Docket: Exhibit Number Commissioner	: <u>A.12-11-009</u> : <u>DRA-6</u> : <u>Florio</u>
ALJ	: Pulsifer
Witness	: <u>Godfrey</u>



DIVISION OF RATEPAYER ADVOCATES CALIFORNIA PUBLIC UTILITIES COMMISSION

Report on the Results of Operations for Pacific Gas and Electric Company General Rate Case Test Year 2014

Electric Distribution Expenses Part 2 of 2

> San Francisco, California May 3, 2013

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ELECTRIC DISTRIBUTION EXPENSES

2 I. INTRODUCTION

1

This exhibit presents the analyses and recommendations of the Division of Ratepayer Advocates (DRA) regarding Pacific Gas and Electric Company's (PG&E) forecasts of Electric Distribution operation and maintenance (O&M) expenses for Test Year (TY) 2014.

Electric distribution O&M expenses are for work activities related to operation,
supervision, and maintenance associated with the electric distribution system, load
dispatching, station expenses, overhead and underground lines, poles, street
lighting, customer installations, tree trimming, line transformers and miscellaneous
work.

This exhibit specifically addresses PG&E's expense forecasts associated with
Electric Mapping and Records Management, Vegetation Management and
Distribution System Operations. All other Electric Distribution expense forecasts are
addressed in Exhibit DRA-5.

PG&E's O&M activities and costs are grouped with similar types of work into a Major Work Category (MWC). PG&E's forecasts for MWC expenses are expressed in SAP nominal dollars. SAP dollars include certain labor-driven adders such as employee benefits and payroll taxes that are charged to separate Federal Energy Regulatory Commission (FERC) accounts. DRA's recommendations are made by MWC and SAP nominal dollars which are then translated into the appropriate FERC accounts through the Results of Operations (RO) model.

23 II. SUMMARY OF RECOMMENDATIONS

PG&E forecasted \$276.103 million for Electric Mapping and Records
Management, Vegetation Management, and Distribution Systems Operations.
PG&E utilized various methods to forecast its Test Year expenses for its Electric
Distribution O&M expenses. The methods utilized to forecast expenses for Electric
Mapping and Records Management, Vegetation Management, and Distribution

1

1 Systems Operations are discussed in the following sections of this report. The

- 2 corresponding DRA estimate for PG&E's Electric Mapping and Records
- 3 Management, Vegetation Management, and Distribution Systems Operations is
- 4 \$217.990 million. DRA's estimate is \$58.113 million less than PG&E's forecast.
- 5 PG&E proposes substantial increases in some of its MWCs and line items
- 6 above 2011 recorded adjusted expenses. To make its recommendations, DRA
- 7 utilized PG&E's 2011 recorded adjusted expenses and PG&E's historical expense
- 8 levels, including its 2012 recorded adjusted expenses. DRA also reviewed and
- 9 considered PG&E's historical Imputed Regulatory Values in its analysis and
- 10 recommendations of each MWC. Table 6-1 compares DRA's and PG&E's TY 2014
- 11 forecasts. The following summarizes DRA's recommendations:
- 12 Dhat DRA's estimate of \$4.416 million for PG&E's MWC GE –
 13 Electric Mapping and Records Management be adopted. DRA's estimate of \$4.416 million is \$26.701 million lower than PG&E's Test Year forecast of \$31.117 million and is \$1.052 million more than PG&E's 2011 recorded adjusted expenses of \$3.364 million.
- 17 That PG&E's request for additional ratepayer funding of \$27.753 18 million, or 825% over 2011 recorded expense levels for projects to 19 address PG&E's electric distribution mapping and recordkeeping 20 deficiencies be denied (i.e., Field Asset Inventory, Converting 21 Paper-Based Records to Electric Format, Updating Electric 22 Records to Standard Format, and Records Quality Assurance 23 Program). PG&E has failed to properly maintain and update its 24 records and databases with authorized ratepayer funding and now 25 extensive remedial work is needed. PG&E's proposed projects lack 26 specific scope details and the associated estimates are not 27 substantiated. PG&E's ratepayers have already funded the utility's 28 electric distribution mapping and records management activities, 29 and it is inappropriate to force ratepayers to pay twice for these 30 normal, on-going, and routine mapping and records maintenance 31 activities.
- Incremental funding that PG&E requires over DRA's estimate for
 MWC GE of \$4.416 million and over historical embedded costs for
 PG&E's Electric Mapping and Records Management projects to
 address its mapping and recordkeeping deficiencies should be
 funding by PG&E's shareholders.
- 37□That DRA's estimate of \$164.223 million for PG&E's MWC HN –38Vegetation Management be adopted. DRA's estimate of \$164.223

1 2 3	million is \$25.777 million lower than PG&E's Test Year forecast of \$190.0 million and is \$2.656 million more than PG&E's 2011 recorded adjusted expenses of \$161.567 million.
4 5	That PG&E's request for continuation of its Vegetation Management one-way balancing account be adopted.
6 7 8 9	That DRA's estimate of \$28.769 million for PG&E's MWC BA – Electric Distribution Operation be adopted. DRA's estimate of \$28.769 million is \$3.974 million lower than PG&E's Test Year forecast of \$32.743 million.
10 11 12 13	That DRA's estimate of \$19.813 million for PG&E's MWC DD – Provide Field Service be adopted. DRA's estimate of \$19.813 million is \$0.515 million lower than PG&E's Test Year forecast of \$20.328 million.
14 15 16 17	That DRA's estimate of \$0.769 million for PG&E's MWC HG – Electric Distribution Operations Technology be adopted. DRA's estimate of \$0.769 million is \$0.268 million lower than PG&E's Test Year forecast of \$1.037 million.
18 19 20 21 22 23 24 25 26 27 28	That PG&E's forecast of \$0.877 million for MWC JV- Maintenance of Information Technology be denied in its entirety. PG&E's forecast includes software labor costs for the development and testing of its electronic wall mapping system for its Distribution Control Center (DCC) consolidation project. PG&E requested additional funding for software implementation costs associated with its DCC consolidation project and electric wall mapping system in its 2011 GRC. PG&E should reallocate and utilize the 2011 GRC authorized funding (that is still embedded) for its 2014 GRC proposed software labor costs for the development and testing of its electronic wall mapping system.

- 29 30 31

Table 6-1 Electric Distribution Expenses for TY2014 (In Thousands of Nominal Dollars)

Description (a)	PG&E 1 Proposed (b)	DRA Recommended (c)	Amount PG&E>DRA (d=b-c)	Percentage PG&E>DRA (e=d/c)
Electric Mapping and Records				
Management	\$31,117	\$4,416	\$26,701	604.64%
Vegetation Management	\$190,000	\$164,223	\$25,777	15.70%
Electric Distribution Operations	\$54,986	\$49,351	\$5,635	11.42%
Total	\$276,103	\$217,990	\$58,113	26.66%

1 Ex. PG&E-4, Workpapers p. WP 4-1, WP 8-1, and WP 11-1.

1 III. GENERAL OVERVIEW

PG&E's Electric Mapping and Records Management Program creates new
maps, records updates and maintains the electric system distribution maps. It also
provides mapping information for planning new services, analyzing existing services,
forecasting work and maintenance of PG&E's facilities. PG&E forecasts \$31.117
million for Electric Mapping and Records Management expenses for the Test Year
2014 which is an increase of \$27.753 million or 825% over 2011 recorded adjusted
expenses of \$3.364 million.²

9 PG&E's Vegetation Management Program patrols, inspects and maintains 10 clearance on trees as required for regulatory compliance and removes vegetation 11 (vegetation control) from around poles that have the potential to cause fires. PG&E 12 also maintains or removes "hazard trees" or trees that it identifies as structurally 13 unsound or that have the potential to fall on to power lines. PG&E forecasts \$190.0 14 million for Vegetation Management expenses for the Test Year 2014, which is an 15 increase of \$28.433 million or 17.60% over 2011 recorded adjusted expenses of 161.567 million.³ PG&E also requests continuation of its Vegetation Management 16 one-way balancing account.⁴ 17 18 PG&E's Distribution System Operations (DSO) monitors its electric system,

19 manages outage restoration, directs system switching, and manages its electric-

- 20 related field customer service work. PG&E forecasts \$54.985 million for its DSO
- 21 expenses for Test Year 2014.⁵ PG&E's forecast also includes its proposal to

² PG&E's 2014 forecast of \$31.117 million is shown in Ex.PG&E-4, Table 4-3, p. 4-13.

³ PG&E's 2014 forecast of \$190.0 million is shown in Ex. PG&E-4, Table 8-1, p. 8-19.

⁴ Ex. PG&E-4, p. 8-26.

⁵ PG&E's 2014 forecast of \$54.986 million is shown in Ex.PG&E-4 workpapers Table 11-1, p. WP 11-1.

1 consolidate thirteen existing Distribution Control Centers (DCC) into three new

- 2 locations.⁶
- 3

A. Authorized vs. Recorded Expenses/Expenditures

4 In PG&E's 2011 GRC, the Commission ordered the utility to provide periodic 7

5 compliance filings showing authorized $\frac{7}{2}$ and recorded expenses and capital

6 expenditures, by Major Work Category (MWC), for electric distribution, electric

7 generation, and gas distribution.⁸

8 DRA provides the following historical comparison of authorized versus

9 recorded O&M expenses for the MWCs addressed in this exhibit. The tables below

also include a comparison between PG&E's 2012 forecasted and recorded O&M

11 expenses.

12Table 6-2132007-2011 Authorized vs. Recorded Electric Mapping and Records Mgmt Expenses14and PG&E's 2012 Forecasted vs. Recorded Expenses15for Major Work Category GE16(In Thousands of Nominal Dollars)

MWC	Year								
		2007	2008	2009	2010	2011	2012		
	Authorized	\$10,585	\$10,903	\$11,221	\$11,539	\$7,114			
GE	Recorded	\$5,596	\$5,341	\$4,301	\$3,477	\$3,364	\$4,302		
	Forecasted						\$4,244		

Source: Authorized 2007-2010 data from Master Data Request, Chapter 24, Q.1. Authorized 2011 data
 from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018. Recorded 2007-2011data
 from Exhibit (PG&E-4), Chapter 4, p. WP 4-1. Recorded 2012 data from PG&E's response to DRA data
 request DRA-PG&E-108-CKT. Forecasted 2012 data from Exhibit (PG&E-4), Chapter 4, p. WP 4-1.

⁶ Ex. PG&E-4, p. 11-2. PG&E plans to construct one central Distribution Control Center (DCC) and two regional facilities. DRA's capital witness will address DRA's forecast for PG&E's capital costs for its DCC consolidation project.

⁷ PG&E's 2011 GRC was a Settlement Agreement and specific values were not provided for most MWCs. (PG&E's 2003 and 2007 GRCs were also Settlement Agreements). In DRA's report on PG&E's 2014 GRC, the amounts identified as PG&E's authorized/ Imputed amounts were calculated by PG&E. PG&E calculated Imputed Regulatory Values for each MWC that was not specified in the Settlement Agreement. See PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018, p.1-1.

8 Decision on PG&E Test Year 2011 General Rate Increase Request (2011) D.11-05-018, 8, mimeo., Ordering Paragraph 42, at pp. 98-99.

Table 6-32007-2011 Authorized vs. Recorded Vegetation Management Expenses
and PG&E's 2012 Forecasted vs. Recorded Expenses
for Major Work Category HN
(In Thousands of Nominal Dollars)

MWC	Year						
		2007	2008	2009	2010	2011	2012
HN	Authorized	\$150,000	\$150,000	\$150,000	\$150,000	\$161,500	
	Recorded	\$150,143	\$150,226	\$150,065	\$150,203	\$161,567	\$161,474
	Forecasted						\$161,500

Source: Authorized 2007-2010 data from Master Data Request, Chapter 24, Q.1. Authorized 2011 data
 from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018. Recorded 2007-2011data
 from Exhibit (PG&E-4), Chapter 8, p. WP 8-1. Recorded 2012 data from PG&E's response to DRA data
 request DRA-PG&E-108-CKT. Forecasted 2012 data from Exhibit (PG&E-4), Chapter 8, p. WP 8-1.

