

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-11-R)

REVISED
PREPARED DIRECT TESTIMONY OF
HECTOR A. MADARIAGA
ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

JULY 2011



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**REVISED PREPARED DIRECT TESTIMONY OF
HECTOR A. MADARIAGA
ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY
(FLEET SERVICES)**

I. INTRODUCTION

A. Purpose of Testimony

The Fleet Services organization is a shared service, and provides vehicle acquisition and disposition, maintenance and repair, fuel management, and technical services to San Diego Gas & Electric Company (SDG&E), Southern California Gas Company (SCG or SoCalGas), and, on a limited basis, to the parent company Sempra Energy Corporate Center (Corporate Center), and other affiliate companies of Sempra Energy.

The purpose of this testimony is to describe the activities performed by the Fleet Services organizations at SoCalGas, summarize the total SoCalGas non-shared and shared service operating and maintenance (O&M) expenses by functional activity, and provide justification for the reasonableness of the requested 2012 Test Year (TY2012) O&M costs.

The following table SCG-HM-1 provides a summary of the requested TY2012 O&M costs for SoCalGas Fleet Services.

**Table SCG-HM-1
Summary of TY2012 Change
(Thousands of 2009 dollars)**

| FLEET SERVICES Description | 2009 Adjusted Recorded | TY2012 Estimated | Change | Testimony Reference |
|-----------------------------------|-------------------------------|-------------------------|---------------|----------------------------|
| Total Non-shared Service | 40,363 | 49,187 | 8,824 | Section II |
| Total Shared Services | 1,380 | 1,504 | 124 | Section III |
| Total O&M | 41,743 | 50,691 | 8,948 | |

NOTE: The Fleet Services charges are the direct costs in FERC clearing account 184.2. The reassignment of these costs to operating and maintenance and capital costs is discussed in the SoCalGas testimony of Rajan Agarwal, Exhibit SCG-36.

1 **B. Overview of Operations**

2 **1. Description of Fleet Activities**

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

10 The key activities of Fleet Services are to:

11 (a) Provide the necessary quantity, type and configuration of vehicles and equipment in a
12 timely and cost efficient manner required daily by gas operations to meet new business
13 demands, respond to gas service outages and service requests, support infrastructure
14 replacement and conduct the corrective maintenance programs central to maintaining
15 reliable service.

16 (b) Maintain vehicles and equipment to reliably meet increasing daily availability
17 requirements. The increasing age of the gas system as well as new business demands that
18 vehicles be available for use essentially 24 hours a day 7 days a week.

19 (c) Manage the vehicle and equipment asset portfolio through the design, acquisition,
20 financing, and replacement of vehicles.

21 (d) Implement standardization of fleet equipment and technological changes in vehicles
22 to effectively manage acquisition costs and maintenance costs.

23 (d) Provide specialized equipment and manage fuel acquisition and operations.

24 (f) Implement fleet systems and processes to minimize the costs and optimize operations.

25 (g) Comply with Federal, State and Local statutes and agency regulations pertaining to air
26 quality, waste, hazardous materials, natural resources, safety, and alternative-fueled
27 vehicles. Of particular impact upon the Fleet Service organization and costs are:

28 *Energy Policy Act requirements regarding the federally mandated procurement
29 of alternative-fueled vehicles.

1 *California Air Resources Board (CARB) regulations requiring the reduction of
2 diesel emissions by retrofitting or replacing diesel vehicles and off-road
3 equipment

4 *U.S. Environmental Protection Agency and CARB regulations requiring diesel
5 engines to reduce oxides of nitrogen and particulate matter emissions.

6 *California Highway Patrol mandated inspections, training and other regulations
7 applicable to heavy-duty fleet vehicles and equipment.

8 *OSHA and Cal OSHA mandated inspections, training and other regulations
9 applicable to fleet operations and equipment acquisition.

10 *Other Environmental Protection Agency requirements governing air quality,
11 water quality, waste, hazardous materials, safety and natural resources, including
12 mandated inspections and repairs applicable to underground storage tanks,
13 aboveground storage tanks, fuel island components, and hazardous waste stream
14 management.

15 (h) Ensure proper training of Fleet Maintenance personnel and hazardous waste disposal
16 requirements of fleet materials.

17 (i) Evaluate changes in technology, regulation and operational trends to ensure they are
18 properly incorporated into all fleet related plans and activities.

