

Company: San Diego Gas & Electric (U 902 E)  
Proceeding: 2019 General Rate Case  
Application: A.17-10-007  
Exhibit: SDG&E-21-R

**REVISED**

**SDG&E**

**DIRECT TESTIMONY OF CARMEN L. HERRERA**

**(FLEET SERVICES)**

**DECEMBER 2017**

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





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## LIST OF ACRONYMS

## SUMMARY OF REQUEST

<b>FLEET SERVICES O&amp;M (In 2016 \$)</b>	2016 Adjusted- Recorded (000s)	TY2019 Estimated (000s)	Change (000s)
Total O&M Non-Shared Services	26,587	43,839	17,252
Total O&M Shared Services (Incurred)	1,356	1,617	261
<b>Total O&amp;M</b>	<b>27,943</b>	<b>45,456</b>	<b>17,513</b>

### Summary of Requests

- San Diego Gas & Electric’s (SDG&E or Company) total Test Year (TY) 2019 estimated Operations and Maintenance (O&M) expenses request for Fleet Services is \$45.456 million, an increase from base year of \$17.513 million. The increase from base year is driven primarily by: (1) replacement of standard vehicles, (2) purchase of Alternative-fuel Vehicles (AFV) consistent with the Energy Policy Act (EPAAct)<sup>1</sup>; (3) replacement of diesel units to comply with the California Air Resources Board (CARB) Truck and Bus vehicle regulations;<sup>2</sup> and (4) additional vehicles needed to primarily support gas transmission, gas distribution, electrical distribution, and customer services field.
- SDG&E requests \$18.802 million in Maintenance Operations costs to maintain and fuel a Fleet of over 2,100 vehicles and power-operated equipment. SDG&E’s request is broken down into two components: (1) Vehicle Servicing & Repairs and (2) Automotive Fuels. Both components are forecasted using the 5-year historical average. Also, included in SDG&E’s request are costs for additional activities to comply with CARB Airborne Toxic Control Measure (ATCM) requirements.

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<sup>1</sup> U.S. Dep’t of Energy, Alternate Fuel Transportation Program, 10 C.F.R. pt. 90 (2007), [https://epact.energy.gov/pdfs/alt\\_compliance\\_rule.pdf](https://epact.energy.gov/pdfs/alt_compliance_rule.pdf).

<sup>2</sup> California Air Resources Board, Statewide Truck and Bus Regulations (Dec. 11, 2008), <https://www.arb.ca.gov/regact/2008/truckbus08/truckbus08.htm>.

1                   **REVISED SDG&E DIRECT TESTIMONY OF CARMEN L. HERRERA**  
2                   **(FLEET SERVICES)**

3  
4   **I.       INTRODUCTION**

5           **A.       Summary of Fleet Services Costs and Activities**

6           In this testimony, I sponsor SDG&E’s Fleet Services non-shared and shared services  
7 estimated O&M expenses for TY 2019 O&M costs are organized by non-shared and shared  
8 services. For TY 2019 non-shared services, Fleet Services requests \$43.839 million in O&M  
9 expense, an increase of \$17.252 million above 2016 adjusted-recorded costs. For TY 2019,  
10 shared Fleet Services requests \$1.617 million, an increase of \$261,000 from 2016 adjusted-  
11 recorded costs. Table CLH-1 summarizes my sponsored costs.

12                                   **TABLE CLH-1**  
13                                   **SDG&E Company**  
14                                   **TY 2019 Summary of Total Costs**

<b>FLEET SERVICES O&amp;M (In 2016 \$)</b>	<b>2016 Adjusted-Recorded (000s)</b>	<b>TY2019 Estimated (000s)</b>	<b>Change (000s)</b>
Total O&M Non-Shared Services	26,587	43,839	17,252
Total O&M Shared Services	1,356	1,617	261
<b>Total O&amp;M</b>	<b>27,943</b>	<b>45,456</b>	<b>17,513</b>

15  
16           SDG&E’s Fleet Services acquires, maintains, repairs, and salvages vehicles and related  
17 equipment to support the reliable delivery of gas and electricity to SDG&E customers. SDG&E  
18 Fleet Services manages a mix of vehicles consisting of over-the-road (OTR) vehicles such as  
19 automobiles, light duty, medium and heavy duty trucks, and non-over-the road (Non-OTR)  
20 vehicles such as power operated equipment including trailers and forklifts. Fleet Services  
21 provides critical daily support to the gas and electricity distribution and transmission operating  
22 crews, customer services field operations, and the capital construction program. The intent of this  
23 section of my testimony is to describe the key activities performed by the Fleet Services  
24 organization and to provide context for Fleet Services’ General Rate Case (GRC) request.

1        The key activities of Fleet Services include the following:

- 2        a) Provide the necessary quantity, type, and configuration of vehicles and equipment  
3                required daily by gas and electric operations to meet new business demands,  
4                respond to gas and electric service outages and service requests, support  
5                infrastructure replacement, and conduct the corrective maintenance programs  
6                central to maintaining reliable service.
- 7        b) Maintain vehicles and equipment to reliably meet daily availability  
8                requirements. The increasing age of SDG&E's gas and electric system as well  
9                as new business demands requires that vehicles be available for use 24 hours a  
10               day and 7 days a week.
- 11       c) Manage the vehicle and equipment asset portfolio through the design,  
12               acquisition, financing, and replacement of vehicles.
- 13       d) Implement Fleet Services' systems and processes to minimize the costs and  
14               optimize operations.
- 15       e) Comply with Federal, State, and Local statutes and agency regulations  
16               pertaining to air quality, waste, hazardous materials, natural resources, safety,  
17               and alternative-fuel vehicles. The following laws particularly impact Fleet  
18               Services:
- 19               • EPCRA requirements regarding the federally mandated procurement of  
20               alternative-fuel vehicles. As an alternative-fuel provider fleet, 90% of  
21               the SDG&E's annual light duty vehicle purchases are required under  
22               the EPCRA to be approved alternative-fuel vehicles.<sup>3</sup> To achieve the  
23               90% annual requirement, SDG&E plans to continue buying alternative-  
24               fuel vehicles that are sold at a premium. If SDG&E cannot achieve the  
25               90% annual requirement, SDG&E may purchase EPCRA credits.
  - 26               • Evolving CARB regulations requiring the reduction of diesel  
27               emissions by replacing diesel vehicles and off-road equipment  
28               necessitate that SDG&E replace a large volume of vehicles over the

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<sup>3</sup> U.S. Dep't of Energy, Alternate Fuel Transportation Program, 10 C.F.R. pt. 90 (2007),  
[https://epact.energy.gov/pdfs/alt\\_compliance\\_rule.pdf](https://epact.energy.gov/pdfs/alt_compliance_rule.pdf).