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Table 6-42007-2011 Authorized vs. Recorded Electric Distributions Operations Expensesand PG&E's 2012 Forecasted vs. Recorded Expensesfor Major Work Categories BA, DD, HG, and JV(In Thousands of Nominal Dollars)

MWC	Year							
		2007	2008	2009	2010	2011	2012	
ВА	Authorized	\$31,587	\$32,536	\$33,486	\$34,436	\$36,023		
DA	Recorded	\$32,246	\$33,884	\$35,218	\$35,163	\$33,681	\$33,401	
	Forecasted						\$35,536	
DD	Authorized	\$15,250	\$15,709	\$15,414	\$14,734			
םם	Recorded	\$15,064	\$15,061	\$18,611	\$19,409	\$19,813	\$19,264	
	Forecasted						\$17,228	
HG	Authorized					\$750		
пG	Recorded	\$683	\$499	\$448	\$545	\$749	\$769	
	Forecasted						\$785	
JV	Authorized							
JV	Recorded						\$521	
	Forecasted						\$495	

15 <u>Source</u>: Authorized 2007-2010 data from Master Data Request, Chapter 24, Q.1. Authorized 2011 data

16 from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018. Recorded 2007-2011data from Exhibit (PG&E-4). Chapter 11. p. WP 11-1. Recorded 2012 data from PG&E's response to DRA data

from Exhibit (PG&E-4), Chapter 11, p. WP 11-1. Recorded 2012 data from PG&E's response to DRA data request DRA-PG&E-108-CKT. Forecasted 2012 data from Exhibit (PG&E-4), Chapter 11, p. WP 11-1.

1IV.DISCUSSION / ANALYSIS OF ELECTRIC MAPPING AND RECORDS2MANAGEMENT

PG&E's Electric Mapping and Records Management Program creates new
 maps, records updates and maintains the electric system distribution maps. It also
 provides mapping information for planning new services, analyzing existing services,
 forecasting work and maintenance of PG&E's facilities. Table 6-5 summarizes
 PG&E's request and DRA's recommendation for Electric Mapping and Records
 Management expenses recorded in MWC GE.

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- 10
- 11 12

Table 6-5Electric Distribution Expenses for TY2014Electric Mapping and Records Management(In Thousands of Dollars)

Description (a)	PG&E 9 Proposed (b)	DRA Recommended (c)
GE- Electric Mapping and Records Management	\$31,117	\$4,416

13 A. Overview of PG&E's Request

14 PG&E forecasts \$31.117 million for Electric Mapping and Records

15 Management expenses for the test year 2014 which is an increase of \$27.753

16 million or 825% over 2011 recorded adjusted expenses of \$3.364 million.¹⁰ PG&E

17 says it developed its forecast based on 2011 recorded expenditures, historical

18 trends, and productivity improvements. PG&E developed its forecast for its Electric

19 Distribution Mapping and Records Management initiatives using project specific

20 estimating methods.¹¹ The corresponding DRA estimate for PG&E's Electric

21 Mapping and Records Management expenses is \$4.416 million, which is \$26.701

22 million less than PG&E's forecast.

<u>11</u> Ex. PG&E-4, p. 4-12.

⁹ Ex. PG&E-4, p. 4-1 citing PG&E WP 4-1, and WP 4-7.

 $[\]frac{10}{10}$ PG&E's 2014 forecast of \$31.117 million is shown in Ex.PG&E-4, Table 4-3, p. 4-13.

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Table 6-6 below shows PG&E's recorded adjusted expenses for MWC GE for

- 2 2007-2012 and its 2014 forecast.

- 3 4 5

Table 6-6 2007-2012 Recorded and 2014 Forecast Data for MWC GE (in Thousands of Dollars)

Description	2007	2008	2009	2010	2011	2012	2014
Base Mapping and	\$5,133	\$5,341	\$4,408	\$3,477	\$3,364	\$0	\$4,688
Records Management							
Field Asset Inventory	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000
Convert Paper-Based	\$0	\$0	\$0	\$0	\$0	\$0	\$14,200
Records to Electronic							
Format							
Update Electronic	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
Records to Standard							
Format							
Records Quality	\$0	\$0	\$0	\$0	\$0	\$0	\$411
Assurance Program							
Standard Variance	\$463	\$0	(\$107)	\$0	\$0	\$0	\$0
Escalation	\$0	\$0	\$0)	\$0	\$0	\$0	\$818
Total	\$5,596	\$5,341	\$4,301	\$3,477	\$3,364	\$4,302	\$31,117

6 Source: 2007-2011 and 2014 data from Exhibit (PG&E-4), Chapter 4, Workpapers P. WP 4-7. The 7 2012 data is from PG&E's response to DRA data request DRA-PG&E-108-CKT.

- **B. MWC GE Electric Mapping and Records Management** 8
- 9 PG&E records expenses for its Electric Mapping and Records Management in
- MWC GE. PG&E's forecast requests includes additional funding, over 2011 10
- recorded levels, of \$10.0 million for Field Asset Inventory.¹² \$14.200 million for 11
- Converting Paper-Based Records to Electric Format, $\frac{13}{5}$ \$1.0 million for Updating 12
- Electric Records to Standard Format. $\frac{14}{14}$ and \$0.411 million for Records Quality 13

¹² PG&E's says its Field Asset Inventory project includes performing a detailed inventory of Electric Distribution System overhead and underground facilities to identify discrepancies between actual conditions and assets in the field.

¹³ PG&E's says its Convert Paper-Based Records to Electronic Format project includes scanning and cataloging of job estimates and construction records (i.e., as-built drawings) maintained on paper located in local and regional office files.

¹⁴ PG&E's says its Update Electronic Records to Standard Format project includes converting records already in electronic format to a Companywide database. PG&E already incurred costs when it originally converted its records from paper form to an electronic format and now it proposes to convert these records again (duplication of effort for additional costs) that are already in electronic (continued on next page)

Assurance¹⁵ Program.¹⁶ PG&E's forecast includes contingency costs for its Field
 Asset Inventory Project of \$3.240 million, its Electric Distribution As-Built Records
 Scanning Project of \$3.670 million, its Distribution Substation Records Scanning
 Project of \$324,000, and its Distribution Maintenance Records Scanning Project of
 \$0.409 million.¹⁷

DRA forecasts \$4.416 million for PG&E's Electric Mapping and Records
Management expenses utilizing a five year average (2007-2011) as a basis. DRA's
estimate is \$26.701 million less than PG&E's forecast. DRA's forecast is \$1.052
million more than PG&E's 2011 recorded adjusted expense level.

10 PG&E's request for additional funding of \$27.753 million or 825% over 2011 11 recorded adjusted expenses of \$3.364 million is not justified based on historical 12 expense levels and should be denied by the Commission as excessive. PG&E's 13 recorded adjusted expenses for MWC GE have been declining each year between 14 2007 and 2011. The five year average (2007-2011) is \$4.416 million and the three 15 year average (2010-2012) is \$3.714 million. During PG&E's 2011 GRC, PG&E's 16 expenses recorded in MWC GE showed a similar declining trend each year in 17 expenses due in part to PG&E's implementation and completion of its Mapping and 18 Improvement Project Phase 2 (MIP2) which was supposed to convert PG&E's older

19 electronic and manual maps to an electronic mapping platform.¹⁸

(continued from previous page)

16 Ex.PG&E-4 p. 4-8 to 4-12 and workpapers p. WP 4-7.

18 PG&E's response to DRA-PG&E-085-TLG, Q 6-d.

format to a "Companywide database". The excessive costs for duplicating work unnecessarily increases costs for ratepayers and its request should be denied.

 $[\]frac{15}{10}$ PG&E says its Quality Assurance program includes assessing and improving the quality of records maintained in its maps and databases.

¹⁷ Regarding contingency costs, PG&E says it "...has not yet developed project scopes, costs estimates and competitive solicitations... In light of the project scope and status, PG&E deemed it appropriate to include contingency of approximately 15% in the overall project estimate (DRA-PG&E-085-TLG Q.8-a).

1 In PG&E's 2011 GRC, PG&E requested additional funding of \$1.773 million 2 over its 2008 recorded adjusted expenses of \$5.341 million for its Electric Mapping expenses.¹⁹ PG&E's 2011 recorded adjusted expenses for MWC GE of \$3.364 3 million is \$3.750 million less than PG&E's 2011 GRC Imputed amount of \$7.114 4 million as shown in Table 6-7 below.²⁰ This is a 111.47% percentage decrease from 5 the Imputed amount. PG&E's 2011 recorded adjusted expenses of \$3.364 million is 6 \$1.380 million less than PG&E's 2011 GRC budgeted amount of \$4.744 million or a 7 decrease of 41.02%.²¹ PG&E states the decrease in its 2011 GRC proposed 8 expense level is "primarily due to lower electric mapping labor costs than originally 9 forecasted and a reduction in low-priority mapping improvement projects".²² 10

11 PG&E's recorded adjusted expenses for 2007-2011 for MWC GE have been 12 less than its Imputed amount each year. This demonstrates that PG&E has received 13 sufficient authorized funding during the historical period (2007-2011) to address projects similar to what it is proposing in its 2014 GRC associated with its mapping 14 15 and records corrections, upgrades, consolidations and paper record conversions to 16 electronic format. Table 6-7 below shows PG&E's MWC GE historical comparison 17 of Imputed versus recorded O&M expenses, its 2012 forecasted and recorded 18 expenses, and its 2014 forecasts. 19

 $[\]frac{19}{2}$ PG&E's 2011 GRC forecast for its Electric Mapping was included in its Exhibit (PG&E-3) Table 16-2, p. 16-10.

²⁰ Imputed 2011 data from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018. PG&E provided its 2011 GRC authorized amount of \$7.114 million in response to DRA-PG&E-085-TLG, Q.1-a.

²¹ PG&E's 2011 budgeted amount of \$4.744 million is from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

²² PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018, pp. 2-14.

Table 6-7

1 2 3

4

PG&E's 2007-2011 Authorized vs. Recorded Electric Mapping and Records Mgmt Exp 2012 Forecasted vs. Recorded Expenses and 2014 Forecasts for Major Work Category GE (In Thousands of Nominal Dollars)

		2007	2008	2009	2010	2011	2012	2014
GE	Authorized	\$10,585	\$10,903	\$11,221	\$11,539	\$7,114		
GE	Recorded	\$5,596	\$5,341	\$4,301	\$3,477	\$3,364	\$4,302	
	Forecasted						\$4,244	\$31,117

Source: Authorized 2007-2010 data from Master Data Request, Chapter 24, Q.1. Authorized 2011
 data from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018. Recorded 2007 2011data from Exhibit PG&E-4, Chapter 4, p. WP 4-1. Recorded 2012 data from PG&E's response
 to DRA data request DRA-PG&E-108-CKT. Forecasted 2012 data from Exhibit PG&E-4, Chapter 4,
 p. WP 4-1.

10 Based on the analysis above, DRA opposes additional ratepayer funding for

11 PG&E's projects for its Field Asset Inventory, Converting Paper-Based Records to

- 12 Electric Format, Updating Electric Records to Standard Format and its Records
- 13 Quality Assurance Program to address PG&E's electric distribution mapping and
- 14 recordkeeping deficiencies. DRA also opposes PG&E's proposed contingency costs
- 15 associated with the above projects. $\frac{23}{2}$
- 16 PG&E's proposed Test Year projects also lack specific scope details and the
- 17 associated Test Year estimates are not substantiated and should be denied.
- 18 According to PG&E, for the Field Asset Inventory Project and three distribution
- 19 records scanning projects:

20 PG&E has not yet developed project scopes, costs estimates and

- 21 *competitive solicitations*. As described in testimony, PG&E proposes
- 22 to conduct pilots in 2013 to support preparation of the detailed project
- 23 plans and cost estimates. In light of the project scope and status,
- 24 PG&E deemed it appropriate to *include contingency of approximately*
- 25 15% in the overall project estimate.²⁴

24 DRA-PG&E-085-TLG Q.8-a (emphasis added).

 $[\]frac{23}{23}$ While it is common to see contingency costs added to proposed capital expenditures, DRA cannot recall an instance of contingency costs being added to O&M expenses.

