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

Application of Pacific Gas and Electric Company for Authority, Among Other Things, to Increase Rates and Charges for Electric and Gas Service Effective on January 1, 2014.

A.12-11-009 (Filed November 15, 2012)

U 39 M

And Related Matter.

Investigation 13-03-007

# PACIFIC GAS AND ELECTRIC COMPANY'S MARCH 30, 2015 BUDGET REPORT IN COMPLIANCE WITH CALIFORNIA PUBLIC UTILITIES COMMISSION DECISION 14-08-032

MICHELLE L. WILSON STEVEN W. FRANK

Pacific Gas and Electric Company 77 Beale Street San Francisco, CA 94105 Telephone: (415) 973-6976

Facsimile: (415) 973-0516 E-Mail: SWF5@pge.com

Attorneys for

Dated: March 30, 2015 PACIFIC GAS AND ELECTRIC COMPANY

In compliance with Decision 14-08-032 of the California Public Utilities Commission, Pacific Gas and Electric Company hereby submits the attached report presenting electric distribution, electric generation and gas distribution recorded amounts for 2014, by major work category, with explanations for significant differences from the Company's budget for 2014. This report also presents budgeted amounts for 2015, by major work category.

This report is being filed in the above-captioned docket and served on the official service list for this docket.

Respectfully Submitted,

MICHELLE L. WILSON STEVEN W. FRANK

By:	/s/	
	STEVEN W. FRANK	

Pacific Gas and Electric Company 77 Beale Street San Francisco, CA 94105 Telephone: (415) 973-6976

Facsimile: (415) 973-0516 E-Mail: SWF5@pge.com

Attorneys for PACIFIC GAS AND ELECTRIC COMPANY

Dated: March 30, 2015

# PACIFIC GAS AND ELECTRIC COMPANY'S MARCH 30, 2015 BUDGET REPORT IN COMPLIANCE WITH CALIFORNIA PUBLIC UTILITIES COMMISSION DECISION 14-08-032

# PACIFIC GAS AND ELECTRIC COMPANY'S MARCH 30, 2015 BUDGET REPORT IN COMPLIANCE WITH CALIFORNIA PUBLIC UTILITIES COMMISSION DECISION 14-08-032

### TABLE OF CONTENTS

Part/Section	Title	Page
PART A	OVERVIEW OF 2014 SPENDING	A-1
PART B	2014 BUDGET VS. RECORDED COMPARISON	B-1
Section 1	Summary and Background Information	1-1
Section 2	Gas Distribution	2-1
Section 3	Electric Distribution	3-1
Section 4	Customer Care	4-1
Section 5	Nuclear Generation	5-1
Section 6	Power Generation	6-1
Section 7	Energy Procurement	7-1
Section 8	Information Technology	8-1
Section 9	Shared Services	9-1
Appendix A	Major Work Category (MWC) Conversion Document	App-1

This March 30, 2015 Budget Report is submitted in compliance with California Public Utilities Commission (CPUC or Commission) Decision (D.) 14-08-032 (page 12), which continues the reporting requirement established in D.11-05-018.

This report is organized as follows.

Part A of this report provides an overview of Pacific Gas and Electric Company's (PG&E or the Company) company-wide General Rate Case (GRC) spending for 2014.

Part B contains a detailed comparison of PG&E's 2014 budgeted and recorded expenditures for the Company's various lines of business (LOB). Specifically, Part B contains:

- PG&E's budgeted amounts for 2014, by major work category (MWC), as of August 31, 2014, generally consistent with the November 12, 2014 Budget Report, and updated to reflect organizational or work realignments.
- The recorded amounts for 2014, by MWC, with explanations for significant differences from PG&E's budgeted amounts.
- PG&E's budgeted amounts for 2015, by MWC, as of January 31, 2015.

### **PART A - OVERVIEW OF 2014 SPENDING**

#### PART A - OVERVIEW OF 2014 SPENDING

### I. 2014 Expense and Capital Comparison of Budgeted and Recorded Costs

As reflected in the table below, in 2014, PG&E spent \$35.1 million more than budgeted for expense. For capital, in 2014, PG&E spent \$89.7 million less than budgeted. The table also includes 2014 imputed regulatory values and 2015 budget for reference.

While PG&E's 2014 capital spending is lower than the level adopted for 2014 in the 2014 GRC Decision, PG&E expects to spend the entire authorized capital amounts over the three-year 2014 GRC cycle. As described in PG&E's last budget report on November 12, 2014, the Decision adopted a method to develop PG&E's 2015 and 2016 capital expenditure regulatory values using a 7-year historic spending average, resulting in front-heavy regulatory values: \$3.5 billion for 2014, \$3.0 billion for 2015 and \$3.1 billion for 2016. PG&E has budgeted \$3.5 billion in capital for 2015, \$500 million more than the regulatory value for that year.

### À

### 2014 BUDGET VS. ACTUAL EXPENSE AND CAPITAL BY LINE OF BUSINESS (MILLIONS OF DOLLARS)

		Expense							Capital					
Line No.	Line of Business	2014 Imputed Regulatory Values	2014 Budget	2014 Actual	2014 Difference (%)	2014 Difference (\$)	2015 Budget	2014 Imputed Regulatory Values	2014 Budget	2014 Actual	2014 Difference (%)	2014 Difference (\$)	2015 Budget	
1	Gas Distribution	\$404.9	\$379.2	\$410.4	8.2%	\$31.1	\$402.7	\$728.4	\$583.7	\$569.7	-2.4%	(\$14.0)	\$736.6	
2	Electric Distribution	620.0	624.3	641.3	2.7%	17.0	664.1	1,566.2	1,525.5	1,473.1	-3.4%	(52.4)	1,595.2	
3	Customer Care	394.4	389.0	399.3	2.7%	10.4	397.2	167.4	185.7	179.6	-3.3%	(6.1)	180.3	
4	Nuclear Generation	388.2	364.1	404.2	11.0%	40.2	383.7	249.5	220.2	220.9	0.3%	0.7	244.1	
5	Power Generation	235.3	212.3	197.9	-6.8%	(14.4)	240.6	326.7	282.9	253.5	-10.4%	(29.3)	317.6	
6	Energy Procurement	59.7	56.1	56.1	0.0%	(0.0)	57.3	28.5	22.4	18.9	-15.8%	(3.5)	17.0	
7	IT	259.2	229.5	246.5	7.4%	16.9	242.9	199.0	165.8	172.7	4.2%	6.9	144.7	
8	Shared Services	96.6	67.9	82.9	22.1%	15.0	89.5	219.8	223.3	221.7	-0.7%	(1.6)	251.0	
9	A&G	298.3	293.9	290.8	-1.1%	(3.1)	314.9	46.3	14.6	24.4	67.4%	9.8	36.9	
10	Subtotal	\$2,756.6	\$2,616.3	\$2,729.4	4.3%	\$113.1	\$2,793.0	\$3,531.8	\$3,224.1	\$3,134.4	-2.8%	(\$89.7)	\$3,523.5	
11	Allocated Contingency	0.0	78.0	0.0	-100%	(78.0)	75.0	0.0	0.0	0.0	0.0%	0.0	0.0	
12	Total	\$2,756.6	\$2.694.3	\$2,729,4	1.3%	\$35.1	\$2.868.0	\$3.531.8	\$3,224,1	\$3.134.4	-2.8%	(\$89.7)	\$3.523.5	

#### Notes:

- (1) Allocated Contingency included in the table refers to funds provided to the LOBs for unforeseen events that require a timely and flexible response outside the standard planning and budgeting process.
- (2) Imputed regulatory values, planned budgets and actual amounts reflect 100 percent of the costs, however, only 88 percent of the Administrative and General (A&G) costs are reflected in GRC revenue requirements.
- (3) Budget and imputed values have been adjusted to reflect organizational structure changes through January 2015.
- (4) Amounts include separately funded projects and programs that are incorporated in the 2014 GRC, such as SmartMeter™, the Cornerstone project, the Market Redesign Technology Upgrade (MRTU), the Fuel Cell project, the Vaca Dixon project, and meter reading costs.
- (5) The 2014 expense budget was decreased by \$0.3 million from its previously reported 2014 budget due to corrections for minor errors.
- (6) The 2014 capital expenditure budget was decreased by \$3.0 million from its previously reported 2014 budget due to corrections for minor errors.

# PART B – 2014 BUDGET VS. RECORDED COMPARISON

#### PART B - 2014 BUDGET VS. RECORDED COMPARISON

SECTION 1 – Summary and Background Information

The information presented in this report conforms to the structure and format of the 2014 GRC. Projects previously funded separately that were incorporated into the 2014 GRC (e.g., SmartMeter™, the Fuel Cell project) are included in the 2014 data presented here. In addition, consistent with the 2014 GRC, Information Technology (IT) and Corporate Real Estate (CRE) costs are presented in a decentralized fashion, meaning that the costs are included in the various lines of business that have initiated the specific IT and CRE programs.

Summarized below are the significant drivers of the differences between 2014 budgeted and recorded costs for each line of business.

Gas Distribution – The Gas Distribution organization overspent its 2014 expense budget by \$31.1 million or 8.2 percent. The increase was primarily driven by work resulting from the Napa Earthquake; higher-than-planned spending on corrective maintenance activities repairing mains, services and values; as well as leak survey and repair and atmospheric corrosion inspection costs above plan. These increases were partially offset by: lower-than-planned volumes of locate and mark activities and cathodic protection resurvey units; and a reduction in maintenance on flow meters, remote terminal units, and electronic recorders. Gas Distribution underspent its 2014 capital budget by \$14.0 million or 2.4 percent. The decrease was primarily driven by lower-than-planned replacement projects and delays with the Gas Operations Technical Training Center and the Hot Back Up Center facility. The decrease was partially offset by increases in work requested by third parties or governmental agencies.

Electric Distribution – The Electric Distribution organization overspent its 2014 expense budget by \$17.0 million or 2.7 percent. The primary drivers were higher-than-planned spending on: overhead and underground preventive maintenance, including work to correct surge arrestor grounding; and operation and maintenance of substations. The increase was offset, in part, by lower-than-planned spending for corrective maintenance. Electric Distribution underspent its 2014 capital budget by \$52.4 million or 3.4 percent. The decrease was primarily due to rescheduling of Rule 20A projects, delays in projects requested by third parties or governmental agencies, three Bay Area switchgear replacements rescheduled to 2015, and lower-than-planned asset replacements. The decrease was partially offset by higher spending on pole replacement projects, substation Supervisory Control and Data Acquisition (SCADA), and routine emergency recovery.

Customer Care – The Customer Care organization overspent its 2014 expense budget by \$10.4 million or 2.7 percent. The primary drivers were higher-than-planned call volumes and customer service work, more non-tariffed products and services work activities, and customer communication on rate education and outreach. These increases were partially offset by productivity gains in billing and credit work. Customer Care underspent its 2014 capital budget by \$6.1 million or 3.3 percent. The decrease

was primarily due to delays in the Sacramento and Fresno Contact Center expansion and upgrades as a result of the delayed 2014 GRC decision. These decreases were partially offset by higher-than-planned technology solutions to provide customers with their preferred methods of conducting business with PG&E (e.g., using a mobile device to start/stop service, pay a bill, report an outage or subscribe to outage notifications) referred to as Channel of Choice, distributed generation bill development, and enhancements to the Interactive Voice Response and Customer Care and Billing Systems to further improve customer service and strengthen system performance.

Nuclear Generation – The Nuclear Generation organization overspent its 2014 expense budget by \$40.2 million or 11.0 percent. The overrun was primarily due to budget levelization from 2014 through 2016 of the second refueling outage which occurred in 2014. Without the budget levelization, Nuclear Generation would have overspent its 2014 budget by \$4.1 million or 1.0 percent. In 2014, Nuclear Generation overspent its capital budget by \$0.7 million or 0.3 percent, primarily due to unplanned emergent work for reactor coolant pump motor replacement, security enhancements and facility upgrades. The increase was partially offset by rescheduling of planned vehicle replacements.

Power Generation – The Power Generation organization underspent its expense budget by \$14.4 million or 6.8 percent in 2014. The primary driver of the underspending was due to budget levelization for the Long Term Service Agreements (LTSA) for Gateway and Colusa Generating Stations that will occur in 2016 and 2019, respectively.<sup>2</sup> Without the budget levelization, the Power Generation organization would have spent to its expense budget in 2014. In 2014, Power Generation's recorded capital expenditures were \$29.3 million or 10.4 percent less-than-budgeted, primarily due to the cancellation of the Kern Canyon runner replacement project, renewable energy grants received on two Hydro projects, and several smaller project cancellations and delays.

Energy Procurement – The Energy Procurement organization spent to the 2014 expense budget. The Energy Procurement organization underspent its capital budget by \$3.5 million or 15.8 percent due to the rescheduling of project work for the Settlement Quality Meter Data (SQMD) Replacement and Central Data Repository and California Independent System Operator (CAISO) delays in its Markets and Performance (MAP) Initiatives projects.

In the second refueling budget levelization, the 2014 Nuclear Generation budget was reduced by \$36.1 million, spreading the planned cost of the second refueling across three years, 2014 through 2016. Such levelization is consistent with the 2014 GRC Decision. See D.14-08-032, p. 388.

As part of the 2014 budget levelization to account for the LTSAs, the 2014 Power Generation budget was increased by \$14.4 million to account for one-third of the 2016 LTSA payment for Gateway Generating Station and one-sixth of the 2019 LTSA payment for Colusa Generating Station. Such levelization is consistent with the 2014 GRC Decision. See D.14-08-032, pp. 424-425.

Information Technology (IT) – The IT organization overspent its expense budget by \$16.9 million or 7.4 percent in 2014. The primary drivers of the overspending were higher vendor support costs for new technology solutions, higher telecom costs to support network growth, and investment in a multi-year strategy to improve IT efficiencies. The increase was partially offset by lower deployment costs for the Data Center Modernization project and delays in a few database projects. IT overspent its 2014 capital budget by \$6.9 million or 4.2 percent. The overspending was primarily due to a significant investment in foundational solutions for both existing application systems and their supporting infrastructure to further enhance and create efficiencies for the enterprise efforts that focus on asset management and system consolidation. The increase was partially offset by rescheduling the Ruggedized Laptop program.

Shared Services – The Shared Services organization overspent its 2014 expense budget by \$15.0 million or 22.1 percent. The primary drivers of the overspending were emergent work and increased work related to safety initiatives. The increase was partially offset by reductions in conference center and fleet maintenance costs. Shared Services underspent its 2014 capital budget by \$1.6 million or 0.7 percent. The primary driver of the underspending was reprioritization of vehicle spending.

More information is provided in the sections below, which provide variance explanations by MWC between 2014 recorded and budgeted amounts where the differences are at least 10 percent or \$1 million. The information in this report is arranged by LOB, as follows:

Section 2 – Gas Distribution;

Section 3 – Electric Distribution;

Section 4 – Customer Care;

Section 5 – Nuclear Generation;

Section 6 – Power Generation;

Section 7 – Energy Procurement;

Section 8 – Information Technology; and

Section 9 - Shared Services.

In Appendix A, PG&E provides a mapping of MWC changes since the 2014 GRC Decision.

