

Company: Southern California Gas Company (U904G)
Proceeding: 2016 General Rate Case
Application: A.14-11-____
Exhibit: SCG-15

SOCALGAS

**DIRECT TESTIMONY OF CARMEN L. HERRERA
FLEET SERVICES & FACILITY OPERATIONS**

November 2014

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



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SUMMARY

(Thousands of 2013 dollars)

O&M	2013 (\$000)	2016 (\$000)	Change
Total Non-Shared	58,549	84,544	25,995
Total Shared Services (Incurred)	3,479	3,479	0
Total O&M	62,028	88,023	25,995

Capital	2014 (\$000)	2015 (\$000)	2016 (\$000)
	31,097	36,050	38,011

Summary of Requests

- Southern California Gas Company's ("SoCalGas" or the "Company") total Test Year ("TY") 2016 estimated Operations and Maintenance ("O&M") expenses for Fleet Services and Facility Operations, including non-shared and shared services, is \$88.023 million. The TY 2016 request includes \$67.672 million for Fleet Services operations, and \$20.351 million for Facility Operations.
- SoCalGas forecasts capital costs of \$31.097 million, \$36.050 million and \$38.011 million for 2014, 2015, and 2016, respectively.
- Fleet Services' request of \$67.672 million, an increase from base year of \$24.132 million, is driven primarily by costs to: 1) replace standard vehicles; 2) purchase Alternative Fuel Vehicles ("AFV") required by the Energy Policy Act ("EPAct"); 3) retrofit or replace units to comply with the Airborne Toxic Control Measures ("ATCM"); and, 4) purchase additional vehicles needed to support gas distribution, transmission, and customer field services.
- Facilities Operations' request of \$20.351 million is driven primarily by: 1) labor costs required to manage and operate the facilities; 2) and non-labor costs associated with repair, maintenance, materials, utilities; 3) contracted services; and, 4) training of facility maintenance personnel.

SOCALGAS DIRECT TESTIMONY OF CARMEN L. HERRERA

FLEET SERVICES AND FACILITY OPERATIONS

I. INTRODUCTION

A. Summary of Costs

In this testimony, I sponsor SoCalGas' Fleet Services and Facility Operations non-shared and shared services estimated expenses for TY 2016. In addition to the O&M costs, I sponsor Facility Operations capital costs for the forecast years 2014, 2015, and 2016. For TY 2016, Fleet Services and Facility Operations (non-shared services) requests \$84.544 million, an increase of \$25.995 million above 2013 adjusted-recorded costs. For TY 2016, Shared Facility Operations requests \$3.479 million, with no increase from 2013 adjusted-recorded costs. For TY 2016, Facility Operations capital requests \$31.097 million in 2014, \$36.050 million in 2015, and \$38.011 million in 2016. Table CLH-1 below summarizes my sponsored costs.

**TABLE CLH-1
TY 2016 Summary of Total Costs
(Thousands of 2013 dollars)**

Non Shared Services	2013 Adjusted-Recorded	TY 2016 Estimated	Change
Ownership Costs	16,644	37,139	20,495
Maintenance Operations	24,026	27,626	3,600
Fleet Management	2,870	2,907	37
Facility Operations	15,009	16,872	1,863
Total	58,549	84,544	25,995
Shared Services	2013 Adjusted-Recorded	TY 2016 Estimated	Change
Shared Facility Operations	3,479	3,479	0
Total Shared Services (Incurred)	3,479	3,479	0
Categories of Capital	Estimated 2014	Estimated 2015	Estimated 2016
Infrastructure & Improvements	18,066	18,066	18,066
Facility Renovations for Future Requirements	5,880	7,000	12,000
Sustainability Projects	1,500	2,855	1,840
Compliance/Systems Upgrades	2,201	4,009	1,650
NGV Refueling Stations	3,450	4,120	4,455
Total	31,097	36,050	38,011

1 In addition to this testimony, please also refer to my workpapers, Ex. SCG-15-WP (for O&M)
2 and SCG-15-CWP (for capital) for additional information on the activities described herein.

3 **B. Fleet Services**

4 **1. Summary of Fleet Services Activities**

5 Fleet Services acquires, maintains, repairs and salvages vehicles and related equipment to
6 support the reliable delivery of gas to more than six million SoCalGas customers. Fleet Services
7 manages a mix of vehicles consisting of over-the-road vehicles such as automobiles, light duty,
8 medium and heavy duty trucks; and non-over-road vehicles such as power operated equipment
9 including trailers and forklifts. Fleet Services provides daily support critical to the gas
10 distribution and transmission operating crews, meter reading operations, and customer services
11 field operations in addition to the capital construction program.

12 The key activities of Fleet Services include the following:

- 13 a) Provide the necessary quantity, type and configuration of vehicles and equipment
14 required daily by gas operations to meet new business demands, respond to gas
15 service outages and service requests, support infrastructure replacement, and
16 conduct the corrective maintenance programs central to maintaining reliable
17 service.
- 18 b) Maintain vehicles and equipment to reliably meet daily availability requirements.
19 The increasing age of the gas infrastructure as well as new business requires that
20 vehicles be available for use 24 hours a day 7 days a week.
- 21 c) Manage the vehicle and equipment asset portfolio through the design, acquisition,
22 financing, and replacement of vehicles.
- 23 d) Implement standardization of fleet equipment and technological changes in
24 vehicles to effectively manage acquisition costs and maintenance costs.
- 25 e) Provide specialized equipment and manage fuel acquisition and operations.
- 26 f) Implement fleet systems and processes to minimize the costs and optimize
27 operations.
- 28 g) Comply with Federal, State and Local statutes and agency regulations pertaining
29 to air quality, waste, hazardous materials, natural resources, safety, and
30 alternative-fueled vehicles. Of particular impact upon the Fleet Service
31 organization and costs include:

- 1 • EAct requirements regarding the federally mandated procurement of
2 alternative-fueled vehicles. As an Alternative Fuel Provider Fleet, 90% of the
3 SoCalGas' annual light duty vehicle purchases are required under the EAct
4 to be approved alternative-fueled vehicles.¹ To achieve the 90% annual
5 requirement, SoCalGas plans to buy alternative fueled vehicles at a premium.
6 If SoCalGas cannot achieve the 90% annual requirement, SoCalGas may
7 purchase EAct credits.
- 8 • California Air Resources Board ("CARB") regulations requiring the reduction
9 of diesel emissions by retrofitting or replacing diesel vehicles and off-road
10 equipment.
- 11 • U.S. Environmental Protection Agency ("EPA") and CARB regulations
12 requiring diesel engines to reduce oxides of nitrogen and particulate matter
13 emissions.
- 14 • California Highway Patrol mandated inspections, training and other
15 regulations applicable to heavy-duty fleet vehicles and equipment.
- 16 • Occupational Safety and Health Administration "OSHA" and Cal OSHA
17 mandated inspections, training and other regulations applicable to fleet
18 operations and equipment acquisition.
- 19 • Other Environmental Protection Agency requirements governing air quality,
20 water quality, waste, hazardous materials, safety and natural resources,
21 including mandated inspections and repairs applicable to underground storage
22 tanks, aboveground storage tanks, fuel island components, and hazardous
23 waste stream management.
- 24 h) Ensure proper training of Fleet Maintenance Technicians.
- 25 i) Ensure compliance with hazardous waste disposal requirements of fleet materials.
- 26 j) Evaluate changes in technology, regulation and operational trends to ensure they
27 are properly incorporated into all fleet related plans and activities.

¹ U.S. Department of Energy; EAct Fleet Information & Regulations.

1 **2. Support for Fleet Services Request**

2 SoCalGas’ forecast of expenses for Fleet Services is needed to support SoCalGas’
3 commitment to providing quality, safe, and reliable customer services. The request supports the
4 Company’s commitment to maintaining the quality of our fleet and maintenance equipment,
5 while enabling productive work. The request also supports SoCalGas commitment to the safety
6 of our work crews, who restore service, provide services to customers, and perform routine
7 inspections and maintenance service.

