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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 (U39M).	A.12-11-009 (Filed November 15, 2012)
And Related Matter.	Investigation 13-03-007

PACIFIC GAS AND ELECTRIC COMPANY'S (U39M)
MARCH 31, 2016 BUDGET REPORT IN COMPLIANCE WITH
CALIFORNIA PUBLIC UTILITIES COMMISSION
DECISION 14-08-032

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Dated: March 31, 2016

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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 2015, by major work category, with explanations for significant differences from the Company's budget for 2015. This report also presents budgeted amounts for 2016, 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,

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This March 31, 2016 Budget Report is submitted in compliance with California Public Utilities 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) companywide General Rate Case (GRC) recorded spending for 2015 and its budget for 2016. Part A also describes PG&E's recent "cost model" changes at a high-level and how they affect PG&E's 2016 budget.

Part B contains a detailed comparison of PG&E's 2015 budgeted and recorded expenditures for the Company's various lines of business. Specifically, Part B contains:

- PG&E's budgeted amounts for 2015, by Major Work Category (MWC), as of January 31, 2015, generally consistent with the March 30, 2015 Budget Report.
- The recorded amounts for 2015, by MWC, with explanations for significant differences (greater than 10 percent or $1 million) from PG&E's budgeted amounts.
- PG&E's budgeted amount for 2016, by MWC, as of January 31, 2016.

PART A – OVERVIEW

PART A – OVERVIEW

I. 2015 Expense and Capital Comparison of Budgeted and Recorded Costs

As reflected in the table below, in 2015, PG&E spent $103.8 million more than budgeted and $136.3 million more than the imputed regulatory value for expense. For capital, in 2015, PG&E spent $76.9 million less than budgeted, but $419.3 million more than the imputed regulatory value.

II. 2016 Budget

Effective January 1, 2016, the Company's budget and recorded costs will reflect a new cost model. PG&E first previewed possible modifications to its "cost model" in the 2017 GRC testimony, included in the General Report exhibit.[1] As described in PG&E's testimony, PG&E's cost model is the structure by which costs are assigned to certain processes or activities in the Company. PG&E's cost model is used for forecasting, budgeting and tracking costs for internal management purposes as well as for external reporting purposes. The core of the cost model change is related to labor rates. Labor rates are used by employees to charge work to expense and capital jobs. The old cost model used a fully inclusive labor rate which factored in all support and overhead costs, e.g., benefits, payroll taxes, supervision, engineering, technical support and office space. The old cost model approach made it easier to evaluate the full costs of field and other work, but it was more difficult to monitor the individual cost components of the work. The new cost model uses a "labor only" labor rate which no longer includes support and overhead costs. In the new cost model, support and overhead costs are budgeted and recorded through separate line items for the expense programs. For capital jobs, the new cost model allocates the proportionate amount of the support and overhead costs to the work as required by the Federal Energy Regulatory Commission Uniform System of Accounts. Accounting for existing balancing account activities are treated similar to capital work to ensure balancing accounts reflect fully allocated costs.

As mentioned above, PG&E's lines of business 2016 budgets were prepared in the new cost model. Therefore, the 2016 budget information included in this report is shown in PG&E's new cost model. For comparison purposes, PG&E has translated PG&E's 2016 budget to the old cost model. Future GRC budget compliance reports, as well as the gas distribution safety reports prepared pursuant to D.11-05-018, will be prepared using the new cost model.

While the new cost model shifts costs among MWCs and organizations to improve accountability and visibility by assigning costs to the service providers where costs can be better monitored (e.g., Shared Services and Information Technology), this shift does not change the overall costs at a Companywide-level. Neither will the shift change the Company's headcount or organization structure.

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1 Exhibit (PG&E-12), Chapter 2, Section D.

2015 BUDGET VS. ACTUAL EXPENSE BY LINE OF BUSINESS
(MILLIONS OF DOLLARS)

Line No.	Line of Business	2015 Imputed Regulatory Values	2015 Budget	2015 Actual	2015 Difference (%)	2015 Difference ($)	2016 Budget Old Cost Model	2016 Budget New Cost Model
1	Gas Distribution	$411.8	$402.7	$439.6	9.2%	$36.9	$446.8	$376.5
2	Electric Distribution	635.4	664.1	765.5	15.3%	101.4	668.6	556.4
3	Customer Care	410.8	397.2	411.0	3.5%	13.9	413.4	304.2
4	Nuclear Generation	404.0	383.7	398.1	3.7%	14.4	404.3	333.0
5	Power Generation	241.6	240.6	234.3	-2.6%	(6.3)	247.0	193.9
6	Energy Procurement	61.5	57.3	57.3	-0.1%	(0.1)	57.7	42.6
7	IT	267.6	242.9	258.5	6.4%	15.6	276.1	266.8
8	Shared Services	95.6	89.5	87.9	-1.7%	(1.5)	106.7	233.1
9	Corporate Services	307.2	314.9	319.5	1.5%	4.6	339.5	303.2
10	New Cost Model: Benefits, Payroll Taxes & Reimbursable Revenues	0.0	0.0	0.0	0.0%	0.0	0.0	381.0
11	Subtotal	$2,835.5	$2,793.0	$2,971.8	6.4%	$178.8	$2,960.1	$2,990.7
12	Allocated Contingency	0.0	75.0	0.0	N/A	(75.0)	60.0	60.0
13	Total	**$2,835.5**	**$2,868.0**	**$2,971.8**	**3.6%**	**$103.8**	**$3,020.1**	**$3,050.7**

Notes:

1) Allocated Contingency included in the table refers to funds provided to the lines of business 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) Amounts include separately funded projects and programs that are incorporated in the 2014 GRC, such as SmartMeter™, the Cornerstone project, the Fuel Cell project, the Vaca Dixon project, and meter reading costs.
4) Line 10 has been added to capture Companywide budget that is not included in the LOBs' 2016 budget amounts using the new cost model.
5) The amounts for Shared Services and IT in the 2016 Budget New Cost Model column are net of Chargeback allocations.
6) The amounts for 2015 and 2016 exclude costs associated with certain one-time costs that are not expected to reoccur.

2015 BUDGET VS. ACTUAL CAPITAL BY LINE OF BUSINESS
(MILLIONS OF DOLLARS)

Line No.	Line of Business	2015 Imputed Regulatory Values	2015 Budget	2015 Actual	2015 Difference (%)	2015 Difference ($)	2016 Budget Old Cost Model	2016 Budget New Cost Model
1	Gas Distribution	$628.8	$736.6	$692.5	-6.0%	($44.1)	$795.0	$789.8
2	Electric Distribution	1,351.9	1,595.2	1,623.2	1.8%	27.9	1,593.0	1,552.5
3	Customer Care	144.5	180.3	174.4	-3.3%	(5.9)	168.9	152.8
4	Nuclear Generation	215.3	244.1	229.2	-6.1%	(14.9)	221.8	228.8
5	Power Generation	282.0	338.9	250.4	-26.1%	(88.5)	298.8	309.1
6	Energy Procurement	24.6	17.0	15.8	-7.5%	(1.3)	12.1	12.0
7	IT	171.8	144.7	193.2	33.6%	48.6	148.8	149.5
8	Shared Services	189.7	251.0	240.6	-4.2%	(10.5)	389.7	394.4
9	Corporate Services	40.0	36.9	48.6	31.9%	11.8	36.2	36.1
10	Subtotal	$3,048.6	$3,544.8	$3,467.9	-2.2%	($76.9)	$3,664.4	$3,624.9
11	Allocated Contingency	0.0	0.0	0.0	N/A	(0.0)	12.0	12.0
12	Total	**$3,048.6**	**$3,544.8**	**$3,467.9**	**-2.2%**	**($76.9)**	**$3,676.4**	**$3,636.9**

Notes:

1) Allocated Contingency included in the table refers to funds provided to the lines of business for unforeseen events that require a timely and flexible response outside the standard planning and budgeting process.

2) 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, and the Vaca Dixon project.

3) The 2015 capital budget amount for Power Generation has been corrected to include $21.3 million of Hydro Relicensing balancing account budget which was inadvertently omitted in the budget compliance report submitted on March 30, 2015.

4) The 2016 budgets for some lines of business include amounts carried over from 2015.

PART B – 2015 BUDGET VS. RECORDED COMPARISON

PART B – 2015 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 2015 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 2015 budgeted and recorded costs for each line of business.

Gas Distribution – The Gas Distribution organization overspent its 2015 expense budget by $36.9 million or 9.2 percent. The increase was primarily driven by an increase in headcount and work activities to support the Enterprise Records and Information Management program and Enterprise Corrective Action Program. The increase was also due to higher spending to respond to gas leaks and emergencies, as well as additional locate and mark activities. The increase was partially offset by delays in IT projects. Gas Distribution underspent its 2015 capital budget by $44.1 million or 6.0 percent. The decrease was primarily driven by leak repairs that were less-than-expected given leak find rates lower-than-forecast, reductions in the number of district regulator rebuilds, and a lower volume of residential and non-residential connection activities.

Electric Distribution – The Electric Distribution organization overspent its 2015 expense budget by $101.4 million or 15.3 percent. The primary driver was higher spending on major emergencies due to severe weather events and wildfires. Additional increases were related to overhead and underground maintenance work, and increased volume of customer requests for field service and new business. The increases were offset, in part, by lower-than-planned spending for the pole intrusive inspection program. Electric Distribution overspent its 2015 capital budget by $27.9 million or 1.8 percent. The increase was primarily due to higher spending on major emergencies, substation capacity projects, and substation emergency equipment replacements. The increase was partially offset by third-party delays and re-scoping associated with Rule 20A projects, underground asset and base reliability replacement projects that were rescheduled to 2016, and lower-than-planned spending on substation switchgear projects.

Customer Care – The Customer Care organization overspent its 2015 expense budget by $13.9 million or 3.5 percent. The primary drivers were reclassification of 2010-2015 historical Natural Gas Appliance Testing costs from non-earnings (balancing account) to GRC expense, more non-tariffed products and services work activities, and Energy Solutions and Service representatives spending more time than planned on customer service work related to billing, reliability and outage response. These

increases were partially offset by decreases in manual meter reading expenses, fewer resources required due to consolidation of Economic Development work under a single organization, and reduced staffing through attrition in local customer service offices. Customer Care underspent its 2015 capital budget by $5.9 million or 3.3 percent. The decrease was primarily due to completion of technology solutions work for the Channel of Choice program under budget, transition of remaining technology work to Corporate Affairs, and transfer of funds to Corporate Real Estate for contact center remodel work. These decreases were partially offset by higher-than-planned electric meter purchases and installations and gas module installations.