1 next couple of years.<sup>4</sup>

- 2 • Evolving California Highway Patrol (CHP) mandated training and  
3 other regulations applicable to heavy-duty fleet vehicles and  
4 equipment such as Basic Inspections of Terminals (BIT) require  
5 SDG&E provide additional training to employees who regularly use  
6 vehicles in conducting SDG&E business.<sup>5</sup>
- 7 • Occupational Safety and Health Administration (OSHA) and Cal  
8 OSHA mandated inspections, training, and other regulations  
9 applicable to Fleet Services operations and equipment acquisition.
- 10 • Other Environmental Protection Agency requirements governing air  
11 quality, water quality, waste, hazardous materials, safety and natural  
12 resources, including mandated inspections, and repairs applicable to  
13 underground storage tanks, aboveground storage tanks, fuel island  
14 components, mobile fueling, and hazardous waste stream management  
15 create ongoing needs to renovate infrastructure to ensure compliance.

16 f) Manage nine mobile fuel tankers to supply gasoline and diesel to support field  
17 operations.

18 g) Maintain proper training of Fleet Services maintenance technicians.

19 h) Comply with hazardous waste disposal requirements of fleet materials.

20 i) Evaluate changes in technology, regulation, and operational trends so that they can be  
21 appropriately incorporated into all Fleet Services related plans and activities.

## 22 **B. Support To/From Other Witnesses**

23 My testimony also references the testimony of several other witnesses, either in support  
24 of their testimony or as referential support for mine:

- 25 • Hal Snyder and Randall Clark; Fueling our Future – Ex. SCG/SDG&E-03
- 26 • Gina Orozco-Meija; Gas Distribution – Ex. SDG&E-04
- 27 • Beth Musich; Gas Transmission – Ex. SDG&E-06

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<sup>4</sup> California Air Resources Board, Airborne Toxic Control Measures,  
<https://www.arb.ca.gov/toxics/atcm/atcm.htm>.

<sup>5</sup> Dep't of California Highway Patrol, Welcome to BIT, The Basic Inspection of Terminals Program,  
<https://www.chp.ca.gov/CommercialVehicleSectionSite/Documents/O%20chp800h.pdf>.

- William Speer; Electrical Distribution – Ex. SDG&E-15
- James Vanderhye; Shared Services – Ex. SCG-34/SDG&E-32

**C. Summary of Costs Related to Fueling our Future (FOF)**

As described in the Fueling Our Future Policy testimony of Hal Snyder and Randall Clark (Exhibit SCG/SDG&E-03), the utilities kicked off the Fueling Our Future (FOF) initiative in May 2016, to identify and implement efficient operations improvements. Table CLH-2 provides a summary of SDG&E Fleet Services FOF cost efficiencies covered in my testimony.

**TABLE CLH-2  
SDG&E Company  
Summary of FOF Costs**

<b>FLEET SERVICES (In 2016 \$)</b>			
<b>FOF O&amp;M</b>	<b>Estimated 2017 (000s)</b>	<b>Estimated 2018 (000s)</b>	<b>Estimated 2019 (000s)</b>
FOF-Ongoing Benefits	-7	-12	-12

**II. SAFETY CULTURE**

SDG&E’s longstanding commitment to safety focuses on three primary areas: employee safety, customer safety, and public safety. This safety focus is embedded in what we do and is the foundation for who we are – from initial employee training, to the installation, operation and maintenance of our utility infrastructure, and to our commitment to provide safe and reliable service to our customers.

SDG&E regularly assesses its safety culture and encourages two-way communication between employees and management as a means of identifying and managing safety risks. In addition to the reporting of pipeline and occupational safety incidents, management has created multiple methods for employees to report close calls/near misses. At SDG&E, safety is a core value so we provide all employees with the training necessary to safely perform their job responsibilities.

Fleet Services supports the development and implementation of a safety culture by fulfilling its responsibility to provide safe and reliable vehicles and related equipment to operate and maintain the safe and reliable maintenance, operation, and emergency response for the energy delivery infrastructure. Creating, implementing, and maintaining a culture of safety in our garages is crucial for SDG&E to properly operate a successful utility. Maintenance



Operations includes: (1) safety inspections and routine maintenance of fleet vehicles; (2) repair of vehicle damage and replacement of worn and defective parts; and (3) compliance with all applicable Federal, State, and local environmental, safety, and emissions regulations.

Fleet Services acquires, maintains, repairs, and salvages vehicles and related equipment to support the delivery of energy. To achieve this objective, Fleet Services provides the necessary quantity and type of vehicles and maintains its operation and reliability for 24x7 availability for response to any issue. In addition, safety culture is extended to the communities that are served by complying with federal, state, and local laws for air quality, waste, hazardous materials, and safety. Finally, Fleet Services ensures that its technicians receive the necessary training to keep the vehicles operational and reliable.

### III. NON-SHARED COSTS

“Non-Shared Services” are activities that are performed by a utility solely for its own benefit. Corporate Center provides certain services to the utilities and to other subsidiaries. For purposes of this general rate case, SDG&E treats costs for services received from Corporate Center as Non-Shared Services costs, consistent with any other outside vendor costs incurred by the utility. Table CLH-3 summarizes the total non-shared O&M forecasts for the listed cost categories.