8 Included in the Vehicle Servicing & Repair section of this testimony are costs for
9 retrofitting the SoCalGas Fleet of over-the-road vehicles with backup cameras and backup
10 sensors to try to help prevent the number of backup incidents. The cost is spread from 2014
11 through 2016 to bring the fleet in compliance with (early adoption of) the National Highway
12 Traffic Safety Administration (“NHTSA”) standard requiring manufacturers to install rear-view
13 visibility systems in light duty vehicles by 2018.²

14 **C. Facility Operations**

15 **1. Summary of Activities**

16 SoCalGas has been delivering clean, safe and reliable natural gas to its customers for
17 more than 140 years. SoCalGas is the nation’s largest natural gas distribution utility, providing
18 safe and reliable energy to 20.9 million consumers through 5.8 million meters in more than 500
19 communities. The Company’s territory encompasses approximately 20,000 square miles in
20 diverse terrain throughout Central and Southern California, from Visalia, to Arizona, to the
21 Mexican border. Facility Operations is responsible for the operations and maintenance of utility
22 facilities, which encompass 1.7 million square feet comprised of 80 manned locations of general
23 offices, bases, multi-use sites, and branch offices and 26 telecommunication sites. Facility
24 Operations supports the safe and reliable delivery of gas to SoCalGas customers. Facility
25 Operations is also tasked with ensuring that the organization has safe, regulatory compliant,
26 reliable, and suitable working environments for its employees.

27 The following is a summary of some key activities for the Facilities Operations:

- 28 a) Management of services and processes that support the core business of
29 SoCalGas. Facility Operations ensures that the organization has safe, regulatory

² 49 CFR Part 571 (2014).

1 compliant, reliable, and suitable working environments for its employees and their
2 activities throughout the SoCalGas territory.

- 3 b) Provide safe and Americans with Disabilities Act (“ADA”) compliant access to
4 our customers at the branch offices.
- 5 c) Comply with Federal, State and Local statutes and regulations pertaining, but not
6 limited to, air quality, hazardous materials management, fire life safety,
7 management compliance, and natural resources.
- 8 d) Ensure proper training of facility maintenance personnel to comply with all
9 applicable rules and regulations.
- 10 e) Conduct regular preventative maintenance of SoCalGas facilities and grounds to
11 ensure we are operating with energy efficiency, environmental awareness and
12 safety of our employees and the public.
- 13 f) Various air quality management district’s regulating, emergency standby
14 generators, boilers and Heating Ventilation and Air Conditioning (“HVAC”)
15 equipment.
- 16 g) Local Certified Unified Program Agencies (“CUPA”s) regulating hazardous
17 material business plans.
- 18 h) Storm water pollution control regulations addressing cleanliness of our parking
19 lots and potential storm water runoff and discharge from our facilities, such as is
20 required by the Municipal Separate Storm Sewer Systems (MS4) requirements.
21 For more details, see the testimony of SoCalGas Environmental witness Jill Tracy
22 (Ex. SCG-17).
- 23 i) Other compliance/regulation items include:
 - 24 1. Reciprocating Internal Combustion Engines / National Emission Standards
25 for Hazardous Air Pollutants (“RICE/NESHAPS”) maintenance
26 requirements for our standby emergency generators.
 - 27 2. Air quality management districts and California Occupational Safety and
28 Health Administration (“Cal OSHA”): Asbestos containing building
29 material management.

- 1 3. Title 22 heavy metal in surface coating compliance. Any construction or
2 disturbance of building materials to comply with Title 22 regulation could
3 be costly.

4 **D. Support for Facility Operations Request**

5 SoCalGas' forecast of expenses for Facility Operations is needed to support SoCalGas'
6 commitment to the safety of our work areas. The request is also essential to enabling our
7 workforce to be productive, and compliant with the ADA and other State and Federal regulations
8 to meet the needs of all our employees. Additionally, the request supports our goal of
9 maintaining and preserving our facility assets.

10 **E. Support To/From Other Witnesses**

11 My testimony supports and/or references the following business areas:

- 12 1. Environmental – Ex. SCG-17, Jill Tracy
13 2. Gas Distribution - Ex. SCG-04, Frank Ayala
14 3. Engineering, Emergency Services & Land - Ex. SCG-07, Ray Stanford
15 4. Gas Transmission - Ex. SCG-05, John Dagg
16 5. Customer Service - Field & Meter Reading - Ex. SCG-10, Sara Franke
17 6. Underground Storage - Ex. SCG-06, Phil Baker
18 7. Corporate Center - Insurance – Ex. SCG-20, Katherine Carbon

19 **F. Excludes Advanced Metering Infrastructure (“AMI”)**

20 Commission Decision (“D.”) 10-04-027 authorized SoCalGas to deploy AMI to
21 approximately 6 million customers over a period of 7 years. Based on this timing, SoCalGas will
22 not complete AMI deployment until 2017. Accordingly, as described in Witness Rene F.
23 Garcia’s testimony (Ex. SCG-39), all SoCalGas forecasts presented in this TY 2016 General
24 Rate Case (“GRC”), including the forecasts in this testimony, reflect business operations,
25 processes and practices without AMI deployment (i.e., “business as usual”). However, it should
26 be noted that implementation of AMI involves both costs (i.e., increases to revenue requirement)
27 and benefits (i.e., decreases to revenue requirement). The combined result is a net revenue
28 requirement that is then embedded in rates. Since a forecasted net revenue requirement for
29 SoCalGas AMI over the 2010 through 2017 timeframe was already approved by the

Commission³, a net revenue requirement is already embedded in SoCalGas rates. Accordingly, if the Commission authorizes operating expenses in this GRC that are materially different than those assumed in SoCalGas' approved AMI net revenue requirement that is currently in rates, then the differences will need to be reconciled in an updated advice letter to ensure that embedded AMI operating benefits are consistent with and no more or no less than what is authorized in this TY 2016 GRC.

II. NON-SHARED COSTS

A. Introduction

Non-Shared costs for Fleet Services include the acquisition, maintenance, repair and salvage of more than 5,000 vehicles. Non-shared costs for Facility Operations include the operation and maintenance of SoCalGas facilities, which encompass 1.7 million square feet (comprised of 80 manned locations of general offices, bases, multi-use sites, branch offices and 26 telecommunication sites).

For TY 2016, Fleet Services and Facility Operations Non-Shared Services requests \$84.544 million, an increase of \$25.995 million above 2013 adjusted-recorded costs. Table CLH-2 below summarizes the total non-shared O&M forecasts for the O&M cost categories for Fleet Services and Facility Operations.

**TABLE CLH-2
Non-Shared O&M Summary of Costs
(Thousands of 2013 dollars)**

	2013 Adjusted-Recorded	TY 2016 Estimated	Change
Ownership Costs	16,644	37,139	20,495
Maintenance Operations	24,026	27,626	3,600
Fleet Management	2,870	2,907	37
Facility Operations	15,009	16,872	1,863
Total	58,549	84,544	25,995

B. Ownership Cost O&M Activities

For TY 2016, the Ownership O&M request is \$37.139 million, an increase of \$20.495 million above 2013 adjusted-recorded costs, as summarized on Table CLH-3 below.

³ AL 4110 was approved by letter dated August 4, 2010.

TABLE CLH-3
Ownership O&M Summary of Costs
(Thousands of 2013 dollars)

	2013 Adjusted-Recorded	TY 2016 Estimated	Change
1. Amortization	14,598	30,751	16,153
2. Interest	1,471	3,767	2,296
3. Salvage	-1,250	-1,248	2
4. License Fees	1,825	3,869	2,044
Total	16,644	37,139	20,495

1. Description of Costs and Underlying Activities

Fleet Services performs the following non-labor costs: acquires, maintains, repairs and salvages vehicles and related equipment to support the reliable delivery of gas to SoCalGas customers. Fleet Services Operations provides daily support critical to the gas distribution and transmission operating crews, customer services field operations, and the capital construction program.

SoCalGas lease-finances its vehicles and incurs annual repayment of principal and interest (amortization) for each vehicle over the term of each lease. Replacement scheduling is based on targeted useful lives of vehicles by various classes, and ownership costs for each year are forecast using a cash-flow model.