Nuclear Generation – The Nuclear Generation organization overspent its 2015 expense budget by $14.4 million or 3.7 percent. The increase was primarily due to higher material costs for plant maintenance, emergent maintenance and discrete project work, and not fully achieving planned work efficiency efforts in security and maintenance work. The increase was also attributed to the reclassification of capital cost for the Fragilities and Seismic studies work to expense. In 2015, Nuclear Generation underspent its capital budget by $14.9 million or 6.1 percent, primarily due to re-classification of the Fragilities and Seismic studies work to expense from capital. The decrease was also driven by schedule changes for regulatory-driven work on fire protection and emergency planning projects, and scope changes for the Fukushima primary storage and equipment project.

Power Generation – The Power Generation organization underspent its expense budget by $6.3 million or 2.6 percent in 2015. The primary drivers of the underspending were lower than planned hot gas path inspection costs at the Colusa Generating Station and scope change in the Pit 7 Flip Buckets project which resulted in planned expense work being reclassified as a capital project. In 2015, Power Generation's recorded capital expenditures were $88.5 million or 26.1 percent less than budgeted. This decrease was primarily due to the transfer of funding for the new Auburn Headquarters purchase to Corporate Real Estate. The decrease was also related to higher-than-planned capital efficiencies, permitting delays, and a settlement-related vendor credit for the Colusa Generating Station.

Energy Procurement – The Energy Procurement organization spent to the 2015 expense budget. The Energy Procurement organization underspent its capital budget by $1.3 million, or 7.5 percent, primarily due to the deferral of the Least Cost Dispatch Systems Upgrade project, and delays in the CAISO MAP Initiative program.

Information Technology (IT) – The IT organization overspent its expense budget by $15.6 million or 6.4 percent in 2015. The primary drivers of the overspending were higher implementation costs for key enterprise project management technology solutions due to complex interfaces, capital to expense reclassifications for work originally planned as capital but executed as expense, and an increase in application support for new business application systems that moved into production, e.g., Geographic Information Systems for Gas Distribution. The increase was partially offset by efficiencies gained in vendor contract negotiations for ongoing support. IT overspent its 2015 capital budget by $48.6 million or 33.6 percent. The overspending

was primarily due to the Disaster Recovery projects within Datacenter Technology solutions. These projects address issues within our critical infrastructure and application systems at an enterprise level. The increase was partially offset by completing the Flexera project, which addressed continuous improvement efforts, ahead of schedule and at a reduced cost.

Shared Services – The Shared Services organization underspent its 2015 expense budget by $1.5 million or 1.7 percent. The primary drivers of the underspending were lower expense-related work in the San Rafael Service Center, Stockton Regional Office and Fresno Office projects. The decrease was partially offset by increases in facility maintenance costs. Shared Services underspent its 2015 capital budget by $10.5 million or 4.2 percent. The primary driver of the underspending is due to the Stockton Regional Office project.

More information is provided in the sections below, which provide variance explanations by MWC between 2015 recorded and budgeted amounts where the differences are at least 10 percent or $1 million. The information in this report is arranged by line of business, 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 PG&E's presentation of the 2014 GRC.

SECTION 2
Gas Distribution
Detailed Variance Explanations

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

TABLE 2-1
GAS DISTRIBUTION 2015 EXPENSE COMPARISON SUMMARY
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	2016 Budget New Cost Model
1	Support	AB	$10,831	$24,294	$13,463	$11,947
2	Provide Field Service	DD	101,906	105,653	3,747	51,499
3	Leak Survey	DE	26,084	28,270	2,185	27,394
4	Locate & Mark	DF	34,598	39,770	5,173	21,458
5	Cathodic Protection	DG	12,577	13,710	1,133	9,648
6	Develop & Provide Training	DN	0	1,986	1,986	1,750
7	Meter Protection Program	EX	0	503	503	703
8	Operate Gas Distribution System	FG	15,595	14,099	(1,496)	9,216
9	Preventive Maintenance (Gas)	FH	14,315	16,691	2,376	13,075
10	Corrective Maintenance (Gas)	FI	78,816	83,520	4,705	99,406
11	Gas Mapping	GF	4,384	6,566	2,182	4,075
12	Gas Distribution Planning & Operations Engineering	GG	10,255	8,645	(1,610)	8,094
13	Natural Gas Fueling Facilities O&M	GM	5,128	6,369	1,241	5,410
14	Gas Research, Development & Demonstration	GZ	1,654	1,210	(444)	2,415
15	Gas Meter Maintenance	HY	2,256	3,726	1,470	1,407
16	Gas Distribution Integrity Management	JQ	27,521	25,437	(2,084)	30,347
17	Distribution Integrity Management Program	JS	0	0	0	0
18	Gas Distribution Leak Survey & Repair	JU	25,400	31,613	6,213	18,933
19	Maintain IT Applications & Infrastructure	JV	23,490	20,073	(3,417)	21,602
20	Provide Executive Services	KT	0	0	0	1,200
21	Gas Expense WRO Activities	LK	7,933	7,494	(439)	5,337
22	Operational Management	OM	0	0	0	9,237
23	Operational Support	OS	0	0	0	22,373
24	Total		$402,743	$439,631	$36,888	$376,524

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

TABLE 2-2
GAS DISTRIBUTION 2015 CAPITAL COMPARISON SUMMARY
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	2016 Budget New Cost Model
1	Tools and Equipment	05	$50,383	$9,283	($41,100)	$14,690
2	Gas Pipeline Replacement Program	14	210,864	235,633	24,769	288,843
3	Gas Meter Protection	27	335	639	304	196
4	Gas Distribution Customer Connections	29	80,000	66,414	(13,586)	67,836
5	NGV – Station Infrastructure	31	3,660	3,644	(16)	3,989
6	Gas Distribution New Capacity	47	27,775	26,960	(815)	35,190
7	Gas Distribution Reliability	50	207,219	171,002	(36,217)	184,407
8	Gas Work at the Request of Others	51	59,450	74,388	14,938	78,769
9	Gas Distribution Emergency Response	52	650	1,439	789	656
10	Gas Metering Capital	74	4,549	4,311	(237)	2,932
11	Manage Buildings	78	6,971	10,397	3,426	18,335
12	Build IT Apps & Infra	2F	40,880	43,933	3,053	35,130
13	Gas Distribution Replace/Convert Customer HPRs	2K	13,166	17,786	4,621	31,691
14	Gas Distribution Control Operations Assets	4A	30,723	26,676	(4,047)	27,166
15	Total		$736,625	$692,506	($44,118)	$789,830

MWC Descriptions – Expense

MWC AB – Support – encompasses general support of the gas distribution system, as well as a number of smaller programs, including: (1) Miscellaneous expenses such as industry association dues; and (2) Collection point for zero sum allocation type work such as Standard Cost[1] Variance, Blanket Purchase Orders and Working Stock.

MWC DD – Provide Field Services – includes customer generated requests for service that require site visit by field technician. Service requests include investigating reports of possible gas leaks, carbon monoxide monitoring, customer requests for stop/starts of gas service, appliance pilot relights, appliance adjustment and safety checks. Customers initiate requests for service through PG&Es call centers or local offices. Service orders are primarily dispatched via Mobile Connect (FAS) directly to ruggedized laptops installed in service vehicles.

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1 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 DE – Leak Survey – includes periodic or routine leak surveys performed by PG&E on its distribution system that are necessary to comply with pipeline safety regulations. MWC DE also includes special leak surveys conducted by PG&E on its gas distribution system that are outside of the routine leak survey schedule for either operating reasons or to assess the integrity of the pipe. For example, a special leak survey occurs when:

- Before and during maximum allowable operating pressure updates of gas distribution facilities;
- Before, during and after some major third-party construction projects;
- For leak rechecks;
- A customer or third-party complains of gas leakage.

Leak Rechecks and Customer Calls are accounted within their own MAT.

MWC DF – Locate and Mark – includes the work necessary 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 systems. Builders, contractors, and others planning to excavate use these systems to notify underground facility owners, like PG&E, of their intent to excavate. 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 any pipes and wires are located. Excavation activities that are within specified distances of high priority facilities require field meets or standby.

MWC DG – Cathodic Protection – includes work related to mitigating the effects of corrosion on metallic gas distribution pipelines. Corrosion of 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, followed by the application of Cathodic Protection (CP) through the use of either an impressed system or galvanic anodes as required by federal pipeline safety regulations.

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 meter set.

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 – Natural Gas Fueling Facilities Operation and Maintenance (O&M) – includes the work required to maintain and operate existing natural gas fueling facilities. PG&E operates over 800 Natural Gas Vehicles (NGVs) and has over 6,000 customers that use their natural gas fueling facilities. PG&E's network of natural gas fueling stations also serves as a back up to customer owned stations that are not available due to breakdowns or maintenance.

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 –Gas Meter Maintenance – the meter set is defined as the facilities between the shut-off valve (i.e., service valve and inlet valve) and service tee or meter outlet valve.
Maintenance includes:

- Corrective Maintenance work performed on meter sets > 1,000 CFH and < or = 1,000 CFH. Outlet Valve > or = 2" in diameter and < 2" in diameter.
- Preventive Maintenance work performed on meter sets >1,000 CFH. Preventive maintenance work includes: Differential Pressure Tests, Regulator A Inspections, Pressure Verification, Electronic Corrector Maintenance, Turbine Spin Test, Delta A Turbine and Ultra-sonic Diagnostic Testing.

MWC JQ – Distribution Integrity Management Program (DIMP) – includes efforts to enhance gas distribution system safety by identifying risks to the gas distribution system and addressing those risks. The program is mandated by Federal regulations. The types of work that this funding would cover include development and improvements in the following areas: DIMP program, emergent work, DIMP leak surveys, and the Cross Bore Inspection Program.

MWC JS – Distribution Integrity Management Program – 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 included developments and improvements in the following areas: the DIMP program, DIMP leak surveys, and Cross Bore Inspection Program. Per Decision 14-08-032, the DIMP balancing account was closed beginning in 2014.

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 Survey, Gas Leak Repair, Meter Set Gas Leak Repair, Gas Tee-Cap Repair, and Gas Atmospheric Corrosion Inspection.

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

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.

New MWC Descriptions – Expense

MWC DN – Develop and Provide Training – the Gas Training Curriculum Development program creates new, and enables significant revisions to existing training materials ensuring that the Gas Operations workforce is, and remains, competent, safe, and qualified. The Training Curriculum program does not include the general maintenance or delivery of training materials.

MWC KT – Provide Executive Services – includes support for PG&E functions and Utility performance. The chief responsibility of the Utility President is to assure that PG&E's LOBs provide safe and reliable gas and electric service that is affordable and environmentally sound. The primary focus of this office has been to provide leadership to PG&E's employees so that the Company achieves its core vision.

MWC OM – Operational Management –includes labor and employee-related costs to provide supervision and management support. MWC OM also includes costs incurred by the administrative staff working for the supervisors/managers.

