

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 10-12-006
Exhibit No.: (SCG-03-R)

REVISED

PREPARED DIRECT TESTIMONY OF

JOHN L. DAGG

ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

JULY 2011



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1 **REVISED PREPARED DIRECT TESTIMONY OF**

2 **JOHN L. DAGG**

3 **ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY**

4 **(GAS TRANSMISSION)**

5 **I. INTRODUCTION**

6 **A. Purpose of Testimony**

7 The purpose of this testimony is to demonstrate that the following Southern California Gas
8 Company (SoCalGas) Gas Transmission Operations and Maintenance costs (O&M) expenses are
9 reasonable and should be approved by the California Public Utilities Commission (CPUC or
10 Commission). Expenditures discussed in this testimony represent day-to-day expenses associated
11 with operating and maintaining SoCalGas' natural gas transmission system. Capital expenditures in
12 support of SoCalGas' gas transmission operations are addressed in the SoCalGas direct testimony
13 of Mr. Raymond Stanford. The forecasts in this testimony are responsive to SoCalGas' philosophy
14 to sustain operational excellence in the provision of safe, reliable delivery of natural gas to
15 customers at the lowest cost possible.

16 In total, SoCalGas request the Commission adopt its 2012 Test Year (TY) forecast of
17 \$32,448,000 for total Gas Transmission (O&M) expense, which is comprised of \$28,296,000 for
18 non-shared service activities and \$4,152,000 for shared service activities. This represents an
19 increase of \$3,143,000 over 2009 adjusted-recorded costs. Unless otherwise noted, all costs in this
20 testimony are shown in thousands of 2009 dollars. A summary of the overall requested O&M
21 funding is presented in Table SCG-JLD-1 below.

22 **Table SCG-JLD-1**
23 **Summary of TY2012 Change**
24 **(Thousands of 2009 dollars)**

Functional Area: GAS TRANSMISSION				
Description	2009 Adjusted-Recorded	TY2012 Estimated	Change	Testimony Reference
Total Non-Shared	25,322	28,296	2,974	Section II
Total Shared Services (Book Expense)	3,983	4,152	169	Section III
Total O&M	29,305	32,448	3,143	

1 **B. Overview of Operations**

2 The SoCalGas transmission system spans from the California–Arizona border to the Pacific
3 Ocean and from the California–Mexico border to Fresno County. Transmission facilities are
4 operated in the counties of San Bernardino, Riverside, Imperial, Orange, Los Angeles, Ventura,
5 Santa Barbara, Kern, Tulare, Kings, San Luis Obispo and San Diego. The transmission system is
6 comprised of approximately 3,989 miles of high-pressure gas pipeline, eleven compressor stations
7 totaling approximately 120,000 horsepower, plus an additional 7,200 horsepower for plant electric
8 generation.

9 The system is designed to receive natural gas from interstate pipelines and various
10 California offshore and onshore production sources, monitor gas quality, measure and deliver
11 pipeline-quality gas to SoCalGas’ gas distribution system. The quality of the gas is analyzed then
12 measured, and the pipeline-quality gas is delivered to SoCalGas’ gas distribution system, gas
13 storage fields, and certain non-core customers. This system was first developed and placed into
14 service in the 1930s with the discovery of natural gas in the San Joaquin Valley. In the late 1940s
15 and early 1950s, the Blythe system was expanded providing for an inter-connect with the El Paso
16 interstate pipeline to accept gas from the Permian Basin in Texas at the California border. These
17 facilities remain in use today. In the last sixty years, the system has been expanded to accept
18 natural gas supplies from the San Juan Basin in New Mexico, the Rocky Mountain area of
19 Wyoming, and from Canadian sources. More recently, additional system upgrades were completed
20 that provide for receipt of re-gasified liquefied Natural Gas (LNG) supplies through the Blythe
21 system. Figure SCG-JLD-1, below, is a map of the system.
22

Figure SCG-JLD-1



2 In total, the gas transmission system is designed to receive, on a firm basis, 3.875 billion
 3 cubic feet per day (Bcf/d) of interstate and intrastate gas supplies at its receipt points (provided
 4 sufficient demand exists). With a combination of pipeline receipts and storage withdrawal, the
 5 system in total is capable of sending out up to 6 Bcf/d to customers. The recorded single day peak
 6 send-out is over 5.3 Bcf. Annual send-out has averaged 961.2 Bcf over the last five years with a
 7 peak of 1.007 trillion cubic feet in 2008.

8 Gas Transmission is organized to provide for cost-effective delivery of service to customers
 9 and to operate the system in accordance with all applicable codes and regulations. Key objectives
 10 of Gas Transmission are to operate safely, provide reliable service, meet all regulatory agency
 11 compliance obligations, and provide customers with value quality services.

1 Costs presented in this testimony are necessary to support the following Gas Transmission
2 functions:

- 3 (i) Pipeline Operations;
- 4 (ii) Gas Compression Operations;
- 5 (iii) Technical Services;
- 6 (iv) Gas System Operations and Planning;
- 7 (v) Gas Scheduling.

8 **(i) Pipeline Operations**

9 The Pipeline Operations function is responsible for the day-to-day operation and
10 maintenance of gas transmission pipeline facilities and infrastructure. This includes operating and
11 maintaining equipment at pipeline receipt points, valve control stations, major customer delivery
12 custody-transfer points, all associated monitoring, metering, and control facilities, odorization
13 equipment, and real-time operating data telemetry communications between gas facilities and
14 SoCalGas' Gas Control Operation department. Pipeline Operations also performs annual leak
15 surveys of all transmission pipeline facilities, operates and maintains the cathodic protection
16 systems, conducts surveillance of third-party construction activities around the vicinity of buried
17 pipeline facilities, and performs locate-and-mark services to identify the location of buried
18 facilities. Additional responsibilities include:

- 19 • Developing and implementing gas handling procedures;
- 20 • Providing emergency services in response to earthquakes, wildfires, dig-ins, or other events
21 as needed in order to minimize the potential for danger to the public and/or to minimize
22 impact to system reliability;
- 23 • Investigating and addressing gas quality issues;
- 24 • Assuring compliance with all applicable environmental and safety regulatory agency
25 requirements. These regulations cover air quality, asbestos, lead, PCBs, natural resources,
26 ground water, storm water, hazardous waste and materials handling, above- and below-
27 ground storage/collection vessels, and the continuous need to track changes in regulatory
28 requirements and adjust operations accordingly to maintain compliance and satisfy all
29 permitting and reporting requirements.