# SECTION 2 Gas Distribution Detailed Variance Explanations

# TABLE 2-1 GAS DISTRIBUTION 2014 EXPENSE COMPARISON SUMMARY (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	2015 Budget
1	Support	AB	(\$2,513)	\$12,319	\$14,832	\$10,831
2	Provide Field Service	DD	101,099	104,564	3,465	101,906
3	Leak Survey	DE (2)	27,964	25,220	(2,744)	26,084
4	Locate & Mark	DF `´	38,746	37,687	(1,059)	34,598
5	Cathodic Protection	DG	11,651	10,495	(1,156)	12,577
6	Gas Expense WRO Activities	LK	6,274	6,364	90	7,933
7	Meter Protection Program	EX	458	2,679	2,221	0
8	Operate Gas Distribution System	FG	14,755	12,286	(2,469)	15,595
9	Preventive Maintenance (Gas)	FH (1)	15,397	18,043	2,646	14,315
10	Corrective Maintenance (Gas)	FI (1),(2)	69,236	73,404	4,167	78,816
11	Gas Mapping	GF	6,880	6,396	(484)	4,384
12	Gas Distribution Planning & Operations Engineering	GG	6,970	8,957	1,987	10,255
13	Manage Energy Efficiency-NonBA	GM	4,465	6,908	2,443	5,128
14	Gas Research, Development & Demonstration	GZ	1,720	860	(860)	1,654
15	Change/Maint Used Gas Meters	HY (1)	2,883	5,211	2,329	2,256
16	G Dist Integrity Mgt (Non Bal)	JQ (1)	38,512	32,769	(5,743)	27,521
17	Distribution Integrity Management Program	JS	0	0	0	0
18	Gas Distrib Leak Srvy & Repair	JU (2)	19,105	28,409	9,304	25,400
19	Maintain IT Apps & Infra	JV	15,643	17,809	2,166	23,490
20	Implement Regulatory Change	KF	0	0	0	0
21	Total		\$379,245	\$410,380	\$31,135	\$402,743

#### Notes:

- (1) The Gas Leak Survey and Repair Balancing account was created in the 2014 GRC Decision. The balancing account costs were centralized into MWCs DE and FI. As a result, parts of the balancing account that had been in MWC HY (\$6.8 million), FH (\$16.0 million) and JQ (\$3.8 million) were moved to MWC FI.
- (2) MWC JU was created to record spending above the Gas Leak Survey and Repair Balancing Account cost cap. In 2014, \$2.0 million was moved from MWC DE 2014 budget and \$17.1 million was moved from MWC FI 2014 budget to MWC JU.

### 2-2

### PACIFIC GAS AND ELECTRIC COMPANY 2014 GENERAL RATE CASE APPLICATION 12-11-009 GAS DISTRIBUTION EXPENSE AND CAPITAL INFORMATION

# TABLE 2-2 GAS DISTRIBUTION 2014 CAPITAL COMPARISON SUMMARY (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	2015 Budget
1	Tools and Equipment	05	(\$6,729)	\$1,828	\$8,557	\$50,383
2	Gas Pipeline Replacement Program	14	172,014	188,224	16,210	210,864
3	Gas Meter Protection	27	4,092	1,877	(2,216)	335
4	Gas Distribution Customer Connections	29	56,947	51,835	(5,111)	80,000
5	NGV - Station Infrastructure	31	3,295	2,901	(394)	3,660
6	Gas Distribution New Capacity	47	29,914	25,907	(4,007)	27,775
7	Gas Distribution Reliability	50	154,718	124,168	(30,550)	207,219
8	Gas Work at the Request of Others	51	41,981	65,019	23,038	59,450
9	Gas Distribution Emergency Response	52	650	8,007	7,357	650
10	Install New Gas Meters	74	5,475	4,849	(626)	4,549
11	Manage Buildings	78	32,128	11,211	(20,916)	6,971
12	Build IT Apps & Infra	2F	35,495	33,574	(1,921)	40,880
13	Gas T&D Implement Regulatory Change	2J	100	51	(49)	0
14	Gas Distribution Replace/Convert Customer HPRs	2K	26,390	24,688	(1,701)	13,166
15	G Dist Ctrl Operations Assets	4A	27,253	25,557	(1,696)	30,723
16	Total		\$583,723	\$569,698	(\$14,025)	\$736,625

### **MWC Descriptions - Expense**

MWC AB – Support – includes general support of the gas distribution systems and gas distribution quality assurance programs, including performance improvement initiatives, as well as a number of smaller projects including American Gas Association dues (non-lobbying related). Efficiency targets for the entire Gas Distribution expense program are set in MWC AB. This MWC also includes technical training costs. In addition, MWC AB captures standard cost variance of multiple gas distribution workgroups in Gas Operations.<sup>1</sup>

MWC DD – Perform Field Services – covers Gas Distribution's portion of customer-generated field service activities, including pilot relights, gas appliance inspections and adjustments, start/stop service requests, emergency response and other customer-generated field services requests.

MWC DE – Leak Survey – is a key public safety and system integrity activity and includes leak survey work to comply with pipeline safety regulations that require PG&E to conduct periodic or routine leak surveys on its distribution systems. It also includes special leak surveys PG&E conducts, outside of the routine leak survey schedule, on its gas distribution system for operating reasons or to assess the integrity of the pipe. For example, a special leak survey occurs when a customer or third party complains of gas leakage; before and during maximum allowable operating pressure uprates of gas distribution facilities; before, during and after some major third-party construction projects; and for leak rechecks.

Standard Cost Variance (SCV) represents the difference between actual costs incurred and the amount charged out by employees at a predetermined rate (i.e., standard cost). Costs charged out are calculated using productive hours multiplied by a planned standard hourly rate. When results match initial estimates, SCV should be minimal. That said, while initial estimates do factor in external factors (e.g., extreme weather) based on historical data, actual results inevitably vary resulting in a SCV.

The following is a simplified example of the standard cost calculation and how SCVs occur. Based on the historic pattern of Team A's productivity and anticipated workload, it is projected that Team A will have a monthly cost of \$100,000 for 10 employees and will perform 1,000 hours of work in a month. The resulting standard rate for Team A is \$100 per hour (\$100,000/1,000 hours). If Team A completes 1,000 hours of work in the month according to plan, Team A will have a zero SCV. However, if Team A does not complete all the planned work, e.g., due to unanticipated bad weather, and only completes 950 hours of work, Team A will have an unfavorable SCV of \$5,000 (50 hours × \$100 per hour).

MWC DF – Locate and Mark – is a key public safety and system integrity activity and includes work performed to comply with federal pipeline safety regulations and state law that requires PG&E to belong to and share the costs of operating the regional "one-call" notification system. Builders, contractors and others planning to excavate use this system to notify underground facility owners, like PG&E, of their plans. PG&E then provides the excavators with information about the location of its underground facilities by having Company personnel visit the work site and place color-coded surface markings to show where pipes and wires are located.

MWC DG – Cathodic Protection – is a key system safety and integrity activity and includes work to mitigate the effects of corrosion on metallic gas distribution pipelines. Corrosion on gas piping systems can cause leaks and other potential safety hazards. In the case of steel gas lines, the pipe is coated or wrapped before installation, and then Cathodic Protection (CP) is applied using either an impressed system or galvanic anodes as required by federal pipeline safety regulations. The CP system requires continual monitoring on regular intervals to ensure that adequate levels of current are maintained. If the CP system is found to be below protection levels, maintenance personnel or corrosion mechanics troubleshoot to identify the location of the problem. Appropriate corrective action is subsequently performed, which restores the CP system to satisfactory protection levels.

MWC LK – Work Requested by Others (WRO) – Gas Maintenance – encompasses work required by tariff, third-party requests, and franchise compliance, including:

- Gas main relocations and rearrangement of gas facilities initiated by customers due to overbuilds (billable to the customer);
- Raise gas valve frame and covers to grade;
- Gas service cutout at property line;
- Provide temporary gas service that is not expected to last more than 1 year (Rule 13) (applicant pays for installation and removal costs); and
- Complete additional work above normal level of mark and locate activities as needed for third-party work. Work will normally be done at applicant's expense unless done to comply with city or county franchise agreements.

MWC EX – Gas Meter Protection Program (MPP) – includes efforts to ensure that gas meter locations that do not conform to current PG&E standards and/or federal pipeline safety regulations are addressed. The program focuses on two types of non-conforming meter locations: those with inadequate protection from potential damage by vehicles; and those with inaccessible service or shutoff valves. The work to correct these non-conforming facilities generally involves one of three work activities: installing barrier posts, installing a new valve or relocating the service.

MWC FG – Operate Gas System – includes a broad range of operations to keep the system safe, such as monitoring the system pressures and flows; checking odorant intensity levels for leak detection; operating valves and regulator stations; and changing pressure recorder charts. Additionally, this program includes occasional manual operations to provide necessary capacity during peak demand periods in the morning (e.g., using a compressed (CNG) or liquefied (LNG) natural gas tanker to inject gas, manually opening separation valves to redirect gas, or manually bypassing regulator station equipment to flow more gas).

MWC FH – Preventive Maintenance – is a key system safety and integrity activity and includes work to comply with pipeline safety regulations that require PG&E to conduct periodic or routine maintenance on its gas distribution system. Preventive maintenance work includes regulator station maintenance, maintenance on mains and services, distribution valve replacement, service valve replacement, and overall preventive gas maintenance support.

MWC FI – Corrective Maintenance – includes work to repair or replace damaged or failed gas facilities. In many cases, the need for such restoration is identified during the preventive maintenance activities described in MWC FH. Corrective maintenance includes leak repair, dig-in repair, CP restoration, regulator station repair, and distribution valve repair.

MWC GF –Gas Mapping – encompasses tracking the size, material type, location, configuration, and other essential information needed to monitor and identify over 42,000 miles of underground gas main and nearly 3.3 million gas services. Gas Mapping updates and maintains the gas distribution system maps and records.

MWC GG – Gas Engineering – includes local gas planning engineers modeling the gas distribution system to ensure a safe, reliable, and cost-effective supply of natural gas to customers and to ensure that the system can accommodate future load growth. By simulating changes in load demand, engineers use modeling to identify potential constraints in the system to support service reliability.

MWC GM – Manage Energy Efficiency (Non-Balancing Account) – covers support for maintenance of natural gas vehicle stations.

MWC GZ – Gas Research, Development and Demonstration (RD&D) – includes RD&D work in targeted areas of gas distribution. The objectives of gas distribution RD&D are to explore new opportunities, concepts and technologies to continue to provide safe and reliable service to customers at a lower cost, where possible.

MWC HY – Perform Gas Meter Maintenance – includes leak repairs and corrosion mitigation at gas meters that are identified through leak and atmospheric corrosion surveys.

MWC JQ – Distribution Integrity Management Program (DIMP) Earnings Impacted Expense – is a key program to improve public safety and the integrity of the gas distribution system. DIMP includes development of an overall plan that evaluates risks and implements projects to reduce risks. MWC JQ includes developments and improvements in the following areas: the DIMP program, preventative maintenance, leak surveys, operator qualifications, training, and programs such as cross-bored sewer, marker ball installation, and Aldyl-A.

MWC JS – Distribution Integrity Management Program (DIMP) Balancing Account – is a key program to improve public safety and the integrity of the gas distribution system. DIMP includes development of an overall plan that evaluates risks and implements projects to reduce risks. MWC JS includes developments and improvements in the following areas: the DIMP program, preventative maintenance, leak surveys, operator qualifications, training, and programs such as cross-bored sewer, marker ball installation, and Aldyl-A. Per Decision 14-08-032, the DIMP balancing account was closed beginning in 2014.

MWC JV – Maintain Applications and Infrastructure – includes costs for ongoing maintenance, operations and repair for PG&E's IT applications, systems and infrastructure.

MWC KF – Implement Regulatory Change – includes work related to modifying PG&E's gas distribution system processes and procedures in response to changes in the regulatory environment. It includes engineering and operations activities to respond to changes in the regulatory environment as well as any related field activities.

### **New MWC Descriptions – Expense**

MWC JU – Gas Distribution Leak Survey & Repair – MWC JU is used to record costs incurred above the Balancing Account cost cap (spend and units) for Gas Leak Repair, Meter Set Gas Leak Repair, Gas Tee-Cap Repair, and Gas Atmospheric Corrosion Inspection.

# TABLE 2-3 GAS DISTRIBUTION 2014 EXPENSE COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
1	AB	(\$2,513)	\$12,319	\$14,832	Increase due to work efficiency targets planned in MWC AB for the entire Gas Distribution expense program. Increase is also attributed to Working (Yard) Stock / minor material usage overspend variance.
2	DD	101,099	104,564	3,465	Increase primarily due to costs for responding to the Napa earthquake (\$2.4 million), additional supervision and management, stand-alone Standard Cost Variance (only applicable to MWC DD) and higher unit costs in customer-generated field services work.
3	DE	27,964	25,220	(2,744)	Decrease due to unit cost reductions in special leak surveys, leak rechecks, downgraded or non-hazardous leaks, customer calls and fewer leak survey units; decrease is partially offset by an increase in leak survey unit cost. \$10 million of costs above the unit cost cap set forth in the 2014 GRC Decision were moved to MWC JU.
4	DF	38,746	37,687	(1,059)	Decrease due to lower volume and unit costs of Locate and Mark units. Decrease is partially offset by higher volume of stand-by units and unit cost.
5	DG	11,651	10,495	(1,156)	Decrease due to lower volume of Cathodic Protection Resurvey units completed when the 6-year resurvey practice was discontinued in the 4th quarter and lower unit cost for Cathodic Protection Monitoring and Troubleshooting work, partially offset by higher volumes in Monitoring and Troubleshooting.
6	LK	6,274	6,364	90	Immaterial variance.
7	EX	458	2,679	2,221	Increase due to increased number of barrier posts installed to protect above-ground gas meters from vehicular damage and improve public safety. The 2015 program scope and budget were accelerated into 2014 and funded through corporate contingency.

### 2-8

### PACIFIC GAS AND ELECTRIC COMPANY 2014 GENERAL RATE CASE APPLICATION 12-11-009 GAS DISTRIBUTION EXPENSE AND CAPITAL INFORMATION

# TABLE 2-3 GAS DISTRIBUTION 2014 EXPENSE COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS) (CONTINUED)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
8	FG	14,755	12,286	(2,469)	Decrease due to a reduction in flow meter maintenance, remote terminal units, and electronic recorders.
9	FH	15,397	18,043	2,646	Increase due to higher number of corrective repairs on mains, services and valves, along with increases in atmospheric corrosion repairs on mains, services and regulator stations.
10	FI	69,236	73,404	4,167	Increase due to higher unit costs for main leak repairs, above- and below-ground service leak repair, and main and service leak dig-ins. Actual number of units decreased due to change in repair methodology, shifting from repairs on main, services and regulator stations to capital replacement (MWC 50). \$19 million of costs above the unit cost cap set forth in the 2014 GRC Decision for meter set leak repair and Atmospheric Corrosion (A/C) inspection were moved to MWC JU.
11	GF	6,880	6,396	(484)	Immaterial variance.
12	GG	6,970	8,957	1,987	Increase due to additional resources supporting Gas Planning, Engineering and Gas Distribution Control Center, including support for the new distribution clearance process.
13	GM	4,465	6,908	2,443	Increase due to freight costs for the transportation of Compressed Natural Gas (CNG)/Liquefied Natural Gas (LNG) trailers being included in MWC GM. Increase is also attributed to additional maintenance and safety improvements.

TABLE 2-3
GAS DISTRIBUTION 2014 EXPENSE COMPARISON
(IN THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
14	GZ	1,720	860	(860)	Decrease due to more gas research and development projects performed in collaboration with other companies providing co-funding, fewer pilots than initially planned, delay in the transfer of team costs to MWC GZ in July 2014, and delays in the initiation and/or the completion of certain projects: Cleaning Tool for Explorer, Explorer 30/36, Crack and Damage Sensor Technology Data Management Metanutix.
15	HY	2,883	5,211	2,329	Increase due to more units and higher unit costs for atmospheric corrosion Meter Repair work.
16	JQ/JS	38,512	32,769	(5,743)	Decrease due to less emergent work than anticipated; unfilled vacancies; less DIMP survey work required than originally planned. Underruns were partially off-set by: overrun in cross bores as a result of completing more work than planned; other small dollar overages in various categories.
17	JU	19,105	28,409	9,304	Increase due to higher unit costs for leak survey and meter set leaks, more atmospheric corrosion meter inspection units and the Napa earthquake. Cost represents incremental spending above the cost caps under the Leak Survey (MWC DE) and Repair (MWC FI) balancing account.
18	JV	15,643	17,809	2,166	Increase due to Pathfinder project - Acceleration of Gate 3 2015 activities.
19	KF	0	0	0	N/A.
20	Total	\$379,245	\$410,380	\$31,135	

### **MWC Descriptions – Capital**

MWC 05 – Tools and Equipment – includes the costs of miscellaneous tools and equipment. Regular expenditures are necessary to replace damaged, worn out, or obsolete tools and to ensure specialized tools are available to perform testing and other functions.