MWC OS – Operational Support – includes labor and employee-related costs to provide services and support that are unrelated to supervision and management. Examples include Business Finance and Sourcing that support the lines of business.

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GAS DISTRIBUTION EXPENSE AND CAPITAL INFORMATION

TABLE 2-3
GAS DISTRIBUTION 2015 EXPENSE COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
1	AB	$10,831	$24,294	$13,463	Increase due to a higher level of headcount and work activities for the Enterprise Records and Information Management program and the Enterprise Corrective Action Program (ECAP).
2	DD	101,906	105,653	3,747	Increase due to additional resources to respond to gas leaks and emergencies and higher unit costs in customer-generated field services work.
3	DE	26,084	28,270	2,185	Increase due to more leak recheck units (MAT DED).
4	DF	34,598	39,770	5,173	Increase due to a higher level of Locate and Mark tickets than expected. Additionally, contract resources were used to meet high ticket volume and enable training of new employees.
5	DG	12,577	13,710	1,133	Increase due to a higher level of activities in Cathodic Protection Monitoring, Cathodic Protection Troubleshooting, and Cathodic Protection Rectifier Maintenance.
6	DN	0	1,986	1,986	Increase due to a higher level of curriculum development activities. MWC DN is a new MWC for Gas Operations. Increase due to budget transfer from MWC AB of Curriculum Development budget costs.
7	EX	0	503	503	Increase due to customer-driven meter protection inspections that were not planned for in 2015. The 2015 budget was established at zero because PG&E accelerated completion of 2015 planned work into 2014.
8	FG	15,595	14,099	(1,496)	Decrease due to a higher level of staff turnover (including re-organization), and a higher level of charge-out to capital projects, compared to plan.
9	FH	14,315	16,691	2,376	Increase due to a higher level of maintenance activities at regulator stations and higher unit costs.
10	FI	78,816	83,520	4,705	Increase due to higher unit costs than planned for main and service leak repairs, and more meter set leak repair units than planned. Increase was offset partially by transferring costs incurred above the balancing account cost cap (unit cost cap overruns) to MWC JU, and performing fewer tee-cap repairs.
11	GF	4,384	6,566	2,182	Increase due to aging workload, a portion of costs associated with approximately 700 jobs carried over from a 2014 backlog, which was not included in the original budget plan.
12	GG	10,255	8,645	(1,610)	Decrease due to a higher level of capital design work (over 103 miles of Gas Distribution pipe replacement vs. 80 miles planned), which diverted resources from expense work.
13	GM	5,128	6,369	1,241	Increase due to greater than anticipated expenditures to maintain safety and reliability, largely associated with aging assets.

PACIFIC GAS AND ELECTRIC COMPANY
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GAS DISTRIBUTION EXPENSE AND CAPITAL INFORMATION

TABLE 2-3
GAS DISTRIBUTION 2015 EXPENSE COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
14	GZ	1,654	1,210	(444)	Decrease due to co-funding from other companies to perform gas research and development as well as delays in the completion of projects including the installation of sensors on the distribution system.
15	HY	2,256	3,726	1,470	Increase due to a higher level of activities and higher unit cost in gas meter repair and maintenance.
16	JQ	27,521	25,437	(2,084)	Decrease primarily due to a $1.85M transfer of budget to MWC AB.
17	JU	25,400	31,613	6,213	Increase due to higher main and service leak repair unit costs than planned. Unrecoverable Balancing Account costs were transferred to MWC JU.
18	JV	23,490	20,073	(3,417)	Decrease due to delays in the As-Built Record Consolidation project as a result of requirement interdependencies with the Pathfinder Project. Decrease was partially offset by increased costs for the Leak Survey collaboration with Picarro to define new technical capabilities to further leverage Picarro functionality.
19	LK	7,933	7,494	(439)	Immaterial variance.
20	Total	$402,743	$439,631	$36,888	

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 Aldyl-A-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 meter set.

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 (NGV) Station Infrastructure – includes keeping PG&E's natural gas fueling infrastructure safe and in compliance for PG&E's fleet and customers. This work includes:

1) Cathodic protection and underground corrosion protection;
2) Upgrading stations from 3,000 psi to 3,600 psi to better serve the vehicles being produced in the market today;
3) Increasing the reliability of stations;
4) Security monitoring as required at some public access stations; and
5) Remote monitoring of stations.

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: mains, 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.
The meter set is defined as the facilities between the shut-off valve (i.e., service valve and inlet valve) and service tee or meter outlet valve.

Maintenance includes:

1) Compliance – Scheduled Meter Change outs (SMC) < or = 1,000 CFH
2) Compliance – Periodic Meter Change outs, every 10 years (PMC) > 1,000 CFH
3) Corrective Maintenance work with replacement of meter performed on meter sets < or = 1,000 CFH and > 1,000 CFH; Meter outlet valve > or = 2'' diameter
4) Meter removal (retire) < or =1,000 CFH and > 1,000 CFH
5) New Business < 400 CFH and 400 - 1,000 CFH
6) Capital projects (i.e., ECAT Replacement)
7) SmartMeter™ gas module replacements

MWC 78 – Manage Buildings – includes capital buildings projects (i.e., facility upgrades/improvements as well as new construction) for Gas Operations.

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

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.

PACIFIC GAS AND ELECTRIC COMPANY
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GAS DISTRIBUTION EXPENSE AND CAPITAL INFORMATION

TABLE 2-4
GAS DISTRIBUTION 2015 CAPITAL COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
1	05	$50,383	$9,283	($41,100)	Decrease due to Emergent/Contingency budgeted centrally in MWC 05 while recorded costs for the approved projects are captured in the appropriate MWC discussed below.
2	14	210,864	235,633	24,769	Increase primarily due to additional main replacement.
3	27	335	639	304	Increase due to higher unit cost than planned in the gas meter protection activities.
4	29	80,000	66,414	(13,586)	Decrease due to lower volume of residential and non-residential connection activities. Additional decrease due to lower unit cost for residential connections.
5	31	3,660	3,644	(16)	Immaterial variance.
6	47	27,775	26,960	(815)	Immaterial variance.
7	50	207,219	171,002	(36,217)	Decrease primarily due to leak find rates lower than planned and a resulting reduction in leak repairs, and reduction in the number of district regulator rebuilds. Decrease was partially offset by an increase in the overbuild program.
8	51	59,450	74,388	14,938	Increase due to a higher volume of work requested by governmental agencies or third parties. Additional increase due to lower than expected reimbursement amounts compared to historical average.
9	52	650	1,439	789	Increase due to more emergency response service replacements as a result of higher than expected dig-ins.
10	74	4,549	4,311	(237)	Immaterial variance.
11	78	6,971	10,397	3,426	Increase due to additional support work on the Gas Operations Technical Training Facility.
12	2F	40,880	43,933	3,053	Increase due to higher costs in ECAP including the acceleration of 2016 work related to scope development and completion of IT dashboard and reporting into the 2015 ECAP release, as well as transfer of budget by Leak Survey group to Gas Technology for purchase of Picarro units. Increase was partially offset by SCADA system replacement delays.

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GAS DISTRIBUTION EXPENSE AND CAPITAL INFORMATION

TABLE 2-4
GAS DISTRIBUTION 2015 CAPITAL COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
13	2K	13,166	17,786	4,621	Increase due to a higher unit cost and increase in number of High Pressure Regulator (HPR) units replaced and/or re-built.
14	4A	30,723	26,676	(4,047)	Decrease primarily due to Gas Control Application Software and Control Room Processes capital projects completed sooner than expected and transitioning to maintenance/update (expense) mode. Consequently, capital was reallocated to the IT expense budget.
15	Total	$736,625	$692,506	($44,118)	

SECTION 3
Electric Distribution
Detailed Variance Explanations

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

TABLE 3-1
ELECTRIC DISTRIBUTION 2015 EXPENSE COMPARISON SUMMARY
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	2016 Budget New Cost Model
1	Support and Emergency Preparedness and Response	AB	$15,602	$24,540	$8,937	$28,112
2	Electric Distribution Operation Activities	BA	38,489	40,203	1,714	26,062
3	Patrols and Inspections	BF	49,913	50,235	322	28,927
4	Electric Distribution Routine Emergency	BH	81,063	82,638	1,576	43,931
5	Maintenance of Other Equipment	BK	2,582	2,718	136	1,560
6	Customer Field Service Work	DD	24,537	28,878	4,341	13,149
7	Develop & Provide Training	DN	3,132	2,073	(1,059)	3,097
8	New Customer Connection Service Inquiry Activities	EV	10,670	13,627	2,957	9,003
9	Work Requested by Others (WRO)	EW	17,326	16,575	(751)	10,547
10	Electric Engineering and Planning	FZ	20,421	21,156	735	13,113
11	Poles-Intrusive Inspection/Test and Treat	GA	16,229	12,490	(3,739)	12,163
12	Operate and Maintain Substations	GC	41,642	41,662	19	24,572
13	Electric Distribution Mapping	GE	8,044	6,443	(1,601)	2,767
14	Vegetation Management Balancing Account	HN	194,200	194,094	(106)	198,800
15	Distribution Automation and Protection Support	HX	2,010	2,088	78	1,272
16	Electric Distribution Major Emergency	IF	44,230	126,637	82,407	46,865
17	Maintain IT Applications & Infrastructure	JV	3,400	5,113	1,713	5,545
18	Preventive Maintenance and Equipment Repair, Overhead	KA	60,253	62,548	2,295	39,051
19	Preventive Maintenance and Equipment Repair, Underground	KB	23,259	25,358	2,099	13,515
20	Preventive Maintenance and Equipment Repair, Network	KC	7,089	6,444	(645)	3,578
21	Provide Executive Services	KT	0	0	0	1,320
22	Provision for Risk and Security Services	KZ	0	0	0	4,000
23	Operational Management	OM	0	0	0	10,199
24	Operational Support	OS	0	0	0	15,224
25	Total		$664,092	$765,522	$101,430	$556,372