PG&E's ratepayers have already funded the utility's electric distribution mapping and records management activities, database enhancements, upgrades and consolidations,²⁵ mapping and records conversions, etc. It is inappropriate to force ratepayers to pay twice for these normal, on-going, and routine mapping and records maintenance activities that already have costs embedded in historical expenses that can be reallocated and utilized for PG&E's proposed projects.

7 PG&E has failed to properly maintain and update its records and databases 8 with authorized ratepaver funding and now extensive remedial work is needed. 9 leading to this request for an increase of 825% over 2011 recorded adjusted 10 expenses of \$3.364 million. PG&E states the main drivers of its 825% increase 11 "... are initiatives PG&E plans to pursue that will improve the accuracy, 12 completeness, uniformity, and accessibility of its electric distribution system records. 13 Some of these initiatives are in response to the Commission-appointed Independent Review Panel (IRP) report issued in June 2011 and ongoing Companywide records 14 improvement efforts".²⁶ DRA requested additional information on PG&E's records 15 16 management proposal. 17

²⁵ During PG&E's 2011 GRC, DRA noted that in 2006, PG&E's MIP2 was later incorporated into its Business Transformation (BT) GIS Project which was closed in December 2007 and all spending for the project stopped. In 2008 PG&E re-initiated the GIS project and renamed it AM/FM. (PG&E's 2011 GRC Ex. (PG&E-3) pp. 16-7 to 16-10). In regards to costs incurred for PG&E's Business Transformation (BT) GIS Project that was closed in December 2007, PG&E states "To the extent possible, PG&E will leverage the software application development that was completed under the BT GIS initiative. It is unclear at this time whether and how much work from the Land Base, GIS Software, and/or Data Conversion phases can be leveraged, but PG&E anticipates being able to leverage some of this work". (PG&E's 2011 GRC Ex. (PG&E-3) p. 16-10). PG&E suspended the AM/FM project after the San Bruno explosion in September 2010 to "assess the effectiveness of the project" in order to achieve accurate, verifiable, and traceable asset information. The AM/FM project closed in September 2011 and was re-launched as separate GIS/AM projects for Electric Distribution, Gas Distribution, Electric Transmission and Gas Transmission.

²⁶ Ex. PG&E-4, p. 4-1, lines 21-27.

1 DRA asked:

2 On page 4-6 PG&E states 'Many PG&E departments, customers, 3 communities, other utilities, and government agencies rely on the 4 accuracy of PG&E's maps and records'. With this said, on page 4-8 in 5 its testimony regarding its Field Asset Inventory. PG&E states 'for a 6 variety of reasons, these records may not contain all of the necessary 7 information or may not fully reflect the actual asset conditions'. 1) 8 Provide the documentation that explains in detail all the 'variety of 9 reasons' PG&E is referring to in this statement which caused its 10 records to lack all the necessary asset information. 2) Provide the 11 documentation that explains in detail the reason why PG&E's records 12 do not reflect the actual asset conditions and describe the documented 13 maintenance problems or deferred maintenance projects PG&E 14 encountered due to its failure to properly reflect the actual asset conditions in its records.²⁷ 15

16 PG&E's response:

34

17 PG&E did not conduct a comprehensive 'study' to document "the 18 variety of reasons" why PG&E's records may not contain all of the 19 necessary information or may not fully reflect asset conditions in the 20 referenced testimony and does not have any 'documentation' per se. 21 However, PG&E is aware that some records contained in its 22 Centralized Electric Distribution System Analysis (CEDSA) database 23 related to the manufacturer and date installed for certain pieces of 24 equipment such as line switches or distribution transformers are 25 missing or were given default values in the database. PG&E believes 26 this information is missing because PG&E decided not to collect this 27 information in the 1970s and 1980s when the CEDSA database and its 28 predecessor databases were created. PG&E also believes that some 29 of this information was not collected and reported by its crews at the 30 time the equipment was installed so it could not be easily recorded in 31 the database. The fact that some information is lacking in the CEDSA 32 database does not mean that PG&E experienced maintenance 33 problems or deferred maintenance... (emphasis added)

27 DRA-PG&E-085-TLG, Q.7-b.

1 DRA also asked:

2 PG&E believes that the IRP recommendations made for its gas 3 transmission records management activities 'are also relevant to 4 PG&E's Electric Distribution Mapping and Records Management 5 practices'. Provide the documentation that explains in detail and 6 demonstrates if PG&E believes it has received authorized funding in 7 past GRCs (2003, 2007, 2011) to ensure that its Electric and Gas 8 mapping records were maintained in an accurate, complete, and easily accessible manner.²⁸ 9

10 PG&E's response:

11 PG&E did receive funds to manage and maintain its Electric and Gas 12 mapping records in an accurate, complete, and accessible manner. 13 However, as noted in a) above, PG&E's reference to the relevance of 14 the IRP recommendations to the specific improvement initiatives 15 proposed for its Electric Distribution records is that PG&E should 16 examine its electric distribution records management practices 17 carefully and make improvements to reflect industry practices by 18 creating a multi-year plan to implement electronic information-based 19 improvements.

- 20 DRA agrees that PG&E "should examine its electric distribution records 21 management practices carefully and make improvements to reflect industry 22 practices". However, this should be done at its current funding levels (reallocating 23 and utilizing embedded historical costs) or at its shareholders expense. Based on 24 PG&E's responses, its recordkeeping practices have been deficient since the 1970s. 25 PG&E has had approximately forty years to correct, verify and compare asset records and asset field inventory,²⁹ completely update records missing critical 26 27 information, streamline processes for easy retrieval of records, convert all paper-
- 28 based records to electronic formats, and migrate/consolidate all necessary mapping

<u>28</u> DRA-PG&E-085-TLG, Q.7-c.

²⁹ PG&E's Field Asset Inventory project with a forecast of \$10.0 million includes the detailed search and inventory of its overhead and underground facilities to identify discrepancies between asset records and assets in the field.

record databases. Since 2007, PG&E has spent considerably less than Commission
authorized amounts for this activity as set forth in Table 6-7. However, PG&E now
proposes in its 2014 GRC, to get its Electric Distribution mapping and records
management practices in proper order. PG&E proposes to perform a detailed
inventory of its Electric Distribution System overhead and underground facilities to
identify and correct all the discrepancies between actual conditions and assets in the
field and its asset records on its maps and in databases.

- 8 PG&E's as-built drawings (installation records) and maintenance records 9 must be accurate, reliable, accessible, and preserved. PG&E has been authorized 10 funding over the last 10 years to ensure that its critical records were maintained and 11 preserved, by converting its paper-based maps and records to electronic format. 12 PG&E's management decided not to use these authorized funds to convert its 13 paper-based, historical, as-built drawings and maintenance records to electronic 14 format. PG&E ratepayers have already funded this activity and should not be 15 charged twice. PG&E's shareholders can fund the incremental cost of converting as-built drawings and maintenance records.30 16
- PG&E states the following regarding its asset record discrepancies and its
 asset management practices utilizing a risk-based approach:

19 Among others, system safety was a key risk identified for Electric 20 Operations. One of the fundamental aspects of addressing system 21 safety risk with this type of approach is to have accurate information 22 about the vintage and manufacturer of operating equipment such as 23 switches, circuit breakers, line reclosers, line sectionalizers, 24 interrupters, voltage regulators and capacitors. As noted in response 25 to Question 7.b of this data request (DRA 085), PG&E did not capture 26 all of this information in its CEDSA database for equipment already in 27 service when this database was implemented in the 1970s and 1980s³¹ 28

30 DRA-PG&E-085-TLG Q. 6 a-f.

³¹ DRA-PG&E-085-TLG, Q.11-a2.

1 PG&E's request for MWC GE- Mapping and Records Management is very 2 similar to PG&E's proposal in its Pipeline Safety Enhancement Plan (PSEP) regarding its Pipeline Records Integration Program (PRIP).³² In the PSEP 3 4 proceeding, PG&E requested incremental ratepayer funding for collecting, reviewing 5 organizing and verifying critical records associated with its installed gas pipeline 6 segments and for additional funding to upgrade and consolidate its multiple existing 7 Information Technology systems (SAP and its Geographic Information System 8 (GIS)). The Commission rejected PG&E's request for ratepayer funding for its PRIP 9 proposal. The Commission stated the following:

10 As set forth below, we find that PG&E has not justified including the 11 costs of its gas system records search and organization projects in 12 revenue requirement. PG&E became responsible for its natural gas 13 transmission system the day it installed facilities and equipment for the 14 system. That responsibility includes creating and maintaining records 15 of the location and engineering details of system components. Over the years. PG&E has sought and obtained ratepayer funding for its 16 17 record-keeping functions. PG&E has imprudently managed its gas 18 system records such that extensive remedial work is now needed to 19 correct past deficiencies. Having created the need for this remedial 20 work by its imprudent historic document management practices, PG&E 21 has not shown by a preponderance of the evidence that the costs of 22 the current document search and organization projects can be included 23 in revenue requirement and that the resulting rates will be just and reasonable.33 24

25 What the Commission stated regarding PG&E's natural gas transmission 26 system, is also applicable to its electric distribution system in that PG&E became 27 responsible for its electric distribution system the day it installed facilities and 28 equipment for the system. PG&E's "responsibility includes creating and maintaining 29 records of the location and engineering details of system components." PG&E has

³² See Decision Mandating Pipeline Safety Implementation Plan, Disallowing Costs, Allocating Risk of Inefficient Construction Management to Shareholders, and Requiring Ongoing Improvement in Safety Engineering, (2012) D.12-12-030, mimeo, p. 18, Section 2.2: PG&E's Pipeline Records Integration Program...

³³ D.12-12-030, p. 87 (emphasis added).

1 not effectively utilized authorized funding to ensure that its electric distribution

2 mapping and records management systems were properly corrected, updated and

3 maintained; if the records had been properly maintained, PG&E would not be

4 requesting an increase of 825% in the Test Year. It is unreasonable to force PG&E

- 5 ratepayers to pay again to address PG&E's deficient records management.³⁴
- 6 DRA recommends that the Commission apply the policy adopted in D.12-12-

7 030, and deny PG&E's request for incremental ratepayer funding of 825% over

8 historical expense levels to address its electric distribution mapping and records

9 deficiencies. The activities included in PG&E's Electric Mapping and Records

10 Management proposal are the same activities associated with prudent Electric

- 11 Distribution recordkeeping and should be part of the normal, routine and on-going
- 12 maintenance activities that are already funded by ratepayers.
- PG&E also fails to demonstrate or incorporate into its forecast any calculated
 savings and benefits and associated efficiency gains in dollars for its proposed
 mapping and records projects. Regarding ratepayer benefits and savings, on
 proposed projects, the Commission has stated the following:

17 The descriptions of the potential benefits of the projects provide 18 general information but there is not sufficient information to determine 19 whether the costs are justified in either the short or long term. With 20 this type of analysis and showing it is possible to explicitly include associated costs in rates but it is not possible to explicitly reflect any of 21 22 the associated benefits or savings, whatever they may ultimately be, in 23 rates for this rate case cycle. This imbalance is troubling. In general, it 24 is our obligation to consider both the costs and, if applicable, the 25 benefits/savings of utility proposals. If the benefits/savings are 26 ultimately small when compared to costs, the proposal should probably 27 not be implemented or included in rates. If the benefits/savings are 28 substantial, it would be reasonable to include both the costs and 29 benefits/savings in determining rates. For the advanced technology 30 programs/projects, the lack of information regarding benefits/savings

³⁴ PG&E proposes to utilize 2011 GRC authorized funding to conduct the first year of work for its Field Asset Inventory project in 2013 and has already conducted targeted specific asset inventories using 2011 GRC authorized funding (DRA-PG&E-085-TLG Q.11-b).

1precludes us from making such determinations. In this decision, we2are authorizing significant increases in T&D O&M and capital3expenditures. How the potential benefits of the advanced technology4programs/projects relate to SCE's proposals for increased spending is5not clear. Whether the advanced technology spending results in the6modification of any future spending related to T&D costs has not been7shown.