For TY 2019, Fleet Services Non-Shared Services requests \$43.839 million, an increase of \$17.252 million above 2016 adjusted-recorded costs. Table CLH-3 below summarizes the total non-shared O&M forecasts for the O&M cost categories for Fleet Services.

**TABLE CLH-3**  
**SDG&E Company**  
**Non-Shared O&M Summary of Costs**

<b>FLEET SERVICES O&amp;M (In 2016 \$)</b>			
<b>Categories of Management</b>	<b>2016 Adjusted-Recorded (000s)</b>	<b>TY2019 Estimated (000s)</b>	<b>Change (000s)</b>
A. Ownership Costs	10,116	24,489	14,373
B. Maintenance Operations	15,747	18,802	3,055
C. Fleet Management	724	548	-176
<b>Total O&amp;M Non-Shared Services</b>	<b>26,587</b>	<b>43,839</b>	<b>17,252</b>

1           **A.      Ownership Costs**

2           For TY 2019, the Ownership O&M request is \$24.489 million, an increase of  
3 \$14.373 million above 2016 adjusted-recorded costs, as summarized on Table CLH-4  
4 below. A majority of this request is for the replacement of heavy duty vehicles to comply  
5 with state ATCM. These vehicles are scheduled to be purchased in the 2017 through 2019  
6 period.

7   **TABLE CLH-4**  
8   **SDG&E Company**  
9   **Forecast for Ownership Costs**

<b>FLEET SERVICES (In 2016 \$)</b>			
<b>A. Ownership Costs</b>	<b>2016 Adjusted-Recorded (000s)</b>	<b>TY2019 Estimated (000s)</b>	<b>Change (000s)</b>
1. Amortization	8,337	18,632	10,295
2. Interest	838	3,480	2,642
3. Salvage	-284	-1,166	-882
4. License Fees	1,189	2,445	1,256
5. Sales Tax	36	1,098	1,062
<b>Total</b>	<b>10,116</b>	<b>24,489</b>	<b>14,373</b>

10  
11   **1.      Description of Costs and Underlying Activities**

12           Fleet Services performs the following operating activities: acquires, maintains,  
13 repairs, and salvages vehicles and related equipment to support the reliable and safe delivery  
14 of gas and electricity to SDG&E customers. Fleet Services provides daily critical support to  
15 the gas and electric distribution and transmission operating crews, customer services field  
16 operations, and the capital construction program.

17           SDG&E lease-finances its vehicles and incurs annual repayment of principal and  
18 interest (amortization) for each vehicle over the term of each lease.<sup>6</sup> Replacement scheduling  
19 is based on the targeted useful life of vehicles by various classes. Ownership costs for each

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<sup>6</sup> Due to a change in accounting rules, SDG&E expects to modify how it records leases in 2019, as required by U.S. GAAP. In general, most leases are expected to be recorded on the balance sheet as lease assets with offsetting lease liabilities, as opposed to current accounting treatment which has no such balance sheet recognition of operating leases. For example, this accounting change is expected impact both real estate and fleet leases and could result in more contractual arrangements meeting the U.S. GAAP definition of a lease. Since this change will not occur until 2019 and the implementation of the new standard is not complete, SDG&E anticipates providing updated numbers during the GRC update phase in 2018.

1 year are forecasted using a cash-flow model.

2 SDG&E's fleet consists of over 2,100 vehicles and power-operated equipment. The  
3 fleet composition at the end of 2016 is shown in Table CLH-5 below:

4 **Table CLH-5**  
5 **SDG&E Company**  
6 **SDG&E Vehicle Types**  
7 **(Year-End 2016)**

<b>VEHICLE TYPES</b>	<b>No. of Units</b>
<b>Automobiles</b>	<b>87</b>
<b>Compact Trucks &amp; Vans</b>	<b>325</b>
<b>Light Duty Trucks &amp; Vans</b>	<b>727</b>
<b>Medium Duty Trucks &amp; Vans</b>	<b>360</b>
<b>Heavy Duty Trucks &amp; Vans</b>	<b>213</b>
<b>Subtotal over-the-road (OTR)</b>	<b>1,712</b>
<b>Trailers</b>	<b>322</b>
<b>Construction Equipment</b>	<b>100</b>
<b>Subtotal non-over-the-road (NON-OTR)</b>	<b>422</b>
<b>Total</b>	<b>2,134</b>

8

9

10

11 As noted above, SDG&E lease finances its fleet of vehicles. The ownership cost category  
12 is comprised of: (1) amortization; (2) interest; (3) salvage; (4) license fees; and (5) sales tax.<sup>7</sup>

13 Below is a description of the components of ownership costs:

14 Amortization

15 SDG&E's amortization request consists of the annual repayment of principal for the Fleet  
16 Services leases composed of active lease obligations and new lease obligations for replacements

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<sup>7</sup> SDG&E has entered into a new fleet finance arrangement with a new vendor. As of the time of this filing, the impact of the new interest rate agreement is unknown. The forecast in this testimony is based on existing agreement terms.

1 or additional vehicles as needed by the operating groups. Replacement scheduling is based on  
2 targeted useful lives of vehicles by various classes and amortization costs for each year are  
3 forecasted for 2017-2019. Fleet Services projected the pay-down of active lease obligations and  
4 applies specified lease duration terms and associated interest to new Fleet Services assets  
5 scheduled to be placed in service during each forecast year. Refer to my workpapers entitled,  
6 “Amortization and Supplemental,” Exhibit SDG&E-21-WP, for more on this topic.

