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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

Energy Supply Expenses

San Francisco, California
May 3, 2013

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ENERGY SUPPLY EXPENSES

I. INTRODUCTION

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 Energy Supply operation and maintenance (O&M) expenses for Test Year (TY) 2014.

Energy Supply O&M expenses are for work activities related to operating and maintaining PG&E's generation facilities (i.e., hydroelectric, nuclear (Diablo Canyon Power Plant (DCPP)), and fossil and other generation power plants), as well as the utility's energy procurement administration costs and generation support costs. This includes the cost of acquiring power to meet customer demands, such as power trading, administering PG&E's contracts with qualifying facilities (QFs) and other power purchase agreements (PPAs), as well as costs associated with obtaining long-term electric supply resources.

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.

II. SUMMARY OF RECOMMENDATIONS

PG&E forecasted $720.077 million for its Energy Supply O&M expenses. PG&E utilized various methods to forecast its Test Year expenses for its Energy Supply O&M expenses. The methods utilized to forecast expenses for Hydro Operations, Nuclear Operations, Fossil and Other Generation, and Energy Procurement are discussed in the following sections of this report. The corresponding DRA estimate for PG&E's Hydro Operations, Nuclear Operations,

Fossil and Other Generation, and Energy Procurement is $526.389 million. DRA's estimate is $193.688 million less than PG&E's forecast.

PG&E proposes substantial increases in some of its MWCs above 2011 recorded adjusted expenses. To make its recommendations, DRA utilized PG&E's 2011 recorded adjusted expenses and PG&E's historical expense levels, including its 2012 recorded adjusted expenses. DRA also reviewed and considered PG&E's historical Imputed Regulatory Values in its analysis and recommendations of each MWC. Table 11-1 compares DRA's and PG&E's TY 2014 forecasts.

Table 11-1
Energy Supply Expenses for TY2014
(In Thousands of Nominal Dollars)

Description (a)	PG&E Proposed[1] (b)	DRA Recommended (c)	Amount PG&E>DRA (d=b-c)	Percentage PG&E>DRA (e=d/c)
Hydroelectric	$191,144	$143,794	$47,350	32.93%
Nuclear/DCPP	$415,500	$285,383	$130,117	45.59%
Fossil & Other Generation	$54,633	$46,606	$8,027	17.22%
Energy Procurement Administration	$58,800	$50,606	$8,194	16.19%
Total	$720,077	$526,389	$193,688	36.80%

The following summarizes DRA's recommendations:

Hydro Operations:

- DRA's estimate of $1.404 million for PG&E's MWC AB – Support should be adopted. DRA's estimate of $1.404 million is $1.660 million lower than PG&E's Test Year forecast of $3.064 million. PG&E's forecast of $3.064 million is an increase of 118.23% over its 2011 recorded adjusted expenses of $1.404 million.
- DRA's estimate of $21.757 million for PG&E's MWC AX – Maintain Hydro Reservoirs, Dams and Waterways should be adopted. DRA's estimate of $21.757 million is $15.056 million lower than PG&E's Test Year forecast of $36.813 million. PG&E's forecast of

[1] Ex. PG&E-6, Workpapers p. WP 2-1, WP 3-1, WP 4-1, and WP 5-1.

$36.813 million is an increase of 69.20% over its 2011 recorded adjusted expenses of $21.757 million.

- DRA's estimate of $31.651 million for PG&E's MWC KJ – Regulatory/License Compliance Hydro Generation should be adopted. DRA's estimate of $31.651 million is $16.251 million lower than PG&E's Test Year forecast of $47.902 million and is $3.316 million more than PG&E's 2011 recorded adjusted expenses of $28.335 million. PG&E's forecast of $47.902 million is an increase of 69.06% over its 2011 recorded adjusted expenses.

- DRA's estimate of $11.150 million for PG&E's MWC KI – Maintain Hydro Structures, Roadways and Infrastructure should be adopted. DRA's estimate of $11.150 million is $3.475 million lower than PG&E's Test Year forecast of $14.625 million. PG&E's forecast of $14.625 million is an increase of 31.17% over its 2011 recorded adjusted expenses of $11.150 million.

- DRA's estimate of $43.066 million for PG&E's MWC KG – Operate Hydro Generation should be adopted. DRA's estimate of $43.066 million is $8.441 million lower than PG&E's Test Year forecast of $51.507 million and is $3.826 million more than PG&E's 2011 recorded adjusted expenses of $39.240 million. PG&E's forecast of $51.507 million is an increase of 31.26% over its 2011 recorded adjusted expenses.

- DRA's estimate of $0.883 million for PG&E's MWC JV – Maintain Information Technology (IT) Applications and Infrastructure should be adopted. DRA's estimate of $0.883 million is $2.467 million lower than PG&E's Test Year forecast of $3.350 million. PG&E's forecast of $3.350 million is an increase of 347.26% over its 2011 recorded adjusted expenses of $0.749 million.

- PG&E's shareholders should be responsible for additional costs associated with PG&E's Hydro Operations deferred maintenance and rescheduled projects which have already been funded by ratepayers. Consistent with Commission policy regarding deferred maintenance, PG&E's request for incremental funding to address this deferred work should be denied.

<u>Nuclear Operations:</u>

- DRA's estimate of $2.467 million for PG&E's MWC AK – Manage Environmental Operations should be adopted. DRA's estimate of $2.467 million is $0.601 million lower than PG&E's Test Year forecast of $3.068 million. PG&E's forecast of $3.068 million is an increase of 24.36% over its 2011 recorded adjusted expenses of $2.467 million.

- DRA's estimate of $5.166 million for PG&E's MWC BP – Manage Diablo Canyon Power Plant (DCPP) Business should be adopted. DRA's estimate of $5.166 million is $10.121 million lower than PG&E's Test Year forecast of $15.287 million. PG&E's forecast of $15.287 million is an increase of 195.92% over its 2011 recorded adjusted expenses of $5.166 million.

- DRA's estimate of $91.921 million for PG&E's MWC BR – Operate DCPP Plant should be adopted. DRA's estimate of $91.921 million is $15.419 million lower than PG&E's Test Year forecast of $107.340 million and is $3.790 million more than PG&E's 2011 recorded adjusted expenses of $88.131 million. PG&E's forecast of $107.340 million is an increase of 21.80% over its 2011 recorded adjusted expenses.

- DRA's estimate of $141.184 million for PG&E's MWC BS – Maintain DCPP Plant Assets should be adopted. DRA's estimate of $141.184 million is $42.994 million lower than PG&E's Test Year forecast of $184.178 million and is $30.710 million more than PG&E's 2011 recorded adjusted expenses of $110.474 million. PG&E's forecast of $184.178 million is an increase of 66.72% over its 2011 recorded adjusted expenses.

- DRA's estimate of $16.131 million for PG&E's MWC BT – Enhance DCPP Personnel Performance should be adopted. DRA's estimate of $16.131 million is $7.405 million lower than PG&E's Test Year forecast of $23.536 million. PG&E's forecast of $23.536 million is an increase of 45.91% over its 2011 recorded adjusted expenses of $16.131 million.

- DRA's estimate of $52.751 million for PG&E's MWC BV – Maintain DCPP Plant Configuration should be adopted. DRA's estimate of $52.751 million is $17.487 million lower than PG&E's Test Year forecast of $70.238 million and is $5.064 million more than PG&E's 2011 recorded adjusted expenses of $47.687 million. PG&E's forecast of $70.238 million is an increase of 47.29% over its 2011 recorded adjusted expenses.

- DRA's estimate of $11.355 million for PG&E's MWC BQ – DCPP Support Services should be adopted. DRA's estimate of $11.355 million is $34.998 million lower than PG&E's Test Year forecast of $46.353 million.

- DRA's estimate of $1.808 million for PG&E's MWC JV – Maintain IT Applications and Infrastructure should be adopted. DRA's estimate of $1.808 million is $1.092 million lower than PG&E's Test Year forecast of $2.9 million. PG&E's forecast of $2.9 million is an increase of 63.38% over its 2011 recorded adjusted expenses of $1.775 million.

- DRA's methodology for forecasting PG&E's Test Year costs for its two refueling outages should be adopted. PG&E had two refueling outages in 2009 and those costs are included in its recorded expenses for that year. PG&E did not identify and remove all costs incurred for refueling outages from each associated MWC prior to calculating its 2014 GRC forecasts. DRA utilized PG&E's recorded data to calculate its Test Year estimates for each of PG&E's MWCs which included 2009 costs for two refueling outages. DRA's Test Year estimates incorporate historical embedded costs for refueling outages.

- DRA recommends that PG&E not be authorized incremental funding over DRA's test year estimate for PG&E's Nuclear Operations to address its aging workforce program. PG&E's forecasts have been overstated in regards to its aging workforce issue and it has received more than enough funding to address its aging workforce activities and has embedded historical costs that can be reallocated and utilized for this program.

- PG&E's shareholders should be responsible for additional costs associated with PG&E's Nuclear Operations deferred maintenance and rescheduled projects which have already been funded by ratepayers. Consistent with Commission policy regarding deferred maintenance, PG&E's request for incremental funding to address this deferred work should be denied.

<u>Fossil and Other Generation Operations:</u>

- DRA's estimate of $12.935 million for PG&E's MWC KK – Operate Fossil Generation should be adopted. DRA's estimate of $12.935 million is $1.923 million lower than PG&E's Test Year forecast of $14.858 million and is $0.594 million more than PG&E's 2011 recorded adjusted expenses of $12.341 million. PG&E's forecast of $14.858 million is an increase of 20.40% over its 2011 recorded adjusted expenses.

- DRA's estimate of $27.045 million for PG&E's MWC KL – Maintain Fossil Generating Equipment should be adopted. DRA's estimate of $27.045 million is $4.897 million lower than PG&E's Test Year forecast of $31.942 million. PG&E's forecast of $31.942 million is an increase of 18.11% over its 2011 recorded adjusted expenses of $27.045 million.

- DRA's estimate of $2.247 million for PG&E's MWC KM – Maintain Fossil Buildings, Grounds, and Infrastructure should be adopted. DRA's estimate of $2.247 million is $0.801 million lower than PG&E's Test Year forecast of $3.048 million and is $0.232 million more that PG&E's 2011 recorded adjusted expenses of $2.015

million. PG&E's forecast of $3.048 million is an increase of 51.27% over its 2011 recorded adjusted expenses.

- DRA's estimate of $60,000 for PG&E's MWC KQ – Operate Alternative Generation should be adopted. DRA's estimate of $60,000 is $304,000 lower than PG&E's Test Year forecast of $364,000.
- DRA's estimate of $6,000 for PG&E's MWC KS – Maintain Alternative Generation Buildings, Grounds, and Infrastructure should be adopted. DRA's estimate of $6,000 is $102,000 lower than PG&E's Test Year forecast of $108,000.
- DRA does not oppose PG&E's proposal to continue to normalize the Gateway Generating Station milestone payment for the first major inspection and the Major Inspection Use tax payment due in 2016 over the period 2014-2016.
- DRA opposes PG&E's proposal to include in its 2014 GRC the normalized milestone payment for the major inspection and Major Inspection Use tax payment due for its Colusa Generating Station in 2019 over the period of 2014-2019 (six years). PG&E's Colusa Generating Station milestone payment and Major Inspection Use tax payment are due in 2019 which is during PG&E's next GRC and should be addressed at that time.
- DRA opposes PG&E's proposal to prospectively adjust the amortization schedule for milestone payments since PG&E should retain the risk of cost recovery until the next GRC.

Energy Procurement Administration:

- DRA's estimate of $42.901 million for PG&E's MWC CT – Acquire and Manage Electric Supply should be adopted. DRA's estimate of $42.901 million is $7.308 million lower than PG&E's Test Year forecast of $50.209 million. PG&E's forecast of $50.209 million is an increase of 17.03% over its 2011 recorded adjusted expenses of $42.901 million.
- DRA's estimate of $3.797 million for PG&E's MWC CV – Aquire and Manage Gas Supply should be adopted. DRA's estimate of $3.797 million is $2.164 million lower than PG&E's Test Year forecast of $5.961 million. PG&E's forecast of $5.961 million is an increase of 56.99% over its 2011 recorded adjusted expenses of $3.797 million.
- DRA's estimate of $1.278 million for PG&E's MWC JV – Maintain IT Applications and Infrastructure should be adopted. DRA's estimate of $1.278 million is $1.722 million lower than PG&E's Test Year forecast of $3.0 million and is $0.372 million more than PG&E's

2011 recorded adjusted expenses of $0.906 million. PG&E's forecast of $3.0 million is an increase of 231.13% over its 2011 recorded adjusted expenses.

Energy Supply Ratemaking:

- DRA does not oppose PG&E's Test Year proposal as stated in the November 15, 2012 testimony to credit (net of litigation costs) the electric generation revenue requirement with funds it receives from the Department of Energy, but there is an open question regarding DOE litigation funds. DRA reserves judgment on the appropriate policy for how DOE refunds should be returned to ratepayers.
- DRA does not oppose PG&E's proposal to credit back to customers the savings associated with the first three years of its Photovoltaic (PV) Program due to the actual capital costs of the first two 50 megawatt tranches of the PV being lower than authorized in Decision 10-04-052. DRA does not express an opinion in this report regarding the credit allocation to customers.
- DRA opposes PG&E's proposed two-way balancing account for Hydro Operations for pending Federal Energy Regulatory Commission (FERC) licenses and recommends that the Commission reject PG&E's request. PG&E's historical expenses include embedded costs for these pending licenses. PG&E has received sufficient authorized funding to address past licensing renewal and amendment activities and establishing a two-way balancing account is not required.
- DRA opposes PG&E's proposed two-way balancing account for Nuclear Operations relating to Nuclear Regulatory Commission (NRC) rulemaking processes already in progress and recommends that the Commission reject PG&E's request. PG&E's has been incurring costs associated with these projects. PG&E has embedded historical costs for these on-going projects that can be reallocated and utilized for the same or similar proposed activities and establishing a two-way balancing account is not required.

III. GENERAL OVERVIEW

PG&E's Hydroelectric Operations (Hydro) maintain and operate PG&E's hydro generating assets consisting of 68 powerhouses, water storage, conveyance systems and switching centers. PG&E performs startup, shut downs, manages generation output, water flows, reads instruments, records, monitors and tracks facility performance and schedules maintenance. PG&E forecasts $191.144 million for Hydro Operations expenses for Test Year 2014, which is an increase of $58.116 million or 43.69% over 2011 recorded adjusted expenses of $133.028 million.[2]

PG&E's Nuclear Operations maintain and operate PG&E's nuclear generating assets located at the Diablo Canyon Power Plant (DCPP) consisting of two nuclear pressurized water reactor (PWR) units and steam-electric turbine generators, feed water systems and cooling water systems and related facilities. PG&E forecasts $415.500 million for Nuclear Operations expenses for Test Year 2014 which is an increase of $101.293 million or 32.24% over 2011 recorded adjusted expenses of $314.207 million.[3]

PG&E's Fossil and Other Generation Operations maintain and operate PG&E's Fossil generation facilities, including Gateway, Humboldt Bay, and Colusa Generating facilities, and its seven ground-mounted Photovoltaic solar stations, and fuel cell generating facilities. PG&E forecasts $54.633 million for Fossil and Other Generation Operations expenses for Test Year 2014 which is an increase of $8.847 million or 19.32% over 2011 recorded adjusted expenses of $45.786 million.[4]

PG&E's Energy Procurement Administration performs the planning, procuring, scheduling, dispatching, and administering of procurement agreements and ensuring payments to the California Independent System Operator and third-party power suppliers associated with the procurement of electricity and natural gas.

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[2] Ex. PG&E-6, Table 2-1, p. 2-4.

[3] Ex. PG&E-6, Table 3-1. p. 3-3.

[4] Ex. PG&E-6, Table 4-1, p. 4-3.

PG&E forecasts $58.800 million for Energy Procurement Administration expenses for Test Year 2014 which is an increase of $9.607 million or 19.53% over 2011 recorded adjusted expenses of $49.193 million.[5]

PG&E includes ratemaking proposals for Energy Supply for the 2014 Test Year. PG&E proposes to establish two-way balancing accounts to manage capital[6] and expenses for its Hydro Operations and its Nuclear Operations. PG&E proposes to credit its electric generation revenue requirement with funds it receives from the Department of Energy (DOE). PG&E proposes to credit back to customers savings associated with its Photovoltaic (PV) Program.

A. Authorized vs. Recorded Expenses/Expenditures

In PG&E's 2011 GRC, the Commission ordered the utility to provide periodic compliance filings showing authorized and recorded expenses and capital expenditures, by Major Work Category (MWC), for electric distribution, electric generation, and gas distribution.[7]

DRA provides the following historical comparison of authorized[8] versus recorded O&M expenses for the MWCs addressed in this exhibit. The tables below also include a comparison between PG&E's 2012 forecast and recorded O&M expenses.

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[5] Ex. PG&E-6, Table 5-1, p. 5-3.

[6] DRA's recommendation on PG&E's two-way balancing account proposals related to capital is discussed by DRA's Energy Supply capital witness in Ex. DRA-12.

[7] *Decision on Pacific Gas and Electric Company Test Year 2011 General Rate Increase Request* (2011) Decision (D.) 11-05-018, *mimeo*., Ordering Paragraph 42, at pp. 98-99.

[8] 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.

Table 11-2
2007-2011 Authorized vs. Recorded Hydro Operations Expenses
and PG&E's 2012 Forecasted vs. Recorded Expenses
(In Thousands of Nominal Dollars)

MWC		Year					
		2007	2008	2009	2010	2011	2012
AB	Authorized	$1,330	$1,370	$1,410	$1,450	$6,495	--
	Recorded	$1,601	$1,201	$1,405	$1,076	$1,404	$2,023
	Forecasted	$--	--	--	--	--	$2,527
AK	Authorized	$990	$1,019	$1,049	$1,079	$1,134	--
	Recorded	$944	$1,105	$1,156	$1,375	$1,448	$1,404
	Forecasted	--	--	--	--	--	$1,677
AX	Authorized	$18,822	$19,388	$19,954	$20,520	$25,898	--
	Recorded	$14,980	$15,709	$14,722	$17,757	$21,757	$23,037
	Forecasted	--	--	--	--	--	$24,123
AY	Authorized	$74	$76	$79	$81	$109	--
	Recorded	$34	$39	$86	$119	$101	$114
	Forecasted	--	--	--	--	--	$119
BC	Authorized	$23	$24	$25	$26	($695)	--
	Recorded	($14)	($956)	($460)	($305)	($508)	$(511)
	Forecasted	--	--	--	--	--	($247)
EP	Authorized	$268	$276	$284	$292	($44)	--
	Recorded	$630	$924	$873	$965	$992	$1,402
	Forecasted	--	--	--	--	--	$708
ES	Authorized	$1,663	$1,713	$1,763	$1,813	$198	--
	Recorded	$99	$32	$178	$490	$338	$424
	Forecasted	--	--	--	--	--	$211
JK	Authorized	$0	$0	$0	$0	$209	--
	Recorded	$29	$12	$27	$25	$17	$4
	Forecasted	--	--	--	--	--	$10
JV	Authorized	$0	$0	$0	$0	$0	--
	Recorded	$1	$0	$249	$945	$749	$248
	Forecasted	--	--	--	--	--	$291
KG	Authorized	$29,079	$29,959	$30,833	$31,708	$35,182	--
	Recorded	$30,955	$31,908	$31,808	$34,036	$39,240	$43,066
	Forecasted	--	--	--	--	--	$41,802
KH	Authorized	$25,740	$26,514	$27,288	$28,062	26,846	--
	Recorded	$24,324	$29,601	$29,382	$24,249	$28,005	$37,715
	Forecasted	--	--	--	--	--	$27,639
KI	Authorized	$6,921	$7,129	$7,337	$7,545	13,853	--
	Recorded	$10,400	$10,196	$9,506	$10,052	$11,150	$9,248
	Forecasted	--	--	--	--	--	$9,756
KJ	Authorized	$48,851	$50,320	$51,789	$53,258	$39,425	--
	Recorded	$22,277	$24,636	$27,756	$31,243	$28,335	$35,376
	Forecasted	--	--	--	--	--	$36,060

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 Ex. PG&E-6, Chapter 2, p. WP 2-1. Recorded 2012 data from PG&E's response to DRA data request DRA-PG&E-108-CKT. Forecasted 2012 data from Ex. PG&E-6, Chapter 2, p. WP 2-1.

Table 11-3
2007-2011 Authorized vs. Recorded Nuclear Operations Expenses and PG&E's 2012 Forecasted vs. Recorded Expenses
(In Thousands of Dollars)

MWC		Year					
		2007	2008	2009	2010	2011	2012
AB	Authorized	$2,858	$2,944	$3,030	$3,116	$2,507	--
	Recorded	$2,161	$1,528	$1,834	$0	$0	$657
	Forecasted	--	--	--	--	--	$0
AK	Authorized	$1,293	$1,332	$1,371	$1,410	$4,528	--
	Recorded	$1,595	$3,509	$2,079	$2,768	$2,467	$3,106
	Forecasted	--	--	--	--	--	$3,278
BP	Authorized	$9,066	$9,339	$9,612	$9,884	$9,836	--
	Recorded	$7,573	$7,032	$6,208	$6,519	$5,166	$8,474
	Forecasted	--	--	--	--	--	$13,661
BQ	Authorized	$29,455	$30,341	$31,227	$32,112	$10,620	--
	Recorded	$2,604	$3,317	$3,746	$4,964	$42,144	$39,421
	Forecasted	--	--	--	--	--	$41,485
BR	Authorized	$39,580	$40,770	$41,960	$43,150	$113,594	--
	Recorded	$78,650	$81,220	$90,444	$95,128	$88,131	$92,503
	Forecasted	--	--	--	--	--	$95,213
BS	Authorized	$131,683	$135,643	$174,602	$143,562	$116,847	--
	Recorded	$140,795	$155,667	$158,387	$116,047	$110,474	$137,341
	Forecasted	--	--	--	--	--	$113,440
BT	Authorized	$19,516	$20,102	$20,689	$21,276	$14,985	--
	Recorded	$16,696	$12,641	$13,089	$14,502	$16,131	$15,975
	Forecasted	--	--	--	--	--	$19,349
BU	Authorized	$3,756	$3,869	$3,981	$4,094	$0	--
	Recorded	($1,686)	$4	($138)	($735)	($57)	($8)
	Forecasted	--	--	--	--	--	$0
BV	Authorized	$53,631	$55,243	$56,856	$58,468	$55,880	--
	Recorded	$35,199	$29,641	$53,190	$57,375	$47,687	$50,224
	Forecasted	--	--	--	--	--	$50,143
CR	Authorized	$116	$120	$123	$127	$0	--
	Recorded	$65	$148	$95	$67	$110	$71
	Forecasted	--	--	--	--	--	$0
EO	Authorized	$4,002	$4,123	$4,243	$4,363	$0	--
	Recorded	($763)	($735)	($274)	($178)	$178	$120
	Forecasted	--	--	--	--	--	$0
JK	Authorized	$0	$0	$0	$0	$49	--
	Recorded	$0	$10	$57	$84	$1	$0
	Forecasted	--	--	--	--	--	$0
JV	Authorized	$0	$0	$0	$0	$0	--
	Recorded	$78	$3,284	$2,134	$1,514	$1,775	$749
	Forecasted	--	--	--	--	--	$477

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 Ex. PG&E-6, Chapter 3, p. WP 3-1. Recorded 2012 data from PG&E's response to DRA data request DRA-PG&E-108-CKT. Forecasted 2012 data from Ex. PG&E-6, Chapter 3, p. WP 3-1.

Table 11-4
2007-2011 Authorized vs. Recorded Fossil and Other Generation Operations Expenses and PG&E's 2012 Forecasted vs. Recorded Expenses
(In Thousands of Dollars)

MWC		Year					
		2007	2008	2009	2010	2011	2012
AB	Authorized	$128	$132	$135	$139	$105	--
	Recorded	$97	$68	$79	($0)	($0)	$6
	Forecasted	--	--	--	--	--	--
AK	Authorized	$688	$709	$1,712	$1,324	$2,045	--
	Recorded	$734	$850	$1,472	$1,649	$3,894	$2,655
	Forecasted	--	--	--	--	--	$3,095
KK	Authorized	$5,108	$5,262	$10,814	$10,644	$10,044	--
	Recorded	$6,011	$6,086	$10,249	$9,907	$12,341	$13,529
	Forecasted	--	--	--	--	--	$13,180
KL	Authorized	$7,181	$7,397	$15,094	$15,890	$41,370	--
	Recorded	$4,028	$4,480	$13,374	$12,510	$27, 045	$42,094
	Forecasted	--	--	--	--	--	$30,760
KM	Authorized	$191	$197	$906	$1,064	$32,544	--
	Recorded	$191	$287	$770	$846	$2,015	$2,479
	Forecasted	--	--	--	--	--	$2,405
KQ	Authorized	$0-	$0	$0	$0	$0	--
	Recorded	$0	$0	$0	$0	$0	$60
	Forecasted	--	--	--	--	--	$0
KR	Authorized	$0	$0	$0	$83	$101	--
	Recorded	$2	$35	$23	$108	$492	$1,206
	Forecasted	--	--	--	--	--	$1,498
KS	Authorized	$0	$0	$0	$0	$0	--
	Recorded	$0	$0	$0	$0	$0	$6
	Forecasted	--	--	--	--	--	$0

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 Ex. PG&E-6, 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 Ex. PG&E-6, Chapter 4, p. WP 4-1.