- 8 PG&E's forecast method ignores historical embedded costs (i.e., those that 9 are already in rates) associated with the upgrades, revisions, enhancements, 10 database consolidations and on-going operation and maintenance of its existing 11 database systems which provides the foundational infrastructure that its proposed 12 Electric Distribution Geographic Information System/Asset Management (ED 13 GIS/AM) Project relies upon. PG&E states "The ED GIS/AM project is a 14 continuation of and enhanced approach to the "Automated Mapping and Facilities" Management (AM/FM)" described in PG&E's 2011 GRC".³⁶ PG&E's forecasting 15 16 method also fails to show the relationship between and the incorporation of 17 embedded costs in its forecast. PG&E's forecast does not consider the previously 18 authorized funding of these types of activities. DRA requested additional information 19 on PG&E's proposal and for information on embedded historical cost for similar 20 activities.
- 21

<u>35</u> D.06-05-016 page 64.

³⁶ Ex. PG&E-4, pp. 2-25 and 2-26. PG&E suspended the AM/FM project after the San Bruno explosion in September 2010 to "assess the effectiveness of the project" in order to achieve accurate, verifiable, and traceable asset information. The AM/FM project closed in September 2011 and was re-launched as separate GIS/AM projects for Electric Distribution, Gas Distribution, Electric Transmission and Gas Transmission.

1 DRA asked:

Provide the documentation that explains in detail if PG&E requested
and was authorized funding in its 2003, 2007, and 2011 General Rate
Cases (GRC) to specifically address its GIS, SAP, and other database
systems that were directly related to the maintenance and operation of

- 6 its electric and gas mapping and records management activities. $\frac{37}{2}$
- 7 PG&E's response was to refer DRA to another response in the same data
- 8 request. That question and answer were the following:
- 9 DRA asked:
- 10 If PG&E did request and receive funding in its 2003, 2007, and 2011
- 11 GRCs, provide the requested, authorized, and recorded expenses, and
- all the associated projects related to the GIS, SAP, and other database
- 13 system projects associated with PG&E's maintenance of its electric
- 14 and gas mapping and records/asset management.³⁸
- 15 PG&E's response:
- 16 PG&E did forecast and recorded expenses in MWC GE in previous
- 17 general rate cases. However, the forecast and recorded expenses for
- projects related to the GIS, SAP and other database system projects
- 19 are accounted for in MWC JV and not MWC GE.
- 20 DRA asked:
- 21 Provide the documentation that explains in detail and demonstrates
- 22 specifically how PG&E incorporated historical embedded costs
- associated with completed, eliminated, or closed GIS, SAP, and
- electric and gas mapping and records/asset management projects in
- its test year forecast to justify an increase of \$27.753 million or 825%
- 26 over 2011 recorded adjusted expenses.³⁹
- 27

³⁷ DRA-PG&E-085-TLG, Q.1-c.

³⁸ DRA-PG&E-085-TLG, Q.1-d.

³⁹ DRA-PG&E-085-TLG, Q.1-e.

1 PG&E's response:

2 As part of the forecasting process, PG&E reviewed the 2011 base year 3 recorded costs for the electric mapping program and determined new 4 work required to develop the 2014 forecast. As discussed in 5 testimony, Exhibit (PG&E-4), page 12, there are two new projects 6 driving the majority of the increase in MWC GE: the Field Asset 7 Inventory project and the Convert Paper Based Records to Electronic 8 Format project. These two projects account for \$24.2 million of the 9 \$27.8 million increase. The remaining difference includes increased 10 costs for incremental work reviewing maps in preparation for GIS, the 11 addition of two guality assurance employees, converting records to 12 new standard formats and cost escalation. PG&E's expense walk for 13 MWC GE (Exhibit (PG&E-4), Chapter 4 WP 4-6) shows the individual components that make up the difference between the base year and 14 15 test year expense amounts.

- 16 PG&E's responses above are insufficient and incomplete and do not justify 17 PG&E's request for additional ratepayer funding. PG&E's responses do not 18 demonstrate the incorporation of historical embedded costs in its forecast estimate. 19 Although PG&E admits it "has implemented a number of complementary mapping and asset records management technology projects over the past 10 years". 40 its 20 21 forecast does not incorporate historical costs. PG&E's failure to account for the 22 embedded costs included in its historical expenses, which are directly related to 23 existing electronic information management systems, produces an excessive cost 24 forecast which is unjustly burdensome to ratepayers. The Commission should deny 25 PG&E's request. 26 In examining the relationship between embedded historical costs and
- 27 forecasted expenses for the same or similar activities in an earlier GRC decision, the
- 28 Commission stated:
- 29 SCE's forecast also includes a \$4.812 million (constant 2006\$)
- 30 increase for insulator replacement as part of its Transmission Life
- 31 Extension Program. SCE claims that the increase represents the cost

⁴⁰ DRA-PG&E-085-TLG, Q.6.

1 of materials and the use of contract crews to supplement SCE's crews 2 for insulator and hardware replacements. DRA claims historical 3 expenses have embedded costs for insulator replacements. 4 According to SCE, some of the circuits it will be replacing are over 90 5 vears old and many of the insulators on its system have exceeded 6 their life expectancies. While these types of programs may be a cost-7 effective way to maintain the integrity of the system and slow the 8 deterioration of capital assets. SCE has not sufficiently addressed the 9 relationship of these programs to costs embedded in historical data. 10 Accordingly, SCE's request for \$4.812 million to increase its insulator replacement as part of its Life Extension Program is denied. 41 11

12 DRA recommends that the Commission continue its policy and deny PG&E's 13 request for incremental ratepayer funding of 825% over historical expense levels to 14 address its electric distribution mapping and records deficiencies. The Commission 15 should reject increased ratepayer funding for activities that already have costs 16 embedded in PG&E's historical expenses and have been previously authorized. 17 PG&E had approximately forty years to correct its Electric Distribution mapping and 18 records deficiencies. DRA's estimate of \$4.416 million utilizing a five year average 19 (2007-2011) is a reasonable method to establish expense levels for the Test Year 20 for PG&E's MWC GE - Electric Mapping and Records Management Program. 21 PG&E had 2012 and 2013 to address its mapping and records management projects 22 before the Test Year and no additional ratepayer funding over DRA's Test Year 23 estimate of \$4.416 million is justified. If there are any incremental expenses incurred 24 over authorized funding levels, those costs should be at PG&E's shareholders 25 expense.

26

1 V. DISCUSSION / ANALYSIS OF VEGETATION MANAGEMENT

PG&E's Vegetation Management Program patrols, inspects and maintains clearance on trees as required for regulatory compliance and removes vegetation (vegetation control) from around poles that have the potential to cause fires. PG&E maintains or removes "hazard trees" or trees that it identifies as structurally unsound or that have the potential to fall on to power lines.⁴² Table 6-8 summarizes PG&E's request and DRA's recommendation for Vegetation Management expenses recorded in MWC HN.

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- 11
- 12

Table 6-8Electric Distribution Expenses for TY2014Vegetation Management(In Thousands of Dollars)

Description (a)	PG&E Proposed <u>43</u>	DRA Recommended (c)
	(b)	
HN Vegetation Management	\$190,000	\$164,223

13 A. Overview of PG&E's Request

14 PG&E forecasts \$190.0 million for Vegetation Management expenses for the

15 Test Year 2014, which is an increase of \$28.433 million or 17.60% over 2011

16 recorded adjusted expenses of \$161.567 million.⁴⁴ PG&E also requests

17 continuation of its Vegetation Management one-way balancing account.⁴⁵ PG&E

- 18 developed its forecast based on planned units of work and then multiplied the units
- 19 of work by a calculated unit cost.⁴⁶ PG&E also utilized an Excel formula "GROWTH"

44 PG&E's 2014 forecast of \$190.0 million is shown in Ex. PG&E-4, Table 8-1, p. 8-19.

45 Ex. PG&E-4, p. 8-26.

46 Ex. PG&E-4, p. 8-27.

⁴² Ex. PG&E-4, p. 8-2.

⁴³ Ex. PG&E-4, p. 8-1.

- 1 non-linear estimation methodology to determine its forecasted unit cost and its
- planned units of work for the Test Year.47 2
- 3 The corresponding DRA estimate for PG&E's Vegetation Management
- 4 expenses is \$164.223 million, which is \$25.777 million less than PG&E's forecast.
- 5 DRA's Test Year estimate of \$164.223 million is \$2.656 million more than PG&E's
- 6 2011 recorded adjusted expenses. DRA does not oppose PG&E's request for
- 7 continuation of its Vegetation Management one-way balancing account.
- 8 Table 6-9 below shows PG&E's recorded adjusted expenses for the line items

9 included in MWC HN for 2007-20012 and its 2014 forecast and DRA's Estimate.

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- 11
- 12

Table 6-9	
2007-2012 Recorded and 2014 Forecast Data for MWC HN	
(in Thousands of Dollars)	

Description	2007	2008	2009	2010	2011	2012 ^{<u>48</u>}	2014	DRA
Routine Tree Work	\$139,926	\$139,976	\$140,397	\$140,110	\$151,602	\$0	\$156,000	\$151,602
Vegetation Control	\$8,788	\$8,906	\$8,111	\$8,594	\$8,392	\$0	\$8,700	\$8,700
Quality Assurance	\$1,096	\$953	\$966	\$849	\$884	\$0	\$1,200	\$1,200
Public Education	\$311	\$346	\$328	\$278	\$375	\$0	\$360	\$360
Environmental Compliance	\$22	\$46	\$263	\$373	\$315	\$0	\$12,591	\$2,361
Fire Risk Reduction	\$0	\$0	\$0	\$0	\$0	\$0	\$11,113	\$0
Forecasting Adjustment							\$36	\$0
Total	\$150,143	\$150,227	\$150,065	\$150,204	\$161,568	\$161,474	\$190,000	\$164,223

¹³ Source: 2007-2011 data from Exhibit (PG&E-4), Chapter 8, Workpapers p. WP 8-6. The 2012 data

- 14 is from PG&E's response to DRA data request DRA-PG&E-108-CKT. Note that PG&E only provided
- 15 2012 recorded expenses by MWC total and did not provide any expense totals broken down by the
- 16 individual line items that are included in the MWCs.

17

⁴⁷ PG&E used the Excel GROWTH function as a basis to calculate its Routine Tree Work expense forecast of \$156.0 million included in its forecast of \$190.0 million for MWC HN (PG&E's response to DRA data request DRA-PG&E-083-TLG, Q.1).

In PG&E's response to DRA-PG&E-108-CKT, PG&E provided 2012 recorded expenses by MWC and did not provide its expenses broken down by the individual line items that are included in the MWCs.

1 **B. MWC**

B. MWC HN – Tree Trimming

PG&E records expenses for its Vegetation Management Program in MWC
HN. As shown in Table 6-9 above, PG&E's expenses were relatively stable between
2007 and 2010, averaging \$150.160 million for the four year period. PG&E's
expenses increased by \$11.354 million between 2010 and 2011. PG&E's expenses
have been flat for the last two years (2011 and 2012) with an average for the two
year period of \$161.521 million.

PG&E's MWC HN includes individual forecasts for six line items/subaccounts.
PG&E forecasted \$156.0 million for Routine Tree Work, \$8.7 million for Vegetation
Control, \$1.2 million for Quality Assurance, \$0.360 million for Public Education,
\$12.591 million for Environmental Compliance and \$11.113 million for Fire Risk
Reduction. 49

13

1. Tree-Trimming Balancing Account

PG&E also requests continuation of its Vegetation Management one-way
 balancing account. DRA does not oppose PG&E's request for continuation of its
 Vegetation Management one-way balancing account.

17 18

2. Public Education Program, Vegetation Control, and Quality Assurance

19 DRA does not oppose PG&E's forecast of \$0.360 million for its Public 20 Education program, \$8.7 million for its Vegetation Control program, and \$1.2 million 21 for its Quality Assurance program. DRA reviewed PG&E's testimony, workpapers, 22 data request responses and historical expense levels for these line items and notes 23 that PG&E's forecast is comparable with its 2011 recorded adjusted expenses and 24 appears to be a reasonable Test Year estimates. As discussed below, DRA does 25 take issue with PG&E's forecasts for Routine Tree Work, Environmental 26 Compliance, and Fire Risk Reduction.

⁴⁹ Ex.PG&E-4, workpapers Table 8-6 p. WP 8-6.