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ELECTRIC DISTRIBUTION EXPENSE AND CAPITAL INFORMATION

TABLE 3-2
ELECTRIC DISTRIBUTION 2015 CAPITAL COMPARISON SUMMARY
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	2016 Budget New Cost Model
1	Tools and Equipment	05	($11,630)	$4,617	$16,246	$8,068
2	Electric Distribution Line and Equipment Capacity	06	93,114	95,722	2,608	108,350
3	Pole Replacement	07	98,431	103,053	4,623	72,304
4	Base Reliability Program	08	46,127	29,661	(16,466)	39,046
5	Electric Distribution Automation and Protection	09	38,050	44,281	6,231	42,891
6	Electric Work at the Request of Others	10	98,000	93,335	(4,665)	80,648
7	Electric Distribution Customer Connections	16	355,000	355,443	443	379,399
8	Electric Distribution Routine Emergency	17	135,942	145,786	9,844	131,651
9	Emergency Preparedness & Response	21	19,900	9,041	(10,859)	(11,283)
10	Implement Real Estate Strategy/Manage Buildings	23	4,878	2,175	(2,703)	4,038
11	Electric Distribution Work at the Request by Others – Rule 20A	30	76,000	41,885	(34,115)	81,239
12	Electric Distribution Substation Capacity	46	54,804	68,301	13,497	50,127
13	Electric Distribution Replace Substation Equipment	48	61,825	49,184	(12,641)	71,105
14	Targeted Reliability Program	49	61,907	50,149	(11,757)	57,264
15	Electric Distribution Substation Transformer Replacements	54	50,398	46,571	(3,827)	45,002
16	Electric Distribution Underground Asset Replacement	56	110,399	90,905	(19,494)	109,878
17	Electric Distribution Substation Safety and Environmental	58	1,052	3,222	2,170	1,523
18	Electric Distribution Substation Emergency Replacement	59	19,324	34,092	14,768	33,165
19	Electric Operations Control Center Facility	63	24,200	20,591	(3,609)	1,667
20	Electric Distribution Major Emergency	95	52,323	128,686	76,363	55,210
21	Electric Distribution Preventive Maintenance, Overhead	2A	103,526	109,976	6,450	114,262
22	Electric Distribution Preventive Maintenance, Underground	2B	39,813	43,506	3,693	43,774
23	Electric Distribution Preventive Maintenance, Network	2C	19,018	19,694	676	14,581
24	Build IT Applications & Infrastructure	2F	42,838	33,303	(9,535)	18,611
25	Total		$1,595,237	$1,623,178	$27,941	$1,552,521

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,[1] and an offset for productivity improvements. This major work category also includes costs for PG&E's Emergency Preparedness and Response organization.

MWC BA – Electric Distribution Operation Activities – includes distribution control center and field operations, including work performed by Distribution Operators, dispatchers, schedulers and engineers. This work includes operating switches to transfer load between circuits, isolating customers or de-energizing sections of line during planned construction or maintenance, dispatching work to troublemen in the field, 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 – Electric Distribution Routine Emergency – 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 – Customer Field Service Work – 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.

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1 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. Courses also include pathway to supervisor and superintendent programs.

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 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 and technical support for automation and protection equipment. Also includes the service and software costs associated with distribution SCADA software. Engineering support consists of three components: (1) Automation Engineering support; (2) Protection Engineering support; and (3) SCADA Specialist support.

MWC IF – Electric Distribution Major Emergency – includes response work to OH or UG outages when a division OEC has been activated and consistent with PG&E's Major Emergency Balancing Account Criteria Guidance Document. Beginning in 2014, these costs are included in the two way Major Emergency balancing account authorized by Decision 14-08-032.

MWC JV – Maintain IT 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; oil sampling and other network maintenance work.

New MWC Descriptions – Expense

MWC KT – Provide Executive Services – includes support for PG&E functions and Utility performance. The chief responsibility of the Utility President is to assure that PG&E's LOB's provide safe and reliable gas and electric service that is affordable and environmentally sound. The primary focus of this office has been to provide leadership to PG&E's employees so that the Company achieves its core vision.

MWC KZ – Provision for Risk and Security Services – includes support for corporate security, risk management, internal audit, and insurance functions. Work is primarily Corporate Security expense costs. Corporate Security includes guard services, investigations and investigators, executive protection, access control, physical security testing, video monitoring our security facilities, and fixing broken security equipment.

MWC OM – Operational Management – includes labor- and employee-related costs to provide supervision and management support. MWC OM also includes costs incurred by the administrative staff working for the supervisors/ managers.

MWC OS – Operational Support – includes labor- and employee-related costs from cost centers that provide support that is unrelated to supervision and management. Examples include Business Finance and Sourcing that support the lines of business.

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TABLE 3-3
ELECTRIC DISTRIBUTION 2015 EXPENSE COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
1	AB	$15,602	$24,540	$8,937	Increase due to (1) overall planned efficiency savings included in MWC AB but realized in individual MWCs throughout the year; and (2) costs related to two process improvements that are now entirely expensed due to an accounting change.
2	BA	38,489	40,203	1,714	Increase due to higher intercompany electric usage costs than planned.
3	BF	49,913	50,235	322	Immaterial variance.
4	BH	81,063	82,638	1,576	Increase due to higher level of activity in routine emergencies.
5	BK	2,582	2,718	136	Immaterial variance.
6	DD	24,537	28,878	4,341	Increase due to a higher volume and higher cost in customer field service requests than planned.
7	DN	3,132	2,073	(1,059)	Decrease due to an unanticipated vendor credit, efficiency initiatives and some curriculum development funded as part of technology projects.
8	EV	10,670	13,627	2,957	Increase due to increased volume and cost of reviewing customer inquiries on existing services.
9	EW	17,326	16,575	(751)	Immaterial variance.
10	FZ	20,421	21,156	735	Immaterial variance.
11	GA	16,229	12,490	(3,739)	Decrease due to additional joint pole credits, lower than planned unit costs for intrusive inspections and pole reinforcements, fewer intrusive inspections completed than planned and fewer poles requiring evaluation than planned.
12	GC	41,642	41,662	19	Immaterial variance.
13	GE	8,044	6,443	(1,601)	Decrease due to the deployment of the Electric Distribution Asset Management Geographic Information System (ED/AM GIS) program, which resulted in efficiency gains and reduced cost. Decrease is also due to more mapping work completed on capital than expense jobs.
14	HN	194,200	194,094	(106)	Immaterial variance.
15	HX	2,010	2,088	78	Immaterial variance.

PACIFIC GAS AND ELECTRIC COMPANY
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ELECTRIC DISTRIBUTION EXPENSE AND CAPITAL INFORMATION

TABLE 3-3
ELECTRIC DISTRIBUTION 2015 EXPENSE COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
16	IF	44,230	126,637	82,407	Increase due to unanticipated severe weather events and wildfires.
17	JV	3,400	5,113	1,713	Increase due to reclassification of capital costs to expense for the Estimator Work Management and SAP Work Management projects, as well as additional change management costs for several other projects. Increase is also due to additional emergent costs for the Mutualink and Mass Notification projects.
18	KA	60,253	62,548	2,295	Increase due to a higher volume of overhead notification units and wood pole bridging costs moved from Transmission to Distribution based on a FERC ruling (in Transmission Owner 16 rate case) that the costs should be included in electric distribution.
19	KB	23,259	25,358	2,099	Increase due to emergent cable splice work in Foster City, and a higher allocation of transformer refurbishment costs, adjusted from an historical based average to an actual rate that includes transformer refurbishment costs.
20	KC	7,089	6,444	(645)	Immaterial variance.
21	Total	$664,092	$765,522	$101,430	

MWC Descriptions – Capital

MWC 05 – Tools and Equipment – includes the costs of miscellaneous tools and equipment, ATS tools, 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. 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. ATS tools include the cost of laboratory and test equipment used for field work or in ATS laboratories. 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 replacing obsolete switches; 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.

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 Routine Emergency – includes facility replacements in response to OH or UG outages that occur during normal conditions.

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.

MWC 23 – Implement Real Estate Strategy/Manage Buildings – includes the costs for new buildings, yards, and Applied Technology Services (ATS), including the purchase of land and the purchase and installation of furniture, office equipment, and IT Infrastructure, ATS labs, 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 – Rule 20A – 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; work to improve service to customers experiencing five or more sustained outages during the year; and expenditures to resolve high-impact reliability issues. This program also includes the purchase of line reclosers (revolving stock), the 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 cables (includes tie-cables), primary and secondary Network Cables, Transfer Ground Rocker Arm Main/Transfer Ground Rocker Arm Line (TGRAM/TGRAL) switches, Load Break Oil Rotary (LBOR) switches, and replacement of failed primary distribution cables. Program also includes performing cable rejuvenation (injection) and testing.

MWC 58 – Electric Distribution Substation Safety and Environmental – includes substation security, fire protection and suppression work. Also 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. This MWC also includes ongoing capital improvements and enhancements to the consolidated control centers, the Fresno Dispatch Facility and the Distribution Technology Operations Center in San Ramon.

MWC 95 – Electric Distribution Major Emergency – includes response work to OH or UG outages when a division OEC has been activated and consistent with PG&E's Major Emergency Balancing Account Criteria Guidance Document. Beginning in 2014, these costs are included in the two way Major Emergency balancing account authorized by Decision 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. Additional work includes safety improvement programs such as High-Rise Building Transformer Replacements, new monitoring system installation and manhole cover replacement program.

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

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TABLE 3-4
ELECTRIC DISTRIBUTION 2015 CAPITAL COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
1	05	($11,630)	$4,617	$16,246	Increase due to overall Electric Distribution planned efficiency savings budgeted in MWC 05 but realized in other MWCs throughout the year.
2	06	93,114	95,722	2,608	Increase due to higher than planned volume of work for agricultural pumping due to drought conditions, partially offset by some capacity projects that were rescheduled to 2016.
3	07	98,431	103,053	4,623	Increase primarily due to $3.1M goods receipt posted to the program in error and higher than expected unit cost.
4	08	46,127	29,661	(16,466)	Decrease due to lower volume of work performed in Base Reliability program activities to support increased new business workload and to support storm response. Some of the reliability projects were rescheduled to 2016.
5	09	38,050	44,281	6,231	Increase due to higher volume of work performed and an increased unit cost due to project complexity in electric distribution automation and protection activities.
6	10	98,000	93,335	(4,665)	Decrease due to lower volume of third-party driven work, combined with Electric Distribution employees performing work for Corporate Real Estate (upgrades for a network transformer vault and cable replacement at 77 Beale) and Nuclear Operations (primarily relocation of distribution facilities) so costs were booked to those lines of business.
7	16	355,000	355,443	443	Immaterial variance.
8	17	135,942	145,786	9,844	Increase is mainly due to higher than planned unit cost, which is in part attributed to (1) higher contract costs; (2) slight increase in material related costs; (3) increase in overhead allocated costs; and (4) higher than planned hours per unit due to the complexity of the outages that took place in 2015.
9	21	19,900	9,041	(10,859)	Decrease due to work performed in Corporate Real Estate Strategy and Services (CRESS) and Fleet for the Emergency Preparedness and Response (EP&R) program; costs were booked to those lines of business to perform this work. $8.9M was transferred to CRESS for Alternate Emergency Operations Center (EOC) and San Francisco emergency center upgrades, and $2.1M was transferred to Fleet for purchases of fuel tankers and transports, a Mobile Command Vehicle, and microwave towers for Base Camp communications.
10	23	4,878	2,175	(2,703)	Decrease due to CRESS funding a number of projects that were originally planned in Electric Distribution.
11	30	76,000	41,885	(34,115)	Decrease due to third-party delays and the need to reduce project scope because of insufficient WRO work credits.
12	46	54,804	68,301	13,497	Increase due to higher than planned expenditures on four large distribution capacity projects, 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 2016.
13	48	61,825	49,184	(12,641)	Decrease primarily due to lower than planned expenditures on several switchgear projects and a lower volume of circuit breaker projects undertaken.
14	49	61,907	50,149	(11,757)	Decrease due to lower volume of work performed compared to plan as crews were diverted to support the restoration efforts in fire areas and storm response. Some of the reliability projects were rescheduled to 2016.