1 **(ii) Gas Compression Operations**

2 The Gas Compression Operations function is responsible for the day-to-day operation and
3 maintenance of the eleven compressor station facilities and infrastructure. This responsibility
4 includes operating and maintaining 42 compressor engines and ancillary equipment, all associated
5 monitoring, metering, and control facilities, odorization equipment, filtration vessels, cooling
6 equipment, and real-time operating data telemetry communications between compression facilities
7 and the Gas System Operations department. Gas Compression Operations also performs station
8 piping leakage inspections, and maintains station piping cathodic protection systems. Additional
9 responsibilities include:

- 10 • Developing and implementing gas compression operating procedures;
- 11 • Conducting compressor station inspections following service interruptions (earthquakes,
12 wildfires, pipeline shut-ins, etc.) in order to maximize system and equipment availability
13 and reliability and therefore minimize the impact of such events upon Gas Transmission,
14 Gas Storage, Gas Distribution and Customer Services Operations;
- 15 • Adjusting operating parameters to address and mitigate gas quality issues;
- 16 • Providing 24-hour staffing and response to address any compression operation issues;
- 17 • Assuring compliance with all applicable environmental and safety regulatory agency
18 requirements. These regulations cover air quality, asbestos, lead, PCBs, natural resources,
19 ground water, storm water, process waste water, hazardous waste and materials, and above-
20 and below-ground tanks. In addition, this group is responsible for continually tracking
21 changes in these regulatory requirements and adjusting operations accordingly to maintain
22 compliance and satisfy all permitting and reporting requirements.

23 **(iii) Technical Services**

24 The Technical Services function includes the activities of design engineering,
25 instrumentation and control, project support, and environmental services in support of the day-to-
26 day operations and maintenance of the gas transmission system.

27 Responsibilities include: right-of-way maintenance, providing on-site technical expertise to
28 Pipeline and Compression Operations field personnel, and troubleshooting technical issues for both
29 capital and O&M projects. Capital expenses in support of SoCalGas' transmission operations are
30 addressed in the SoCalGas direct testimony of Mr. Raymond Stanford. Technical Services also
31 provides environmental support services to the Pipeline and Compression Operations groups, which
32 is necessary to support their day-to-day operations. Specifically, Technical Services provides

1 services that address each of the regulatory disciplines (air, water, asbestos, lead, PCBs, natural
2 resources, etc.) as previously described for those Operating groups.

3 **(iv) Gas System Operations and Planning (A Utility Shared Service, USS)**

4 Gas System Operations and Planning consists of the following departments:

- 5 • Gas Control / SCADA: Gas Control operates and manages real-time operation and
6 control of gas flow through the pipeline system. The SCADA group manages the
7 planning, operation and maintenance of the supervisory control and data acquisition
8 system (SCADA) that provides for remote monitoring and operation of valves,
9 compressors, pressure regulation equipment, and gas flow across the system.
- 10 • Gas Transmission Planning: Responsible for the long-term planning and design of the
11 SoCalGas and SDG&E gas transmission systems. Using hydraulic analytical tools, Gas
12 Transmission Planning continually assesses the transmission system's ability to maintain
13 CPUC-mandated design standards, meet existing service obligations, serve new
14 customer demand, and access new sources of gas supply.

15 **(v) Gas Scheduling (A Utility Shared Service, USS)**

16 Gas Scheduling manages the day-to-day system and operations for nominations, allocations
17 and scheduled volumes for approximately 955 of SoCalGas' non-core meter customers and 125 of
18 SDG&E's non-core meter customers. Gas Scheduling is a 7-day-a-week (including holidays)
19 operation that is responsible for ensuring that the transmission system is balanced between the
20 nominated gas supplies and forecasted system demand and is responsible for enforcing the
21 Operational Flow Order (OFO) and Winter Balancing rules.

22 As part of the scheduling processes, Gas Scheduling manages transportation nominations for
23 on-system and off-system deliveries based on priority rights, confirms nominations to interstate and
24 intrastate suppliers, reports scheduled quantities to customers, tracks storage accounts, tracks and
25 clears shipper imbalances and administers the imbalance trading process. Gas Scheduling also
26 makes regular postings on Envoy (SDG&E's and SoCalGas' gas management electronic bulletin
27 board) which include critical and non-critical notices, transmission and storage system conditions,
28 and hourly, and daily capacity operational information to communicate in a transparent and
29 consistent manner with the gas marketplace.

1 **C. Challenges Facing Operations**

2 A number of challenges are faced by Gas Transmission. These are listed as follows and are
3 categorized between non-shared and shared parts of the organization:

4 **Non Shared Services Cost**

- 5 • Environmental / Air Quality Regulation Changes and Compliance - \$405K
- 6 – CARB - A.B. 32 - Greenhouse Gas Management - \$229K
- 7 – RICE/NESHAPS - MDAQMD Rule 1160 - NOx Management - \$114K
- 8 – CARB – A.B. 10X - Emissions Management - \$62K Non Standard Escalation (NSE)
- 9 • Removal of Previously Abandoned Pipelines \$750K;
- 10 • D.O.T. Pipeline Safety Fee Assessment Increases - \$532K (NSE);
- 11 • Right-Of-Way Maintenance and Improvements - \$500K;
- 12 • Gas Odorant Change - \$400K;
- 13 • Technical Services Support - \$205K;
- 14 • Long Beach Pipeline Lease Cost Inflation - \$164K (NSE);
- 15 • Fire Hazard Prevention – Electric System Pole Inspections - \$17K.

