emissions.

The District is also encouraged by SCG's efforts in the advancement of bioenergy. There is strong momentum behind increasing the production and use of digester biogas, both for the reduction of methane emissions and the potential as a renewable energy source. However, traditional methods for using the biogas from organic material for electricity generation results in very high NOx emissions, relative to a modern, combined-cycle, natural gas-fired power plant. SCG's technology advancement goals in its RD&D program with regard to upgrading digester gas for direct pipeline injection could have significant benefits to not only air quality in the Valley, but will help to improve the economics of Valley municipal and agricultural operations.

The Valley's natural gas customers are under increasing pressure to reduce both criteria pollutant, precursor, and greenhouse gas emissions in light of tightening federal air quality standards and state climate change legislation. Through past RD&D funding, SCG has worked closely with customers and the District to help fund research for new cleaner technologies and develop incentives for deployment of such technologies. Continued funding of SCG's RD&D programs will help to further research in many areas that are critical to meeting District and SCG goals.

For these reasons, the District supports SCG's proposal for continued RD&D funding as part of its 2012 General Rate Case filing.

Please call me at (559) 230-6100 if you have any questions or would like to discuss this further.

Sincerely,

Seyed Sadredin
Executive Director/Air Pollution Control Officer

ATTACHMENT D

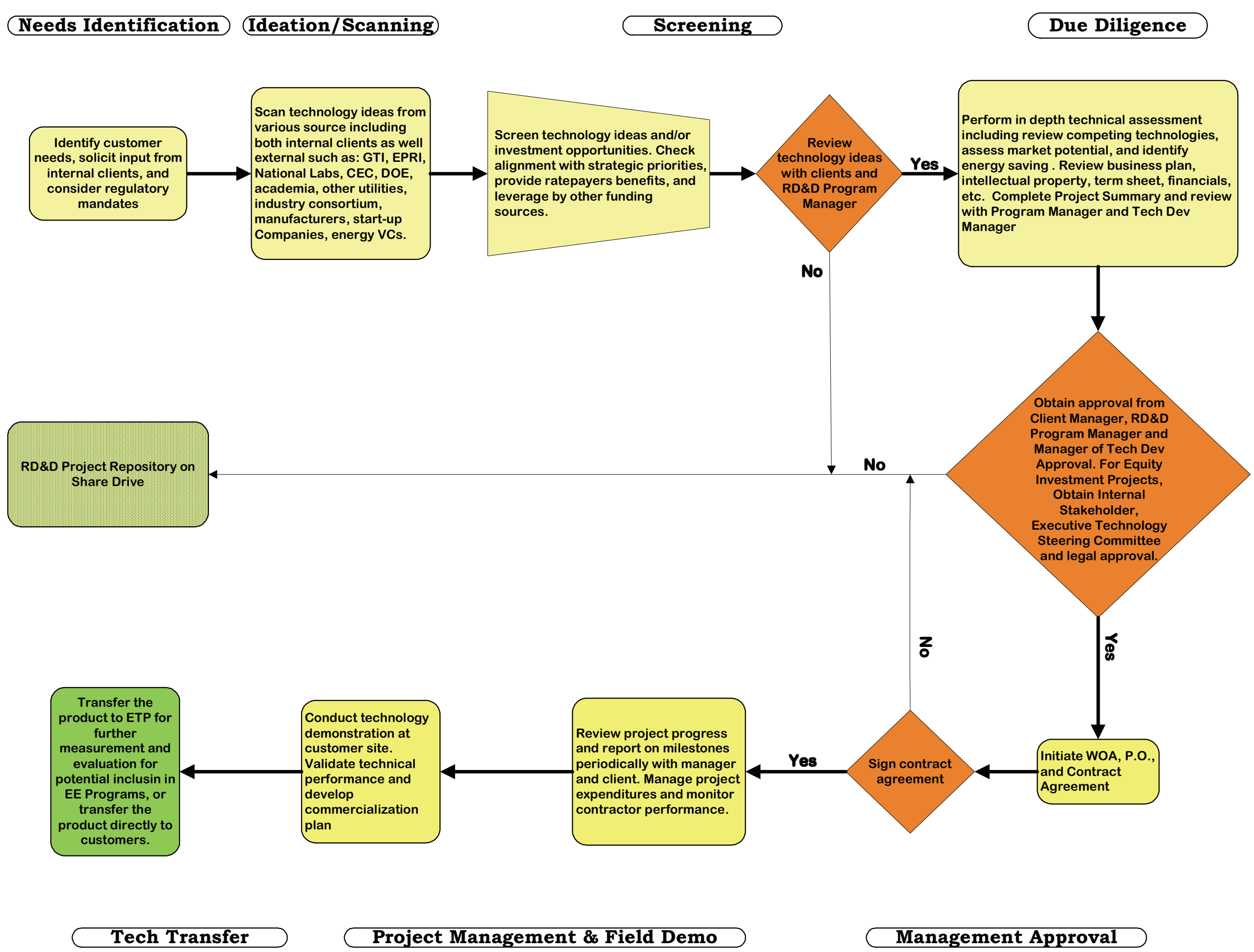
DRA-SCG-Informal-DR-06-MZX

2. Provide an example of the RD&D project selection process.

SoCalGas Response:

The flow chart below shows the steps that are generally used to identify and evaluate potential RD&D projects. The following description outlines how this process was applied to a recent project demonstrating an ultra-low-emission industrial boiler.