1

3. Routine Tree Work

2 PG&E forecasted \$156.0 million for its Routine Tree Work expenses, utilizing an Excel GROWTH formula as a basis to forecast its Test Year expenses.⁵⁰ 3 4 PG&E's forecast is an increase of \$4,398 million over its 2011 recorded adjusted 5 expenses of \$151.602 million. PG&E's request for additional funding for its Routine 6 Tree Work expenses is not justified when compared to historical levels. DRA utilized 7 PG&E's 2011 recorded adjusted expense level as a basis for its forecast of 8 \$151.602 million for PG&E's Routine Tree Work. DRA's estimate is \$4.398 million 9 less than PG&E's forecast.

10 PG&E's expenses were relatively stable between 2007 and 2010 with an 11 average for the four year period of \$140.102 million. PG&E's 2011 recorded 12 adjusted expenses for Routine Tree Work increased by \$11.492 million between 13 2010 and 2011 from \$140.110 million in 2010 to \$151.602 million in 2011. PG&E's 14 increase between 2010 and 2011 is due primarily to PG&E's expanded fire risk reduction work and tree trimming reliability projects.⁵¹ The five year average (2007-15 16 2011) for PG&E's Routine Tree Work is \$142.402 million and the three year average 17 (2009-2011) is 144.036 million. PG&E's 2011 recorded adjusted expenses for this 18 line item is the highest annual recorded figure for the five year period (2007-2011). 19 and is more than its three, four, and five year averages. PG&E's 2011 recorded 20 adjusted expenses is a reasonable expense level for the Test Year. 21

⁵⁰ E. PG&E-4, p. 8-20.

⁵¹ PG&E's response to DRA's data request DRA-PG&E-083-TLG, Q.1.

PG&E's methodology forecasts a \$4.398 million increase over 2011 recorded
adjusted expenses⁵² (using the Excel GROWTH formula) for its Routine Tree Work,
but does not appear to have any other correlation to PG&E's historical expense
levels. PG&E utilized the Excel GROWTH function as a basis to forecast its 2011
GRC expenses of \$152.500 million⁵³ for its Routine Tree Work.⁵⁴ PG&E's 2011
recorded adjusted expenses of \$151.602 million are \$0.898 million less than PG&E's
2011 GRC forecast of \$152.5 million.

- PG&E utilized the Excel GROWTH function as a basis to forecast its 2010
 expenses in its 2011 GRC of \$147.6 million for its Routine Tree Work. PG&E's 2010
 recorded adjusted expenses of \$140.110 million are \$7.490 million less than PG&E's
 2010 forecast of \$147.6 million. PG&E's 2010 recorded adjusted expenses of
 \$140.110 million are comparable to the historical expenses recorded for 2007
 through 2009.⁵⁵ It appears that PG&E's forecasting method routinely
 overestimates Routine Tree Work expenses.
- 15 PG&E states that its contractor costs are overwhelmingly the largest single
- 16 component of its Vegetation Management program and that these costs are
- 17 increasing. PG&E states further that its vegetation contractors' health costs have
- 18 increased, its liability insurance premiums are increasing, its worker compensation

⁵² PG&E states that "a large component of PG&E's unit prices are labor costs" and that the "most recently negotiated union labor agreement had a 3 percent annual increase from 2011-2012…" (Ex. PG&E-4 p. 8-19). In a response to a DRA data request PG&E states "The most recently negotiated union labor agreement had a 2 percent annual increase from 2011-2012". PG&E will issue an errata to correct the annual percent increase (DRA-PG&E-083-TLG, Q.1-g).

⁵³ PG&E's response to DRA's data request DRA-PG&E-083-TLG Q.1.

⁵⁴ PG&E's line item for Routine Tree Work in its 2014 GRC, was called Routine Tree Trimming and Removal in PG&E's 2011 GRC.

⁵⁵ Ex.PG&E-4, workpapers Table 8-6, p. WP 8-6.

1 costs are increasing, and that costs are increasing due to decreased productivity

2 due to increased travel time between fewer work locations.⁵⁶

3 PG&E was not able to provide documentation that demonstrated that specific 4 costs associated with its contractors, which PG&E identified in its testimony, were increasing. $\frac{57}{10}$ PG&E was not able to provide any detailed breakdown of the 5 increasing costs it identified in its testimony so that those costs could be compared 6 7 to its current funding level for its Routine Tree Work to show that its current funding 8 level of \$151.602 million was insufficient. PG&E stated that its "contractors express 9 to PG&E the factors that are causing cost increases but individual costs for health insurance, liability premiums, and workers compensation are not tracked by 10 PG&E".⁵⁸ Since PG&E has not tracked costs that can be verified, DRA cannot 11 12 assume that specific costs are increasing over 2011 recorded adjusted expenses 13 and require more ratepayer funding in the Test Year. PG&E did not provide 14 information pertaining to the manner in which it requests bids for projects which 15 assures that PG&E is getting the lowest competitive price from contractors. 16 In its TY 2011 GRC regarding increasing contractor costs, PG&E stated the 17 following: 18 The 2011 forecast for routine tree trimming and removal of \$152.5

million results from the Growth calculation, using annual expense and annual units worked for 2004 through 2009. PG&E did not perform separate, detailed calculations related to "increased labor, contractor insurance, environmental costs and decreased productivity due to increased travel time between fewer work locations" to calculate the increase. Such calculations were unnecessary to develop the

25 forecast.<u>59</u>

- 57 PG&E's response to DRA-PG&E-083-TLG Q.1-g.
- 58 PG&E's response to DRA-PG&E-083-TLG Q.1-g.
- 59 PG&E's response to DRA-092-TLG Q.3-e.

<u>56</u> Ex. PG&E-4, p. 8-19.

PG&E's 2011 recorded adjusted expenses for this line item is the highest
 recorded for the five year period (2007-2011). PG&E has embedded historical costs
 that can be reallocated and utilized to perform its Routine Tree Work projects.
 PG&E has not shown that additional funding is required over 2011 recorded
 adjusted expenses of \$151.602 million.

6

4. Fire Risk Reduction

PG&E forecasts \$11.113 million for its Fire Risk Reduction expenses.⁶⁰
PG&E states that the additional funding is for its inspectors to conduct "a more
detailed evaluation of every tree that has the potential to fall into PG&E's lines in
selected highest fire risk locations...⁶¹ PG&E's request for additional funding of
\$11.113 million is not justified based on historical expense levels. PG&E has not
provided sufficient support to burden ratepayers with additional funding of \$11.113

PG&E's Fire Risk Reduction line item does not show any recorded costs for 2007-2011. It is unclear why there were no recorded costs in this area because in PG&E's 2011 GRC, PG&E requested additional funding of \$13.0 million for its Fire Risk Reduction program. DRA took issue with PG&E's 2011 GRC request and recommended additional funding of \$4.3 million for PG&E's expanded fire risk reduction work at that time.

For this GRC, PG&E states that the reason its line item for Fire Risk Reduction program does not show any recorded costs for 2011 is because "PG&E's current work to reduce the risk of fires is recorded as part of its Routine Tree Work, so therefore does not appear as Fire Risk Reduction work for 2011-2013 in Table 8-

<u>61</u> Ex PG&E-4, p. 8-18.

⁶⁰ Ex. PG&E-4, workpapers Table 8-6, p. WP 8-6.

1 1.^{"62} Similarly, in its TY 2011 GRC, PG&E did not show any historical expenses recorded for its Fire Risk Reduction work for the years 2004-2008 even though PG&E argued that it had been performing fire risk reduction work as part of its ongoing and routine maintenance activities.⁶³ PG&E has embedded historical expenses that can be reallocated and utilized to address its proposed Fire Risk Reduction Program needs.

- Regarding embedded historical costs associated with PG&E's Fire Risk
 Reduction activities, DRA requested additional information from PG&E on its
- 9 proposed program:

10 PG&E states that its "Fire Risk Reduction forecast for 2014 reflects a 11 more rigorous assessment and possible removal of trees that could fall into its power lines in selected locations..." (page 8-4) Provide the 12 13 documentation that explains in detail and demonstrates if PG&E, as 14 part of its normal and routine maintenance, assessed trees for 15 "possible removal that could fall into its power lines in selected 16 locations" between 2007 and 2011. If PG&E never utilized authorized 17 funding to assess trees that "could fall into its power lines" and cause potential fires, between 2007 and 2011, as part of its normal and 18 routine vegetation management maintenance, please state so. 64 19

20 PG&E's response:

Between 2007 and 2011 (and prior) PG&E did assess trees for
"possible removal that could fall into its power lines in selected
locations". As stated in the testimony (Exhibit (PG&E-4), Chapter 8,
page 8-2, lines 15-30): "To support public safety, service reliability and
regulatory compliance, PG&E annually inspects approximately five
million trees along approximately 113,500 miles of high-voltage
distribution lines. Approximately 1.3 million trees were pruned or

62 DRA-PG&E-083-TLG Q.1-b.

<u>64</u> DRA-PG&E-083-TLG, Q.2.

 $[\]frac{63}{100}$ Ex. (PG&E-3, Table 5-4 p. 5-20. PG&E stated in its 2011 GRC that "PG&E began a program in mid-2006 to reduce the risk of fires by removing overhanging branches in urban areas as part of its routine tree trimming and removal program. The recorded expenses for the program were \$7.0 million in 2007 and \$10.4 million in 2008" (Exhibit (PG&E-3) p. 5-27).

1 removed in 2011 to maintain regulatory compliance-required distances 2 and/or to prevent trees from failing into power lines. Regulatory 3 compliance distances are set forth in GO 95 Rule 35 and PRC 4293. 4 'Hazard trees' are also identified during annual inspections. A hazard 5 tree is a tree or tree part that is deemed structurally unsound and could 6 strike a power line if it were to fall. PG&E estimates that there are 7 approximately 50 million trees tall enough to hit high-voltage 8 distribution lines if they were to fall, and some of these are deemed to 9 be hazard trees. GO 95 Rule 35, PRC 4293 and CAL Fire Power Line 10 Fire Prevention Field Guild articulate the regulatory requirements for 11 identifying hazard trees. Hazard trees are pruned or removed to 12 prevent them from striking power lines.' General Order 95, Rule 35 13 and Public Resources Code 4293 both require removal of trees (or 14 potions thereof) that are really identifiable as dead, dving or diseased. 15 These 'hazard trees' are currently identified and addressed during 16 PG&E's annual inspections. Outage reduction is a primary focus of 17 PG&E's vegetation management program and PG&E removed 18 branches (and some trees) at select locations from 2007 and 2010. In 19 Exhibit (PG&E-4), Chapter 8, page 8-4, lines 19-22 of the testimony 20 PG&E discusses the vegetation management program's expanded 21 focus on branches overhanging the conductors that began in 2011: 'In 22 2011, PG&E expanded its fire risk work to include rural areas and the 23 removal of overhanging tree branches on selected high risk circuits. 24 This fire risk reduction work has been made a part of PG&E's Routine 25 Tree Work'. In addition to the work described above, which has mainly 26 focused on dead trees or branches overhanging the conductors, the 27 proposed 2014 fire risk reduction plan will also look at all trees at a 28 given location...

29 PG&E's response demonstrates that it has been performing Fire Risk 30 Reduction work for several years, in particular, assessing trees for "possible removal 31 [of trees] that could fall into its power lines in selected locations." PG&E's response 32 does not address incorporation of embedded costs for on-going and routine activities 33 that are similar to activities that will be performed in the Test Year. It is inappropriate 34 to require increased ratepayer funding for activities that already have costs 35 embedded in PG&E's historical expenses. PG&E has not provided any 36 documentation demonstrating that its current funding levels for its fire risk reduction 37 work is insufficient.

38

1 Table 6-10 below shows PG&E's recorded costs for its Fire Risk Reduction 2 work for the years 2007-2011, and these costs are included in PG&E's historical 3 expenses for its Routine Tree Work. The five year average of \$10.129 million for 4 PG&E's Fire Risk Reduction expenses is comparable to PG&E's 2014 GRC request 5 of \$11.113 million. PG&E's 2011 Fire Risk Reduction expenses are the highest 6 recorded for the five year period and is a reasonable expense level for the Test 7 Year. Essentially, PG&E already has embedded costs in rates which are sufficient 8 for the utility to do the work, and the Commission should deny PG&E's request for 9 an additional \$11.113 million.