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TABLE 3-4
ELECTRIC DISTRIBUTION 2015 CAPITAL COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
15	54	50,398	46,571	(3,827)	Decrease due to the reprioritization of the Berkeley T Substation Bank 1 and Bank 2 replacement project.
16	56	110,399	90,905	(19,494)	Decrease due to lower than planned unit cost for network TGRAM replacements as well as lower volume of work performed as crews were diverted to support the restoration efforts in fire-related areas and storm response. Some projects are rescheduled to 2016.
17	58	1,052	3,222	2,170	Increase due to higher than planned costs to complete the Potrero security project.
18	59	19,324	34,092	14,768	Increase due to higher than planned expenditures for unanticipated emergency events.
19	63	24,200	20,591	(3,609)	Decrease due to adjusted schedules for the Concord and Rocklin Distribution Control Center facilities and lower than expected project costs.
20	95	52,323	128,686	76,363	Increase due to unanticipated severe weather events and wildfires that took place during 2015.
21	2A	103,526	109,976	6,450	Increase due to higher volume of units for overhead notifications and Critical Operating Equipment and increased spending for Regulated Output streetlights.
22	2B	39,813	43,506	3,693	Increase due to higher volume of units for underground notifications and Critical Operating Equipment.
23	2C	19,018	19,694	676	Immaterial variance.
24	2F	42,838	33,303	(9,535)	Decrease due to completing the Electric Distribution Asset Management Geographic Information System (ED/AM-GIS) project ahead of schedule and under budget; reclassifications of capital costs to expense for the Estimator Work Management and SAP Work Management projects; and 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 but rescheduled to 2016 and beyond.
25	Total	$1,595,237	$1,623,178	$27,941	

SECTION 4
Customer Care
Detailed Variance Explanations

PACIFIC GAS AND ELECTRIC COMPANY
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CUSTOMER CARE EXPENSE AND CAPITAL INFORMATION

TABLE 4-1
CUSTOMER CARE 2015 EXPENSE PROGRAMS COMPARISON SUMMARY
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	2016 Budget New Cost Model
1	Read & Investigate Meters	AR	$29,308	$25,314	($3,994)	$17,484
2	Perform Field Services	DD	2,543	2,040	(503)	1,064
3	Manage Customer Inquiries	DK	107,093	107,650	557	68,302
4	Develop New Revenue	EL	11,260	17,051	5,792	10,408
5	Perform Electric Meter Maintenance	EY	24,645	24,674	29	10,613
6	Manage Various Customer Care Processes	EZ	44,685	38,117	(6,568)	35,094
7	Retain and Grow Customers	FK	3,729	1,403	(2,326)	844
8	Manage Energy Efficiency (Non-Balancing Account)	GM	5,098	15,453	10,355	4,706
9	Perform Gas Meter Maintenance	HY	14,579	16,369	1,790	7,236
10	Manage Various Balancing Acct Processes	IG	8,400	11,058	2,658	7,537
11	Process Customer Bills	IS	65,986	67,922	1,936	56,873
12	Manage Credit	IT	21,717	23,267	1,550	15,148
13	Collect Revenue	IU	35,856	34,441	(1,415)	23,977
14	Provide Account Services	IV	21,260	25,330	4,070	19,008
15	Maintain IT Apps & Infra	JV	1,000	923	(77)	10,655
16	Operational Management	OM	0	0	0	9,629
17	Operational Support	OS	0	0	0	5,646
18	Total		$397,157	$411,012	$13,856	$304,224

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TABLE 4-2
CUSTOMER CARE 2015 CAPITAL PROGRAMS COMPARISON SUMMARY
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	2016 Budget New Cost Model
1	IT Desktop Computers	01	$500	$17	$(483)	$0
2	CFS Tools Capital	05	2,490	264	(2,226)	906
3	Office Equipment	21	2,998	513	(2,485)	10,199
4	Implement Real-Estate Strategy	23	3,000	71	(2,929)	7,700
5	Electric Metering Capital	25	42,590	47,082	4,492	48,523
6	Gas Metering Capital	74	86,907	89,202	2,294	70,172
7	Build IT Apps & Infra	2F	40,414	36,013	(4,401)	14,268
8	SmartMeter™ Opt Out	3J	1,407	1,264	(143)	997
9	Total		$180,306	$174,427	$(5,879)	$152,766

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 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.

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 OM – Operational Management – MWC OM includes labor and employee related costs to provide supervision and management support. MWC OM also includes costs incurred by the administrative staff working for the supervisors/ managers.

MWC OS – Operational Support – MWC OS includes labor and employee related costs to provide services and support that are unrelated to supervision and management. Examples include Business Finance and Sourcing that support the lines of business.

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CUSTOMER CARE EXPENSE AND CAPITAL INFORMATION

TABLE 4-3
CUSTOMER CARE 2015 EXPENSE COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
1	AR	$29,308	$25,314	($3,994)	Decrease due to lower manual meter reading expenses as a result of additional SmartMeter™ installations and network connections.
2	DD	2,543	2,040	(503)	Decrease due to implementation of IT functionality utilizing SmartMeter™ data to reduce field visits when customers request to start or stop service.
3	DK	107,093	107,650	557	Immaterial variance.
4	EL	11,260	17,051	5,792	Increase due to higher demand for wireless services, activities related to the Utility Energy Service Contract (UESC), Sustainable Solutions and LED turnkey programs.
5	EY	24,645	24,674	29	Immaterial variance.
6	EZ	44,685	38,117	(6,568)	Decrease due to movement of budget to support activities in MWC GM, partially offset by an increase in customer programs education and outreach costs.
7	FK	3,729	1,403	(2,326)	Decrease due to: (1) costs to support Small Medium Business (SMB) activities planned in MWC FK but recorded in MWC IV; (2) lower than planned customer retention activities; and (3) consolidating Economic Development (ED) work under a single organization to provide an equivalent amount of ED support with fewer resources.
8	GM	5,098	15,453	10,355	Increase due to the Natural Gas Appliance Testing (NGAT) 2010-2015 historical costs being reclassified from Non-Earnings (balancing account) to GRC expense.
9	HY	14,579	16,369	1,790	Increase due to higher costs for gas service representatives performing customer-driven gas corrective maintenance and preventive maintenance work.
10	IG	8,400	11,058	2,658	Increase due to: (1) higher than planned SmartMeter™ Opt-Out manual meter reading unit costs associated with increased drive times between meter locations; and (2) unplanned IT costs associated with implementation of directives from Smart Meter™ Opt-Out decision (D.14-12-078), such as every-other-month meter reading and 36-month billing projects.

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TABLE 4-3
CUSTOMER CARE 2015 EXPENSE COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
11	IS	65,986	67,922	1,936	Increase due to costs for Billing Work Management Tool and USPS postal increase.
12	IT	21,717	23,267	1,550	Increase due to credit collection management software tools and related IT work.
13	IU	35,856	34,441	(1,415)	Decrease due to: (1) lower labor from headcount attrition in local customer service offices; and (2) a partial budget transfer to Corporate Real Estate for the Bakersfield Customer Service Office (CSO) remodel and Vacaville CSO lobby upgrade projects.
14	IV	21,260	25,330	4,070	Increase due to: (1) costs of the First Fuel Project to benefit SMB; and (2) Energy Solutions and Service representatives spending more time than planned on customer service work related to billing, reliability, and outage response.
15	JV	1,000	923	(77)	Immaterial variance.
16	Total	$397,157	$411,012	$13,856	

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.

MWC 3J – SmartMeter™ Opt-Out – for electric, this MWC includes purchases of electric analog meters, and field technician labor to exchange existing SmartMeter™ devices 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.

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TABLE 4-4
CUSTOMER CARE 2015 CAPITAL COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
1	01	$500	$17	($483)	Decrease due to: (1) MWC 01 budget partially transferred to Shared Services organization to purchase trucks for field employees; and (2) fewer than planned laptops purchased for field employees.
2	05	2,490	264	(2,226)	Decrease due to: (1) MWC 05 budget partially transferred to Shared Services and Corporate Real Estate to purchase vehicles for field employees and for the Stockton office remodel project, respectively; and (2) fewer than planned tools purchased for field employees.
3	21	2,998	513	(2,485)	Decrease due to: (1) lower than planned spend on office equipment; and (2) MWC 21 budget partially reprioritized to Corporate Real Estate for costs associated with the Customer Service Office remodels.
4	23	3,000	71	(2,929)	Decrease due to a complete budget transfer from MWC 23 to Corporate Real Estate for contact center remodel work.
5	25	42,590	47,082	4,492	Increase due to higher than planned electric meter purchases as a result of SmartMeter™ installations.
6	74	86,907	89,202	2,294	Increase driven by higher than planned gas module installations.
7	2F	40,414	36,013	(4,401)	Decrease due to the completion of the Customer Care projects within the Channel of Choice Program under budget; and transitioning the remaining projects—Mobile and Energy Diagnostics—to Corporate Affairs. This was partially offset by unplanned costs in the Meter to Cash Excellence Program.
8	3J	1,407	1,264	(143)	Immaterial variance.
9	Total	$180,306	$174,427	($5,879)	

SECTION 5
Nuclear Generation
Detailed Variance Explanations

PACIFIC GAS AND ELECTRIC COMPANY
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NUCLEAR GENERATION EXPENSE AND CAPITAL INFORMATION

TABLE 5-1
NUCLEAR GENERATION 2015 EXPENSE PROGRAMS COMPARISON SUMMARY
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	2016 Budget New Cost Model
1	Support	AB	$0	($84)	($84)	($0)
2	Manage Environmental Operations	AK	3,334	3,439	104	2,600
3	Manage DCPP Business	BP	10,230	5,207	(5,023)	16,267
4	DCPP Loss Prevention	BQ	42,287	47,925	5,639	43,958
5	Operate DCPP Plant	BR	101,398	99,064	(2,335)	71,141
6	Maintain DCPP Plant Assets	BS	134,517	149,514	14,997	102,867
7	Enhance DCPP Personnel Performance	BT	19,557	17,519	(2,039)	17,818
8	Procure DCPP Materials & Services	BU	56	499	443	(44)
9	Maintain DCPP Plant Configuration	BV	60,772	58,149	(2,624)	40,204
10	Manage Waste Disposal & Transportation	CR	0	75	75	0
11	Provide Nuclear Support	EO	348	203	(145)	210
12	Manage Various Balancing Acct Processes	IG	11,200	16,016	4,815	14,800
13	Maintain IT Apps & Infra	JV	0	539	539	1,555
14	Operational Management	OM	0	0	0	5,347
15	Operational Support	OS	0	0	0	16,319
16	Total		$383,700	$398,064	$14,364	$333,043

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

TABLE 5-2
NUCLEAR GENERATION 2015 CAPITAL PROGRAMS COMPARISON SUMMARY
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	2016 Budget New Cost Model
1	Office Furniture and Equipment	03	$231	$292	$60	$275
2	Fleet/Auto Equipment	04	958	1,044	86	1,046
3	Tools and Equipment	05	780	1,042	261	1,374
4	DCPP Capital Projects	20	176,440	178,389	1,949	181,405
5	Build IT Applications & Infrastructure	2F	5,982	5,158	(824)	7,069
6	Nuclear Safety and Security	3I	59,700	43,286	(16,414)	37,600
7	Total		$244,092	$229,210	($14,882)	$228,769

MWC Descriptions – Expense

MWC AB – Support – includes miscellaneous support cost from both within and outside of Nuclear Generation.