Table 11-5
2007-2011 Authorized vs. Recorded Energy Procurement Expenses
and PG&E's 2012 Forecasted vs. Recorded Expenses
(In Thousands of Dollars)

MWC		Year					
		2007	2008	2009	2010	2011	2012
AB	Authorized	$2,769	$2,852	$2,935	$3,018	$2,310	--
	Recorded	$1,200	$1,796	$2,028	$2,416	$2,495	$2,747
	Forecasted	--	--	--	--	--	$2,505
BI	Authorized	$0	$0	$0	$0	$0	--
	Recorded	$116	$21	$604	($28)	$0	-$0
	Forecasted	--	--	--	--	--	$100
CT	Authorized	$33,463	$34,469	$35,475	$36,481	$54,060	--
	Recorded	$25,816	$30,407	$41,046	$42,783	$42,901	$42,291
	Forecasted	--	--	--	--	--	$44,009
CV	Authorized	$3,433	$3,536	$3,639	$3,743	$4,137	--
	Recorded	$3,460	$3,388	$3,475	$3,766	$3,797	$3,821
	Forecasted	--	--	--	--	--	$3,897
JV	Authorized	$0	$0	$0	$0	$0	--
	Recorded	$272	$769	$1,638	$1,291	$906	$4,330
	Forecasted	--	--	--	--	--	$2,751
JV	Less IT	($272)	($769)	($1,638)	($1,291)	($906)	$0

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 Ex. PG&E-6, Chapter 5, p. WP 5-1. Recorded 2012 data from PG&E's response to DRA data request DRA-PG&E-108-CKT. Forecasted 2012 data from Ex. PG&E-6, Chapter 5, p. WP 5-1.

IV. DISCUSSION / ANALYSIS OF HYDRO OPERATIONS

PG&E's Hydroelectric Operations (Hydro) maintain and operate PG&E's hydro generating assets consisting of 68 powerhouses, water storage, conveyance systems and switching centers. PG&E performs startup, shut downs, manages generation output, water flows, reads instruments, records, monitors and tracks facility performance and schedules maintenance.

Table 11-6 summarizes PG&E's request and DRA's recommendation for Hydro Operations expenses recorded in the MWCs within Hydro.

Table 11-6
Energy Supply Expenses for TY2014
Hydro Operations
(In Thousands of Dollars)

Description (a)	PG&E Proposed[9] (b)	DRA Recommended (c)
AB- Support	$3,064	$1,404
AK- Manage Environmental Operation	$2,444	$2,444
AX- Maintain Hydro Reservoirs, Dams, & Waterways	$36,813	$21,757
AY- Habitat and Species Protection	$192	$192
BC- Perform Reimbursable Work for Others	($222)	($222)
EP- Manage Property & Buildings	$1,049	$1,049
ES- Implement Environment Projects	$373	$373
JK- Manage Environmental Remediation	$10	$10
JV- Maintain IT Apps & Infra	$3,350	$883
KG- Operate Hydro Generation	$51,507	$43,066
KH- Maintain Hydro Generating Equipment	$30,037	$30,037
KI- Maintain Hydro Structures, Roadways & Infrastructure	$14,625	$11,150
KJ- Regulatory/License Compliance Hydro Generation	$47,902	$31,651
Total	$191,144	$143,794

A. Overview of PG&E's Request

PG&E forecasts $191.144 million for Hydro Operations expenses for Test Year 2014, which is an increase of $58.116 million or 43.69% over 2011 expenses of $133.028 million.[10] For most of the MWCs DRA discusses below, PG&E utilized a bottoms-up methodology[11] to develop its forecast for its Hydro Operations expenses. PG&E states "work is identified, categorized, and prioritized in Hydro's long-term plan which results in a detailed schedule of work and associated

[9] Ex. PG&E-6, Chapter 2, Workpapers p. WP 2-1.

[10] PG&E's 2014 forecast of $191.144 million is shown in Ex. PG&E-6, Table 2-1, p. 2-4.

[11] *See* DRA-PG&E-101-TLG Q.1-a, p. 2, last paragraph. *See*, however, MWC JV relating to PG&E's Information Technology proposals.

expenditures into the future".[12] PG&E proposes to establish a two-way balancing account for "Hydro Licensing and License Implementation".[13] The corresponding DRA estimate for PG&E's Hydro Operations expenses is $143.794 million, which is $47.350 million less than PG&E's forecast.[14]

Table 11-7 below shows PG&E's recorded adjusted expenses for 2007-2012 and its 2014 forecast.

Table 11-7
2007-2012 Recorded and 2014 Forecast Data for MWCs included in Hydro Operations
(in Thousands of Dollars)

Description	2007	2008	2009	2010	2011	2012	2014
AB- Support	$1,601	$1,201	$1,405	$1,076	$1,404	$2,023	$3,064
AK- Manage Environmental Operations	$944	$1,105	$1,156	$1,375	$1,448	$1,404	$2,444
AX- Maintain Resv, Dams, & Waterways	$14,980	$15,709	$14,722	$17,757	$21,757	$23,037	$36,813
AY- Habitat and Species Protection	$34	$39	$86	$119	$101	$114	$192
BC- Perf Reimburs Work for Others	($14)	($956)	($460)	($305)	($508)	($511)	($222)
EP- Manage Property & Bldg	$630	$924	$873	$965	$992	$1,402	$1,049
ES- Implement Environment Projects	$99	$32	$178	$490	$338	$424	$373
JK- Manage Environ Remed	$29	$12	$27	$25	$17	$4,422	$10
JV- Maintain IT Apps & Infra	$1	$0	$249	$945	$749	$248	$3,350
KG- Operate Hydro Generation	$30,955	$31,908	$31,808	$34,036	$39,240	$43,066	$51,507
KH- Maintain Hydro Generating Equipment	$24,324	$29,601	29,382	$24,249	$28,005	$37,715	$30,037
KI- Maintain Hydro Struct, Roads & Infrastructure	$10,400	$10,196	$9,506	$10,052	$11,150	$9,248	$14,625
KJ- License Compliance Hydro Gen	$22,277	$24,636	27,756	$31,243	$28,335	$35,376	$47,902
Total	$106,260	$114,407	$116,688	$122,027	$133,028	$157,968	$191,144

Source: 2007-2011 and 2014 data from Ex. PG&E-6, Chapter 2, Workpapers p. WP 2-1. The 2012 data is from PG&E's response to DRA data request DRA-PG&E-108-CKT.

[12] Ex. PG&E-6, p. 2-151.

[13] Ex. PG&E-6, p. 2-2.

[14] PG&E's 2011 GRC Imputed amount of $148.8 million is $15.772 million more than its 2011 recorded adjusted expenses of $133.028 million. (Ex. PG&E-6, pp. 2-56 and 2-57 and PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018).

PG&E records expenses for its Hydroelectric Operations in thirteen MWCs for the Test Year: AB – Support with a forecast of $3.064 million, AK – Manage Environmental Operations with a forecast of $2.444 million, AX – Maintain Reservoirs, Dams and Waterways with a forecast of $36.813 million, AY – Habitat and Species Protection with a forecast of $0.192 million, BC – Perform Reimbursement Work for Others with a forecast of ($0.222) million, EP – Manage Property and Buildings with a forecast of $1.049 million, ES – Implement Environment Projects with a forecast of $0.373 million, JK – Manage Environ Remediation with a forecast of $0.010, JV – Maintain IT Applications and Infrastructure with a forecast of $3.350 million, KG – Operate Hydro Generation with a forecast of $51.507 million, KH – Maintain Hydro Generating Equipment with a forecast of $30.037 million, KI – Maintain Hydro Structures, Roads and Infrastructure with a forecast of $14.625 million and KJ – License Compliance Hydro Generation with a forecast of $47.902 million.[15]

DRA does not oppose PG&E's requests for MWC KH – Maintain Hydro Generating Equipment with a forecast of $30.037 million,[16] AK – Manage Environmental Operation with a forecast of $2.444 million, AY – Habitat and Species Protection with a forecast of $0.192 million, BC – Perform Reimbursement Work for Others with a forecast of ($0.222) million, EP – Manage Property and Buildings with a forecast of $1.049 million, ES – Implement Environment Projects with a forecast of $0.373 million, and JK – Manage Environ Remediation with a forecast of $0.010. DRA reviewed PG&E's testimony, workpapers, data request responses and historical expense levels for these specific MWCs and notes that PG&E's forecasts are comparable with its historical expenses and are reasonable Test Year estimates.

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[15] Ex. PG&E-6, workpapers p. WP 2-1.

[16] PG&E's forecast of $30.037 million for MWC KH - Maintain Hydro Generating Equipment is comparable to its most recent recorded expenses with a three year average (2010-2012) of $29.990 million.

DRA opposes PG&E's requests for MWC AB – Support, with a forecast of $3.064 million, AX – Maintain Reservoirs, Dams and Waterways, with a forecast of $36.813 million, JV – Maintain IT Applications and Infrastructure, with a forecast of $3.350 million, KG – Operate Hydro Generation, with a forecast of $51.507 million, KI – Maintain Hydro Structures, Roads and Infrastructure, with a forecast of $14.625 million and KJ – License Compliance Hydro Generation, with a forecast of $47.902 million.

PG&E's forecast of $191.144 million includes Base Work and Non-Base Work. Base work "is the day-to-day, year-in-year-out routine work."[17] Non-Base work "includes projects and programs that are unique in nature, and are not repeated every year."[18]

PG&E's TY 2014 forecast of $191.144 million includes costs for on-going and routine projects (Base work) that have embedded historical costs, some of which were initially proposed in PG&E's TY 2011 GRC, but were deferred or rescheduled. In discovery, DRA asked PG&E why it could not reallocate embedded costs from completed, closed or eliminated projects to address its proposed 2014 GRC Hydro Operations projects, PG&E's response, in part, was that "[p]rojects that were comp[l]eted in 2011 are not included in the 2014 forecast, and therefore, all else equal, those expense dollars are available to fund a portion of the project work forecasted for 2014."[19]

[17] Ex. PG&E-6, p. 2-6.

[18] Ex. PG&E-6, p. 2-6.

[19] DRA-PG&E-101-TLG, Q. 1-a.

The forecast for Base Work is $134.908 million and the forecast for Non-Base Work (Projects) is $56.236 million.[20] Although PG&E says that its work is "identified, categorized and prioritized in Hydro's long-term plan which results in a detailed schedule of work and associated expenditures into the future," DRA finds this assurance inadequate to rely on for purposes of establishing a Test Year estimate compared to using PG&E's historical cost levels. As discussed in more detail below for the affected MWCs, PG&E deferred maintenance on some proposed TY 2011 GRC projects and reallocated funding authorized for Hydro work to lines of business outside of its Hydro organization.

PG&E's recorded expenses for Base Work increased slightly each year between 2007 and 2011. Between 2007 and 2008 the Base Work expenses increased by 5.46%, between 2008 and 2009 the increase was 2.71%, between 2009 and 2010 the increase was 7.68%, and between 2010 and 2011, the increase in Base Work was 5.62%. The five year average (2007-2011) for Base Work expenses is $103.626 million. PG&E's 2014 forecast for Base Work of $134.908 million is an increase of 17% over 2011 recorded Base Work expenses of $115.302 million.

PG&E's recorded expenses for Non-Base Work fluctuated slightly between 2007 and 2011. Between 2007 and 2008 the Non-Base Work expenses increased by 23.95%, between 2008 and 2009 the expenses decreased by 2.59%, between 2009 and 2010 the expenses decreased further by 19%, and between 2010 and 2011, the Non-Base Work expenses increased by 37.78%. PG&E's 2014 forecast for Non-Base Work expenses is $56.236 million, an increase of 217.25% over 2011 Non-Base Work recorded expenses of $17.726 million.

[20] Ex. PG&E-6, workpapers p. WP 2-11. Base Work is "the day-to-day, year-in-year-out routine work" and Non-Base work "includes projects and programs that are unique in nature, and are not repeated every year". (Ex. PG&E-6, p. 2-6).

Table 11-8 below shows PG&E's recorded expenses for 2007-2012 and its 2014 forecast for Base and Non-Base Work. Based on a comparison of PG&E's 2014 forecast for Base and Non-Base Work and its historical expenses for Base and Non-Base Work, PG&E's 2014 forecast is unreasonable.

Table 11-8
PG&E's 2007-2012 Recorded Expenses for Base and Non-Base Work and 2014 Forecast[21]
(In Thousands of Nominal Dollars)

	2007	2008	2009	2010	2011	2012	2014
Base Work	$93,588	$98,700	$101,377	$109,162	$115,302	--	$134,908
Non-Base Work/Projects	$12,672	$15,707	$15,310	$12,866	$17,726	--	$56,236
Total	$106,260	114,407	$116,687	$122,028	$133,028	$157,968	$191,144

B. PG&E's Reallocation of Hydro Authorized O&M Funding

PG&E's reallocation of funding authorized for its Hydro Operations to other lines of business has caused PG&E to defer maintenance or "reschedule" projects that it included in its 2011 GRC. PG&E states "[w]hen comparing actual 2011 expenses to the CPUC adopted funding, $15.8 million of expense was reallocated outside of Hydro".[22] This reallocation of authorized funding is an unreasonable burden to ratepayers because they are being requested to pay double for the same activities that were already funded in PG&E's prior rate case. Reallocation of funding also increases the chances of equipment failure or unplanned outages. PG&E states:[23]

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[21] Ex. PG&E-6, workpapers p. WP 2-11.

[22] Ex. PG&E-6, p. 2-57.

[23] DRA-PG&E-101-TLG, Q 15-b.

> While some of the items on this list are rescheduled due to license, permitting or other regulatory delays, many of these items include activities such as building and roof repairs, miscellaneous equipment repairs, sealing/coating of equipment, and dredging projects. These are the types of projects that are typically rescheduled to fund other priority expense work. As a result, the condition of these facilities continues to degrade, increasing the risk of failure. When equipment fails in service, rather than being repaired in a planned manner, unplanned outages may occur and will likely cause the unit or specific piece of equipment to be out of service longer than it would have been if the work had been performed on a planned basis.

As a result of this reallocation of funding and "rescheduling" of projects, PG&E is requesting substantial funding increases of 43.69% in its 2014 GRC to do more maintenance work in order to catch-up on its backlogs of deferred Hydro maintenance projects. During PG&E's 2011 GRC, PG&E stated that "[a]s the result of emergent, high-priority distribution system work over the last several years, the Company reallocated a portion of the Hydro O&M funding that has been adopted for Hydro Operations to Distribution Operations".[24] In 2007 PG&E spent $31.1 million less on Hydro expenses than it had budgeted for Hydro activities and in 2008 PG&E spent $23.9 million less than its Hydro budget.[25]

It is inappropriate for PG&E to request incremental funding from ratepayers of 43.69% over 2011 recorded expenses because it reallocated authorized funding away from its Hydro Operations. The Commission should not feel obligated to replace any of this reallocated funding. PG&E should reallocate funding back to its Hydro Operations and complete its deferred maintenance projects, and no additional funding is required over DRA's estimates for PG&E's Hydro Operations.

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[24] PG&E's 2011 GRC Ex. PG&E-5, p. 3-4.

[25] See DRA's 2011 GRC report on PG&E's Hydro Operations in Ex. DRA-9, p.7.

C. MWC AB – Support

PG&E forecasts $3.064 million for its MWC AB – Support expenses. PG&E's forecast is an increase of $1.660 million or 118.23% over its 2011 recorded adjusted expenses of $1.404 million. PG&E's forecast is based on its expected level of transactions over the GRC period.[26] PG&E states that "full information is not yet available to develop an accurate estimate of the number of transactions required to implement the LCP".[27]

DRA forecasts $1.404 million utilizing PG&E's 2011 recorded adjusted expenses as a basis for its estimate. DRA's forecast is $1.660 million less than PG&E's forecast.

Table 11-9 below shows PG&E's MWC AB historical comparison of Imputed versus recorded O&M expenses, its 2012 forecasted and recorded expenses, and its 2014 forecasts.

Table 11-9
PG&E's 2007-2011 Authorized vs. Recorded Hydro Operations Expenses
2012 Forecasted vs. Recorded Expenses
and 2014 Forecast for Major Work Category AB
(In Thousands of Dollars)

		2007	2008	2009	2010	2011	2012	2014
AB	Authorized	$1,330	$1,370	$1,410	$1,450	$6,495	--	--
	Recorded	$1,601	$1,201	$1,405	$1,076	$1,404	$2,023	--
	Forecasted	--	--	--	--	--	$2,527	$3,064

Source: Authorized 2007-2010 data from Master Data Request, Chapter 24 Question 1. Authorized 2011 data from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018. Recorded 2007-2011data from Ex. PG&E-6, Chapter 2, p. WP 2-1. Recorded 2012 data from PG&E's response to DRA data request DRA-PG&E-108-CKT. Forecasted 2012 and 2014 data from Ex. PG&E-6, Chapter 2, p. WP 2-1.

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[26] Ex. PG&E-6, p. 2-93.

[27] Ex. PG&E-6, p. 2-93. Land Conservation Plan (LCP). The Pacific Forest and Watershed Lands Stewardship Council, an independent nonprofit organization created in 2003, oversees development and implementation of a LCP and Youth Investment Initiative. The Council receives $10 million annually for ten years (2004-2013) from PG&E with $70 million funding the LCP and $30 million going towards the Youth Investment Initiative. (Ex. PG&E-6, p. 2-91).

PG&E's request for additional funding of $1.660 million or 118.23% over 2011 recorded adjusted expenses of $1.404 million is not justified based on historical expense levels. PG&E's 2011 recorded adjusted expenses for MWC AB of $1.404 million is $5.091 million less than PG&E's 2011 GRC Imputed amount of $6.495 million as shown in Table 11-9 above.[28] This is a percentage decrease from the Imputed amount of 363%. PG&E's 2011 recorded adjusted expenses of $1.404 million is $1.664 million less than PG&E's 2011 GRC budgeted amount of $3.068 million.[29] PG&E's 2012 recorded adjusted expenses of $2.023 million is $0.504 million less than its 2012 forecast of $2.527 million.

PG&E did not provide traceable or verifiable documentation demonstrating that its current expense level, including its historical embedded funding, was insufficient. PG&E's forecast is for routine and on-going activities that do not require additional funding. PG&E states the following: "PG&E means by its statement that 'No new type of work is forecast in this MWC' that the body of work within the MWC is similar to the work contained in the 2011 and earlier GRCs. The increased 2014 forecast for the Land Conservation Support is to continue an ongoing effort as described above".[30]

Since no new work is forecasted for this MWC, and "full information is not yet available to develop an accurate estimate of the number of transactions required to implement the LCP",[31] there is no justification for incremental funding of 118.23%

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[28] Imputed 2011 data from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018. PG&E states the decrease in expenses was due to "New Generation expenses being moved to MWC CO, Land Conservation Commitment expenses, Asset Management costs being cascaded to other projects, and the Senior Vice President's and Chief Nuclear Officer's costs being cascaded across all of Energy Supply (rather than just Power Generation)".

[29] PG&E's 2011 budgeted amount of $3.068 million is from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

[30] DRA-PG&E-101-TLG, Q. 5-d.

[31] Ex. PG&E-6, p. 2-93.

over 2011 expenses. PG&E's expenses recorded in MWC AB fluctuated between 2007 and 2011. The five year average (2007-2011) is $1.337 million. The three year average (2009-2011) is $1.295 million. DRA's estimate of $1.404 million utilizing PG&E's 2011 expense levels is more than the three and five year averages for this MWC. DRA recommends the Commission use $1.404 million as a reasonable estimate for the Test Year for MWC AB.

D. MWC AX – Maintain Hydro Reservoirs, Dams and Waterways

PG&E forecasts $36.813 million for its MWC AX – Maintain Hydro Reservoirs, Dams and Waterways expenses. PG&E's forecast is an increase of $15.056 million or 69.20% over its 2011 recorded adjusted expenses of $21.757 million. PG&E's forecast includes incremental funding for increased maintenance on its reservoirs, dams and waterways.[32] PG&E states "While the scope of existing programs expands and maintenance is performed at different facilities, this is core work that has been traditionally done in Hydro".[33] DRA forecasts $21.757 million utilizing PG&E's 2011 recorded adjusted expenses as a basis for its estimate. DRA's forecast is $15.056 million less than PG&E's forecast.

PG&E's request for additional funding of $15.056 million or 69.20% over 2011 recorded adjusted expenses of $21.757 million is excessive based on historical expense levels, and not justified by the information PG&E provided when DRA asked for PG&E's support for the increases over 2011 expense levels. In discovery, DRA asked PG&E to "provide a detailed breakdown of the calculation of the forecasted increase of $15.056 million (i.e., the calculation of each individual line item estimate included in the increase) and the supporting documentation to substantiate the projects that caused the increase in expense."[34] PG&E's response

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[32] Ex. PG&E-6, p. 2-61.

[33] Ex. PG&E-6, pp. 2-72 and 2-73.

[34] DRA-PG&E-TLG-101, Q. 7a.

referred DRA back to PG&E's workpapers. PG&E's workpapers do not show in detail how each individual line item included in the forecasted increase over 2011 was calculated and do not provide any verifiable documentation that shows PG&E's current funding level and embedded historical costs (for the same or similar on-going activities as the ones proposed in the Test Year) are insufficient to address required maintenance work in the Test Year.

PG&E's recorded adjusted expenses for MWC AX fluctuated slightly between 2007 and 2009 and averaged $15.137 million for the three year period (2007-2009). In 2010 PG&E's expenses increased by $3.035 million or 20.62% over 2009 recorded adjusted expenses of $14.722 million and increased by $4.0 million or 22.53% in 2011. The average for the five year period (2007-2011) is $16.985 million. Table 11-10 below shows PG&E's MWC AX historical comparison of Imputed versus recorded O&M expenses, its 2012 forecasted and recorded expenses, and its 2014 forecasts.

Table 11-10
PG&E's 2007-2011 Authorized vs. Recorded Hydro Operations Expenses
2012 Forecasted vs. Recorded Expenses
and 2014 Forecast for Major Work Category AX
(In Thousands of Dollars)

		2007	2008	2009	2010	2011	2012	2014
AX	Authorized	$18,822	$19,388	$19,954	$20,520	$25,898	--	--
	Recorded	$14,980	$15,709	$14,722	$17,757	$21,757	$23,037	--
	Forecasted	--	--	--	--	--	$24,123	$36,813

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 Ex. PG&E-6, Chapter 2, p. WP 2-1. Recorded 2012 data from PG&E's response to DRA data request DRA-PG&E-108-CKT. Forecasted 2012 and 2014 data from Ex. PG&E-6, Chapter 2, p. WP 2-1.

PG&E's 2011 recorded adjusted expenses for MWC AX of $21.757 million are $4.141 million less than PG&E's 2011 GRC Imputed amount of $25.898 million as shown in Table 11-10 above.[35] This is a percentage decrease from the Imputed amount of 19.03%. PG&E's 2011 recorded adjusted expenses of $21.757 million are $1.058 million less than PG&E's 2011 GRC budgeted amount of $22.815 million.[36] PG&E's recorded adjusted expenses for the years 2007-2011 for MWC AX have been less than its Imputed amount each year. PG&E's 2012 recorded adjusted expenses of $23.037 million are $1.086 million less than its 2012 forecast of $24.123 million. Based on PG&E's historical expense levels and its Imputed amounts, PG&E has requested and been authorized more than was necessary to address its work activities in MWC AX.

PG&E states "[t]he work included in the base reservoir, dam and waterway maintenance includes annually reoccurring dam, canal, flume, and tunnel inspections; routine canal patching; vegetation management along our canals, on dams and in our spillways; removing silt and debris from our reservoirs and dam intakes; and levee maintenance".[37] Several of PG&E's proposed maintenance projects are for on-going and routine work with similar costs embedded in its historical expenses, so incremental funding is not justified. If PG&E has more routine and on-going maintenance work to perform in the Test Year because it deferred maintenance on several Hydro projects, some of which were included in the forecast of PG&E's 2011 GRC, it is inappropriate for PG&E to require ratepayers to provide funding for projects they already paid for.

PG&E states that the decrease in expenses in MWC AX was "due to rescheduling of some non-critical concrete work, dredging, painting and certain other

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[35] Imputed 2011 data from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

[36] PG&E's 2011 budgeted amount of $22.815 million is from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

[37] Ex. PG&E-6, p. 2-70.

infrastructure items".[38] PG&E states further that the decrease in its 2011 recorded expenses compared to its 2011 GRC imputed amount was due to "permitting and other delays resulted in some of the reservoir, dam and waterway maintenance funds to be underspent.[39]

DRA requested additional information on PG&E's forecast:

> Provide the documentation that explains in detail and demonstrates why PG&E is not able to reallocate embedded costs that were "reallocated outside of Hydro" to address its proposed 2014 GRC Hydro Operations projects.
>
> Referring to page 2-57, provide the documentation that explains in detail, identifies the projects and costs incurred, and demonstrates the current status of the higher priority work that PG&E reallocated its 2011 authorized funding for its Hydro Operations towards and therefore had to reschedule projects that were proposed in its 2011 GRC.[40]

PG&E's response:

> b. Just like Hydro Operations did, each of the functional areas within PG&E's lines of business developed their 2014 expense forecasts based on the work that they believe needs to be done in 2014 in order to provide safe, reliable, and affordable service. A large portion of this work can be funded under existing revenues, but incremental revenue is needed to fund the forecasted work in 2014.
>
> c. The August 3, 2011 report referred to in the response to part (a) provides a comparison of the 2011 budget vs. 2011 imputed amounts for all of PG&E's lines of business, and the March 30, 2012 report provides the 2011 actuals.
>
> Within Hydro Operations, a number of projects that had been forecasted in the 2011 GRC were rescheduled as a result of needing to do other emergent higher priority work. GRC2014-Ph-I_DR_DRA_101-Q01Atch01 identifies the expense projects and programs with forecasted 2011 costs from the 2011 GRC,

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[38] PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

[39] Ex. PG&E-6, pp. 2-57 and 2-58.

[40] DRA-PG&E-101-TLG Q. 1-b and c.

and compares it to the expense projects and programs with actual 2011 expenditures. Rows 6 through 78 list the emergent, high priority, hydro expense projects and programs with actual 2011 expenditures that were not identified in the 2011 GRC.