10 **Table 6-10** 11 2007-2011 Fire Risk Reduction Costs 12 (in Thousands of 2011 Dollars) 2008 2009 Description 2007 2010 Fire Risk Reduction costs \$6.655 \$10,002 \$8,252 \$7,322

13 Source: PG&E's response to DRA's data request DRA-PG&E-083-TLG Q.1-b and 1-c.

14

5. Environmental Compliance

15 PG&E forecasted \$12.591 million for its Environmental Compliance 16 expenses, which is an increase of \$12.276 million or 3,896% over its 2011 recorded 17 adjusted expenses of \$0.315 million. PG&E's request includes additional funding for 18 screening, surveying and monitoring, permitting, mitigation, staff and Vegetation Control VC erosion mitigation.⁶⁵ PG&E's request for additional funding for its 19 20 Environmental Compliance expenses is excessive and not justified based on 21 historical levels for this line item. DRA's Test Year estimate is \$2.361 million for 22 PG&E's Environmental Compliance expenses. DRA normalized half of PG&E's 23 incremental request of \$6.138 million over the three year rate case cycle to arrive at 24 additional funding of \$2.046 million over 2011 recorded adjusted expenses of \$0.315 25 million. DRA's estimate is higher than PG&E's recorded historical expenses for

2011

\$18,413

<u>65</u> Ex. PG&E-4, pp. 8-3, 24.

Environmental Compliance activities and should be more than adequate for PG&E to
 address its needs in the Test Year.

3	Based on its historical spending on Environmental Compliance, PG&E will not
4	require additional funding of \$12.276 million in the Test Year to perform the activities
5	for this line item. PG&E's five year average (2007-2011) for this line item is \$0.204
6	million and the three year average (2009-2011) is \$0.317 million. During PG&E's
7	2011 GRC, PG&E requested additional funding of \$3.0 million for its Environmental
8	Compliance expenses. ⁶⁶ DRA took issue with PG&E's forecast and recommended
9	additional funding of \$1.0 million. ⁶⁷ PG&E's 2011 recorded adjusted expenses for
10	Environmental Compliance of \$0.315 million is less than PG&E's 2011 GRC forecast
11	of \$3.0 million and less than DRA's recommendation of \$1.0 million.

During a field tour $\frac{68}{100}$ to observe some of PG&E's vegetation management 12 13 activities, DRA learned that PG&E has incurred costs associated with screening, 14 surveying and monitoring, permitting, mitigation, additional staffing and VC erosion 15 mitigation during the historical period (2007-2011). PG&E's proposed activities are 16 not new and are part of PG&E's on-going, normal and routine maintenance activities 17 that are funded by ratepayers. PG&E has embedded historical costs that it can 18 reallocate and utilize in the Test Year for its Environmental Compliance activities. 19 DRA requested additional information from PG&E on its proposed program, 20 including the following:

PG&E's 2014 forecasts for MWC HN include additional funding of
 \$12.6 million for its Environmental Compliance expenses. This is an
 increase of \$12.276 million over 2011 recorded expenses of \$0.315

88

<u>66</u> PG&E's 2011 GRC forecast for its Environmental Compliance line item was included in its Ex. (PG&E-3) Table 5-4, p. 5-20 to A.09-12-020.

⁶⁷ See DRA's Ex. DRA-5, p. 50 on PG&E's 2011 GRC forecast on Vegetation Management Expenses recorded in MWC HN, in A.09-12-020.

⁶⁸ The PG&E Vegetation Management field tour was on March 14, 2013.

1 million. In PG&E's 2011 GRC, PG&E requested funding of \$3.0 million 2 for its Environmental Implementation costs associated with its 3 Environmental Compliance, PG&E's five year average (2007–2011) 4 for its Environmental Compliance expenses is \$0.203 million. Provide a detailed and itemized listing (line item breakdown of expense 5 6 calculation) for all labor (including positions, job titles, and annual 7 salary) and non labor expenses that is included in the \$12.6 million forecast for PG&E's Environmental Compliance program and the 8 basis/source for each estimate. 69 9

10 PG&E's response:

11 PG&E did not forecast by labor and non-labor. As stated in Exhibit 12 (PG&E-4), Chapter 8 testimony on page 8-27, lines 12-15, 'whenever 13 possible, PG&E used forecast units times forecast unit costs to arrive 14 at cost estimates for the different sections. See workpapers for a more 15 detailed breakdown of the estimates used'. Workpaper Table 8-12 16 found, on page WP 8-14 of the Exhibit (PG&E-4) Workpapers, 17 provides a detailed and itemized listing of the \$12.6 million forecast for PG&E's Environmental Compliance efforts calculated as forecast units 18 19 times forecast unit costs.

- 20 PG&E's response does not justify an increase of \$12.276 million over 2011 21 recorded adjusted expenses of \$0.315 million. During a vegetation management 22 field tour, PG&E informed DRA of increasing restrictions, procedures and 23 complications being encountered by PG&E relating to the environmental concerns 24 from other stakeholders about specific areas and permitting guidelines associated 25 with removing trees identified by PG&E as "hazard trees". It is possible that 26 additional projects for the above mentioned issues could increase costs over 2011 27 recorded levels, however, PG&E provided no traceable and identifiable support to 28 demonstrate that additional funding of \$12.276 million over 2011 expense levels of 29 \$0.315 million is necessary or required to address Test Year activities. Considering 30 PG&E's historical spending on Environmental Compliance, DRA's Test Year method 31 is reasonable and its estimate of \$2.361 million is sufficient for PG&E to address its
- 32 proposed activities for this line item.

<u>69</u> DRA-PG&E-083-TLG, Q.2.

1VI.DISCUSSION / ANALYSIS OF DISTRIBUTION SYSTEMS2OPERATIONS

PG&E's Distribution System Operations (DSO) monitors its electric system,
 manages outage restoration, directs system switching, and manages its electric related field customer service work. Table 6-11 summarizes PG&E's request and
 DRA's recommendation for the MWCs within Distribution System Operations.
 Table 6-11

Electric Distribution Expenses for TY2014 Distribution System Operations (In Thousands of Dollars) PG&E DRA Proposed 70 Description Recommended (a) (C) (b) **BA-** Operate Distribution System \$32,743 \$28,769 **DD- Provide Field Service** \$20.328 \$19.813 HG- Elec Trans Ops Engr & Tech \$1,037 \$769

\$877

\$54,985

\$0

\$49,351

11 A. Overview of PG&E's Request

JV- Maintain IT Apps & Infra

Total

8

9

10

12 PG&E forecasts \$54.985 million for its DSO expenses for Test Year 2014.⁷¹

13 PG&E developed its forecast by utilizing its 2011 recorded expenses as a basis and

14 adjusted for escalation, additional staff, reduction of system operators and support

- 15 staff, employee training and software related to electronic wall mapping.⁷² PG&E's
- 16 forecast also includes its proposal to consolidate thirteen existing Distribution
- 17 Control Centers (DCC) into three new locations. $\frac{73}{7}$ The corresponding DRA estimate

⁷⁰ Ex.PG&E-4, Chapter 11, Workpapers p. WP 11-1.

⁷¹ PG&E's 2014 forecast of \$54.986 million is shown in Ex.PG&E-4 workpapers Table 11-1, p. WP 11-1.

⁷² Ex.PG&E-4, p. 11-9, 11-10, 11-14, and 11-15.

 $[\]frac{73}{12}$ Ex. PG&E-4, p. 11-2. PG&E plans to construct one central Distribution Control Center and two regional facilities.
- 1 for PG&E's DSO expenses is \$49.351 million, which is \$5.634 million less than
- 2 PG&E's forecast. Table 6-12 below shows PG&E's recorded adjusted expenses for
- 3 2007-2012 and its 2014 forecast.
- 4
- 5 6

Table 6-12
2007-2012 Recorded Data and 2014 Forecast for MWC BA, DD, HG, and JV
(in Thousands of Dollars)

Description	2007	2008	2009	2010	2011	2012	2014 Forecast
BA- Operate Distribution System	\$32,246	\$33,884	\$35,218	\$35,163	\$33,681	\$33,401	\$32,743
DD- Provide Field Service	\$15,064	\$15,061	\$18,611	\$19,409	\$19,813	\$19,264	\$20,328
HG-Elec Trans Ops Engr & Tech	\$683	\$499	\$448	\$545	\$749	\$769	\$1,037
JV- Maintain IT Apps & Infra	\$0	\$0	\$0	\$0	\$0	\$521	\$877
Total	\$47,993	\$49,444	\$54,277	\$55,117	\$54,243	\$53,955	\$54,985

7 Source: 2007-2011 data from Ex. PG&E-4, Chapter 11, Workpapers p. WP 11-1. The 2012 data is

8 from PG&E's response to DRA data request DRA-PG&E-108-CKT.

- 9 PG&E records expenses for DSO in four Major Work Categories (MWCs): BA
- 10 Electric Distribution Operation Activities, with a forecast of \$32.743 million, DD -
- 11 Field Service and Dispatch Scheduling, with a forecast of \$20.328 million, HG -
- 12 Electric Distribution Operations Technology Activities, with a forecast of \$1.037
- 13 million, and JV Maintenance of Information Technology Applications, with a
- 14 forecast of \$0.877 million.⁷⁴

15

⁷⁴ Ex. PG&E-4 workpapers p. WP 11-1.

1

B. MWC BA – Electric Distribution Operation

- 2 PG&E forecasts \$32.743 million for MWC BA - Electric Distribution Operation expenses $\frac{75}{10}$ PG&E's request includes additional funding for 27 new hires $\frac{76}{10}$ 3 4 adjustments for 41 staff reductions, employee/operator training, curriculum development, and interdepartmental energy usage $\frac{77}{100}$ PG&E's forecast also 5 includes its proposal to consolidate thirteen existing Distribution Control Centers 6 $(DCC)^{\frac{78}{12}}$ down to one Central DCC and two regional facilities. 7 8 PG&E's forecast for MWC BA is not justified based on historical expense 9 levels. DRA forecasts \$28.769 million for PG&E's MWC BA, which is \$3.974 million less than PG&E's forecast. The basis for DRA's estimate is PG&E's 2011 recorded 10
- costs for MWC BA.80 11

77 Ex.PG&E-4, pp.11-2, 11-9, 11-10, and 11-15.

79 Ex. PG&E-4, p.11-7.

<u>80</u>

⁷⁵ Ex.PG&E-4, workpapers WP p. 11-1. The costs to operate and maintain PG&E's DCCs are charged to MWC BA. The majority of PG&E employee training costs are planned and recorded in its Provider Cost Centers (PCC). PG&E organized its 2014 GRC filing by MWC and not by PCC. PG&E is requesting employee training costs in MWC BA. (PG&E's response to DRA-PG&E-084-TLG Q.5-i).

⁷⁶ PG&E describes this as the "[a]ddition of seven employees and the replacement of 15 Assistant System Operators with 20 higher skilled and more experienced dispatchers..." (Ex, PG&E-4, p. 11-9, lines 16-20.)

⁷⁸ In PG&E's 2011 GRC it proposed to consolidate/eliminate seventeen DCCs down to four new DCCs. DRA requested clarification on PG&E's proposed DCCs consolidation. "In the 2010/2011 time period, the electric distribution operations team executed a "DCC pre-consolidation" project which consisted of expansions and upgrades to six of the existing control centers allowing for the reduction in the number of control centers from 17 to 13." PG&E's expenditures for its DCC preconsolidation project were \$3.785 million in 2010 and \$0.709 million in 2011. (PG&E's response to DRA-PG&E-084-TLG Q. 5-h).

DRA's estimate of \$28.769 million is based on what appears to be a revised amount by PG&E for its 2011 recorded costs for MWC BA. PG&E provided its 2011 recorded operations costs of \$28,769 million (this amount includes labor, non-labor expenses and interdepartmental energy usage recorded in MWC BA) associated with its thirteen DCCs in its response to DRA-PG&E-084-TLG Q.5-i. The 2011 recorded costs of \$28.769 million are different from the 2011 recorded adjusted expense of \$35.536 million that PG&E shows in its workpapers (See Ex. PG&E-4, workpapers p. 11-1).