7 The total TY 2019 request is \$18.632 million which is comprised of the following: (1)  
8 \$9.502 million (or 51%) of the 2019 amortization forecast total is for committed financing of  
9 existing vehicles and replacements currently under purchase order; (2) \$4.929 million (or 26%)  
10 of the 2019 amortization forecast total is state mandated (ATCM) replacements; (3) \$3.133  
11 million (or 17%) of the 2019 amortization forecast total is for replacements scheduled to be  
12 purchased in the 2017 through 2019 period; (4) Alternative-Fuel Vehicles that are sold at a  
13 premium account for the remaining \$0.676 million (or 4%) of the 2019 forecast replacements;  
14 and (5) \$0.392 million (or 2%) of the 2019 amortization forecast total is for incremental vehicle  
15 additions requested by operating departments.

16 The key challenge facing SDG&E’s Fleet Services organization in the coming years is  
17 the technological change driven by emissions reduction requirements and enhancing the  
18 Company’s goal of reducing its carbon footprint. In prior years, SDG&E’s Fleet Services  
19 organization could address regulatory changes through diesel particulate filters (i.e., retrofits).  
20 However, as discussed in detail below, these retrofits are no longer allowed. For instance, CARB  
21 requirements for ATCM necessitates early replacement of heavy duty vehicles.<sup>8</sup> Further,  
22 California’s landmark climate change law, the Global Warming Solutions Act (AB 32), set the  
23 State on an aggressive path toward significantly reducing greenhouse gas (GHG) emissions and  
24 improving the environment.<sup>9</sup> These in turn contribute to the upward pressures on Fleet Services’  
25 costs. Accordingly, SDG&E has begun to replace these vehicles to comply with regulatory  
26 requirements.

27 In addition, SDG&E is supporting California’s initiatives to reduce its petroleum use by up  
28 to 50 percent by 2030 and achieve greenhouse gas (GHG) emission reduction targets of 40

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<sup>8</sup> California Air Resources Board, Statewide Truck and Bus Regulations (Dec. 11, 2008),  
<https://www.arb.ca.gov/msprog/onrdiesel/documents/tbfinalreg.pdf>.

<sup>9</sup> California Air Resources Board, First Update to the Climate Change Scoping Plan 46 (May 2014),  
[http://www.arb.ca.gov/cc/scopingplan/2013\\_update/first\\_update\\_climate\\_change\\_scoping\\_plan.pdf](http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf).

1 percent below 1990 levels by 2030, with continued progress towards an 80 percent reduction by  
2 2050.<sup>10</sup> SDG&E proposes to support the state initiative to grow its electric and natural gas fleet  
3 by replacing traditional gas and diesel vehicles. SDG&E expects to reduce approximately 16,000  
4 metric tons of greenhouse gases over 5 years which is the equivalent of reducing greenhouse gas  
5 emissions from nearly 3,400 passenger vehicles driven for one year. 10% of SDG&E's fleet is  
6 comprised of alternative-fuel vehicles, an increase of 50% from 2012. Refer to my Amortization  
7 and Supplemental workpapers, Exhibit SDG&E-21-WP, for further detail. Finally, in the  
8 recently approved South Coast Air Quality Management District's (SCAQMD) Air Quality  
9 Management Plan, SCAQMD stated the following regarding transportation fuel:

10           Transitioning to cleaner transportation technologies will involve increased  
11 costs, but also have significant public health and climate change benefits.  
12           Adopting a plan with sufficient measures to attain the ozone and  
13 Particulate Matter (PM) 2.5 air quality standards is not only required by  
14 federal law, but will also improve public health and mitigate climate  
15 change. By transitioning to cleaner transportation technologies, NOx and  
16 PM2.5 emissions from transportation sources will be reduced,  
17 subsequently resulting in cleaner air quality, lower health risk across the  
18 region, and reductions in toxic risk and GHGs along goods-movement  
19 corridors. Not meeting air quality standards would not only have negative  
20 public health consequences, but would also have adverse economic  
21 impacts on the region due to potential federal sanctions.<sup>11</sup>

22           This regulatory framework must be considered within the business context. The  
23 transportation sector accounts for 36% of GHG emissions in California.<sup>12</sup> The majority of  
24 emissions in the transportation sector are from on-road vehicles, which consist of light-duty  
25 vehicles (cars, motorcycles, and light-duty trucks) and heavy-duty vehicles (heavy-duty trucks,  
26 buses, and motorhomes).<sup>13</sup> In order to capture the benefits of reducing emissions from the  
27 millions of cars and trucks on California's roads today, the State has taken steps to enable

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<sup>10</sup> Governor's Interagency Working Group on Zero-Emission Vehicles, 2016 ZEV Action Plan 4 (Oct. 2016), [https://www.gov.ca.gov/docs/2016\\_ZEV\\_Action\\_Plan.pdf](https://www.gov.ca.gov/docs/2016_ZEV_Action_Plan.pdf).

<sup>11</sup> South Coast Air Quality Management District, Final 2016 Air Quality Management Plan 4-9 to 4-10 (Mar. 2017), <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15>.

<sup>12</sup> California Air Resources Board, First Update to the Climate Change Scoping Plan 46 (May 2014), [http://www.arb.ca.gov/cc/scopingplan/2013\\_update/first\\_update\\_climate\\_change\\_scoping\\_plan.pdf](http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf).

<sup>13</sup> California Air Resources Board, 2016 California GHG Emission Inventory 4 (June 27, 2016), [https://www.arb.ca.gov/cc/inventory/pubs/reports/2000\\_2014/ghg\\_inventory\\_trends\\_00-14\\_20160617.pdf](https://www.arb.ca.gov/cc/inventory/pubs/reports/2000_2014/ghg_inventory_trends_00-14_20160617.pdf).

1 widespread and accelerated adoption of alternative-fuel vehicles and the infrastructure to support  
2 them.

3 Interest

4 All replacement and incremental vehicle additions are forecasted to be financed under  
5 lease arrangements with floating interest rates.<sup>14</sup>

6 Salvage

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

9 License Fees

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

13 Sales Tax

14 To prevent paying excess sales tax at the time of transferring title, the Company has  
15 revised the way it pays sales tax on vehicle leases by incorporating sales tax into its monthly  
16 lease payments. Previously, SDG&E paid sales tax for vehicle leases up front. The change was  
17 necessary to avoid double payment of sales taxes in the event that vehicles are later purchased by  
18 SDG&E.