The SoCalGas fleet consists of over 5,000 vehicles and power-operated equipment which is divided into over 85 individual vehicle classifications. The fleet composition at the end of 2013 is shown in Table CLH-4 below:

Table CLH-4
SoCalGas Vehicle Types
(Year-End 2013)

VEHICLE TYPES	No. of Units
Automobiles	357
Compact Trucks and Vans	574
Light Duty Trucks and Vans	2,654
Medium Duty Trucks and Vans	581
Heavy Duty Trucks and Vans	82
Subtotal over-the-road (OTR)	4,248
Trailers	669
Construction Equipment	287
Subtotal non-over-the-road (Non-OTR)	956
TOTAL	5,204

1 SoCalGas lease-finances its fleet of vehicles. The ownership cost category is comprised
2 of: 1) amortization; 2) interest; 3) salvage; and 4) license fees. Below is a description of the
3 components of ownership costs:

4 Amortization

5 Annual repayment of principal for the fleet leases composed of active lease obligations
6 for vehicles in the fleet at year-end 2013 and new lease obligations for replacements or additions
7 to the fleet requested by operating departments. Replacement scheduling is based on targeted
8 useful lives of vehicles by various classes and amortization costs for each year are forecasted for
9 2014 through 2016. Fleet Services projects the pay-down of active lease obligations, applies
10 specified lease duration terms and associated interest to new fleet assets scheduled to be placed
11 in service during each forecast year. See Ex. SCG-15-WP-Amortization and supplemental for
12 further detail.

13 51% or \$15.641 million of the 2016 amortization forecast total is for committed financing
14 of existing vehicles and replacements currently under purchase order, 10 % or \$3.155 million of
15 the 2016 amortization forecast total is for replacements scheduled to be purchased in the 2014
16 through 2016 period, 11% or \$3.316 million of the 2016 amortization forecast total is for
17 incremental vehicle additions requested by operating departments, and 1% or \$0.290 million of
18 the 2016 amortization forecast total is for completion of state mandated diesel particulate filter
19 (Airborne Toxic Control Measure (“ATCM”)) retrofits or replacements. Additionally, Natural
20 Gas Vehicles (“NGVs”) account for 27% or \$8.350 million of the 2016 forecast replacements.

21 California’s landmark climate change law, the Global Warming Solutions Act (AB 32),
22 set the state on an aggressive path toward significantly reducing greenhouse gas (GHG)
23 emissions and improving the environment. The transportation sector accounts for 36% of GHG
24 emissions in California.⁴ In order to capture the benefits of reducing emissions from the
25 millions of cars and trucks on California’s roads today, the state has taken steps to enable
26 widespread and accelerated adoption of Alternative Fuel Vehicles and the infrastructure to
27 support them.

⁴ First Update to the Climate Change Scoping Plan, California Air Resources Board, May 2014, p. 46,
http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf.

1 In line with California state initiatives and regional and multi-agency efforts seeking
2 ozone reductions in the range of 70% to 80% in all sectors, including the transportation sector's
3 contribution toward meeting California's GHG goals, SoCalGas is supporting this initiative to
4 grow its natural gas fleet by replacing and/or retrofitting traditional gas and diesel vehicles. See
5 Ex. SCG-15-WP Amortization and supplemental for further detail.

6 Interest

7 All replacement and incremental vehicle additions are forecasted to be financed under the
8 operating lease with floating interest rates.

9 Salvage

10 Vehicles are sold for salvage at the end of their useful life. Any net proceeds are credited
11 back to Fleet Services offsetting the incremental acquisition costs of replacement vehicles.

12 License Fees

13 License fees payable to the State of California each year are a function of the age and
14 composition of the fleet during that year, and consist of several components based on vehicle
15 weight, capacities, age, purchase price, and location.

16 **2. Forecast Method**

17 For TY 2016, I forecasted \$67.672 million for non-shared Fleet Services costs. My
18 forecasted amount is mostly due to committed financing of existing vehicles and the need for
19 additional fleet and replacement vehicles to support gas distribution, transmission, and customer
20 field services. Operating departments estimate the need for 506 additional vehicles for operating
21 departments over the three year period, 2014, 2015, and 2016. The increase in vehicles also
22 impacts the costs for associated services such as: maintenance and fuel costs; activities required
23 to meet compliance; the addition of one trainer for Fleet Services to support the increase in
24 alternative fueled vehicles and new vehicle technology. Additionally, there is an associated
25 increase in the costs to satisfy CARB environmental requirements related to retrofitting vehicles.
26 These estimates for the ownership cost categories are derived using a zero-based method, as
27 explained below.

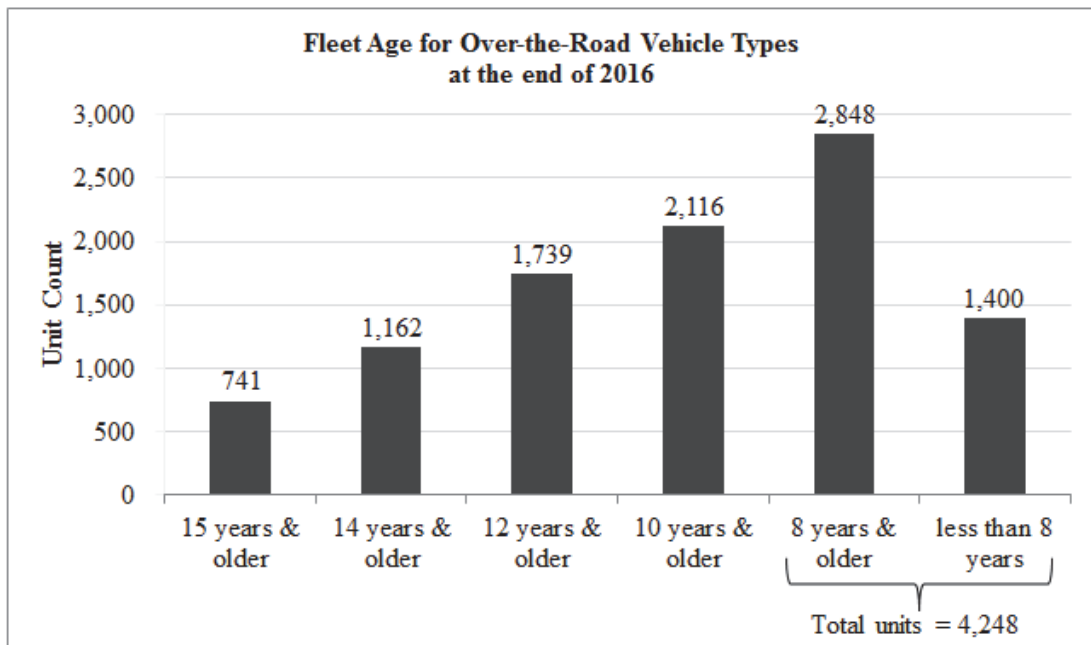
28 Amortization

29 A zero-based forecast is appropriate because costs vary according to lease amortization
30 schedules for units currently in the fleet or new units added. Therefore, historical trends or

1 averages will not properly represent the costs. Costs are actually determined based on each
 2 vehicle lease schedule. The cost associated with lease amortization for 2014 through 2016 is
 3 based on year-end 2013 actual vehicles under lease financing plus the planned replacement
 4 vehicles scheduled each year and requested incremental vehicle additions each year. The
 5 increase in amortization costs in 2016 is due primarily to increasing lease balances of
 6 replacement vehicles following the required replacement lifecycles and the requests for
 7 incremental vehicles required by other SoCalGas business units. More information is included in
 8 Ex. SCG-15-WP-Amortization and supplemental.

9 The chart below shows the aging status of the Fleet for all the over-the-road vehicles at
 10 the end of 2016 assuming they are not replaced.

11 **Chart CLH- 1**



12
 13 As a practice, and consistent with current utility standards, SoCalGas replaces over-the-
 14 road vehicles once they enter the seven-to ten-year mark, in order to minimize maintenance costs
 15 and downtime as the fleet ages and becomes less reliable.

⁵ E.g., automobiles, trucks and vans.

1 I did not use an alternate forecast method(s) or other historical data because neither is
2 appropriate since amortization expenses involve debt retirement and escalation, which are
3 included in the price estimates for new vehicle acquisition.