<u>Customer Applications RD&D Project Selection & Approval Process Flowchart</u>



Response to Question 2 (Continued)

Shown below is an example of how SoCalGas initiated the Super Boiler RD&D project:

- Need Identification: Through ongoing customer dialogue, market scanning (conferences, ongoing contact with vendors, outreach to various RD&D organizations and secondary research) and assessment of evolving environmental regulation, it was determined that no available boiler products would meet the South Coast Air Quality Management District's (SCAQMD) new requirements for boilers in rule 1146 reducing the NOx emissions to levels below 9 PPM effective 2010. There were no products in the market available to achieve this emission level.
- Ideation/Scanning: Researched new product plans through secondary research and consultation with manufacturers on various proposed technologies to meet single digit NOx level. Consulted with DOE, CEC and GTI on best proposed technology we should consider developing. Assessed interest from other gas utilities that have similar interest to fund low emissions boiler development. Secured funding commitments of $3 million from other gas utilities, DOE and the CEC.
- Screening: Reviewed proposed technologies with potential customers and identified the top prospect to pursue development. Compared this technology with other on-going projects being funded by SoCalGas. Reviewed DOE and CEC RD&D projects for this type of equipment to make sure to avoid duplication of efforts.
- Due Diligence: Performed in depth technical assessment on potential to achieve project targets. Reviewed competing technologies. Finalized project objectives, scope, timing and budget.
- Management Approval: Presented project details to Manager of RD&D for approval, then submitted to Director of Emerging Technologies for approval. Negotiated contract terms with GTI and finalized the Contract Agreement.
- Project Management: Managed the progress of the technology development through the various milestones. Periodically held project review meetings with GTI. Reviewed monthly reports and witnessed actual technology testing at GTI labs.
- Field Demonstration at Customer Site: Installed the new low NOx boiler and the energy efficient heat recovery system at customer's facility in Ontario, CA. Monitored the performance for six months and documented the results in a report that was shared with other customers.
- Technology Transfer: Held seminars at the Energy Resource Center to educate potential users and customers regarding the benefits of this technology and to accelerate market adoption. The outreach and educational efforts included printing and distribution of several brochures, posting information on the SoCalGas web site, and holding media event at the customer site.

4. Please provide information regarding the percentage of company customers that use twitter, if available.

SoCalGas Response:

In a survey to our Residential Customer Insight Panel, in September 2009, our panelists were asked which social networking sites they visit most often. Twelve percent (n=865) indicated that they use Twitter most often.

In December 2010, Pew Research Center released their first-ever survey to determine the percentage of the US adult internet population who use Twitter service specifically. The survey found that eight percent (8%) of the American adults who use the internet are Twitter users[1]. Previously, the Pew Research Center framed the survey question in a way to capture Twitter users and others who use similar functionality on other kind of internet services. This broader survey question found the following percentages of the American adult internet population who use Twitter or another service with similar functionality:

- Sept 2010 – 24%[2]
- Oct 2009 – 19%[3]
- December 2008 – 11%[4]

Also, Facebook's user base provides another relevant data point to illustrate the mass adoption and usage of social media in the US. According to iStrategy Labs, their January 2011 update[5] shows a 42.4% growth rate in the Facebook's US user base from 103 million to 146.8 million in 2010.

---

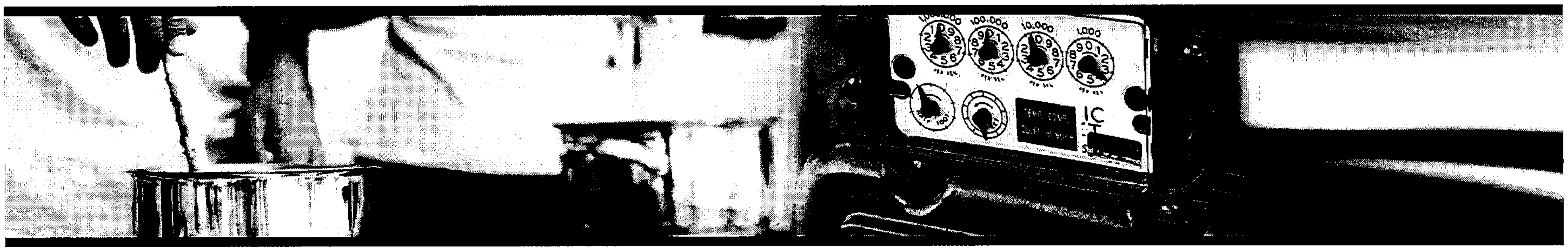
[1] http://pewinternet.org/Reports/2010/Twitter-Update-2010/Findings/Overview.aspx
[2] See footnote 1
[3] "Portrait of a Twitter user: Status update demographics", Pew Internet and American Life, http://www.pewinternet.org/Infographics/Twitter-demographics--Fall-2009.aspx, Oct. 21, 2009.
[4] http://www.pewinternet.org/Reports/2009/Twitter-and-status-updating.aspx
[5] http://www.istrategylabs.com/2011/01/2011-facebook-demographics-and-statistics-including-federal-employees-and-gays-in-the-military/