MWC 14 – Gas Pipeline Replacement Program (GPRP) – is a key safety and integrity program and primarily encompasses three gas distribution asset replacement programs, the GPRP, Copper Service Replacement Program (CSRP) and plastic replacement program. The GPRP targets cast iron and pre-1940 steel gas mains. PG&E uses age, materials, seismic factors, and gas leaks to identify and prioritize gas mains for replacement. In addition to gas main replacement, the program includes related service replacement and meter relocation work. CSRP was added to MWC 14 in 2006 because copper services were determined to have a similar relative risk to GPRP pipe. Subsequently, plastic was added into MWC 14 in 2012 because of increase in the relative risk of vintage plastic material such as Aldyl-A.

MWC 27 – Gas Meter Protection Program (MPP) – includes efforts to ensure that gas meter locations that do not conform to current PG&E standards and/or federal pipeline safety regulations are addressed. The program focuses on two types of non-conforming meter locations: those with inadequate protection from potential damage by vehicles; and those with inaccessible service or shutoff valves. The work to correct these non-conforming facilities generally involves one of three work activities: installing barrier posts, installing a new valve or relocating the service.

MWC 29 – Gas Distribution Customer Connections – includes building new gas distribution systems to provide service to new customers and the costs of regulators purchased for emergency response, regulator change outs, and system upgrades.

MWC 31 – Natural Gas Vehicle Station Infrastructure – includes costs of necessary upgrades for compressed natural gas fueling stations to fuel vehicles added each year.

MWC 47 – Gas Distribution New Capacity – includes capacity additions to meet load growth by reinforcing the existing gas systems.

MWC 50 – Gas Distribution Reliability – includes installation or replacement of gas facilities to: improve system safety and reliability, replace aging facilities (which have reached the end of their useful life or have increasing failure rates), and maintain compliance with pipeline safety regulations. Facilities replaced include: services, regulator stations, cathodic protection equipment, electronic chart recorders and remote cathodic protection monitoring equipment.

MWC 51 – Gas Work at the Request of Others – includes relocating gas distribution and service facilities at the request of a governmental agency or other third parties (e.g., customers and developers). This work could be due to road widening, street improvements, sewer improvements and other similar work.

MWC 52 – Gas Distribution Emergency Response – includes work and materials required to replace damaged or failed facilities including replacement of mains and services due to gas dig-ins and external forces such as landslides and earthquakes.

MWC 74 – Gas Metering Capital – includes regulator replacement labor to remove and install new regulators and meters and regulators for new business connections and labor to install.

MWC 78 – Manage Buildings – Cost for managing gas facilities, including Gas Training Center and Gas Control Center.

MWC 2F – Build Applications and Infrastructure – includes the costs to design, develop and enhance applications, systems and infrastructure technology solutions.

MWC 2J – Gas T&D Implement Regulatory Change – includes all capital efforts necessary to comply with and implement orders, instructions, or recommendations from regulatory or governmental agencies as a result of the San Bruno Incident. MWC 2J is limited to the initial implementation and set up of process changes and includes: class location work; upgrade of older pipelines to enable pipeline inspection by "pigging" devices and the purchase of cameras and other tools needed for in-line inspections; purchase of trailers used for CNG and LNG injections into areas of inadequate pressure as a result of the San Bruno Incident; various replacements and upgrades to Line 132 and its supporting facilities; and costs associated with the purchase of computers, servers, and other hardware for the Maximum Allowable Operating Pressure project. (These costs are generally for gas transmission-related services, however, this MWC also includes costs associated with restoring distribution service to customers impacted by the San Bruno Incident.)

MWC 2K – Gas Distribution Replace/Convert Customer HPRs – is a key safety and integrity program and includes the replacement of gas customer High Pressure Regulators (HPR) or the reconstruction of gas distribution systems to eliminate the need for HPRs.

MWC 4A – Gas Distribution Control Operations Assets – includes costs associated with the installation of Supervisory Control and Data Acquisition devices, electronic recorders, and similar instrumentation assets and related tools. MWC 4A captures costs associated with the development of software tools to support the collection, retention, and presentation of data related to the Control Center. Capital outlays support telecommunication radio system assets to monitor and control the gas distribution network.

# TABLE 2-4 GAS DISTRIBUTION 2014 CAPITAL COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
1	05	(\$6,729)	\$1,828	\$8,557	Increase due to work efficiency targets planned in MWC 05 for the entire Gas Distribution capital program.
2	14	172,014	188,224	16,210	Increase due to GPRP unit cost increase as a result of increased volume of work in San Francisco. Aldyl-A (Plastic Pipe), completed 31.0 miles vs. 31.9 miles budgeted because crews were reallocated to non-Aldyl-A higher priority work; cost increase primarily driven by Carmel projects, electrofusion rework in North Valley, and challenging field conditions that resulted in higher unit costs.
3	27	4,092	1,877	(2,216)	Decrease due to completing fewer units than originally forecast. This reduction was due to a) bundling units with GPRP (14A) projects and b) confirming through field verification, that fewer service replacements were required.
4	29	56,947	51,835	(5,111)	Decrease due to fewer than expected customer connection requests in the Residential portfolio and a lower than planned unit cost in the Non-Residential portfolio. Decrease was partially offset by more units completed in Non-Residential portfolio.
5	31	3,295	2,901	(394)	Decrease due to lower CNG/LNG station capital upgrades or replacements.
6	47	29,914	25,907	(4,007)	Decrease due to permitting delays on 4 distribution capacity projects.
7	50	154,718	124,168	(30,550)	Decrease due to overall fewer units of main replacements completed at lower unit cost, and less volume of service replacements completed at slightly higher unit costs.
8	51	41,981	65,019	23,038	Increase due to higher volume of projects (requested by third parties or government agencies) combined with higher percentage of non-reimbursable projects than planned.
9	52	650	8,007	7,357	Increase due to emergency service and main repairs driven by the August Napa earthquake.

### 2-14

### PACIFIC GAS AND ELECTRIC COMPANY 2014 GENERAL RATE CASE APPLICATION 12-11-009 GAS DISTRIBUTION EXPENSE AND CAPITAL INFORMATION

# TABLE 2-4 GAS DISTRIBUTION 2014 CAPITAL COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
10	74	5,475	4,849	(626)	Decrease due to completing fewer units than planned and not completing the Non-Internal Relief Valve (IRV) Commercial Regulator replacements as anticipated. Not completed as anticipated due to the need to develop a more robust inventory of non-IRV regulators.
11	78	32,128	11,211	(20,916)	Decrease due to continued delays with the Gas Operations Technical Training Center and the Hot Center Back Up facility.
12	2F	35,495	33,574	(1,921)	Decrease due to delays for Supervisory Control and Data Acquisition (SCADA) software project and majority of the work being pushed to 2015.
13	2J	100	51	(49)	Decrease due to minor changes in regulatory expenditures.
14	2K	26,390	24,688	(1,701)	Decrease due to fewer High-Pressure Regulator units being addressed.
15	4A	27,253	25,557	(1,696)	Decrease due to 157 canceled capital jobs because of work reprioritization.
16	Total	\$583,723	\$569,698	(\$14,025)	

# SECTION 3 Electric Distribution Detailed Variance Explanations

### ή

### PACIFIC GAS AND ELECTRIC COMPANY 2014 GENERAL RATE CASE APPLICATION 12-11-009 ELECTRIC DISTRIBUTION EXPENSE AND CAPITAL INFORMATION

# TABLE 3-1 ELECTRIC DISTRIBUTION 2014 EXPENSE COMPARISON SUMMARY (IN THOUSANDS OF NOMINAL DOLLARS)

					2014	
Line			2014	2014	Difference	2015
No.	MWC Description	MWC	Budget	Actual	Higher/(Lower)	Budget
1	Support and Emergency Preparedness & Response	AB	\$10,278	\$7,547	(\$2,731)	\$15,602
2	Operate Electric Distribution	BA	35,509	34,227	(1,282)	38,489
3	Patrols and Inspections	BF	53,766	56,810	3,044	49,913
4	Corrective Maintenance	BH	87,823	82,319	(5,505)	81,063
5	Maintenance of Other Equipment	BK	2,647	2,161	(486)	2,582
6	Provide Field Service	DD	20,978	23,545	2,568	24,537
7	Develop & Provide Training	DN	2,050	1,336	(714)	3,132
8	New Customer Connection Service Inquiry Activities	EV	10,800	9,105	(1,694)	10,670
9	Work Requested by Others (WRO)	EW	12,034	15,184	3,149	17,326
10	Electric Engineering and Planning	FZ	23,352	23,660	307	20,421
11	Poles - Intrusive Inspection/Test and Treat	GA	12,246	11,076	(1,170)	16,229
12	Operate and Maintain Substations	GC	37,629	41,751	4,122	41,642
13	Electric Distribution Mapping	GE	5,032	3,538	(1,494)	8,044
14	Electric Distribution Operations Technology	HG	0	0	0	0
15	Vegetation Management Balancing Account	HN	190,000	189,673	(326)	194,200
16	Distribution Automation and Protection Support	HX	1,975	2,155	180	2,010
17	Major Emergency	IF	42,549	44,916	2,366	44,230
18	Maintain IT Apps & Infra	JV	5,129	4,198	(930)	3,400
19	Preventive Maintenance and Equipment Repair, Overhead	KA	42,956	55,335	12,379	60,253
20	Preventive Maintenance and Equipment Repair, Underground	KB	21,796	26,222	4,427	23,259
21	Preventive Maintenance and Equipment Repair, Network	KC	5,779	6,577	797	7,089
22	Total		\$624,328	\$641,315	\$17,007	\$664,092

### 3-2

# PACIFIC GAS AND ELECTRIC COMPANY 2014 GENERAL RATE CASE APPLICATION 12-11-009 ELECTRIC DISTRIBUTION EXPENSE AND CAPITAL INFORMATION

# TABLE 3-2 ELECTRIC DISTRIBUTION 2014 CAPITAL COMPARISON SUMMARY (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	2015 Budget
1	Tools and Equipment	05	\$20,931	\$6,709	(\$14,222)	(\$11,630)
2	Electric Distribution Line and Equipment Capacity	06	91,157	94,291	3,134	93,114
3	Pole Replacement	07	98,230	111,797	13,567	98,431
4	Base Reliability Program	08	45,792	42,682	(3,110)	46,127
5	Electric Distribution Automation and Protection	09	29,978	45,620	15,641	38,050
6	Electric Work at the Request of Others	10	93,810	79,611	(14,199)	98,000
7	Electric Distribution Customer Connections	16	309,635	320,807	11,172	355,000
8	Electric Distribution Emergency Response	17	121,325	135,705	14,380	135,942
9	Emergency Preparedness & Response	21	0	0	0	19,900
10	Implement Real Estate Strategy/Manage Buildings	23/78	3,700	2,670	(1,030)	4,878
11	Electric Distribution Work at the Request by Others - Rule 20A	30	69,931	16,745	(53,187)	76,000
12	Electric Distribution Substation Capacity	46	55,773	67,051	11,278	54,804
13	Electric Distribution Replace Substation Equipment	48	51,231	32,220	(19,010)	61,825
14	Targeted Reliability Program	49	58,168	53,524	(4,644)	61,907
15	Electric Distribution Substation Transformer Replacements	54	41,932	30,920	(11,012)	50,398
16	Electric Distribution Underground Asset Replacement	56	98,350	81,219	(17,131)	110,399
17	Electric Distribution Substation Safety and Environmental	58	3,021	1,230	(1,790)	1,052
18	Electric Distribution Substation Emergency Replacement	59	31,513	35,526	4,013	19,324
19	Electric Operations Control Center Facility	63	35,000	43,155	8,155	24,200
20	Electric Distribution Major Emergency	95	49,848	48,838	(1,010)	52,323
21	Electric Distribution Preventive Maintenance, Overhead	2A	94,072	95,421	1,349	103,526
22	Electric Distribution Preventive Maintenance, Underground	2B	52,555	55,744	3,189	39,813
23	Electric Distribution Preventive Maintenance, Network	2C	19,126	15,699	(3,427)	19,018
24	Build IT Apps & Infra	2F	50,459	55,949	5,490	42,838
25	Total		\$1,525,538	\$1,473,132	(\$52,406)	\$1,595,237

### **MWC Descriptions – Expense**

MWC AB – Support and Emergency Preparedness and Response – includes general support of the electric distribution system, including performance improvement initiatives, interdepartmental meter costs, as well as a number of smaller projects such as the Electric Magnetic Fields program. In addition, MWC AB captures standard cost variance of multiple electric distribution workgroups in Electric Operations, and an offset for productivity improvements. This major work category also includes costs for PG&E's Emergency Preparedness and Response organization.

MWC BA – Operate Electric Distribution – includes distribution control center and field operations, including work performed by distribution system operators, troublemen, electricians and electric crews. This work includes operating switches to transfer load between circuits, isolating customers or de-energizing sections of line during planned construction or maintenance, and reconfiguring circuits to mitigate unplanned situations such as dig-ins, car pole accidents and storms.

MWC BF – Patrols and Inspections – includes patrols and inspections of overhead (OH) and underground (UG) electric distribution facilities per General Order 165; patrols and inspection of OH facilities in wildfire areas; infrared inspections; testing and inspection of OH and UG line equipment; special patrols and inspections; and other work associated with electric distribution system maintenance such as the cost of implementing mobile technology.

MWC BH – Corrective Maintenance – includes response to OH or UG outages that occur during normal conditions including routine emergency response work as well as work issued using PG&E's Field Automation System (FAS) for either emergency response or system reliability.

MWC BK – Maintenance of Other Equipment – includes repair of specialized equipment, such as transformers, voltage regulators, circuit reclosers, capacitor banks and line switches, as well as equipment repair activities at the Emeryville repair facility.

MWC DD – Perform Field Services – covers Electric Distribution's portion of customer-generated field service activities, specifically start/stop service requests, emergency response and other customer-generated electric field service requests.

<sup>1</sup> Standard Cost Variance (SCV) is described in the Gas Distribution expense Section 2 of this report.

MWC DN – Develop & Provide Training – includes revising existing and creating new training materials and course curriculums for PG&E's workforce.

MWC EV – New Customer Connection Service Inquiry Activities – includes processing customer requests related to new business or increased connection capacity (added load) on existing services.

MWC EW – Work Requested by Others (WRO) – Maintenance – encompasses work required by tariff, third-party requests and franchise compliance, including:

- Relocations: Non-plant related relocations of electric facilities; Land Department right-of-way record research requested by third parties that are not project specific; and local division office WRO service inquiries not requiring Land Department involvement. (WRO related to gas service has moved to MWC LK in Gas Operations.)
- Generation Interconnection Services (GIS): Managing the electric interconnection process for CPUC and Federal Energy Regulatory Commission jurisdictional customer generation projects connected at distribution service level from receipt of the interconnection inquiry through the in-service date of the new generation facility and continuing through billing, settlements and refunds.
- Pre-Parallel Inspections: On-site inspections of distribution voltage interconnections that are funded via Electric Tariff Rule 21. Pre-parallel inspections are performed to ensure safe and reliable operation of customer-owned generators paralleled with PG&E's grid.

MWC FZ – Electric Engineering and Planning – supports many programs that require engineering and planning services, including the Electric Distribution Capacity, Electric Distribution Reliability, and Underground Asset Management programs. This program also supports: investigating secondary voltage complaints that troublemen cannot resolve on the first visit; investigation of down power lines; and operational field work that electric planning personnel initiate, such as phase balancing and replacing fuses that are projected to be overloaded.

MWC GA – Poles - Intrusive Inspection/Test and Treat – includes activities to assess the condition of the lower section of wood poles and preserve the poles' wood strength through the application of chemicals. Based on results of pole test activities, where the pole condition warrants reinforcement, the pole is restored to its original strength, extending the pole's serviceable life. This program also includes coordination of billing joint owners and tenants for their share of costs for work performed on jointly owned or leased facilities.

MWC GC – Operate and Maintain Substations – includes operations, preventive maintenance and corrective maintenance within distribution substations.