4 Interest

5 A zero-based forecast is appropriate because interest costs vary according to lease
6 amortization balances for units currently in the fleet or new units added. Therefore, historical
7 trends or averages will not properly represent the costs. Costs are actually determined based on
8 each vehicle lease balance. This method is appropriate because interest costs in each forecast
9 year are based on monthly outstanding balances multiplied by the London Interbank Offered
10 Rate (“LIBOR”) contained in the Global Insight Forecast for the payment month, then summed
11 for the year. More information is included in Ex. SCG-15-WP-Interest and supplemental.

12 Use of alternate forecast method(s) or certain historical data is not appropriate because
13 interest calculations are tied to the forecasted outstanding balances, and these balances vary year-
14 to-year depending on the number and value of leases.

15 Salvage

16 A zero-based forecast is appropriate because estimates of salvage proceeds for each
17 forecast year are determined by multiplying the number of vehicles expected to be replaced
18 during the year by the salvage received based on the 3-year average per-unit salvage amount.

19 Use of alternate forecast method(s) or certain historical trends is not appropriate because
20 the value of the salvage proceeds is directly related to the forecasted number of vehicle
21 replacements. More information is included in Ex. SCG-15-WP-Salvage and supplemental.

22 License Fees

23 Historical trends or averages will not properly represent the costs. A zero-based forecast,
24 where the base year ratio of license fees to amortization is used to determine the license fee costs
25 is the most reasonable forecasting method. This methodology is considered reasonable as the
26 calculation to replicate the California Department of Motor Vehicles (“DMV”) formulae⁶ for
27 SoCalGas’ fleet which is comprised of more than five thousand fleet vehicles, is complex. This

⁶ The California DMV computation consists of 1) type of vehicle; 2) model year; 3) motive power; purchase date, etc. See <http://www.dmv.org/articles/how-to-calculate-vehicle-registration-fees>.

1 estimating method has proven a reasonable approximation. More information is included in Ex.
2 SCG-15-WP-License Fees and supplemental.

3 **3. Cost Drivers**

4 During 2013, SoCalGas vehicles were serviced at 48 fleet maintenance garages,
5 including satellite facilities. SoCalGas maintains a wide variety of vehicles to support the reliable
6 delivery of gas to SoCalGas customers.

7 The cost drivers behind this forecast are attributable to the cost and timing of replacement
8 vehicles, additional vehicles needed to support gas distribution, transmission, and customer field
9 services, future interest rate increases, and environmental and regulatory compliance-related
10 costs associated with the purchase and maintenance of vehicles and equipment. These drivers
11 are supported by my workpapers detailing the replacement of vehicles, and our incremental
12 request for ATCM diesel particulate filter replacements for 76 vehicles. See Ex. SCG-15-WP for
13 more information.

14 Additionally, as an Alternative Fuel Provider Fleet, 90% of the SoCalGas annual light
15 duty vehicle purchases are required under the EPA Act to be approved alternative-fueled vehicles.⁷
16 To achieve the 90% annual requirement, SoCalGas plans to buy alternative fueled vehicles at a
17 premium. If SoCalGas cannot achieve the 90% annual requirement, SoCalGas may purchase
18 EPA Act credits.

19 **C. Maintenance Operations O&M Activities**

20 For TY 2016, the Maintenance Operations O&M request is \$27.626 million, an increase
21 of \$3.600 million above 2013 adjusted-recorded costs, as summarized in Table CLH-5 below.

22
23 **TABLE CLH-5**
24 **Maintenance Operations O&M Summary of Costs**
25 **(Thousands of 2013 dollars)**

	2013 Adjusted-Recorded	TY 2016 Estimated	Change
1. Vehicle Servicing and Repairs	11,666	14,477	2,811
2. Automotive Fuels	12,360	13,149	789
Total	24,026	27,626	3,600

26

⁷ U.S. Department of Energy; EPA Act Fleet Information & Regulations.

1 **1. Description of Costs and Underlying Activities**

2 The Vehicle Servicing and Repairs component of Maintenance Operations performs
3 vehicle safety inspections and other routine maintenance (such as oil changes). Inspection and
4 maintenance are carried out in 48 garage locations distributed throughout the SoCalGas territory.
5 Vehicle Servicing and Repairs also repairs damaged vehicles and replaces worn and defective
6 parts. In addition, this group facilitates compliance with all applicable Federal, State, and local
7 environmental, safety, and emissions regulations. Additional technician training costs are
8 included in this forecast.

9 The cost of fuel is a function of both price and quantity consumed. SoCalGas attempts to
10 reduce financial impact of increasing prices through ongoing hedging activities. While improved
11 fuel economy units will likely have a beneficial impact on fuel costs, the price will remain the
12 dominant factor.

13 **2. Forecast Method**

14 **Vehicle Servicing & Repairs** - I have forecasted vehicle maintenance costs and fleet
15 services maintenance and operations based on a three-year historical average. The use of multi-
16 year averaging is generally recognized as a reasonable and valid methodology where costs
17 fluctuate from year to year. Costs in this area are prone to fluctuations because of the volatility
18 in commodity prices. SoCalGas cannot predict the changes in commodity prices, and must
19 therefore rely on averaging to arrive at a reasonable cost estimate. SoCalGas did not use a five-
20 year historical average because the year 2009 was an anomaly as the nation recovered from a
21 recession.⁸ More information is included in Ex. SCG-15-WP-Maintenance Operations.

22 **Automotive Fuel** – I have forecasted automotive fuel using the three-year historical
23 average. The use of multi-year averaging is generally recognized as a reasonable and valid
24 methodology where costs fluctuate from year to year. Costs in this area are prone to fluctuations
25 because of the volatility of fuel prices due to political, social, and economic concerns. The use
26 of alternate forecast method(s) is not applicable because of the fluctuations in the price of fuel.
27 Such volatility makes predicting the cost of fuel over an extended historical time difficult. As a

⁸ The National Bureau of Economic Research reported that the recession ended in June 2009.
<http://www.nber.org/cycles/sept2010.html>.

1 result, SoCalGas must rely on averaging to arrive at a reasonable estimate. More information is
2 included in Ex. SCG-15-WP-Maintenance Operations for Automotive Fuels.

3 **3. Cost Drivers**

4 The following are key cost drivers behind this forecast:

- 5 • Labor resources and materials required to effectively manage Fleet Services
6 operations.
- 7 • The cost of gasoline and diesel fuel has been volatile due to global issues which
8 impact fuel sources. For example, the cost of diesel has increased 58% in the last
9 five years and reformulated gasoline increased by 45%.⁹

10 There are incremental vehicles that also impact the cost of the fuel. These cost drivers
11 are further described in my workpapers (SCG-15-WP).

- 12 • The costs to retrofit backup camera and sensor safety devices on over-the-road
13 vehicles in the fleet are included in this forecast.
- 14 • The costs to insource the smog inspection program are also included in this
15 forecast.

16 **D. Fleet Management O&M Activities**

17 For TY 2016, Fleet Management requests \$2.907 million, an increase of \$0.037 million
18 above 2013 adjusted-recorded costs, as summarized on Table CLH-6 below.

19 **TABLE CLH-6**
20 **Fleet Management O&M Summary of Costs**
21 **(Thousands of 2013 dollars)**

	2013 Adjusted-Recorded	TY 2016 Estimated	Change
Fleet Management	2,870	2,907	37
Total	2,870	2,907	37

22
23 **1. Description of Costs and Underlying Activities**

24 This activity consists of all the Fleet Services management staff which includes the
25 allocated portion of the Fleet Services Director as well as management and technology systems
26 that provide technical support. The following is a summary of some of the activities that are
27 performed by Fleet Management:

⁹ http://www.eia.gov/dnav/pet/pet_pri_gnd_dcus_r50_a.htm.

- a) Vehicle design specification and up-fitting;
- b) Quality assurance inspection services;
- c) Vehicle replacement management;
- d) Garage management and associated compliance;
- e) Quality assurance environmental services;
- f) Parts and inventory control; and
- g) Training for Fleet Services Technicians.

Fleet Management also collects employee commutation fees to help offset incremental fleet costs for take home fleet vehicles.

2. Forecast Method

A three-year historical average was used as the basis for our TY 2016 forecast. The three-year historical average is most appropriate because recorded costs for this activity have fluctuated in the past three years. In addition, this methodology accurately reflects the current and future staffing levels and the recent economic trends.