16 **Shared Services Cost**

- 17 • Gas System Operations;
- 18 – Control Room Staffing Increase - Regulatory Compliance - \$243K
- 19 • Gas Scheduling;
- 20 – Scheduler Staffing Increase - Regulatory Compliance - \$85K

D. Summary of Request

The non-shared and shared cost forecast summary is expressed in the two tables which follow:

**Table SCG-JLD-2
O&M Non-Shared Services
Testimony Section II
(Thousands of 2009 dollars)**

GAS TRANSMISSION			
Categories of Management	2009 Adjusted-Recorded	TY2012 Estimated	Change
A. Pipeline O & M	16,355	17,818	1,463
B. Compressor Station O & M	7,293	8,099	806
C. Technical Services	1,674	2,379	705
Total	25,322	28,296	2,974

**Table SCG-JLD-3
O&M Shared Services
Testimony Section III
(Thousands of 2009 dollars)**

GAS TRANSMISSION			
Categories of Management	2009 Adjusted-Recorded	TY2012 Estimated	Change
A. Gas Transmission Operations	3,983	4,152	169
B. USS Billed-in from SDG&E	0	0	0
Total Shared Services (Book Expense)	3,983	4,152	169

1 **II. NON SHARED SERVICES**

2 **A. Introduction / O&M Forecasting Methodology**

3 The Test Year 2012 forecast was determined by applying annual incremental changes to the
4 2009 base year adjusted recorded expenditures. For analysis, the recorded 2009 expenditures were
5 adjusted as necessary, by subtracting one-time events and by making other applicable accounting
6 adjustments for related activities. The adjusted expense levels of 2009 were determined to be a
7 reasonable indicator of future costs as reflecting recent and representative operational conditions.
8 Depending on the activity, annual changes in planned expenditures for 2010 to 2012 were based on
9 either changes in work functions or specific changes associated with new or existing program
10 requirements. Specific forecast assumptions are discussed in further detail in each individual
11 Category of Management accounting. Additional detail on forecast assumptions can be found in the
12 work papers for this testimony.

13 **B. Discussion of O&M Activities**

14 **1. Pipeline Operations**

15 **Table SCG-JLD-4**
16 **O&M Non-Shared Services**
17 **(Thousands of 2009 dollars)**

Category 1 Pipeline Operations	2009 Adj. Recorded	2012 Estimated	Change
A. Base Year Adjusted Recorded	16,355	17,818	1,463
1. D.O.T. Safety Fee Assessments (NSE)	821	1,354	533
2. Long Beach Lease Line Inflation (NSE)	4,554	4,717	163
3. Removal of Previously Abandoned Pipelines	0	750	750
4. Electric System Pole Inspections	0	17	17
5. 2009 Adjusted Recorded Pipeline O&M Expense	10,980	10,980	0

18 **a. Category: A.1. - D.O.T. Safety Fee Assessments**

19 The U.S. Department of Transportation (DOT), through the Pipeline and Hazardous
20 Materials Safety Administration (PHMSA), is authorized to assess and collect user fees to fund its
21 pipeline safety program activities. This authority is provided under “Title 49 of the Consolidated
22 Omnibus Budget Reconciliation Act of 1985, 49 U.S.C.S. §60301”. The annual increase in this

1 expense was calculated based on non-standard escalation inflation indexing. The 2010 inflation
2 amount was based on actual invoicing from the DOT. The 2011 and 2012 inflation amounts were
3 based on a two-year historical (2009, 2010) annual average inflation percentage and were applied to
4 a two-year annual average pipeline footage factor, as the amount SoCalGas is assessed is based on
5 the miles of transmission pipeline it operates. The resulting increase is a forecasted 18.07% annual
6 expense increase.

7 **b. Category: A.2. - Long Beach Pipeline Lease Inflation**

8 The increase is attributable to non-standard escalation as provided for under the lease
9 agreement contract with the City of Long Beach. The contracted inflation index for the lease is the
10 annual percentage change in the "US All Urban Consumer Pricing Index" as published annually in
11 June. The 2010 inflation is based on the 2010 applicable inflation rate change specified within the
12 agreement. The 2011 and 2012 inflation rates are based on forecasted annual percentage rates of
13 change.

14 **c. Category: A.3. - Removal of Previously Abandoned Pipelines**

15 The company has recently experienced an increase in requests for removal of pipelines that
16 had been abandoned many years earlier under safe, routine and generally-accepted practices. When
17 the company receives such a request it is obligated to remove the pipe and bear the burden of the
18 costs which must be expensed. These costs are unanticipated additional costs beyond the original
19 abandonment removal costs that occurred many years ago. Based upon specific projects and
20 mandates, the Company will continue to remove additional pipe, abandoned many years earlier.

21 The geneses for these removal requests are two-fold. The first is a physical conflict between
22 the location of the abandoned pipe and the desire of an entity (typically a land owner or developer)
23 to use the same space for a different purpose. Two recent examples in which pipe removal work is
24 required due to physical conflict are; 1) a 440 foot removal due to a municipality development
25 project involving installation of a community aquatic facility, and 2) a 7,500 foot removal request
26 due to a transportation development project involving installation of a light-rail system.

27 The second reason for a removal request is that of landowners desiring to perfect legal title
28 on their land. When SoCalGas holds an easement for a line that has been abandoned, the company
29 is obligated to quit-claim the easement back to the landowner upon their request.