ATTACHMENT E

J.D. Power and Associates, 2011 Gas Utility Residential Customer Satisfaction Study

J.D. POWER AND ASSOCIATES®

2011 Gas Utility Residential Customer Satisfaction Study℠



Industry Overview and Results Webcast

September 20, 2011

John Hazen
Senior Director
Energy Practice

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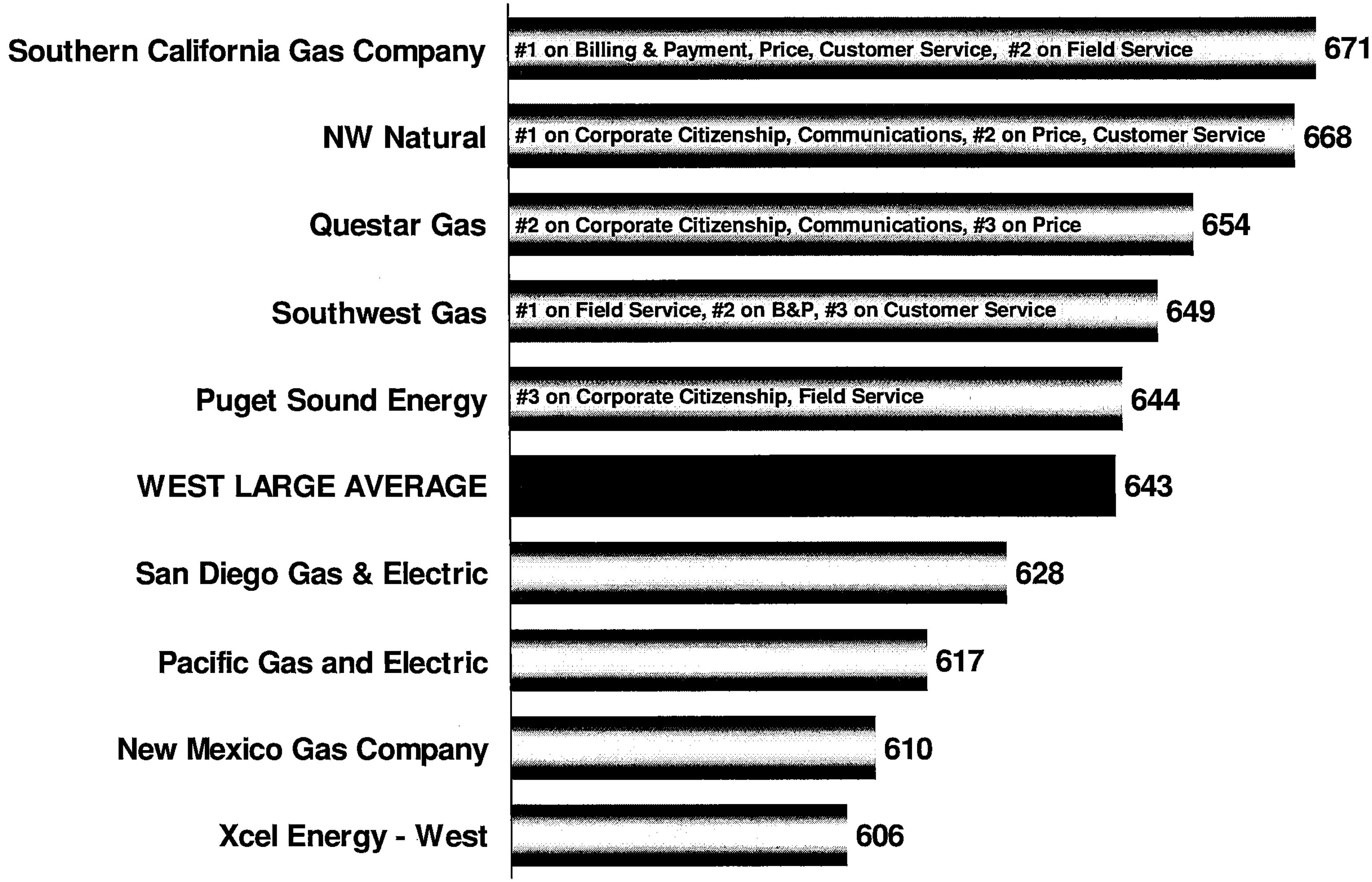
SCG Doc#260048