19 **2. Forecast Method**

20 For TY2019, SDG&E forecasted \$24.489 million for non-shared Fleet Services  
21 ownership costs. SDG&E's forecasted amount is mostly due to committed financing of existing  
22 vehicles and replacements to comply with CARB ATCM requirements. Additionally, the  
23 Company's operating departments estimate the need for 62 additional vehicles over the three-year  
24 period, 2017, 2018, and 2019.

25 The increase in vehicles also impacts the costs for associated services such as: ( 1 )  
26 maintenance and fuel costs; and (2) activities required for compliance. Additionally, there are  
27 increased costs due to the increase purchases of AFV vehicles that are purchased at a premium as  
28 well as increased costs associated to satisfy CARB environmental requirements related to the

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<sup>14</sup> SDG&E has entered into a new fleet finance arrangement with a new vendor. As of the time of this filing, the impact of the new interest rate agreement is unknown. The forecast in this testimony is based on existing agreement terms.

1 replacement of diesel heavy duty vehicles. The forecasts for the ownership cost categories are  
2 derived using a zero-based method, as explained below.

### 3 Amortization

4 A zero-based forecast is appropriate because costs vary according to lease amortization  
5 schedules for units currently in the fleet or new units added. Therefore, historical trends or  
6 averages will not properly represent the costs. Costs are determined based on each vehicle lease  
7 schedule. The cost associated with lease amortization for 2017 through 2019 is based on year-end  
8 2016 actual vehicles under lease financing; actual vehicles under purchase order; the planned  
9 replacement vehicles scheduled each year; and requested incremental vehicle additions each year.  
10 The increase in amortization costs in 2019 is primarily due to replacement vehicles, following the  
11 required replacement lifecycles and the requests for incremental vehicles required by other  
12 SDG&E business units. Further, CARB requirements for ATCM requires early replacement of  
13 heavy duty vehicles, which contribute to upward pressures on Fleet Services costs. As noted  
14 above, in prior years, SDG&E's Fleet Services organization could address ATCM requirements  
15 through diesel particulate filters (i.e., retrofits). However, these retrofits are no longer allowed  
16 and SDG&E must begin its efforts to replace these vehicles to maintain compliance with  
17 regulatory requirements.

18 Additionally, as an AFV provider fleet, 90% of the SDG&E's annual light duty vehicle  
19 purchases are required under the EPA Act to be approved alternative-fuel vehicles.<sup>15</sup> To achieve the  
20 90% annual requirement, SDG&E plans to buy AFVs at a premium. SDG&E's fleet, specifically,  
21 all the over-the-road vehicles, is aging. At the end of 2016, 692 vehicles, or 40% of SDG&E's  
22 over-the-road fleet vehicles were 8 years and older. As a practice, SDG&E replaces over-the-road  
23 vehicles once they enter the seven-to ten-year mark. SDG&E engages in this practice to minimize  
24 maintenance costs and downtime as the fleet ages and becomes less reliable. More information is  
25 included in my Amortization and Supplemental workpapers, Exhibit SDG&E-21-WP.

### 26 Interest

27 A zero-based forecast is appropriate because interest costs vary according to lease  
28 amortization balances for units currently in the fleet or new units added. Therefore, historical  
29 trends or averages will not properly represent the costs. Costs are actually determined based on

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<sup>15</sup> S. Dep't of Energy, Alternate Fuel Transportation Program, 10 C.F.R. pt. 90 (2007),  
[https://epact.energy.gov/pdfs/alt\\_compliance\\_rule.pdf](https://epact.energy.gov/pdfs/alt_compliance_rule.pdf).

1 each vehicle lease balance. This method is most appropriate because interest costs in each forecast  
2 year are based on monthly outstanding balances multiplied by the London Interbank Offered Rate  
3 (LIBOR) contained in the Global Insight Forecast for the payment month, then summed for the  
4 year. Use of alternate forecast method(s) or certain historical data is not appropriate because  
5 interest calculations are tied to the forecasted outstanding balances, and these balances vary year-  
6 to-year depending on the number and value of leases.

#### 7 Salvage

8 A zero-based forecast is appropriate because estimates of salvage proceeds for each  
9 forecast year are determined by multiplying the number of vehicles expected to be replaced during  
10 the year by the salvage received based on the 5-year average per-unit salvage amount. Use of  
11 alternate forecast method(s) or certain historical data is not appropriate because the value of the  
12 salvage proceeds is directly related to the forecasted number of vehicle replacements. More  
13 information is included in my workpapers entitled, “Salvage,” Ex. SDG&E-21-WP.

#### 14 License Fees

15 A zero-based forecast, where the five-year ratio of license fees to amortization is used to  
16 determine the license fee costs, is the most reasonable forecasting method because historical  
17 trends or averages will not properly represent the costs for licenses fees. This methodology is  
18 considered reasonable as the calculation to replicate the California Department of Motor Vehicles  
19 (DMV) formulae for SDG&E’s fleet – comprised of more than 2,100 fleet vehicles – are  
20 complex.<sup>16</sup> This estimating method has proven a reasonable approximation.

21 In addition, beginning January 1, 2018, the DMV’s registration fee will increase due to a new  
22 “transportation improvement fee.” The fee increase will range from \$25 to \$175, depending on the  
23 value of the vehicle.<sup>17</sup> This further complicates the forecasting of such fees. More information is  
24 included in my workpapers entitled, “License Fees,” Ex. SDG&E-21-WP.