30 In 2009, SoCalGas experienced eight intent-of-quit-claim notifications. Final resolution for
31 each of these locations is presently unresolved. The funding request is based on estimating

1 experiencing, an average of one or more pipe removal projects totaling 4,500 in total footage per
 2 year beginning in 2010.

3 **d. Category: A.4. - Electric System – Utility Owned Pole Inspections**

4 The pole inspection/restoration/replacement program is designed to comply with revisions
 5 to CPUC General Order 95, which applies to overhead electrical supply and communication
 6 facilities located outside of buildings and includes facilities that belong to non-electric utilities.
 7 This program is designed to maintain the integrity of SoCalGas' overhead electric supply systems
 8 by applying the same standards set forth under General Order 95 that prescribes configuration
 9 criteria for electrical distribution facilities. Implementing a preventative maintenance program will
 10 provide for improved protection against fire risks and is necessary to meet our responsibility to
 11 Local, State and Federal land management agencies. Implementation of the program will directly
 12 contribute toward increasing the life expectancy and safety of the overhead electric distribution
 13 systems.

14 **e. Category: A.5. - 2009 Adjusted Recorded O&M Expense**

15 Base Year 2009 Adjusted-Recorded, Labor and Non-Labor expenses are attributable to the
 16 performance of annual scheduled Pipeline Operation and Maintenance activities. No increase is
 17 forecast for these activities through TY 2012.

18 **Table SCG-JLD-5**
 19 **O&M Non-Shared Services**
 20 (Thousands of 2009 dollars)

Category 2 Gas Compression	2009 Adj. Recorded	2012 Estimated	Change
B. Base Year Adjusted Recorded	7,293	8,099	806
1. CARB – AB32	0	229	229
2. RICE / NESHAPS MDAQMD Rule 1160	0	114	114
3. CARB – AB10X	117	179	62
4. Odorant Policy Change	0	400	400
5. 2009 Adjusted Recorded Gas Compression O&M Expense	7,176	7,176	0

1
2 **f. Category: B.1. - California Air Resource Board (CARB) – A.B. 32**
3 **[Cal. Health & Safety Code § 38500 et seq.]**

4 New state legislation A.B. 32 will require the California Air Resources Board (CARB) to
5 implement measures to reduce California’s greenhouse gas (GHG) emissions to 2000 levels by
6 2010, to 1990 levels by 2020 and to 80% below 1990 levels by 2050.

7 The new legislation will result in increased regulatory compliance requirements relative to
8 minute releases of methane gas into the atmosphere. These minor sources of leakage are scheduled
9 for identification under the new legislation as a source of GHG emissions. CARB, continues to
10 conduct hearings in preparation for the implementation of rules to achieve objectives stated in the
11 legislation. The regulations are effective in the 2011 / 2012 period of operation. The CPUC has
12 previously reviewed and supported CARB’s A.B. 32 Scoping Plan that included these GHG
13 emission reduction strategies for gas utilities. Additional information and background on these
14 rules can be found in the testimony of Mrs. Lisa Gomez.

15 **g. Category: B.2. - National Emissions Standards for Hazardous Air**
16 **Pollution for Reciprocating Internal Combustion Engines (RICE**
17 **NESHAP), 40 C.F.R. § 63.6580 et seq., and Mojave Desert Air**
18 **Quality Management District (MDAQMD) Rule 1160**

19 Nine of SoCalGas’ eleven compressor stations will be subject to new emission control
20 operating and reporting requirements required by new national emissions standards for hazardous
21 air pollutants (NESHAPS) and revision of Mojave Desert Air Quality Management District
22 (MDAQMD) Rule 1160.

23 In March 2010, the Environmental Protect Agency (EPA) issued a final rule that imposes
24 new national standards for hazardous air pollutants (NESHAPS) from existing diesel powered
25 stationary reciprocating internal combustion engines (RICE), also known as “compression ignition”
26 or “CI” engines. This rule requires SoCalGas to maintain operating logs of certain equipment.
27 SoCalGas is already keeping logs of this information and is not requesting additional funding for
28 this compliance activity.

29 On March 5, 2009, EPA proposed new NESHAP’s for existing spark ignition, or “SI”
30 engines, that either (a) have a site rating of less than or equal to 500 brake horsepower and are
31 located at major sources of hazardous air pollutants (HAP) emissions; or (b) are located at area

1 sources of HAP's (with no horsepower limitation). EPA has not finalized a rule for SI engines, but
2 is expected to do so by August 2010. The most recent SI engine proposal would require SoCalGas
3 to install improved combustion stability and oxidation catalysts on SI engines to reduce
4 formaldehyde and carbon monoxide emissions. SoCalGas is requesting funding for the additional
5 operating and maintenance cost associated with these changes. The estimates are based on the
6 requirements outlined in the 2009 proposed rule.

7 SoCalGas anticipates Mojave Desert Air Quality Management District (MDAQMD) will
8 revise Rule 1160 Internal Combustion Engines (Rule 1160) in a manner that will require SoCalGas
9 to meet new emission limits and monitoring requirements at the North Needles, South Needles and
10 Newberry Compressor Stations. SoCalGas is requesting funding for the operation and maintenance
11 of this additional equipment. Cost estimates are based on the anticipated amendment.

12 Additional information and background on these rules can be found in the testimony of Mrs.
13 Lisa Gomez. Capital improvements to comply with these rules can be found in the testimony of
14 Mr. Raymond Stanford.

