

Application: \_\_\_\_\_  
(U 39 M)  
Exhibit No.: (PG&E-4)  
Date: December 21, 2009  
Witness: Various

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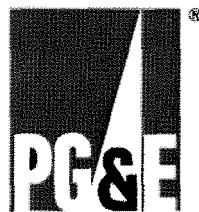
**PACIFIC GAS AND ELECTRIC COMPANY**

**2011 GENERAL RATE CASE**

**PREPARED TESTIMONY**

**EXHIBIT (PG&E-4)  
CUSTOMER CARE COSTS**

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1 management. The forecasted cost of \$881,000 in 2011 is an estimate  
 2 for defining the business requirements for the new technology and the  
 3 time it will take for field employees to learn the new technology.

4 Costs associated with the application development and hardware  
 5 are included in the Shared Services and Other Support Costs chapter  
 6 for Information Technology Costs in Exhibit (PG&E-7), Chapter 2.

7 Table 2-7 below shows recorded 2008 expenses, and forecast 2009  
 8 through 2011 expenses for MWC BF by work activity:

**TABLE 2-7**  
**PACIFIC GAS AND ELECTRIC COMPANY**  
**MWC BF RECORDED AND FORECAST MAINTENANCE EXPENSE**  
**RECORDED EXPENSE FOR 2008,**  
**FORECAST EXPENSE FOR 2009, 2010 AND 2011**  
**(THOUSANDS OF DOLLARS)**

Line No.	Work Description	2008 Recorded	2009 Forecast	2010 Forecast	2011 Forecast
1	Poles Patrolled	\$5,006	\$4,367	\$5,024	\$4,984
2	Poles Inspected	6,974	9,325	8,158	11,122
3	Enclosures Patrolled	2,318	2,293	2,263	2,398
4	Enclosures Inspected	8,586	9,793	10,248	10,464
5	Poles Infrared Inspected	670	352	420	857
6	Overhead Line Equipment Inspected and Tested	5,309	4,086	3,254	5,641
7	Underground Line Equipment Inspected and Tested	412	1,241	878	1,131
8	Network Transformers Inspected	3,630	3,249	3,072	2,923
9	Special Patrols	0	0	304	311
10	Miscellaneous Maintenance Items	320	713	285	881
11	Total	\$33,225	\$35,419	\$33,906	\$40,712

## 9 2. MWC BG – Preventive Maintenance and Equipment Repair

10 The following types of activities are performed within the MWC BG:

- 11 • Repair of overhead and underground facilities.
- 12 • Repair of overhead and underground ERR.
- 13 • Repair of streetlights and perform group streetlight replacements.
- 14 • Refurbish and overhaul of specific types of overhead and underground
- 15 distribution line equipment.
- 16 • Repair of overhead facilities to address migratory bird requirements.

- 1 • Investigation and response to radio television interference inquiries.
- 2 • Washing insulators.
- 3 • Replenishment of nitrogen cylinders.
- 4 • Repair of network equipment and overhaul of network protectors.
- 5 • Maintenance-related projects.
- 6 • Other work associated with maintenance work such as reassessments,
- 7 transformer reclassification, information technology changes, and
- 8 equipment failure analysis.

9 Table 2-8 shows the actual units of work completed in 2008, and  
 10 forecast units of work for 2009 through 2011. As the EDM Program has  
 11 evolved, additional units of work (cost drivers) have been identified and  
 12 included in the program's unit measures.

**TABLE 2-8**  
**PACIFIC GAS AND ELECTRIC COMPANY**  
**MWC BG UNITS OF WORK**  
**ACTUAL UNITS COMPLETED FOR 2008, FORECAST UNITS FOR 2009, 2010 AND 2011**

Line No.	Work Description	2008 Recorded	2009 Forecast	2010 Forecast	2011 Forecast
1	Number of Overhead Notifications	11,312	11,776	8,188	17,385
2	Number of Underground Notifications	5,490	5,958	1,191	4,223
3	Number of Overhead ERR	876	2,087	2,715	2,161
4	Number of Underground ERR	271	398	345	398
5	Number of Streetlight Burnouts	16,556	19,967	18,750	21,000
6	Number of Streetlight Group Replacements	13,294	10,393	4,000	49,329
7	Number of Line Equipment Overhauls (Emeryville)	298	140	200	500
8	Number of Line Equipment Overhauls (Division Up/Down Labor)	117	178	633	500
9	Bird Safe	1,348	1,025	1,050	1,132
10	Bird Retrofits	944	1,100	1,000	1,000
11	Number of Radio and Television Interference (RTVI) Investigations	1,308	830	1,265	1,266
12	Number of Poles – Insulator Washing	2,227	11,668	7,289	10,000
13	Number of Nitrogen Cylinders	410	1,261	440	440
14	Number of Capacitor Controllers	183	0	0	241

13 Table 2-9 summarizes completed unit costs of work within MWC BG for  
 14 2008, and forecast unit costs of work for 2009 through 2011.