My forecast includes one additional FTE for a Fleet Services Trainer to support the increase in alternative fueled vehicles and new technology, the increase in State of California regulatory and environmental requirements, and the insourcing of the smog inspection program. More information is included in Ex. SCG-15-WP- Fleet Management.

3. Cost Drivers

The cost drivers behind this forecast include labor, one incremental trainer, and the costs to maintain the Fleet Services Systems. The Fleet Services System is a software application that facilitates SoCalGas’ management and operation of the full life-cycle management of all fleet units.

E. Facility Operations O&M Activities

For TY 2016, the Facility Operations O&M request is \$16.872 million, an increase of \$1.863 million above 2013 adjusted-recorded costs, as summarized on Table CLH-7 below.

**TABLE CLH-7
Facility Operations O&M Summary of Costs
(Thousands of 2013 dollars)**

	2013 Adjusted-Recorded	TY 2016 Estimated	Change
Facility Operations	15,009	16,872	1,863
Total	15,009	16,872	1,863

1 **1. Description of Costs and Underlying Activities**

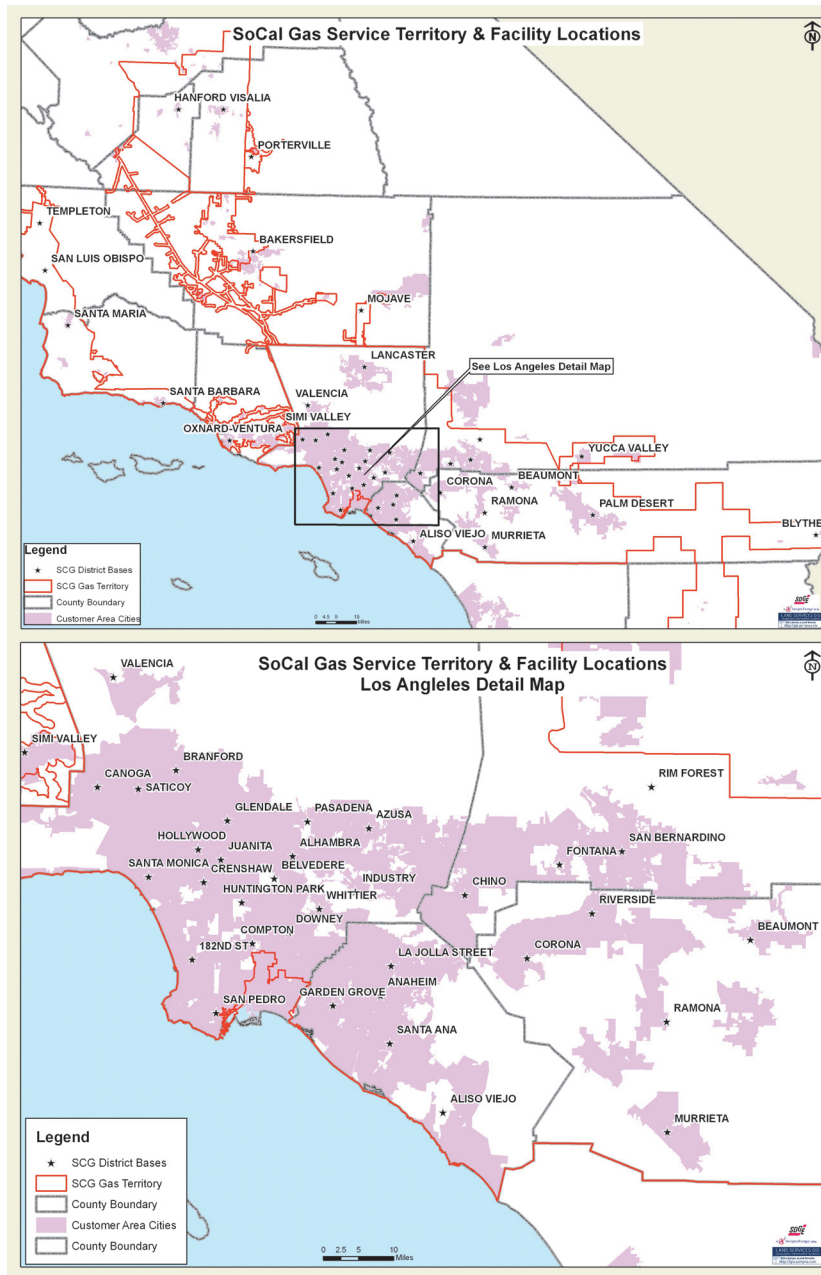
2 As shown in Table CLH-8 below, Facility Operations provides operations and
3 maintenance for 80 owned and manned utility facilities averaging 44 years old. The operations
4 are comprised of operating bases, regional headquarters, branch offices, and multi-use facilities.
5 Facility Operations also provides operations and maintenance to 26 telecommunication sites, 46
6 leased branch offices, and the leased Gas Company Tower headquarters.

7 **TABLE CLH-8**
8 **SoCalGas Owned Facilities**

	# Sites	Sq. Ft.	Average Age
Operating Bases	64	868,414	43
Branch Offices	6	14,598	66
Multi-Use	6	593,670	41
Regional HQ	4	239,858	26
Total	80	1,716,540	44

1 The following maps illustrate the location of the SoCalGas facilities, followed by a
2 description of each facility type.

SCG Service Territory



3
4
5
6
7

1 **The following is a description of facility types in Facility Operations:**

- 2 (1) Operating Bases: These facilities house the SoCalGas operations activities. They
3 support gas distribution and transmission crews, customer service field
4 operations, meter reading operations, and storage operations that provide services
5 to SoCalGas customers.
- 6 (2) Regional Headquarters/Other Office Facilities: These offices consist of Regional
7 Headquarters buildings to house a number of administrative functions that support
8 distribution and customer service field operations, and transmission/storage
9 operations. In addition, this category includes two customer call centers and the
10 Monterey Park (“MPK”) facility (which is a shared site with SDG&E and is
11 discussed under Shared Facility Operations later in this testimony) that houses
12 various activities for Information Technology (“IT”), billing, and payment
13 processing.
- 14 (3) Branch Offices: This category represents payment offices for customer service to
15 support bill payment and customer walk-in inquiries and service requests.
- 16 (4) Multi-Use Facilities: These facilities provide various support functions for
17 SoCalGas. They provide storage capacity for gas distribution material and
18 equipment, various meter repair and fabrication shops, office space for gas
19 distribution, gas transmission, fleet operations, and environmental solutions.
20 Pipeline welding and classroom training for customer service employees are also
21 provided at a multi-use site. SoCalGas also operates a testing lab at its Pico
22 Rivera site to support environmental compliance and material testing and
23 evaluation services for air quality and compressor services, applied technology,
24 and chemical analysis. In addition, this category includes the SoCalGas Energy
25 Resource Center (“ERC”).
- 26 (5) Gas Company Tower (“GCT”): This shared facility is the primary SoCalGas
27 administrative office space, which is located in downtown Los Angeles.
28 SoCalGas is currently occupying less space than when SoCalGas filed its last
29 GRC due to the renegotiation of the lease, which became effective in November
30 2011.

(6) Telecommunication Sites: contain the radio network and dispatch infrastructure for Company operations, handling both data and voice communications.

2. Forecast Method

The forecast method I have applied for this cost category is the three-year historical average. The use of multi-year averaging is generally recognized as a reasonable and valid methodology where costs fluctuate from year to year. Costs in this area have fluctuated in the past years. Therefore, SoCalGas relies on averaging of three years to arrive at a reasonable cost estimate. More information is included in Ex. SCG-15-WP- Facility Operations.

3. Cost Drivers

The cost drivers include labor required to manage the infrastructure and non-labor costs associated with maintenance, repairs, materials, electricity and water costs. Cost drivers also include contracted services for janitorial, landscaping and yard sweeping for the facilities. The increase from base year is driven by increased training for facility mechanics to meet required maintenance and repairs on new building & equipment technology; permits to meet regulation for industrial storm water including Municipal Separate Storm Sewer Systems (MS4) requirements; and meeting emission reduction targets set by South Coast Air Quality Management District (“SCAQMD”) Rule 2202.¹⁰

III. SHARED COSTS

A. Introduction

For TY 2016, the Shared Facility Operations O&M request is \$3.479 million, with no increase above 2013 adjusted-recorded costs, as summarized on Table CLH-9 below.