15 **h. Category: B.3. - California Air Resource Board (CARB) – Rule**
16 **A.B. 10X**

17 The State of California's Annual Budget Act authorizes the State Environmental Protection
18 Agency (EPA) to annually assess fees to partially fund the California Air Resources Board's
19 (CARB), Stationary Source Program. The fees are assessed on facilities emitting 250 tons or more
20 per year of nonattainment pollutants or their precursors of volatile organic compounds within the
21 State. For 2009, the State's Budget Act required the assessment of \$20 million in such fees to the
22 owners of such facilities. Non-payment of the fees can result in penalties of up to \$10,000 per day.
23 The annual fees are based on three components; A) a company's reported emissions for the calendar
24 period for two years preceding the assessment year; B) a base fee as determined by the CARB,
25 based on the total number of reported tons within the state qualifying under the program for
26 assessment; and C) a supplemental fee of 2.5% of the tonnage fee assessed each facility. The
27 supplemental fee is an administrative fee that incurred as a result of the State authorizing the
28 Mojave Desert Air Quality Management District (MDAQMD) to collect and process the payments
29 to the CARB, on behalf of the EPA.

30 **i. Category: B.4. - Odorant Policy Change**

31 Beginning in 2011, SoCalGas will be implementing the addition of Tetrahydrothiophene
32 (THT) as a supplement odorant at two receipt points where incoming gas from the supplier, El

Paso gas, currently contains one primary odorant component, Tertiary Butyl Mercaptan (TBM). This supplemental THT will provide greater consistency in the odorant blend throughout the service territory and within California to match the 50/50 THT/TBM blend being used now at the other major receipt points and California Utilities. A more consistent blend of odorant helps ensure employees and customers moving throughout the major Utilities' service territories within California have the ability to recognize the same odor should there be a gas leak at any point along all of California's utility-operated natural gas systems. Adding THT at the two receipt points where we receive El Paso Gas (Blythe and South Needles Stations) also will align SoCalGas with PG&E's and Southwest Gas' odorant strategy of having a 50/50 THT/TBM blend throughout their systems.

j. Category: B.5. - 2009 Adjusted Recorded O&M Expense

Base Year 2009 Adjusted-Recorded, Labor and Non-Labor expenses are attributable to the performance of annual scheduled Gas Compression Operation and Maintenance activities. No increase is forecast for these activities through TY 2012.

**Table SCG-JLD-6
O&M Non-Shared Services
(Thousands of 2009 dollars)**

Category 3 Technical Services	2009 Adj. Recorded	2012 Estimated	Change
C. Base Year Adjusted Recorded	1,674	2,379	705
1. Right-of-way Management	685	1185	500
2. Technical Services Support Staffing	0	205	205
3. 2009 Adjusted Recorded Technical Services O&M Expense	989	989	0

k. Category: C.1. - Right-Of-Way Management

This activity consists of vegetation removal, storm damage mitigation, access roadway resurfacing, right of access and pipeline placement signage repairs and replacement, and exposed pipeline rust mitigation. Right-of-way maintenance keeps patrol roads in useable condition for ensuring safe access and travel, prevents overgrowth, and conforms to right-of-access obligations imposed by landowners. Storm damage repair is performed on pipeline exposures, road washouts, and landslides affecting facilities. Painting is performed on pipeline spans due to wind, water and fire damage, and general atmospheric-generated deterioration. Vegetation management is a highly

1 regulated requirement of State and Federal Land Management authorities, and local City/County
2 fire agency ordinances.

3 The cost of this maintenance is increasing due to stricter habitat preservation guidelines and
4 restrictions. The regulations protect against the disturbance of nesting habitats of various
5 endangered wildlife species (desert tortoises, burrowing owls, eagles, foxes, etc.) which make their
6 homes along the routes of the pipeline.

7 Every land maintenance project is incurring increased cost associated with requirements for
8 deploying certified environmental protection inspectors, in addition to requiring all personnel
9 deployed on the project to have proper training in the identification of potential restricted
10 disturbance areas, the recent presence of protected species, and approved methods for protecting
11 against encroachment or disturbance.

12 **l. Category: C.2. - Technical Services Support Staffing**

13 The Technical Services staff is responsible for developing operational process changes in
14 response to continuous and ever-changing business needs. These process changes are designed to
15 achieve multiple goals which include; regulatory compliance, operational efficiency, and employee
16 and public safety.

17 The work environment and activity of gas transportation is increasingly influenced by, and
18 continuously evolving as a result of, the implementation of new technologies which are applicable
19 to both field and administrative functions. The nature of these changes is not expected to diminish
20 in future years, but rather is expected to increase in both frequency and magnitude.

21 **m. Category: C.3. - 2009 Adjusted Recorded Base Year O&M**
22 **Expense**

23 Base Year 2009 Adjusted-Recorded, Labor and Non-Labor expenses are attributable to the
24 performance of annual Technical Services Operation and Maintenance activities. No change is
25 forecast for these activities through TY 2012.
26

1
2 **III. SHARED SERVICES**

3 **A. Introduction**

4 The purpose of the Shared Services section of my testimony is to demonstrate that the
5 following SoCalGas and SDG&E Shared Services, O&M forecast expenditures are reasonable and
6 should be adopted by the California Public Utilities Commission. Forecast expenditures are to
7 support management of operations and support staff services relating to gas transmission operations
8 at both SoCalGas and SDG&E. Specifically, SoCalGas and SDG&E Gas Transmission operations
9 are managed and supported, in part, by SoCalGas employees. This section will discuss the material
10 changes in shared services expenses in TY2012 compared to 2009 adjusted incurred expenses.
11 These expenses support operation and maintenance functions of Pipeline and Gas Compression
12 Operations, Technical Services, Gas System Operations and Planning, and Gas Scheduling.

13 Forecast expenditures are consistent with SoCalGas and SDG&E philosophies to sustain
14 operational excellence in the safe and reliable receipt, transportation and delivery of natural gas to
15 customers at the lowest cost possible. In total SoCalGas and SDG&E are requesting the
16 Commission adopt its 2012 Test Year (TY) forecast of \$4,765,000 for Gas Transmission Shared
17 Services of which \$613,000 is forecast for allocation to SDG&E in support of the utility's cross-
18 functional gas transmission operation and maintenance requirements. SDG&E does not provide gas
19 transmission shared services to SoCalGas.