19 (j) Ensure that facilities are outfitted with the required tools and equipment to maintain
20 vehicles and power operated equipment.

21 **2. Summary of Managed Fleet Assets**

22 The SoCalGas fleet consists of over 5,000 vehicles. The fleet is broken down into over
23 85 individual vehicle classifications, which can be summarized into major types as follows:

Table SCG-HM-2
SoCalGas Vehicle Types
 (Year-End 2009)

| VEHICLE TYPES | No. of Units |
|-----------------------------|---------------------|
| Automobiles | 323 |
| Compact Trucks and Vans | 584 |
| Light Duty Trucks and Vans | 2,607 |
| Medium Duty Trucks and Vans | 543 |
| Heavy Duty Trucks and Vans | 80 |
| Trailers | 681 |
| Construction Equipment | 291 |
| TOTAL | 5,109 |

During 2009, SoCalGas vehicles accumulated more than 34 million miles and were serviced at 49 fleet maintenance garages. SoCalGas maintains a wide variety of vehicles to meet new construction requirements for customer growth as well as gas distribution and transmission and customer service maintenance activities.

3. Fleet Organizational Structure

In carrying out its functions, the Fleet Services organization contains the following groups:

- Asset Management
- Financial and Systems Management
- Maintenance Operations – North
- Maintenance Operations – South
- Director – Fleet Services

Asset Management

This function develops the vehicle replacement plan, vehicle design and specifications, manages vehicle supplier and rental vendor relationship, including quality assurance inspections of new vehicles, warranty, and goodwill recovery, and manages vehicle auction and salvage operations. It also coordinates fleet policies and the overall fleet portfolio planning and analysis for both SDG&E and SoCalGas.

1 Financial and Systems Management

2 This function manages the financial processes and data systems necessary to support fleet
3 operations for both SDG&E and SoCalGas, including lease and license administration for all
4 utility vehicles, budget preparation and oversight, accounting reconciliations, vehicle class
5 charge rates and clearing, quality assurance inspections, inventory management oversight, and
6 strategic support and analysis to the maintenance organization, along with ensuring compliance
7 with associated business controls.

8 Maintenance Operations – North

9 This function manages the garage activities (vehicle inspections, maintenance and
10 repairs, and training) at SoCalGas sites. It is organized by regional area and coordinates onsite
11 maintenance and repairs, parts inventories, and vehicle transfers. The maintenance support staff
12 is located at Monterey Park.

13 Maintenance Operations – South

14 This function manages the garage maintenance activities (vehicle inspections,
15 maintenance and repairs, and training) for the SDG&E Fleet and is located at garages throughout
16 the SDG&E service territory. The maintenance support staff is located at Miramar.

17 Fleet Services Director

18 The Fleet Services Director function provides the overall leadership of the organization.
19 Major environmental projects and fuel purchases are managed under this function.

20 **C. Challenges Facing Operations**

21 The key challenge facing the Fleet organization during the next decade is technological
22 change, driven by emissions reduction requirements and the goal of reducing the company's
23 carbon footprint. CARB requirements for Airborne Toxics Control Measure (ATCM) engine
24 retrofits, and where retrofit is not practical the alternative of early replacement of heavy duty
25 vehicles, contribute significantly to upward pressures on Fleet costs. Additionally, with all
26 vehicles becoming more complex and costly to maintain and operate (as the recent spate of
27 Toyota accelerator issues demonstrates), the technician workforce must be retrained or replaced
28 to effectively manage the fleet of the future. New diagnostic tools, preventive measures to
29 ensure vehicles do not become stranded in the field with plugged particulate filters, fueling
30 capacity for alternative-fueled and hybrid vehicles, changes in maintenance procedures and

1 lubricants, and other challenges as yet unseen, all contribute to an uncertain, yet exciting,
2 challenging time to be in the Fleet management business.