- Preventive maintenance includes: substation facility and equipment inspections; switching and restoring service to customers; calibrating and adjusting substation equipment; diagnostic testing; overhauls; washing insulators; maintenance of Capitalized Emergency Material (CEM) equipment; maintaining station logs. Miscellaneous activities such as yard repairs, janitorial work and landscaping.
- Corrective maintenance includes: restoration and repair of failed equipment; mobile substation and mobile transformer installation costs; and relocation of emergency and surplus equipment.
- Operations in a substation include: activities associated with providing safe working conditions for employees; building maintenance, vegetation management, rental contracts, and system funded expense projects such as transformer relocations.

MWC GE – Electric Distribution Mapping – includes creating new maps, recording updates and maintaining the electric distribution system maps, and mapping and record management initiatives.

MWC HG – Electric Distribution Operations Technology – covers technical support for Electric Distribution Operations, including but not limited to operational and development support for various control center and emergency preparedness applications and tools (e.g., the Outage Information System, the Outage Management Tool, the Distribution Operator Dashboard and the Integrated Logging Information System).

MWC HN – Vegetation Management Balancing Account – includes the cost to patrol, inspect and maintain clearance for approximately five million trees along approximately 114,000 miles of OH high voltage distribution lines. The program covers routine tree trimming and removal, vegetation control, contractor quality control, environmental compliance and public education, and fire risk reduction work.

MWC HX – Distribution Automation and Protection Support – includes engineering support for the maintenance and operation of automation and protection equipment and the Enhanced Outage Notification subprogram.

MWC IF – Major Emergency – includes response to OH or UG outages when a division Operations Emergency Center (OEC) has been activated, indicating emergency conditions at Level 2 or above. (Level 2 or above emergencies are major emergencies that are either division or area-wide (or high profile) and require construction and/or other resources

### 3-6

# PACIFIC GAS AND ELECTRIC COMPANY 2014 GENERAL RATE CASE APPLICATION 12-11-009 ELECTRIC DISTRIBUTION EXPENSE AND CAPITAL INFORMATION

from outside the impacted area.) Beginning in 2014, these costs are included in the two-way Major Emergency balancing account authorized by decision D.14-08-032.

MWC JV – Maintain Applications and Infrastructure – includes costs for ongoing maintenance, operations and repair for PG&E's IT applications, systems and infrastructure.

MWC KA – Preventive Maintenance and Equipment Repair, Overhead – includes repair of OH facilities; repair of OH Critical Operating Equipment (COE); repair of streetlights and group streetlight replacements; refurbish and overhaul of specific types of OH distribution line equipment; repair of OH facilities to address migratory bird requirements; investigate and respond to radio television interference (RTVI) inquiries; wash insulators; and other OH maintenance work.

MWC KB – Preventive Maintenance and Equipment Repair, Underground – includes repair of UG facilities; repair of UG COE; refurbishment and overhaul of specific types of UG distribution line equipment; and other UG line maintenance work.

MWC KC – Preventive Maintenance and Equipment Repair, Network – includes repair of network facilities; repair of network COE; repair of network equipment and overhaul of network protectors; and other network maintenance work.

# TABLE 3-3 ELECTRIC DISTRIBUTION 2014 EXPENSE COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
1	AB	\$10,278	\$7,547	(\$2,731)	Decrease due to a positive standard cost variance <sup>(1)</sup> driven by the Restoration and Maintenance and Construction resources.
2	BA	35,509	34,227	(1,282)	Decrease due to moving the intercompany electric usage costs to other lines of business that drive the activity.
3	BF	53,766	56,810	3,044	Increase due to higher unit costs, an increase in the volume of patrol and inspection units, and additional work to support asset strategy and reliability.
4	ВН	87,823	82,319	(5,505)	Decrease due to lower volume of corrective maintenance work than forecast for routine outages.
5	BK	2,647	2,161	(486)	Decrease due to lower than anticipated volume of maintenance activities for regulators and reclosers.
6	DD	20,978	23,545	2,568	Increase due to a higher volume of customer field service requests than planned.
7	DN	2,050	1,336	(714)	Decrease due to vendor rebate received at the end of 2014.
8	EV	10,800	9,105	(1,694)	Decrease due to lower than anticipated volume of new customer connection service inquiries.
9	EW	12,034	15,184	3,149	Increase due to a higher volume of work for wholesale/retail and net energy metering service (third-party generation interconnections).
10	FZ	23,352	23,660	307	Immaterial variance.
11	GA	12,246	11,076	(1,170)	Decrease due to higher level of recovery from other utilities on joint pole utility credits than planned, lower volume of pole evaluations than planned, lower joint utility maintenance work than planned, and rescheduling of joint pole SAP data integration project to 2015.

#### ဌာ

#### PACIFIC GAS AND ELECTRIC COMPANY 2014 GENERAL RATE CASE APPLICATION 12-11-009 ELECTRIC DISTRIBUTION EXPENSE AND CAPITAL INFORMATION

# TABLE 3-3 ELECTRIC DISTRIBUTION 2014 EXPENSE COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS) (CONTINUED)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
12	GC	\$37,629	\$41,751	\$4,122	Increase due to a higher volume of maintenance tags requiring corrective work.
13	GE	5,032	3,538	(1,494)	Decrease in base mapping costs due to decreased non- project related mapping resulting from technology changes and lower than planned records management project work.
14	HG	0	0	0	N/A.
15	HN	190,000	189,673	(326)	Immaterial variance.
16	HX	1,975	2,155	180	Immaterial variance.
17	IF	42,549	44,916	2,366	Increase due to slightly higher spending than budget because of a higher level of expense activities than the five-year historical average (relatively less than budgeted replacement work (capital) and more repair (expense) work was completed in the program).
18	JV	5,129	4,198	(930)	Decrease due to the strategic rescheduling of several key workforce mobilization projects in an effort to leverage foundational capabilities that will be delivered in the Enterprise Mobile Platform solution planned for 2015, and changes in expense expenditures in other IT projects.
19	KA	42,956	55,335	12,379	Increase due to work required to correct surge arrestor grounding.
20	KB	21,796	26,222	4,427	Increase due to higher unit costs and higher volume of work than planned in underground facilities maintenance work.

#### <u>ဒ-</u>9

### PACIFIC GAS AND ELECTRIC COMPANY 2014 GENERAL RATE CASE APPLICATION 12-11-009 ELECTRIC DISTRIBUTION EXPENSE AND CAPITAL INFORMATION

# TABLE 3-3 ELECTRIC DISTRIBUTION 2014 EXPENSE COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS) (CONTINUED)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
21	KC	5,779	6,577	797	Increase due to higher volume of electric corrective work than planned and higher unit costs for network routine preventative maintenance.
22	Total	\$624,328	\$641,315	\$17,007	

#### Note:

(1) Standard Cost Variance (SCV) is the difference between costs captured at the Provider Cost Center (PCC) and costs charged to the Major Work Categories (MWC) as work is performed. MWC AB is used to collect all SCVs. SCV is described in more detail in the Gas Distribution expense section of this report.

#### **MWC Descriptions – Capital**

MWC 05 – Tools and Equipment – includes the costs of miscellaneous tools and equipment, and of overdrawn materials. Overdrawn credits arise when material is purchased for a project and goes unused. Normally, the overdrawn material is credited back to the capital order that was initially used to purchase the material. However, if the capital order is closed, the overdrawn material is credited back to an order in MWC 05. On tools, regular expenditures are necessary to replace damaged, worn out, or obsolete tools and to ensure specialized tools are available to perform testing and other functions. This MWC also includes an offset for capital-related productivity improvements.

MWC 06 – Electric Distribution Line and Equipment Capacity – includes capacity expansion work outside a substation necessary to correct specific capacity deficiencies or overload conditions on the distribution lines and equipment and includes replacing/upgrading conductors and devices along with installing capacitors, switches or other equipment; establishing new circuit outlets; converting circuit line sections to a higher operating voltage; and reconfiguring primary distribution circuits to redistribute loading.

MWC 07 – Pole Replacement – includes the replacement of poles, 99 percent of which are wood, to support safety and reliability of the electric distribution system.

MWC 08 – Base Reliability Program – includes installing fused cutouts, reclosers, sectionalizers, switches, fault indicators, fused switches and interrupters; rebuilding and reframing OH distribution lines (including the installation of tree-insulated wire); and performing other reliability and system protection improvement work such as replacing annealed OH conductors. Base reliability work is intended to maintain the current level of electric distribution system reliability.

MWC 09 – Electric Distribution Automation and Protection – covers investments in field automation and protection devices including installing or replacing substation Remote Terminal Units; installing or replacing supervisory control and data acquisition (SCADA) peripherals; installing or replacing automated line equipment; replacing obsolete protection equipment, primarily relays, in distribution substations; replacing automation or protection equipment due to unanticipated failure; and continuing the Fire Risk Management (FRM) initiative that allows remote operation of reclose relays on certain circuit breakers and line reclosers to reduce the likelihood of wildland and urban fires.

MWC 10 – Electric Work at the Request of Others (WRO) – includes relocating electric distribution facilities at the request of a governmental agency or other third parties (e.g., customers and developers) and conversion of OH electric facilities to UG under Tariff Rule 20B and Rule 20C.

MWC 16 –Electric Distribution Customer Connections – includes building new UG and OH primary distribution systems, and the associated secondary systems and services to both residential and non-residential customers.

MWC 17 – Electric Distribution Emergency Response – includes facility replacements in response to OH or UG outages that occur during normal conditions.

MWC 23/78 – Implement Real Estate Strategy/Manage Buildings – includes the costs for new buildings and yards, including the purchase of land and the purchase and installation of furniture, office equipment, and IT Infrastructure, as well as the costs to improve building environmental sustainability, to implement workplace strategy, and to optimize the real estate portfolio.

MWC 30 – Electric Distribution Work Requested by Others – includes the conversion of existing OH electric distribution facilities to underground facilities. A specified project must be in the general public interest and have sufficient work credits to convert the facilities.

MWC 46 – Electric Distribution Substation Capacity – includes capacity work within substations including new substations, increased capacity at existing substations, and work on feeders/breakers within a substation.

MWC 48 – Electric Distribution Replace Substation Equipment – includes all major and minor substation equipment replacements not included in MWC 54 (Transformer Program). Specific sub-programs include:

- Ancillary Substation Equipment Replacement
- Ground Grid Replacement
- Circuit Breaker Replacement Program
- Switch Replacement
- Battery Replacement
- Civil Structure Replacements
- Switchgear Replacement
- Regulator Replacement
- Yard Improvement Replacement
- Diagnostic Installation Program
- Arc Flash Reduction Replacement
- Animal Abatement
- Transformer Bushings

MWC 49 – Targeted Reliability Program – includes OH fuses; UG protective devices; new line reclosers and converting existing reclosers from manual to remote operation (i.e., making them SCADA operable); fault indicators; and expenditures to resolve high-impact reliability issues. This program also includes installation of Fault Location, Isolation, and Service Restoration (FLISR) systems, and the targeted circuit initiative which addresses the least reliable circuits and typically involves a mixture of installing new fuses, reclosers, fault indicators and animal and bird guards, reframing poles to increase phase separation, repairing or replacing existing equipment, and completing previously identified maintenance tags.

MWC 54 – Electric Distribution Substation Transformer Replacements – includes maintaining or improving substation reliability by replacing transformers that have the highest risk of failure. This MWC also includes maintaining an adequate supply of emergency transformer stock, mobile transformers, and breakers for emergency response.

MWC 56 – Electric Distribution Underground Asset Replacement – includes the non-emergency related replacement of primary distribution cable, replacement of Transfer Ground Rocker Arm Main/Transfer Ground Rocker Arm Line (TGRAM/TGRAL) switches, and tie-cable replacement.

MWC 58 – Electric Distribution Substation Safety and Environmental – encompasses miscellaneous, unforeseen, short lead-time and emergency environmental work (e.g., removal of an old asbestos panel in a control room that requires special handling).

MWC 59 – Electric Distribution Substation Emergency Replacement – includes replacements for substation equipment that fails or is forced out of service as well as an emergency supply of transformers and other equipment to replace failed equipment.

MWC 63 – Electric Operations Control Center Facility – covers implementation of the Distribution Control Center Consolidation (DCCC) Project, which involves consolidating thirteen individual DCCs into three DCCs.

MWC 95 – Electric Distribution Major Emergency – includes facility replacements performed during emergency conditions at Level 2 or above when a division Operations Emergency Center (OEC) has been activated. Beginning in 2014, these costs are included in the two-way Major Emergency balancing account authorized by decision D.14-08-032.

MWC 2A – Electric Distribution Preventive Maintenance, Overhead – includes replacing deteriorated OH facilities on a planned basis where it is not cost effective to repair those facilities. This work is similar to the work performed in MWC KA, but includes replacing equipment, rather than repair and maintenance. Typical equipment replacements include corroded transformers, deteriorated cross-arms, inoperative line switches, and other OH distribution facilities. Equipment is replaced in-kind in most cases; however, upgrades are required where the equipment must meet current operating conditions, technology, and safety standards. Work also includes replacing PG&E owned non-decorative High Pressure Sodium Vapor (HPSV) streetlights with Light Emitting Diode (LED) streetlights.

MWC 2B – Electric Distribution Preventive Maintenance, Underground – includes replacing deteriorated UG facilities on a planned basis where it is not cost effective to repair those facilities. This work is similar to the work performed in MWC KB, but includes replacing equipment, rather than repair and maintenance. Typical equipment replacements include corroded transformers, inoperative switches, damaged UG enclosures and other UG distribution facilities. Equipment is replaced in-kind in most cases; however, upgrades are required where the equipment must meet current operating conditions, technology, and safety standards.

MWC 2C – Electric Distribution Preventive Maintenance, Network – includes replacing deteriorated network facilities on a planned basis where it is not cost effective to repair those facilities. This work is similar to the work performed in

MWC KC, but includes replacing equipment, rather than repair and maintenance. Typical equipment replacements include corroded transformers, inoperative switches, and other network distribution facilities. Equipment is replaced in-kind in most cases; however, upgrades are required where the equipment must meet current operating conditions, technology, and safety standards.

MWC 2F – Build Applications and Infrastructure – includes the costs to design, develop and enhance applications, systems and infrastructure technology solutions.

#### **New MWC Descriptions – Capital**

MWC 21 – Emergency Preparedness & Response – includes costs to build critical infrastructure required for response to catastrophic emergencies. This includes costs for basecamps, facility upgrades, communications and data infrastructure improvements, and also natural disaster models.

## TABLE 3-4 ELECTRIC DISTRIBUTION 2014 CAPITAL COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
1	05	\$20,931	\$6,709	(\$14,222)	Decrease due to budget support for emergent work allocated to other MWCs throughout the year.
2	06	91,157	94,291	3,134	Increase due to higher than planned volume of work for agricultural pumping due to drought conditions.
3	07	98,230	111,797	13,567	Increase due to higher volume of pole replacements and higher unit cost due to more complex jobs than planned.
4	08	45,792	42,682	(3,110)	Decrease due to lower volume of work performed than planned due to crews diverted to support storm response in December. Some of the reliability projects are rescheduled to 2015.
5	09	29,978	45,620	15,641	Increase due to higher than planned volume of substation SCADA installations
6	10	93,810	79,611	(14,199)	Decrease due to delays from third party requested work and crews diverted for storm response in December.
7	16	309,635	320,807	11,172	Increase due to higher than planned transformer purchases in agriculture, maintenance and poles.
8	17	121,325	135,705	14,380	Increase due to a higher cost than planned for facility replacement work in response to outages.
9	21	0	0	0	N/A
10	23/78	3,700	2,670	(1,030)	Decrease due to permitting delays for facility renovations in the city of Hayward.
11	30	69,931	16,745	(53,187)	Decrease due to third party delays and project rescheduling consistent with available work credits. 2014 actual amount does not reflect \$24.4 million in PG&E shareholder funds for cost overruns associated with sixteen completed Rule 20A projects.
12	46	55,773	67,051	11,278	Increase due to higher than planned volume of work for agricultural pumping due to drought conditions and carryover of previous year's projects as well as acceleration of transformer and feeder projects from 2015.

