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Commissioner : C. Peterman

ALJ : <u>J. Wong</u> Witness : K.C. Lee



OFFICE OF RATEPAYER ADVOCATES CALIFORNIA PUBLIC UTILITIES COMMISSION

Report on the Results of Operations for Pacific Gas and Electric Company Test Year 2015 Gas Transmission and Storage Rate Case

Chapter 6
Asset Family - Facilities

San Francisco, California August 11, 2014

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ASSET FAMILY -- FACILITIES

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3	This exhibit presents the analyses and recommendations of the Office of
4	Ratepayer Advocates (ORA) regarding Pacific Gas and Electric Company's (PG&E)
5	Facilities Asset Family proposals associated with its Test Year (TY) 2015 Gas
6	Transmission and Storage (GT&S) rate case. Specifically, this exhibit addresses
7	PG&E's forecasts of Facilities Asset Family operation and maintenance (O&M)
8	expenses for 2015 and capital expenditures for 2015 through 2017. 1
9	Facilities Asset Family expenses and capital expenditures are for work
10	activities related to the upgrade and maintenance of PG&E's Compression and
11	Processing (C&P) and Measurement and Control (M&C) Stations.
12	This chapter only addresses the program areas in the Facilities Asset Family
13	in which ORA recommends adjustment to the PG&E's proposed expenditures.
14	These programs areas include Engineering Critical Assessment (ECR) Phase 1,
15	ECR Phase 2, Hydrostatic Testing of station components, Critical Documents,
16	Hinkley Compressor Unit Retrofit Project, Biomethane Interconnects, Gas Quality
17	Practices Assessment, and Routine Spending.

II. SUMMARY OF RECOMMENDATIONS

19 ORA presents its recommendations along with PG&E's proposals on 20 Facilities Asset Family in Table 6-1 for expenses and Table 6-2 for capital 21 expenditures. A summary of ORA's recommendation on TY2015 Facilities Asset Family 22 O&M expenses are: 23 24 □ ORA recommends no O&M expenses for ECR Phase 1, ECR Phase 2, 25 and Hydrostatic Testing because PG&E requests ratepayer funding of its 26 proposed projects before formal guidance from the Pipeline and

¹ PG&E Prepared Testimony, Volume 1, Chapter 6 (White).

1		Hazardous Materials Safety Administration (PHMSA) rulemaking is
2		released. PG&E should be directed to file an advice letter or application to
3		establish a memorandum account to track costs of the three programs
4		when PHMSA implements the new Integrity Verification Process rules;
5		ORA recommends zero funding for Critical Documents instead of PG&E's
6		proposed \$11.573 million because the purpose of this project is to remedy
7		PG&E's past imprudent document management;
8		ORA recommends \$0.56 million for Gas Quality Practice Assessment
9		which is \$1.55 million lower than PG&E's forecast. ORA's forecast does
10		not include costs that will not be incurred by PG&E in 2015. PG&E can file
11		an advice letter or application to establish a memorandum account to track
12		the costs of the implementation of new CPUC rules for Gas Quality
13		Practice Assessment after the new rules are issued;
14		Adopt ORA's recommended \$12.483 million for Routine Expense
15		Spending instead of PG&E's proposal of \$16.830 million.
16	Fo	or the TY2015 Facilities Asset Family capital expenditures, ORA
17	recomme	ends that the California Public Utilities Commission (Commission):
18		Adopt ORA's recommendation to deny PG&E's request of capital
19		expenditures to retrofit a Hinkley Compressor Unit in 2016 and 2017;
20		Adopt ORA's recommendation of zero funding for Biomethane
21		Interconnects for use in anticipated new CPUC rules. Direct PG&E to file
22		an advice letter or application to establish a memorandum account to track
23		the costs of the implementation of new CPUC rules for Biomethane
24		Interconnects after such rules are issued.
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26		

Table 6-1 compares ORA's and PG&E's TY2015 forecasts of expenses in the program areas of the Facilities Asset Family in which ORA recommends adjustments:

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Table 6-1
Facilities Asset Family Expenses for TY2015
(In Thousands of Dollars)

Description (a)	ORA Recommended (b)	PG&E Proposed ² (c)	Amount PG&E>DRA (d=c-b)
ECR Phase 1	\$0	\$15,633	\$15,633
ECR Phase 2	\$0	\$8,686	\$8,686
Hydrostatic Testing	\$0	\$5,926	\$5,926
Critical Documents	\$0	\$11,573	\$11,573
Gas Quality Practice Assessment	\$558	\$2,110	\$1,552
Routine Spending	\$12,483	\$16,830	\$4,347
Total	\$13,041	\$60,758	\$47,717

Table 6-2 compares ORA's and PG&E's 2013-2015 forecasts of capital expenditures in the program areas of the Facilities Asset Family in which ORA recommends adjustments:

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Table 6-2
Facilities Asset Family Capital Expenditures
(In Thousands of Dollars)

Description	ORA	Recomme	nded	PG	&E Propos	ed ³
	2013	2014	2015	2013	2014	2015
Hinkley Compressor Unit Retrofit Project	-	-	1	-	-	-
Biomethane Interconnects	\$0	1	\$0	\$1,110	-	\$4,815
Total	\$0	-	\$0	\$1,110	-	\$4,815

² PG&E Prepared Testimony, Volume 1 (White), page 6-4, Table 6-1.

³ PG&E Prepared Testimony, Volume 1 (White), page 6-6, Table 6-3.

III. GENERAL OVERVIEW

PG&E forecasts total expenses of \$65.7 million for 2015, and total capital expenditures of \$144.3 million in 2015, \$159.2 million in 2016, and \$159.2 million in $2017^{\frac{4}{9}}$ for programs proposed in both the C&P and M&C areas of the Facilities Asset Family.

ORA forecasts total expenses of \$18.0 million for 2015, and total capital expenditures of \$139.5 million for 2015.

The PG&E C&P assets include the compressor units and the associated equipment installed at the nine gas transmission compressor stations as well as the compressor units and gas processing equipment installed at PG&E's three underground storage facilities. This asset family also includes the gas processing and conditioning equipment installed at transmission dehydrator stations and all the gas odorizers in PG&E's system.

The M&C assets include only transmission assets and transmission stations. These assets also include large customer meter sets and gas quality monitoring equipment. The distribution related regulating and metering stations and associated equipment are excluded from this GT&S proceeding.

IV. DISCUSSION / ANALYSIS OF ENGINEERING CRITICAL ASSESSMENT (ECR) PHASE 1, ECR PHASE 2, AND HYDROSTATIC TESTING

This section discusses ORA's review of PG&E's forecasted expenditures in proposed programs that include the validation of Maximum Allowable Operating Pressure (MAOP) of station piping within gas transmission facilities to meet possible requirements to be proposed by the Pipeline and Hazardous Materials Safety Administration (PHMSA) in its still developing Integrity Verification Process (IVP).

The following table summarizes PG&E's request and ORA's recommendation for ECR Phase 2, and Hydrostatic Testing:

⁴ PG&E Prepared Testimony, Volume 1 (White), page 6-3, lines 10 to 12.

Table 6-3
Facilities Asset Family Expenses for TY2015
ECR Phase 1, ECR Phase 2, and Hydrostatic Testing
(In Thousands of Dollars)

Description (a)	ORA Recommended (b)	PG&E 5 Proposed 2015 (c)
ECR Phase 1	\$0	\$15,633
ECR Phase 2	\$0	\$8,686
Hydrostatic Testing	\$0	\$5,926
Total	\$0	\$30,245

The proposed IVP by PHMSA is intended to help address several mandates set forth in the federal regulations Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 (Section 23, Maximum Allowable Operating Pressure), and to address the recommendations issued by the National Transportation Safety Board (NTSB) after the San Bruno pipeline rupture.