#### 25 Sales Tax

26 A zero-based forecast for sales tax is appropriate because historical trends or averages  
27 will not properly represent the costs for this spend. Sales tax applies to fair rental value for all  
28 periods during which mobile transportation equipment is leased. The lessor must pay tax at the

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<sup>16</sup> California Dep’t of Motor Vehicles, Registration Related Fees,  
[https://www.dmv.ca.gov/pubs/brochures/fast\\_facts/ffvr34.htm#reg](https://www.dmv.ca.gov/pubs/brochures/fast_facts/ffvr34.htm#reg).

<sup>17</sup> S.B.-1, Transportation Funding (Cal. 2017),  
[https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\\_id=201720180SB1](https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB1).



rate in effect at the time the equipment is leased, including the periods during the first lease of the equipment and all periods during any subsequent leases of the equipment.<sup>18</sup> Historical trends or averages are not used to forecast because the lease amortization costs vary depending on units currently in the fleet or for new units added.

**3. Cost Drivers**

The cost drivers behind this forecast are attributable to the cost and timing of replacement vehicles, additional vehicles needed to support gas and electric transmission, customer service field, future interest rate increases, and environmental and regulatory compliance-related costs associated with the purchase and maintenance of vehicles and power-operated equipment. These drivers are discussed in greater detail in my workpapers, Exhibit SDG&E-21-WP, including information on the replacement of 255 vehicles needed to comply with ATCM requirements.

Additionally, as an Alternative-Fuel Provider fleet, 90% of the SDG&E annual light duty vehicle purchases are required under the EPAct to be approved alternative-fuel vehicles.<sup>19</sup> To achieve the 90% annual requirement, SDG&E plans to continue buying alternative-fuel vehicles that are sold at a premium. If SDG&E cannot achieve the 90% annual requirement, SDG&E may purchase EPAct credits.

**B. Maintenance Operations**

For TY 2019, the Maintenance Operations O&M request is \$18.802 million, an increase of \$3.055 million above 2016 adjusted-recorded costs, as summarized in Table CLH-6 below.

**TABLE CLH-6**  
**SDG&E Company**  
**Maintenance Operations O&M Summary of Costs**  
**(Thousands of 2016 dollars)**

<b>B. Maintenance Operations</b>	<b>2016 Adjusted-Recorded (000s)</b>	<b>TY2019 Estimated (000s)</b>	<b>Change (000s)</b>
1. Maintenance Operations	10,999	12,062	1,063
2. Automotive Fuels	4,748	6,740	1,992
<b>Total</b>	<b>15,747</b>	<b>18,802</b>	<b>3,055</b>

<sup>18</sup> California State Bd. of Equalization, Sales and Use Tax Regulations: Article 15. Leases of Tangible Personal Property, <http://www.boe.ca.gov/lawguides/business/current/btlg/vol11/sutr/1661.html>.

<sup>19</sup> Dep't of Energy, Alternate Fuel Transportation Program, 10 C.F.R. pt. 90 (2007), [https://epact.energy.gov/pdfs/alt\\_compliance\\_rule.pdf](https://epact.energy.gov/pdfs/alt_compliance_rule.pdf).

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

2                   Inspection and maintenance activities are carried out at 11 Fleet Services maintenance  
3 garages, including satellite facilities. Maintenance Operations includes: ( 1) safety inspections  
4 and routine maintenance of fleet vehicles; (2) repair of vehicle damage and replacement of worn  
5 and defective parts; and (3) compliance with applicable federal, state, and local environmental,  
6 safety, and emissions regulations. SDG&E’s fleet consists of over 2,100 vehicles and power-  
7 operated equipment.

8                   The cost of fuel is a function of both price and quantity consumed. While improved fuel  
9 economy units will likely have a beneficial impact on fuel costs, the price will remain the  
10 dominant factor.

11                   **2.       Forecast Method**

12                   A five-year historical average is appropriate to forecast Maintenance Operations O&M and to  
13 forecast the automotive fuel consumption because the use of five-year averaging is generally  
14 recognized as a reasonable and valid methodology where costs fluctuate from year to year.

15                   The five-year average is appropriate for Maintenance Operations’ and automotive fuels  
16 forecast because costs for Maintenance Operations are prone to fluctuations due to the volatility  
17 in commodity prices. SDG&E cannot predict the changes in commodity prices and must  
18 therefore rely on averaging to arrive at a reasonable cost estimate. In the TY 2016 GRC, a 3-year  
19 average was selected as more appropriate than a 5-year average for Maintenance Operations and  
20 automotive fuel due to costs in 2009 being an anomaly as the nation recovered from a recession.

21                   <sup>20</sup> More information is included in my workpapers entitled, “Maintenance Operations,” Exhibit  
22 SDG&E-21-WP.

23                   Costs for automotive fuel are prone to fluctuations because of the volatility of fuel prices  
24 due to political, social, and economic concerns. The use of alternate forecast method(s) is not  
25 applicable because of the fluctuations in the price of fuel. Such volatility makes predicting the  
26 forward-cost of fuel over an extended period of time difficult. The cost of fuel is a function of  
27 both price and quantity consumed. Fuel prices will remain the dominate factor and a historical 5-  
28 year average annual fuel cost is a reasonable predictor of cost. Additionally, SDG&E’s fuel

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<sup>20</sup> The National Bureau of Economic Research reported that the recession ended in June 2009. Business Cycle Dating Committee, The National Bureau of Economic Research (Sept. 20, 2010), <http://www.nber.org/cycles/sept2010.html>.

1 forecast includes the costs for the recently approved California legislation to increase the excise  
2 tax on gasoline and diesel by 12 and 20 cents per gallon, respectively. Further, the sales tax on  
3 diesel is increasing four percentage points from the current 5.75% to 9.75%. More information is  
4 included in my workpapers entitled, “Maintenance Operations and Automotive Fuels,” Exhibit  
5 SDG&E-21-WP.