1 PG&E's forecast for MWC BA appears to be overstated, which causes 2 ratepayers to be unnecessarily overcharged for the work activities in the Test Year 3 for MWC BA. As shown in Table 6-12 above, PG&E's 2014 forecast of \$32.743 4 million is comparable to historical expense levels. This is problematic. PG&E's 5 recorded adjusted expenses for 2007-2010 includes operational costs for seventeen 6 DCCs, and its 2011 recorded adjusted expenses includes operational costs for 7 thirteen DCCs. PG&E's 2014 GRC forecast is supposed to include costs for the 8 operation of only three DCCs along with incorporated employee cost reductions and 9 savings caused by added efficiencies from the DCC consolidation project.

10 PG&E's 2011 recorded adjusted expenses for MWC BA is shown as \$33.681 million.⁸¹ However, PG&E's 2011 GRC Imputed amount was \$36.023 million for 11 12 MWC BA. PG&E's 2011 GRC budgeted amount was \$41.242 million for its MWC BA.⁸² PG&E's 2011 recorded adjusted expense of \$33.681 million is \$2.342 million 13 14 less than its 2011 GRC Imputed amount and is \$7.561 million less than PG&E's 2011 GRC budgeted amount. Similarly, PG&E forecasted \$35.536 million for 2012 15 16 for MWC BA in its 2014 GRC, but its 2012 recorded adjusted expenses for MWC BA is \$33.401 million. This is \$2.135 million less than the 2012 forecasted amount.⁸³ 17

18 Although DRA utilized PG&E's 2011 revised recorded cost for MWC BA of

19 \$28.769 million as its Test Year estimate, this amount is overstated because further

<u>81</u> The 2011 recorded amount of \$33.681 million is from Ex. PG&E-4 workpapers p. WP 11-1.

⁸² PG&E's 2011 GRC Imputed and budgeted amounts are from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018, p. 2-11. PG&E states the following as the reason for the difference between its 2011 Imputed and budgeted amounts: "Increase primarily due to an increased forecast of unclaimed meter costs and routine electric operations labor, partially offset by a reduction in forecasted Distribution Control Center consolidation training costs". PG&E's 2011 recorded adjusted expenses of \$33.681 million for MWC BA is less than PG&E's Imputed and budgeted amounts.

⁸³ PG&E's 2011 GRC Imputed amount is from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018. PG&E's 2012 recorded expense amount is from PG&E's response to DRA-PG&E-108-CKT. The 2011 recorded amount and the 2012 forecasted amounts are from Exhibit (PG&E-4) workpapers p. WP 11-1.

1 adjustments are appropriate. PG&E did not provide any documentation that clearly 2 and specifically demonstrated how PG&E incorporated identifiable and calculated 3 ratepayer savings costs associated with the DCCs consolidation project into its 2014 4 GRC Test Year forecast. PG&E proposed staff reductions and reductions in 5 associated overtime. PG&E did not provide the specific positions and associated 6 annual salary for the specific positions being eliminated or verifiable documentation 7 on the calculated overtime savings costs for 2014. PG&E states the following 8 regarding its proposed staff reductions:

9 The proposed staffing reductions due to consolidation for 2014 are a 10 best estimate based on PG&E's judgment at the time the forecast was

11 made and PG&E has not yet identified the specific positions and job

12 titles. There is no other documentation available on this subject.⁸⁴

PG&E states the following regarding proposed savings associated with the reduction in overtime (PG&E is scheduled to eliminate ten system operator positions and one support position in 2013 and an additional ten system operator positions and five more support positions in 2014):

- 17 Beginning in 2016, a 25% reduction in overtime for the remaining
- 18 Operators is assumed. A total of \$1.5 million per year is forecasted
- based on overtime savings of \$15K/Operator for the remaining 100.⁸⁵
- 20 PG&E's responses are insufficient and incomplete and do not show any
- 21 incorporation of ratepayer savings costs in the 2014 GRC forecast for reduced labor
- 22 and associated overtime. PG&E's forecast for 2012 of \$35.536 million was
- 23 supposed to include additional costs of \$2.507 million for the addition of seven new
- 24 positions and "the replacement of 15 Assistant System Operators with 20 higher
- 25 skilled and more experienced dispatchers".⁸⁶ The 2012 forecast was also supposed

⁸⁴ PG&E's response to DRA-PG&E-084-TLG, Q.1-e.

⁸⁵ Ex. PG&E-4, workpapers p. WP 11-33.

⁸⁶ Ex.PG&E-4, workpapers p. WP 11-8.

to include additional costs of \$0.750 million for process development associated with
its DCCs consolidation project. At the same time, PG&E's 2012 forecast was
supposed to show the results of reduced labor and associated overtime. DRA also
notes that PG&E's 2012 recorded adjusted expenses of \$33.401 million are \$2.135
million less than PG&E's 2012 forecast of \$35.536 million, adding doubt to the
reliability of PG&E's forecasts.

7 PG&E's 2014 forecast of \$32.743 million does not show any identifiable and calculated savings costs for the following: reduced training costs $\frac{87}{5}$ based on 8 9 reduced headcount, reduced operating costs for thirteen eliminated DCCs, reduced 10 maintenance costs (new/upgraded facilities and equipment require less maintenance 11 than older equipment and facilities), calculated efficiency costs gained from 12 eliminating paper wall maps maintained manually and the efficiency gains from 13 implementing electronic wall mapping systems, efficiency savings costs from 14 streamlined operational processes and reduced manual labor, efficiency gains from 15 eliminating the costs and need to maintain, record and manage multiple systems,

- 16 etc.⁸⁸
- 17 Regarding ratepayer benefits and savings on proposed projects, the
- 18 Commission has stated the following:

19 The descriptions of the potential benefits of the projects provide 20 general information but there is not sufficient information to determine 21 whether the costs are justified in either the short or long term. With 22 this type of analysis and showing it is possible to explicitly include 23 associated costs in rates but it is not possible to explicitly reflect any of 24 the associated benefits or savings, whatever they may ultimately be, in 25 rates for this rate case cycle. This imbalance is troubling. In general, it

⁸⁷ PG&E forecasted \$0.800 million in 2013 and \$0.400 million in 2014 for additional employee training associated with its DCC consolidation project. PG&E received authorized funding in its 2011 GRC for employee training associated with its DCC consolidation project, and therefore PG&E has embedded training costs that can be reallocated and utilized and no additional funding for this activity is required in the Test Year.

⁸⁸ Ex.PG&E-4, workpapers pp. WP 11-25 to WP 11-31.

1 is our obligation to consider both the costs and, if applicable, the 2 benefits/savings of utility proposals. If the benefits/savings are 3 ultimately small when compared to costs, the proposal should probably 4 not be implemented or included in rates. If the benefits/savings are 5 substantial, it would be reasonable to include both the costs and 6 benefits/savings in determining rates. For the advanced technology 7 programs/projects, the lack of information regarding benefits/savings 8 precludes us from making such determinations. In this decision, we 9 are authorizing significant increases in T&D O&M and capital 10 expenditures. How the potential benefits of the advanced technology programs/projects relate to SCE's proposals for increased spending is 11 12 not clear. Whether the advanced technology spending results in the 13 modification of any future spending related to T&D costs has not been shown.⁸⁹ 14

15 PG&E implemented a DCC "pre-consolidation" project with costs of \$3.785 million in 2010 and \$0,709 million in 2011.⁹⁰ PG&E incurred costs for DCC "pre-16 consolidation" that expanded and upgraded DCCs that PG&E is proposing to 17 18 eliminate. PG&E did not provide any documentation demonstrating how these costs 19 were incorporated in its Test Year estimate or documentation that discussed how 20 these expanded and upgraded DCCs would be utilized in the Test Year. PG&E's 21 decision to incur costs, at ratepayer expense, to upgrade and expand DCCs that it 22 proposed in its 2011 and 2014 GRCs to eliminate is problematic. PG&E states:

- 23 In the 2010/2011 time period, the electric distribution operations team
- executed a "DCC pre-consolidation" project which consisted of
 expansions and upgrades to six of the existing control centers allowing
- 26 for the reduction in the number of control centers from 17 to $13.\frac{91}{2}$
- 27

⁸⁹ D.06-05-016 p. 64.

⁹⁰ PG&E's response to DRA-PG&E-084-TLG Q.5-h.

⁹¹ PG&E's response to DRA-PG&E-084-TLG Q.5-h.

1 PG&E has embedded historical costs that can be reallocated and utilized for 2 its proposed Test Year activities for MWC BA. It is inappropriate to charge 3 ratepayers excessive costs for PG&E's DCCs consolidation projects for activities 4 that are already included in its historical costs. Based on the foregoing, DRA's Test 5 Year estimate of \$28.769 million for PG&E's MWC BA should be adopted: PG&E 6 has not proved that any additional funding is reasonable over this amount.

7 8

1. Summary of PG&E's Distribution Control Center **Consolidation Proposal**

9 In PG&E's 2011 GRC, PG&E proposed to consolidate its seventeen DCCs down to four large control centers with a capital forecast of \$133 million. The DCC 10 consolidation project was supposed to be completed in 2013.⁹² In January 2012. 11 PG&E "re-initiated" its DCC consolidation program. The "re-initiated" DCC 12 13 consolidation project would reduce its thirteen DCCs down to one central control center and two regional facilities with a capital forecast of \$72.3 million.⁹³ PG&E's 14 DCC consolidation project is supposed to be completed in 2014.⁹⁴ PG&E states 15 that "[t]his control center configuration will ultimately provide geographic coverage 16 17 throughout PG&E's service territory while eliminating the need to maintain and staff the existing 13 DCCs".95 18 19

94 Ex. PG&E-4, p.11-14 and PG&E's response to DRA-PG&E-084-TLG Q.5-b.

<u>95</u> Ex. PG&E-4, p. 11-14.

⁹² Ex. PG&E-4, p. 11-2 and PG&E's response to DRA-PG&E-084-TLG Q.5-b.

⁹³ DRA's capital witness will address the costs of PG&E's DCC consolidation project. PG&E's capital forecast for its DCC consolidation project also includes \$9.7 million for software recorded in MWC 2F. The capital forecast of \$72.3 million for the three new DCCs is recorded in MWC 63D (Ex. PG&E-4, pp. 11-2 and 11.15). Regarding PG&E's changes in its DCC consolidation project, PG&E states "No specific documentation is available formalizing the change in strategy. At the time of forecast preparation, this strategy change was still under development". (PG&E's response to DRA-PG&E-084-TLG Q.5-b.)

1 In PG&E's 2011 GRC, DRA had concerns with PG&E's lack of support and 2 justification for the DCC consolidation project. DRA recognized that the DCC 3 consolidation project would provide some ratepayer cost savings and benefits due to 4 gained efficiencies. However, because PG&E's 2011 GRC showing had many 5 uncertainties, DRA recommended that PG&E's project proceed in two phases. The 6 first phase would consolidate eight of its distribution facilities into two new locations 7 for the 2011 rate case cycle. DRA recommended that PG&E's other nine DCCs 8 remain in operation until the 2014 GRC.

In the 2014 GRC, DRA recommended that PG&E show sufficient information on the total costs of the two newly consolidated facilities (including permits, environmental studies, location, etc.), and information on the steps involved in the consolidation of the eight facilities and associated problems, reduced staffing/overtime savings, proposed plans for displaced employees, demonstrated ratepayer savings, benefits and efficiency gains, etc.

As mentioned above, PG&E delayed its DCC consolidation project that was included in its 2011 GRC. In its TY 2014 showing, PG&E has provided additional information on its DCC consolidation project which is scheduled for the 2014 completion time frame. However, DRA has similar concerns about PG&E's 2014 GRC showing lacking supporting documentation of the calculated ratepayer cost savings and not demonstrating how these savings, benefits and efficiency gains have been incorporated into its Test Year forecast.