# TABLE 3-4 ELECTRIC DISTRIBUTION 2014 CAPITAL COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS) (CONTINUED)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
13	48	51,231	32,220	(19,010)	Decrease due to three Bay Area switchgear replacements rescheduled to 2015, funds reallocated to support substation emergency replacements and higher priority work in pole replacements, routine emergency, and substation SCADA.
14	49	58,168	53,524	(4,644)	Decrease due to lower than planned level of recloser purchases to support associated distribution programs.
15	54	\$41,932	\$30,920	(\$11,012)	Decrease due to lower than planned transformer replacements due to construction schedule changes, and funds reallocated to support substation emergency replacements and higher priority work in pole replacement and routine emergency.
16	56	98,350	81,219	(17,131)	Decrease due to rescheduling several projects to fund higher priority work in pole replacement and routine emergency.
17	58	3,021	1,230	(1,790)	Decrease due to schedule changes in the Potrero Substation Security Upgrade Project.
18	59	31,513	35,526	4,013	Increase due to higher emergency replacements than planned.
19	63	35,000	43,155	8,155	Increase due to adjusted construction schedules for the Concord and Fresno Distribution Control Center facilities.
20	95	49,848	48,838	(1,010)	Decrease due to slightly lower spending than budget because of a lower level of capital work than the five-year historical average (relatively less than budgeted replacement (capital) work and more repair (expense) work was completed in the program).
21	2A	94,072	95,421	1,349	Increase due to higher volume of maintenance tags and higher unit cost, offset by scheduling changes in projects (San Francisco Incandescent Streetlights and LED Streetlight program).

### 3-17

### PACIFIC GAS AND ELECTRIC COMPANY 2014 GENERAL RATE CASE APPLICATION 12-11-009 ELECTRIC DISTRIBUTION EXPENSE AND CAPITAL INFORMATION

# TABLE 3-4 ELECTRIC DISTRIBUTION 2014 CAPITAL COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS) (CONTINUED)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
22	2B	52,555	55,744	3,189	Increase due to higher than planned volume of higher cost jobs in underground preventive maintenance.
23	2C	19,126	15,699	(3,427)	Decrease due to lower cost for transformer replacements, a vendor settlement for faulty network transformer equipment, and lower volume on venting manhole covers.
24	2F	50,459	55,949	5,490	Increase due to the Electric Distribution-Geographic information Systems (ED-GIS) project which experienced delays in the final delivery of the solution. In addition, there were unplanned implementation costs in the Work Scheduling and Dispatch project. These increases were partially offset by strategic rescheduling of several key workforce mobilization projects as described in the explanation for MWC JV.
25	Total	\$1,525,538	\$1,473,132	(\$52,405)	<del>-</del>

## SECTION 4 Customer Care Detailed Variance Explanations

### TABLE 4-1 CUSTOMER CARE 2014 EXPENSE COMPARISON SUMMARY (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	2015 Budget
1	Read & Investigate Meters	AR (1)	\$34,765	\$33,820	(\$945)	\$29,308
2	Perform Field Services	DD `´	2,583	2,333	(250)	2,543
3	Manage Customer Inquiries	DK	103,818	106,906	3,088	107,093
4	Develop New Revenue	EL (4)	15,873	19,555	3,683	11,260
5	Perform Electric Meter Maintenance	EY	23,422	25,010	1,588	24,645
6	Manage Various Customer Care Processes	EZ (2)	24,417	32,579	8,162	44,685
7	Retain and Grow Customers	FK (3)	1,953	1,638	(315)	3,729
8	Manage Energy Efficiency (Non-Balancing Account)	GM	5,062	5,035	(27)	5,098
9	Perform Gas Meter Maintenance	HY	15,505	14,868	(637)	14,579
10	Manage Var Bal Acct Processes	IG (1) (2)	8,400	8,956	556	8,400
11	Process Customer Bills	IS	72,409	69,174	(3,235)	65,986
12	Manage Credit	IT	23,389	22,020	(1,369)	21,717
13	Collect Revenue	IU	35,443	35,176	(267)	35,856
14	Provide Account Services	IV	16,752	17,759	1,007	21,260
15	Maintain IT Apps & Infra	JV	5,170	4,497	(674)	1,000
16	Total		\$388,961	\$399,325	\$10,364	\$397,157

#### Notes:

- (1) MWC AR 2014 budget is decreased by \$5.4 million from its previously reported \$40.1 million as a result of transfer of SmartMeter™ Opt-Out work to MWC IG.
- (2) MWC EZ 2014 budget is decreased by \$13.7 million from its previously reported \$38.1 million as a result of:
  - a) Transfer of SmartMeter™ Opt-Out work (\$3 million) to MWC IG;
  - b) Reorganization of work to Corporate Affairs (\$10.7 million) for Customer Insight, Channel of Choice, Digital Strategy; and Solutions Marketing.
- (3) MWC FK 2014 budget is increased by \$0.6 million from its previously reported \$1.4 million as a result of correcting for costs that were erroneously classified as below-the-line in the prior report.
- (4) MWC EL 2014 budget is decreased by \$0.6 million from its previously reported \$16.5 million as a result of removing non-tariff balancing account costs that are not part of the GRC.

## TABLE 4-2 CUSTOMER CARE 2014 CAPITAL COMPARISON SUMMARY (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	2015 Budget
1	IT Desktop Computers	01	\$463	\$104	(\$359)	\$500
2	CF Tools Capital	05	906	986	80	2,490
3	Office Equipment	21	3,303	243	(3,060)	2,998
4	Implement Real-estate Strategy	23	18,000	13,868	(4,132)	3,000
5	Electric Metering Capital	25 (1)	40,098	36,601	(3,497)	42,590
6	Gas Metering Capital	74	83,581	82,809	(772)	86,907
7	Build IT Apps & Infra	2F	39,318	43,512	4,194	40,414
8	Smart Meter Opt Out	3J (1)	45	1,476	1,431	1,407
9	Total		185,715	\$179,599	(\$6,116)	\$180,306

#### Notes:

(1) MWC 3J was included in Customer Care as a result of a 2014 budget transfer of \$0.045 million for SmartMeter™ Opt-Out work from MWC 25.

#### **MWC Descriptions – Expense**

MWC AR – Perform Meter Reading – covers all meter reading activities, including meter reads of traditional meters and interval meters by meter readers in the field and the communication costs associated with reading interval meters that are not converted to use SmartMeter™ technology.

MWC DD – Perform Field Services – covers Customer Care's portion of customer-generated field service activities, specifically electric start/stop service requests and other customer-generated field services requests.

MWC DK – Manage Customer Inquiries – includes expenses incurred in operating the Company's five Contact Centers which handle approximately 18 million calls per year, with approximately 8 million of these handled by a customer service representative; costs associated with PG&E's Customer Relations department; and expenses to address customer inquiries at the local offices, and various non-cash receiving front counter activities

MWC EL – Develop New Revenue – covers work in support of the New Revenue Development team on streetlight light emitting diode (LED) turnkey work, wireless telecomm and fiber optics attachments on PG&E assets, and various other services based on secondary use of PG&E assets.

MWC EY – Perform Electric Meter Maintenance – covers all electric meter maintenance activities that do not result in new meter exchanges, including electric meter tests, meter communication trouble-shooting, and meter repairs.

MWC EZ – Manage Various Customer Care Processes – covers customer satisfaction surveys; customer service; program implementation and outreach; rate education and outreach; rate tools; correspondence management and literature fulfillment, customer facing check and letter generation and delivery, meter data collection associated with load research activities; tariff, risk, compliance, and privacy support.

MWC FK – Retain and Grow Customers – covers responding to economic development inquiries; providing detailed analyses of service options desired by customers; and providing detailed explanations of special rate components. (MWC FK also includes "below the line" activities related to public power and Community Choice Aggregation issues. Below-the-line costs are not included in this report.)

MWC GM – Manage Energy Efficiency (Non-Balancing Account) – covers required safety and compliance work associated with Low Income Energy Efficiency direct installation measures, including Natural Gas Appliance Testing (NGAT) tests which measure levels of carbon monoxide after weatherization of homes of low-income customers. This MWC also covers support required for guiding and adhering to policy related to Electric Vehicles (EV), introducing new services that benefit EV customers, and for minimal market readiness activities for EVs.

MWC HY – Perform Gas Meter Maintenance – covers gas meter maintenance activities that do not result in new meter exchanges, including meter tests, minimal regulator maintenance, meter/module communication trouble-shooting, and meter/module repairs.

MWC IS – Process Customer Bills – includes expenses incurred to print, insert and mail over 52 million customer bills; provide electronic bills to customers, bill complex commercial and industrial accounts including the growing number of Net Energy Metering accounts; calculate and remit franchise fees and taxes; perform user acceptance testing of the customer billing system to ensure billing accuracy; and verify and/or resolve billing issues. Also covers work in support of streetlight inventory and discontinuing service/investigating situation of metered commodity usage with no customer service agreement (broken lock).

MWC IT – Manage Credit – covers expenses incurred to perform credit risk management for retail customers; delinquent account follow up and post account closure collections; open account collections on high dollar accounts; balance transfers for closed accounts; fraud verification, and costs related to notifying customers of past due amounts, as well as discontinuing and reconnecting service for non-payment; MWC IT also includes external collection agency costs.

MWC IU – Collect Revenue – covers expenses incurred to process energy payments received through the US mail and in Local Offices, as well as vendor transaction fees for on-line energy payments. MWC IU also includes expenses to manage and resolve approximately 1 million customer payment Inquiries, managing cash refunds; investigating and settling all customer energy theft allegations.

MWC IV – Provide Account Services – covers the cost of labor, materials and other expenses incurred in responding to customer inquiries, primarily for non-residential customers, regarding contracts, credit, billing and accounting, collections and complaints, providing reliability and outage information, coordinating planned outages, providing retail interconnection information, and responding to customer needs of Energy Service Providers (ESP) and Core Transport Agents (CTA).

MWC JV – Maintain Applications and Infrastructure – includes costs for ongoing maintenance, operations and repair for PG&E's IT applications, systems and infrastructure.

#### **New MWC Descriptions – Expense**

MWC IG – Manage Various Balancing Account Processes – covers expenses pertaining to SmartMeter™ Opt Out, including expenses related to manual meter reading, billing, customer notifications, program administration, regulatory reporting, and related activities.

## TABLE 4-3 CUSTOMER CARE 2014 EXPENSE COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
1	AR	\$34,765	\$33,820	(\$945)	Immaterial variance.
2	DD	2,583	2,333	(250)	Immaterial variance.
3	DK	103,818	106,906	3,088	Increase due to higher labor costs resulting from an increase in calls from such events as a phishing scam and the Napa earthquake, partially offset by a reduction in calls resulting from customers using self-service options implemented through the Channel of Choice program.
4	EL	15,873	19,555	3,683	Increase due to more non-tariffed products and services work activities such as wireless work, streetlight LED turnkey work, and Sustainable Solutions turnkey work.
5	EY	23,422	25,010	1,588	Increase due to ability to re-use electric meters returned from meter manufacturer under warranty for meter exchanges – the re-use of meters is treated as expense, as compared to new meter installations which are capitalized.
6	EZ	24,417	32,579	8,162	Increase primarily due to: (1) expanded distributed generation education and outreach, (2) unplanned Customer Operations IT service requests, and (3) additional work on rate education and outreach for Communities of Color Settlement.
7	FK	1,953	1,638	(315)	Decrease due to lower than planned economic development activities.
8	GM	5,062	5,035	(27)	Immaterial variance.
9	HY	15,505	14,868	(637)	Immaterial variance.
10	IG	8,400	8,956	556	Immaterial variance.
11	IS	72,409	69,174	(3,235)	Decrease due to process efficiencies related to pre- and post- billing exception work, partially offset by increased postage costs.
12	IT	23,389	22,020	(1,369)	Decrease due to improvements in credit processes and fewer field shut-offs of customers for non-payment.

#### 4-7

#### PACIFIC GAS AND ELECTRIC COMPANY 2014 GENERAL RATE CASE APPLICATION 12-11-009 CUSTOMER CARE 2014 EXPENSE AND CAPITAL INFORMATION

# TABLE 4-3 CUSTOMER CARE 2014 EXPENSE COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS) (CONTINUED)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
13	IU	35,443	35,176	(267)	Immaterial variance.
14	IV	16,752	17,759	1,007	Increase due to Energy Solutions and Service representatives spending more time than planned on customer service work, which includes billing, reliability, outage response, and service planning issues.
15	JV	5,170	4,497	(674)	Decrease due to the 2013 Rate Design Window effort being completed more efficiently. In addition, there was a greater focus on capital solutions, which delivered more technology enablement needed by the business in a compressed timeframe.
16	Total	\$388,961	\$399,325	\$10,364	

#### **MWC Descriptions – Capital**

- MWC 01 IT Desktop Computers includes costs associated with the purchase of mobile laptops used by field technicians to manage and record work activities.
- MWC 05 Tools and Equipment includes tools and equipment used by field technicians and meter repair facilities to perform field metering and meter repair activities.
- MWC 21 Miscellaneous Capital includes various capital equipment.
- MWC 23 Implement Real Estate Strategy includes the costs for new buildings and yards, including the purchase of land and the purchase and installation of furniture, office equipment, and IT Infrastructure, as well as the costs to improve building environmental sustainability, to implement workplace strategy, and to optimize the real estate portfolio.
- MWC 25 Electric Metering Capital includes new electric meters, and field technician labor to install/remove electric meters due to maintenance and new business growth activities.
- MWC 74 Gas Metering Capital includes new gas meters, new gas modules, and field technician labor to install/remove gas meters and regulators due to maintenance and new business growth activities.
- MWC 2F Build Applications and Infrastructure includes the costs to design, develop and enhance applications, systems and infrastructure technology solutions.

#### **New MWC Descriptions – Capital**

MWC 3J – SmartMeter™ Opt Out – for electric, this MWC includes purchases of electric analog meters, and field technician labor to exchange existing SmartMeters™ with analog meters. For gas, this MWC includes field technician labor to remove gas modules, and purchases of gas meters and labor to install, if necessary.

## TABLE 4-4 CUSTOMER CARE 2014 CAPITAL COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
1	01	\$463	\$104	(\$359)	Decrease due to fewer than planned tools purchased for field employees.
2	05	906	986	80	Immaterial variance.
3	21	3,303	243	(3,060)	Decrease primarily due to work and costs shifting to MWC 2F for new IT projects. See explanations for MWC 2F below.
4	23	18,000	13,868	(4,132)	Decrease due to Corporate Real Estate reprioritization of Sacramento and Fresno Contact Center expansion and upgrades as a result of the timing of the 2014 GRC decision; decrease is partially offset by higher than planned relocation/facility upgrade for the Stockton Regional Office project, which includes the relocation of Billing and Credit Operations.
5	25	40,098	36,601	(3,497)	Decrease primarily due to ability to re-use electric meters returned from meter manufacturer under warranty for meter exchanges. This also reduced the number of new electric meters purchased. The re-use of meters is treated as expense, as compared to new meter installations which are capitalized.
6	74	83,581	82,809	(772)	Immaterial variance.
7	2F	39,318	43,512	4,194	Increase due to: (1) an approved acceleration of technology solutions within the Channel of Choice program, (2) effort spent on the distributed generation bill development solution and (3) unplanned enhancement work on the Interactive Voice Response and Customer Care and Billing systems to further enable the customer experience and strengthen system performance.
8	3J	45	1,476	1,431	Increase due to higher than planned meter exchanges for customers choosing to opt out of SmartMeters™.
9	Total	\$185,715	\$179,599	(\$6,116)	

# SECTION 5 Nuclear Generation Detailed Variance Explanations

## TABLE 5-1 NUCLEAR GENERATION 2014 EXPENSE PROGRAMS COMPARISON SUMMARY (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	2015 Budget (3)
1	Support	AB	(\$36,067)	\$681	\$36,748	\$0
2	Manage Environmental Operations	AK	3,179	3,133	(45)	3,334
3	Manage DCPP Business	BP (1)	(7,232)	4,154	11,386	10,230
4	DCPP Loss Prevention	BQ	41,857	44,053	2,195	42,287
5	Operate DCPP Plant	BR	107,457	104,713	(2,744)	101,398
6	Maintain DCPP Plant Assets	BS (2)	164,595	165,387	791	134,517
7	Enhance DCPP Personnel Performance	BT	18,251	18,191	(60)	19,557
8	Procure DCPP Materials & Services	BU	(434)	(326)	108	56
9	Maintain DCPP Plant Configuration	BV	61,588	55,634	(5,954)	60,772
10	Manage Waste Disposal & Transportation	CR	0	46	46	0
11	Provide Nuclear Support	EO	188	245	57	348
12	Manage Var Bal Acct Processes	IG (2)	10,674	8,339	(2,335)	11,200
13	Maintain IT Apps & Infra	JV	0	0	0	0
14	Total		\$364,056	\$404,250	\$40,194	\$383,700

#### Notes:

- (1) MWC BP 2014 budget was decreased by \$3.6 million from its previously reported amount of (\$3.6 million) as a result of the transfer of Aircraft costs to Shared Services.
- (2) MWC BS 2014 budget was reduced by \$10.7 million from its previously reported amount of \$175.3 million to reflect a transfer of Nuclear Safety and Security Balancing Account work to MWC IG.
- (3) 2015 Budget does not include second refueling levelization adjustments for MWC AB.