Rows 98 through 109 list the expense projects and programs with 2011 actual expenditures that were identified in the 2011 GRC but did not forecast expenditures in 2011. Expenditures on these projects and programs caused lower priority work to be rescheduled. Rows 87 through 89, and 110 through 222, list the expense projects and programs that were included in the 2011 GRC forecast, but were rescheduled either to reflect license or permitting delays or in order to accommodate the emergent work in Hydro, as well as fund work high priority work outside of Hydro Operations. The current status of the higher priority work within Hydro Operations is shown in column H.

Although PG&E acknowledges that "[a] large portion of this work can be funded under existing revenues", PG&E's testimony does not discuss this or demonstrate how PG&E incorporated embedded costs from deferred and completed projects and programs into its Test Year forecast. This omission causes PG&E's forecast to be overstated.

PG&E ratepayers should not be required to fund PG&E's routine and on-going maintenance work twice because PG&E's management decided to defer the work, underspent in MWC AX, and reallocated the funding outside of its Hydro operations, or because PG&E did not incorporate historical embedded cost for on-going and routine projects into its Test Year forecast.[41] PG&E had 2012 and has 2013 to complete these proposed on-going or deferred projects before the 2014 Test Year.

[41] See *Alternate Decision of President Peevy on Test Year 2009 General Rate Case for Southern California Edison Company* (2009), mimeo., D.09-03-025, p. 4.

Regarding deferred maintenance the Commission has stated the following:[42]

> For us to authorize Edison's recovery of deferred maintenance expense would establish an undesirable precedent, whereby the utility is effectively guaranteed that it can earn (or exceed) its authorized rate of return, regardless of its operating efficiency or inefficiency, simply by curtailing current maintenance activities, in the assurance that they could be refinanced later through recovery of deferred maintenance expenses in a succeeding rate case. This would create a perverse incentive for the utility to defer needed maintenance in the future. Consequently, we will disallow recovery of the $34.6 million requested for deferred maintenance activities in 1983 and 1984. Our disallowance of this expense for test year ratemaking purposes dose not relieve Edison of its responsibility to maintain the operating efficiency of its utility plant in a timely manner. Indeed, we expect Edison to fulfill that responsibility more conscientiously in the future.

Consistent with Commission policy regarding deferred maintenance, PG&E's shareholders, and not its ratepayers, are responsible for additional costs associated with deferred maintenance. PG&E's request for additional funding over 2011 levels to address its deferred maintenance work should be denied. PG&E has received sufficient authorized funding during 2007-2011 and has embedded historical costs from completed projects for the same or similar on-going and routine work that can be reallocated and utilized to address PG&E's proposed activities in the Test Year. DRA's estimate of $21.757 million, utilizing PG&E's 2011 expense levels, is the highest recorded figure for the five year period (2007-2011). The Commission should adopt $21.757 million as a reasonable Test Year estimate for MWC AX.

E. MWC KJ – Regulatory/License Compliance Hydro Generation

PG&E forecasts $47.902 million for its MWC KJ – Regulatory Compliance Hydro Generation expenses. PG&E's forecast is an increase of $19.567 million or 69.06% over its 2011 recorded adjusted expenses of $28.335 million. PG&E developed its forecast for the costs of new license implementation utilizing "PG&E's

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[42] *SoCal Edison* (1982) 10 CPUC 2d 155,186; D.82-12-055, 1982 Cal. PUC LEXIS 1209.

forecasting process and is based upon the best information that we have as of the date the testimony was prepared".[43] PG&E's forecast includes costs for pending license implementation work from pending FERC licenses.[44] PG&E proposes a two-way balancing account for Hydro Licensing and License Implementation. DRA forecasts $31.651 million utilizing a three year average (2010-2012) as a basis for its estimate. DRA's forecast is $16.251 million less than PG&E's forecast. DRA's estimate is $3.316 million more than PG&E's 2011 recorded adjusted expenses.

PG&E's request for additional funding of $19.567 million or 69.06% over 2011 recorded adjusted expenses of $28.335 million is not justified based on historical expense levels, and the information PG&E provided in testimony and workpapers is insufficient and incomplete.[45] In discovery, DRA asked PG&E to "provide a detailed breakdown of the calculation of the forecasted increase of $19.567 million (i.e., the calculation of each individual line item estimate included in the increase) and the supporting documentation to substantiate the estimates for each proposed project." PG&E referred DRA back to PG&E's workpapers. PG&E's workpapers show several pages of projects with lump sum numbers. Some of these projects were included in the 2011 GRC forecast and were later deferred, but PG&E is requesting funding again in this 2014 GRC. PG&E did not provide details showing how it calculated each individual line item estimate included in the forecasted increase over 2011 expense levels and did not provide the supporting documentation to substantiate the estimates for each proposed project.

PG&E's recorded adjusted expenses for MWC KJ increased by $8.966 million between 2007-2010, from $22.277 million in 2007 to $31.243 million in 2010.

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[43] Ex. PG&E-6, p. 2-85.

[44] Ex. PG&E-6, pp. 2-77, 2-85 and 2-87. The new FERC licenses are expected to be issued between 2012-2014 for Chili Bar (Application filed in 2005), Upper North Fork Feather River (Application filed in 2002), DeSabla-Centerville (Application filed in 2007), Poe and McCloud – Pit FERC Projects (Application filed in 2003), and Kilarc-Cow Creek License Surrender (License Surrender Application filed in 2009).

[45] DRA-PG&E-101-TLG, Q.11-a.

PG&E's expenses declined by $2.908 million between 2010 and 2011, from $31.243 million in 2010 to $28.335 million in 2011. The highest recorded figure for the five year period (2007-2011) was in 2010 of $31.243 million. The five year average (2007-2011) is $26.849 million, the six year average is $28.271 million, and the three year average (2010-2012) is $31.651 million. Table 11-11 below shows PG&E's MWC KJ historical comparison of Imputed versus recorded O&M expenses, its 2012 forecast and recorded expenses, and its 2014 forecasts.

Table 11-11
PG&E's 2007-2011 Authorized vs. Recorded Hydro Operations Expenses
2012 Forecasted vs. Recorded Expenses
and 2014 Forecast for Major Work Category KJ
(In Thousands of Dollars)

		2007	2008	2009	2010	2011	2012	2014
KJ	Authorized	$48,851	$50,320	$51,789	$53,258	$39,424	--	--
	Recorded	$22,277	$24,636	$27,756	$31,243	$28,335	$35,376	--
	Forecasted	--	--	--	--	--	$36,060	$47,902

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 Ex. PG&E-6, Chapter 2, p. WP 2-1. Recorded 2012 data from PG&E's response to DRA data request DRA-PG&E-108-CKT. Forecasted 2012 and 2014 data from Ex. PG&E-6, Chapter 2, p. WP 2-1.

PG&E's 2011 recorded adjusted expenses for MWC KJ of $28.335 million are $11.089 million less than PG&E's 2011 GRC Imputed amount of $39.424 million as shown in Table 11-11 above.[46] This is a 39.14% decrease from the Imputed amount. PG&E's recorded adjusted expenses for the years 2007-2011 for MWC KJ have been less than its Imputed amount for each year. PG&E has received sufficient authorized funding during 2007-2011 and has embedded historical funding that can be reallocated and utilized to address the activities associated with PG&E's expected FERC licenses in the Test Year. DRA recommends the Commission adopt a three year (2010-2012) average of $31.651 million for MWC KJ for the Test Year.

[46] Imputed 2011 data from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

1. PG&E's Proposal for a Two-Way Hydro Licensing and License Implementation Balancing Account

PG&E proposes a two-way balancing account for pending Federal Energy Regulatory Commission (FERC) licenses expected to be issued between 2012 and 2014[47] for Chili Bar (Application filed in 2005), Upper North Fork Feather River (Application filed in 2002), DeSabla-Centerville (Application filed in 2007), Poe and McCloud – Pit FERC Projects (Application filed in 2003), and Kilarc-Cow Creek License Surrender (License Surrender Application filed in 2009.[48] PG&E states:[49]

> It is difficult to estimate the actual costs of new FERC license implementation because PG&E will not know the nature of many of the new license conditions that will be required, particularly those mandated by resource agencies with mandatory conditioning authority, until after mandatory conditions and other FERC requirements have been developed and incorporated by FERC into the final FERC license, which generally occurs at the tail end of the process. Until the nature of the license conditions is known, PG&E cannot determine how much implementation will cost or when the costs will be incurred.

DRA opposes PG&E's request to establish a two-way balancing account for pending FERC licenses. This is not the first time PG&E became aware that it had to incur costs to renew or amend FERC licenses and possibly implement new FERC-mandated conditions.[50] PG&E's historical expenses include embedded costs for these pending licenses.[51] DRA requested additional information on PG&E's two-way balancing account proposal:

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[47] PG&E shows License Implementation expenses in its proposed 2-way balancing account of $0.553 million for 2012, $6.371 million in 2013, and $6.286 million in 2014 in Table 2-21 in Ex. PG&E 6, p. 2-160

[48] Ex. PG&E-6, pp. 2-77, 2-85 and 2-87.

[49] Ex. PG&E-6, p. 2-87.

[50] DRA-PG&E-101-TLG, question 3-b.

[51] See DRA-PG&E-101-TLG, question 3- c.

> Referring to page 2-3, provide the documentation that explains in detail and demonstrates if PG&E ever dealt with "the difficult-to-forecast FERC licensing renewal and amendment process durations, and costs to implement the resulting new license conditions" during any historical years. If the answer is yes, provide the documentation that explains in detail and demonstrates if PG&E requested recovery in rates only of actual costs that were incurred.[52]

PG&E's response:

> PG&E has dealt with 'the difficult-to-forecast FERC licensing renewal and amendment process durations, and costs to implement the resulting new license conditions' in the past. However, since the timing and magnitude of the costs incurred on hydroelectric relicensing have been difficult to predict, PG&E has found that the traditional approach of forecasting these costs in the GRC has been sub-optimal. PG&E has proposed the balancing account approach to improve the ratemaking process for these costs. Under PG&E's approach, PG&E would recover the actual costs incurred on hydro licensing rather than the forecast and any costs recovered in rates for license renewal would only be spent on license renewal. While this is a departure from traditional forecast ratemaking, PG&E believes the approach is beneficial to customers given the unique characteristics of the hydroelectric relicensing costs.

As PG&E stated above, it has "dealt with "the difficult-to-forecast FERC licensing renewal and amendment process durations, and costs to implement the resulting new license conditions" in the past. PG&E has received sufficient authorized funding to address past licensing renewal and amendment activities and establishing a two-way balancing account is not required. PG&E also has embedded costs that can be reallocated and utilized in the Test Year if incremental funding over DRA's Test Year estimate for MWC KJ is needed.

[52] DRA-PG&E-101-TLG, question 3-d.

F. MWC KI – Maintain Hydro Structures, Roadways and Infrastructure

PG&E forecasts $14.625 million for its MWC KI – Maintain Hydro Structures, Roadways and Infrastructures expenses. PG&E's forecast is an increase of $3.475 million or 31.17% over its 2011 recorded adjusted expenses of $11.150 million. PG&E states "While the scope of existing programs expands and maintenance is performed at different facilities, this is core work[53] that has been traditionally done in Hydro".[54] In fact, in response to a data request, PG&E says that "the type of infrastructure work forecast in MWC KI has not changed. KI expenditures include repairs to roads, bridges, waste water systems, and structures.[55] DRA forecasts $11.150 million utilizing PG&E's 2011 recorded adjusted expenses as a basis for its estimate. DRA's forecast is $3.475 million less than PG&E's forecast.

PG&E's request for additional funding of $3.475 million or 31.17% over 2011 recorded adjusted expenses of $11.150 million is not justified based on historical expense levels, and the information PG&E provided in testimony and workpapers to support the increases over 2011 expense levels is insufficient and incomplete.[56] In discovery, DRA asked PG&E to "provide a detailed breakdown of the calculation of the forecasted increase of $3.475 million (i.e., the calculation of each individual line item estimate included in the increase) and the supporting documentation to substantiate the estimates for each proposed project." PG&E referred DRA back to its workpapers.

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[53] PG&E states that "Forty-two projects drive the KI increase in 2014". (DRA-PG&E-101-TLG, Q.10-a)

[54] Ex. PG&E-6, p. 2-90.

[55] DRA-PG&E-101-TLG, Q. 10.

[56] DRA-PG&E-101-TLG, Q. 10-a.

PG&E's workpapers show several pages of projects with lump sum numbers. Some of these projects were included in the 2011 GRC forecast and were later deferred but funding is being requested again in the 2014 GRC. PG&E did not provide details showing how it calculated each individual line item estimate included in the forecasted increase over 2011 expense levels and also did not provide the supporting documentation to substantiate the estimates for each proposed project

PG&E has not shown that its current funding level and embedded historical costs (for the same or similar on-going activities as the ones proposed in the Test Year) are insufficient to address required maintenance work in the Test Year. PG&E's recorded adjusted expenses for MWC KI were relatively stable between 2007 and 2010 and averaged $10.039 million for the four year period. In 2011 PG&E's expenses increased by $1.098 million or 10.92% over 2010 recorded adjusted expenses of $10.052 million. The average for the five year period (2007-2011) is $10.261 million. Table 11-12 below shows PG&E's MWC KI historical comparison of Imputed versus recorded O&M expenses, its 2012 forecasted and recorded expenses, and its 2014 forecasts.

Table 11-12
PG&E's 2007-2011 Authorized vs. Recorded Hydro Operations Expenses
2012 Forecasted vs. Recorded Expenses
and 2014 Forecast for Major Work Category KI
(In Thousands of Dollars)

		2007	2008	2009	2010	2011	2012	2014
KI	Authorized	$6,921	$7,129	$7,337	$7,545	$13,853	--	--
	Recorded	$10,400	$10,196	$9,506	$10,052	$11,150	$9,248	--
	Forecasted	--	--	--	--	--	$9,756	$14,625

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 Ex. PG&E-6, Chapter 2, p. WP 2-1. Recorded 2012 data from PG&E's response to DRA data request DRA-PG&E-108-CKT. Forecasted 2012 and 2014 data from Ex. PG&E-6, Chapter 2, p. WP 2-1.

PG&E states "an additional consequence of the reprioritization of budget was that the hydro organization was not able to fill certain open positions, and certain lower priority O&M work, such as KI – Maintain Hydro Structures, Roadways and

Infrastructure, was rescheduled out in time".[57] PG&E's ratepayers should not be forced to fund PG&E's routine and on-going maintenance work twice because PG&E's management decided to defer the work. PG&E had 2012 and has 2013 to complete these proposed on-going or deferred projects before the 2014 Test Year. Consistent with Commission policy regarding deferred maintenance, PG&E's shareholders (not ratepayers) are responsible for additional costs associated with deferred maintenance. DRA's estimate of $11.150 million utilizing PG&E's 2011 expense levels is the highest recorded figure for the six year period (2007-2012). The Commission should adopt $11.150 million as a reasonable Test Year estimate for MWC KI.

G. MWC KG – Operate Hydro Generation

PG&E forecasts $51.507 million for its MWC KG – Operate Hydro Generation expenses. PG&E's forecast is an increase of $12.267 million or 31.26% over its 2011 recorded adjusted expenses of $39.240 million. PG&E's states that its forecasted "growth in KG expenditures is driven by increased public and employee safety, facility security, and employee training efforts".[58] DRA forecasts $43.066 million utilizing PG&E's 2012 recorded expenses as a basis for its estimate. DRA's forecast is $8.441 million less than PG&E's forecast. DRA's estimate is $3.826 million more than PG&E's 2011 recorded adjusted expenses.

PG&E's request for additional funding of $12.267 million or 31.26% over 2011 recorded adjusted expenses of $39.240 million is not justified based on historical expense levels, and the information PG&E provided in testimony and workpapers to support the increases over 2011 expense levels is insufficient and incomplete.

In discovery, DRA asked PG&E to "provide a detailed breakdown of the calculation of the forecasted increase of $12.267 million (i.e., the calculation of each

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[57] Ex. PG&E-6, p. 2-58.

[58] Ex. PG&E-6, p. 2-68.

individual line item estimate included in the increase) and the supporting documentation to substantiate the estimates for each proposed project." PG&E referred DRA back to its workpapers which show several pages of projects with lump sum numbers. Some of these projects were included in the 2011 GRC forecast and were later deferred. PG&E did not provide details showing how it calculated each individual line item over 2011 expense levels, and also did not provide the supporting documentation to substantiate the estimates for each proposed project.[59]

PG&E's recorded adjusted expenses for MWC KG were relatively stable between 2007 and 2009 and averaged $31.557 million for the three year period. In 2010, PG&E's expenses increased by $2.228 million or 7% over 2009 recorded adjusted expenses of $31.808 million. In 2011, PG&E's expenses increased by $5.204 million or 15.29% over 2010 recorded adjusted expenses of $34.036 million. The average for the five year period (2007-2011) is $33.589 million and the three year average (2009-2011) is $35.028 million. Table 11-13 below shows PG&E's MWC KG historical comparison of Imputed versus recorded O&M expenses, its 2012 forecasted and recorded expenses, and its 2014 forecasts.

Table 11-13
PG&E's 2007-2011 Authorized vs. Recorded Hydro Operations Expenses
2012 Forecasted vs. Recorded Expenses
and 2014 Forecast for Major Work Category KG
(In Thousands of Dollars)

		2007	2008	2009	2010	2011	2012	2014
KG	Authorized	$29,079	$29,959	$30,833	$31,708	$35,182	--	--
	Recorded	$30,955	$31,908	$31,808	$34,036	$39,240	$43,066	--
	Forecasted	--	--	--	--	--	$41,802	$51,507

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 Ex. PG&E-6, Chapter 2, p. WP 2-1. Recorded 2012 data from PG&E's response to DRA data request DRA-PG&E-108-CKT. Forecasted 2012 and 2014 data from Ex. PG&E-6, Chapter 2, p. WP 2-1.

[59] DRA-PG&E-101-TLG, Q.9-a.

PG&E's highest recorded expense of $39.240 million for the five year period (2007-2011) was in 2011. PG&E's recorded adjusted expenses for 2007-2011 have been more than its Imputed amount each year however the recorded expense amount over the Imputed figure was never as high as PG&E's forecasted increase of $12.267 million or 31.26%.

PG&E states that its base work for MWC KG is forecast to increase by 12% in 2014 over 2011 levels.[60] PG&E's base work includes routine and ongoing maintenance projects. Incremental funding over 2011 expense levels is not required because base work activities have historical embedded costs for the same or similar activities and funds from completed projects can be reallocated and utilized for proposed work in the Test Year.

Included in PG&E's proposed increase is funding for a Records Management Initiative called Documentum,[61] with a forecast of $2.450 million ($7.350 million over three years)[62] PG&E says that "[n]o cost savings or avoidance is forecast for this project."[63]

In its workpapers describing the Documentum project, PG&E says that "…[i]mproved records management is a key component of Hydro's Risk Management efforts, and that the "Business Objectives" include "…ensur[ing] key Power Generation records are readily available."[64] This request for additional funding to address its recordkeeping deficiencies is similar to PG&E's proposal in its Pipeline Safety Enhancement Plan (PSEP), regarding its Pipeline Records

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[60] Ex. PG&E-6, p. 2-62.

[61] Ex. PG&E-6, workpapers, pp.2-161-162.

[62] Ex. PG&E-6 workpapers p. 2-162.

[63] Ex. PG&E-6, workpapers, p. 2-162.

[64] Ex. PG&E-6, workpapers, p. 2-161.

Integration Program (PRIP). In the PSEP proceeding, PG&E requested incremental ratepayer funding for collecting, reviewing, organizing, and verifying critical records associated with its installed gas pipeline segments and for additional funding to upgrade and consolidate its multiple existing Information Technology systems (SAP and Geographic Information System (GIS)). The Commission rejected PG&E's PRIP proposal.[65]

The activities included in PG&E's proposal for MWC KG are the same activities associated with prudent Hydro Operations recordkeeping and should be part of the routine and on-going maintenance activities that are already funded by ratepayers. DRA requested additional information on PG&E's proposal:

> Referring to page 2-142, regarding PG&E's Records Information Management Documentum project, PG&E states that its "Power Generation has extensive paper records for its hydro facilities that date back to the original construction and operation of the hydro system. These records need to be identified and validated for migration to a permanent on-line system. Some of those records are brittle with age and nearing end-of-life". Provide the documentation that explains in detail and demonstrates why PG&E has not utilized authorized funding prior to its 2014 GRC to address this extremely important and routine records maintenance issue.[66]

PG&E's response:

> PG&E is not waiting until it receives the 2014 GRC funding to work on this important project. In fact, PG&E began its efforts to inventory and identify its key records in the summer of 2010. Based on Power Generation's review of the Independent Review Panel (IRP) report, and the Enterprise Risk Management (ERM) efforts for hydro operations, Power Gen accelerated its records management effort in 2011. PG&E reallocated a portion of its funding in 2011 and 2012 to do this work and plans further spend in 2013. PG&E is in the process of building/implementing the Documentum tool,

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[65] See D.12-12-030 p. 87.

[66] DRA-PG&E-101-TLG, Q. 2-c.

which will serve as the foundation for the enterprise-wide data archival and records management program.

PG&E's response does not justify additional ratepayer funding. PG&E has embedded costs for this recordkeeping activity and no additional funding is required. PG&E's Hydro Organization rescheduled maintenance projects, and ratepayers are not responsible for additional costs incurred to address deferred maintenance work. PG&E had 2012 and has 2013 to address its rescheduled projects and its recordkeeping deficiencies before the Test Year. PG&E did not provide any verifiable documentation that demonstrated that its current funding level and embedded historical costs (for the same or similar on-going activities as the ones proposed in the Test Year) were insufficient to address required maintenance work in the Test Year.

DRA's estimate of $43.066 million utilizing PG&E's 2012 recorded expenses is an increase of 9.75% over PG&E's 2011 recorded adjusted expenses. This figure represents the highest expense level for this MWC. The Commission should adopt $43.066 million as a reasonable expense level for the Test Year for MWC KG.

H. MWC JV – Maintain IT Applications and Infrastructure

PG&E forecasts $3.350 million for its MWC JV – Maintain IT Applications and Infrastructure expenses. PG&E's forecast is an increase of $2.601 million or 347.26% over its 2011 recorded adjusted expenses of $0.749 million. PG&E developed its estimates for ten IT projects[67] utilizing outputs from its IT Concept Estimating tool. DRA forecasts $0.883 million by normalizing PG&E's forecast after making adjustments to remove two IT projects. DRA's forecast is $2.467 million less than PG&E's forecast.

PG&E's request for additional funding of $2.601 million or 347.26% over 2011 recorded adjusted expenses of $0.749 million is not justified based on historical

[67] DRA-PG&E-101-TLG, Q. 8-a. DRA's concerns about PG&E's IT Concept Estimating tool are set forth in detail in Ex. DRA-18.

expense levels, and the information PG&E provided to support the increases over 2011 expense levels is insufficient and incomplete.

In discovery, DRA asked PG&E to "provide a detailed breakdown of the calculation of the forecast increase of $2.601 million or 347.26% (i.e., the calculation of each individual line item estimate included in the increase) and the supporting documentation to substantiate the estimates for each proposed project." PG&E provided lump sum totals for its proposed IT projects and referred DRA to its IT application development forecasts which utilized its concept cost estimating tool.[68] PG&E did not provide details showing how it calculated each individual line item estimate included in the forecasted increase of 347.26% over 2011 expense levels.

PG&E's recorded adjusted expenses for MWC JV fluctuated between 2007 and 2011. The five year average (2007-2011) is $0.389 million and the three year average (2009-2011) is $0.648 million. Table 11-14 below shows PG&E's historical comparison of Imputed versus recorded O&M expenses, its 2012 forecasted and recorded expenses, and its 2014 forecasts.

Table 11-14
PG&E's 2007-2011 Authorized vs. Recorded Hydro Operations Expenses
2012 Forecasted vs. Recorded Expenses
and 2014 Forecast for Major Work Category JV
(In Thousands of Dollars)

		2007	2008	2009	2010	2011	2012	2014
JV	Authorized	--	--	--	--	--	--	--
	Recorded	$1	$0	$249	$945	$749	$246	--
	Forecasted	--	--	--	--	--	$291	$3,350

Source: Recorded 2007-2011data from Ex. PG&E-6, Chapter 2, p. WP 2-1. Recorded 2012 data from PG&E's response to DRA data request DRA-PG&E-108-CKT. Forecasted 2012 and 2014 data from Ex. PG&E-6, Chapter 2, p. WP 2-1.

PG&E's forecast includes eight IT projects at a cost $2.650 million ($7.950 million over three years). DRA opposes additional ratepayer funding over 2011 recorded expense levels for two of PG&E's proposed IT projects with a forecast of

[68] DRA-PG&E-101-TLG, Q. 8-a.

$0.500 million ($1.500 million over three years) for RIM-Documentum and $0.200 million ($0.600 over three years) for Asset Management/Condition Based Maintenance in the Test Year to address PG&E's Hydro Operations recordkeeping and document management deficiencies.[69] The activities included in PG&E's proposals mentioned above are the same activities associated with prudent Hydro Operations recordkeeping and should be part of the normal, routine and on-going maintenance activities that are already funded by ratepayers. DRA requested additional information on PG&E's proposal:

> Referring to page 2-148, regarding PG&E's Asset Management/Condition Based Maintenance, PG&E states it 'plans to implement an asset management toolset to improve optimization and assessment of the material condition of our generating facilities, provide more effective and efficient use of our resources and improved generator reliability, and to improve plant performance, safety, and production and maintenance cost by analytically identifying and considering equipment condition when scheduling maintenance'.
>
> Provide the documentation that explains in detail and demonstrates why, prior to its 2014 GRC, PG&E has not utilized authorized funding to address its asset management condition based maintenance projects to ensure 'effective and efficient use of our resources and improved generator reliability, and to improve plant performance, safety, and production and maintenance cost by analytically identifying and considering equipment condition when scheduling maintenance'.