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

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

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

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 OM – Operational Management – MWC OM includes labor- and employee-related costs to provide supervision and management support. MWC OM also includes costs incurred by the administrative staff working for the supervisors/ managers.

MWC OS – Operational Support – MWC OS includes labor- and employee-related costs to provide services and support that are unrelated to supervision and management. Examples include Business Finance and Sourcing that support the lines of business.

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

TABLE 5-3
NUCLEAR GENERATION 2015 EXPENSE COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2015 Budget	2015 Actual*	2015 Difference Higher/(Lower)	Explanation
1	AB	$0	($84)	($84)	Decrease due to various credits for fuel procurement costs.
2	AK	3,334	3,439	104	Immaterial variance.
3	BP	10,230	5,207	(5,023)	Decrease due to Nuclear Generation's planned emergent work which was budgeted in MWC BP, but was reprioritized to fund unplanned emergent work in MWC BS.
4	BQ	42,287	47,925	5,639	Increase primarily due to not achieving planned efficiencies in new work processes for site security functions. These efficiencies were expected to be driven by plant security enhancements, which were not completed as planned.
5	BR	101,398	99,064	(2,335)	Decrease primarily due to higher than planned staffing attrition, delays in hiring, and lower material costs in support of plant chemistry and radiological management.
6	BS	134,517	149,514	14,997	Increase due to higher material cost for plant maintenance and higher material refurbishment costs. Increase is also due to not fully achieving planned outage work efficiencies and higher than planned cost for emergent maintenance activities and discrete project work.
7	BT	19,557	17,519	(2,039)	Decrease primarily due to lower Nuclear Regulatory Commission (NRC) license and inspection fees. The lower fees are driven by fewer inspections due to NRC work backlog and lower annual operating cost.
8	BU	56	499	443	Increase due to material costs higher than planned.
9	BV	60,772	58,149	(2,624)	Decrease due to higher staffing attrition than planned, delays in hiring, and rescheduling of engineering studies and programs.
10	CR	0	75	75	Increase due to higher hazardous waste disposal cost than planned.
11	EO	348	203	(145)	Decrease due to lower support required for internal communication efforts.
12	IG	11,200	16,016	4,815	Increase due to reclassification of capital cost for the Fragilities & Seismic Studies work to expense, and increased work on the Cyber Security project driven by further clarification of regulatory requirements.
13	JV	0	539	539	Increase due to reclassifications of capital costs to expense for the SAP Work Management (Enhancements) project.
14	Total	$383,700	$398,064	$14,364	

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.

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

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

TABLE 5-4
NUCLEAR GENERATION 2015 CAPITAL COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
1	03	$231	$292	$60	Increase due to higher demand for furniture replacements.
2	04	958	1,044	86	Immaterial variance.
3	05	780	1,042	261	Increase due to higher demand for tool replacements.
4	20	176,440	178,389	1,949	Increase primarily due to security infrastructure enhancement projects.
5	2F	5,982	5,158	(824)	Decrease largely due to reclassifications of capital costs to expense for the SAP Work Management (Enhancements) project and scheduling delays on the Electronic Shift Operations Management System Upgrade project.
6	3I	59,700	43,286	(16,414)	Decrease primarily due to reclassification of capital cost for the Fragilities & Seismic Studies work to expense, schedule changes for the National Fire Protection Association 805 and Emergency Planning projects, and scope changes for the Fukushima Primary Storage & Equipment project.
7	Total	$244,092	$229,210	($14,882)	

SECTION 6
Power Generation
Detailed Variance Explanations

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

TABLE 6-1
POWER GENERATION 2015 EXPENSE PROGRAMS SUMMARY COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	2016 Budget New Cost Model
1	Business/Miscellaneous Expense (Hydro)	AB	$3,500	$3,320	($180)	$1,664
2	Manage Environmental Operations (Hydro)	AK	1,276	1,412	136	1,143
3	Manage Environmental Operations (Fossil)	AK	3,346	3,399	52	2,478
4	Maintain Hydro Reservoirs, Dams & Waterways (Hydro)	AX	30,318	26,344	(3,974)	17,846
5	Habitat and Species Protection (Hydro)	AY	171	197	26	144
6	Perform Reimbursable Work for Others (Hydro)	BC	0	(21)	(21)	0
7	Manage Property & Bldgs (Hydro)	EP	1,412	1,536	124	1,210
8	Implement Environment Projects (Hydro)	ES	757	417	(340)	623
9	Manage Var Bal Acct Processes (Hydro)	IG	398	527	128	844
10	Manage Environ Remed (Earning) (Hydro)	JK	0	0	0	65
11	Maintain IT Apps & Infra (Hydro)	JV	914	1,525	611	0
12	Operate Hydro Generation (Hydro)	KG	54,668	52,693	(1,975)	34,687
13	Maintain Hydro Generating Equipment (Hydro)	KH	26,719	31,348	4,629	22,869
14	Maintain Hydro Buildings, Grounds & Infrastructure (Hydro)	KI	12,622	14,248	1,626	9,516
15	Regulatory Compliance Hydro Generation (Hydro)	KJ	37,964	35,424	(2,540)	35,362
16	Operational Management (Hydro)	OM	0	0	0	3,756
17	Operational Support (Hydro)	OS	0	0	0	1,672
18	Business / Miscellaneous Expense (Fossil)	AB	0	0	0	35
19	Operate Fossil Generation (Fossil)	KK	15,846	15,488	(359)	12,484
20	Maintain Fossil Generating Equipment (Fossil)	KL	46,245	43,225	(3,020)	42,502
21	Maintain Fossil Generation Buildings, Grounds & Infrastructure (Fossil)	KM	2,815	2,434	(380)	2,641
22	Operate Alternative Gen (Fossil)	KQ	417	289	(128)	306
23	Maintain Alternative Generation Generating Equipment (Fossil)	KR	1,117	429	(688)	920
24	Maintain Alternative Generation Building, Ground, Infrastructure (Fossil)	KS	109	67	(42)	24
25	Operational Management (Fossil)	OM	0	0	0	300
26	Operational Support (Fossil)	OS	0	0	0	796
27	Total		$240,612	$234,298	($6,314)	$193,887

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

TABLE 6-2
POWER GENERATION 2015 CAPITAL PROGRAMS SUMMARY COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	2016 Budget New Cost Model
1	Office Furniture & Equipment (Hydro)	03	$0	($0)	($0)	$404
2	Tools & Equipment (Hydro)	05	962	2,563	1,601	1,112
3	Tools & Equipment (Fossil)	05	397	276	(121)	334
4	Relicensing Hydro Generation (Hydro)	11	6,920	3,064	(3,856)	3,604
5	Implement Environment Projects (Hydro)	12	2,159	2,274	114	3,154
6	Build IT Applications & Infrastructure	2F	11,707	7,512	(4,195)	5,955
7	Install / Replace for Hydro Gen Safety & Regulatory Requirements (Hydro)	2L	50,030	32,712	(17,318)	48,231
8	Install / Replace Hydro Generating Equipment (Hydro)	2M	128,882	109,933	(18,949)	116,252
9	Install / Replace Reservoirs, Dams & Waterways (Hydro)	2N	64,579	52,214	(12,366)	76,232
10	Install / Replace Hydro Generation Buildings, Grounds & Infrastructure (Hydro)	2P	40,337	11,727	(28,610)	23,970
11	Install / Replace Fossil Gen Safety & Regulatory Requirements (Fossil)	2R	280	122	(158)	2,772
12	Install / Replace Fossil Generating Equipment (Fossil)	2S	10,094	5,897	(4,197)	5,814
13	Install / Replace Fossil Generation Buildings, Grounds & Infrastructure (Fossil)	2T	1,200	2,249	1,049	188
14	Install / Replace Alternative Generation Safety and Regulation (Fossil)	3A	29	0	(29)	20
15	Install / Replace Alternative Generation Equipment (Fossil)	3B	20	289	269	16
16	Construct New Alternative Generation Buildings, Grounds and Infrastructure (Fossil)	3C	10	0	(10)	0
17	Hydro Elec License & License Conditions (Hydro)	3H	21,334	19,585	(1,749)	20,997
18	Total		$338,941	$250,417	($88,524)	$309,053

MWC Descriptions – Expense

MWC AB – Business / Miscellaneous Expense – includes costs associated with Land Conservation Commitment, Contracts and Consulting Services, and miscellaneous support costs.

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. Also includes reimbursable work for other third parties.

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 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.

MWC JK – Manage Environmental Remediation (Earnings impacted) – 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 OM – Operational Management – MWC OM includes labor and employee related costs to provide supervision and management support. MWC OM also includes costs incurred by the administrative staff working for the supervisors/managers.

MWC OS – Operational Support – MWC OS includes labor and employee related costs to provide services and support that are unrelated to supervision and management. Examples include Business Finance and Sourcing that support the lines of business.