3 **D. Summary of Request**

4
5 **Table SCG-HM-3**
6 **O&M Non-Shared Services**
7 **Testimony Section II**
8 (Thousands of 2009 dollars)

| FLEET SERVICES Categories of Management | 2009 Adj. Recorded | TY2012 Estimated | Change |
|--|-------------------------------|-----------------------------|---------------|
| 1. Ownership Costs | 17,058 | 20,761 | 3,703 |
| 2. Maintenance Operations | 21,700 | 27,000 | 5,300 |
| 3. Maintenance Management | 1,032 | 1,223 | 191 |
| 4. Vehicle & Equip. Rentals | 573 | 203 | -370 |
| Total | 40,363 | 49,187 | 8,824 |

9
10
11 **Table SCG-HM-4**
12 **O&M Shared Services**
13 **Testimony Section III**
14 (Thousands of 2009 dollars)

| FLEET SERVICES Categories of Management | 2009 Adj. Recorded | TY2012 Estimated | Change |
|--|-------------------------------|-----------------------------|---------------|
| 1. Asset Management | 621 | 622 | 1 |
| 2. Financial & Sys Mgmt | 653 | 546 | -107 |
| 3. Maintenance Mgmt | 84 | 184 | 100 |
| 4. Director | 22 | 152 | 130 |
| Total (Book Expense) | 1,380 | 1,504 | 124 |

1 **II. NON-SHARED SERVICES**

2 **A. Introduction**

3 As discussed in Section III, the Fleet departments of SoCalGas and SDG&E share a
4 management team that achieves synergies in vehicle specifications and bidding, replacement and
5 environmental planning, financial and systems management, lease and license administration,
6 fuel purchases and training, but costs that are unique to each company are not shared. These
7 non-shared costs consist of the following categories:

8
9 **Table SCG-HM-5**
10 **O&M Non-Shared Services**
11 (Thousands of 2009 dollars)

| FLEET SERVICES Categories of Management | 2009 Adj. Recorded | TY2012 Estimated | Change |
|--|-------------------------------|-----------------------------|---------------|
| 1. Ownership Costs | 17,058 | 20,761 | 3,703 |
| 2. Maintenance Operations | 21,700 | 27,000 | 5,300 |
| 3. Maintenance Management | 1,032 | 1,223 | 191 |
| 4. Vehicle & Equip. Rentals | 573 | 203 | -370 |
| Total | 40,363 | 49,187 | 8,824 |

12
13 **B. Discussion of O&M Activities**

14 **1. Ownership Costs**

15 SoCalGas lease finances its vehicles (except for limited short term rentals) and incurs
16 annual repayment (amortization) of principal and interest for each vehicle over the term of each
17 lease. Replacement scheduling is based on targeted useful lives of vehicles by various classes,
18 and ownership costs for each year are forecast using a cash-flow model developed in-house by
19 Fleet staff using Microsoft Excel. The model projects the pay-down of active lease obligations,
20 applies specified lease duration terms and associated interest to new fleet assets scheduled to be
21 placed in service during each forecast year, and estimates annual salvage based on historical
22 auction sale averages by vehicle class. Data for existing leases and eligible replacement vehicles
23 is loaded directly into the model through queries from the Fleet M4 database, while data for
24 special projects such as incremental vehicle additions and our proposed "Green Initiative" are
25 manually input to generate the cash-flow forecast. Detailed monthly forecast totals for each
26 category of model inputs are contained in the work paper attachment titled "Fleet Ownership
27 Cost Forecast 2010-2012," with all categories rolling up to expense totals as follows:

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

| FLEET SERVICES | 2009 Adj. | TY2012 | |
|---------------------------|------------------|------------------|---------------|
| 1. Ownership Costs | Recorded | Estimated | Change |
| a. Amortization | 15,064 | 17,732 | 2,668 |
| b. Interest | 993 | 2,389 | 1,396 |
| c. Salvage | -753 | -1,180 | -427 |
| d. License Fees | 1,754 | 1,820 | 66 |
| 1. Total Ownership | 17,058 | 20,761 | 3,703 |

61% of the 2012 forecast total in table SCG-HM-6 is for committed financing of existing vehicles and replacements currently under purchase order, 32% is for replacements scheduled to be purchased in the 2010-2012 time period, 3% for incremental vehicle additions requested by operating departments, and 4% for a “Green Initiative” to convert new gasoline-powered vehicles to CNG. As a fuel provider, 90% of the SCG annual light duty vehicle purchases is required under the Energy Policy Act to be approved alternative-fueled vehicles, a requirement that is becoming increasingly more difficult to meet as vehicle manufactures have stopped manufacturing Natural Gas Vehicles (NGVs). By converting up to 200 vehicles to CNG per year with a target of 1000 vehicle conversions, SoCalGas will be leading by example, and in turn, preserving its investment in NGV fueling infrastructure for the next generation of natural gas and potentially fuel cell vehicles. These vehicles will also replace existing dual-fuel CNG vehicles that are getting older and need to be replaced.