PG&E's response:

> PG&E sought funding for its asset management program in the 2011 GRC and began its effort to inventory and plan its evaluation of the condition of the key hydro assets in 2010. Based on Power Generation's review of the Independent Review Panel (IRP) report, and the Enterprise Risk Management (ERM) efforts for hydro operations, Power Gen accelerated the implementation of its effort and focused it on Public Safety-related asset management programs. PG&E reallocated a portion of its funding in 2011 and 2012 to do this

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[69] PG&E's request for additional funding for implementation of RIM-Documentum and its Asset Management/Condition Based Maintenance for MWC JV to address its recordkeeping deficiencies is similar to its proposal in its Pipeline Safety Enhancement Plan (PSEP), regarding its Pipeline Records Integration Program (PRIP). See discussion above in connection with MWC KG. See also D.12-12-030 p. 87.

important work and plans further spend in 2013. While PG&E has made great strides in developing its asset management programs and assessing the condition of its critical assets, PG&E is requesting funding in the 2014 GRC to implement tools to manage and analyze the data. PG&E is currently evaluating various options for asset management tools.

PG&E's response does not justify additional funding. The Commission should reject PG&E's request. PG&E has received ratepayer funding during the historical years to ensure that its recordkeeping and document storage programs associated with its Hydro Operations were maintained. The Commission's statements in PG&E's Pipeline Safety Enhancement Plan (PSEP) regarding its Pipeline Records Integration Program (PRIP) and PG&E's natural gas transmission system,[70] also apply to PG&E's Hydro Operations facilities. PG&E's "responsibility includes creating and maintaining records of the location and engineering details of system components." PG&E has not utilized authorized funding efficiently and effectively to ensure that its Hydro records management systems were properly corrected, updated, organized, validated and maintained. If the records had been properly organized and maintained, PG&E would not be requesting incremental funding in the Test Year for these recordkeeping activities. It is unreasonable for PG&E to request additional ratepayer funding to address its deficiencies.

PG&E had 2012 and has 2013 to address its proposed activities in this MWC before the Test Year. PG&E also has embedded historical costs that can be reallocated and utilized for its proposed IT projects. DRA normalized PG&E's forecast estimate and calculated $0.883 million for its Test Year estimate for MWC JV. DRA calculated its estimate for MWC JV by removing $0.700 million for two of PG&E's proposed projects ($0.500 million for RIM-Documentum and $0.200 million for Asset Management/Condition Based Maintenance) and normalizing for eight

[70] See D.12-12-030, p. 87, regarding PG&E's Pipeline Safety Enhancement Plan (PSEP) and its Pipeline Records Integration Program (PRIP).

projects due to insufficient support for the calculated estimates of $2.650 million or $7.950 million over the three year rate case cycle.[71]

The Commission should adopt DRA's estimate of $0.883 million as a reasonable estimate for the Test Year for MWC JV.

V. DISCUSSION / ANALYSIS OF NUCLEAR OPERATIONS

PG&E's Nuclear Operations Program maintains and operates PG&E's nuclear generating assets located at the Diablo Canyon Power Plant (DCPP) consisting of two nuclear pressurized water reactor (PWR) units and steam-electric turbine generators, feed water systems and cooling water systems and related facilities. Table 11-15 summarizes PG&E's request and DRA's recommendation for Nuclear Operations expenses recorded in the MWCs within Nuclear.

Table 11-15
Energy Supply Expenses for TY2014
Nuclear Operations
(In Thousands of Dollars)

Description (a)	PG&E Proposed[72] (b)	DRA Recommended (c)
AB- Support	($37,400)	($37,400)
AK- Manage Environmental Operations	$3,068	$2,467
BP- Manage DCPP Business	$15,287	$5,166
BQ –DCPP Support Services	$46,353	$11,355
BR –Operate DCPP Plant	$107,340	$91,921
BS- Maintain DCPP Plant Assets	$184,178	$141,184
BT- Enhance DCPP Personnel Performance	$23,536	$16,131
BV- Maintain DCPP Plant Configuration	$70,238	$52,751
JV- Maintain IT Applications & Infrastructure	$2,900	$1,808
Total	$415,500	$285,383

[71] $3.350 million minus $0.700 million equals $2.650 million divided by three years is $0.883 million.

[72] Ex. PG&E-6, Chapter 2, Workpapers p. WP 2-1.

A. Overview of PG&E's Request

PG&E forecasts $415.500 million for Nuclear Operations expenses for Test Year 2014 which is an increase of $101.293 million or 32.24% over 2011 recorded adjusted expenses of $314.207 million.[73] For the most part, PG&E developed its forecasts based on 2011 recorded costs, one-time adjustments to these costs and PG&E's estimated additional costs for proposed projects.[74] PG&E's request includes continued funding for an aging workforce.[75] PG&E's forecast includes a proposal to establish a two-way balancing account for "new nuclear safety and security regulatory-mandated projects".[76] The corresponding DRA estimate for PG&E's Nuclear Operations expenses is $285.383 million, which is $130.117 million less than PG&E's forecast.[77] Table 11-16 below shows PG&E's recorded adjusted expenses for 2007-2012 and its 2014 forecast.

[73] PG&E's 2014 forecast of $415.500 million is shown in Ex. PG&E-6 Table 3-1, p. 3-3.

[74] Ex. PG&E-6 p. 3-83. The exception is PG&E's forecasts for Information Technology projects. .

[75] Ex. PG&E-6 p. 3-30.

[76] Ex. PG&E-6 workpapers p. WP 3-1.

[77] PG&E's 2011 GRC Imputed amount of $328.8 million is $14.593 million more than its 2011 recorded adjusted expenses of $314.207 million. (PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018)

Table 11-16
2007-2012 Recorded and 2014 Forecast Data for MWCs included in Nuclear Operations
(in Thousands of Dollars)

Description	2007	2008	2009	2010	2011	2012	2014
AB- Support	$2,161	$1,528	$1,834	$0	$0	$656	($37,400)
AK- Manage Environmental Oper	$1,595	$3,509	$2,079	$2,768	$2,467	$3,106	$3,068
BP- Manage DCPP Business	$7,573	$7,032	$6,208	$6,519	$5,166	$8,474	$15,287
BQ –DCPP Support Services	$2,604	$3,317	$3,746	$4,964	$42,144	$39,421	$46,353
BR –Operate DCPP Plant	$78,650	$81,220	$90,444	$95,128	$88,131	$92,503	$107,340
BS- Maintain DCPP Plant Assets	$140,795	$155,667	$158,387	$116,047	$110,474	$137,341	$184,178
BT- Enhance DCPP Personnel Performance	$16,696	$12,641	$13,089	$14,502	$16,131	$15,975	$23,536
BU- Procure DCPP Materials & Svcs	($1,686)	$4	($138)	($735)	($57)	($8,057)	$0
BV- Maintain DCPP Plant Configuration	$35,199	$29,641	$53,190	$57,375	$47,687	$50,224	$70,238
CR- Manage Waste Disp & Trans	$65	$148	$95	$67	$110	$71,796	$0
EO- Provide Nuclear Support	($763)	($735)	($274)	($178)	$178	$120	$0
JK- Manage Environment Remed (Earings)	$0	$10	$57	$84	$1	$0	$0
JV- Maintain IT Applications & Infrastructure	$78	$3,284	$2,134	$1,514	$1,775	$749	$2,900
Total	$282,967	$297,266	$330,851	$298,055	$314,207	$412,308	$415,500

Source: 2007-2011 and 2014 data from Ex. PG&E-6, Chapter 3, Workpapers p. WP 3-1. The 2012 data is from PG&E's response to DRA data request DRA-PG&E-108-CKT.

PG&E records expenses for its Nuclear Operations in nine MWCs for the Test Year: AB – Support with a forecast of ($37,400) million, AK – Manage Environmental Operations with a forecast of $3.068 million, BP – Manage DCPP Business with a forecast of $15.287 million, BQ – DCPP Support Services with a forecast of $46.353 million, BR – Operate DCPP Plant with a forecast of $107.340 million, BS – Maintain DCPP Plant Assets with a forecast of $184.178 million, and BT – Enhance DCPP Personnel Performance with a forecast of $23.536 million, BV – Maintain DCPP Plant Configuration with a forecast of $70.238 million, and JV – Maintain IT Applications with a forecast of $2.900 million.[78]

[78] Ex. PG&E-6, workpapers p. WP 3-1.

PG&E's 2014 forecast of $415.500 million includes projects that were initially proposed during its 2011 GRC, but were deferred or rescheduled.[79] PG&E identified some of those deferred projects. However, DRA has concerns that there are other deferred maintenance projects that were not identified by PG&E for which it received funding in past GRCs, and is requesting funding again in this one. On March 1, 2013, DRA toured PG&E's DCPP facility. During this tour DRA was informed that some of PG&E's 2014 proposed projects are for on-going projects (i.e., Cybersecurity, Emergency Preparedness, Procedure Upgrade, etc.). These projects have embedded historical costs. Some of its 2014 proposed projects may have already been completed, have been rescheduled, or may not be completed.

For the reasons discussed in more detail below, DRA takes issue with PG&E's forecasts for MWC AK – Manage Environmental Operations, with a forecast of $3.068 million, BP – Manage DCPP Business, with a forecast of $15.287 million, BQ – DCPP Support Services, with a forecast of $46.353 million, BR – Operate DCPP Plant, with a forecast of $107.340 million, BS – Maintain DCPP Plant Assets, with a forecast of $184.178 million, and BT – Enhance DCPP Personnel Performance, with a forecast of $23.536 million, BV – Maintain DCPP Plant Configuration, with a forecast of $70.238 million, and JV – Maintain IT Applications with a forecast of $2.900 million.

B. MWC AK – Manage Environmental Operations

PG&E forecasts $3.068 million for its MWC AK – Manage Environmental Operations, an increase of $0.601 million or 24.36% over its 2011 recorded adjusted expenses of $2.467 million. PG&E has a staffing level of four charging to MWC AK and this level is expected to stay the same in the Test Year.[80] DRA's forecast of $2.467 million uses PG&E's 2011 recorded adjusted expenses as a basis. DRA's forecast is $0.601 million less than PG&E's forecast.

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[79] Ex. PG&E-6, p. 3-25.

[80] Ex. PG&E-6, p. 3-61.

Table 11-17 below shows PG&E's historical MWC AK costs compared to Imputed versus recorded O&M expenses, its 2012 forecasted and recorded expenses, and its 2014 forecasts.

Table 11-17
PG&E's 2007-2011 Authorized vs. Recorded Nuclear Operations Expenses
2012 Forecasted vs. Recorded Expenses
and 2014 Forecast for Major Work Category AK
(In Thousands of Dollars)

		2007	2008	2009	2010	2011	2012	2014
AK	Authorized	$1,293	$1,332	$1,371	$1,410	$4,528	--	--
	Recorded	$1,595	$3,509	$2,079	$2,768	$2,467	$3,106	--
	Forecasted	--	--	--	--	--	$3,278	$3,068

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 Ex. PG&E-6, Chapter 3, p. WP 3-1. Recorded 2012 data from PG&E's response to DRA data request DRA-PG&E-108-CKT. Forecasted 2012 and 2014 data from Ex. PG&E-6, Chapter 3, p. WP 3-1.

PG&E's request for additional funding of $0.601 million or 24.36% over 2011 recorded adjusted expenses of $2.467 million is not justified based on historical expense levels, and PG&E has not provided sufficient or complete information to support the increases over 2011 expense.

In discovery, DRA asked PG&E to provide a detailed breakdown of the calculation of the forecasted increase of $0.601 million (i.e., the calculation of each individual line item estimate included in the increase) and the supporting documentation to substantiate the estimates for each proposed project. PG&E provided a spreadsheet showing lump sum numbers but not how it calculated each individual line item estimate over 2011 expense levels. Nor did PG&E provide the supporting documentation to substantiate the estimates.[81]

PG&E says it is not planning to add any staff to current levels,[82] and did not provide any verifiable documentation that its current funding level and embedded

[81] DRA-PG&E-098-TLG, Q. 8

[82] Ex. PG&E-6, p. 63.

historical costs (for the same or similar activities as the ones proposed in the Test Year) are insufficient to address required maintenance work in the Test Year.

PG&E's 2011 recorded adjusted expenses for MWC AK of $2.467 million is $2.061 million less than PG&E's 2011 GRC Imputed amount of $4.528 million as shown in Table 11-17 above.[83] This is a 83.54% decrease from the Imputed amount. PG&E's 2011 recorded adjusted expenses of $2.467 million are $0.300 million less than PG&E's 2011 GRC budgeted amount of $2.767 million.[84] PG&E says the decrease in expenses was due to lower costs for the annual fee for waste discharge requirements per the State Water Resources Control Board.[85]

PG&E's expenses recorded in MWC AK fluctuated between 2007 and 2011. The five year average (2007-2011) is $2.484 million. The three year average (2009-2011) is $2.438 million. PG&E's 2008 recorded adjusted expenses of $3.509 million was the highest figure for the six year period (2007-2012). PG&E's forecasted staffing level is expected to remain the same as its 2011 levels. DRA's estimate of $2.467 million utilizing PG&E's 2011 expense levels is a reasonable estimate for the Test Year and is comparable to the three and five year averages for this MWC.

C. MWC BP – Manage DCPP Business

PG&E forecasts $15.287 million for its MWC BP – Manage DCPP Business expenses, an increase of $10.121 million or 195.92% over its 2011 recorded adjusted expenses of $5.166 million. PG&E's current staffing level for MWC BP is 63 and PG&E plans to increase the staffing level by four by 2013 "driven by the addition of the office of the [Chief Nuclear Officer] CNO".[86] DRA forecasted $5.166

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[83] Imputed 2011 data from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

[84] PG&E's 2011 budgeted amount of $2.767 million is from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

[85] PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

[86] Ex. PG&E-6, p. 3-82.

million utilizing PG&E's 2011 recorded adjusted expenses as a basis for its estimate. DRA's forecast is $10.121 million less than PG&E's forecast.

PG&E's request for additional funding of $10.121 million, or 195.92%, over 2011 recorded adjusted expenses of $5.166 million is excessive, based on historical expense levels. The information PG&E provided to support the increases over 2011 expense levels is insufficient and incomplete.[87] PG&E did not provide any verifiable documentation that demonstrated that its current funding level and embedded historical costs (for the same or similar activities as the ones proposed in the Test Year) are insufficient to address required maintenance work in the Test Year. PG&E's recorded adjusted expenses for MWC BP declined by $2.407 million between 2007 and 2011 from $7.573 million in 2007 to $5.166 million in 2011. Table 11-18 below shows PG&E's MWC BP historical comparison of Imputed versus recorded O&M expenses, its 2012 forecasted and recorded expenses, and its 2014 forecasts.

Table 11-18
PG&E's 2007-2011 Authorized vs. Recorded Nuclear Operations Expenses
2012 Forecasted vs. Recorded Expenses
and 2014 Forecast for Major Work Category BP
(In Thousands of Dollars)

		2007	2008	2009	2010	2011	2012	2014
BP	Authorized	$9,066	$9,339	$9,612	$9,884	$9,836	--	--
	Recorded	$7,573	$7,032	$6,208	$6,519	$5,166	$8,474	--
	Forecasted	--	--	--	--	--	$13,661	$15,287

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 Ex. PG&E-6, Chapter 3, p. WP 3-1. Recorded 2012 data from PG&E's response to DRA data request DRA-PG&E-108-CKT. Forecasted 2012 and 2014 data from Ex. PG&E-6, Chapter 3, p. WP 3-1.

[87] In DRA-PG&E-098-TLG, Q.6, DRA asked PG&E to provide a detailed breakdown of the calculation of the forecasted increase of $10.121 million (i.e., the calculation of each individual line item estimate included in the increase) and the supporting documentation to substantiate the estimates for each proposed project. PG&E provided a spreadsheet showing lump sum numbers which lacked the detail showing how it calculated each individual line item estimate over 2011 expense levels and also did not provide the supporting documentation to substantiate the estimates.

PG&E's 2011 recorded adjusted expenses for MWC BP of $5.166 million is $4.670 million less than PG&E's 2011 GRC Imputed amount of $9.836 million as shown in Table 11-18 above.[88] This is a 90.40% decrease from the Imputed amount. PG&E's 2011 recorded adjusted expenses of $5.166 million is $5.723 million less than PG&E's 2011 GRC budgeted amount of $10.889 million or a decrease of 110.78%.[89] PG&E's recorded adjusted expenses for the years 2007-2011 for MWC PB have been less than its Imputed amount each year. PG&E's 2012 recorded adjusted expenses of $8.474 million are $5.187 million less than its 2012 forecast of $13.661 million. PG&E's 2012 forecast was thus more than PG&E considered necessary to address its actual 2012 work activities in MWC BP. PG&E has received sufficient authorized funding during 2007-2011 and has embedded historical funding that can be reallocated and utilized to address PG&E's proposed activities in the Test Year. DRA's estimate of $5.166 million utilizing PG&E's 2011 expense levels is a reasonable estimate for the Test Year.

D. MWC BR – Operate DCPP Plant

PG&E forecasts $107.340 million for its MWC BR – Operate DCPP Plant expenses, an increase of $19.209 million or 21.80% over its 2011 recorded adjusted expenses of $88.131 million. PG&E's current staffing level for MWC BR is 283,[90] but PG&E plans to increase the staffing level to 300 in 2013 to add seventeen additional positions as part of its "DCPP hire in advance of the attrition program."[91]

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[88] Imputed 2011 data from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

[89] PG&E's 2011 budgeted amount of $10.889 million is from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

[90] Ex. PG&E-6, p. 3-59.

[91] Ex. PG&E-6 p. 3-59.

DRA forecasts $91.921 million utilizing a three year average (2010-2012) as a basis for its estimate. DRA's forecast is $15.419 million less than PG&E's forecast and is $3.790 million more than PG&E's 2011 recorded adjusted expenses.

PG&E's request for additional funding of $19.209 million or 21.80% over 2011 recorded adjusted expenses of $88.131 million is not justified by historical expense levels or adequately supported with sufficient and complete information.[92] PG&E's recorded adjusted expenses for MWC BR decreased by $6.997 million, or 7.94%, between 2010 and 2011 but increased each year between 2007 and 2010 from $78.650 million in 2007 to $95.128 million in 2010. This is an increase of $16.478 million or 20.95% between 2007 and 2010. The five year average (2007–2011) for the period is $86.715 million. PG&E's highest recorded expense for the six year period (2007-2012) was in 2010 of $95.128 million. PG&E's forecasted percentage increase of 21.80% over 2011 levels is unreasonable based on historical percentage changes between each year. A summary of PG&E's percentage changes of the increases and decreases in expenses (which included two unit refueling outages in 2009 which is similar to PG&E's 2014 GRC proposal)[93] between 2007 and 2012 were as follows: the increase between 2007 and 2008 was 3.27%, the increase between 2008 and 2009 was 11.36%, the increase between 2009 and 2010 was 5.18%, the decrease between 2010 and 2011 was 7.94% and the increase between 2011 and 2012 was 4.96%.

Table 11-19 below shows PG&E's MWC BR historical comparison of Imputed versus recorded O&M expenses, its 2012 forecasted and recorded expenses, and its 2014 forecasts. As shown in Table 11-19, PG&E's 2011 recorded adjusted

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[92] DRA-PG&E-098-TLG, Q.4. DRA asked PG&E to provide a detailed breakdown of the calculation of the forecasted $19.209 million increase (i.e., the calculation of each individual line item estimate included in the increase) and the supporting documentation to substantiate the estimates for each proposed project. PG&E provided a spreadsheet showing lump sum numbers which lacked the detail showing how it calculated each individual line item estimate over 2011 expense levels and also did not provide the supporting documentation to substantiate the estimates.

[93] DRA-PG&E-098-TLG, Q.4-a. PG&E's forecast includes $6.610 million for two unit refueling outages in 2014.

amount of $88.131 million is $25.463 million less than its 2011 GRC Imputed amount of $113.594 million. PG&E's 2012 recorded adjusted expenses of $92.503 million are $2.710 million less than its 2012 forecast of $95.213 million.

Table 11-19
PG&E's 2007-2011 Authorized vs. Recorded Nuclear Operations Expenses
2012 Forecasted vs. Recorded Expenses
and 2014 Forecast for Major Work Category BR
(In Thousands of Dollars)

		2007	2008	2009	2010	2011	2012	2014
BR	Authorized	$39,580	$40,770	$41,960	$43,150	$113,594	--	--
	Recorded	$78,650	$81,220	$90,444	$95,128	$88,131	$92,503	--
	Forecasted	--	--	--	--	--	$95,213	107,340

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 Ex. PG&E-6, Chapter 3, p. WP 3-1. Recorded 2012 data from PG&E's response to DRA data request DRA-PG&E-108-CKT. Forecasted 2012 and 2014 data from Ex. PG&E-6, Chapter 3, p. WP 3-1.

PG&E's forecasted costs for 17 additional positions are overstated. PG&E used an average salary of $155,000 ("fully loaded") per position. This fully loaded amount includes expenses such as employee benefits, taxes, overhead, fleet, materials, etc. Including these expenses in PG&E's increased staffing level costs is duplicated of expenses that are already included in PG&E's Administrative and General forecast in this GRC. Ratepayers should not be charged twice for employee related costs. PG&E's historical expense levels and authorized funding has embedded costs that can be reallocated and utilized for its proposed Test Year activities and proposed hiring activities. PG&E has embedded expenses from employee retirements and overtime costs that can be relocated and utilized for its proposed activities. PG&E has been hiring in advance of attrition during the historical period[94] and its expenses have not increased by 21.80% between 2007 and 2012. DRA's estimate of $91.921 million, utilizing a three year average (2010-2012), is more than the five year average (2007-2011) of $86.715 million. DRA

[94] Ex. PG&E-6, p. 3-30.

recommends the Commission adopt $91.921 million as a reasonable estimate for the Test Year for this MWC.

E. MWC BS – Maintain DCPP Plant Assets

PG&E forecasts $184.178 million for its MWC BS – Maintain DCPP Plant Assets expenses, an increase of $73.704 million or 66.72% over its 2011 recorded adjusted expenses of $110.474 million. PG&E's current staffing level for MWC BS is 354.[95] PG&E plans to increase the staffing level to 391 in 2014 with its proposal to add 37 additional positions as part of its aging workforce initiative.[96]

DRA forecasts $141.184 million utilizing a five year average (2007-2011) plus incremental funding as a basis for its estimate (five year average of $136.274 million plus incremental funding of $4.910 million). DRA's forecast is $42.994 million less than PG&E's forecast and $30.710 million more than PG&E's 2011 recorded adjusted expenses, which is a significant increase of 27.80%.

PG&E's request for additional funding of $73.704 million or 66.72% over 2011 recorded adjusted expenses of $110.474 million is not justified based on historical expense levels, PG&E has not provided sufficient or complete information to support the increases over 2011 expense levels.[97] PG&E did not provide verifiable documentation to support and justify its calculated estimates for additional funding of $11.500 million ($34.500 million over three years) for Fukushima Daiichi Nuclear Regulatory Commission (NRC) Rulemaking, $2.932 million ($8.796 million over three years) for Re-wedge Main Generator project, and $0.300 million ($0.900 million over three years) for its Large Motor Rewind project.

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[95] Ex. PG&E-6, p. 3-61.

[96] Ex. PG&E-6, p. 3-61.

[97] In DRA-PG&E-098-TLG, Q.5 and DRA-PG&E-205-TLG, Q.1. DRA asked PG&E to provide a detailed breakdown of the calculation of the forecasted increase (i.e., the calculation of each individual line item estimate included in the increase) and the supporting documentation to substantiate the estimates for each proposed project. PG&E provided spreadsheets showing line items with lump sum numbers, but they lacked the detail showing how it calculated each individual

(continued on next page)

DRA normalized PG&E's incremental request over the three year rate cycle and recommends an additional $3.833 million for Fukushima Daiichi NRC Rulemaking, $0.977 million for Re-wedge Main Generator project, and $0.100 million for the Large Motor Rewind project. DRA opposes additional ratepayer funding over 2011 expense levels for PG&E's proposed projects for Water Storage Water Tank Concrete Removal of $1.840 million, Concrete Repair Program of $1.121 million, Repair Concrete CWT 11 & 12 of $0.709 million, Repair Intake Concrete of $0.371 million, Repair Discharge Structure Concrete of $0.530 million, Underground Cable/Conduit Program of $0.625 million, Anion Resin Tank Liners of $1.029 million, License Basis Verification of $1.519 million, Procedures Upgrade Project of $2.970 million, Implement Emergency Planning of $1.453 million, Implement Cybersecurity of $1.608 million, and Write off of Material Obsolescence[98] of $3.0 million.

PG&E did not provide any verifiable documentation that demonstrated that its current funding level and embedded historical costs (for the same or similar activities as the ones proposed in the Test Year) were insufficient to address required maintenance work in the Test Year. Table 11-20 below shows PG&E's MWC BS historical comparison of Imputed versus recorded O&M expenses, its 2012 forecasted and recorded expenses, and its 2014 forecasts.

(continued from previous page)
line item estimate over 2011 expense levels. Nor did PG&E provide the supporting documentation to substantiate the estimates.

[98] Ex. PG&E-6, p. 3-34. PG&E's write-off of obsolete inventory has fluctuated over the last six years (2007-2012) with an average for the period of $1.015 million (DRA-PG&E-205-TLG supplemental response to question 4). PG&E included a request for additional funding for this project in its 2011 GRC. PG&E's states in regards to a $3.542 million decrease in its 2011 Imputed expense levels: "Decrease is due to accelerating the evaluation of inventory items for obsolescence".