#### 7-9

### PACIFIC GAS AND ELECTRIC COMPANY 2014 GENERAL RATE CASE APPLICATION 12-11-009 NUCLEAR GENERATION EXPENSE AND CAPITAL INFORMATION

## TABLE 5-2 NUCLEAR GENERATION 2014 CAPITAL PROGRAMS COMPARISON SUMMARY (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	2015 Budget
1	Office Furniture and Equipment	03	\$226	\$199	(\$27)	\$231
2	Fleet/Auto Equipment	04	1,244	865	(379)	958
3	Tools and Equipment	05	986	980	(6)	780
4	DCPP Capital Projects	20 (1)	169,670	171,131	1,461	176,440
5	Build IT Apps & Infra	2F	3,567	3,581	14	5,982
6	Nuclear Safety and Security	3I (1)	44,474	44,099	(374)	59,700
7	Total		\$220,167	\$220,856	\$689	\$244,092

#### Note:

(1) MWC 20 2014 budget was decreased by \$44.5 million from its previously reported amount of \$214.1 million to reflect a transfer of Nuclear Safety and Security Balancing Account work to MWC 3I.

#### **MWC Descriptions – Expense**

MWC AB – Support – includes costs to levelize the second refueling outage over the 2014 – 2016 GRC period.

MWC AK – Manage Environmental Operations – includes managing the environmental protection programs mandated by federal, state, and local regulations.

MWC BP – Manage DCPP Business – includes all activities associated with representing the Company and providing technical input to committees, owners groups, industry, professional and trade associations that support electric utilities. MWC BP also includes dues to the Institute of Nuclear Power Operators, Nuclear Energy Institute, Strategic Teaming and Resource Sharing, and Diablo Canyon Independent Safety Committee. MWC BP also includes land management activities. In addition, planned efficiencies for the entire Nuclear Generation organization are captured in MWC BP.

MWC BQ – DCPP Loss Prevention – includes support for the management and implementation of the Security, Industrial Safety and Health, Emergency Preparedness and Fire Protection programs.

MWC BR – Operate DCPP Plant – includes all activities to operate the plant, radiation control, monitoring of plant chemistry, managing radioactive waste and hazardous waste generation, nuclear fuel movement, and reactor physics testing.

MWC BS – Maintain DCPP Plant Assets – includes all preventative and corrective maintenance activities for systems, structures, and components at the plant.

MWC BT – Enhance DCPP Personnel Performance – includes all training programs for license and non-license operator, maintenance, engineering, and all general employee training development and delivery.

MWC BU – Procure DCPP Materials & Services – includes cost for under/over clearing of material burden.

MWC BV – Maintain DCPP Plant Configuration – includes design engineering, system engineering, component engineering, reactor engineering, in-service testing and inspection, reliability engineering, and fire protection engineering.

MWC EO – Provide Nuclear Support – includes cost for plant support provided by PG&E's Corporate Support organizations such as security and communications.

MWC JV – Maintain Applications and Infrastructure – includes costs for ongoing maintenance, operations and repair for PG&E's IT applications, systems and infrastructure.

#### **New MWC Descriptions – Expense**

MWC CR – Manage Waste Disposal and Transportation – includes cost for disposal and transportation of site hazardous waste.

MWC IG – Manage Balancing Account Processes – includes costs subject to the 2-way balancing account established for Nuclear Safety and Security regulatory-mandated projects.

#### 5-5

### PACIFIC GAS AND ELECTRIC COMPANY 2014 GENERAL RATE CASE APPLICATION 12-11-009 NUCLEAR GENERATION EXPENSE AND CAPITAL INFORMATION

## TABLE 5-3 NUCLEAR GENERATION 2014 EXPENSE COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
1	AB	(\$36,067)	\$681	\$36,748	Increase due to 2014 second refueling outage levelized over 3 years (2014-2016) in the budget for presentation consistency with the 2014 GRC decision.
2	AK	3,179	3,133	(45)	Immaterial variance.
3	BP	(7,232)	4,154	11,386	Increase due to Nuclear Generation work efficiencies planned in MWC BP, however the efficiencies are realized through work projects and efforts that are recorded in MWC BQ, BR and BV.
4	BQ	41,857	44,053	2,195	Increase primarily due to not fully achieving planned efficiencies in new work processes for site security functions.
5	BR	107,457	104,713	(2,744)	Decrease primarily due to efficiency gains in refueling outage work management, higher than planned labor attrition and lower material costs in support of radiological management.
6	BS	164,595	165,387	791	Immaterial variance.
7	ВТ	18,251	18,191	(60)	Immaterial variance.
8	BU	(434)	(326)	108	Increase due to materials costs higher than planned.
9	BV	61,588	55,634	(5,954)	Decrease primarily due to efficiency gains in contracting for steam generator testing, rescheduling of engineering studies, and labor attrition higher than planned.
10	CR	0	46	46	Increase due to higher hazardous waste disposal costs than planned.
11	EO	188	245	57	Increase due to additional oversight and support provided by Corporate Security.
12	IG	10,674	8,339	(2,335)	Decrease due to delays in completion of the Fukushima flooding and seismic studies.
13	JV	0	0	0	N/A
14	Total	\$364,056	\$404,250	\$40,194	

#### **MWC Descriptions – Capital**

MWC 03 – Office Furniture and Equipment – includes capital costs to replace office furniture and equipment.

MWC 04 – Fleet/Auto Equipment – includes replacement of station fleet/auto equipment which has been in use longer than their useful life.

MWC 05 – Tools and Equipment – includes replacement of tools and shop equipment.

MWC 20 – DCPP Capital Projects – includes replacement of capital structures, systems and components that no longer can be maintained to safely and reliably operate and protect the plant. There are three major drivers to these replacements: (1) reliability has degraded to cause replacement to be needed; (2) obsolete replacement material, not allowing proper maintenance to continue; and (3) regulatory driven (NRC) requirements.

MWC 2F – Build Applications and Infrastructure – includes the costs to design, develop and enhance applications, systems and infrastructure technology solutions.

#### **New MWC Descriptions - Capital**

MWC 3I - includes DCPP capital projects subject to the 2-way balancing account established for Nuclear Safety and Security regulatory-mandated projects.

## TABLE 5-4 NUCLEAR GENERATION 2014 CAPITAL COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
1	03	\$226	\$199	(\$27)	Decrease due to lower demand for furniture replacements.
2	04	1,244	865	(379)	Decrease due to strategic rescheduling of planned vehicle replacements.
3	05	986	980	(6)	Immaterial variance.
4	20	169,670	171,131	1,461	Increase primarily due to unplanned emergent work for Reactor Coolant Pump Motor replacement, security enhancements and facility upgrades.
5	2F	3,567	3,581	14	Immaterial variance.
6	31	44,474	44,099	(374)	Immaterial variance.
7	Total	\$220,167	\$220,856	\$689	

# SECTION 6 Power Generation Detailed Variance Explanations

TABLE 6-1
POWER GENERATION 2014 EXPENSE PROGRAMS SUMMARY COMPARISON
(IN THOUSANDS OF NOMINAL DOLLARS)

					2014	
Line			2014	2014	Difference	2015
No.	MWC Description	MWC	Budget	Actual	Higher/(Lower)	Budget (2)
1	Business / Miscellaneous Expense (Hydro)	AB	\$3,400	\$2,010	(\$1,390)	\$3,500
2	Manage Environmental Operations (Hydro)	AK	1,246	1,313	67	1,276
3	Manage Environmental Operations (Fossil)	AK	3,257	2,832	(425)	3,346
4	Maintain Hydro Reservoirs, Dams & Waterways (Hydro)	AX	23,447	23,989	542	30,318
5	Habitat and Species Protection (Hydro)	AY	183	209	25	171
6	Perform Reimbursable Work for Others (Hydro)	BC	0	108	108	0
7	Manage Property & Bldgs (Hydro)	EP	1,278	1,259	(19)	1,412
8	Implement Environment Projects (Hydro)	ES	745	689	(56)	757
9	Manage Var Bal Acct Processes	IG (1)	625	286	(339)	398
10	Manage Environ Remed (Earning)	JK	0	0	0	0
11	Maintain IT Apps & Infra	JV	850	852	1	914
12	Operate Hydro Generation (Hydro)	KG	51,636	50,574	(1,062)	54,668
13	Maintain Hydro Generating Equipment (Hydro)	KH	30,425	32,703	2,277	26,719
14	Maintain Hydro Buildings, Grounds & Infrastructure (Hydro)	KI	9,250	10,859	1,609	12,622
15	Regulatory Compliance Hydro Generation (Hydro)	KJ (1)	32,922	31,157	(1,764)	37,964
16	Operate Fossil Generation (Fossil)	KK	14,560	15,033	472	15,846
17	Maintain Fossil Generating Equipment (Fossil)	KL	34,161	19,839	(14,322)	46,245
18	Maintain Fossil Generation Buildings, Grounds & Infrastructure (Fossil)	KM	2,739	2,580	(159)	2,815
19	Operate Alternative Gen	KQ	382	290	(92)	417
20	Maintain Alternative Generation Generating Equipment (Fossil)	KR	1,079	1,219	140	1,117
21	Maintain Alternative Generation Building, Ground, Infrastructure	KS	106	50	(57)	109
22	Total		\$212,292	\$197,850	(\$14,442)	\$240,612

#### Notes:

- (1) MWC KJ was reduced by \$0.6 million from its previously reported amount of \$33.5 million to reflect a transfer of Hydro Relicensing Balancing Account work to MWC IG.
- (2) 2015 Budget does not include LTSA levelization adjustments for MWC KL.

#### 6-2

### PACIFIC GAS AND ELECTRIC COMPANY 2014 GENERAL RATE CASE APPLICATION 12-11-009 POWER GENERATION EXPENSE AND CAPITAL INFORMATION

TABLE 6-2
POWER GENERATION 2014 CAPITAL PROGRAMS SUMMARY COMPARISON
(IN THOUSANDS OF NOMINAL DOLLARS)

					2014	
Line			2014	2014	Difference	2015
No.	MWC Description	MWC	Budget	Actual	Higher/(Lower)	Budget
1	Office Furniture & Equipment (Fossil)	03	\$209	\$203	(\$6)	\$0
2	Tools & Equipment (Hydro)	05	740	1,196	456	962
3	Tools & Equipment (Fossil)	05	234	256	21	397
4	Relicensing Hydro Generation (Hydro)	11 (1)	15,124	17,286	2,162	6,920
5	Implement Environment Projects (Hydro)	12	4,526	3,928	(598)	2,159
6	Build IT Apps & Infra	2F	13,996	16,556	2,560	11,707
7	Install / Replace for Hydro Gen Safety & Regulatory Requirements (Hydro)	2L	47,274	39,312	(7,963)	50,030
8	Install / Replace Hydro Generating Equipment (Hydro)	2M	101,405	91,780	(9,625)	128,882
9	Install / Replace Reservoirs, Dams & Waterways (Hydro)	2N	54,196	49,063	(5,132)	64,579
10	Install / Replace Hydro Generation Buildings, Grounds & Infrastructure (Hydro)	2P	11,818	8,238	(3,580)	40,337
11	Install / Replace Fossil Gen Safety & Regulatory Requirements (Fossil)	2R	471	657	186	280
12	Install / Replace Fossil Generating Equipment (Fossil)	2S	12,299	8,701	(3,599)	10,094
13	Install / Replace Fossil Generation Buildings, Grounds & Infrastructure (Fossil)	2T	0	49	49	1,200
14	Install / Replace Alternative Generation Safety and Regulation (Fossil)	3A	41	28	(13)	29

#### 6-3

### PACIFIC GAS AND ELECTRIC COMPANY 2014 GENERAL RATE CASE APPLICATION 12-11-009 POWER GENERATION EXPENSE AND CAPITAL INFORMATION

# TABLE 6-2 POWER GENERATION 2014 CAPITAL PROGRAMS SUMMARY COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS) (CONTINUED)

Line No.	MWC Description	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	2015 Budget
15	Instal/Repl AltGen GneratngEqp	3B	400	187	(213)	20
16	Construct New Alternative Gen	3C	0	0	0	10
17	Construct New Alternative Gen	3D	0	6	6	0
18	Hydroelec Lic & Lic Conditions	3H (1)	20,121	16,074	(4,048)	0
19	Total		\$282,856	\$253,520	(\$29,335)	\$317,607

#### Notes:

(1) MWC 11 2014 budget was decreased by \$20.1 million from its previously reported amount of \$35.2 million to reflect a transfer of Hydro Relicensing Balancing Account work to MWC 3H.

#### **MWC Descriptions – Expense**

MWC AB – Business / Miscellaneous Expense – includes costs associated with Land Conservation Commitment.

MWC AK – Manage Environmental Operations – includes costs associated with managing environmental operations.

MWC AX – Maintain Hydro Reservoirs, Dams & Waterways – includes costs associated with maintenance of hydroelectric reservoirs, dams, and water conveyance systems. These maintenance activities also ensure safety through routine and preventive maintenance.

MWC AY – Habitat and Species Protection – includes costs and reimbursements associated with environmental risk management and sensitive species protection.

MWC BC – Perform Reimbursable Work for Others – includes costs associated with managing the irrigation district contracts and the reimbursable expenses incurred to perform maintenance on behalf of the irrigation districts.

MWC EP – Manage Property & Buildings – includes costs associated with managing land rights and property leases in support of the operation of hydro power plants.

MWC ES – Implement Environmental Projects – includes costs associated with the implementing environmental projects and programs.

MWC JK - Manage Environ Remed (Earning) – includes costs for the cleanup of contaminated sites which are not recovered through the Hazardous Substance Mechanism (HSM), decommissioning accounts, or at shareholder expense. These include internal labor and expenses associated with management and support of the site remediation as well as contractor and legal fees.

MWC JV – Maintain Applications and Infrastructure – includes costs for ongoing maintenance, operations and repair for PG&E's IT applications, systems and infrastructure.

MWC KG – Operate Hydro Electric Generation – includes costs to operate hydroelectric power generating stations and associated facilities.

MWC KH – Maintain Hydro Electric Generating Equipment – includes costs to maintain generating equipment or components to support hydroelectric generation activities.

MWC KI – Maintain Hydro Electric Generation Buildings, Grounds & Infrastructure – includes costs to maintain buildings, grounds and infrastructure to support hydroelectric generation activities, including roads and bridges.

MWC KJ – Regulatory Compliance Hydro Electric Generation – includes costs to maintain Federal Energy Regulatory Commission (FERC) license compliance to support hydroelectric generation activities for licenses received prior to January 1, 2014.

MWC KK – Operate Fossil Generation – includes costs to operate fossil power generating stations.

MWC KL – Maintain Fossil Generating Equipment – includes costs to maintain fossil power generating station equipment.