a. Amortization

The cost associated with lease amortization for 2010-2012 is based on year-end 2009 actual vehicles under lease financing plus the planned replacement vehicles scheduled each year, and requested incremental vehicle additions each year. Vehicle acquisition costs are estimated using the last purchase price of a vehicle in each class escalated to the replacement year using the IHS Global Insight Composite Gas Non-Labor index,¹ then annualized based on the amortization schedule for the vehicle class. Since amortization expenses involve debt retirement, and escalation is included in the price estimates for new vehicle acquisitions, this cost category is not amenable to standard escalation forecasting, and the annual cost estimates were generated using the cash-flow model that essentially calculates each year from a zero-base.

¹ See the testimony of Scott Wilder, Exhibit SCG-31, regarding IHS Global Insight econometric forecasting.

1 **b. Interest**

2 As the result of a major vehicle refinancing effort that was necessary due to the
3 termination of the SoCalGas master lease during the 2008 financial crisis, roughly half the
4 SoCalGas vehicles under lease finance at the end of 2009 were under a capital lease with fixed
5 interest rates and the other half an operating lease with floating interest rates tied to the London
6 Interbank Offered Rate (LIBOR) index plus a fixed margin above the index. All replacement
7 and incremental vehicle additions are forecast to be financed under the operating lease with
8 floating interest rates, as financial conditions return to normal after the crisis. Interest costs in
9 each forecast year are based on monthly outstanding balances calculated in the cash-flow model
10 multiplied by the LIBOR rate contained in the "IHS Global Insight's February 2010 Forecast of
11 the US Economy" for the payment month, then summed for the year.

12 **c. Salvage**

13 Vehicles are sold for salvage at the end of their useful life. Any net proceeds are credited
14 back to Fleet, offsetting the incremental acquisition costs of replacement vehicles. Estimates of
15 salvage proceeds for each forecast year are determined by multiplying the number of vehicles
16 expected to be replaced during the year by the average per-unit salvage received during the base
17 year.

18 **d. License Fees**

19 License fees payable to the State of California each year are a function of the age and
20 composition of the fleet during that year, and consist of several components based on vehicle
21 weight, capacities, age, purchase price, and location. Since replicating the DMV formula for
22 every vehicle in the fleet is not feasible, the base year ratio of license fees to amortization is used
23 for forecasting.

24 **2. Maintenance Operations**

25 Maintenance Operations involves the performing of vehicle safety inspections and other
26 routine maintenance (such as oil changes), managing the automotive fuel inventory to ensure the
27 availability of fuel to meet operating needs, repairing vehicle damage and replacing worn and
28 defective parts, and ensuring compliance with all applicable Federal, State, and Local
29 environmental, safety, and emissions regulations. As highlighted above in comments on

1 challenges facing the Fleet department, significant upward cost pressures result from this
2 regulatory environment, as summarized in table SCG-HM-7:

3
4 **Table SCG-HM-7**
5 **O&M Non-Shared Services**
6 (Thousands of 2009 dollars)

| FLEET SERVICES | 2009 Adj. | TY2012 | |
|--|------------------|------------------|---------------|
| 2. Maintenance Operations | Recorded | Estimated | Change |
| a. Maintenance & Repair Services | 11,571 | 12,882 | 1,311 |
| b. Automotive Fuels | 8,532 | 10,608 | 2,076 |
| c. ATCM Diesel Engine Retrofits | 1,597 | 3,510 | 1,913 |
| 2. Maintenance Operations Total | 21,700 | 27,000 | 5,300 |

7
8 **a. Vehicle Servicing and Repairs**

9 Vehicle servicing and repair activities are carried out in 49 garage locations disbursed
10 throughout the service territory. Staffing requirements for these garages are forecast to increase
11 by 6 technicians in 2011 and another 6 in 2012. These staffing requirements are needed to
12 maintain, regenerate and clean particulate filters required on existing diesel vehicles and are in
13 all new diesel vehicles that are compliant with 2007 regulation.