GAW-E1

West Large Segment



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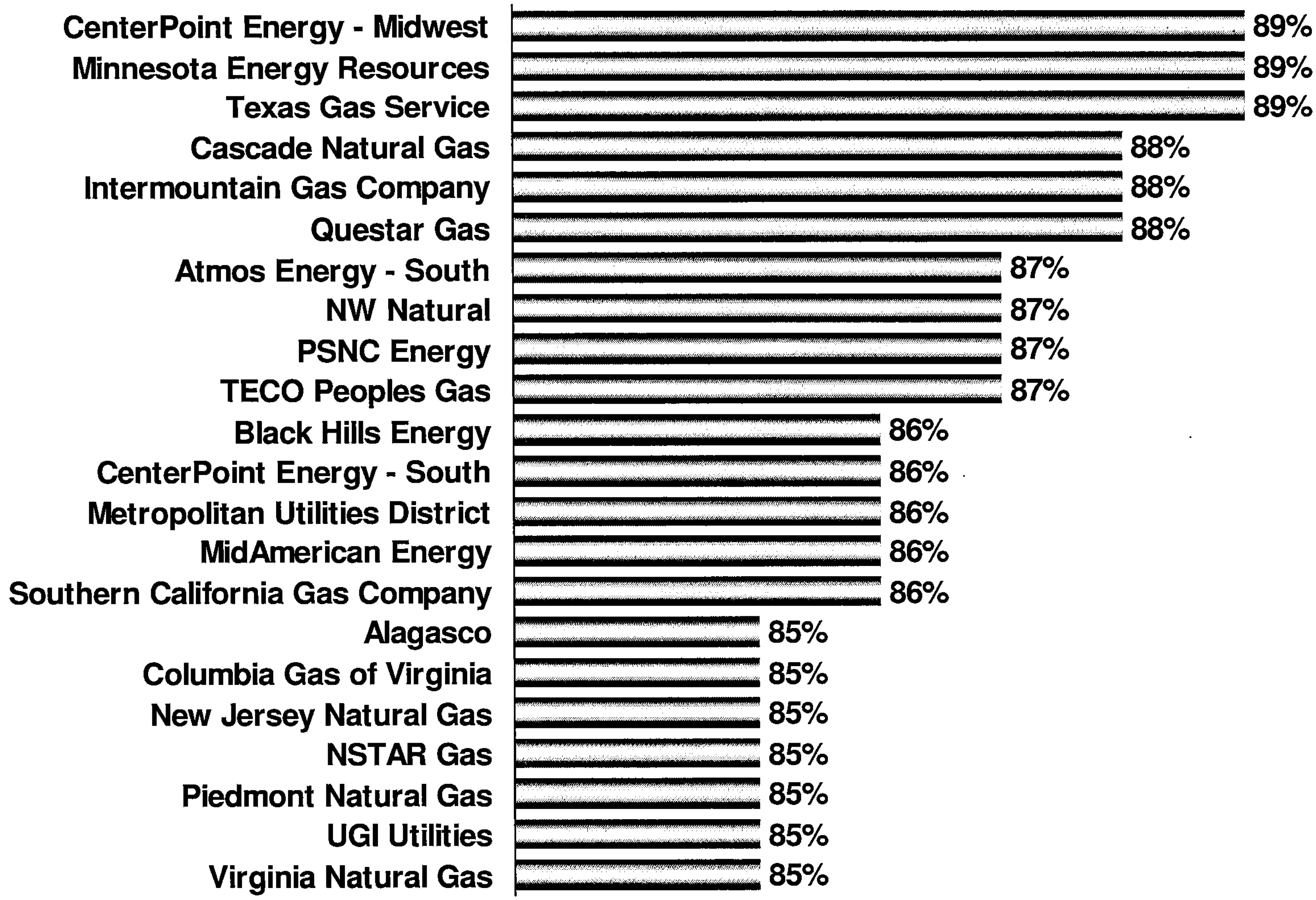
Highest Agreement On "Manages Its Business Cost Effectively"



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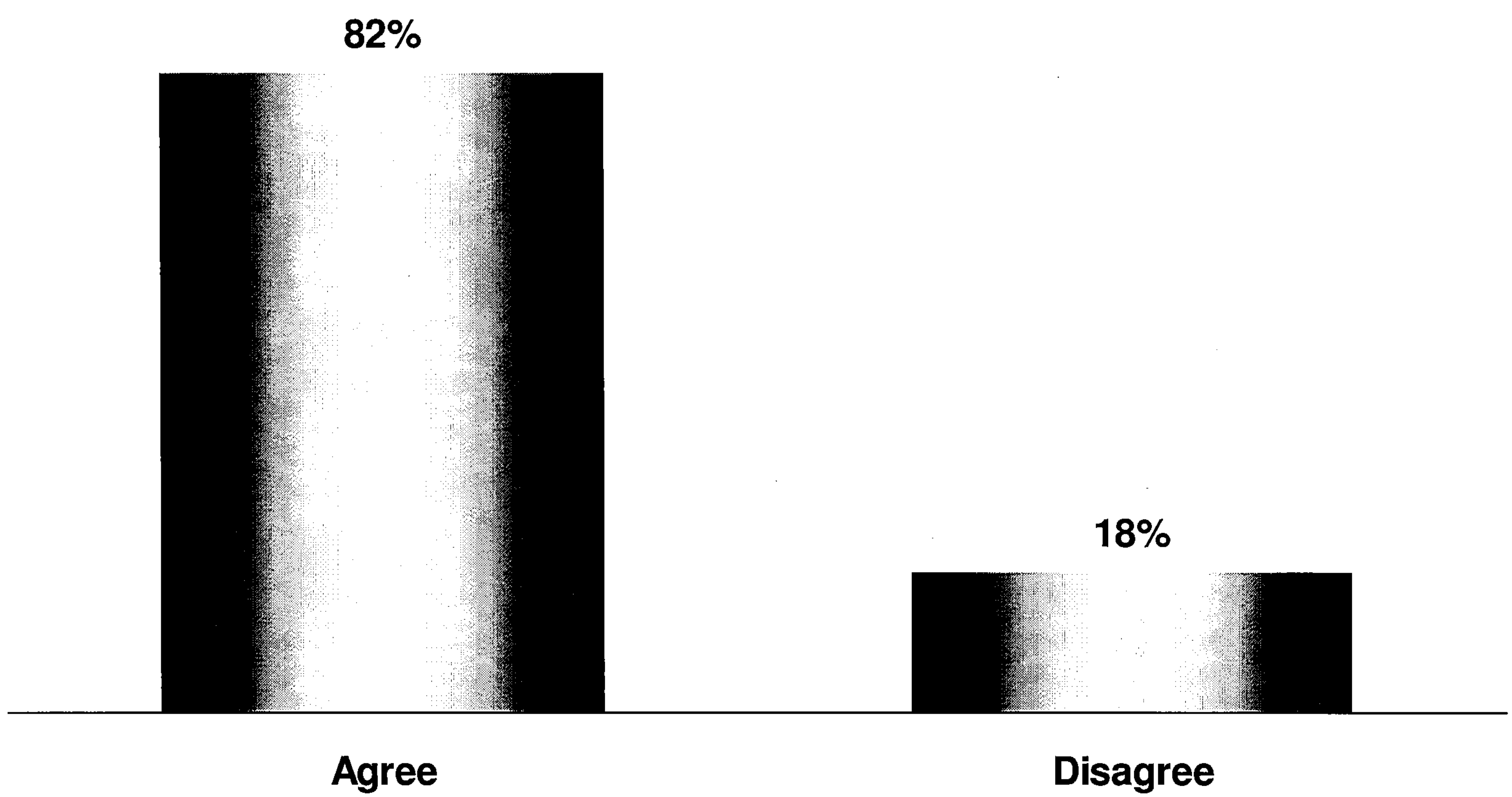
Customers Want Even More Communications