- 22
- 23 24

2. PG&E's Employee, Operational Development, Software Development and Implementation Costs Related to its DCC Consolidation Project

PG&E's forecast for MWC BA of \$32.743 million includes costs for employee
training and associated labor and overtime, operational development, software
development and implementation, and IT upgrades for electronic wall mapping
associated with its DCC consolidation project. PG&E was authorized funding in its

1 2011 GRC to address these activities in MWC BA and in its Information Technology business unit.⁹⁶ In 2011, PG&E decided to defer this DCC consolidation project.⁹⁷ 2

- 3 PG&E Imputed \$260.915 million and budgeted \$246.369 million for its 2011 4 GRC for all of its IT work, including Electric Distribution IT for its DCC consolidation project.⁹⁸ PG&E delayed the development of several of the technology projects 5 proposed in its 2011 GRC, including the projects for its DCC consolidation project.99 6 PG&E also deferred its employee training $\frac{100}{100}$ and reduced its 2011 GRC forecasts 7 associated with its DCC consolidation project. 101 8
- 9 PG&E's ratepavers should not be required to fund PG&E's projects
- associated with its DCC consolidation twice (in its 2011 GRC and its 2014 GRC) 10
- because PG&E deferred the project. As mentioned above, PG&E has embedded 11
- 12 historical costs that can be reallocated and utilized to address its proposed projects
- for MWC BA in the Test Year. 13

102 PG&E also has embedded historical costs associated with expenses that are not necessary or required to operate the utility business. DRA requested that PG&E provide a detailed and itemized listing of all non-labor expenses by year (2007-2011) for costs incurred for employee meals, vendor payments for safety and other luncheons, entertainment expenses, employee recognition activities, sporting events, bonuses/Rewards & Recognition, company memberships, and other employee (continued on next page)

⁹⁶ Regarding PG&E's 2011 GRC request associated with its DCC consolidation project, See DRA's 2011 GRC report in Ex.t DRA-5, pp. 71 through 78.

⁹⁷ PG&E states "No specific documentation is available giving formal notification that this project was placed on hold at this time". (DRA-PG&E-084-TLG. Q.5-a).

⁹⁸ DRA-PG&E-084-TLG, Q.5-e, and PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018, p. 7-1.

⁹⁹ PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018, p. 1-7.

¹⁰⁰ PG&E also has embedded historical costs for various completed, closed, and/or eliminated training programs that can be reallocated and utilized to address its training needs in the Test Year. PG&E's response to DRA-PG&E-TLG Q.5-g shows historical training costs fluctuating during the five year period (2007-2011).

¹⁰¹ PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018, p. 2-11.

C. MWC DD – Provide Field Service

1

PG&E forecasts \$20.328 million for its MWC DD – Provide Field Services. 2 3 PG&E calculated its forecast for MWC DD utilizing its 2011 recorded adjusted 4 expenses as a basis for its 2012 forecast and then used its 2012 forecast to 5 calculate its 2014 GRC forecast amount. PG&E states that "for GRC purposes, the 6 forecasted SmartMeter benefits are added back into the forecast because they are being accounted for through the absorption of escalation".¹⁰⁴ PG&E's forecast is 7 not justified when compared to historical levels. DRA utilized PG&E's 2011 recorded 8 9 adjusted expenses of \$19.813 million as the basis for its estimate for PG&E's MWC 10 DD. DRA's estimate is \$0.515 million less than PG&E's forecast. 11 As shown in Table 6-12 above, PG&E's recorded adjusted expenses have 12 been relatively stable for the last three years (2010-2012) with a three year average

13 of \$19.495 million and a five year average (2007-2011) of \$17.592 million. PG&E's

- 14 testimony for MWC DD does not discuss any proposed programs or projects
- 15 requiring additional funding over 2011 recorded levels. In fact, PG&E states that its
- 16 electric customer service work was transferred from its Customer Care Line of
- 17 Business to its Electric Distribution Operation along with the necessary resources
- and expenditures to support the transferred work.¹⁰⁵ PG&E's 2011 recorded
- 19 adjusted expenses of \$19.813 million are the highest recorded for the six year period
- 20 (2007-2012) and are a reasonable expense level for the Test Year.

104 Ex.PG&E-4, p. 11-11.

⁽continued from previous page)

reimbursable expenses. *PG&E did not provide the requested information*. PG&E stated that these costs "are typically planned and recorded in a provider cost center (PCC), not in a Major Work Category". PCCs are the primary budgeting structure for the Company used to track employee-related costs that occur at the department level". (DRA-PG&E-084-TLG Q. 2). PG&E filed its 2014 GRC by MWC and not by PCC. The issue is not where these costs are recorded; DRA asked for PG&E to provide the amounts of the costs incurred that are embedded in PG&E's historical expenses for its employees.

¹⁰³ Ex.PG&E-4, workpapers p. WP 11-1.

¹⁰⁵ Ex.PG&E-4, p. 11-11.

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D. MWC HG – Electric Distribution Operations Technology

2 PG&E forecasts \$1.037 million for its MWC HG – Electric Distribution Operations Technology Activities.¹⁰⁶ PG&E calculated its forecast for MWC HG 3 4 utilizing its 2011 recorded adjusted expenses as a basis plus an increase of \$0.261 5 million for IT support costs (technology specialist and supervisors to provide support for applications associated with its "OIS, ILIS and DOD") and escalation. 6 7 PG&E's forecast is not justified when compared to historical levels. DRA utilized PG&E's 2012 recorded adjusted expenses of \$0,769 million¹⁰⁸ as the basis for its 8 9 estimate for PG&E's MWC HG. DRA's estimate is \$0.268 million less than PG&E's 10 forecast.

11 As shown in Table 6-12 above, PG&E's recorded adjusted expenses have 12 been relatively stable for the last two years (2011-2012) with a two year average of 13 \$0.759 million and a three year average (2010-2012) of \$0.688 million. The five 14 year average (2007-2011) is \$0.585 million. PG&E's 2012 recorded adjusted 15 expenses of \$0.769 million are the highest recorded for the six year period (2007-2012). PG&E states "IT support costs had historically been charged to both 16 17 Distribution and Transmission, but will only be charged to Distribution going forward" 109 18

PG&E did not provide any traceable or verifiable documentation that
demonstrate the specific dates for when its Transmission will stop being charged IT
support costs or that stated what the recorded costs were for 2007-2011 for its
Transmission so that this data could be compared with information for its Distribution

109 Ex.PG&E-4, p. 11-12.

¹⁰⁶ Ex. PG&E-4, workpapers p. WP 11-1.

¹⁰⁷ Ex.PG&E-4- pp. 11-11 and 11-12.

¹⁰⁸ DRA-PG&E- 108-CKT Q. 4.

1 to justify increases over 2011 expense levels. PG&E states "Personnel provide 2 troubleshooting and issue resolution of these managed applications and ensure that they are operating effectively".¹¹⁰ These activities appear to be on-going and 3 4 routine and PG&E should have embedded historical costs for similar work that can 5 be reallocated. PG&E's expenses increased by \$0.204 million between 2010 and 2011 from \$0.545 million in 2010 to \$0.749 million in 2011. PG&E's testimony does 6 7 not discuss the specific cause of this increase in expenses. PG&E has embedded historical costs¹¹¹ that can be reallocated and utilized to cover proposed activities of 8 9 \$0.261 million. PG&E's 2012 recorded adjusted expenses of \$0.769 million are the 10 highest recorded for the six year period (2007-2012) and is a reasonable expense level for the Test Year. 11

12 13

E. MWC JV – Maintenance of Information Technology **Applications**

14 PG&E forecast \$0.877 million for its MWC JV – Maintenance of Information

Technology Applications.¹¹² PG&E's forecast includes software labor (employee 15

and contract labor) costs for the development and testing of its electronic wall 16

mapping system for its DCC consolidation project.¹¹³ PG&E developed its forecast 17

110 Ex.PG&E-4.p. 11-12.

111 PG&E has embedded historical costs associated with expenses that are not necessary or required to operate the utility business. DRA requested PG&E to provide a detailed and itemized listing of all non-labor expenses by year (2007-2011) for costs incurred for employee meals, yendor payments for safety and other luncheons, entertainment expenses, employee recognition activities. sporting events, bonuses/Rewards & Recognition, company memberships, and other employee reimbursable expenses. PG&E did not provide the requested information. PG&E stated that these costs "are typically planned and recorded in a provider cost center (PCC), not in a Major Work Category". PCCs are the primary budgeting structure for the Company used to track employeerelated costs that occur at the department level". (DRA-PG&E-084-TLG Q.2). PG&E filed its 2014 GRC by MWC and not by PCC. The issue is not where these costs are recorded, DRA asked for PG&E to provide the amounts all of the costs incurred that are embedded in PG&E's historical expenses for its employees.

112 Ex. PG&E-4, workpapers p. WP 11-1.

113 Ex. PG&E-4, workpapers p. WP 11-29.

- for MWC JV "using inputs from PG&E's Concept Estimator tool".¹¹⁴ PG&E's 1
- 2 forecast is not justified based on historical levels and should be denied in its entirety.
- PG&E does not show any expenses recorded for MWC JV for 2007-2011.¹¹⁵ 3 4 In PG&E's 2011 GRC, PG&E requested additional funding for software implementation costs, among other things, associated with its DCC consolidation 5 project which PG&E decided to place on hold.¹¹⁶ Although PG&E was authorized 6 funding for its IT projects (including its DCC consolidation project), PG&E delayed 7 8 the development of several of the technology projects it proposed in its 2011 GRC.¹¹⁷ PG&E states the following regarding its decision to place on hold the 9 proposed mapping software that it requested in its 2011 GRC associated with its 10 11 DCC consolidation project: 12 At the time of PG&E's 2011 direct testimony forecast, technology to

13 enable electronic mapping was still evolving and different platforms

- 14 that offered similar capabilities had started to converge. As the
- consolidation plan continued to be analyzed and refined, PG&E 15
- 16 realized that technologies had not advanced to a point where full
- 17 implementation within the original plan timeline was prudent. It made
- financial and operational sense to delay the consolidation until PG&E 18
- assessed the best approach to enabling technologies.¹¹⁸ 19

¹¹⁴ Ex. PG&E-4, workpapers p. WP 11-29. DRA discovered during PG&E's 2011 GRC that the forecast estimates produced by PG&E's IT Concept Estimator tool were excessive, produced lump sum totals and the individual line items included in the estimates could not be substantiated. Therefore, forecasts produced by PG&E's Concept Estimator tool should not be relied upon to establish Test Year Estimates.

¹¹⁵ PG&E does not show a breakdown of historical expenses or its 2011 GRC imputed amounts for MWC JV. PG&E Imputed \$260.9 million for all of its IT work, including Electric Distribution IT for its DCC consolidation project (DRA-PG&E-084-TLG, Q.5-e).

¹¹⁶ PG&E states "No specific documentation is available giving formal notification that this project was placed on hold at this time". (DRA-PG&E-084-TLG, Q.5-a).

<u>117</u> PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018, p. 1-7.

¹¹⁸ Ex. PG&E-4, p. 11-15.

1 PG&E requested ratepayer funding in its 2011 GRC for technology to 2 implement its electronic mapping system when, at the time it made the forecast, the 3 company apparently knew that the "technology to enable electronic mapping was 4 still evolving and different platforms that offered similar capabilities had started to 5 converge". Therefore, it makes "financial and operational sense" for PG&E to 6 prudently reallocate and utilize the 2011 GRC authorized funding (that is still 7 embedded) for its 2014 GRC proposed software labor (employee and contract labor) costs for the development and testing of its electronic wall mapping system.¹¹⁹ 8

9 DRA considers development, implementation and testing costs to be one time 10 non-recurring costs and additional funding is not required each year during the rate 11 case cycle for this activity. PG&E ratepayers should not be required to provide 12 additional funding for recurring costs that are already embedded in historical 13 expenses. PG&E has not provided any documentation to demonstrate that the 14 funding it was authorized in its 2011 GRC associated with its DCC consolidation 15 project is insufficient, so no additional funding is required in the Test Year for 16 PG&E's MWC JV. PG&E had 2012 and 2013 to develop and test its electronic wall 17 mapping system before the Test Year.

¹¹⁹ During PG&E's 2011 GRC, DRA toured some of PG&E's DCCs that PG&E proposed to eliminate and while on the tours DRA observed the paper wall maps that PG&E proposed to eliminate. PG&E's 2011 GRC proposal included development and implementation costs for software to implement its electronic wall mapping system which was supposed to streamline operational processes, reduce manual labor, and reduce employee headcount due to gained efficiencies and consolidation. During PG&E's 2014 GRC, DRA once again toured PG&E's DCCs that PG&E proposed to consolidate and also observed a proposed location for one of the new DCCs. During the tour, DRA again observed the paper wall maps being maintained manually.