TABLE CLH-9
Shared O&M Summary of Costs
(Thousands of 2013 dollars)

	2013 Adjusted-Recorded	TY 2016 Estimated	Change
Shared Facility Operations	3,479	3,479	0
Total Shared Services (Incurred)	3,479	3,479	0

I am sponsoring the forecasts on a total incurred basis as well as the shared services allocation percentages related to those costs. Those percentages are presented in my shared

¹⁰ For a more detailed discussion, see testimony of SoCalGas witness Jill Tracy, Exh. SCG-17.

1 services workpapers, along with a description explaining the activities being allocated. See Ex.
 2 SCG-15-WP. The dollar amounts allocated to affiliates are presented in the testimony of
 3 SoCalGas' Shared Services Policy and Procedures witness Mark Diancin (Ex. SCG-25).

4 **B. Shared Facility Operations**

5 The costs for each category are summarized below in Table CLH-10.

6 **TABLE CLH-10**
 7 **(Thousands of 2013 dollars)**

Shared Facility Operations	2013 Adjusted-Recorded	TY 2016 Estimated	Change
Facilities – Monterey Park	2,177	2,177	0
Facilities - Gas Company Tower	1,210	1,210	0
Director Support Services	92	92	0
Incurred Costs Total	3,479	3,479	0

8
 9 **1. Description of Costs and Underlying Activities**

10 This request is necessary to fund shared facility operations at SoCalGas. As summarized
 11 in the above Table CLH-9, the forecast for TY 2016 is \$3.479 million, which is flat compared to
 12 the base year. The purpose of this request is to continue to fund two major locations, the GCT
 13 and MPK, in addition to Director costs. The forecast is comprised of the following: MPK -
 14 \$2.177 million, GCT - \$1.210 million, and Director costs of \$0.092 million.

15 The majority of the Shared Services activities in the Facility Operations area reflect costs
 16 for shared management or operational costs that overlap between SDG&E, SoCalGas, and the
 17 Sempra Energy Corporate Center.

18 **The following is a summary of the SoCalGas cost centers:**

19 **MPK**

20 This cost center contains facility operations, houses the data center and maintenance
 21 expenses (e.g. mechanic and manager labor, facility operations non-labor expenses such as
 22 general maintenance, janitorial, landscaping, and security maintenance) for MPK.

23 These costs are allocated back to SDG&E and Corporate Center based on the amount of
 24 space used and the respective Shared Services percentages of each occupying utility. The data
 25 center allocation method, however, uses Local Area Network (“LAN”) identifications (applied to
 26 the electric costs of the Data Center) to compute the allocation percentages. More information is
 27 included in Ex. SCG-15-WP- Facilities Monterey Park Mgr.

1 **GCT**

2 This cost center contains facility operations and maintenance expenses (e.g., mechanic
3 and manager labor, facility operations non-labor expenses such as general maintenance,
4 janitorial, landscaping, and security maintenance) for GCT. In 2011, a new Gas Tower lease was
5 negotiated, which included the consolidation of floors. More information is included in Ex.
6 SCG-15-WP-Facilities GCT.

7 These costs are allocated back to SDG&E and Corporate Center based on the amount of
8 space used and the respective Shared Services percentages of each occupying utility.

9 **Director Costs**

10 The Director provides overall leadership and direction to the operations & planning
11 Facility functional organization. The Director cost center contains the partial costs of one
12 Director and one administrative staff. These costs are housed at the Company where the Director
13 is employed, which is at SoCalGas, and then reallocated accordingly. More information is
14 included in Ex. SCG-15-WP-Director Support Services.

15 **2. Forecast Method**

16 As a base for TY 2016, I used the last recorded year for MPK Facility Operations. The
17 last recorded year represents a reasonable base to estimate operational needs for TY 2016
18 because SoCalGas expanded its data center in 2013, and the associated costs prior to 2013 are
19 anomalies that skew the historical data. In addition, the last recorded year accurately depicts the
20 expected future cost trend based on our recent operating structure. More information is included
21 in my workpapers, Ex. SCG-15- Facilities Monterey Park Mgr.

22 As a base for TY 2016, I used the last recorded year for GCT Facility Operations. The
23 last recorded year represents a reasonable base to estimate operational needs for TY 2016
24 because SoCalGas re-negotiated its lease agreement in November 2011, which reduced
25 SoCalGas' square footage. Thus, the associated lease costs prior to 2012 are anomalies that
26 skew the historical data. In addition, the last recorded year accurately depicts the expected
27 future cost trend based on our recent operating structure. More information is included in my
28 workpapers, Ex. SCG-15-WP-Facilities GCT.

29 As a base for TY 2016, I used the last recorded year for Director Facility Operations.
30 The last recorded year represents a reasonable base to estimate operational needs for TY 2016
31 because it accurately depicts the expected future cost trend based on our recent operating

1 structure. More information is included in my workpapers, Ex. SCG-15-WP - Director Support
2 Services.

3 **3. Cost Drivers**

4 The cost drivers for this activity include labor required to manage the infrastructure and
5 non-labor costs for maintenance, repairs, materials, electricity and water costs, and contracted
6 services for janitorial, landscaping and yard sweeping costs for the facilities.

7 **IV. CAPITAL EXPENDITURES**

8 **A. Introduction**

9 The capital expenditures forecast includes base dollars required to maintain current
10 infrastructure and system integrity; projects to renovate SoCalGas buildings to meet future
11 operational needs; costs to support sustainability efforts (conserve water, energy), system
12 upgrades and compliance; and costs for NGV refueling.

13 For TY 2016, the capital expenditures request is \$31.097 million in 2014, \$36.050million
14 in 2015, and \$38.011million in 2016. Table CLH-11 below summarizes the capital expenditure
15 forecasts. Capital expenditures costs include the following categories: 1) infrastructure &
16 improvements; 2) facility renovation for future requirements; 3) sustainability projects; 4)
17 compliance/systems upgrades; and 5) NGV refueling stations.

18 **TABLE CLH-11**
19 **Capital Expenditures Summary of Costs**
20 **(Thousands of 2013 dollars)**

Categories of Capital Expenditures	Estimated 2014	Estimated 2015	Estimated 2016
Infrastructure & Improvements	18,066	18,066	18,066
Facility Renovation for Future Requirements	5,880	7,000	12,000
Sustainability Projects	1,500	2,855	1,840
Compliance/Systems Upgrades	2,201	4,009	1,650
NGV Refueling Stations	3,450	4,120	4,455
Total	31,097	36,050	38,011

21 **B. Infrastructure & Improvements**

22 For TY 2016, the Infrastructure & Improvements request is \$18.066 million in 2014,
23 \$18.066 million in 2015, and \$18.066 million in 2016, as summarized on Table CLH-12 below.
24

TABLE CLH-12
Capital Expenditures Summary of Costs
(Thousands of 2013 dollars)

Infrastructure & Improvements	Estimated 2014	Estimated 2015	Estimated 2016
Infrastructure & Improvements	18,066	18,066	18,066
Total	18,066	18,066	18,066

1. Description

The forecast for the Infrastructure & Improvements category for 2014, 2015, and 2016 is \$18.066 million per year. This request is necessary to fund numerous basic facility improvements to adequately support business operations, extend the life of Company assets, protect employees and Company property, adhere to codes and regulations, and ensure safety and environmental compliance.

The Infrastructure & Improvements forecast funds necessary recurring facility improvements and equipment upgrades to adequately support business operations. The SoCalGas capital renewal program identifies facilities to be repaired or improved, as needed, based on the criticality of the facility, the age of the asset, and the implications for failure to complete the replacement or upgrade. The capital renewal program is based on a systematic management process to plan and budget for known recurring repairs and replacements that extend the life and retain the usable condition of facilities and systems. The requested capital expenditure costs are needed to maintain safety of Company facilities and assets, support operational needs, and achieve cost avoidance.

Projects are planned and scheduled according to the availability of resources, lead times and priorities. Similar projects are bundled for economies of scale for better pricing in sourcing. Construction calculations are supported by industry professionals, including licensed architects and designers, construction industry professionals, and IT domain experts using standard construction estimation practices.