20 Total forecast funding requirements for all of the SoCalGas shared service cost centers
21 covered by this testimony are shown in Table SCG-USS-JLD-7. All costs are shown in thousands
22 of 2009 dollars, unless otherwise noted.

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**Table SCG-JLD-7
O&M Shared Services
(Thousands of 2009 dollars)**

GAS TRANSMISSION	2009 Adjusted-Recorded	TY2012 Estimated	Change
SoCalGas Incurred Costs (100% Level)			
A. Gas Transmission Operations	4,538	4,765	227
Incurred Costs Sub-Total	4,538	4,765	227
Allocations Out To SDG&E			
A. Gas Transmission Operations	555	613	58
Allocations Out To SDG&E Sub-Total	555	613	58
Allocations Out To CORP			
A. Gas Transmission Operations	0	0	0
Allocations Out To CORP Sub-Total	0	0	0
Allocations Out To Unreg			
A. Gas Transmission Operations	0	0	0
Allocations Out To Unreg Sub-Total	0	0	0
Retained by SoCalGas			
A. Gas Transmission Operations	3,983	4,152	169
SoCalGas Retained Sub-Total	3,983	4,152	169
Billed-In From SDG&E	0	0	0
SoCalGas Book Expense	3,983	4,152	169

B. Summary of Shared Services Activities

SoCalGas' Gas Transmission Shared Services are provided by six individual cost center organizations. These organizations are; Director-Transmission, Field Operations Manager (FOM) – Victorville, FOM – Olympic, Technical Services Manager, Gas System Operations and Planning, and Gas Scheduling. Salaries and expenses relating to the provision of qualified shared service functions performed by personnel reporting under each of these cost center organizations is charged to their respective cost center.

Specifically, SoCalGas personnel remain SoCalGas employees even though organizational responsibilities include responsibility for supervision and management of SDG&E assets and personnel.

The amount of incurred cost that is allocated out to SDG&E varies by cost center, as the allocations are based on applicable cost center specific cost allocation methodologies. Individual cost center cost allocation methodologies are described below. Allocation cost factor details of each specific cost center is provided in the associated work papers.

a. Category: B.1. - Shared Services Cost Center Organization Descriptions
Director Transmission – USS (Cost Center 2200-0253)

The cost center organization is responsible for Gas Transmission and System Operations overall operational and directional leadership, operation and maintenance performance, regulatory compliance, financial performance and work measurement reporting. These tasks are administered by the Director, a Administrative Associate, a Senior Business Analyst, and a Technical Specialist staff positions.

Expenses are allocated to SDG&E based on the number of SDG&E Gas Transmission employees (31) divided by the total number of Gas Transmission employees (SoCalGas and SDG&E) (251). This adapted methodology produces an allocation percentage to SDG&E of 12%.

SoCalGas is forecasting a \$45,000 increase for this cost center for TY2012. The increase is comprised of \$9,000 Labor and \$36,000 Non-Labor, both attributable to changes in organizational responsibility and staffing assignments. Details on the forecast cost are shown below in Table SCG-JLD-11.

Table SCG-JLD-8
O&M Shared Services
(Thousands of 2009 dollars)

Director Gas Transmission			
Cost Center: 2200-0253	Base Year	Forecast	2009-2012
	2009	2012	Incr. (Decr.)
SoCalGas Incurred Costs	288	333	45
Allocations Out			
To SDG&E from SoCalGas	34	40	6
To Corp. Center/Other	0	0	0
Subtotal Allocations Out	34	40	6
Book Expense			
SoCalGas Retained	254	293	39
Billed from SDG&E	0	0	0
SoCalGas Book Expense	254	293	39

FOM Victorville (Cost Center 2200-0265)

The cost center organization is responsible for departmental operational leadership, staffing management, operation and maintenance performance, regulatory compliance, financial and work measurement performance and reporting for gas compression operations within both utilities.

Responsibility for operation and maintenance management of SDG&E’s assets includes Moreno and Rainbow compressor stations. Compressor station operation and maintenance activities for these assets are performed by SDG&E employees, with managerial responsibilities administered by the Field Operations Manager, a District Operation Manager, and a Technical Specialist positions.

Expenses are allocated to SDG&E based on the number of SDG&E Gas Transmission employees (29) divided by the total number of Gas Transmission employees (SoCalGas and SDG&E) (103) assigned under the Field Operations Manager’s integrated utility organization. This adopted methodology produces an allocation percentage to SDG&E of 28.2%.

SoCalGas is forecasting a \$ 45,000 increase in allocated book value cost to SDG&E from this cost center for TY2012.

The increase is attributable to a change in shared service allocation percentage for cost assignable to SDG&E.

Details of the forecast change in cost are shown below in Table SCG-JLD-9.

**Table SCG-JLD-9
O&M Shared Services
(Thousands of 2009 dollars)**

FOM Victorville			
Cost Center: 2200-0265	Base Year 2009	Forecast 2012	2009-2012 Incr. (Decr.)
SoCalGas Incurred Costs	315	323	8
Allocations Out			
To SDG&E from SoCalGas	46	91	45
To Corp. Center/Other	0	0	0
Subtotal Allocations Out	46	91	45
Book Expense			
SoCalGas Retained	269	232	-37
Billed from SDG&E	0	0	0
SoCalGas Book Expense	269	232	-37

21

FOM Olympic (Cost Center 2200-0275)

The cost center organization is responsible for departmental operational leadership, staffing management, operation and maintenance performance, regulatory compliance, financial and work measurement performance and reporting for gas compression and pipeline operations within both utilities. Responsibilities for SDG&E’s assets and operations consisted of the gas transmission pipeline system and associated metering and pressure monitoring equipment. Pipeline operation and maintenance activities are performed by SDG&E employees, with managerial responsibilities administered by the Field Operations Manager and a Technical Specialist position.