PG&E requests ratepayer funding of its proposed ECR projects before formal guidance from this rulemaking is released. The ECR projects include ECR Phase 1, which entails reviewing and identifying the issues that may compromise station asset integrity, ECR Phase 2, which is to mitigate discrepancies identified by ECR Phase 1, and Hydrostatic Testing, which will perform pressure testing of station components where required as a result of ECA conclusions.

The implementation of IVP has been a very deliberate process. PHMSA held a public workshop on August 7, 2013, issued a revised IVP flowchart on September 12, 2013, and extended the comment period from September 9, 2013 to October 7, 2013. As PG&E pointed out in the testimony, "Its latest draft, published on

⁵ PG&E Prepared Testimony, Volume 1 (White), Table 6-10 on page 6-29, Table 6-11 on page 6-30, and Table 6-12 on page 6-31.

⁶ Public Law 112-90, January 3, 2012.

September 10, 2013, is still subject to revision." At this time, there has been no word on PHMSA's next step on this rulemaking.

The pipeline industry groups do expect that the proposed regulations could come out later in 2014. These trade groups expressed their concerns to the lawmakers that the proposed regulations may require a costly duplication of efforts to ensure pipeline safety. 8

With the great uncertainty on the issue date and final contents of the proposed PHMSA regulations, and the implementation date of these regulations, ORA recommends the deletions of all of the PG&E's proposed expenses in the three programs, the ECR Phase 1, ECR Phase 2, and Hydrostatic Testing from this GT&S rate case. If and when the regulations are finally implemented, PG&E can file an advice letter or application to establish a memorandum account to track the costs of the three programs if they are still required to address the new regulations.

V. DISCUSSION / ANALYSIS OF CRITICAL DOCUMENTS

PG&E in its testimony and workpapers describe this project as involving a concerted effort to research existing documents, to review, validate, and update existing documents and to create new documents missing from existing records.

⁷ PG&E's Prepared Testimony, Volume 1 (White), page 6-28, lines 20 to 21.

⁸ "Pipelines Plead for Regulatory Clarity on Safety," Platts Gas Daily, May 21, 2014.

The following table summarizes PG&E's request and ORA's recommendation for the Critical Documents project:

Table 6-4 Facilities Asset Family Expenses for TY2015 Critical Documents (In Thousands of Dollars)

Description (a)	ORA Recommended (b)	PG&E Proposed (c)
C&P	\$0	\$6,330
M&C	\$0	\$5,243
Total	\$0	\$11,573

ORA opposes PG&E's funding proposal for the Critical Documents project. The purpose of this project is to remedy PG&E's past imprudent document management. Keeping good records when a new facility is built or improvement is made is good engineering practice. If PG&E had followed the good engineering practice of retaining and updating facilities records, it would not have been under pressure to develop and to implement the Utility Standard TD-4551S "Station Critical Documentation" in 2012 after the San Bruno accident. Commission General Order 28¹⁰ which was adopted in 1912, makes explicit the obligation for public utilities to retain records pertaining to public utility property, including improvements.

The funding request in this GT&S is similar to PG&E's funding request for its Pipeline Records Integration Program in Rulemaking R.11-02-019. D.12-12-030 denied PG&E's funding request. The decision states that

"we find that PG&E has not justified including the cost of its gas system records search and organization projects in revenue requirement.

PG&E became responsible for its natural gas transmission system the day it installed facilities and equipment for the system. That responsibility includes creating and maintaining records of the location

⁹ PG&E Prepared Testimony, Volume 1 (White), page 6-32, Table 6-13.