### 6 **3. Cost Drivers**

7 The cost drivers behind this forecast include the maintenance and repair costs associated  
8 with a fleet of more than 2,100 vehicles and power-operated equipment, including technician  
9 labor, technical training, replacement parts, and contracted repair services. The cost driver for  
10 this request is to backfill positions to match maintenance operations historic staffing levels in  
11 order to meet the continued work load increases. The majority of Fleet Services vacant positions  
12 are due to retirements that SDG&E plans to backfill. Increased work load is due to the  
13 implementation of:

- 14 (1) a training program to support the 50% increase of AFV’s and increased  
15 complexity of modern fleet vehicles. SDG&E’s mix of vehicle types adds to the  
16 complexity of ensuring our technicians are appropriately trained to service the  
17 mixture of vehicles with both new and old technologies; and
- 18 (2) a newly revised CHP 2016 Basic Inspection of Terminals (BIT) program. Fleet  
19 Services conducts audits to ensure compliance with CHP’s BIT program which  
20 includes the review of vehicle and employee driver records. To ensure compliance  
21 for the new revisions, SDG&E will have to inspect an additional 2 terminals and 467  
22 vehicles due to the reduced vehicle weight requirement of the program (from 26,000  
23 pounds Gross Vehicle Weight (GVW) to 10,001 pounds GVW). Further, all BIT  
24 vehicles between 10,001-26,000 pounds GVW require a 90-day safety inspection.<sup>21</sup>

25 Further, the cost of gasoline and diesel fuel has been volatile due to global issues which  
26 impact fuel sources. For example, in the last five years the cost of diesel has fluctuated an  
27 average of 35%. Additionally, the cost of reformulated gasoline has fluctuated by 29% as  
28 demonstrated by the data provided by the U.S. Energy Information Administration.<sup>22</sup>

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<sup>21</sup> Dep’t of California Highway Patrol, Welcome to BIT, The Basic Inspection of Terminals Program, <https://www.chp.ca.gov/CommercialVehicleSectionSite/Documents/O%20chp800h.pdf>.

<sup>22</sup> U.S. Energy Information Administration, Petroleum & Other Liquids (Sept. 18, 2017), [http://www.eia.gov/dnav/pet/pet\\_pri\\_gnd\\_dcus\\_r50\\_a.htm](http://www.eia.gov/dnav/pet/pet_pri_gnd_dcus_r50_a.htm).

1 Starting November 1, 2017, new California legislation will increase the base excise tax by  
2 12 cents per gallon for gasoline, and 20 cents per gallon for diesel. Additionally, the sales tax on  
3 diesel is increasing four percentage points from the current 5.75% to 9.75%.<sup>23</sup>

4 There are incremental vehicles that also impact vehicle maintenance and fuel costs. These  
5 cost drivers are further described in my Maintenance Operations and Automotive Fuels  
6 workpapers, Exhibit SDG&E-21-WP.

### 7 C. Non-Shared Fleet Management

8 For TY2019, the Fleet Management request is \$0.548 million, a decrease of \$0.176  
9 million below 2016 adjusted-recorded costs, as summarized on Table CLH-7 below.

10 **TABLE CLH-7**  
11 **SDG&E Company**  
12 **Forecast for Maintenance Operations**

<b>C. Fleet Management</b>	<b>2016 Adjusted- Recorded (000s)</b>	<b>TY2019 Estimated (000s)</b>	<b>Change (000s)</b>
1. Maintenance Management	724	548	-176
<b>Total</b>	<b>724</b>	<b>548</b>	<b>-176</b>

#### 13 1. Description of Cost and Underlying Activities

14 This activity consists of all the Fleet Services management staff which includes the  
15 allocated portion of the Fleet Services Director as well as garage management. The following are  
16 of some of the activities that are performed by Maintenance Management:  
17

- 18 a) Garage management and oversight
- 19 b) The collection of employee commutation fees for take home fleet vehicles

#### 20 2. Forecast Method

21 A 5-year historical average was selected as the basis for our TY 2019 forecast. The 5-  
22 year historical average is most appropriate because recorded costs for this activity have fluctuated  
23 in the past five years. In addition, this methodology accurately reflects the current and future  
24 staffing levels and the recent economic trends.  
25

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<sup>23</sup> S.B.-1, Transportation Funding (Cal. 2017),  
[https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\\_id=201720180SB1](https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB1).

1                   **3. Cost Drivers**

2                   The cost drivers behind this forecast include the labor required to provide supervision and  
 3 management to the Maintenance Operations organization and the collection of employee  
 4 commutation fees for take home fleet vehicles. Cost drivers also include backfilling positions to  
 5 match Fleet Services’ historic staffing levels in order to meet the continued work load increases.  
 6 The majority of Fleet Services’ vacant positions are due to retirements which have not been  
 7 backfilled. In addition, the cost driver for this request is due to the need to provide supervision  
 8 and oversight for the following areas: (1) a newly revised CHP 2016 BIT program, described  
 9 earlier; and (2) a training program to support the 50% increase of AFV’s over 2012 numbers and  
 10 increased complexity of modern fleet vehicles. SDG&E’s mix of vehicle types adds to the  
 11 complexity of ensuring our technicians are appropriately trained to service the mixture of  
 12 vehicles with both new and old technologies. For more information, refer to my workpapers  
 13 entitled, “Maintenance Management”, Exhibit SDG&E-21-WP.

14 **IV. SHARED COSTS**

15 **A. Introduction**

16 As described in the Shared Services and Shared Assets Billing, Segmentation, and  
 17 Capital Reassignments testimony of James Vanderhye (Exhibit SCG-34/SDG&E-32), Shared  
 18 Services are activities performed by a utility shared services department (i.e., Fleet Services) for  
 19 the benefit of: (i) SDG&E or SoCalGas, (ii) Sempra Energy Corporate Center, and/or (iii) any  
 20 unregulated subsidiaries. The utility providing Shared Services allocates and bills incurred costs  
 21 to the entity or entities receiving those services.