The specific details regarding Infrastructure & Improvements are found in my workpapers, Ex. SCG-15-CWP- Infrastructure & Improvements.

1 **2. Forecast Method**

2 The forecast for this cost category was determined using the aggregate current
3 replacement value (“CRV”)¹¹ of SoCalGas-owned buildings and applying a capital renewal rate
4 based on an industry benchmarking index that supports the investment necessary to maintain our
5 existing infrastructures.

6 I applied an index from the International Facility Management Association (“IFMA”)
7 Utility Council benchmarking study conducted in 2012 to the CRV.¹² The IFMA benchmarking
8 study indicated capital renewal ranges from 1.16% to 3.77% for current year capital and 1.21%
9 to 4.52% for 5-year average capital.

10 Taking into consideration the IFMA ranges above in conjunction with the condition and
11 average age of the properties (44 years), I applied a 2.5% capital renewal rate to our current
12 replacement value to determine the forecasted amount. My forecast approach recognizes that
13 facilities require ongoing investments to maintain their functional and operational integrity, as
14 the conditions continually deteriorate over time. This method is most appropriate because it is
15 based on industry standards and reputable industry benchmarking index.

16 More information is included in Ex. SCG-15-CWP-Infrastructure & Improvements and
17 supplemental.

18 **3. Cost Drivers**

19 The underlying cost drivers for these capital improvements include:

- Boilers • Chillers • Water Heaters • Cooling Towers
- Flooring & Carpeting • Generators • Air Handlers • Stormwater Protection
- HVAC Systems • Lighting • Plumbing • Electrical
- ADA Compliance • Security Integrity • Ceiling Tiles • Parking Lots

- Parking Lots - Focus will be placed on parking lots which contain cracks and low spots over time and could create safety concerns with foot traffic walking in the

¹¹ Facilities replacement value is derived from data that is similarly used to determine appropriate insurance levels for those same properties, as described in the testimony of Ms. Katherine Carbon, Exh. SCG-20.

¹² International Facility Management Association Utilities Council, 2014 Facilities Benchmarking Study Using 2013 Data, publish date May 31, 2014. <https://facilityissues.com/utilities-council/>

1 existing parking lots, as well as the integrity of the surface where top cover
2 degradation leads to accelerated deterioration of the underlying ground.

- 3 • Chillers – Old parts for chillers are becoming harder to procure and costs to
4 maintain are not economical. Additionally, some replacements may require
5 redesign and piping configurations.
- 6 • HVAC- systems which have been identified as under-performing or nearing the
7 end of their useful life cycle. Additionally, some replacements may require new
8 electrical controls and other components.

9 Some of the improvements may require re-design, engineering, and permitting.

10 SoCalGas plans to execute these improvements by TY 2016. More information for these cost
11 drivers is included in my workpapers, Ex. SCG-15-CWP-Infrastructure & Improvements and
12 supplemental.

13 C. Facility Renovations for Future Requirements

14 For TY 2016, the Facility Renovations for Future Requirements request is \$5.880 million
15 in 2014, \$7.000 million in 2015, and \$12.000 million in 2016, as summarized on Table CLH-13
16 below.

17 **TABLE CLH-13**
18 **Capital Expenditures Summary of Costs**
19 **(Thousands of 2013 dollars)**

Facility Renovations for Future Requirements	Estimated 2014	Estimated 2015	Estimated 2016
Facility Renovations for Future Requirements	5,880	7,000	12,000
Total	5,880	7,000	12,000

20 1. Description

21 The forecast for Facility Renovations for Future Requirements is \$5.880 million, \$7.000
22 million, and \$12.000 million, for 2014, 2015, and 2016, respectively. These renovations are
23 necessary due to the aging facilities that no longer meet workforce space requirements. These
24 renovations will support SoCalGas' changing workplace requirements and improve the
25 functionality of our buildings and/or sites, which support the work patterns of SoCalGas
26 employees. Additionally, we need facilities that provide flexibility so that the space can evolve
27

1 as people, technology, and business needs change over time. These improvements typically
2 include space reconfiguration, building modifications, technology and furniture upgrades.

3 These improvements are projected over multiple years due to their magnitude and
4 complexity. The specific details regarding facility upgrades are included in Ex. SCG-15-CWP-
5 Facility Renovations for Future Requirements.

6 **2. Forecast Method**

7 The TY 2016 forecast was developed using a zero-based methodology. This method is
8 most appropriate because costs to renovate SoCalGas facilities will depend on project
9 requirements and vendor estimates for specific work to be performed. Use of historical average
10 data is an inappropriate base because it does not accurately reflect future building improvements
11 and renovations. More information is included in my workpapers, Ex. SCG-15-CWP-Facility
12 Renovations for Future Requirements.

13 **3. Cost Drivers**

14 The underlying cost driver(s) for these capital improvements include facility redesign,
15 space reconfiguration, technology and furniture equipment. More information for these cost
16 drivers is included in Ex. SCG-15-CWP-Facility Renovations for Future Requirements.

17 **D. Sustainability Projects**

18 For TY 2016, the Sustainability Projects request is \$1.500 million in 2014, \$2.855
19 million in 2015, and \$1.840 million in 2016, as summarized on Table CLH-14 below.

20 **TABLE CLH-14**
21 **Capital Expenditures Summary of Costs**
22 **(Thousands of 2013 dollars)**

Sustainability Projects	Estimated 2014	Estimated 2015	Estimated 2016
Sustainability - Solar	0	2,505	1,450
Sustainability - Water Conservation	925	275	300
Sustainability - Energy Management System	575	75	90
Total	1,500	2,855	1,840

23 **1. Description**

24 The forecast for Sustainability Projects for 2014, 2015, and 2016 is \$1.500 million,
25 \$2.855 million, and \$1.840 million, respectively. In support of our Company's goals,
26

1 sustainability is a significant factor in business planning. Our sustainability efforts are to
2 improve energy conservation and to reduce our carbon footprint in addition to cost containment.

3 The objective of the overall Company's sustainability efforts is to minimize its
4 environmental footprint and establish SoCalGas' baseline and develop and implement a plan to
5 mitigate and/or reduce that footprint while containing costs. In support of this objective,
6 SoCalGas requests funding to install: 1) solar systems at various facilities to generate renewable
7 energy from solar photovoltaic panels, which will partially offset rising electricity costs; 2)
8 water conservation projects at various facilities, which include xeriscaping and other drought
9 tolerant projects; and 3) energy management systems, which consist of software and hardware
10 that are integrated with the building's HVAC and lighting systems. Specific details regarding
11 Sustainability Projects are found in Ex. SCG-15-CWP-Sustainability-Solar, Ex. SCG-15-CWP-
12 Sustainability-Water Conservation, and Ex. SCG-15-CWP-Sustainability-Energy Management
13 System. SoCalGas plans to build and place in service these projects by TY 2016.

14 **2. Forecast Method**

15 The forecast method developed for this cost category is zero-based. This method is most
16 appropriate because the cost estimate depends on project requirements and vendor estimates for
17 specific work to be performed. More information is included in my workpapers, Ex. SCG-15-
18 CWP-Sustainability-Solar, Ex. SCG-15-CWP-Sustainability-Water Conservation, and Ex. SCG-
19 15-CWP- Sustainability-Energy Management System.

20 **3. Cost Drivers**

21 The underlying cost drivers for this capital project relate to project requirements and
22 vendor estimates. More information is included in Ex. SCG-15-CWP-Sustainability-Solar, Ex.
23 SCG-15-CWP-Sustainability-Water Conservation, and Ex. SCG-15-CWP-Sustainability-Energy
24 Management System.

25 **E. Compliance/Systems Upgrades**

26 For TY 2016, the Compliance/Systems Upgrades request is \$2.201 million in 2014,
27 \$4.009 million in 2015, and \$1.650 million in 2016, as summarized on Table CLH-15 below.

TABLE CLH-15
Capital Expenditures Summary of Costs
(Thousands of 2013 dollars)

Compliance/Systems Upgrades	Estimated 2014	Estimated 2015	Estimated 2016
Facility & Capital System Upgrade	1,102	0	0
Fleet Capital Tool Replacement	250	250	250
Fleet Fuel System Upgrade	849	2,546	0
Fleet UST Replacement Program	0	1,050	1,400
Fleet Smog Tools	0	163	0
Total	2,201	4,009	1,650

1. Description

The forecast for Compliance & Systems Upgrades for 2014, 2015, and 2016 is \$2.201 million, \$4.009 million and \$1.650 million, respectively. SoCalGas plans to build and place these upgrades in service by TY 2016.