**TABLE 2-9**  
**PACIFIC GAS AND ELECTRIC COMPANY**  
**MWC BG UNIT COSTS OF WORK**  
**COMPLETED FOR 2008, FORECAST UNIT COST FOR 2009, 2010 AND 2011**

Line No.	Work Description	2008 Recorded	2009 Forecast	2010 Forecast	2011 Forecast
1	Unit Cost Overhead Notifications	\$1,537	\$1,295	\$1,533	\$1,584
2	Unit Cost Underground Notifications	\$2,011	\$2,450	\$2,182	\$2,250
3	Unit Cost Overhead ERR	\$5,627	\$2,875	\$3,288	\$3,384
4	Unit Cost Underground ERR	\$6,336	\$4,264	\$5,300	\$5,487
5	Unit Cost Streetlight Burnouts	\$251	\$210	\$223	\$231
6	Unit Cost Streetlight Group Replacements	\$54	\$61	\$63	\$65
7	Unit Cost Line Equipment Overhauls (Emeryville)(a)	\$4,852	\$5,000	\$7,800	\$5,408
8	Unit Cost Line Equipment Overhauls (Division Up/Down Labor)(b)	\$3,274	\$2,954	\$3,850	\$3,956
9	Unit Cost Bird Safe	\$1,231	\$1,339	\$1,516	\$1,571
10	Unit Cost Bird Retrofits	\$1,034	\$1,101	\$1,257	\$1,295
11	Unit Cost RTVI Investigations	\$491	\$520	\$541	\$555
12	Unit Cost Per Pole – Insulator Washing	\$79	\$31	\$45	\$47
13	Unit Cost Nitrogen Cylinders	\$359	\$270	\$568	\$587
14	Unit Cost Capacitor Controllers	\$1,727	\$0	\$0	\$1,787

(a) The Line Equipment Overhaul unit costs for Emeryville reflect the costs associated with the repair by the Emeryville Repair Facility. The current unit cost reflects a mix of line regulators and other equipment being overhauled.

(b) The Line Equipment Overhaul unit costs for Divisions reflect the labor costs associated with taking down and putting up the overhauled equipment.

1                   As indicated in Section D, due to factors such as availability and  
2                   assessment of historical unit costs, and projected changes in type of work or  
3                   how work is performed, PG&E applied one of four unit cost forecast  
4                   methods to forecast unit costs for the electric distribution maintenance  
5                   program. Table 2-10 summarizes the type of unit cost forecast method used  
6                   for preventive maintenance and equipment repair.

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*Cash Management Group:* The Cash Management group is responsible for the cash account reconciliation of the Company's four primary customer depository cash accounts. Through these accounts, the Company collects approximately \$1.4 billion per month. The bank reconciliation is a complex process due to the various payment channels available, which requires comprehensive understanding of internal systems and processes, as well as understanding changes and impacts originating from external sources. The volume of activity involves utilizing 30 system-generated reports to validate approximately 18,000 batches of transactions. The reconciliation of these transactions and differences between PG&E's books versus the bank is a labor-intensive process.

The team also follows up with various departments to ensure reconciling items are cleared and booked properly into both the billing system and the general ledger system. In addition, the team coordinates with various departments to ensure that payments where no customer account exists are escheated timely.

**(d) Street Light Inventory Project**

The employees of SLIP are responsible for performing system-wide audits of street lights in the PG&E service territory, including both company-owned and customer-owned street lights. The LS-2 tariff requires that PG&E perform these regular audits related to the billing of customer-owned street lights.

Technicians using hand-held computer tablets record the size of the lamp, wattage, lamp number, physical location, etc., of each street light being audited. PG&E's 2011 request is for eight technicians and two project managers, who will manage the recorded data, supervise the technicians and plan the work. The \$1.2 million forecasted for MWC DA for the SLIP was derived as follows:



1 records management, and communications between PG&E and  
2 its customers.

3 *Information to Street Light Customers:* The billing data and  
4 GIS information that is updated as a result of the SLIP is  
5 provided to each respective street light customer (i.e., cities,  
6 counties, lighting districts). This information provides for  
7 improved partnering and communications with customers for  
8 meeting their street lighting needs.

9 **(e) SmartMeter™ Operations**

10 SMO is a new PG&E workgroup that manages the  
11 SmartMeter™ technologies used to remotely collect gas and  
12 electric consumption data for monitoring and billing purposes  
13 and to deliver the business benefits cited in PG&E's  
14 AMI/SmartMeter™ Applications. This is the first GRC filing in  
15 which funds for this work are being requested.

16 SMO is organized into the following three groups:

17 **(i) Advanced Metering Services Operations**

18 Advanced Metering Services (AMS) Operations  
19 monitors SmartMeter™ technologies that deliver the remote  
20 functionality of the system such as the ability of gas and  
21 electric meter reading, the operation of disconnect switches,  
22 and Home Area Network (HAN). AMS Operations includes  
23 the following teams:

- 24 • The Electric Team manages the performance of  
25 PG&E's various electric SmartMeter™ technologies,  
26 and directs troubleshooting and maintenance to resolve  
27 issues with electric endpoints and their associated  
28 network to ensure system operation in the manner  
29 required to deliver timely and accurate data and serves  
30 the business to meet customer needs and achieve  
31 business benefits.
- 32 • The Gas Team manages the performance of PG&E's  
33 gas SmartMeter™ technology, and directs