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

TABLE 6-3
POWER GENERATION 2015 EXPENSE COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
1	AB	$3,500	$3,320	($180)	Immaterial variance.
2	AK	1,276	1,412	136	Increase due to higher than planned environmental work in the DeSabla and Kings Crane Valley Hydro areas.
3	AK	3,346	3,399	52	Immaterial variance.
4	AX	30,318	26,344	(3,974)	Decrease due to: scope change in the Pit 7 Flip Buckets project, which became a capital project; the Fordyce Dam project, which is on hold pending alternative analysis; and the Spaulding Dam project, which was rescheduled from 2015 to 2016 because the scope and access to the site prevented construction in 2015.
5	AY	171	197	26	Increase due to higher than planned spending on the Zebra Quagga Prevention Program.
6	BC	0	(21)	(21)	Decrease due to higher than planned reimbursements from Yuba County Water Agency.
7	EP	1,412	1,536	124	Immaterial variance.
8	ES	757	417	(340)	Decrease primarily due to lower than planned costs on Crane Valley Dam environmental monitoring and mitigation.
9	IG	398	527	128	Increase primarily due to higher than planned spending on Chili Bar License Conditions.
10	JV	914	1,525	611	Increase due to reclassifications of costs originally planned as capital, but executed as expense for the SAP Work Management Enhancements project.
11	KG	54,668	52,693	(1,975)	Decrease due to Hydro Operations crews working more on capital projects.
12	KH	26,719	31,348	4,629	Increase due to Power Gen efficiencies that were planned in MWC KH, but were in part realized and recorded in other MWCs.

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

TABLE 6-3
POWER GENERATION 2015 EXPENSE COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
13	KI	12,622	14,248	1,626	Increase due to various unplanned infrastructure projects such as road/bridge maintenance and building repairs.
14	KJ	37,964	35,424	(2,540)	Decrease due to lower than planned costs for various Facility Safety and License Compliance projects.
15	KK	15,846	15,488	(359)	Immaterial variance.
16	KL	46,245	43,225	(3,020)	Decrease due to lower than planned Hot Gas Path Inspection costs at Colusa Generating Station, primarily due to the use of refurbished parts under the vendor Long Term Service Agreement.
17	KM	2,815	2,434	(380)	Decrease due to lower than planned facility maintenance costs at Gateway and Humboldt Bay Generating Stations, partially offset by higher than planned facility maintenance costs at Colusa Generating Station.
18	KQ	417	289	(128)	Decrease due to unanticipated Fuel Cell performance-related vendor credits and lower than planned external preliminary engineering costs.
19	KR	1,117	429	(688)	Decrease due to lower than planned equipment maintenance costs at Vaca-Dixon Solar Station and other generating facilities, and Fuel Cell performance-related vendor credits.
20	KS	109	67	(42)	Decrease due to lower than planned Solar and Fuel Cell facility maintenance costs.
21	Total	$240,612	$234,298	($6,314)	

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/Replace 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 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.

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

TABLE 6-4
POWER GENERATION 2015 CAPITAL COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
1	05	$962	$2,563	$1,601	Increase due to purchasing additional tools for the Hydro Operations, Maintenance, and Construction crews.
2	05	397	276	(121)	Decrease due to lower than planned tools and equipment for Fossil and other generation facilities.
3	11	6,920	3,064	(3,856)	Decrease due to permitting and agency decision delays on License Condition and other projects.
4	12	2,159	2,274	114	Immaterial variance.
5	2F	11,707	7,512	(4,195)	Decrease due to the reprioritization of the technology budget to support other non-technology efforts outside of Power Generation.
6	2L	50,030	32,712	(17,318)	Decrease due to delays in permitting, contracting, project work placed on hold due to need for further evaluation. Decrease is also due to higher than planned capital efficiencies.
7	2M	128,882	109,933	(18,949)	Decrease due to realized capital efficiencies, as well as delays in permitting and alternatives analysis pushing work into 2016.
8	2N	64,579	52,214	(12,366)	Decrease due to permit delays and alternatives analysis which pushed work into 2016 and reduced originally planned scope on the Wise Canal.
9	2P	40,337	11,727	(28,610)	Decrease due to funding transferred from Power Generation to Corporate Real Estate to support the Auburn Headquarters project.
10	2R	280	122	(158)	Decrease due to lower than planned costs for Fossil safety and regulatory projects.

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

TABLE 6-4
POWER GENERATION 2015 CAPITAL COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
11	2S	10,094	5,897	(4,197)	Decrease due to a settlement-related vendor credit for the Colusa Generating Station. Decrease is also driven by delays in spare transformer and technical upgrades at Humboldt Bay Generation Station.
12	2T	1,200	2,249	1,049	Increase due to higher than planned costs for the Canal Bridge replacement at Colusa Generating Station.
13	3A	29	0	(29)	Decrease due to planned safety monitoring work rescheduled to 2016.
14	3B	20	289	269	Increase due to realignment of Solar Monitoring and Control System work to match the internal Information Technology availability. Increase is due to the emergent San Francisco Fuel Cell work.
15	3C	10	0	(10)	Decrease due to planned IT Mobilization work rescheduled to 2016.
16	3H	21,334	19,585	(1,749)	Decrease due to new License Condition projects placed on hold until the license is issued.
17	Total	$338,941	$250,417	($88,524)	

SECTION 7
Energy Procurement
Detailed Variance Explanations

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

TABLE 7-1
ENERGY PROCUREMENT 2015 EXPENSE PROGRAMS SUMMARY COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	2016 Budget New Cost Model
1	Support	AB	$2,525	$2,041	($484)	$1,055
2	Maintain Buildings	BI	170	453	283	48
3	Acquire and Manage Electric Supply	CT	49,803	49,909	106	37,444
4	Gas Procurement	CV	4,123	4,069	(54)	3,053
5	Maintain IT Apps & Infrastructure	JV	711	786	75	1,008
6	Total		$57,332	$57,258	($75)	$42,608

TABLE 7-2
ENERGY PROCUREMENT 2015 CAPITAL PROGRAMS SUMMARY COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	2016 Budget New Cost Model
1	Build IT Applications & Infrastructure	2F	$17,049	$15,765	($1,284)	$12,024
2	Total		$17,049	$15,765	($1,284)	$12,024

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.

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

TABLE 7-3
ENERGY PROCUREMENT 2015 EXPENSE COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
1	AB	$2,525	$2,041	($484)	Decrease due to lower than planned Supervision & Management costs from former Energy Supply SVP and Business Finance Cost Centers.
2	BI	170	453	283	Increase due to conversion of over 150 desktops to electronic sit-stand workstations in 2015.
3	CT	49,803	49,909	105	Immaterial variance.
4	CV	4,123	4,069	(54)	Immaterial variance.
5	JV	711	786	75	Increase due to reclassification of costs for the Regulatory Enhancements project originally planned as a capital expenditure to expense.
6	Total	$57,332	$57,258	($75)	

MWC Description – Capital

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

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

TABLE 7-4
ENERGY PROCUREMENT 2015 CAPITAL COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
1	2F	$17,049	$15,765	($1,284)	Decrease due to the deferral of the Least Cost Dispatch Systems Upgrade project because the originally planned solution was based on an expected level of energy market maturity; the project has been delayed because the market is still evolving. In addition, there were delays in the CAISO MAP Initiative program which were compounded by delayed requirements from CAISO.
2	Total	$17,049	$15,765	($1,284)	

SECTION 8
Information Technology
Detailed Variance Explanations

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

TABLE 8-1
INFORMATION TECHNOLOGY 2015 EXPENSE COMPARISON SUMMARY
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	Program	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	2016 Budget New Cost Model
1	Baseline	JV	$233,792	$239,712	$5,920	$292,103[2]
2	Lifecycle	JV	2,714	1,235	(1,479)	2,003
3	Continuous Improvement	JV	1,007	(10)	(1,017)	34
4	Technology Reliability Projects	JV[1]	5,429	17,600	12,171	8,545
5	Operational Management	OM				2,036
6	Operational Support	OS				(2,199)
7	Total		$242,942	$258,536	$15,594	$302,522
8	Chargeback Allocations					(35,718)
9	Total Net of Chargeback Allocation		$242,942	$258,536	$15,594	$266,804

Note:

(1) Technology Reliability Projects include IT Tech Projects.

(2) The 2016 budget new cost model amount for MWC JV (Baseline) includes total company chargebacks before the allocation to capital. In the old cost model, the chargebacks were embedded in various expense and capital MWCS across all LOBs. Information Technology's 2016 expense budget is $266,804, net of allocations.

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

TABLE 8-2
INFORMATION TECHNOLOGY 2015 CAPITAL COMPARISON SUMMARY
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	2016 Budget New Cost Model
1	Lifecycle	2F	$42,901	$50,668	$7,767	$39,197
2	Continuous Improvement	2F	8,377	4,001	(4,376)	3,122
3	Technology Reliability Projects	2F[1]	93,397	138,559	45,163	107,132
4	Total		$144,674	$193,228	$48,554	$149,451

Note:

(1) Technology Reliability Projects include IT Tech Projects.

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.

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

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.

New MWC Descriptions – Expense

MWC OM – Operational Management – MWC OM includes labor- and employee-related costs to provide supervision and management support. MWC OM also includes costs incurred by the administrative staff working for the supervisors/ managers.

MWC OS – Operational Support – MWC OS includes labor- and employee-related costs to provide services and support that are unrelated to supervision and management. Examples include Business Finance and Sourcing that support the lines of business.

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

TABLE 8-3
INFORMATION TECHNOLOGY 2015 EXPENSE COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	Program	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
1	Baseline	JV	$233,792	$239,712	$5,920	Increase due to higher than planned application support in Business Technology, including: (1) Online Application support for Customer Care; (2) specialized application support for Nuclear Generation; and (3) Geographic Information Systems support for Gas Distribution. Increase was partially offset by efficiencies gained in the Information and Operations vendor contract negotiations.
2	Lifecycle	JV	2,714	1,235	(1,479)	Decrease due to resequencing of Lifecycle efforts to cover high-priority Disaster Recovery projects within the Technology Reliability Projects program. In addition, specific Network Technologies projects within Wireless and Transmission expenditures were less than originally planned.
3	Continuous Improvement	JV	1,007	(10)	(1,017)	Decrease due to resequencing of Continuous Improvement efforts to cover high priority Disaster Recovery projects within the Technology Reliability Projects program.
4	Technology Reliability Projects	JV	5,429	17,600	12,171	Increase due to additional expenditures to implement key enterprise project management solutions (e.g., Disaster Recovery) and reclassifications of work originally planned as capital but executed as expense.
5	Total		$242,942	$258,536	$15,594	

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

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.