Table 11-20
PG&E's 2007-2011 Authorized vs. Recorded Nuclear Operations Expenses
2012 Forecasted vs. Recorded Expenses
and 2014 Forecast for Major Work Category BS
(In Thousands of Dollars)

		2007	2008	2009	2010	2011	2012	2014
BS	Authorized	$131,683	$135,643	$174,602	$143,562	$116,847	--	--
	Recorded	$140,795	$155,667	$158,387	$116,047	$110,474	$137,341	--
	Forecasted	--	--	--	--	--	$113,440	$184,178

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 Ex. PG&E-6, Chapter 3, p. WP 3-1. Recorded 2012 data from PG&E's response to DRA data request DRA-PG&E-108-CKT. Forecasted 2012 and 2014 data from Ex. PG&E-6, Chapter 3, p. WP 3-1.

PG&E's recorded adjusted expenses in MWC BS fluctuated significantly between 2007 and 2011. These expenses increased each year between 2007 and 2009 from $140.795 million in 2007 to $158.387 million in 2009 but declined each year between 2009 and 2011 from $158.387 million in 2009 to $110.474 million in 2011 for a decrease of $47.913 million or 43.37%. The five-year average (2007–2011) for the period is $136.274 million and the three year average (2009-2011) is $128.303 million. PG&E's highest recorded figure for the six year period (2007-2012) was in 2009 of $158.387 million. In response to a data request, PG&E states "Please note that 2009 had two refueling outages increasing labor approximately $11.0 million for this MWC. 2010 reflected significant increases in Security costs (allocated partially to this MWC in 2010) due to new NRC requirements and as reflected in headcount #s..."[99]

[99] DRA-PG&E-098-TLG, Q.5-c.

PG&E's 2011 recorded adjusted expenses for MWC BS of $110.474 million is $6.373 million less than PG&E's 2011 GRC Imputed amount of $116.847 million as shown in Table 11-20 above.[100] PG&E's recorded adjusted expenses for the years 2009-2011 for MWC BS have been less than its Imputed amount each year. PG&E's 2009 recorded adjusted amount of $158.387 million was $16.215 million less than the 2009 Imputed amount of $174.602 million and its 2010 recorded adjusted expenses of $116.047 million was $27.515 million less than its 2010 Imputed amount of $143.562 million.

PG&E's forecast for MWC BS includes incremental funding of $2.731 million for four concrete repair projects (Concrete Repair Program, Repair Concrete CWT 11 & 12, Repair Intake Concrete and Repair Discharge Structure Concrete) that are on-going, normal and/or routine maintenance work that already have embedded historical costs from completed concrete projects that are the same or are similar to the proposed Test Year projects.[101] The funding from these completed concrete projects can be reallocated and utilized for proposed concrete projects in the Test Year.[102] PG&E states that "[t]he purpose of the Concrete Repair Program is to repair and/or replace damaged structural concrete on an on-going defensive programmatic manner in order to restore the plant structures to their as-designed configuration".[103]

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[100] Imputed 2011 data from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

[101] Ex. PG&E-6, workpapers p. WP 3-44 to WP 3-60.

[102] Ex. PG&E-6, p. 3-26. PG&E provided a document that included the history of its concrete repair projects and associated costs for the period 2006-present (DRA-PG&E-205-TLG Q.1-a-f). The list of historical concrete projects are very similar to its proposed Test Year concrete projects.

[103] Ex. PG&E-6, p.3-26.

PG&E's forecast includes funding of $10.917 million for six proposed projects (Water Storage Water Tank Concrete removal, Underground Cable/Conduit Program, Anion Resin Tank Liners, Procedures Upgrade Project, Implement Emergency Planning and Write-Off of material obsolescence)[104] that were included in its 2011 GRC funding request but were deferred. PG&E is now asking for funding a second time for the same projects. PG&E's forecast includes funding of $3.127 million for two ongoing projects that were funded from 2011 authorized amounts (Implement Cybersecurity and License Basis Verification) that were "Emergent requirements that were identified after the 2011 GRC".[105]

Regarding deferred maintenance projects, PG&E's testimony states "Some of the projects that were initially proposed during [the] 2011 rate case period have not been completed or were rescheduled to the 2014 rate case timeframe. Others were planned to start in the 2011 GRC timeframe and continue into the 2014 GRC window".[106] Tables 11-21 and 11-22, below, show PG&E's Test Year projects that are proposed for MWC BS.

[104] Ex. PG&E-6, pp.3-27 and 3-28, DRA-PG&E-205-TLG, Q.1-j-ii and PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

[105] DRA-PG&E-205-TLG, Q.1-j-ii.

[106] Ex. PG&E-6, p. 3-25.

Table 11-21
PG&E's Proposed O&M Expense Projects for
MWC BS - Maintain DCPP Plant Assets for TY2014
Nuclear Operations
(In Thousands of Dollars)

Description (a)	PG&E Proposed[107] (b)	DRA Recommended (c)	DRA Comments (d)
Water Storage Water Tank Concrete Removal	$1,840	$0	Deferred project; Included in PG&E's 2011 GRC; on-going, routine project; embedded historical funding[108]
Concrete Repair Program	$1,121	$0	On-going and routine; embedded historical funding
Repair Concrete CWT	$709	$0	On-going and routine; embedded historical funding
Repair Intake Concrete	$371	$0	On-going and routine; embedded historical funding
Repair Discharge Structure Concrete	$530	$0	On-going and routine; embedded historical funding
Underground Cable/Conduit Program	$625	$0	Deferred project; included in PG&E's 2011 GRC, imputed amount was $1.037 million, 2011 recorded expense was $0.597 million and 2012 expense was $0.527 million[109]
Procedures Upgrade Project	$2,970	$0	Deferred project; included in PG&E's 2011 GRC; on-going project[110]
Implement Emergency Planning Rulemaking	$1,453	$0	Deferred project; included in PG&E's 2011 GRC; on-going project[111]
Sub-total	$9,619	$0	

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[107] Ex. PG&E-6, Chapter 3, Workpapers p. WP 3-44 to WP 3-60.

[108] As noted above, PG&E's forecast includes several concrete repair projects that are on-going, normal and routine activities that have embedded historical costs from completed concrete projects that are the same or are similar to the proposed Test Year projects that can be reallocated. See DRA-PG&E-205-TLG, Q.1-j-ii, and PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

[109] Ex. PG&E-6, p. 3-28, DRA-PG&E-205-TLG, Q.1-b, and PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

[110] This project is on-going and has a current backlog (Ex. PG&E-6 p. 3-28). See PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018. Also see DRA-PG&E-205-TLG, Qs.2 and 3. In the response PG&E states it "has been actively working on the Procedure Upgrade project since 2005". Between 2005-2007 PG&E was performing the work internally with PG&E labor and did not track the costs for this project under a specific project order. PG&E states that "At the completion of 2012, approximately 85% of the Operating Procedures have been updated". PG&E "requested funding for the Procedure Upgrade Project in 2009-2011 as part of the "Other Reliability" funding request" with 2009 funding of "$1,005K, 2010 - $65K and 2011 $1,718K".

[111] This project is on-going. (Ex. PG&E-6, p. 3-87). See PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

Table 11-22
Continuation of PG&E's Proposed O&M Expense Projects for
MWC BS - Maintain DCPP Plant Assets for TY2014
Nuclear Operations
(In Thousands of Dollars)

Description (a)	PG&E Proposed[112] (b)	DRA Recommended (c)	DRA Comments (d)
Write Off/Material Obsolescence	$3,000	$0	Deferred project; included in PG&E's 2011 GRC; on-going project[113]
Anion Resin Tank Liners	$1,029	$0	Deferred project; included in PG&E's 2011 GRC[114]
Implement Cyber Security Requirements	$1,608	$0	Included in PG&E's 2011 GRC funding; on-going project[115]
License Basis Verification	$1,519	$0	Included in PG&E's 2011 GRC funding; on-going project; costs included in 2011 recorded expenses of $1.879 million[116]
Large Motor Rewind Program	$300	$100	Normalized over 3 years
Re-Wedge Main Generator	$2,932	$977	Normalized over 3 years
Fukushima Daiichi NRC Rulemaking	$11,500	$3,833	New Rulemaking established in 2012; normalized over 3 years[117]
Sub-total	$21,888	$4,910	
Total	$31,507[118]	$4,910	

[112] Ex. PG&E-6, Chapter 3, Workpapers p. WP 3-44 to WP 3-60.

[113] Ex. PG&E-6, p. 3-34. This is an on-going and routine project that PG&E deferred which was included in PG&E's 2011 GRC. (See PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018). PG&E has embedded funding to address this project.

[114] DRA-PG&E-205-TLG, Q.1-j-ii.

[115] This project is on-going. (Ex. PG&E-6, p. 3-89 and 3-90) DRA-PG&E-205-TLG, Q/1-j-ii.

[116] DRA-PG&E-205-TLG, Q.1-j-ii. PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

[117] Ex. PG&E-6 p. 3-84) PG&E incurred $2.2 million in 2012 for Fukushima rulemaking. (DRA-PG&E-205-TLG, Q.1-j-ii).

[118] PG&E's workpapers show $24.949 million for Strategic Projects and Major Maintenance projects on line 28 and on line 29 its shows $3.0 million for Material Write-Offs for 2014 (Ex.PG&E-6, workpapers p. WP 3-12). Included in the $29.949 million is a project for Asphalt Road Repair, an individual estimate for the project is not provided. This project is a deferred maintenance project that was included in PG&E's 2011 GRC request (see PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-01 and Ex. PG&E-6, p. 3-57).

PG&E's ratepayers should not be required to fund this routine and on-going maintenance work twice because PG&E either deferred the work or did not incorporate historical embedded cost for on-going projects into its Test Year forecast. PG&E had 2012 and 2013 to complete these proposed on-going or deferred projects before the 2014 Test Year.

As noted above in Section IV in connection with PG&E's Hydro Operations, the Commission's long-standing policy is that it is the utility's shareholders, not its ratepayers who are responsible for additional costs associated with deferred maintenance.[119]

In examining the relationship between embedded historical costs and forecast expenses for the same or similar activities, the Commission has stated:

> SCE's forecast also includes a $4.812 million (constant 2006$) increase for insulator replacement as part of its Transmission Life Extension Program. SCE claims that the increase represents the cost of materials and the use of contract crews to supplement SCE's crews for insulator and hardware replacements. DRA claims historical expenses have embedded costs for insulator replacements. According to SCE, some of the circuits it will be replacing are over 90 years old and many of the insulators on its system have exceeded their life expectancies. While these types of programs may be a cost-effective way to maintain the integrity of the system and slow the deterioration of capital assets, SCE has not sufficiently addressed the relationship of these programs to costs embedded in historical data. Accordingly, SCE's request for $4.812 million to increase its insulator replacement as part of its Life Extension Program is denied.[120]

PG&E was authorized sufficient funding during 2007-2011 and has embedded funding that can be reallocated and utilized to address PG&E's proposed activities in the Test Year. DRA's estimate of $141.184 million utilizing a five year average (2007-2011) of $136.274 million plus incremental funding of $4.910 million is a reasonable estimate for the Test Year.

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[119] 10 CPUC 2d, 155, 186 (D.82-12-055); D.09-03-025.

[120] D.09-03-025, p. 72.

F. MWC BT – Enhance DCPP Personnel Performance

PG&E forecasts $23.536 million for its MWC BT – Enhance DCPP Personnel Performance expenses, an increase of $7.405 million or 45.91% over its 2011 recorded adjusted expenses of $16.131 million. PG&E's current staffing level for MWC BT is 106, and PG&E plans to increase the staffing level by six as part of its aging workforce initiative.[121]

DRA forecasts $16.131 million utilizing PG&E's 2011 recorded adjusted expenses as a basis for its estimate. DRA's forecast is $7.405 million less than PG&E's forecast.

PG&E's request for additional funding of $7.405 million or 45.91% over 2011 recorded adjusted expenses of $16.131 million is not justified based on historical expense levels. PG&E's recorded adjusted expenses for MWC BT fluctuated slightly between 2007 and 2011. The five year average (2007-2011) is $14.612 million and the three year average (2009-2011) is $14.574 million. Table 11-23 below shows PG&E's MWC BT historical comparison of Imputed versus recorded O&M expenses, its 2012 forecasted and recorded expenses, and its 2014 forecasts.

Table 11-23
PG&E's 2007-2011 Authorized vs. Recorded Nuclear Operations Expenses
2012 Forecasted vs. Recorded Expenses
and 2014 Forecast for Major Work Category BT
(In Thousands of Dollars)

		2007	2008	2009	2010	2011	2012	2014
BT	Authorized	$19,516	$20,102	$20,689	$21,276	$14,985	--	--
	Recorded	$16,696	$12,641	$13,089	$14,502	$16,132	$15,975	--
	Forecasted	--	--	--	--	--	$19,349	$23,536

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 Ex. PG&E-6, Chapter 3, p. WP 3-1. Recorded 2012 data from PG&E's response to DRA data request DRA-PG&E-108-CKT. Forecasted 2012 and 2014 data from Ex. PG&E-6, Chapter 3, p. WP 3-1.

[121] Ex. PG&E-6, p. 3-64.

PG&E did not provide any verifiable documentation that demonstrated that its current funding level and embedded historical costs (for the same or similar activities as the ones proposed in the Test Year) are insufficient to address required maintenance work in the Test Year. PG&E's recorded adjusted expenses for the years 2007-2010 for MWC BT have been less than its Imputed amount each year.[122] PG&E's 2012 recorded adjusted expenses of $15.975 million are $3.374 million less than its 2012 forecast of $19.349 million. PG&E has requested more funding than necessary to address its work activities in MWC BT.

PG&E was authorized sufficient funding during 2007-2011 and has embedded funding that can be reallocated and utilized to address PG&E's proposed activities in the Test Year. DRA's estimate of $16.131 million utilizing PG&E's 2011 expense levels is a reasonable estimate for the Test Year and is more than the five year and three averages.

G. MWC BV – Maintain DCPP Plant Configuration

PG&E forecasts $70.238 million for its MWC BV – Maintain DCPP Plant Configuration expenses. PG&E's forecast is an increase of $22.551 million or 47.29% over its 2011 recorded adjusted expenses of $47.687 million. PG&E's forecast includes $11.818 million ($35.454 million over three years) for two unit refueling outages and $5.0 million ($15.0 million over three years) for steam generator eddy current inspections.[123] PG&E's current staffing level for MWC BV is 230 and PG&E plans to increase the staffing level by nine as part of its aging workforce initiative.[124]

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[122] Imputed 2011 data from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

[123] DRA-PG&E-098-TLG, Q.7. DRA's forecast for MWC BV of $52.751 million includes incremental funding of $5.064 million over 2011 recorded adjusted expenses. DRA's incremental funding of $5.064 million is reasonable and is comparable to the normalized amount of PG&E's forecast of $11.818 million for its two unit refueling outages and the normalized forecast of $5.0 million for PG&E's steam generator eddy current inspections of $5.606 million ($11.818 million plus $5.0 million divided by three years equals $5.606 million).

[124] DRA-PG&E-098-TLG, Q.7.

DRA forecasts $52.751 million using a three year average (2009-2011) as a basis for its estimate, which is $17.487 million less than PG&E's Test Year forecast but $5.064 million more than PG&E's 2011 recorded adjusted expenses.

PG&E's request for additional funding of $22.551 million or 47.29% over 2011 recorded adjusted expenses of $47.678 million is not justified based on historical expense levels and the information PG&E provided to support the increases over 2011 expense levels is insufficient and incomplete.[125] PG&E's recorded adjusted expenses for MWC BV fluctuated between 2007 and 2011. This fluctuation was due in part to PG&E's two unit refueling outages in 2009 that caused expenses to increase between 2008 and 2009. The five year average (2007-2011) is $44.618 million and the three year average (2009-2011) is $52.751 million. Table 11-24 below shows PG&E's MWC BV historical comparison of Imputed versus recorded O&M expenses; its 2012 forecasted and recorded expenses, and its 2014 forecasts.

Table 11-24
PG&E's 2007-2011 Authorized vs. Recorded Nuclear Operations Expenses
2012 Forecasted vs. Recorded Expenses
and 2014 Forecast for Major Work Category BV
(In Thousands of Dollars)

		2007	2008	2009	2010	2011	2012	2014
BV	Authorized	$53,631	$55,243	$56,856	$58,468	$55,880	--	--
	Recorded	$35,199	$29,641	$53,190	$57,375	$47,687	$50,224	--
	Forecasted	--	--	--	--	--	$50,143	$70,238

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 Ex. PG&E-6, Chapter 3, p. WP 3-1. Recorded 2012 data from PG&E's response to DRA data request DRA-PG&E-108-CKT. Forecasted 2012 and 2014 data from Ex. PG&E-6, Chapter 3, p. WP 3-1.

[125] DRA-PG&E-098-TLG, Q.7. DRA asked PG&E to provide a detailed breakdown of the calculation of the forecasted increase (i.e., the calculation of each individual line item estimate included in the increase) and the supporting documentation to substantiate the estimates for each proposed project. PG&E provided a brief one page spreadsheet showing line items for labor costs, material, contract, refueling outage, and other as lump sum numbers which lacked the specific detail showing exactly how PG&E calculated each individual line item estimate included in the forecasted increase over 2011 expense levels and also did not provide the supporting documentation to substantiate the estimates for each proposed project.

PG&E's forecasted costs of $1.098 million for nine additional positions are overstated. PG&E used an average salary of $122,000 ("fully loaded") per position. This fully loaded amount includes expenses such as employee benefits, taxes, overhead, fleet, materials, etc. Including these expenses in PG&E's increased staffing level costs is duplicated of expenses that are already included in PG&E's Administrative and General forecast in this GRC. Ratepayers should not be charged twice for employee related costs.

PG&E did not provide verifiable documentation to demonstrate that its current funding level and embedded historical costs (for the same or similar activities as those proposed in the Test Year) are insufficient to address required maintenance work in the Test Year. PG&E's 2011 recorded adjusted expenses for MWC BV of $47.687 million are $8.193 million less than PG&E's 2011 GRC Imputed amount of $55.880 million as shown in Table 11-24 above.[126] This is a 17.18% decrease from the Imputed amount. PG&E's recorded adjusted expenses for the years 2007-2011 for MWC BV have been less than its Imputed amount each year and PG&E has requested more funding than necessary to address its work activities in MWC BV. These excessive funding requests are burdensome to ratepayers. PG&E was authorized sufficient funding during 2007-2011 and has embedded historical funding from closed and completed projects that can be reallocated and utilized to address PG&E's proposed activities (i.e., two unit refueling outages, steam generator eddy current inspections, additional staffing, etc.) in the Test Year.

DRA's estimate of $52.751 million utilizing a three year average is a reasonable estimate for the Test Year and is more than the five year average and PG&E's 2011 recorded adjusted expenses.

[126] Imputed 2011 data from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

H. MWC BQ – DCPP Support Services/Loss Prevention

PG&E forecasts $46.353 million for its MWC BQ – DCPP Support Services/Loss Prevention expenses. PG&E's forecast is an increase of $4.209 million or 9.99% over its 2011 recorded adjusted expenses of $42.144 million. Staffing level for MWC BQ is 306.[127] PG&E plans to reduce the level by nine due to the completion of security projects.[128] DRA forecasts $11.355 million for MWC BQ using a five year average as a basis for its estimate. DRA's forecast is $34.998 million less than PG&E's forecast.

PG&E's request is not justified based on historical expense levels, and the information PG&E provided to support the increases over 2011 expense levels is insufficient and incomplete.[129] PG&E's recorded adjusted expenses for MWC BQ increased by $2.360 million between 2007 and 2010 with an average for the four year period of $3.658 million. PG&E's recorded expenses increased between 2010 and 2011 by $37.180 million from $4.964 million in 2010 to $42.144 million in 2011. The increase in expenses between 2010 and 2011 was due in part to PG&E's change in the accounting of its Security Support costs and Facility charges.[130] The five year average (2007-2011) is $11.355 million.

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[127] Ex. PG&E-6, p. 3-77.

[128] Ex. PG&E-6, p. 3-77.

[129] In response to DRA-PG&E-098-TLG, Q.10, PG&E provided a spreadsheet showing line items for labor costs, material, contract, and other as lump sum numbers which lacked the specific detail showing exactly how PG&E calculated each individual line item estimate over 2011 expense levels and also did not provide the supporting documentation to substantiate the estimates.

[130] Regarding PG&E's Facility charges, beginning in 2011 PG&E allocated the costs incurred to various MWCs instead of directly charging MWC BS. (DRA-PG&E-098-TLG).

Regarding PG&E's Security Support costs, PG&E began to direct charge MWC BQ for the expenses incurred.[131] This shifting of costs between MWCs caused the large increase of $37.180 million in MWC BQ between 2010 and 2011 and caused decreases in MWCs BV, BS, and BR between 2010 and 2011. The expense decrease in these MWCs due to this accounting change between 2010 and 2011 totaled $22.258 million.[132] However the increase between 2010 and 2011 in MWC BQ was $37.180 million, a difference of $14.992 million. PG&E's recorded adjusted expenses for MWCs BV, BS, and BR for 2007-2010 include embedded expenses for Security Support costs which DRA reviewed during its analysis of PG&E's Test Year expense request for these MWCs. DRA utilized PG&E's recorded data to calculate its Test Year estimates for MWCs BQ, BV, BS, and BR, which included Security Support costs. PG&E should have identified and removed all costs incurred for Security Support from MWCs BV, BS, and BR for 2007-2010 prior to calculating its forecast in its 2014 GRC. DRA utilized a different methodology from PG&E to forecast each of PG&E's MWCs, and the forecasted costs for PG&E's Security Support costs included in the various MWCs are incorporated in DRA's estimates.

Table 11-25 below shows PG&E's MWC BQ historical comparison of Imputed versus recorded O&M expenses; its 2012 forecasted and recorded expenses, and its 2014 forecasts.

[131] DRA-PG&E-098-TLG, Q.10.

[132] The expense decrease between 2010 and 2011 for MWC BV is $9.688 million, for MWC BS, the decrease between 2010 and 2011 is $5.573 million, and for MWC BR the expense decrease between 2010 and 2011 is $6.997 million. PG&E did not provide verifiable documentation that clearly identified the Security cost adjustments or the specific cause of the expense decrease between 2010 and 2011 for MWCs BV, BS, and BR or provide documentation on the specific cause of the expense increase between 2010 and 2011 in MWC BQ.

Table 11-25
PG&E's 2007-2011 Authorized vs. Recorded Nuclear Operations Expenses
2012 Forecasted vs. Recorded Expenses
and 2014 Forecast for Major Work Category BQ
(In Thousands of Dollars)

		2007	2008	2009	2010	2011	2012	2014
BQ	Authorized	$29,455	$30,341	$31,227	$32,112	$10,620	--	--
	Recorded	$2,604	$3,317	$3,746	$4,964	$42,144	$39,421	--
	Forecasted	--	--	--	--	--	$41,485	$46,353

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 Ex. PG&E-6, Chapter 3, p. WP 3-1. Recorded 2012 data from PG&E's response to DRA data request DRA-PG&E-108-CKT. Forecasted 2012 and 2014 data from Ex. PG&E-6, Chapter 3, p. WP 3-1.

PG&E's recorded adjusted expenses for the years 2007-2010 for MWC BQ have been less than its Imputed amount each year before the change in accounting for expenses reflected in the 2011 expense level.[133] Based on a review of PG&E's recorded and Imputed amounts for the MWCs impacted by the accounting change, PG&E requested more than was necessary to address its work activities during 2007-2011, especially in MWC BQ.

PG&E's excessive funding requests are burdensome to ratepayers. PG&E has received sufficient authorized funding during 2007-2011 and has embedded historical funding that can be reallocated and utilized to address PG&E's proposed activities in the Test Year. DRA's estimate of $11.355 million utilizing a five year average is a reasonable estimate for the Test Year and addresses the fluctuations in recorded expenses for MWC BQ.

[133] Imputed 2011 data from PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018. The accounts impacted by the Security Cost allocation change were MWCs BV, BS, and BR. These MWCs are no longer being charged for Security Cost as of 2011. The recorded adjusted expenses recorded for MWC BV for 2007-2011 were less than the Imputed amount each year. MWC BS recorded adjusted expenses for 2009-2011 were lower than the Imputed amount. The recorded adjusted expenses in MWC BR were higher than the Imputed amount for 2007-2010. The 2011 recorded adjusted expenses for MWC BR was less than the 2011 GRC Imputed amount.

I. MWC JV – Maintain Information Technology Applications and Infrastructure

PG&E forecasts $2.9 million for its MWC JV – Maintain IT Applications and Infrastructure expenses. PG&E's forecast is an increase of $1.125 million or 63.38% over its 2011 recorded adjusted expenses of $1.775 million. PG&E developed its 2014 forecast for MWC JV using inputs from PG&E's Concept Estimator tool.[134] PG&E's proposal include costs to implement and deploy infrastructure systems and software applications.[135] DRA forecasts $1.808 million utilizing a three year average (2009-2011) as the basis for its estimate. DRA's forecast is $1.092 million less than PG&E's forecast.

PG&E's request for additional funding of $1.125 million or 63.38% over 2011 recorded adjusted expenses of $1.775 million is not justified based on historical expense levels. PG&E's recorded adjusted expenses for MWC JV fluctuated between 2007 and 2011. The five year average (2007-2011) is $1.757 million and the three year average (2009-2011) is $1.808 million. Table 11-26 below shows PG&E's historical comparison of Imputed versus recorded O&M expenses, its 2012 forecasted and recorded expenses and its 2014 forecasts.

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[134] DRA's concerns about PG&E's IT Concept Estimating tool are set forth in detail in Ex. DRA-18. For the reasons discussed in Ex. DRA-18, DRA is recommending a reduction to forecasts made using the Concept Estimating Tool.

[135] Ex. PG&E-6, p. 3-31. PG&E's proposed IT projects also have an associated capital forecast.