14 In addition, 2010 diesel vehicles also require the use of diesel exhaust fluid to reduce
15 Nitrogen of Oxides (NOX) emissions. These new systems must be properly maintained to
16 ensure compliance and prevent damage to engines, which would make vehicles unavailable to
17 respond to emergencies and operational needs. All these requirements will increase operational
18 and maintenance costs.

19 **b. Automotive Fuels – Gasoline & Diesel**

20 No one needs to be reminded of the volatility of automotive fuel prices during the past
21 several years, nor that such volatility makes predicting the cost of fuel in 2012 nearly impossible.
22 Accordingly, the 2005-2009 5-year average is used to forecast years 2010-2012. The change
23 from 2009 to 2012 using this method obviously looks dramatic, but it must be kept in mind that
24 the 2012 number is the average annual cost actually incurred during the historical 5-year period
25 from 2005-2009. The abnormal number, therefore, is 2009, not 2012. Fuel prices were
26 depressed in 2009 as a result of the recession, and SoCalGas fuel costs in 2009 were further
27 reduced through fuel hedging that generated more than \$350,000 in hedging credits booked to

1 the Fleet fuel account. As the economy improves, fuel prices are already moving higher, and
2 while fuel hedging is continuing, the effectiveness benefits booked in 2009 must be unwound by
3 2011 as futures contracts expire.

4 The cost of fuel, of course, is a function of both price and quantity consumed. Efforts to
5 reduce fuel consumption to meet greenhouse gas reduction targets should have a beneficial
6 impact on fuel costs, offset to some extent by reduced fuel economy in diesel engines retrofit
7 with particulate traps as well as additional vehicles, but price will remain the dominate factor,
8 and a return to the historical 5-year average annual fuel cost is a reasonable expectation.

9 c. ATCM Diesel Engine Retrofits

10 A combination of State and Federal regulations requiring reductions in particulate and
11 nitrous oxide emissions from diesel engines are driving the cost forecasts. The Public Agency
12 and Utility rule contained in the 2005 CARB ATCM requires that the retrofit or replacement of
13 all specified diesel engines be completed by 2012, with a recent extension for Group 3 engines to
14 2013. The forecast increase in cost between 2009 and 2012 is a direct result of compliance with
15 the phase-in requirements of the rule, with SoCalGas having 285 vehicles remaining in the
16 phase-in schedule. 79 of these units are planned for replacement, while 206 will undergo retrofit
17 by the mandated 2012 deadline, costing an average of \$25,000-\$30,000 per retrofit. Along with
18 these Public Agency and Utility rule-mandated retrofits, the 2012 forecast includes the retrofit of
19 32 off-road diesel engines that are required to be retrofit or replaced by 2014 under the In Use
20 Off-Road Diesel Rule.

21 3. Maintenance Management

22 Maintenance Management involves both a shared and non-shared function. The shared
23 function is technician training, and is addressed in Section III of this testimony. The non-shared
24 function is garage supervision and support, with costs summarized as follows:
25
26

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

| FLEET SERVICES | 2009 Adj. Recorded | TY2012 Estimated | Change |
|--|---------------------------|-------------------------|---------------|
| 3. Maintenance Management | | | |
| a. Garage Supervision & Support | 1,032 | 1,223 | 191 |
| 3. Maintenance Management Total | 1,032 | 1,223 | 191 |

a. Garage Supervision and Support

The management team performing the garage supervision and support function at SoCalGas consists of a Maintenance Manager, six geographic area Fleet Supervisors, and 5 clerks. The team establishes and monitors performance standards, manages garage technicians, assesses supplier work quality, performs replace/repair analyses and payroll data entry, and coordinates the assignment of vehicles to garage locations. Technician and supplier work quality performance standards are in a state of flux in light of the rapidly changing vehicle technology, as discussed above in challenges facing operations. With the addition of technicians in 2011 and 2012 to free up technician work time for training in particulate trap cleaning, monitoring of diesel emissions fluids, maintaining hybrid and alternative fuel vehicles, and using new diagnostic tools, additional garage supervision resources will be needed to establish and enforce new performance standards and manage work assignments, thus the forecast upward trend in Maintenance Management costs in 2012.