Should Utility Spend More to Communicate Better?



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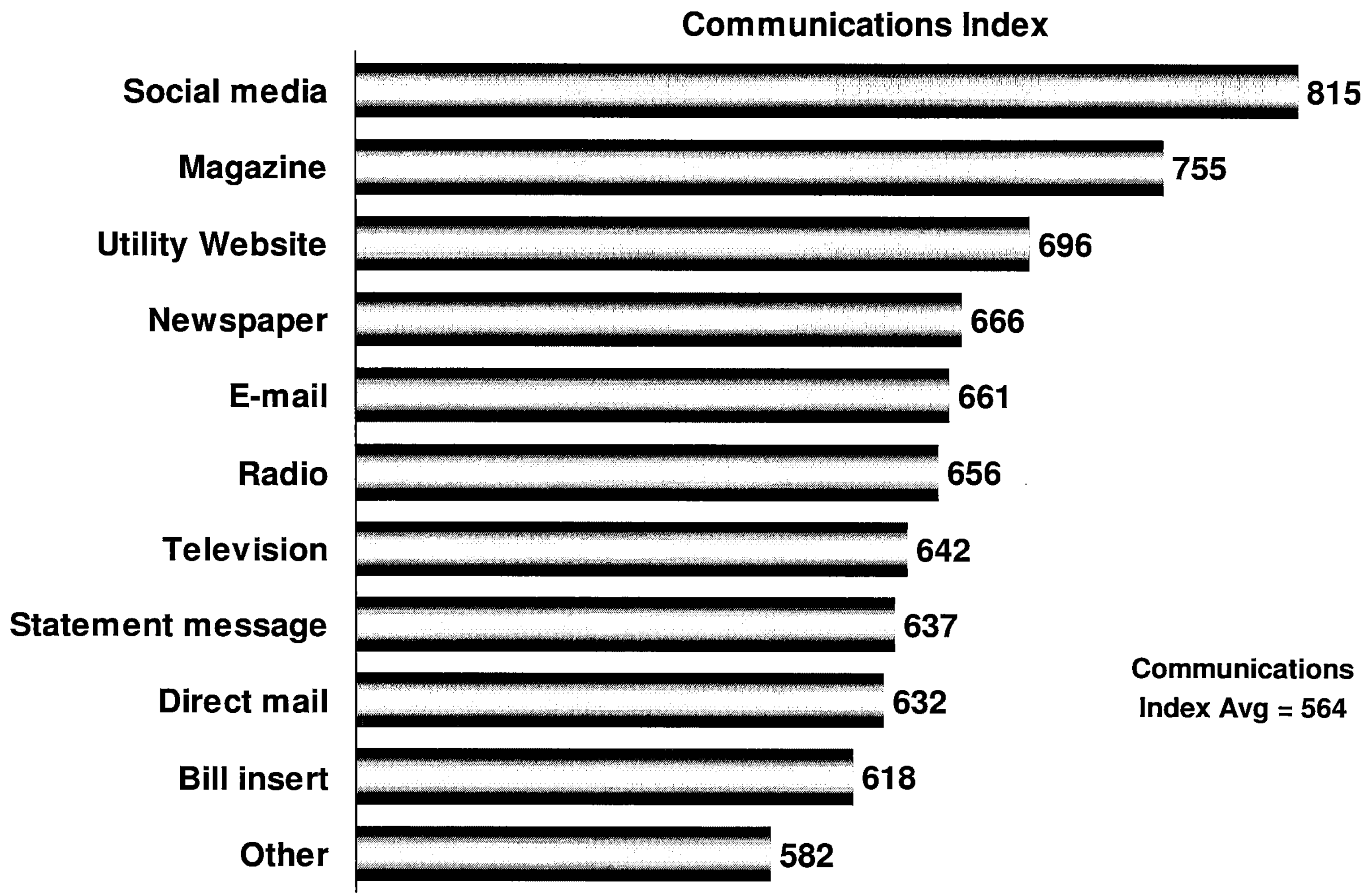
All Communications Channels Are Satisfying