MWC KM – Maintain Fossil Generation Buildings, Grounds & Infrastructure – includes costs to maintain buildings, grounds and infrastructure on the plant site to support fossil generation activities, including buildings and facilities, roadways, landscaping, retaining walls, fencing, and yard lighting systems.

MWC KQ – Operate Alternative Generation – includes costs to operate alternative generation sites.

MWC KR – Maintain Alternative Generation Generating Equipment – includes costs to maintain alternative power generating station equipment.

MWC KS - Maintain Alternative Generation Building, Ground, Infrastructure – includes costs to maintain photovoltaic and fuel cell generation common facilities.

#### **New MWC Descriptions – Expense**

MWC IG – Balancing Account -- Regulatory Compliance Hydro Electric Generation – includes costs to maintain FERC license compliance to support hydroelectric generation activities for licenses received after January 1, 2014.

## TABLE 6-3 POWER GENERATION 2014 EXPENSE COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
1	AB	\$3,400	\$2,010	(\$1,390)	Decrease due to fewer Land Conservation Commitment easement transactions than anticipated.
2	AK	1,246	1,313	67	Immaterial variance.
3	AK	3,257	2,832	(425)	Decrease due to lower than planned Environmental work necessary for Fossil compliance and higher than planned staff vacancies.
4	AX	23,447	23,989	542	Immaterial variance.
5	AY	183	209	25	Increase due to higher costs for reviewing new California Department of Fish and Wildlife regulations and replacement of vandalized equipment relating to invasive species prevention programs.
6	ВС	0	108	108	Increase due to unplanned Yuba County Water Agency Support work.
7	EP	1,278	1,259	(19)	Immaterial variance.
8	ES	745	689	(56)	Immaterial variance.
9	IG	625	286	(339)	Decrease primarily due to the rescheduling of license implementation work associated with new FERC licenses for Chili Bar and DeSabla Centerville.
10	JK	0	0	0	N/A
11	JV	850	852	1	Immaterial variance.
12	KG	51,636	50,574	(1,062)	Decrease due to rescoping the portfolio of electric grounding projects.
13	KH	30,425	32,703	2,277	Increase due to additional work on powerhouse electrical, piping, and instrumentation drawings, emergent inspections, as well as higher than planned generator maintenance costs.
14	KI	9,250	10,859	1,609	Increase due to various infrastructure projects (road patching, roof repairs, etc.) and additional work associated with the installation of emergency eyewash stations in the hydro powerhouses.

#### 6-7

#### PACIFIC GAS AND ELECTRIC COMPANY 2014 GENERAL RATE CASE APPLICATION 12-11-009 POWER GENERATION EXPENSE AND CAPITAL INFORMATION

# TABLE 6-3 POWER GENERATION 2014 EXPENSE COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS) (CONTINUED)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
15	KJ	32,922	31,157	(1,764)	Decrease primarily due to lower than planned FERC fees as a result of the dry water year and a payment to State Parks which has been rescheduled to 2016 due to agency delay in defining requirements.
16	KK	14,560	15,033	472	Immaterial variance.
17	KL	34,161	19,839	(14,322)	Decrease primarily due to the budget reflecting the levelization of Fossil Long Term Service Agreements (LTSA) per the GRC Decision, while there were no major Fossil LTSA outages occurring in 2014, as well as lower than planned spend on generator maintenance work.
18	KM	2,739	2,580	(159)	Immaterial variance.
19	KQ	382	290	(92)	Decrease due to lower than planned spend on Fuel Cell and Photovoltaic operations. MWCs KQ, KR, and KS are managed as an overall program. Across these three MWCs the variance is immaterial.
20	KR	1,079	1,219	140	Increase due to higher than planned spend on Fuel Cell and Photovoltaic equipment maintenance. MWCs KQ, KR, and KS are managed as an overall program. Across these three MWCs the variance is immaterial.
21	KS	106	50	(57)	Decrease due to lower than planned spend on Fuel Cell and Photovoltaic facility ground maintenance. MWCs KQ, KR, and KS are managed as an overall program. Across these three MWCs the variance is immaterial.
22	Total	\$212,292	\$197,850	(\$14,442)	

#### **MWC Descriptions – Capital**

MWC 03 – Office Furniture & Equipment - includes capital costs to replace office furniture and equipment.

MWC 05 – Tools & Equipment – includes purchase of tools and equipment required to perform various functions to maintain the safety and reliability of fossil and hydro electric generation operations.

MWC 11 – Relicensing and License Compliance Hydro Electric Generation – includes costs for complying with the conditions required by FERC licenses received prior to January 1, 2014, and other compliance work generally related to facility safety.

MWC 12 – Implement Environmental Projects – includes costs for capital projects to comply with water and air quality regulations and various oil spill prevention projects.

MWC 2F – Build Applications and Infrastructure – includes the costs to design, develop and enhance applications, systems and infrastructure technology solutions.

MWC 2L – Install/Replace for Hydro Electric Generation Safety & Reg Requirements – includes capital costs primarily related to employee or public safety and regulatory requirements that are not connected with relicensing for hydroelectric generation.

MWC 2M – Install/Replace Hydro Electric Generating Equipment – includes capital costs to install/replace generating equipment or components to support hydroelectric generation activities.

MWC 2N – Install/Replace Reservoirs, Dams & Waterways – includes capital costs to support the operation of reservoirs, dams and waterways.

MWC 2P – Install/Replace Hydro Electric Generation Buildings, Grounds & Infrastructure – includes capital costs to install/replace buildings, grounds and infrastructure to support hydroelectric generation activities, including roads and bridges.

MWC 2R – Install/Replace Fossil Generating Safety & Regulatory Requirements – includes capital costs primarily related to employee safety or regulatory requirements for fossil generation.

MWC 2S – Install/Replace Fossil Generating Equipment – includes capital costs to install new or replace existing generating equipment or components to support fossil generation activities.

MWC 2T – Install/Replace Fossil Generation Buildings, Grounds & Infrastructure – includes capital costs to install or replace new buildings, grounds and infrastructure on the plant site to support fossil generation activities.

MWC 3A – Install/Replace Alternative Fossil Generation Safety and Regulation – includes capital costs associated with the installation and/or replacement of safety equipment for alternative generation.

MWC 3B – Install/Replace Alternative Generation Equipment – includes capital costs associated with the installation of solar photovoltaic generation equipment.

MWC 3C – Install/Repl Alternative Generation Buildings, Grounds & Infrastructure – includes capital costs to install or replace new buildings, grounds and infrastructure on the plant site to support Alternative Generation activities.

MWC 3D – Construct New Alternative Generation – includes capital costs to construct new Alternative Generation plants.

#### **New MWC Descriptions - Capital**

MWC 3H – Balancing Account -- Relicensing Hydro Electric Generation – includes costs for relicensing existing FERC licenses; obtaining major license amendments; surrendering licenses for facilities that are no longer economic; complying with the conditions required by existing and newly issued FERC licenses and major license amendments; and anticipated to be required by pending new FERC licenses for licenses. This includes costs for all pending licenses as of January 1, 2014, and new licenses applied for after January 1, 2014.

### TABLE 6-4 POWER GENERATION 2014 CAPITAL COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
1	03	\$209	\$203	(\$6)	Immaterial variance.
2	05	740	1,196	456	Increase due to purchasing additional tools for the Hydro Operations, Maintenance, and Construction crews.
3	05	234	256	21	Immaterial variance.
4	11	15,124	17,286	2,162	Increase due to additional costs for fish habitat protection projects and emergent facility modifications due to new FERC requirements.
5	12	4,526	3,928	(598)	Immaterial variance.
6	2F	13,996	16,556	2,560	Increase due to the increased demand for hydro watershed's telecommunications infrastructure.
7	2L	47,274	39,312	(7,963)	Decrease due to reduced contractor costs achieved by restaging work on several projects, lower priority projects cancelled, and other project work rescheduled from 2014 to 2015 in accordance with changes to outage schedules.
8	2M	101,405	91,780	(9,625)	Decrease primarily due to the cancellation of the Kern Canyon runner replacement project, renewable energy grants received on two Pit 5 projects, and several smaller project cancellations.
9	2N	54,196	49,063	(5,132)	Decrease due to rescheduling of work at the Potter Valley penstock due to materials availability, reduced costs of canal repairs due to asset management efficiency programs such as implementing new standardized designs, bundling contracts and prioritizing the portfolio of water conveyance projects.
10	2P	11,818	8,238	(3,580)	Decrease due to the timing of expenditures on the Hydro Service Center project and the rescheduling of a Helms pump installation project to align with the planned outage schedule.

# TABLE 6-4 POWER GENERATION 2014 CAPITAL COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS) (CONTINUED)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
11	2R	471	657	186	Increase primarily due to emergent eyewash installation at Humboldt Bay Generating Station, as well as increased costs on other safety-related projects.
12	2S	12,299	8,701	(3,599)	Decrease due to negotiated reduction of power plant repair cost due to manufacturer error.
13	2T	0	49	49	Increase due to unplanned Colusa Generating Station building paneling work.
14	3A	41	28	(13)	Decrease due to lower than planned cost for a safety project located at the San Francisco Service Center solar site.
15	3B	400	187	(213)	Decrease due to lower costs than planned on the installation of a Solar PV Monitoring Control System.
16	3C	0	0	0	N/A
17	3D	0	6	6	Increase due to unplanned minor costs related to the Photovoltaic and Fuel Cell projects.
18	3H	20,121	16,074	(4,048)	Decrease due to delayed receipt of FERC license issuance.
19	Total	\$282,856	\$253,520	(\$29,335)	

# SECTION 7 Energy Procurement Detailed Variance Explanations

#### 7.

### PACIFIC GAS AND ELECTRIC COMPANY 2014 GENERAL RATE CASE APPLICATION 12-11-009 ENERGY PROCUREMENT EXPENSE AND CAPITAL INFORMATION

### TABLE 7-1 ENERGY PROCUREMENT 2014 EXPENSE PROGRAMS SUMMARY COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS)

					2014	
Line No.	MWC Description	MWC	2014 Budget	2014 Actual	Difference Higher/(Lower)	2015 Budget
	Mivve Becomption		Daagot	- / totaai	Tilghol/(Lowor)	Daagot
1	Support	AB	\$3,182	\$2,704	(\$479)	\$2,525
2	Maint Buildings	BI	170	262	92	170
3	Acquire and Manage Electric Supply	CT	47,565	47,859	293	49,803
4	Gas Procurement	CV	3,963	3,928	(35)	4,123
5	Maintain IT Apps & Infra	JV	1,250	1,353	103	711
6	Total		\$56,130	\$56,104	(\$26)	\$57,332

TABLE 7-2
ENERGY PROCUREMENT 2014 CAPITAL PROGRAMS SUMMARY COMPARISON
(IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	2015 Budget
1 2	Implement Real Estate Strategy Build IT Apps & Infra	23 2F	\$0 \$22,429	\$7 18,876	\$7 (3,553)	\$0 17,049
3	Total		\$22,429	\$18,883	(\$3,546)	\$17,049

#### **MWC Descriptions – Expense**

MWC AB – Support – represents the office of the Senior Vice President (SVP) of Energy Procurement, along with the administrative support functions for the Chief of Staff, business planning, budgeting, and financial and operational reporting.

MWC BI – Maintain Buildings – includes costs to repair and maintain base building to extend the life of building components, correct building component deficiencies, improve equipment operating efficiencies, and increase the operating reliability of buildings and yards.

MWC CT – Acquire and Manage Electric Supply – includes resources necessary for electric procurement operations for bundled electric supply, including electric generation-related gas procurement. These functions include Energy Policy, Planning and Analysis, Energy Supply Management, Renewable Energy, Energy Contract Management and Settlements, and Energy Compliance and Reporting.

MWC CV – Gas Procurement – includes resources necessary for gas procurement operations to supply gas for PG&E's core customers.

MWC JV – Maintain Applications and Infrastructure – includes costs for ongoing maintenance, operations and repair for PG&E's IT applications, systems and infrastructure.

### TABLE 7-3 ENERGY PROCUREMENT 2014 EXPENSE COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
1	AB	\$3,182	\$2,704	(\$479)	Decrease due to lower cost of employee benefits allocation than planned.
2	BI	170	262	92	Increase due to unplanned office ergonomic upgrades and improvements.
3	CT	47,565	47,859	293	Immaterial variance.
4	CV	3,963	3,928	(35)	Immaterial variance.
5	JV	1,250	1,353	103	Immaterial variance.
6	Total	\$56,130	\$56,104	(\$26)	

#### **MWC Description - Capital**

MWC 2F – Build Applications and Infrastructure – includes the costs to design, develop and enhance applications, systems and infrastructure technology solutions.

#### **New MWC Descriptions – Capital**

MWC 23 – Implement Real Estate Strategy – represents costs associated with the build out of new real estate facilities for Energy Procurement (EP).

### TABLE 7-4 ENERGY PROCUREMENT 2014 CAPITAL COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
1	23	\$0	\$7	\$7	Increase due to IT and storm water monitoring costs related to the Energy Procurement alternative headquarters.
2	2F	22,429	18,876	(3,553)	Decrease due to the rescheduling of several programs to enable the completion of the Energy Trading and Risk Management Endur program; primary deferrals are within the Settlement Quality Meter Data Replacement, Central Data Repository and CAISO MAP Initiatives. Delays in the CAISO MAP Initiative program are compounded by delayed requirements from CAISO.
3	Total	\$22,429	\$18,883	(\$3,546)	

#### SECTION 8 Information Technology Detailed Variance Explanations

### TABLE 8-1 INFORMATION TECHNOLOGY 2014 EXPENSE COMPARISON SUMMARY (IN THOUSANDS OF NOMINAL DOLLARS)

					2014	
Line			2014	2014	Difference	2015
No.	Program	MWC	Budget	Actual	Higher/(Lower)	Budget
1	Baseline	JV	\$218,616	\$230,818	\$12,202	\$233,792
2	Lifecycle	JV	3,974	3,065	(909)	2,714
3	Technology Reliability Projects	JV	5,826	3,479	(2,347)	5,429
4	Continuous Improvement	JV	1,120	9,109	7,989	1,007
5	Total	JV	\$229,536	\$246,471	\$16,935	\$242,942

### TABLE 8-2 INFORMATION TECHNOLOGY 2014 CAPITAL COMPARISON SUMMARY (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	Program	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	2015 Budget
1	Lifecycle	2F	\$51,615	\$51,281	(\$335)	\$42,901
2	Technology Reliability Projects	2F	114,214	112,483	(1,730)	93,397
3	Continuous Improvement	2F	0	8,948	8,948	8,377
4	Total	(1)	\$165,829	\$172,713	\$6,883	\$144,674

#### Notes:

(1) MWC 2F 2014 budget is decreased from its previously reported amount of \$168.8 million as a result of a \$3.0 million correction to transfer that budget amount from the GRC to the Gas Transmission & Storage rate case.

#### **MWC Description - Expense**

MWC JV – Maintain Applications and Infrastructure – includes costs for ongoing maintenance, operations and repair for PG&E's IT applications, systems and infrastructure.

### TABLE 8-3 INFORMATION TECHNOLOGY 2014 EXPENSE COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	Program	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
1	Baseline	JV	\$218,616	\$230,818	\$12,202	Increase due to unplanned incremental vendor support costs for new technology solutions and telecommunication lease line increases to support network growth.
2	Lifecycle	JV	3,974	3,065	(909)	Decrease due to a rescheduling of Security, Network and Data Center lifecycle jobs and a reallocation of funding to support foundational solutions for assets within Technology Reliability Projects.
3	Technology Reliability Projects	JV	5,826	3,479	(2,347)	Decrease due to: (1) lower deployment costs for the Data Center Modernization project; (2) rescheduling of some database and middleware enhancement efforts; and (3) lower expense efforts on Security Analytics.
4	Continuous Improvement	JV	1,120	9,109	7,989	Increase due to a one-time investment in a vendor engagement to develop a multi-year strategy (SuperFit) that will enable the organization to deliver solutions without significantly increasing resources.
5	Total		\$229,536	\$246,471	\$16,935	

#### **MWC Description – Capital**

MWC 2F – Build Applications and Infrastructure – includes the costs to design, develop and enhance applications, systems and infrastructure technology solutions.