Table 11-26
PG&E's 2007-2011 Authorized vs. Recorded Nuclear Operations Expenses
2012 Forecasted vs. Recorded Expenses
and 2014 Forecast for Major Work Category JV
(In Thousands of Dollars)

		2007	2008	2009	2010	2011	2012	2014
JV	Authorized	--	--	--	--	--	--	--
	Recorded	$78	$3,284	$2,134	$1,514	$1,775	$749	--
	Forecasted	--	--	--	--	--	$477	$2,900

Source: Authorized 2007-2010 data from Master Data Request, Chapter 24 Q.1. Authorized 2011 data that is shown as zero for MWC JV. The 2011 authorized amounts in PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018 of $260.915 million is for PG&E's IT organization for all Lines of Business that it services, and the amounts are not separated out by the Lines of Business. Recorded 2007-2011data from Ex. PG&E-6, Chapter 3, p. WP 3-1. Recorded 2012 data from PG&E's response to DRA data request DRA-PG&E-108-CKT. Forecasted 2012 and 2014 data from Ex. PG&E-6, Chapter 3, p. WP 3-1.

DRA opposes additional ratepayer funding over 2011 recorded expense levels of $0.300 million ($0.900 million over three years) for Electric Document Management System (EDMS) to Documentum Migration,[136] $0.300 million ($0.900 over three years) for Linear Asset Management,[137] and $0.350 million ($1.050 million over three years) for SAP Application Consolidation, Enhancement and Integration projects in the Test Year to address PG&E's Nuclear Operations recordkeeping and document management deficiencies.[138] The activities included

[136] PG&E's Electric Document Management System (EDMS) to Documentum Migration project includes migrating PG&E's legacy content management system to a new enterprise platform for "more and rigorous record keeping of documents, procedures, correspondence and drawings". (Ex. PG&E-6, p. 3-48).

[137] PG&E's Linear Asset Management project implements the SAP module for Linear Asset Management for DCPP piping and conduit and other linear-type assets and will leverage the work currently being done in its Gas Operations. This project will integrate with Documentum and with the Geographic Information System (GIS) to record the specific location along a linear asset of the maintenance, testing and project work performed so the exact location is documented. (Ex. PG&E-6, p. 3-53).

[138] PG&E's request for additional funding for implementation of Electric Document Management system (EDMS) to Documentum Migration, Linear Asset Management and SAP Application Consolidation, Enhancement and Integration projects for MWC JV to address its recordkeeping deficiencies is similar to its proposal in its Pipeline Safety Enhancement Plan (PSEP) regarding its Pipeline Records Integration Program (PRIP). In the PSEP proceeding, PG&E requested incremental

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in PG&E's proposals mentioned above are the same activities associated with prudent nuclear recordkeeping and should be part of the normal, routine and on-going maintenance activities that are already funded by ratepayers. In support for its proposal, PG&E states the following:

> In a manner analogous to the gas business, it is imperative that the nuclear facility have the ability to tie exact locations to linear assets and to understand and represent those assets as sub-elements of larger continuous systems. When testing, maintenance or inspection is done at a physical location, resulting work records must reflect the linear asset sub-element on which the work was performed and must allow PG&E the ability to mine the work records to identify those sub-elements on which work was performed.[139]

The Commission should reject PG&E's request. DRA agrees with PG&E that, "[i]n a manner analogous to the gas business, it is imperative that the nuclear facility have the ability to tie exact locations to linear assets…" Consequently, PG&E has received ratepayer funding in the historical years to ensure that its recordkeeping and document storage programs associated with its nuclear operations were maintained. The Commission's statements in PG&E's Pipeline Safety Enhancement Plan (PSEP) regarding its Pipeline Records Integration Program (PRIP) and PG&E's natural gas transmission system,[140] also apply to PG&E's nuclear facility in that PG&E became responsible for its nuclear system the day it installed facilities and equipment for the system. PG&E's "responsibility includes creating and maintaining records of the location and engineering details of system components."[141] If PG&E had utilized authorized funding efficiently and effectively to ensure that its nuclear

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ratepayer funding for collecting, reviewing, organizing, and verifying critical records associated with its installed gas pipeline segments and for additional funding to upgrade and consolidate its multiple existing Information Technology systems (SAP and Geographic Information System (GIS)). The Commission rejected PG&E's PRIP proposal. (See D.12-12-030 p. 87).

[139] Ex. PG&E-6, p. 3-53 and 3-54.

[140] See D.12-12-030, p. 87, regarding PG&E's Pipeline Safety Enhancement Plan (PSEP) and its Pipeline Records Integration Program (PRIP).

[141] See D.12-12-030, p. 87.

records management systems were properly corrected, updated, organized and maintained, PG&E would not be requesting incremental funding in the Test Year for these recordkeeping activities. It is unreasonable for PG&E to request additional ratepayer funding to address its deficiencies.

DRA's estimate of $1.808 million utilizing a three year average is a reasonable estimate for the Test Year. PG&E had 2012 and now has 2013 to address its proposed activities in this MWC before the Test Year.

J. Other PG&E Test Year Proposals

PG&E has included in this TY 2014 GRC proposals for a two-way balancing account, for levelizing the cost of the second refueling outage over the GRC period of 2014 through 2016 and for incremental funding for its aging workforce.

1. PG&E's Proposal for a Two-Way Diablo Canyon Regulatory Balancing Account

PG&E's forecast include a proposal to establish a two-way balancing account for the Nuclear Regulatory Commission (NRC) rulemaking processes already in progress for projects associated with Fukushima Daiichi Nuclear Station Rulemaking of $11.500 million, Cybersecurity of $1.608 million and Emergency Planning of $1.452 million.[142] PG&E states "it is difficult to estimate the cost and timing of the impacts of the new NRC rules".[143]

DRA opposes PG&E's request to establish a two-way balancing account for proposed projects for Daiichi Nuclear Station Rulemaking, Cybersecurity, and Emergency Planning, and recommends that the Commission reject PG&E's request.

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[142] Ex. PG&E-6, p. 3-2, 3-84, and p. 3-92. See Ex.PG&E-6, workpapers p. WP 3-51 and WP 3-53 for PG&E's forecast for its proposed Emergency Planning project of $1.453 million and its Cybersecurity projects of $1.608 million recorded to MWC BS.

[143] Ex. PG&E-6, p. 3-84.

PG&E has been able to record costs associated with these projects in MWC BS and did not provide any documentation that identified specific problems or any other difficulties it experienced with recording costs in MWC BS. PG&E's recorded adjusted expenses for 2007-2012 include embedded costs for these projects. PG&E has dealt with "uncertainty in the cost and timing of implementation of new NRC rules" during the historical period, so this is not a new activity that PG&E must address.

DRA requested additional information on PG&E's two-way balancing account proposal. Specifically, regarding whether PG&E had implemented a balancing account for similar safety and security regulations in the past, DRA asked:

> Referring to page 3-83, PG&E states it 'proposes to implement a two-way balancing account for managing the capital and expense forecasts associated with new nuclear energy safety and security regulatory required projects'. Provide the documentation that explains in detail and demonstrates if PG&E implemented one-way or two-way balancing accounts that were associated with new nuclear energy safety and security regulations that were required after the 9-11 terrorists attacks.

PG&E responded:

> PG&E has not implemented a balancing account for these items. Our proposal is to implement a balancing account on a prospective basis starting January 1, 2014.

On how long PG&E has been aware of the proceeding for which it now seeks a balancing account, DRA asked:

> Provide the documentation that explains in detail and demonstrates how long PG&E was aware, prior to its 2014 GRC, of the Emergency Planning Rulemaking, National Fire Protection Associated with 805 Rulemaking, and the Cybersecurity Rulemaking.

PG&E's response was:

> PG&E became aware that the NRC was preparing the Emergency Planning Rulemaking in early 2009; however, the final rule-making was not issued until November 2011. PG&E has been aware of the NFPA

805 Rulemaking since mid-2004; however, the final requirements for the transition were to be determined following the completion of programs at two pilot plants which were not completed until December 2010. NRC input on review of the DCPP Seismic Probabalistic [sic] Risk Assessment was provided in April 2011. PG&E has been aware of the Cybersecurity Rulemaking since early 2009; however the final rule-making was not completed until April 2011. Final Rulemaking documents are attached as GRC2014-PH_DR_DRA_098-Q02Atch02 through GRC2014-PH_DR_DRA_098-Q02Atch05.

Regarding costs PG&E incurred for the same activities in the last GRC, DRA asked:

Provide the documentation that explains in detail and demonstrates if PG&E incurred costs between 2007 and 2011 for the Emergency Planning Rulemaking, National Fire Protection Associated with 805 Rulemaking, and the Cybersecurity Rulemaking. If the answer is yes, provide the total costs incurred for each year (2007-2011) and the accounts where the costs were recorded.

PG&E's response was:

Yes, costs were incurred. See Attachment – GRC2014-PH_DR_DRA_098-Q02Atch01.

And finally, regarding whether PG&E dealt with similar uncertainties between 2007 and 2011 DRA asked.

Provide the documentation that explains in detail and demonstrates if PG&E ever dealt with "uncertainty in the cost and timing of implementation of new NRC rules" during any historical years. If the answer is yes, provide the documentation that explains in detail and demonstrates if PG&E requested "recovery in rates only of actual costs that are incurred'[144].

PG&E's response was:

Yes, PG&E has dealt with 'uncertainty in the cost and timing of implementation of new NRC rules' in the past; however, the costs were not as significant as they are with the current set of regulations. PG&E

[144] DRA-PG&E-098-TLG, Q.2-a-d.

has not previously requested 'recovery in rates only of actual costs that are incurred'.

PG&E has been incurring costs for on-going Cybersecurity and Emergency Planning projects and these costs are included in historical expenses that can be reallocated and utilized for the same or similar proposed activities.[145] Based on this, establishing a two-way balancing account is not required for these projects. PG&E's 2011 GRC included funding for its Cybersecurity project, but PG&E deferred this project due to a revision of PG&E's project schedule.[146]

PG&E's Fukushima Daiichi project is a new regulatory requirement which started in 2012. In 2012 PG&E incurred $2.2 million for the Fukushima project.[147] PG&E forecasts $11.500 million ($34.500 million over three years) for is Fukushima Daiichi project. The information PG&E provided to support the increases over 2011 expense levels is insufficient and incomplete.[148] DRA's calculated Test Year estimate for this project is $3.833 million based on normalizing PG&E's forecast of $11.500 million over the three year rate case cycle and this estimate is included in the forecast for MWC BS.

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[145] PG&E established budgets of $1.9 million in 2011 from its 2011 GRC funding with a forecasted total spend of $4.2 million between 2011-2013 for its Cybersecurity project. (DRA-PG&E-205-TLG, Q.1-j-ii).

[146] PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018 and DRA-PG&E-205-TLG, Q.1-j-ii.

[147] DRA-PG&E-205-TLG, Q.1-j-ii. The Fukushima project includes "permanent modification to the plant, procurement of emergency spare equipment and strategies for obtaining sufficient offsite resources to sustain emergency equipment functionality". (Ex. PG&E-6, p. 3-84).

[148] DRA-PG&E-098-TLG. DRA asked PG&E to provide a detailed breakdown of the calculation of the forecasted increase (i.e., the calculation of each individual line item estimate included in the increase) and the supporting documentation to substantiate the estimates for each proposed project. PG&E provided brief spreadsheets showing lump sum numbers which lacked the specific detail showing exactly how PG&E calculated each individual line item estimate included in the forecasted increase over 2011 expense levels and also did not provide the supporting documentation to substantiate the estimates for each proposed project.

2. PG&E's Proposal to Levelize Refueling Outage Costs

PG&E's forecast includes its proposal for levelizing the cost of the second refueling outage over the GRC period of 2014 through 2016.[149] The levelized cost is $18.7 million annually. PG&E had two refueling outages in 2009 and those costs are included in its recorded expenses for that year. PG&E did not provide any documentation that identified specific problems or any other difficulties it experienced with recording costs associated with its refueling outages. PG&E's recorded adjusted expenses for 2007-2012 include embedded costs for refueling outages which DRA reviewed during its analysis of PG&E's Test Year expense request for each MWC. DRA utilized PG&E's recorded data to calculate its Test Year estimates for each of PG&E's MWCs, which included 2009 costs for two refueling outages. PG&E should have identified and removed all costs incurred for refueling outages from each associated MWC prior to calculating its forecast in its 2014 GRC. DRA's Test Year estimates incorporate historical embedded costs for refueling outages. DRA requested additional information on PG&E's proposal.

[149] Ex. PG&E-6, p.3-3.

Referring to page 3-3, PG&E states that one of the primary reasons for its increase from 2011 to 2014 is its second refueling outage "which increases the forecast for that year by $56.1 million (WP 3-63). PG&E proposes that the cost of the second refueling outage be levelized over the GRC period of 2014 through 2016, resulting in a cost to customers of $18.7 million (WP 3-62) per year for the 3-year period. This approach reduces 2014 forecast expense by $37.4 million". During DRA's tour of Diablo Canyon on March 1, 2013, PG&E mentioned that in 2009 it had two refueling outages. PG&E's 2008 recorded adjusted expenses increased by $14.297 million or 5.05% over 2007 recorded adjusted expenses of $282.967 million. PG&E's 2009 recorded adjusted expenses increased by $33.588 million or 11.30% over 2008 recorded adjusted expenses of $297.264 million. PG&E's 2010 recorded adjusted expenses decreased by $32.797 million or 11.00% over 2009 recorded adjusted expenses of $330.852 million. PG&E's 2011 recorded adjusted expenses increased by $16.152 million or 5.42% over 2010 recorded adjusted expenses of $298.055 million. PG&E's 2014 GRC forecast of $415.500 million is an increase of $101.293 million or 32.24% over 2011 recorded adjusted expenses of $314.207 million.

> Provide the documentation that explains in detail and demonstrates the costs PG&E incurred in 2009 for its two refueling outages and which shows how PG&E recorded the costs (i.e., levelized the costs over three years (2009-2011) or included the full costs in its 2009 recorded adjusted expenses). Provide the documentation that explains in detail and demonstrates how PG&E is recording costs for the current refueling outage (i.e., were the costs forecasted in PG&E's 2011 GRC and did PG&E request that the costs be levelized over a three year period).[150]

PG&E's response:

> In 2009 Diablo Canyon had two refueling outages. The costs for these refueling outages were recorded completely in 2009 consistent with our GRC request in 2007. In 2013, Diablo Canyon has one refueling outage. The costs for this refueling outage are being recorded

[150] DRA-PG&E-205-TLG, Q.1-h.

completely in 2013 consistent with the request in 2011. The costs of the refueling outages in 2009 are shown on WP 3-63.

As PG&E states in "2009 Diablo Canyon had two refueling outages. The costs for these refueling outages were recorded completely in 2009 consistent with our GRC request". PG&E's costs for its refueling outages are recorded in various MWCs within Nuclear Operations. DRA utilized PG&E's recorded data to calculate its Test Year estimates for PG&E's MWCs, which included costs for two refueling outages. DRA utilized a different methodology from PG&E to forecast each of PG&E's MWCs. DRA's Test Year estimates incorporate historical embedded costs for refueling outages.

3. PG&E's Proposal for Aging Workforce

PG&E requests incremental funding for its aging workforce program. PG&E states "Beginning in 2000, Diablo Canyon began addressing the aging workforce issue".[151] PG&E has requested and received funding in its 2007 and 2011 GRC to establish various training programs and to hire for additional positions to offset attrition.[152] DRA recommends that PG&E not be authorized incremental funding over DRA's test year estimate for PG&E's Nuclear Operations to address its aging workforce program.

PG&E's forecasts have been overstated in regards to its aging workforce issue and it has received more than enough funding to address its aging workforce activities and has embedded historical costs that can be reallocated and utilized for this program. For example, in PG&E's 2011 GRC, DRA noted that PG&E's forecast of staff attrition for 2009 greatly exceeded the actual attrition in 2009. PG&E's 2011 GRC authorized amount of $328.8 million is $14.593 million more than its 2011 recorded adjusted expenses of $314.207 million. DRA's estimates $285.323 for

[151] Ex. PG&E-6, p. 3-30.

[152] Ex. PG&E-6, p. 3-30.

PG&E's Nuclear Operations, plus PG&E's embedded historical costs for the same or similar activities, and considering its funding requests from 2007 and 2011 GRC that were overstated regarding its aging workforce program, are sufficient for PG&E to address its aging workforce issue in the Test Year.

VI. DISCUSSION / ANALYSIS OF FOSSIL AND OTHER GENERATION OPERATIONS

PG&E's Fossil and Other Generation Operations maintain and operate PG&E's Fossil generation facilities, including Gateway, Humboldt Bay, and Colusa Generating facilities, and its seven ground-mounted Photovoltaic solar stations, and fuel cell generating facilities. Table 11-27 summarizes PG&E's request and DRA's recommendation for Fossil and Other Generation Operations expenses recorded in the MWCs within Fossil and Other Generation Operations.

Table 11-27
Energy Supply Expenses for TY2014
Fossil and Other Generation Operations
(In Thousands of Dollars)

Description (a)	PG&E Proposed[153] (b)	DRA Recommended (c)
AK- Manage Environmental Operations	$3,204	$3,204
KK- Operate Fossil Generation	$14,858	$12,935
KL- Maintain Fossil Generating Equipment	$31,942	27,045
KM- Maintain Fossil Buildings, Grounds, and Infrastructure	$3,048	$2,247
KQ- Operate Alternative Generation	$364	$60
KR- Maintain Alternative Gen Generating Equipment	$1,109	$1,109
KS- Maintain Alternative Generation Buildings, Grounds, and Infrastructure	$108	$6
Total	$54,633	$46,606

[153] Ex. PG&E-6, Workpapers p. WP 4-1.

A. Overview of PG&E's Request

PG&E forecasts $54.633 million for Fossil and Other Generation Operations expenses for Test Year 2014 which is an increase of $8.847 million or 19.32% over 2011 expenses of $45.786 million.[154] PG&E developed its forecast by utilizing 2011 recorded costs and O&M expense forecasts used to develop the revenue requirements adopted in D.10-04-052, and D.10-04-028 plus incremental expenses for proposed projects.[155] The corresponding DRA estimate for PG&E's Fossil and Other Generation Operations expenses is $46.606 million, which is $8.027 million less than PG&E's forecast.

Table 11-28 below shows PG&E's recorded adjusted expenses for 2007-20012 and its 2014 forecast.

Table 11-28
2007-2012 Recorded and 2014 Forecast Data for MWCs included in Fossil and Other Generation Operations
(in Thousands of Dollars)

Description	2007	2008	2009	2010	2011	2012	2014
AB- Support	$97	$68	$79	($0)	($0)	$6	$0
AK- Manage Environmental Operation	$734	$850	$1,472	$1,649	$3,894	$2,655	$3,204
KK- Operate Fossil Generation	$6,011	$6,086	$10,249	$9,907	$12,341	$13,529	$14,858
KL- Maintain Fossil Generating Equipment	$4,028	$4,480	$13,374	$12,510	$27,045	$42,094	$31,942
KM- Maintain Fossil Bldg Grnd Infrst	$191	$287	$770	$846	$2,015	$2,479	$3,048
KQ- Operate Alternative Gen	$0	$0	$0	$0	$0	$60	$364
KR- Maintain Alt Gen Generating Equipment	$2	$35	$23	$108	$492	$1,206	$1,109
KS- Maintain Alt Gen Bldg Grnd Infrast	$0	$0	$0	$0	$0	$6	$108
Total	$11,063	$11,806	$25,967	$25,020	$45,787	$62,035	$54,633

Source: 2007-2011 and 2014 data from Ex. PG&E-6, Chapter 4, Workpapers p. WP 4-1. The 2012 data is from PG&E's response to DRA data request DRA-PG&E-108-CKT.

[154] PG&E's 2014 forecast of $54.633 million is shown in Ex. PG&E-6 Table 4-1, p. 4-3.

[155] Ex. PG&E-6 pp. 4-55 and 4-56. PG&E's 2011 GRC forecast for Humboldt Bay Generating Station was based on the O&M expense forecast used to develop the revenue requirement in D.06-11-048. PG&E's 2014 GRC forecast for Humboldt Bay Generating Station is based on 2011 recorded expenses. (Ex. PG&E-6 p. 4-21).

PG&E records expenses for its Fossil and Other Generation Operations in seven Major Work Categories (MWC) for the Test Year: AK – Manage Environmental Operations with a forecast of $3.204 million, KK – Operate Fossil Generation with a forecast of $14.858 million, KL – Maintain Fossil Generating Equipment with a forecast of $31.942 million, KM – Maintain Fossil Building, Ground, and Infrastructure with a forecast of $3.048 million, KQ – Operate Alternative Generation with a forecast of $0.364 million, KR – Maintain Alternative Generation Generating Equipment with a forecast of $1.109 million, and KS – Maintain Alternative Generation Buildings, Grounds, and Infrastructure with a forecast of $0.108 million.[156]

DRA does not oppose PG&E's forecast for MWC AK - Manage Environmental Operations with a forecast of $3.204 million,[157] and KR – Maintain Alternative Gen Generating Equipment with a forecast of $1.109 million. DRA reviewed PG&E's testimony, workpapers, data request responses and historical expense levels for these MWCs and notes that PG&E's forecasts are comparable with its recent recorded expenses and appear to be reasonable Test Year estimates. Therefore, DRA will not address these MWCs in the testimony to follow.

DRA does take issue with PG&E's forecasts for MWC KK – Operate Fossil Generation with a forecast of $14.858 million, KL – Maintain Fossil Generating Equipment with a forecast of $31.942 million, KM – Maintain Fossil Building, Ground, and Infrastructure with a forecast of $3.048 million, and KQ – Operate Alternative Generation with a forecast of $0.364 million, and KS – Maintain Alternative Generation Building, Ground, and Infrastructure with a forecast of $0.108 million. These MWCs are addressed below.

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[156] Ex. PG&E-6 workpapers p. WP 4-1.

[157] PG&E's forecast for MWC AK of $3.204 million is comparable to its two year average (2011-2012) of $3.274 million.

B. MWC KK – Operate Fossil Generation

PG&E forecasted $14.858 million for its MWC KK – Operate Fossil Generation expenses. PG&E's forecast is an increase of $2.517 million or 20.40% over its 2011 recorded adjusted expenses of $12.341 million. PG&E based its TY 2014 forecast for MWC KK on 2011 recorded adjusted expenses "with additions and reductions for specific purposes".[158] PG&E's forecast includes costs for two additional power plant technicians at Humboldt Bay Generating Station (HBGS) and work that was transferred from other MWCs.[159] DRA forecasts $12.935 million with a two year average (2011 and 2012) as the basis for its estimate. DRA's forecast is $1.923 million less than PG&E's forecast and is $0.594 million more than PG&E's 2011 recorded adjusted expenses.

Year 2011 was PG&E's first full year of operations that shows costs for all of PG&E's Fossil Operations facilities including, Gateway, Colusa, and Humboldt Bay Generating Stations. PG&E's recorded adjusted expenses for the years 2007-2010 were not used for forecasting Test Year expense levels. PG&E's forecast includes a request for funding for two power plant technicians (PPT). PG&E's forecast for its two proposed positions is overstated because it includes costs for materials, contracts, vehicles, and other costs that should be accounted for in PG&E's Administration and General expenses.[160] PG&E states the following in regards to PPT overtime:

> In order for PPT to be able to take his or her vacation time and any necessary sick leave, a PPT from one of the other three groups must work overtime to replace the vacationing or sick PPT in order to keep the required minimum plant operations staffing at two. This situation has created significant overtime and work/life balance issues.[161]

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[158] Ex. PG&E-6 p. 4-35.

[159] Ex. PG&E-6 p. 4-4 and 4-36.

[160] DRA-PG&E-088-TLG Q.2-c.

[161] Ex. PG&E-6 p. 4-4 and 4-36.

Despite its concerns about overtime, PG&E has embedded funding for "significant overtime" and associated employee expenses that can be reallocated and utilized in the Test Year for the requested positions.[162]

DRA opposes additional ratepayer funding of $0.240 million ($0.720 million over three years) in the Test Year for PG&E's implementation of a document storage program to address PG&E's Fossil Generation document management and recordkeeping deficiencies.[163] The Commission should reject PG&E's request. PG&E attempts to justify this project by stating the following:

> Plant documents need to be stored and be able to be retrieved in a timely manner, for daily use within the plant. The Independent Review Panel [IRP] report on the San Bruno explosion concluded that PG&E lacks robust data and document information management systems and processes and recommended that PG&E conduct a comprehensive review of its data and information management systems to validate the completeness, accuracy, availability, and accessibility to data and information and take action through a formal management of change process to correct deficiencies where possible.[164]

The IRP Report did not state that PG&E's ratepayers should be charged excessive costs over historical embedded costs so that PG&E could improve its deficient records and document information management database systems. PG&E's records for its newly commissioned Fossil facilities should currently be accurate, complete, organized and accessible. If any of these new facilities are experiencing problems with record completeness, accuracy, availability and

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[162] DRA-PG&E-088-TLG Q.2-c.

[163] PG&E's request for additional funding for implementation of a document storage program included in MWC KK to address its deficiencies is similar to its proposal in its Pipeline Safety Enhancement Plan (PSEP) regarding its Pipeline Records Integration Program (PRIP). In the PSEP proceeding, PG&E requested incremental ratepayer funding for collecting, reviewing, organizing, and verifying critical records associated with its installed gas pipeline segments and for additional funding to upgrade and consolidate its multiple existing Information Technology systems (SAP and Geographic Information System (GIS)). The Commission rejected PG&E's PRIP proposal. (See D.12-12-030 p. 87) PG&E's proposed IT project also has an associated capital forecast.