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ATTACHMENT F

TURN-SCG-DR-34

TURN DATA REQUEST
TURN-SCG-DR-34
SOCALGAS 2012 GRC – A.10-12-006
SOCALGAS RESPONSE
DATE RECEIVED: SEPTEMBER 6, 2011
DATE RESPONDED: SEPTEMBER 19, 2011

8. For recorded years 2005-2010, please provide the annual number of natural gas appliance tests (NGAT) tests completed by SoCalGas and their associated annual costs.

SoCalGas Response:

The table below represents the SoCalGas annual number of NGAT tests for income qualified customers participating in low income energy efficiency program and their associated annual costs for recorded years 2005-2010. Dollars are in thousands.

NGAT	2005	2006	2007	2008	2009	2010
Nominal Dollars	$1,126	$1,004	$1,119	$1,394	$1,915	$2,765
2009 Constant Dollars	$1,264	$1,087	$1,172	$1,391	$1,915	$2,715
Number of NGAT's	39,756	34,717	39,755	48,917	66,897	97,033

ATTACHMENT G

DRA-SCG-DR-006-MZX

14. Provide data showing that "Increasing numbers of customers … operate NGVs and/or NGV refueling station requiring information, education, and training." (See GAW-70)

SoCalGas Response:

Per the SoCalGas and SDG&E G-NGV tariffs, any compressed natural gas vehicle refueling station receiving service from the utility must be separately metered. As a result, the number of G-NGV meters are directly related to the number of NGV customers requiring utility service, including information, education and training services provided through the utility NGV Program. The following table shows the steadily increasing number of G-NGV meters for the past five years. In Decision 05-05-010, the Commission recognizes the importance and necessity of customer support and education for Low Vehicle Emission programs: "While called discretionary programs, the utilities do not carry these programs out at their own discretion. In fact, the utilities play a unique and vital role by engaging in these programs. For example, growing volumes of customer calls to utilities on such LEV matters as tariff explanation, hook up concerns and fueling safety issues are to be expected and will increase as the adoption of these technologies increases"[2]. New NGV facilities require training such as vehicle inspection and maintenance, safe vehicle refueling, station inspection and maintenance, station operation and safety procedures.

Year	G-NGV Meters	
	Number of meters	% Increase (from 2005 base year)
2005	240	-
2006	248	3.33%
2007	263	9.58%
2008	279	16.25%
2009	291	21.25%

Response prepared by: Tuong Tran

[2] D. 05-05-010 page 8

DRA DATA REQUEST
DRA-SCG-006-MZX
SOCALGAS 2012 GRC
SOCALGAS RESPONSE
DATE RECEIVED: OCTOBER 19, 2010
DATE RESPONDED: NOVEMBER 2, 2010

18. Why does SCG believe it is reasonable to subsidize these producers through contributions from other ratepayers? (See GAW-88-89)

SoCalGas Response:

SoCalGas does not propose "to subsidize these producers through contributions from other ratepayers." SoCalGas proposes that all ratepayers contribute to the cost of facilities to be owned by SoCalGas which will produce biomethane at a cost higher than the cost of natural gas that would otherwise be used in company facilities and fleet vehicles. The estimated cost of the biomethane at GAW-90 reflects the cost of the biogas conditioning process and equipment, which would be owned by SoCalGas and paid by ratepayers.

The benefit to the producers, small to midsize wastewater treatment plants that are funded by local taxpayers, would be a reasonable lease payment for the space required for the biogas conditioning equipment, and in certain situations, potential cost savings from avoided air quality permit fees from reduced flaring of raw biogas. The lease payment should not be construed as a subsidy to the biogas producers, but rather fair compensation for the right to use its asset.

Response prepared by: Tuong Tran

ATTACHMENT H

DRA-SCG-DR-044-MZX

4. Does SCG plan on asking the sites to contribute to the costs of the BioEnergy units?

SoCalGas Response:

No, SoCalGas does not plan on asking the sites to contribute to the costs of the biogas conditioning systems. Currently, a small to mid size wastewater treatment plant can flare their biogas to the atmosphere with minimal cost to the facility owner/operator. The Sustainable SoCal Program proposes that all of the benefits of the biomethane and GHG credits go to SoCalGas ratepayers, and thus believes it unlikely the WWTP would contribute to the cost of the biogas conditioning system.

ATTACHMENT I

DRA-SCG-DR-023-MZX Question 5

5. Has SCG compared the cost of the Sustainable SoCal Program (Biogas) with renewable sources beyond PV Thin Film? If so, please provide all documents relating to those comparisons. (See page GAW-91, Table GAW-33)

SoCalGas Response 5 (Revised):

SoCalGas just discovered that the table in the original response to Question 5 of DRA-SCG-DR-023 inadvertently omitted the top two heading rows, and apologizes for the omission. There is no change to the response except for the inclusion of the complete table.