Under both MWC 2F and MWC JV, IT work is further organized by sub-program.

The Baseline sub-program provides for the ongoing operations and maintenance of IT's existing applications systems and infrastructure.

The Lifecycle sub-program represents IT's physical asset and software replacement initiatives required to maintain current operational and reliability performance standards.

The Technology Reliability Project sub-program accounts for projects that originate within IT and are executed to address: 1) enabling new technology deployments across PG&E's lines of business (enterprise-wide projects); 2) manage reliability or security concerns with obsolete technology; or 3) fulfill capacity needs arising from growth in PG&E's new technology environment.

The Continuous Improvement sub-program highlights projects that are specifically targeted to improve the efficiency or streamline the delivery of IT functions or services.

#### ά

### PACIFIC GAS AND ELECTRIC COMPANY 2014 GENERAL RATE CASE APPLICATION 12-11-009 INFORMATION TECHNOLOGY EXPENSE AND CAPITAL INFORMATION

### TABLE 8-4 INFORMATION TECHNOLOGY 2014 CAPITAL COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	Program	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
1	Lifecycle	2F	\$51,615	\$51,281	(\$335)	Immaterial variance.
2	Technology Reliability Projects	2F	114,214	112,483	(1,730)	Decrease primarily due to a rescheduling of the Ruggedized Laptop program.
3	Continuous Improvement	2F	0	8,948	8,948	Increase primarily due to: (1) a significant investment in foundational solutions for both existing application systems and their supporting infrastructure (i.e., Flexera Software project and Enterprise Network Operating Center); (2) using tools, such as Business Service Management and Discovery & Dependency Mapping, to clearly articulate the business impact of scheduled changes or when the health of a system causes issues. Investments in both efforts will further enhance and create efficiencies for enterprise efforts that focus on asset management and system consolidation.
4	Total		\$165,829	\$172,713	\$6,883	

## SECTION 9 Shared Services Detailed Variance Explanations

### TABLE 9-1 SHARED SERVICES 2014 EXPENSE COMPARISON SUMMARY (IN THOUSANDS OF NOMINAL DOLLARS)

					2014	
Line			2014	2014	Difference	2015
No.	MWC Description	MWC	Budget	Actual	Higher/(Lower)	Budget
1	Support	AB	\$1,270	\$4,142	\$2,872	\$1,373
2	Manage Environmental Operations	AK	9,081	8,869	(212)	10,414
3	Habitat and Species Protection	AY	181	749	`568 <sup>°</sup>	195
4	Maintain Buildings	ВІ	10,839	10,487	(352)	6,731
5	Manage DCPP Business	BP (1)	3,568	3,419	(149)	3,911
6	Manage Waste Disposal and Transportation	CR	2,848	3,353	505	2,570
7	Implement Environmental Projects	ES	905	702	(203)	905
8	Special A&G/Other Costs-Budget Department	FA/FL	17,025	20,273	3,248	26,353
	Safety Engineering and OSHA Compliance					
9	Manage Land Services	JE	2,551	2,339	(213)	2,601
10	Implement Real Estate Strategy	JH	5,337	4,404	(932)	11,008
11	Manage Environmental Remediation-Earnings	JK	5,368	6,727	1,359	6,248
12	Procure Materials and Services	JL	7,303	14,860	7,558	13,488
13	Maintain IT Apps & Infra	JV	1,622	2,599	977	3,690
14	Total		\$67,898	\$82,925	\$15,027	\$89,487

#### Note:

<sup>(1)</sup> MWC BP was included in Shared Services as a result of a 2014 budget transfer of \$3.6 million for work from Nuclear Generation.

#### TABLE 9-2 SHARED SERVICES 2014 CAPITAL COMPARISON SUMMARY (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	2015 Budget
1	Fleet/Automotive Equipment	04	\$134,270	\$144,728	\$10,458	\$117,634
2	Tools and Equipment	05	1,565	4,013	2,448	1,603
3	Implement Environment Projects	12	5,270	3,887	(1,383)	5,850
4	Purchase/Install - Other Capital	21	451	347	(104)	463
5	Maintain Buildings	22	56,214	45,317	(10,897)	43,174
6	Implement Real Estate Strategy	23	17,280	11,029	(6,251)	70,520
7	EV – Station Infrastructure	28	2,412	3,009	597	2,556
8	Build IT Apps & Infra	2F	5,816	9,326	3,510	9,234
9	Total		\$223,279	\$221,657	(\$1,622)	\$251,034

#### **MWC Descriptions – Expense**

MWC AB – Support – includes costs associated with climate protection and other environmental leadership initiatives. MWC AB also includes standard cost variances for Shared Services departments that charge out their costs to other organizations<sup>1</sup> and miscellaneous support costs.

MWC AK – Manage Environmental Operations – includes costs for environmental compliance support, permits and day-to-day costs that are part of facility environmental operations. MWC AK also includes routine environmental work, including the labor costs of environmental professionals and facility personnel who perform environmental compliance tasks (e.g., inspections, compliance assessments, corrective actions and hazardous waste management).

MWC AY – Habitat and Species Protection – includes compliance with regulations to protect endangered species and sensitive habitats as part of PG&E's broader Environmental Stewardship Program. The Environmental Stewardship Program covers initiatives to support habitat and species protection, Safe Harbor Agreement, avian protection, land stewardship and conservation partnerships. MWC AY includes labor and expense associated with administration of the different programs.

MWC BI – Maintain Buildings – includes costs to repair and maintain base building to extend the life of building components, correct building component deficiencies, improve equipment operating efficiencies, and increase the operating reliability of buildings and yards.

MWC CR – Manage Waste Disposal & Transportation – includes costs of transportation and disposal of hazardous and other regulated wastes in accordance with Federal and state laws and regulations.

MWC ES – Implement Environment Projects – includes costs associated with repairing, replacing, or upgrading equipment to comply with environmental regulations.

<sup>1</sup> Standard Cost Variance is described in the Gas Distribution expense Section 2 of this report.

MWC FA/FL – Safety Engineering & OSHA Compliance – includes costs of the Safety Engineering & Health Services department which provides overall direction and implementation of the Company's occupational safety and health programs. MWC FL also includes costs for the development and integration of safety and health solutions supporting the goal of to eliminating employee injuries.

MWC JE – Manage Land Services – includes costs to establish policies and provide support for the management and protection of the Company's land and land rights in support of PG&E's utility operations. MWC JE also includes costs to manage the Company's timberlands to achieve optimal revenues while maintaining and/or enhancing timberland values.

MWC JH – Real Estate Strategy and Transactions – includes costs for long-term real estate strategy development, space demand forecasting and planning and lease administration and transaction management.

MWC JK – Manage Environmental Remediation-Earnings – includes costs for the cleanup of contaminated sites which are not recovered through the Hazardous Substance Mechanism (HSM), decommissioning accounts, or at shareholder expense. These include internal labor and expenses associated with management and support of the site remediation as well as contractor and legal fees.

MWC JL – Procure Materials & Services – includes costs to procure goods and services, including implementing programs to improve organizational effectiveness, developing supplier alliances, and maintaining and promoting a diverse supplier base.

MWC JV – Maintain Applications and Infrastructure – includes costs for ongoing maintenance, operations and repair for PG&E's IT applications, systems and infrastructure.

#### **New MWC Description – Expense**

MWC BP – Manage DCPP Business – includes costs of aircraft services that have been moved from the Nuclear Generation Line of Business.

### TABLE 9-3 SHARED SERVICES 2014 EXPENSE COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
1	AB	\$1,270	\$4,142	\$2,872	Increase due to higher than planned spending on repairs and maintenance of facilities in Corporate Real Estate.
2	AK	9,081	8,869	(212)	Immaterial variance.
3	AY	181	749	568	Increase due to higher gas and electric distribution project review and screening activities within the habitat conservation plan.
4	ВІ	10,839	10,487	(352)	Immaterial variance.
5	BP	3,568	3,419	(149)	Immaterial variance.
6	CR	2,848	3,353	505	Increase due to one-time recognition for emergency waste disposal cost with vendor PSC Corporation.
7	ES	905	702	(203)	Decrease due to delays in tank repair and minor environmental projects due to inclement weather.
8	FA/FL	17,025	20,273	3,248	Increase due to Safety Culture work related to the Company's occupational safety and health programs.
9	JE	2,551	2,339	(213)	Immaterial variance.
10	JH	5,337	4,404	(932)	Decrease due to reprioritization of work to MWC AB for repairs and maintenance of facilities.
11	JK	5,368	6,727	1,359	Increase due to reprioritization to support Environmental Remediation work on land disposition. Increase also due to greater environmental remediation management and support costs related to the environmental remediation program, manufactured gas plants, and utility work.

# TABLE 9-3 SHARED SERVICES 2014 EXPENSE COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS) (CONTINUED)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
12	JL	7,303	14,860	7,558	Increase due to Sourcing's cross-cutting initiative, along with lines of business, to develop and commit to multi-year forecasts and long-term contracts. Also, costs related to the Integrated Supply Model initiatives, and reprioritization within Shared Services for the supplier diversity programs.
13	JV	1,622	2,599	977	Increase due to the decision to implement the Supplier Relationship Management solution using a software as a service vendor provider (also referred to as a public cloud solution) which necessitates a greater expense investment than originally estimated.
14	Total	\$67,898	\$82,925	\$15,027	

#### **MWC Descriptions – Capital**

MWC 04 – Fleet/Automotive Equipment – includes acquisition of vehicles, power-operated and off-road equipment, and trailers needed to respond to customer service requests and the myriad of maintenance and construction needs of the Company.

MWC 05 – Tools & Equipment – includes purchase of tools and equipment required to perform various functions, including fleet repairs, warehouse operations, etc.

MWC 12 – Implement Environment Projects – includes costs associated with repairing, replacing, or upgrading equipment and facilities to comply with environmental regulations.

MWC 21 – Purchase/Install – Other Capital – includes costs related to the disposition and sale of PG&E's surplus, obsolete or damaged assets.

MWC 22 – Maintain Buildings – includes the costs to replace and construct base buildings, to extend the life of building components, correct building component deficiencies, improve equipment operating efficiencies, replace failed or functionally obsolete building components, and increase the operating reliability of buildings and yards. This includes furniture, office equipment, and IT Infrastructure for buildings.

MWC 23 – Implement Real Estate Strategy – includes the costs for new buildings and yards, including the purchase of land and the purchase and installation of furniture, office equipment, and IT Infrastructure, as well as the costs to improve building environmental sustainability, to implement workplace strategy, and to optimize the real estate portfolio.

MWC 28 – EV-Station Infrastructure – includes the cost of electric vehicle charging infrastructure for PG&E's owned vehicles.

MWC 2F – Build Applications and Infrastructure – includes the costs to design, develop and enhance applications, systems and infrastructure technology solutions.

#### 9-8

### PACIFIC GAS AND ELECTRIC COMPANY 2014 GENERAL RATE CASE APPLICATION 12-11-009 SHARED SERVICES 2012 EXPENSE AND CAPITAL INFORMATION

### TABLE 9-4 SHARED SERVICES 2014 CAPITAL COMPARISON (IN THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2014 Budget	2014 Actual	2014 Difference Higher/(Lower)	Explanation
1	04	\$134,270	\$144,728	\$10,458	Increase due to reprioritization of funding from MWC 22 to support a higher level of vehicle replacement purchases.
2	05	1,565	4,013	2,448	Increase due to reprioritization of funding to purchase Land Surveying tools and Materials equipment.
3	12	5,270	3,887	(1,383)	Decrease due to delays in environmental capital fuel tank removal work due to inclement weather and reprioritization of funding to purchase Land Surveying tools.
4	21	451	347	(104)	Decrease due to a lower than planned labor costs.
5	22	56,214	45,317	(10,897)	Decrease primarily due to reprioritization of funding to MWC 04 to support a higher level of vehicle replacement purchases.
6	23	17,280	11,029	(6,251)	Decrease primarily due to reprioritization of funding to MWC 04 to support a higher level of vehicle replacement purchases.
7	28	2,412	3,009	597	Increase due to reprioritization of funding for additional Electric Vehicle Charging stations.
8	2F	5,816	9,326	3,510	Increase due to acceleration of compliance projects for both Environmental (Safety and Environmental Management System) and Transportation (Department of Transportation).
9	Total	\$223,279	\$221,657	(\$1,622)	

# PACIFIC GAS AND ELECTRIC COMPANY APPENDIX A MAJOR WORK CATEGORY (MWC) CONVERSION DOCUMENT

### APPENDIX A MAJOR WORK CATEGORY (MWC) CONVERSION DOCUMENT

The following tables provide mapping for MWCs used in the 2014 GRC that have changed over time.

### PACIFIC GAS AND ELECTRIC COMPANY MARCH 2015 GRC BUDGET COMPLIANCE REPORTING DOCUMENT – APPENDIX A MAJOR WORK CATEGORY (MWC) CONVERSION DOCUMENT

Gas Distribution					
Prior MWC (used in the 2014 GRC)	Prior MWC Description	New MWC	New MWC Description	Comment	Period of Update
N/A	None	JU	Gas Distribution Leak Survey & Repair	MWC JU was created to record spending above the Gas Leak Survey and Repair Balancing Account cost cap	March 2015 Budget Report

<b>Customer Care</b>					
Prior MWC (used in the 2014 GRC)	Prior MWC Description	New MWC	New MWC Description	Comment	Period of Update
Presented in MWCs IT, IS, AR, and JV for 2014 GRC (partial transfers to IG)		IG	Manage Various Balancing Account Processes	Transfer of funding related to SmartMeter™ Opt-Out balancing account work	March 2015 Budget Report

Nuclear Generation					
Prior MWC (used in the 2014 GRC)	Prior MWC Description	New MWC	New MWC Description	Comment	Period of Update
Presented in MWC 20 for 2014 GRC (partial transfer to 3I)			Nuclear Safety	Transfer of funding related to Nuclear Safety balancing account work	March 2015 Budget Report
Presented in MW	C BS for 2014 GRC (partial transfer to IG)	IG	Manage Various Balancing Account Processes	Transfer of funding related to Nuclear Safety balancing account work	March 2015 Budget Report

Power Generation					
Prior MWC (used in the GRC)	Prior MWC Description	New MWC	New MWC Description	Comment	Period of Update
N/A	None	3C	Install/Replace Alternative Generation Buildings, Grounds & Infrastructure	New MWC created for new Alternative Generation activities	March 2015 Budget Report
N/A	None	3D	Construct New Alternative Generation	New MWC created for new Alternative Generation activities	March 2015 Budget Report
Presented in MWC 11 for 2014 GRC (partial transfer to 3H)		3Н	Hydro Electric License & Licensing Conditions	Transfer of funding related to Hydro Relicensing balancing account work	March 2015 Budget Report
Presented in MWC KG for 2014 GRC (partial transfer to IG)		IG	Manage Various Balancing Account Processes	Transfer of funding related to Hydro Relicensing balancing account work	March 2015 Budget Report

# PACIFIC GAS AND ELECTRIC COMPANY MARCH 2015 GRC BUDGET COMPLIANCE REPORTING DOCUMENT – APPENDIX A MAJOR WORK CATEGORY (MWC) CONVERSION DOCUMENT (CONTINUED)

Energy Procurer	ment				
Prior MWC					
(used in the	Dries MMC Description	New	Now MAKE Description	C	Devied of the date
GRC)	Prior MWC Description	MWC	New MWC Description	Comment	Period of Update
Presented in MW	C CT for 2014 GRC (partial transfer to BI)	ВІ	Maintain Building	Transfer for ongoing maintenance for alternative headquarters	March 2015 Budget Report

Shared Services					
Prior MWC (used in the 2014 GRC)	Prior MWC Description	New MWC	New MWC Description	Comment	Period of Update
Presented in Nuclear MWC BP for 2014 GRC		BP	Manage DCPP Business	Transfer from Nuclear for operation/maintenance of the airplane	March 2015 Budget Report