[164] Ex. PG&E-6 workpapers p. WP 4-32.

accessibility, PG&E needs to reallocate historical embedded cost to address all of its records management and storage deficiencies immediately and not wait until 2014. Any costs incurred over authorized funding levels should be at PG&E's shareholders' expense. DRA notes that PG&E's Gateway Generating Station was placed in service in January 2009, Humboldt Bay Generating Station was placed in service in September 2010 and Colusa Generating Station was placed in service in December 2010.[165] DRA requested additional information from PG&E on its proposed project in a data request to PG&E.

> Provide the documentation that explains in detail and demonstrates if PG&E believes it has received authorized funding in past GRCs (2003, 2007, 2011) to ensure that its Fossil and Other Generation Operations records were maintained in an accurate, complete, and easily accessible manner.[166]

PG&E responded:

> There was no funding authorized during PG&E's 2003 and 2007 GRCs for PG&E's records management at Gateway, Colusa, and Humboldt Bay Generating Stations since these facilities were not commissioned until after 2007. The level of funding authorized in PG&E's 2011 GRC for PG&E's records management at Gateway, Colusa, and Humboldt Bay Generating Stations was adequate to perform records management at the level PG&E felt was prudent at the time the 2011 GRC was filed, but not necessarily adequate at the time the 2014 GRC was filed. Consistent with the IRP recommendations, this document storage program includes improving the retrievability of records, confirming their accuracy, and improving the records management system to help better manage PG&E's operations.

PG&E's response does not justify additional ratepayer funding. DRA considers development, implementation and testing costs to be one-time non-recurring costs and additional funding is not required each year during the rate case cycle for this activity. PG&E had 2012 and has 2013 to implement its document

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[165] DRA-PG&E-088-TLG Q.8-b and c. PG&E's VDSS became commercial in December 2009.

[166] DRA-PG&E-088-TLG Q.3-d.

storage program before the Test Year. DRA's forecast of $12.935 million based on a two year average (2011 and 2012) is a reasonable Test Year estimate for MWC KK.

C. MWC KL – Maintain Fossil Generating Equipment

PG&E forecasts $31.942 million for its MWC KL – Maintain Fossil Generating Equipment expenses. PG&E's forecast is an increase of $4.897 million or 18.11% over its 2011 recorded adjusted expenses of $27.045 million. PG&E based its 2014 forecast for MWC KL on 2011 recorded adjusted expenses "with increases and decreases for specific purposes".[167] DRA forecasts $27.045 million for MWC KL utilizing PG&E's 2011 recorded adjusted expenses as a basis. DRA's forecast is $4.897 million less than PG&E's forecast.

DRA opposes PG&E's request for additional ratepayer funding for its Piping Integrity Program with a forecast of $0.722 million ($2.166 million over three years), its Machinery Assessment Program with a forecast of $0.386 million ($1.158 million over three years) and its Material Traceability Program with a forecast of $0.771 million ($2.313 million over three years). Regarding PG&E's Piping Integrity Program[168] and its Machinery Assessment Program,[169] the proposed activities are very similar to the work already covered under PG&E's Long-Term Service Agreements (LTSAs), which PG&E states is a "significant portion" of PG&E's O&M costs, which are funded by ratepayers. PG&E states "LTSAs provide an effective cost control measure for the major planned and unplanned maintenance activities"

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[167] Ex. PG&E-6 p. 4-38.

[168] The proposed activities for PG&E's Piping Integrity program for Gateway and Colusa Generating Stations include the measurement and tracking of hot and cold pipe hanger settings, inspection of operating records for temperature transients, non-destructive examination of critical welds and supports, detection of flow accelerated corrosion, review and inspection of steam trap and drain systems to ensure proper operation, etc. (Ex. PG&E-6 workpapers p. WP 4-25).

[169] The proposed activities for PG&E's Machinery Assessment Program include Installation of predictive diagnostic software and ongoing services that would potentially help to avoid unplanned equipment failure. This program is supposed to detect problems before they grow large and catastrophic to help the facility to initiate a more proactive maintenance process, etc. (Ex. PG&E-6 workpapers p. WP 4-26).

and that LTSA "are commonly used in the industry as a way to provide high reliability and efficiency for combined cycle power plants". The LTSA cover all inspections, maintenance, replacements and repairs due to wear and tear over the term of the LTSA.[170]

PG&E has not provided any documentation demonstrating problems or shortcomings with its LTSA or that showed that its LTSAs have been inefficient at performing needed maintenance. PG&E has not provided any documentation demonstrating that its current funding levels were insufficient to address its proposed activities. It is inappropriate to charge ratepayers excessive maintenance costs (double charging) for the same or similar maintenance activities that have costs embedded in historical expenses. PG&E states:

> PG&E utilizes contract services for much of its major maintenance work at its fossil, PV and fuel cell generating assets. For GGS and CGS, an LTSA for the CTs and STs is provided by GE, the original equipment manufacturer for the CTs and STs. The fuel cells are currently under warranty and PG&E has entered into LTSA with the original equipment manufacturers. Portions of the PV sites are also currently under warranty. PG&E is responsible for the maintenance of the PV sites but contracts out certain work such as weed abatement, pest control and module washing.[171]

PG&E's states that its Material Traceability Program "is a multi-year effort to trace the location and specifications of material used in the construction and the operation or maintenance of the fossil fueled plants throughout their life cycle, from requisition, manufacturing to retirement".[172] The Commission should reject PG&E's

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[170] Ex. PG&E-6 p.4-39.

[171] Ex. PG&E-6 p. 4-29.

[172] Ex. PG&E-6 workpapers p. WP 4-30. PG&E's request for MWC KL for its Material Traceability Program is very similar to PG&E's proposal in its Pipeline Safety Enhancement Plan (PSEP) regarding its Pipeline Records Integration Program (PRIP). In the PSEP proceeding, PG&E requested incremental ratepayer funding for searching, collecting, reviewing organizing, and verifying critical records associated with its installed gas pipeline segments and for additional funding to upgrade and consolidate its multiple existing Information Technology systems (SAP and its Geographic Information System (GIS)). The Commission rejected PG&E's PRIP proposal. See D.12-

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proposal. PG&E became responsible for its fossil fueled plants the day it installed facilities and equipment for the system. Therefore, PG&E's responsibility included creating and maintaining records of the location and engineering details of system components. Based on PG&E's proposal, it appears that PG&E has not utilized authorized funding efficiently and effectively to ensure that its fossil fueled records and document storage systems were accurate, complete, updated and maintained; if they were, PG&E would not need to "trace the location and specifications of materials used in the construction and the operation or maintenance of the fossil fueled plants". It is unreasonable for PG&E to request additional ratepayer funding to address its deficiencies. The activities included in PG&E's Material Traceability Program are the same activities associated with prudent recordkeeping and should be part of the normal, routine and on-going maintenance activities that are already funded by ratepayers.

1. Long-Term Service Agreement (LTSAs)

The maintenance cost of PG&E's combustion turbine (CT) and steam turbine (ST) generators is a large portion of PG&E's O&M expenses recorded in MWC KL.[173] PG&E entered into Long-Term Service Agreements (LTSA) with General Electric (GE) to provide maintenance, inspections, replacements and repairs of its CT and ST generators at Gateway and Colusa Generating Stations. PG&E's 2014 forecast for the LTSAs are based on recorded costs in 2011.[174] The LTSAs include variable (quarterly) and periodic milestone payments (hot gas path milestone or major inspection milestone payment).

(continued from previous page)
12-030, p. 87.

[173] Ex. PG&E-6 p. 4-39.

[174] Ex. PG&E-6 pp. 4-17 and 4-19.

PG&E's next milestone payment for Gateway Generating Station is due in 2016 for the first major inspection. PG&E proposes to continue with the method adopted in the 2011 GRC and spread out or normalize the hot gas path milestone payments over the years 2014-2016. There is a forecasted Major Inspection Use tax that is also due at the same time and PG&E proposes to normalize this payment over the same time period, 2014-2016. PG&E's workpapers show the milestone payment on line eight and the forecasted Major Inspection Use tax payment on line nine for Gateway.[175] The combined normalized annual payment for 2014-2016 is found on line one.

The next milestone payment for a major inspection for Colusa Generating Station is due in 2019. PG&E proposes to normalize this payment over the years 2014-2019 (six years) along with the scheduled Major Inspection Use tax payment.[176] PG&E also requests that it be authorized to adjust on a prospective basis the schedule for amortization of milestone payments so that PG&E can true-up its recovery of milestone payments in the next GRC.[177] PG&E's workpapers show the milestone payment on line thirty-one and the forecasted Major Use tax on line thirty-two for Colusa.[178] The combined normalized annual payment for 2014-2019 is found on line twenty-four.

DRA does not oppose PG&E's proposal to continue to normalize the Gateway Generating Station milestone payment for the first major inspection and the Major Inspection Use tax payment due in 2016 over the period 2014-2016. However, DRA opposes PG&E's proposal to include in its 2014 GRC the normalized milestone payment for the major inspection and Major Inspection Use tax payment due for its

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[175] PG&E's Milestone payment and Major Use tax payment are confidential (Ex. PG&E-6 p. WP 4-34.

[176] Ex. PG&E-6 p. 4-40.

[177] Ex. PG&E-6 p. 4-41.

[178] PG&E's Milestone payment and Major Use tax payment are confidential. (Ex. PG&E-6 p. WP 4-

(continued on next page)

Colusa Generating Station in 2019 over the period of 2014-2019 (six years). PG&E's Colusa Generating Station milestone payment and Major Inspection Use tax payment are due in 2019 which is during PG&E's next GRC and should be addressed at that time. DRA also opposes PG&E's proposal to prospectively adjust the amortization schedule for milestone payments since PG&E should retain the risk of cost recovery until the next GRC.

D. MWC KM – Maintain Fossil Buildings, Grounds, and Infrastructure

PG&E forecasts $3.048 million for its MWC KM – Maintain Fossil Buildings, Grounds, and Infrastructure expenses. PG&E's forecast is an increase of $1.033 million or 51.27% over its 2011 recorded adjusted expenses of $2.015 million. PG&E based its TY 2014 forecast for MWC KM on 2011 recorded adjusted expenses "with increases and decreases for specific purposes".[179] DRA forecasts $2.247 million for MWC KM utilizing a two year average (2011 and 2012) as a basis. DRA's forecast is $0.801 million less than PG&E's forecast and is $0.232 million more than PG&E's 2011 recorded adjusted expenses.

Year 2011 was PG&E's first full year of operations that shows costs for all of PG&E's Fossil Operations facilities including, Gateway, Colusa, and Humboldt Bay Generating Stations. PG&E's recorded adjusted expenses for the years 2007-2010 were not used for forecasting Test Year expense levels. PG&E's forecast includes performing corrosion protection work at its Humboldt Bay Generation Station.[180] DRA's forecast of $2.247 million, based on a two year average, is a reasonable estimate to establish Test Year expense levels for MWC KM and is sufficient to address PG&E's proposed activities.

(continued from previous page)
34.

[179] Ex. PG&E-6 p. 4-43.

[180] Ex. PG&E-6 p. 4-43.

E. MWC KQ – Operate Alternative Generation and KS – Maintain Alternative Generation Buildings, Grounds, and Infrastructure

PG&E forecasts $0.364 million for its MWC KQ – Operate Alternative Generation expenses and forecasts $0.108 million MWC KS – Maintain Alternative Generation Buildings, Grounds, and Infrastructure expenses. PG&E based its TY 2014 forecast for MWC KQ and KS on "the forecasts used to develop the revenue requirement used in the CPUC decisions that approved these projects".[181] DRA forecasts $60,000 for MWC KQ which is $0.304 million less than PG&E's forecast. DRA forecasts $6,000 for MWC KS which is $0.102 million less than PG&E's forecast. DRA utilized PG&E's 2012 recorded adjusted expenses as a basis for its Test Year estimates.[182]

PG&E does not show any historical expenses recorded for 2007-2011 for MWC KQ and KS. PG&E's alternative generation facilities were in operation for 2011[183] and the entire year of 2012. PG&E states "Since PG&E does not have any significant experience with fuel cells, PG&E's O&M expense forecast in this proceeding is primarily based on the O&M expense forecast adopted by the Commission in D.10-04-028".[184] PG&E states "As PG&E continued to add additional alternative generating facilities to its electric generation fleet, it had become clear that it was more appropriate to utilize the three MWCs KR, KS, and

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[181] Ex. PG&E-6 p. 4-37. PG&E based its forecast for Vaca Dixon Solar Station (VDSS) on the revenue requirement used in D.10-04-052. The forecasts for San Francisco State and CSU East Bay fuel cell facilities were based on the revenue requirement used in D.10-04-028 (includes reduction for shared labor and reductions in the cost of the Long-Term Service Agreement (LTSA). PG&E is currently using the same employee to support its fuel cell facilities and its VDSS. The labor forecasts used for the revenue requirement adopted in D.10-04-028 was based on one full time employee dedicated to only supporting the fuel cell facilities (DRA-PG&E-088-TLG Q.4-b&c).

[182] 2012 data is from PG&E's response to DRA data request DRA-PG&E-108-CKT.

[183] PG&E's VDSS became commercial in December 2009, its fuel cell facilities entered commercial operations in September 2011. The solar technician that supports the fuel cells and VDSS facilities was hired in July 2011. (DRA-PG&E-088-TLG Q.4-a and Q. 5).

[184] Ex. PG&E-6 p. 4-23.

KQ in order to accurately settle costs to the appropriate FERC accounts".[185] "Since PG&E does not have any significant experience with fuel cells", utilizing PG&E's actual 2012 expense levels of $60,000 for MWC KQ and $6,000 for MWC KS is a reasonable method to establish expense levels for the Test Year.

VII. DISCUSSION / ANALYSIS OF ENERGY PROCUREMENT ADMINISTRATION

PG&E's Energy Procurement Administration performs the planning, procuring, scheduling, dispatching, and administering of procurement agreements and ensuring payments to the California Independent System Operator and third-party power suppliers associated with the procurement of electricity and natural gas. Table 11-29 summarizes PG&E's request and DRA's recommendation for Energy Procurement Administration recorded in the MWCs within Energy Procurement Administration.

Table 11-29
Energy Supply Expenses for TY2014
Energy Procurement Administration
(In Thousands of Dollars)

Description (a)	PG&E Proposed[186] (b)	DRA Recommended (c)
AB- Support	$2,630	$2,630
CT- Acquire and Manage Electric Supply	$50,209	$42,901
CV –Acquire and Manage Gas Supply	$5,961	$3,797
JV- Maintain IT Applications and Infrastructure	$3,000	$1,278
Less		
JV- Maintain IT Applications and Infrastructure	(3,000)	
Total	$58,800	$50,606

[185] DRA-PG&E-088-TLG Q. 4-a.

[186] Ex. PG&E-6, Chapter 5, Workpapers p. WP 5-1.

A. Overview of PG&E's Request

PG&E forecasts $58.800 million for Energy Procurement Administration expenses for Test Year 2014 which is an increase of $9.607 million or 19.53% over 2011 expenses of $49.193 million.[187] PG&E developed its forecast by utilizing 2011 recorded costs, a one-time labor adjustment, plus incremental expenses for proposed staffing and escalation.[188] The corresponding DRA estimate for PG&E's Energy Procurement Administration is $50.606 million, which is $8.194 million less than PG&E's forecast.

Table 11-30 below shows PG&E's recorded adjusted expenses for 2007-20012 and its 2014 forecast.

Table 11-30
2007-2012 Recorded and 2014 Forecast Data for MWCs included in Energy Procurement Administration
(in Thousands of Dollars)

Description	2007	2008	2009	2010	2011	2012	2014
AB- Support	$1,200	$1,796	$2,028	$2,416	$2,495	$2,747	$2,630
BI- Maintain Bldgs	$116	$21	$604	($28)	$0	$0	$0
CT- Acquire and Manage Electric Supply	$25,816	$30,407	$41,046	$42,783	$42,901	$42,291	$50,209
CV –Acquire and Manage Gas Supply	$3,460	$3,388	$3,475	$3,766	$3,797	$3,821	$5,961
JV- Maintain IT Applications and Infrastructure	$272	$769	$1,638	$1,291	$906	$4,330	$3,000
Less	$0	$0	$0	$0	$0	$0	$0
JV- Maintain IT Applications and Infrastructure	($272)	($769)	($1,638)	($1,291)	($906)	($4,330)	($3,000)
Total	$30,592	$35,612	$47,153	$48,937	$49,193	$48,859	$58,800

Source: 2007-2011 and 2014 data from Ex. PG&E-6, Chapter 5, Workpapers p. WP 5-1. The 2012 data is from PG&E's response to DRA data request DRA-PG&E-108-CKT.

[187] PG&E's 2014 forecast of $58.800 million is shown in Ex. PG&E-6 Table 5-1, p. 5-3.

[188] Ex. PG&E-6 pp. 5-46 and 5-47.

P&GE records expenses for its Energy Procurement Administration in four MWCs for the Test Year: MWC AB – Administration Support with a forecast of $2.630 million, CT – Acquire and Manage Electric Supply with a forecast of $50.209 million, CV – Acquire and Manage Gas Supply with a forecast of $5.961 million, and JV - Maintenance of Information Technology Applications with a forecast of $3.0 million.[189]

DRA does not oppose PG&E's forecast of $2.630 million MWC AB – Administration Support. DRA reviewed PG&E's testimony, workpapers, data request responses and historical expense levels for this line item and notes that PG&E's forecast is comparable with its most recent expense level for 2012 of $2.747 million and is a reasonable Test Year estimate. DRA takes issue with PG&E's forecasts for MWC CT – Acquire and Manage Electric Supply with a forecast of $50.209 million, CV – Acquire and Manage Gas Supply with a forecast of $5.961 million, and JV - Maintenance of Information Technology Applications with a forecast of $3.0 million.

B. MWC CT– Acquire and Manage Electric Supply

PG&E forecasts $50.209 million for its MWC CT - Acquire and Manage Electric Supply expenses. PG&E's TY 2014 forecast is an increase of $7.308 million or 17.03% over its 2011 recorded adjusted expenses of $42.901 million. PG&E's request for additional funding is for "resource needs to support new and existing compliance requirements",[190] (additional staffing) over its 2011 staffing levels of two hundred and ninety-one positions in the Energy Procurement organization to address compliance mandates, internal initiatives, process improvements, and cost escalation.[191] PG&E's request for additional funding for its

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[189] Ex. PG&E-6 workpapers p. WP 5-1.

[190] Ex. PG&E-6 p. 5-45. PG&E is requesting a total of thirty-seven additional positions in the Test Year for Energy Procurement. PG&E's staffing request for 37 additional positions is excessive. Refer to p. 5-5 Table 5-3 and p. 5-20 Table 5-7 on the thirty-seven requested positions.

[191] Ex. PG&E-6 p. 5-2.

MWC CT is not justified when compared to historical levels. DRA utilized PG&E's 2011 recorded adjusted expense level as a basis for its forecast of $42.901 million for PG&E's MWC CT - Acquire and Manage Electric Supply expenses. DRA's estimate is $7.308 million less than PG&E's forecast.

PG&E's expenses for its MWC CT- Acquire and Manage Electric Supply, have been relatively stable for the last three years (2010-2012) with an average for the three year period of $42.658 million. PG&E's expenses increased substantially by $16.967 million or 65.72% between 2007 and 2010 from $25.816 million in 2007 to $42.783 million in 2010. The increase in PG&E's expenses between 2007 and 2010 of $16.967 million were driven mostly by labor costs for additional staffing as PG&E prepared for implementation of compliance mandates (i.e., 33 percent Renewable Portfolio Standard (RPS), Assembly Bill (AB) 32 Greenhouse Gas (GHG) Cap-and-Trade implementation,[192] Qualifying Facility/Combined Heat and Power (QF/CHP) Settlement and the Dodd-Frank Wall Street Reform Consumer Protection Act).[193] PG&E hired eighty-nine additional employees between 2007 and 2011 for its Energy Procurement organization, its staffing level increased from two hundred and two employees in 2007 to two hundred and ninety-one employees in 2011.[194] PG&E states its "has also established the required infrastructure necessary for AB 32 compliance, in terms of making the necessary information system enhancements, and developing and implementing processes and platforms for front, mid, back-office, compliance, and market monitoring functions".[195]

[192] AB 32 – The Global Warming Solutions Act, was signed into law by then-Governor Schwarzenegger in 2006 and was the first mandatory greenhouse gas (GHG) reduction law in the United States (DRA-PG&E-087-TLG Q.1-b).

[193] DRA-PG&E-087-TLG Q.1-b.

[194] DRA-PG&E-087-TLG Q.5.

[195] DRA-PG&E-087-TLG Q.1-c (note that a portion of this response is confidential).

PG&E's 2011 recorded adjusted expenses are shown as $42.901 million in its 2014 GRC for MWC CT- Acquire and Manage Electric Supply.[196] During PG&E's 2011 GRC, PG&E requested $89.060 million for its MWC CT. PG&E's 2011 GRC Imputed amount of $54.060 million is $11.159 million more than its 2011 recorded adjusted expenses of $42.901 million and its 2011GRC budgeted amount of $46.980 million is $4.079 million more than the 2011 recorded adjusted amount.[197] PG&E has overstated the amount necessary to address activities for MWC CT and this unnecessarily increases costs for ratepayers. PG&E has embedded historical funding that it was authorized in its 2011 GRC that it can reallocate and utilize for its proposed activities in MWC CT. It would be inappropriate to charge ratepayers twice to address these activities that have costs embedded in historical expenses. As discussed below, PG&E overstated its 2012 forecast.

PG&E's recorded adjusted expenses for 2012 for MWC CT were $42.291 million,[198] while PG&E forecasted $44.009 million for 2012, a difference of $1.718 million.[199] PG&E's 2012 estimate of $44.009 million was forecasted as an increase of $1.108 million over 2011 recorded adjusted expenses of $42.901 million and was supposed to address funding for eight additional employees in 2012.[200] PG&E's 2011 headcount is 291 and the 2012 headcount is 292, only an increase in staffing levels by one position in its Energy Procurement organization.[201] PG&E's 2011

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[196] Ex. PG&E-6, Chapter 5, Workpapers p. WP 5-1.

[197] PG&E's 2011 GRC forecast and Imputed amounts for MWC CT - Acquire and Manage Electric Supply expenses are from DRA-PG&E-087-TLG Q.1-a. The Imputed and budgeted amounts are shown in PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

[198] 2012 recorded data is from PG&E's response to DRA data request DRA-PG&E-108-CKT.

[199] 2012 forecast data from Ex. PG&E-6 , Workpapers p. WP 5-1.

[200] DRA-PG&E-087-TLG Q.2.

[201] In PG&E's 2011 GRC, its forecast for MWC CT of $89.060 million included some funding for its 2011 proposed headcount of 359 positions. This was a proposed staffing increase of 147 positions over 2008 staffing levels of 212 in its Energy Procurement organization. PG&E's 2011 headcount

(continued on next page)

recorded adjusted expenses of $42.901 million is $0.610 million more that its 2012 recorded adjusted expenses of $42.291 million.[202] DRA requested additional information for PG&E's Energy Procurement staffing proposal requested in its 2011GRC in order to determine if PG&E's 2014 GRC request for incremental funding for thirty-seven additional employees was justified and/or required and to determine if PG&E was requesting funding in its 2014 GRC a second time for the same resources and activities it deferred from its 2011 GRC.

DRA asked:

> Provide documentation that explains in detail and demonstrates all projects and programs that were authorized funding in PG&E's 2011 GRC but were deferred, postponed, rescheduled or eliminated.
>
> Provide documentation that explains in detail and demonstrates all projects and programs that were authorized funding in PG&E's 2011 GRC but were deferred, postponed, rescheduled or eliminated and are being proposed again in PG&E's 2014 GRC.[203]

PG&E's response:

> Following PG&E's 2011 GRC Settlement with the CPUC, which was adopted in D.11-05-018, PG&E imputed regulatory values for MWCs. Please note that specific amounts were not imputed for individual projects and programs, as values were not imputed below the MWC level. Therefore, we are unable to state which specific programs/projects were authorized for funding in the 2011 GRC, but were deferred, postponed, re-scheduled, eliminated, or proposed again in PG&E's 2014 GRC.

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was only 291, a difference of 68 positions from its 2011 forecasted headcount of 359 positions (See DRA's 2011 GRC Energy Supply Ex. DRA-9 p. 35 for PG&E's 2011 GRC forecast and historical (2004-2008) headcount and PG&E's response to DRA-PG&E-087-TLG Q.5 for its 2007-2012 headcount).

[202] PG&E states "During 2011 and 2012, Energy Procurement had a total of seven employee retirements. These positions were all backfilled. The retired employees' labor dollars are not included in the labor dollars for the incremental 37 positions". (DRA-PG&E-087-TLG Q.7).

[203] DRA-PG&E-093-TLG Qs1-a and 1-b.

DRA asked about the expected costs of regulatory compliance:

> PG&E states "As part of the 2011 GRC filing, Energy Procurement requested resources for AB 32 implementation and the cap and trade infrastructure with the objective to meet the original CARB implementation timeline of 2012 market "go-live". Provide a detailed explanation and supporting documentation that clearly demonstrates why PG&E's current staffing level, including the additional funding requested in its 2011 GRC, is inefficient in order to justify 37 additional positions in the test year. In response identify all requested positions (job title, job descriptions, breakdown of annual salary (exclude employee incentives, bonuses, benefits, overhead, fleet, and taxes from salary).[204]

PG&E's Response:

> As part of the 2011 GRC filing, Energy Procurement **had requested a total of 19 resources** for AB 32 implementation and the cap and trade infrastructure with the objective to meet the original CARB implementation date (January 1, 2012). Due to the subsequent delay of the cap-and-trade implementation by CARB (to January 1, 2013), PG&E was able to defer the hiring of most of these requested GHG resources beyond the test year 2011. **Actual hiring amounted to 3 additional resources** in Portfolio Management for transacting GHG compliance instruments (1 Senior Manager, 1 Principal, and 1 Analyst). These positions were filled in 2011. In order to meet the requirements of the first GHG compliance period (set to begin on January 1, 2013), Energy Procurement will require 12 resources (by 2014). In addition, EP plans to hire an additional 12 GHG resources (beginning in 2014) for the second GHG compliance period, effective on January 1, 2015. These requested resources, job titles, position descriptions, and salary ranges are stated in the below-table [omitted], along with the other EP-requested resources. For additional information on these resources, please refer to the testimony pages 5-7 through 5-18, and work papers on WP 5-21 to WP 5-24.