22 Table CLH-8 summarizes the total shared O&M forecasts for the listed cost categories.

23 **TABLE CLH-8**  
 24 **SDG&E Company**  
 25 **Shared O&M Summary of Costs**

<b>FLEET SERVICES (In 2016 \$)</b>			
<b>(In 2016 \$) Incurred Costs (100% Level)</b>			
<b>A. Shared Fleet Management</b>	<b>2016 Adjusted-Recorded (000s)</b>	<b>TY2019 Estimated (000s)</b>	<b>Change (000s)</b>
1. Shared Fleet Management	1,356	1,617	261
<b>Incurred Costs Total</b>	<b>1,356</b>	<b>1,617</b>	<b>261</b>

1 The forecast reflects the total costs incurred as well as the shared services allocation  
2 percentages related to those costs. Those percentages are presented in the Shared Services  
3 workpapers, Exhibit SDG&E-21-WP, along with a description explaining the activities being  
4 allocated. The dollar amounts allocated to affiliates are presented by Mr. Vanderhye (Ex. SCG-  
5 34/SDG&E-32).

## 6 **B. Shared Fleet Management**

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

8 This activity consists of all the Fleet Services management staff which includes the  
9 allocated portion of the management and technology systems that provide technical support.

10 The following is a summary of some of the activities that are performed by Fleet  
11 Management:

- 12 • Vehicle design specification and up-fitting
- 13 • Quality assurance inspection services
- 14 • Vehicle replacement management
- 15 • Quality assurance - Environmental compliance
- 16 • Training for Fleet Services Technicians
- 17 • Fuel ordering and Management
- 18 • Fleet System and Technology Management
- 19 • Continuous Improvement

### 20 **2. Forecast Method**

21 A three-year historical average was used as the basis for our TY 2019 forecast. The 3-  
22 year average most accurately reflects the most recent changes in staffing levels and shared  
23 support between SoCalGas and SDG&E.  
24

25 Additionally, SDG&E used a 3-year average for shared Cost Centers to reflect the  
26 consolidation of SDG&E and SoCalGas fleets in 2014. The 3-year forecast is most appropriate  
27 since this represents the current and future direction of Fleet Services. In addition, the 3-year  
28 average forecast is the lowest among the averaging methodologies as well as lower than utilizing  
29 base year.

### 30 **3. Cost Drivers**

31 The cost drivers behind this forecast are primarily due to labor resources (and associated  
32 non-labor costs) required to effectively manage Fleet Services' operations. The forecast includes:  
33 one Asset Team Lead added in May 2016 to coordinate replacement planning, design, and

1 acquisition of vehicles; one Equipment Designer was added in 2017 to coordinate replacement  
2 planning, design, and acquisition of vehicles; one incremental Compliance Inspector to  
3 coordinate and ensure compliance with Basic Inspection of Terminals (BIT), safety, OSHA, and  
4 other state and federally-mandated compliance; and one incremental trainer to train on vehicle  
5 safety, hydraulics, and new AFV technology.

6 Further, the cost drivers behind this forecast are primarily due to labor resources (and  
7 associated non-labor costs) required to effectively manage Fleet Services operations. The cost  
8 driver for this request is to meet the continued work load increases in Fleet Services. The  
9 majority of Fleet Services vacant positions are due to retirements which SDG&E plans to  
10 backfill. In addition, the cost driver for this request is due to the need to provide supervision and  
11 oversight for the following areas: (1) a newly revised CHP 2016 BIT (Basic Inspection of  
12 Terminals) program, described earlier; and (2) a training program to support the 50% increase of  
13 AFV's from 2012 and increased complexity of modern fleet vehicles. SDG&E's mix of vehicle  
14 types adds to the complexity of ensuring our technicians are appropriately trained to service the  
15 mixture of vehicles with both new and old technologies.

## 16 **V. CONCLUSION**

17 Fleet Services provides the underlying tools and support necessary to field crews who not  
18 only maintain the reliability and safety of our gas and electric system, but also are often the first  
19 contact between the customer and the Company. The quality of our fleet maintenance &  
20 equipment, while enabling productive work, is also fundamental to the safety of our work crews  
21 permitting them to restore service, provide services to new customers, and perform routine  
22 inspection and maintenance. My requested forecast for Fleet Services is essential to the  
23 continuation of our efforts and commitment to public and employee safety.

24 SDG&E requests that the Commission adopt the O&M forecasts presented in this  
25 testimony. The forecasts were carefully developed and represent a prudent level of funding for  
26 the critical activities to take place in this GRC term. The amounts requested for TY 2019 for  
27 Fleet Services are necessary to meet the needs of utility operations and customer service. They  
28 are based on an evaluation of 2012-2016 cost trends adjusted for known incremental increases  
29 and decreases, and then forecasted for the 2017 through 2019 period.

30 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. I have previously testified before the Commission.



## LIST OF ACRONYMS

<b>ACRONYM</b>	<b>DEFINITION</b>
AB32	Global Warming Solutions Act
AFV	Alternative Fuel Vehicle
ATCM	Airborne Toxic Control Measure
BIT	Basic Inspections of Terminals
CARB	California Air Resources Board
CHP	California Highway Patrol
DMV	California Department of Motor Vehicles
EPA	United States Environmental Policy Agency
EPAct	Energy Policy Act of 1992
FOF	Fueling Our Future
GHG	Greenhouse Gas
GVW	Gross Vehicle Weight
LIBOR	London Interbank Offered Rate
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
PM	Particulate Matter
SCAQMD	South Coast Air Quality Management District's
TY	Test Year

**SDG&E 2019 GRC Testimony Revision Log –December 2017**

<b>Exhibit</b>	<b>Witness</b>	<b>Page</b>	<b>Line or Table</b>	<b>Revision Detail</b>
<i>SDGE-21</i>	<i>Carmen Herrera</i>	<i>CLH-4</i>	<i>25</i>	<i>Changed “Fleet Operations” to “Fleet Services”</i>
		<i>CLH-5</i>	<i>4</i>	
		<i>CLH-5</i>	<i>5</i>	
		<i>CLH-5</i>	<i>9</i>	