The cost to produce biomethane for the Sustainable SoCal Program can also be compared to other renewable technologies such as solar thermal, PV track, geothermal wind and biomass. However, SoCalGas believes PV Thin Film technology provides the most relevant comparison case for biomethane because adoption of PV Thin Film in the marketplace is still in the early stages relative to wind and geothermal. The California State Legislature and the Commission have made significant policy commitments to promote the installation of PV thin film, through programs such as the California Solar Initiative, although a substantial subsidy is required to make a PV Thin Film generation project economic.

As stated in NOI testimony Table GAW-33, the biogas production cost for the Sustainable SoCal Program is $14.31 per MMBtu resulting in a renewable premium of ~ 43%.[1] Figure 1.1 of the *Renewable Energy Transmission Initiative (RETI) Phase 2B Final Report, May 2010* (report is attached below) shows the cost of generation for a variety of renewable technologies. Using cost of generation figures from Figure 1.1, comparable renewable premium associated with each technology is summarized in the table below. The renewable premium is defined as the cost above comparable energy costs to generate renewable energy.

[1] Note the NOI testimony indicates the renewable premium is approximately 45%; however the value is updated in the Application testimony to properly state the renewable premium is approximately 43%.

DRA DATA REQUEST
DRA-SCG-DR-023
SOCALGAS 2012 GRC – A.10-12-006
SOCALGAS REVISED RESPONSE
DATE RECEIVED: SEPTEMBER 20, 2011
DATE RESPONDED: SEPTEMBER 29, 2011

SoCalGas Response 5 (Revised) Continued:

		Cost of Generation ($/MWh)											
	Sustainable SoCal Program	Solar Thermal		PV Track		PV Thin Film		Geothermal		Wind		Biomass	
		Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
Total Production Cost	$14.31	$195	$226	$135	$214	$138	$206	$65	$140	$60	$116	$100	$151
Comparable Energy Cost*	$10.00	$98.19	$98.19	$98.19	$98.19	$98.19	$98.19	$98.19	$98.19	$98.19	$98.19	$98.19	$98.19
Renewable Premium (includes PTC's and ITC's)**	43%	99%	130%	37%	118%	41%	110%	-34%	43%	-39%	18%	2%	54%
Renewable Premium (excludes PTC of $21//MWh)	Not Applicable	Variable						-12%	64%	-18%	40%	23%	75%

* Comparable Energy Cost includes cost of GHG
Natural Gas - average of 2010 California Gas Report and 2009 MPR Model between 2012-2026
Electricity Cost - 2009 Market Price Reference Model assumes "Project Start Date" of 2012, "Contract Term" of 15 Years
2009 MPR Model Link: http://www.cpuc.ca.gov/NR/rdonlyres/1406475F-6F1E-4A3F-85AF-6EA53419BA01/0/2009_MPR_Model.xls
** The Sustainable SoCal figure of 43% does not include any incentives. PTC and ITC only apply to renewable generation projects.

As Section 3.3 of the RETI Phase 2B report indicates, the ranges provided in Figure 1.1 include the benefits of incentives such as Investment Tax Credits or Production Tax Credits. The table above also shows how the renewable premium increases when a PTC value of $21/kWh (consistent with the RETI report) is applied for geothermal, wind and biomass. Solar technologies utilize the ITC incentive, but the incentive amount is variable as it is dependent on the cost of the project. Figure 3.2 of the RETI Phase 2B report shows the impact of PTCs and ITCs on the cost of renewables; it also shows that for PV technologies, excluding the ITC incentive results in a significant production cost increase.

Attached below is the RETI Phase 2B Report.

RETI-Phase2B_Report.pdf

ATTACHMENT J

Imperial County Air Pollution Control District Support Letter

150 SOUTH NINTH STREET
EL CENTRO, CA 92243-2850

TELEPHONE: (760) 482-4606
FAX: (760) 353-9904

IMPERIAL COUNTY
AIR POLLUTION CONTROL DISTRICT
CALIFORNIA
1907

October 6, 2011

The Honorable Michael R. Peevey, President
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Dear President Peevey,

Imperial County Air Pollution Control District (ICAPCD) supports the efforts being made by SoCalGas and SDG&E relating to the conditioning of biogas.

The ICAPCD believes the following aspects of this effort are noteworthy:

- SoCalGas' efforts to develop the biogas market support the State's GHG emission reduction goals and objectives (ex: Assembly Bill 32 and State Executive Order S-06-06) by providing Californians with potentially significant environmental and economic benefits of GHG emission reductions.
- ICAPCD supports efforts by SoCalGas to design, install, permit, own and operate biogas conditioning systems for smaller waste water treatments plants that would not normally pursue a solution to utilize their biogas.
- Biogas is currently an underutilized source of renewable energy within the State of California and (facility, industry or organization) supports projects that will promote conditioning/upgrading of biogas for pipeline injection.
- We believe SoCalGas' involvement and willingness to invest in biogas facilities will help develop the biogas market, overcome market barriers, and assist producers of biogas to reduce their GHG emissions and/or provide new options for using their biogas.

Thank you for your time and consideration.