PG&E's responses are conflicting and demonstrate that it has overestimated its forecast for MWC CT (i.e., forecasting for nineteen additional employees ("resources"), being authorized the funding, and then hiring only three out of the nineteen requested positions). The Commission should not rely on PG&E's

[204] DRA-PG&E-087-TLG Q.10.

estimates to establish Test Year expense levels for MWC CT. Regarding PG&E's statement above that "In order to meet the requirements of the first GHG compliance period (set to begin on January 1, 2013), Energy Procurement will require 12 resources (by 2014)", PG&E should have already had in place sufficient "resources" (i.e., staffing) prior to January 1, 2013 in order to meet the first GHG compliance period.

PG&E stated during its 2011 GRC regarding AB 32 implementation and GHG that "PG&E will begin to prepare itself for participation in this new market beginning in 2011 when we expect the first auctions associated with cap and trade market to take place".[205] PG&E stated in its 2014 GRC that it "has also established the required infrastructure necessary for AB 32 compliance, in terms of making the necessary information system enhancements, and developing and implementing processes and platforms for front, mid, back-office, compliance, and market monitoring functions".[206] PG&E has hired sufficient "resources" of 89 new staff between 2007 and 2011, to meet its compliance mandates in the Test Year and its request for thirty-seven additional positions should be rejected.

Since PG&E's 2011 GRC Imputed amount for this MWC was $54.060 million and its 2011 GRC budgeted amount was $46.980 million, PG&E has embedded historical funding that can be reallocated and utilized in the Test Year. PG&E did not provide any documentation to demonstrate that its current funding level is insufficient to address its proposed Test Year projects. DRA's estimate of $42.901 million, utilizing PG&E's 2011 recorded adjusted expense levels as a basis (which is comparable to PG&E's recorded adjusted expenses for the last three years (2010-2012), is a reasonable forecast for PG&E's MWC CT- Acquire and Manage Electric Supply expenses in the Test Year.

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[205] DRA's report on PG&E's 2011 GRC for Energy Supply in Ex. DRA-9, p. 39.

[206] DRA-PG&E-087-TLG Q.1-c.

C. MWC CV– Acquire and Manage Gas Supply

PG&E forecasts $5.961 million for its MWC CV - Acquire and Manage Gas Supply expenses, an increase of $2.164 million or 56.99% over its 2011 recorded adjusted expenses of $3.797 million. PG&E's request for additional funding is for inflation and "new resources necessary for AB 32 implementation",[207] (additional staffing) over its 2011 staffing levels of 291 positions in the Energy Procurement organization to address compliance mandates, internal initiatives, process improvements, and cost escalation.[208] PG&E's request for additional funding for its MWC CV is excessive and not justified when compared to historical levels. DRA utilized PG&E's 2011 recorded adjusted expense level as a basis for its forecast of $3.797 million for PG&E's MWC CV - Acquire and Manage Gas Supply expenses. DRA's estimate is $2.164 million less than PG&E's forecast.

PG&E's expenses for MWC CV- Acquire and Manage Gas Supply, have been relatively stable for the last three years (2010-2012) with an average for the three year period of $3.795 million. PG&E's expenses fluctuated slightly between 2007 and 2010 with an average for the four year period (2007-2010) of $3.522 million. There was a small increase between 2009 and 2010 of $0.291 million, as mentioned above in the discussion for MWC CT- Acquire and Manage Electric Supply expenses, the increase may have also been associated with labor costs for additional staffing as PG&E prepared for implementation of compliance mandates (i.e., 33 percent Renewable Portfolio Standard (RPS), Assembly Bill (AB) 32 Greenhouse Gas (GHG) Cap-and-Trade implementation, Qualifying Facility/Combined Heat and Power (QF/CHP) Settlement and the Dodd-Frank Wall Street Reform Consumer Protection Act). PG&E hired 89 additional employees between 2007 and 2011 for its Energy Procurement organization to meet its

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[207] Ex. PG&E-6 p. 5-46. PG&E is requesting a total of thirty-seven additional positions in the Test Year for Energy Procurement. Refer to p. 5-5 Table 5-3 and p. 5-20 Table 5-7 on the thirty-seven requested positions.

[208] Ex. PG&E-6 p. 5-2.

compliance mandates and this staffing level should be sufficient for PG&E to perform its proposed Test Year activities.

PG&E's 2011 recorded adjusted expenses are shown as $3.797 million in its 2014 GRC for MWC CV-Acquire and Manage Gas Supply.[209] PG&E requested $4.535 million in its 2011 GRC for MWC CV. PG&E's 2011 GRC Imputed amount of $4.137 million is $0.340 million more than its 2011 recorded adjusted expenses of $3.797 million and its 2011GRC budgeted amount of $4.032 million is $0.235 million more than the 2011 recorded adjusted amount.[210] Based on PG&E's historical expense levels, its 2011 GRC Imputed and budgeted amounts, it is not reasonable that PG&E will require a substantial increase of 56.99% over 2011 recorded adjusted expense levels of $3.797 million in the Test Year. PG&E has embedded historical funding that it can reallocate and utilize for its proposed activities in MWC CV.

As mentioned above in the discussion for MWC CT – Acquire and Manage Electric Supply, PG&E's 2011 headcount was 291 and the 2012 headcount 292, only an increase in staffing levels of one position in its Energy Procurement organization. DRA's estimate of $3.797 million (which utilizes PG&E's 2011 recorded adjusted expense levels as a basis which is comparable to its recorded adjusted expenses for the last three years (2010-2012), and is a reasonable forecast for PG&E's MWC CV-Acquire and Manage Gas Supply expenses in the Test Year.

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[209] Ex. PG&E-6, Workpapers p. WP 5-1.

[210] PG&E's 2011 GRC forecast and Imputed amounts for MWC CV - Acquire and Manage Gas Supply expenses are from DRA-PG&E-087-TLG Q.1-a. The Imputed and budgeted amounts are shown in PG&E's August 3, 2011 Budget Report in Compliance with D.11-05-018.

D. MWC JV– Maintain IT Applications and Infrastructure

PG&E forecasts $3.0 million for its MWC JV – Maintain IT Applications expenses,[211] an increase of $2.094 million or 231.13% over its 2011 recorded adjusted expenses of $0.906 million. PG&E's request for additional funding is for "developing and implementing new software or systems" (i.e., projects for Forecasting, Central Data Repository,[212] Document Management,[213] Settlement Quality Meter Data (SQMD), Replacement, Reporting Expansion/Systems/Software Upgrade, CAISO MAP.[214] PG&E's request for additional funding for its MWC JV is excessive and not justified when compared to historical levels. DRA forecasts $1.278 million using a three year average (2009-2011) as the basis for its Test Year estimate of PG&E's MWC JV - Maintain IT Applications expenses. DRA's estimate is $1.722 million less than PG&E's forecast and $0.372 million more than PG&E's 2011 recorded adjusted expenses.

DRA opposes additional ratepayer funding for PG&E's projects for its Central Data Repository ($1.5 million over three years) and Document Management ($1.2 million over three years) to address PG&E's Energy Procurement Administration's recordkeeping deficiencies. PG&E's continued use of multiple systems of record and heavy reliance on time-consuming manual processes was an inefficient and

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[211] PG&E's proposed IT projects also have an associated capital forecast.

[212] Regarding PG&E's Central Data Repository project: PG&E's Energy Procurement currently has multiple systems of record for different types of data. This project is supposed to consolidate data on PG&E's generation assets, trades, transactions, contact parameters and prices in one principal system of record. (Ex. PG&E-6 p. 5-24). It appears that PG&E has deferred maintenance, upgrades and consolidation activities on its critical records storage and management based on its continued use of multiple systems of record.

[213] Regarding PG&E's Document Management project: PG&E's Energy Procurement administers over 450 executed energy contracts and retains other related documentation. PG&E manages these documents (contracts and proposal responses) through existing manual processes which is inefficient and labor/time-consuming. (Ex. PG&E-6, p. 5-25). It appears that PG&E has deferred technology/maintenance upgrades, conversions and consolidations for its critical records based on its continued use of and heavy reliance on manual processes.

[214] Ex. PG&E-6 pp. 5-19 and 5-46.

ineffective use of funding that was authorized to ensue that PG&E's records management and database systems containing critical information were properly maintained, upgraded, converted to an electronic format and consolidated.[215]

DRA considers PG&E's proposal for "developing and implementing new software or systems" to be a one time non-recurring costs and additional funding is not required each year during the rate case cycle for this activity. PG&E's ratepayers should not be required to provide additional funding for recurring costs that are already embedded in historical expenses. PG&E's expenses for MWC JV have fluctuated between 2007 and 2011 with an average for the five year period of $0.975 million. PG&E's expenses declined each year between 2009 and 2011 from $1.638 million in 2009 to $0.906 million in 2011. The three year average (2009-2011) is $1.278 million. DRA requested additional information on PG&E's proposed Document Management project as follows:

> Referring to page WP 5-56 regarding PG&E's proposed Document Management project, PG&E states "This is a non-mandated project, but it is essential to ensure compliance with Energy Procurement's numerous requirements. Various regulatory authorities require evidence of operational compliance through documentation. An inability to timely or completely access such documentation could result in penalties being levied".
>
> Provide the documentation that explains in detail and demonstrates if PG&E believes it has received authorized funding in past GRCs (2003, 2007, and 2011) to ensure that its Energy Procurement Administration department had an efficient and effective Document Management program.

[215] Ex. PG&E-6 pp. 5-23 and 5-25. Regarding PG&E's Document Management project, PG&E states "Through the document management system, it is estimated that Energy Procurement will be able to reduce number of hours for searching for documents by up to 85 percent, improve cycle times for record creation by 65 percent, and provide a record retrieval capability". (Ex. PG&E-6 p. 5-25). Based on PG&E's statement, there should be sufficient costs savings that can be reallocated and utilized in the Test Year and no additional funding should be required for this project over historical expense levels.

PG&E's response was:

> GRC settlement agreements do not provide specific values for MWCs. Please refer to GRC2014-Phl_DRA_093-Q01 for additional information.

Regarding how long PG&E had been aware of the need for this compliance obligation, DRA asked:

> Provide the documentation that explains in detail the number of years PG&E was aware, prior to this rate case, that "Various regulatory authorities require evidence of operational compliance through documentation" from PG&E's Energy Procurement Administration.

PG&E responded:

> PG&E has always been aware of the need to maintain documentation that supports evidence of regulatory compliance. Energy Procurement continues to evaluate solutions that will ensure proper and efficient document management practices, especially as energy markets and regulations continue to evolve.

Regarding the documentation with which to verify the need for such compliance, DRA inquired:

> Provide the documentation that explains in detail and demonstrates PG&E's Energy Procurement Administration's fines and penalties and associated costs PG&E incurred between 2007 and 2011 due to its "inability to timely or completely access such documentation".

PG&E responded:

> While no fines or penalties have been levied due to PG&E's inability to "timely or completely access documentation," PG&E is facing additional compliance requirements in increasingly complex energy markets since its last GRC filing. These factors have escalated the need for more centrally managed documentation. Please refer to Chapter 5 of the testimony (pages 5-7, and 5-29) for additional information on new compliance requirements and market initiatives.

And on why PG&E failed to use its authorized funding for this compliance in the past, DRA inquired:

> Provide the documentation that explains in detail and demonstrates why PG&E has not utilized authorized funding, prior to its 2014 GRC for a Document Management project to ensure that its Energy Procurement Administration's documents and records could be timely or completely accessed.[216]

PG&E responded:

> GRC Settlement agreements do not provide specific values for MWCs. Please refer to GRC2014-Phl_DRA_093-Q01 for additional information.

DRA also asked about PG&E's proposed Central Data Repository project:

> Referring to page WP 5-48 regarding PG&E's proposed Central Data Repository project, PG&E states 'In 2011, an inventory of spreadsheet usage as well as an assessment of regulatory reporting processes was performed to identify key controls, issues, and gaps to ensure accurate, complete and timely operational decision-making as well as reporting'.
>
> Provide the documentation that explains in detail the number of years PG&E was aware, prior to this rate case, that its Energy Procurement Administration's Legacy, home-grown systems relied upon for reports lacked 'complete, timely or accurate data requiring highly manual validation procedures'.
>
> Provide the documentation that explains in detail the number of years PG&E was aware, prior to this rate case, that its Energy Procurement Administration's 'Reliance on data from applications external to Energy Procurement results in inefficient and highly manual methods of report preparation and increased likelihood for error'.[217]

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[216] DRA-PG&E-093-TLG Q.3-a-d.

[217] DRA-PG&E-093-TLG Q.2-a and b.

PG&E's response:

> Energy Procurement does not have specific documentation regarding the number of years it was aware that its legacy, home grown systems lacked complete, timely or accurate data, and required highly manual validation procedures. However, in 2011, Energy Procurement completed an assessment of its regulatory reporting processes and systems, which concluded that the current legacy processes and systems capabilities were strained, mainly due to PG&E's growing energy portfolio, new market initiatives and regulation. This was further underscored with the 2012 release of the Five Year IT Roadmap, prepared by an outside consultant, which highlighted principal information system shortcomings and recommended enhancements.
>
> Energy Procurement does not have specific documentation regarding the number of years it was aware that its reliance on data from applications external to Energy Procurement results in inefficient and highly manual methods of report preparation and the increased likelihood of error. However, in 2011, Energy Procurement completed an assessment of its regulatory reporting processes and systems, which concluded that the current frequency and breadth of required data was manually and automatically extracted from numerous and disparate sources – internal and external to PG&E. This was further underscored with the 2012 release of the Five Year IT Roadmap, prepared by an outside consultant, which highlighted principal information system shortcomings and recommended enhancements.

PG&E's responses are insufficient and incomplete and do not justify additional ratepayer funding for these projects. The activities included in PG&E's proposed Central Data Repository and Document Management projects are activities associated with prudent recordkeeping and should be part of the normal, routine and on-going maintenance responsibilities that are already funded by ratepayers. It would be inappropriate to charge ratepayers twice to address these activities that have costs embedded in historical expenses because PG&E did not utilize authorized funding efficiently and effectively to ensure that its document storage and records management systems were properly corrected, updated and maintained. It is unreasonable for PG&E to request additional ratepayer funding to address what has previously been authorized.

PG&E's 2011 recorded adjusted expenses are shown as $0.906 million in its 2014 GRC for MWC JV.[218] PG&E requested $5.833 million in its 2011 GRC for its MWC JV and it Imputed $4.914 million which is $4.008 million more than its 2011 recorded adjusted expenses of $0.906 million.[219] Based on PG&E's historical expense levels and its 2011GRC Imputed amount, it seems unreasonable for PG&E to request a substantial increase of 231.13% over 2011 recorded adjusted expense levels of $0.906 million in the Test Year. PG&E has embedded historical funding that it can reallocate and utilize for its proposed activities in MWC JV. It would be inappropriate to charge ratepayers twice to address these activities that have costs embedded in historical expenses.

PG&E Imputed $260.915 million and budgeted $246.369 million for its 2011 GRC for all of its IT work,[220] but PG&E chose to delay deployment of several technology projects throughout the Company that had been proposed in the 2011 GRC. Based on PG&E's 2011 recorded adjusted expenses for MWC JV of $0.906 million and its 2011 GRC Imputed amount of $4.914 million, it appears that PG&E delayed several of its Energy Procurement IT projects until 2012. PG&E's 2012 recorded adjusted expenses for MWC JV were $4.330 million.[221]

PG&E had 2012 and has 2013 to address projects associated with "developing and implementing new software or systems" (i.e., Central Data Repository, Reporting Expansion/System/Software Upgrade, CAISO MAP, etc.)[222]

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[218] Ex. PG&E-6, Workpapers p. WP 5-1.

[219] PG&E's 2011 GRC forecast and Imputed amounts for MWC JV – Maintain IT Applications and Infrastructure are from DRA-PG&E-087-TLG Q.1-a.

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

[221] 2012 recorded data is from PG&E's response to DRA data request DRA-PG&E-108-CKT.

[222] PG&E's 2012 forecast for MWC JV includes $0.883 million for Central Data Repository (and $0.590 million in 2013), $0.468 million for Reporting Expansion/System/Software Upgrade, and $1.400 million for CAISO MAP (Ex. PG&E-6 p. 5-19).

before the Test Year, and no additional funding over DRA's Test Year estimate of $1.278 million is required.

VIII. DISCUSSION / ANALYSIS OF ENERGY SUPPLY RATEMAKING

This section discusses PG&E's ratemaking proposals for Energy Supply for the 2014 Test Year. PG&E proposes to establish two-way balancing accounts to manage capital[223] and expenses for its Hydro Operations and its Nuclear Operations.[224] PG&E proposes to credit its electric generation revenue requirement with funds it receives from the Department of Energy (DOE). PG&E proposes to credit back to customers savings associated with its Photovoltaic (PV) Program.[225]

Table 11-31 shows PG&E's estimated DOE litigation credits and PV Program cost savings.

Table 11-31
Energy Supply Estimated DOE Litigation Credits and PV Program Savings
(In Millions of Nominal Dollars)

Description	2011	2012	2013	2014	2015	2016	Total
DOE Litigation Award	$(5)	--	$286	$20	$20	$20	$341
PV Cost Savings	$9	$37	$45	--	--	--	$91
Total	$4	$37	$331	$20	$20	$20	$432

Source: Ex. PG&E-6, Table 6-4, p. 6-7

[223] DRA's recommendation on PG&E's two-way balancing account proposals related to capital is discussed by DRA's Energy Supply capital witness in Ex. DRA-12.

[224] DRA opposes PG&E's two-way balancing accounts. DRA's forecast associated with PG&E's proposed costs that PG&E proposed to include in its Nuclear Operations and Hydro Operations two-way balancing accounts are discussed in the sections in this report for Hydro Operations and Nuclear Operations.

[225] Ex. PG&E-6 p. 6-1.

A. PG&E's Proposal for a Two-Way Balancing Account for Hydro Operations

PG&E proposes to establish a two-way balancing account for its Hydro Operations relating to pending Federal Energy Regulatory Commission (FERC) licenses expected to be issued between 2012 and 2014[226] for Chili Bar (Application filed in 2005), Upper North Fork Feather River (Application filed in 2002), DeSabla-Centerville (Application filed in 2007), Poe and McCloud – Pit FERC Projects (Application filed in 2003), and Kilarc-Cow Creek License Surrender (License Surrender Application filed in 2009.[227]

As discussed in DRA's testimony in this report on PG&E's Hydro Operations forecast for MWC KJ, DRA opposes PG&E's request to establish a two-way balancing account for pending FERC licenses and recommends that the Commission reject PG&E's request. This is not the first time PG&E became aware that it had to incur costs to renew or amend FERC licenses and possibly implement new FERC-mandated conditions.[228] PG&E's historical expenses include embedded costs for these pending licenses.[229] PG&E has received sufficient authorized funding to address past licensing renewal and amendment activities and establishing a two-way balancing account is not required.

PG&E also has embedded costs that can be reallocated and utilized in the Test Year if incremental funding over DRA's Test Year estimate for MWC KJ is needed.

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[226] PG&E forecasts costs of $6.286 million in 2014 for its proposed two-way balancing account for Hydro License Implementation. (Ex. PG&E-6 p. 2-160).

[227] Ex. PG&E-6 pp. 2-77, 2-85 and 2-87.

[228] DRA-PG&E-101-TLG, Q.3-b.

[229] DRA-PG&E-101-TLG, Q.3.

B. PG&E's Proposal for a Two-Way Balancing Account for Nuclear Operations

PG&E proposes to establish a two-way balancing account for its Nuclear Operations relating to Nuclear Regulatory Commission (NRC) rulemaking processes already in progress for projects associated with Fukushima Daiichi Nuclear Station Rulemaking of $11.500 million, Cybersecurity of $1.608 million and Emergency Planning of $1.452 million.[230]

As discussed in DRA's testimony in this report on PG&E's Nuclear Operations forecast, DRA opposes PG&E's request to establish a two-way balancing account for proposed projects for Daiichi Nuclear Station Rulemaking, Cybersecurity, and Emergency Planning, and recommends that the Commission reject PG&E's request. PG&E has been able to record costs associated with these projects in MWC BS and did not provide any documentation that identified specific problems or any other difficulties it experienced with recording costs in MWC BS.

PG&E's has been incurring costs associated with these projects and those costs were included in its historical expenses. PG&E has embedded historical costs in MWC BS for on-going Cybersecurity[231] and Emergency Planning projects that can be reallocated and utilized for the same or similar proposed activities and establishing a two-way balancing account is not required for these projects. PG&E's Fukushima Daiichi project is a new regulatory requirement which started in 2012. PG&E incurred $2.2 million for the Fukushima project in 2012. DRA's Test Year estimate for PG&E's MWC BS includes incremental funding for PG&E's Fukushima project of $3.833 million.

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[230] Ex. PG&E-6, pp. 3-2, 3-84 and 3-92. See Ex. PG&E-6, workpapers p. WP 3-51 and WP 3-53 for PG&E's forecast for its proposed Emergency Planning project of $1.453 million and its Cybersecurity projects of $1.608 million recorded to MWC BS.

[231] PG&E established budgets of $1.9 million in 2011 from its 2011 GRC funding with a forecasted total spend of $4.2 million between 2011-2013 for its Cybersecurity project. (DRA-PG&E-205-TLG, Q.1-j-ii).

C. PG&E's Proposal to Credit its Electric Generation Revenue Requirement with Funds Received from DOE

PG&E proposes to credit (net of litigation costs[232]) the electric generation revenue requirement with funds it receives from DOE as a result of its September 5, 2012 settlement in the DOE litigation.[233] The proposed credits are the result of PG&E's litigation regarding the failure of the DOE to take and permanently store spent nuclear fuel from PG&E's nuclear facilities.[234] PG&E's proposal includes amortizing the litigation settlement proceeds over the three year rate case cycle which is forecasted to result in a reduction to generation rates of $340 million over the three year period.[235]

Based on the settlement agreement, PG&E was supposed to receive, in the fourth quarter of 2012, $266,104,245 for spent fuel storage costs and other reimbursable damages incurred through the end of 2010. PG&E will continue to receive payments annually for three years. PG&E states "any additional funds received in 2014 through 2016, currently estimated at about $20 million per year annually, will be credited to rates on an actual basis".[236]

DRA does not oppose PG&E's Test Year proposal as stated in the November 15, 2012 testimony to credit (net of litigation costs) the electric generation revenue requirement with funds it receives from DOE. However, due to uncertainty

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[232] PG&E currently records litigation costs in the Department of Energy Litigation Balancing Account (DOELBA). PG&E will subtract its accumulated litigation costs once the settlement funds are received and the remainder will be recorded in the DOELBA to be credited to customers consistent with Decision D.07-03-044. (Ex. PG&E-6, p. 6-5).

[233] Ex. PG&E-6 p. 6-5.

[234] Ex. PG&E-6 p. 6-1.

[235] Ex. PG&E-6 p. 6-1.

[236] Ex. PG&E-6 p. 6-6.

surrounding the allocation of DOE credit to PG&E customers, DRA does not express an opinion in this report regarding DOE credit allocation.

PG&E's April 8, 2013, Notice of *Ex Parte* Communication with Administrative Law Judge Thomas Pulsifer states, "…PG&E explained that it is modifying its proposal concerning the proceeds from Department of Energy litigation. PG&E's original proposal was to credit 100% of the proceeds to the Utility Generation Balancing Account (UGBA). PG&E's modified proposal is to credit the portion of the proceeds relating to the Humboldt Bay facility to the Nuclear Decommissioning Adjustment Mechanism (NDAM) thereby reducing the NDAM rate." In light of this, DRA reserves judgment on the appropriate policy for how DOE refunds should be returned to ratepayers, given that PG&E appears to have changed its proposal.

D. PG&E's Proposal to Credit Back Customers Savings Associated with its Photovoltaic Program

PG&E proposes to "credit to generation rates the difference between the revenues assumed in the PV decision and the revenues based on the actual PV capital costs for the first 150 MW of the PV Program over the 3-year GRC period."[237] PG&E proposes to credit back to customers the savings associated with the first three years of its Photovoltaic (PV) Program due to the actual capital costs of the first two 50 megawatt tranches[238] of the PV being lower than authorized in Decision 10-04-052. PG&E's generation revenues are forecast to be reduced by approximately $90 million over the GRC period as a result of this credit.[239] PG&E

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[237] Ex. PG&E-6, p. 6-1.

[238] PG&E states in regards to the final two 50 MW PV tranches "PG&E has not started development or PV panei procurement of the final two 50 MW PV tranches under the program and has not committed to proceeding with these tranches. It is therefore premature to forecast potential cost savings associated with the last 100 MW of the program. However, any actual cost savings realized associated with these final two tranches will be credited to customers once these projects are complete". (Ex. PG&E-6, p. 6-6 and 6-7).

[239] Ex. PG&E-6, p. 6-1 and 6-2.

states to “minimize any excess revenue collection from 2014 onward”, it proposes to prospectively adjust the revenue requirement for the PV program.[240]

DRA does not oppose PG&E’s proposal to credit back to customers the savings associated with the first three years of its PV Program due to the actual capital costs of the first two 50 megawatt tranches of the PV being lower than authorized in Decision 10-04-052. DRA does not express an opinion in this report regarding the credit allocation to customers.

[240] Ex. PG&E-6 p. 6-7.