4. Vehicle & Equipment Rentals

Fleet Services pays for vehicle and equipment rentals from its budget when (1) a vehicle is out-of-service for an extended period for repairs, and (2) the delayed delivery of an on-order vehicle would adversely impact operations. Rental of vehicles or equipment for day jobs or short-term projects is handled directly by operating departments. Fleet costs for this function are as follows:

Table SCG-HM-9
O&M Non-Shared Services
(Thousands of 2009 dollars)

| FLEET SERVICES | 2009 Adj. Recorded | TY2012 Estimated | Change |
|---|---------------------------|-------------------------|---------------|
| 4. Vehicle & Equipment Rentals | | | |
| a. Rentals & Miscellaneous | 573 | 202 | -371 |
| 4. Vehicle & Equipment Rentals Total | 573 | 202 | -371 |

1 **a. Rentals & Miscellaneous**

2 Since the need for rentals is determined by factors that are not readily predictable and can
3 vary substantially from year to year, the 2005-2009 5-year average is used as the forecast method
4 for 2012. Costs during base year 2009 were higher than average primarily because of down-time
5 for vehicles undergoing particulate trap retrofits.

6 **III. SHARED SERVICES**

7 **A. Introduction**

8 Fleet Services is a utility shared service with an integrated SoCalGas/SDG&E
9 management team. With over 7,000 vehicles, trailers, and powered equipment between the
10 utilities (5,100 at SoCalGas and 2,100 at SDG&E), significant synergies and cost savings for
11 both utilities are achieved by establishing common standards and bidding common specifications
12 for vehicles with similar functions in both utilities, leveraging suppliers to achieve lower lease
13 interest rates and volume pricing for fuel and repair parts, and reducing administrative support
14 costs for such functions as data system management, budgeting, license administration, and
15 replacement and salvage planning and scheduling. Categories of shared services included Asset
16 Management, Financial & Systems Management, the training function within Maintenance
17 Management, and the department Directorate. Detailed information about the shared services
18 billing process can be found within the Shared Services Policy & Billings testimony of Edward J.
19 Reyes, Exhibit SCG-24. For purposes of this testimony, that total is disaggregated by category
20 in explaining the cost allocation formula applied to each category.

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

| FLEET SERVICES | | | |
|--------------------------------|---------------------------|--------------------------|------------------------------------|
| Summary | Base Year 2009 | Forecast 2012 | 2009-2012 Incr. (Decr.) |
| SOCALGAS Incurred Costs | 1,466 | 1,751 | 285 |
| Allocations Out | | | |
| To SDG&E from SOCALGAS | 593 | 763 | 170 |
| To Corp. Center/Other | 0 | 0 | 0 |
| Subtotal Allocations Out | 593 | 763 | 170 |
| Book Expense | | | |
| SOCALGAS Retained | 873 | 988 | 115 |
| Billed from SDG&E | 507 | 516 | 9 |
| SOCALGAS Book Expense | 1,380 | 1,504 | 124 |

The most common factors for establishing sharing ratios are headcount (or FTEs), labor cost, and total cost (labor and non-labor), depending upon the nature of the shared service. In Fleet’s case, vehicle count is another obvious factor, but when it comes to specifications development and maintenance requirements, not every vehicle is equal. Therefore, in the fleet industry, Maintenance Repair Units (MRUs) are used as a normalizing standard for comparing staffing levels and benchmarking costs, much the way FTEs are used in normalizing labor costs. The count of MRUs within a fleet is determined by establishing a base-line unit - usually an unmodified automobile or pickup - determining the annual labor hours required to maintain that base-line unit, then dividing that number into the labor hours required to maintain each of the other types vehicles in the fleet. By using MRUs, the “vehicle count” ratio at the end of the base year shifts from 71% SoCalGas: 29% SDG&E to 52% SoCalGas: 48% SDG&E. This reflects the fact that the vehicles required to operate the electrical system are larger and have overhead booms, sophisticated hydraulic control systems, and other auxiliary equipment not ordinarily found on gas operations vehicles. For those shared activities otherwise tied to vehicle count, MRUs are used instead in the cost allocation formulas, to more accurately reflect the effort involved in managing those activities.