The following are planned Compliance/Systems Upgrade projects for Fleet Services and Facility Operations:

- \$1.102 million in 2014 is needed to fund a centralized single integrated software system that provides various modules in space planning and management; real estate portfolio management and capital projects management. The current system is at the end of its useful life and no longer supported by the vendor. As a result, SoCalGas may risk having a system that is not functional without the proper support.
- \$0.250 million for each year from 2014 to 2016 are needed to fund new/replacement garage equipment such as tire changing and balancing machines and diagnostic tools, and emissions related equipment, which is shared across 48 SoCalGas garages. This equipment is necessary in order to comply with state mandated regulations.
- \$0.849 million in 2014 and \$2.546 million in 2015 are needed to fund installation of a new Fuel Management System to replace the current system that has become obsolete and will not be supported by the vendor in the near future. These factors pose the risk of having a system that is not functional without the proper support. The lack of a new fuel management system poses the risk that we will not be able

1 to track fuel consumption and other critical data to make properly informed
2 business decisions.

- 3 • \$1.050 million in 2015 and \$1.400 million in 2016 are needed to fund
4 Underground Storage Tanks (“UST”) replacements. SoCalGas currently has 77
5 USTs of which 38 were placed in service prior to 1987. As a result, SoCalGas is
6 establishing a routine replacement plan for all USTs in the system to ensure any
7 UST is either under warranty or within the standard life expectancy for the tank.
8 We are also standardizing unleaded tanks to a 15,000 gallon capacity to ensure
9 adequate inventory levels, allow for emergency response fuel requirements, and to
10 allow for a more strategic ordering process to ensure fuel is purchased at the best
11 possible price at the time of ordering. Diesel tanks will be standardized to ensure
12 the fuel inventory is used in no more than six months to prevent the degradation
13 of the diesel fuel, algae contamination, or sludge buildup. The work will include
14 UST and piping removal and replacement, which will require upgrades to meet
15 the Assembly Bill (“AB”) 2481¹³ standard, obsolete dispenser removal &
16 replacement, and Under Dispenser Containment (“UDC”) removal and
17 replacement to also meet AB 2481 standards.
- 18 • \$0.163 million in 2015 is needed to fund smog tools. SoCalGas will be in-
19 sourcing smog testing for vehicle models 2000 and newer. The equipment is
20 required to conduct training, perform smog testing and provide mandated
21 certifications.

22 The specific details regarding my Capital Project requirement are found in Exhibits under
23 SCG-15-CWP-Compliance/Systems Upgrades.

24 2. Forecast Method

25 The forecast method developed for this cost category is zero-based. This method is most
26 appropriate because the costs are based on the specific equipment needs, software requirements,
27 and vendor estimates for the individual capital projects. More information is included in
28 Exhibits under SCG-15-CWP-Compliance/Systems Upgrades.

¹³ AB 2481, Frommer (2002).

2. Secondary compression at select SoCalGas NGV fleet-public fueling stations to improve reliability and capacity;
3. Standardization of critical equipment at SoCalGas NGV stations to improve reliability and return-to-service time;
4. Upgrade of existing public fueling station driveways and fueling islands to allow access for larger fleet vehicles (Tractor Trailer trucks, buses, refuse truck, etc.);
5. Replacement of outdated NGV fuel dispensers with latest-generation equipment, which will provide for added reliability and data security for public fueling customers who use a credit card to pay for fuel;
6. Design, construction and commissioning of eight new NGV fueling stations at strategic locations throughout SoCalGas service territory;
7. Expand SoCalGas' utilization of existing NGV fleet vehicles; and
8. Support an increase in the number and type of NGV vehicles to be operated by the Company.

These stations will also support public vehicle fueling in new geographic areas to promote expanded public use of CNG as an environmentally-friendly vehicle fuel alternative.

The specific details regarding NGV Refueling Stations are found in my workpapers, Ex. SCG-15-CWP-NGV Refueling Stations. SoCalGas plans to build and place in-service all facilities associated with this capital request by the conclusion of TY 2016.

2. Forecast Method

The forecast method developed for this cost category is zero-based. This method is most appropriate because each project has been estimated based on unique and specific scope and budgetary considerations. The estimates do, however, reflect past costs and vendor estimates for projects with similar scope and complexity completed over the prior three-year period. More information is included in my workpapers, Ex. SCG-15-CWP-NGV Refueling Stations.

3. Cost Drivers

The underlying cost drivers for this capital project are engineering/planning, equipment costs, contractor cost for installation and Company labor to manage and support the projects. See Ex. SCG-15-CWP-NGV Refueling Stations for more information.

1 **V. CONCLUSION**

2 Fleet Services and Facilities Operations provide the underlying tools and support
3 necessary to field crews who not only maintain the reliability and safety of our gas systems, but
4 are often the first contact between the customer and the Company. The quality of our fleet
5 maintenance & equipment, while enabling productive work, is also fundamental to the safety of
6 our work crews permitting them to restore service, provide services to new customers, and
7 perform routine inspection and maintenance. My requested forecast for Fleet Services and
8 Facilities Operations is essential to the continuation of our efforts and commitment to public and
9 employee safety.

10 SoCalGas requests that the Commission adopt the O&M and Capital forecasts presented
11 in this testimony. The forecasts were carefully developed and represent a prudent level of
12 funding for the critical activities to take place in this GRC term. The amounts requested for TY
13 2016 for Fleet Services are necessary to meet the needs of utility operations and customer
14 service. They are based on an evaluation of 2009-2013 cost trends adjusted for known
15 incremental increases and decreases, and then forecasted for the 2014 through 2016 period.

16 This concludes my prepared direct testimony.

1 **VI. WITNESS QUALIFICATIONS**

2 My name is Carmen L. Herrera. My business address is 8101 S. Rosemead Blvd., Pico
3 Rivera, CA 90660. I am employed by Southern California Gas Company (“SoCalGas”), as the
4 Director of Support Services responsible for overseeing Fleet Services for SoCalGas and
5 SDG&E, and Facility Operations and Capital Programs for SoCalGas. I have been in this
6 position since 2011.

7 I received a Bachelor’s of Science in Business Administration from the University of
8 Southern California and hold an inactive Certified Public Accountant license. I have been
9 employed by SoCalGas, SDG&E, and/or Sempra Energy in various positions and responsibilities
10 since 2001. My experience is in numerous areas including Financial Planning, Supplier
11 Diversity, Facilities Maintenance, Construction, Land Management Services, and Corporate
12 Compliance.

13 I have not previously testified before the California Public Utilities Commission.

APPENDIX A – GLOSSARY OF ACRONYMS

ADA	Americans With Disabilities Act
ATCM	Airborne Toxic Control Measure
CARB	California Air Resources Board
CUPA	Certified Unified Program Agencies
CalOSHA	California Occupational Safety and Health Administration
CNG	Compressed Natural Gas
CRV	Current Replacement Value
DMV	Department of Motor Vehicles
EPA	U.S. Environmental Protection Agency
EPAact	Energy Policy Act
ERC	Energy Resource Center
FTE	Full-time equivalent
GCT	Gas Company Tower
GHG	Greenhouse Gas
HVAC	Heating Ventilation and Air Conditioning
IFMA	International Facility Management Association
IT	Information Technology
LAN	Local Area Network
LIBOR	London Interbank Offered Rate
MPK	Monterey Park
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NGV	Natural Gas Vehicle
NHTSA	National Highway Traffic Safety Administration
Non-OTR	Non-over-the-road vehicles such as trailers and forklifts
O&M	Operations and Maintenance
OSHA	Occupational Safety and Health Administration
OTR	Over-the-road vehicles such as automobiles and trucks
RICE	Reciprocating Internal Combustion Engines (frequently as RICE/'NESHAPS)
SCAQMD	South Coast Air Quality Management District
SCG	Southern California Gas Company
SoCalGas	Southern California Gas Company
UDC	Under Dispenser Containment
UST	Underground Storage Tank