Expenses were allocated to SDG&E based on the number of SDG&E Gas Transmission employees (14) divided by the total number of Gas Transmission employees (SoCalGas and SDG&E) (102) assigned under the Field Operations Manager’s integrated utility organization. This adopted methodology produces an allocation percentage to SDG&E of 13.7%.

SoCalGas is forecasting a \$25,000 reduction change in allocated book value cost to SDG&E for TY2012 for this cost center, the result of a change in organization responsibility assignments. .

Details of the forecast change in cost are shown below in Table SCG-JLD-10.

**Table SCG-JLD-10
O&M Shared Services
(Thousands of 2009 dollars)**

FOM Olympic			
Cost Center: 2200-0275	Base Year 2009	Forecast 2012	2009-2012 Incr. (Decr.)
SoCalGas Incurred Costs	187	50	-137
Allocations Out			
To SDG&E from SoCalGas	25	0	-25
To Corp. Center/Other	0	0	0
Subtotal Allocations Out	25	0	-25
Book Expense			
SoCalGas Retained	162	50	-112
Billed from SDG&E	0	0	0
SoCalGas Book Expense	162	50	-112

20

Technical Services Manager (Cost Center 2200-2172)

The cost center organization is responsible for departmental operational leadership, staffing management, and technical support services of the combined utilities Technical Services departments.

Expenses are allocated to SDG&E based on the number of SDG&E Gas Transmission employees (2) divided by the total number of Gas Transmission employees (SoCalGas and SDG&E) (25) assigned under the Technical Services Manager’s integrated utility organization.

This adopted methodology produces an allocation percentage to SDG&E of 8%.

SoCalGas is forecasting a \$ 17,000 reduction in funding for this cost center as a result of changes in staffing. SoCalGas is also forecasting a \$1,000 decrease in allocated book value cost to SDG&E from this cost center for TY2012 as a result of the staffing change.

Details on the forecast cost are shown below in Table SCG-JLD-11.

**Table SCG-JLD-11
O&M Shared Services
(Thousands of 2009 dollars)**

Technical Services			
Cost Center: 2200-2172	Base Year 2009	Forecast 2012	2009-2012 Incr. (Decr.)
SoCalGas Incurred Costs	546	529	-17
Allocations Out			
To SDG&E from SoCalGas	44	43	-1
To Corp. Center/Other	0	0	0
Subtotal Allocations Out	44	43	-1
Book Expense			
SoCalGas Retained	502	486	-16
Billed from SDG&E	0	0	0
SoCalGas Book Expense	502	486	-16

1 **Gas System Operations, and Gas Scheduling**

2 **(Cost Centers 2200-0329 and 2200-0258)**

3 As noted previously, Gas System Operations and Planning (Cost center 2200-0329) is
4 responsible for real-time operation and control of gas flow through the pipeline system, and the
5 long-term planning and design of the SoCalGas and SDG&E gas transmission systems, which
6 includes evaluating the system's capability to maintain our design standards, meet existing service
7 obligations, serve new customer demand, and access new sources of gas supply.

8 Expenses are allocated to SDG&E based on the number of total SDG&E customer meters
9 (846,945) divided by the sum of total SoCalGas and SDG&E customer meters (6,638,877). This
10 methodology produces an allocation percentage to SDG&E of 12.76%.

11 SoCalGas is forecasting an increase in annual operating cost for this cost center in TY 2012.

12 The funding increase is attributable to new gas system operations control legislation
13 that is forecast to be in-place beginning in 2011. The new pending legislation will result in the
14 requirement to increase staffing by 3 Full-Time Equivalent (FTE) gas operator positions in order to
15 achieve new compliance standards established by this legislation. The resulting compliance
16 requirements will be equally applicable to both Utility's gas transmission system's operations.

17 The new legislative which is currently before the Commission is:

18 **PHMSA – Pipeline and Hazardous Materials Safety Administration, Dept of Transportation;**

19 D.O.T. 49 CFR §§ 192 (Transportation of Natural and Other Gas by Pipeline: Minimum
20 Federal Safety Standards), and 195 (Transportation of Hazardous Liquids by Pipeline).

21 Pipeline Safety: Control Room Management/Human Factors, 75 Fed. Reg. 5536 (Feb. 3,
22 2010) (discussing Docket No. PHMSA – 2007-27954); Amdt. Nos. 192-112 and 195-93.

23 PHMSA is amending the federal pipeline safety regulations to address human factors and
24 other aspects of control room management (CRM) where controllers use SCADA systems. Under
25 the final rule, affected pipeline operators must define the roles and responsibilities of controllers
26 and provide controllers with the necessary information, training and processes to fulfill their
27 defined responsibilities. Operators must also implement methods to prevent controller fatigue. The
28 final rule further requires operators to manage SCADA alarms, assure control room considerations
29 are taken into account when changing pipeline equipment or configurations, and review reportable
30 incidents or accidents to determine whether control room actions contributed to the event.

1 Gas Scheduling (Cost center 2200-2158), as noted previously is responsible for managing
2 the day-to-day system and operations for nominations, allocations and scheduled volumes for
3 approximately 955 of SoCalGas' non-core meter customers and 125 of SDG&E's non-core meter
4 customers. Gas Scheduling is a 7-day-a-week (including holidays) operation that is responsible for
5 ensuring that the transmission system is balanced between the nominated gas supplies and
6 forecasted system demand and enforcing the OFO and Winter Balancing rules.

7 Expenses are allocated to SDG&E based on the number of total SDG&E non-core customer
8 meters (125) divided by the sum of total SoCalGas and SDG&E non-core meters (1,080). This
9 methodology produces an allocation percentage to SDG&E of 11.57 %.