1 **B. Summary of Shared Services Activities**

2 **1. Asset Management**

3 The SoCalGas Asset Management group is structured into three cost centers, each with
4 separate allocation formulas. The first cost center includes costs for the group’s Manager (with
5 staff at both SoCalGas and SDG&E), an administrative associate, and a technology Project
6 Manager (to be added in 2011, explaining the 2012 cost increase), all allocated based on MRUs
7 as described above. The second cost center includes costs for a Team Lead and support staff
8 responsible for coordination of vehicle requirements with SoCalGas operating groups, together
9 with specifications development and in-servicing of light duty vehicles for both utilities. Costs
10 in this cost center are accordingly allocated proportionately to the types of light duty vehicles at
11 each utility. The final cost center includes costs for two employees reporting to a Team Lead at
12 SDG&E who are responsible for supplier relationships and asset recovery (vehicle salvage) for
13 both utilities. Costs in this cost center are allocated based on MRUs.

14
15 **Table SCG-HM-11**
16 **O&M Shared Services**
17 (Thousands of 2009 dollars)

| FLEET SERVICES | | | |
|--------------------------------|---------------------------|--------------------------|------------------------------------|
| Asset Management | Base Year 2009 | Forecast 2012 | 2009-2012 Incr. (Decr.) |
| | | | |
| SOCALGAS Incurred Costs | 648 | 748 | 100 |
| | | | |
| Allocations Out | | | |
| To SDG&E from SOCALGAS | 110 | 219 | 109 |
| To Corp. Center/Other | 0 | 0 | 0 |
| Subtotal Allocations Out | 110 | 219 | 109 |
| | | | |
| Book Expense | | | |
| SOCALGAS Retained | 538 | 529 | -9 |
| Billed from SDG&E | 83 | 93 | 10 |
| SOCALGAS Book Expense | 621 | 622 | 1 |

18
19 **2. Financial and Systems Management**

20 The SoCalGas Financial and Systems Management group is structured into two cost
21 centers, both reporting to the group’s Manager at SDG&E. The first cost center includes costs

1 for a data system administrator and a staff accountant, responsible for these functions at both
 2 utilities, and allocated based on MRUs. The second cost center includes costs for a Team Lead
 3 (with direct reports at both SoCalGas and SDG&E), a quality assurance inspector and a parts
 4 specialist. These individuals perform parts inventory management and compliance reviews of
 5 garage operations at both utilities, with allocation of their costs based on the number and
 6 associated time involved in reviewing locations annually at each utility.

7
 8 **Table SCG-HM-12**
 9 **O&M Shared Services**
 10 (Thousands of 2009 dollars)

| FLEET SERVICES | | | |
|---|---------------------------|--------------------------|------------------------------------|
| Financial & Systems Management | Base Year 2009 | Forecast 2012 | 2009-2012 Incr. (Decr.) |
| SOCALGAS Incurred Costs | 470 | 470 | 0 |
| Allocations Out | | | |
| To SDG&E from SOCALGAS | 205 | 224 | 19 |
| To Corp. Center/Other | 0 | 0 | 0 |
| Subtotal Allocations Out | 205 | 224 | 19 |
| Book Expense | | | |
| SOCALGAS Retained | 265 | 246 | -19 |
| Billed from SDG&E | 388 | 300 | -88 |
| SOCALGAS Book Expense | 653 | 546 | -107 |

11
 12 **3. Maintenance Management**

13 While the majority of Maintenance Management expenses are non-shared, the technician
 14 training function is shared to take advantage of expertise differences between the SoCalGas and
 15 SDG&E trainers. The cost increase in the test year reflects the anticipated need to pay suppliers
 16 to train company technicians on new technologies being introduced into the fleet to ensure
 17 compliance with new emission reduction targets. The cost allocation for this function is based
 18 on the number of training sessions to be conducted by the SoCalGas trainer at each utility during
 19 the year.
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Table SCG-HM-13
O&M Shared Services
(Thousands of 2009 dollars)

| FLEET SERVICES | | | |
|--------------------------------|---------------------------|--------------------------|------------------------------------|
| Maintenance Management | Base Year 2009 | Forecast 2012 | 2009-2012 Incr. (Decr.) |
| SOCALGAS Incurred Costs | 80 | 180 | 100 |
| Allocations Out | | | |
| To SDG&E from SOCALGAS | 14 | 31 | 17 |
| To Corp. Center/Other | 0 | 0 | 0 |
| Subtotal Allocations Out | 14 | 31 | 17 |
| Book Expense | | | |
| SOCALGAS Retained | 66 | 149 | 83 |
| Billed from SDG&E | 18 | 35 | 17 |
| SOCALGAS Book Expense | 84 | 184 | 100 |