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

TABLE 8-4
INFORMATION TECHNOLOGY 2015 CAPITAL COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	Program	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
1	Lifecycle	2F	$42,901	$50,668	$7,767	Increase due to unplanned storage purchases in support of Datacenter Technologies solutions compounded by higher than planned replacements in laptop, desktop and multi-function devices to support User Technology Solutions.
2	Continuous Improvement	2F	8,377	4,001	(4,376)	Decrease due to resequencing of Continuous Improvement efforts to cover high-priority Disaster Recovery projects within the Technology Reliability Projects program. In addition, effective vendor negotiations resulted in a more rapid cost-effective deployment of the Flexera project within the Continuous Improvement program.
3	Technology Reliability Projects	2F	93,397	138,559	45,163	Increase due to additional expenditures on the Disaster Recovery projects within the Datacenter Technologies solutions compounded by unforeseen costs of implementing key enterprise project management solutions due to complex interfaces and issues in delivering key Security Technology solutions.
4	Total		$144,674	$193,228	$48,554	

SECTION 9
Shared Services
Detailed Variance Explanations

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

TABLE 9-1
SHARED SERVICES 2015 EXPENSE COMPARISON SUMMARY
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	2016 Budget New Cost Model
1	Support	AB	$1,373	$5,211	$3,838	$213,570
2	Manage Environmental Operations	AK	10,414	8,977	(1,438)	10,387
3	Habitat and Species Protection	AY	195	148	(47)	258
4	Maintain Buildings	BI	6,731	8,467	1,736	7,302
5	Manage DCPP Business	BP	3,911	4,072	161	2,734
6	Manage Waste Disposal & Transportation	CR	2,570	2,337	(233)	2,470
7	Manage Property & Bldgs	EP	0	307	307	128,281
8	Implement Environmental Projects	ES	905	622	(283)	905
9	Special A&G/Other Costs-	FA/FL				
	Safety Engineering & OSHA Compliance		26,353	25,951	(402)	20,327
10	Manage Land Services	JE	2,601	3,211	610	1,901
11	Implement Real Estate Strategy	JH	11,008	6,092	(4,916)	6,050
12	Manage Environmental Remediation-Earnings	JK	6,248	6,645	398	4,897
13	Procure Materials & Services	JL	13,488	11,855	(1,634)	16,780
14	Maintain IT Apps & Infra	JV	3,690	4,045	356	10,781
15	Operational Management	OM	0	0	0	448
16	Operational Support	OS	0	0	0	11,601
17	Total		$89,487	$87,939	($1,547)	$438,692
18	Chargeback Allocations					(205,594)
19	Total Net of Chargeback Allocation		$89,487	$87,939	($1,547)	$233,098

Note:

The 2016 budget new cost model amount for MWC AB and MWC EP includes total company chargebacks before the allocation to capital. In the old cost model, the chargebacks were embedded in various expense and capital MWCs across all LOBs. Shared Services' 2016 expense budget is $233,098, net of allocations.

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

TABLE 9-2
SHARED SERVICES 2015 CAPITAL COMPARISON SUMMARY
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC Description	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	2016 Budget New Cost Model
1	Fleet/Automotive Equipment	04	$117,634	$121,667	$4,033	$212,927
2	Tools & Equipment	05	1,603	2,490	887	1,663
3	Implement Environment Projects	12	5,850	4,687	(1,163)	7,923
4	Purchase/Install – Other Capital	21	463	1,720	1,257	480
5	Maintain Buildings	22	43,174	43,701	527	71,016
6	Implement Real Estate Strategy	23	70,520	56,270	(14,250)	89,704
7	EV – Station Infrastructure	28	2,556	3,370	814	2,980
8	Build IT Apps & Infra	2F	9,234	6,657	(2,578)	7,674
9	Total		$251,034	$240,561	($10,473)	$394,367

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[1] 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.

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1 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 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 clean-up 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.

MWC EP – Manage Property and Buildings – includes costs to operate, maintain, and repair PG&E's facilities and shared conference center space.

MWC OM – Operational Management – MWC OM includes labor and employee related costs to provide supervision and management support. MWC OM also includes costs incurred by the administrative staff working for the supervisors/managers.

MWC OS – Operational Support – MWC OS includes labor and employee related costs to provide services and support that are unrelated to supervision and management. Examples include Business Finance and Sourcing that support the lines of business.

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

TABLE 9-3
SHARED SERVICES 2015 EXPENSE COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
1	AB	$1,373	$5,211	$3,838	Increase due to higher than forecasted spend on facility maintenance projects.
2	AK	10,414	8,977	($1,438)	Decrease due to less than planned spend on routine environmental support to the shared sites (locations utilized by more than one line of business) and distribution substations.
3	AY	195	148	($47)	Immaterial variance.
4	BI	6,731	8,467	$1,736	Increase due to higher than forecasted spend on General Office water tanks, Corporate Real Estate & Shared Services Project Management Tool, and project management costs.
5	BP	3,911	4,072	$161	Increase due to additional safety culture training in the Aircraft Ops department.
6	CR	2,570	2,337	($233)	Decrease due to one-time savings in vendor settlement negotiations for environmental services from 2011-2014.
7	EP	0	307	$307	Increase due to unplanned repairs and maintenance costs.
8	ES	905	622	($283)	Decrease due to lower than planned spend on environmental maintenance projects such as tank repair and maintenance at shared sites.
9	FA/FL	26,353	25,951	($402)	Decrease due to unplanned employee vacancies.
10	JE	2,601	3,211	$610	Increase due to additional spending for emergency mapping services.
11	JH	11,008	6,092	($4,916)	Decrease due to lower than forecasted spend on San Rafael Service Center, Stockton Regional Office, and Fresno Office projects.

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

TABLE 9-3
SHARED SERVICES 2015 EXPENSE COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
12	JK	6,248	6,645	$398	Increase due to higher than planned spending on repairs and maintenance of facilities in Corporate Real Estate.
13	JL	13,488	11,855	($1,634)	Decrease due to delay in filling vacant positions within Materials Warehouse and Transport and unplanned vendor rebate, as well as lower than planned spend on the Supplier Diversity Technical Assistance Program.
14	JV	3,690	4,045	$356	Increase due to higher gas and electric distribution project review and screening activities within the Habitat Conservation Plan.
15	Total	$89,487	$87,939	($1,547)	

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 miscellaneous purchase of capital and/or 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.

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

TABLE 9-4
SHARED SERVICES 2015 CAPITAL COMPARISON
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	MWC	2015 Budget	2015 Actual	2015 Difference Higher/(Lower)	Explanation
1	04	$117,634	$121,667	$4,033	Increase due to budgets not reflecting transfers from other lines of business (Electric, Gas, Customer Care, IT).
2	05	1,603	2,490	887	Increase due to reprioritization of funds within Safety and Shared Services to conduct small yard optimization.
3	12	5,850	4,687	(1,163)	Decrease due to lower than planned environmental capital improvements required at shared sites.
4	21	463	1,720	1,257	Increase due to reprioritization of funds within Transportation Services to purchase fixed wing gas patrol planes and perform avionics upgrade for corporate jet.
5	22	43,174	43,701	527	Immaterial variance.
6	23	70,520	56,270	(14,250)	Decrease primarily due to lower than planned spend on Stockton Regional Office project.
7	28	2,556	3,370	814	Increase due to reprioritization of funds within Transportation Services for installation of incremental EV charging stations.
8	2F	9,234	6,657	(2,578)	Decrease largely driven by delays on the CRESS Application Rationalization project and the decision to execute the SRM Technical/Functional Upgrade project (internally named “OASIS”) as an expense solution instead of the originally planned capital solution.
9	Total	$251,034	$240,561	($10,473)	

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 that have been added since PG&E's presentation of the 2014 GRC.

PACIFIC GAS AND ELECTRIC COMPANY
MARCH 2016 GRC BUDGET COMPLIANCE REPORTING DOCUMENT – APPENDIX A
MAJOR WORK CATEGORY (MWC) CONVERSION DOCUMENT

All Lines of Business

Prior MWC (used in the 2014 GRC)	Prior MWC Description	New MWC	New MWC Description	Comment	Period of Update
Supervision and Management Costs Previously Recorded in Multiple MWCs		**OM**	Operational Management	New MWC OM is created to record spending for labor and employee-related costs to provide supervision and management support under PG&E's new cost model, which became effective in 2016	March 2016 Budget Report
Support Costs Previously Recorded in Multiple MWCs		**OS**	Operational Support	New MWC OS is created to record spending for labor and employee-related costs to provide services and support that are unrelated to supervision and management under PG&E's new cost model, which became effective in 2016	March 2016 Budget Report

Gas Distribution

Prior MWC (used in the 2014 GRC)	Prior MWC Description	New MWC	New MWC Description	Comment	Period of Update
AB	Support	**DN**	Develop and Provide Training	MWC DN is used to record spending for development of training material	March 2016 Budget Report
DE, FI	Leak Survey, Leak Repair	**JU**	Gas Distribution Leak Survey & Repair	MWC JU is created to record spending above the cost cap level for the Gas Leak Survey and Repair Balancing Account	March 2015 Budget Report
Presented in Corporate Services in the 2014 GRC		**KT**	Provide Executive Services	MWC KT is used to record costs related to the Utility presidents	March 2016 Budget Report

Electric Distribution

Prior MWC (used in the 2014 GRC)	Prior MWC Description	New MWC	New MWC Description	Comment	Period of Update
78	Manage Buildings	**23**	Implement Real Estate Strategy	MWC 23 is used to record spending for real estate related costs	March 2016 Budget Report
Presented in Corporate Services in the 2014 GRC		**KT**	Provide Executive Services	MWC KT is used to record costs related to the Utility presidents	March 2016 Budget Report
Presented in Corporate Services in the 2014 GRC		**KZ**	Provision for Risk and Security Services	MWC KZ is used to record spending for support of corporate security	March 2016 Budget Report

PACIFIC GAS AND ELECTRIC COMPANY
MARCH 2016 GRC BUDGET COMPLIANCE REPORTING DOCUMENT – APPENDIX A
MAJOR WORK CATEGORY (MWC) CONVERSION DOCUMENT
(CONTINUED)

Customer Care

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)		**3I**	Nuclear Safety	Transfer of funding related to Nuclear Safety balancing account work	March 2015 Budget Report
Presented in MWC 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
2F	Build Applications and Infrastructure	**3C**	Install/Replace Alternative Generation Buildings, Grounds & Infrastructure	New MWC 3C is created for new Alternative Generation activities	March 2015 Budget Report
96	Separately Funded Capital	**3D**	Construct New Alternative Generation	New MWC 3D is created for new Alternative Generation activities	March 2015 Budget Report
Presented in MWC 11 for 2014 GRC (partial transfer to 3H)		**3H**	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 2016 GRC BUDGET COMPLIANCE REPORTING DOCUMENT – APPENDIX A
MAJOR WORK CATEGORY (MWC) CONVERSION DOCUMENT
(CONTINUED)

Shared Services					
Prior MWC (used in the 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	MWC BP is used to record spending for costs related to aircraft services that have been moved from the Nuclear Generation line of business	March 2015 Budget Report
Chargeback costs previously recorded in multiple MWCs		**EP**	Manage Property and Buildings	New MWC EP is created to record spending for costs to operate, maintain, and repair PG&E's facilities and shared conference center space under PG&E's new cost model, which became effective in 2016	March 2015 Budget Report