10 SoCalGas is forecasting an increase in annual operating cost for this cost center in TY 2012.
11 The funding increase is attributable to new legislation applicable to gas scheduling processes, and
12 the resulting compliance requirements are forecast to be in-place beginning in 2011. The new
13 legislation will result in requirement to increase staffing by one FTE in the gas scheduler position in
14 order to achieve compliance with the new regulations. The new regulations and resulting
15 compliance requirements will be equally applicable to both Utility's gas scheduling operations.

16 The three new legislative applications currently before the Commission are:

17 1. Application 04-08-018

18 (Filed August 16, 2004) [Application of Southern California Gas Company to Establish
19 Regulatory Authority Over the Access for Natural Gas Provided by California Gas
20 Producers]

21 California Producer Balancing – The final decision would provide California gas producers
22 to balance within 10 percent on a weekly basis (defined as a seven-day rolling period x
23 MDV x 10%) and would find that the payback period be for 14 days. If the imbalance is not
24 paid back in 14 days, the under-delivery and over-delivery will be cashed out. This
25 additional work will require approximately 1-3 hours per day.

26 2. Application08-06-006

27 (Filed June 6, 2008) [Application of Southern California Gas Company (U 904G) and
28 San Diego Gas & Electric Company (U 902 G) to Expand Existing Off-System Delivery
29 Authority]

Off System Deliveries/Shipper Imbalances – This service would allow shippers to deliver gas supplies from SoCalGas to interconnecting pipelines via displacement (4 cycles per day). This additional work will require approximately 2-4 hours per day.

3. Application 10-03-028

(Filed March 29, 2010) [Application of San Diego Gas & Electric Company (U 902 G) and Southern California Gas Company (U 904 G) Updating Firm Access Rights Service and Rates]

Firm Access Rights (FAR) Update Application - Requests to make changes and modifications to the FAR service and authorize a fully-unbundled, cost-based, rate design and the resulting FAR (Backbone Transportation Service) rate as well as the resultant updated rates by customer class. This application also requests authority for in-kind treatment of transmission fuel. Additional processes or reporting for Gas Scheduling will be dependent on the final outcome of this application. This additional work will require approximately 1-4 hours per day.

Final decisions from the CPUC on these applications will have impact to the already complex scheduling processes that occur for the five scheduling cycles per day plus added customer education and inquiries made to the existing staff.

**Table SCG-JLD-11
O&M Shared Services
(Thousands of 2009 dollars)**

Gas System Operations, and Gas Dispatching			
Cost Centers: 2200-0329 and 2200-0258	Base Year 2009	Forecast 2012	2009-2012 Incr. (Decr.)
SoCalGas Incurred Costs	3,202	3,530	328
Allocations Out			
To SDG&E from SoCalGas	406	439	33
To Corp. Center/Other	0	0	0
Subtotal Allocations Out	406	439	33
Book Expense			
SoCalGas Retained	2,796	3,091	295
Billed from SDG&E	0	0	0
SoCalGas Book Expense	2,796	3,091	295

1 **IV. CONCLUSION**

2 The forecast of the TY 2012 costs associated with the operation and maintenance of the
3 SoCalGas gas transmission system as presented in this testimony are reasonable and should be
4 adopted by the Commission. The TY 2012 forecast of \$28,296,000 for Non-Shared operating
5 expenses, and \$4,152,000 (SCG's Book Expense) for Shared Services operating expenses reflect a
6 continuing focus on sustaining safe and reliable service to our customers while controlling
7 operating expenses.

8 This concludes my revised prepared direct testimony.
9

1 **V. WITNESS QUALIFICATIONS**

2 I, John L. Dagg, am Director of (Gas) Transmission and System Operations for SoCalGas
3 and SDG&E.

4 I hold a BS degree in Mechanical Engineering from California State University, Northridge.
5 I have a broad background in engineering and natural gas pipeline operations with over 28 years of
6 experience with SoCalGas. I have held a number of technical and managerial positions with
7 increasing responsibility in the Gas Engineering, Gas Operations, Gas Distribution, and Gas
8 Transmission Departments. In these positions, I was responsible for gas system control operations,
9 field operations, technical services, and engineering design and construction. I have held my
10 current position as the Director of (Gas) Transmission and System Operations since April 2009.

11 I have not testified previously before the Commission.
12

CHANGE LOG FOR ERRATA

Exhibit	Witness	Page	Line	Errata Item
SCG-03	Dagg	JLD-5	23	Deleted "Transmission" from the section title "Transmission Technical Services".
SCG-03	Dagg	JLD-9	Table Item 1	Table SCG-JLD-4 – "1. D.O.T. Safety Fee Assessments" row, "2009 Adj. Recorded" column – changed value from 4,554 to 821 to correctly match workpaper.
SCG-03	Dagg	JLD-9	Table Item 1	Table SCG-JLD-4 – "1. D.O.T. Safety Fee Assessments" row, "2012 Estimated" column, changed value from 5,086 to 1,354 to correctly match workpaper.
SCG-03	Dagg	JLD-9	Table Item 1	Table SCG-JLD-4 – "1. D.O.T. Safety Fee Assessments" row, "Change" column, changed value from 532 to 533 to correctly reflect the increase from 2009 to 2012.
SCG-03	Dagg	JLD-9	Table Item 2	Table SCG-JLD-4 – "2. Long Beach Lease Inflation" row, "2009 Adj. Recorded" column – changed value from 821 to 4,554 to correctly match workpaper.
SCG-03	Dagg	JLD-9	Table Item 2	Table SCG-JLD-4 – "2. Long Beach Lease Inflation" row, "2012 Estimated" column, changed value from 985 to 4,717 to correctly match workpaper.
SCG-03	Dagg	JLD-9	Table Item 2	Table SCG-JLD-4 – "2. Long Beach Lease Inflation" row, "Change" column, changed value from 164 to 163 to correctly reflect the increase from 2009 to 2012.