4. Director

This function consists of a single SoCalGas cost center covering costs for the department Director (with Manager direct reports at both SoCalGas and SDG&E), an administrative associate, two project managers (environmental and eco-driving), and an ATCM project engineer. A second engineer will be added in 2011 to the environmental project for evaluating NGV requirements and fueling capacity at both companies. Cost allocation for this cost center is based on the weighted average of labor and non-labor costs incurred by each of the two utilities, excluding “commutation credits.” This exclusion involves SoCalGas employees who qualify for taking company vehicles home at night (first responders and field-based supervisors) and pay a monthly fee to the company to comply with IRS regulation. These fees (amounting to \$308,000 annually) are credited to Fleet as an offset to cost incurred for commuting miles driven by take-home vehicles, and are recorded in the Fleet Director’s cost center (Book Expense in Table SCG-HM-14 below would be \$308,000 higher without these credits).

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Table SCG-HM-14
O&M Shared Services
(Thousands of 2009 dollars)

| FLEET SERVICES | | | |
|--------------------------------|---------------------------|--------------------------|------------------------------------|
| Director | Base Year 2009 | Forecast 2012 | 2009-2012 Incr. (Decr.) |
| | | | |
| SOCALGAS Incurred Costs | 268 | 353 | 85 |
| | | | |
| Allocations Out | | | |
| To SDG&E from SOCALGAS | 264 | 289 | 25 |
| To Corp. Center/Other | 0 | 0 | 0 |
| Subtotal Allocations Out | 264 | 289 | 25 |
| | | | |
| Book Expense | | | |
| SOCALGAS Retained | 4 | 64 | 60 |
| Billed from SDG&E | 18 | 88 | 70 |
| SOCALGAS Book Expense | 22 | 152 | 130 |

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5 **IV. CAPITAL**

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A. Introduction

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The only Fleet-related capital request is for an upgrade to the Fleet M4 database system, and is discussed in the SoCalGas witness testimony of Jeffrey C. Nichols, Exhibit SCG-12.

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V. CONCLUSION

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The amounts requested for the 2012 Test Year for Fleet Services are necessary to meet the needs of utility operations and customer service. They are based on an evaluation of 2005-2009 cost trends adjusted for known incremental increases and decreases forecasted over the 2010-2012 period. For the shared service activities, the costs reflect the appropriate shared service allocations between SoCalGas and SDG&E.

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This concludes my prepared direct testimony.

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1 **VI. WITNESS QUALIFICATIONS**

2 My name is Hector A. Madariaga. My business address is 555 W. Fifth Street, Los
3 Angeles, California, 90013. I am employed by Southern California Gas Company (SCG) as
4 Director of Environmental Affairs. From 2005 to July, 2011, I was Director of Fleet Services for
5 SCG and San Diego Gas & Electric Company (SDG&E).

6 I received a Bachelor of Science degree in Engineering from California State University
7 Northridge, where my area of emphasis was environmental engineering. I was first employed by
8 SCG in 1975, and held various positions of increasing responsibilities in Gas Engineering,
9 Research, Human Resources, and Gas Transmission. From 1997 to 2004, I was a Vice President
10 in Sempra Energy International, where I was involved in the acquisition and management of
11 international utility investments. In 2004, I returned to SCG as Director of Environmental
12 Solutions for both SCG and SDG&E, and in 2005, I became Director of Fleet Services. I have
13 previously testified before the California Public Utilities Commission.

CHANGE LOG

| Page | Line | Errata Item |
|-------------|-------------|---|
| HM-1 | 10 | Added "Company" after "Electric." |
| HM-2 | 28 | Deleted "(EPA)." |
| HM-3 | 4 | Deleted "(EPA)." |
| HM-8 | 10 | Deleted "(EPAct)." |
| HM-10 | 4 | Table SCG-HM-7: 10,582 changed to 10,608 (TY2012 Automotive Fuels) 2,050 changed to 2,076 (Change in Automotive Fuels) |
| HM-11 | 12 | Deleted "California Air Resources Board" and "Airborne Toxics Control Measure" as previously defined terms. |
| HM-19 | var. | Revised Witness Qualifications for address and job title changes. |
| var. | var. | Removed the symbol "\$" in Table figures for consistency. In addition, miscellaneous minor corrections to typographical errors and punctuation. |