Sincerely,

Brad Poiriez
Air Pollution Control Officer

AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER

ATTACHMENT K

Southern California Alliance of Publicly Owned Treatment Works Support Letter

SCAP
SOUTHERN CALIFORNIA ALLIANCE OF PUBLICLY OWNED TREATMENT WORKS

October 18, 2010

Mr. Michael R. Peevey, President
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Subject: Support for SoCalGas' Sustainable SoCal Program

Dear Mr. Peevey:

The Southern California Alliance of Publicly Owned Treatment Works, or SCAP, as we are commonly called, is an organization made up of 106 members, 86 of which are public wastewater agencies located in seven counties. Collectively our Publicly Owned Treatment Works (POTW) members provide over 1 billion gallons per day of wastewater treatment to more than 18 million people in Southern California. Furthermore, our POTWs produce over 1.4 million wet tons of biosolids per year, much of which is beneficially used for composting and the production of biofuel.

SCAP strongly supports the expansion of biogas energy generation and requests that the California Public Utilities Commission (CPUC) continue to facilitate programs and incentives that enable this expansion. Our agencies are constantly seeking ways in which to reduce their Greenhouse Gas emissions in consonance with the Global Warming Act of 2006 (AB32) and in particular, by implementing sustainable projects that produce renewable energy from biogas at their wastewater treatment facilities.

Furthermore, SCAP fully supports the on-going efforts being made by SoCalGas relating to the conditioning of biogas and point to the following significant benefits of continuing programs such as SoCalGas' Sustainable SoCal Program:

- SoCalGas' efforts to develop the biogas market support the State's GHG emission reduction goals and objectives (ex: Assembly Bill 32 and State Executive Order S-06-06) by providing Californians with potentially significant environmental and economic benefits of GHG emission reductions.

- Allowing SoCalGas to design, install, own and operate biogas conditioning systems for smaller wastewater treatments plants, that would not normally pursue a solution to utilize their biogas, will help demonstrate the technology, give practicable experience with the construction/installation and operation of the equipment and will hopefully lead to cost

P.O. Box 231565
Encinitas, CA 92024-1565
Fax: 760-479-4881 Tel: 760-479-4880 Website: www.scap1.org Email: info@scap1.org

effective options for small and mid-size facilities and provide another option to on-site gas usage.

- Biogas is currently an underutilized source of renewable energy within the State of California and SCAP supports projects that will promote conditioning/upgrading of biogas for pipeline injection.

- Using biogas generated and conditioned from wastewater facilities to fuel Compressed Natural Gas (CNG) fleet vehicles is one of the most effective means to reduce GHG emissions. Biogas is the cleanest vehicle fuel – even cleaner than electricity.

- We believe SoCalGas' involvement and willingness to invest in biogas facilities will help develop the biogas market, overcome market barriers, and assist producers of biogas to reduce their GHG emissions and/or provide new options for using their biogas.

Our POTWs are actively investigating methods to achieve maximization of their methane gas production by developing strategies that include adding new sources of organic wastes to their anaerobic digesters, such as food waste; fats, oils and greases (FOG); and dairy manure. Existing, barriers in the form of net metering policies and tariffs have prevented our POTWs from selling their excess power at a price that offers them a reasonable return on their capital investment.

For all of these reasons, SCAP requests that the CPUC continue its effort to incentivize the use of wastewater treatment biogas and approve initiatives such as SoCalGas' Sustainable SoCal Program.

Thank you for your consideration in this matter. Please feel free to contact me at (760) 479-4121 if you have any questions or at jpastore@scap1.org .

Sincerely,

John Pastore, Executive Director

cc: Enrique Zaldivar, SCAP President

ATTACHMENT L

Mojave Desert Air Quality Management District Support Letter

Mojave Desert Air Quality Management District
14306 Park Avenue, Victorville, CA 92392-2310
760.245.1661 • fax 760.245.2699
Visit our web site: http://www.mdaqmd.ca.gov
Eldon Heaston, Executive Director

October 17, 2011

The Honorable Michael R. Peevey, President
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

RE: SoCalGas and SDG&E Development of BioGas Market

Dear President Peevey,

The Mojave Desert Air Quality Management District (MDAQMD) supports the efforts being made by SoCalGas and SDG&E relating to the conditioning of biogas.

We believe SoCalGas' involvement and willingness to invest in biogas facilities will help develop the biogas market, overcome market barriers, and assist producers of biogas to reduce their GHG emissions and/or provide new options for using their biogas. SoCalGas' efforts support the State's GHG emission reduction goals and objectives as outlined in Assembly Bill 32 and State Executive Order S-06-06 by providing Californians with the potentially significant environmental and economic benefits of GHG emission reductions.

Using biogas generated and conditioned from waste water facilities to fuel Compressed Natural Gas (CNG) fleet vehicles is one of the most effective means to reduce GHG emissions. It is my understanding that biogas is the cleanest vehicle fuel – even cleaner than electricity. Biogas is currently an underutilized source of renewable energy within the State of California and the MDAQMD believes innovative efforts such as this are needed to reduce vehicle emissions and improve air quality, a large part of our mission here as an air quality district.

Thank you for your time and consideration.

Sincerely,

Eldon Heaston
Executive Officer/APCO

EH/hdn

cc: Commissioner Mark J. Ferron
Commissioner Michael Peter Florio
Commissioner Catherine J.K. Sandoval
Commissioner Timothy Alan Simon
Richard Myers, Energy Division
Julie Fitch, Energy Division
Judith Ikle, Energy Division