¹⁰ General Order No. 28, "In the Matter of the Preservation of Records of Public Utilities and Common Carriers." CPUC, September 10, 1912.

and engineering details of system components. Over the years, PG&E
has sought and obtained ratepayer funding for its record-keeping
functions. PG&E has imprudently managed its gas system records
such that extensive remedial work is now needed to correct past
deficiencies. Having created the need for this remedial work by its
imprudent historic document management practices, PG&E has not
shown by a preponderance of the evidence that the costs of the
current document search and organization projects can be included in
revenue requirement and that the resulting rates will be just and
reasonable "11

VI. DISCUSSION / ANALYSIS OF HINKLEY COMPRESSOR UNIT RETROFIT PROJECT

PG&E proposes to retrofit an additional compressor at the Hinkley Compressor Station with a High-Pressure Fuel Injection Nitric Oxide retrofit to reduced overall Nitric Oxide emission. Currently, the retrofitted units at the stations are permitted to operate 24 hours a day, 365 days a year. The non-retrofitted units cannot operate more than 1,500 run hours per year. PG&E contends that an additional retrofitted unit would increase overall reliability of the station. PG&E has not presented any evidence to demonstrate that the Hinkley Station is unreliable.

PG&E proposes capital expenditures of \$6.034 million in 2016 and \$6.193 million 2017. No funding is proposed for 2015. The following table summarizes PG&E's request and ORA's recommendation for the Hinkley Compressor Unit Retrofit Project:

¹¹ D.12-12-030, "Decision Mandating Pipeline Safety Implementation Plan, Disallowing Costs, Allocating Risk of Inefficient Construction Management to Shareholders, and Requiring Ongoing Improvement in Safety Engineering," December, 28, 2012. Page 87.

Table 6-5 Facilities Asset Family Capital Expenditures Hinkley Compressor Unit Retrofit Project (In Thousands of Dollars)

Description	ORA	Recommer	ıded	PG	&E Propose	d 12
	2013	2014	2015	2013	2014	2015
Hinkley Compressor Unit Retrofit Project	-	-	\$0	-	-	\$0
Total	-	-	\$0	-	-	\$0

ORA opposes the capital expenditures request to retrofit an additional compressor unit during this 2015 to 2017 GT&S period. PG&E provides no clear evidence that an additional retrofitted unit is required for reliability. In a data response to ORA, PG&E provided the actual yearly service hours of each compressor from 2009 to 2013 as shown in Table 6-6¹³. For the compressors (K-1, -3, -4, -7, -10, -11, and -12) that are permitted to operate 24 hours a day for 365 days a years (8,760 hours), none of the units came close to the 8,760 hours. For the compressors (K-2, -5, -6, -8, -9) that are limited to 1,500 hours per year, none came close to the limit each year. The evidence provided by PG&E clearly shows that the current mixed of compressors are providing reliable service, therefore no funding should be provide to retrofit an additional unit.

¹² PG&E Prepared Testimony, Volume 1 (White), page 6-45, Table 6-25.

¹³ PG&E Response to ORA-DR-047. Q3.

VII. DISCUSSION / ANALYSIS OF BIOMETHANE INTERCONNECTS

In this program, PG&E proposes to construct up to three biomethane interconnections per year over the 3-year GT&S rate case period to accommodate biomethane from sources such as landfills and water treatment plants.

The following table summarizes PG&E's request and ORA's recommendation for the Biomethane Interconnects:

¹⁴ PG&E Response to ORA-DR-047 Q3.

Table 6-7 Facilities Asset Family Capital Expenditures for Biomethane Interconnects (In Thousands of Dollars)

Description	ORA	Recommer	nded	PG	&E Propose	1 <u>5</u>
	2013	2014	2015	2013	2014	2015
Biomethane Interconnects	\$0	-	\$0	\$1,110	1	\$4,815
Total	\$0	-	\$0	\$1,110	-	\$4,815

ORA recommends no capital expenditures for Biomethane Connections during this GT&S period. PG&E's current tariffs require the supplier of gas to the system to pay for interconnection costs, including biomethane gas suppliers. Therefore, PG&E's request for ratepayer funding for Biomethane Interconnections should be rejected.

Assembly Bill (AB) 1900 required the Commission to approve standards and requirements for health, safety, and pipeline integrity for biomethane injected into the pipelines and access rules for nondiscriminatory open access. The Commission initialed the implementation of AB 1900 with Rulemaking R.13-02-008. Decision D.14-01-034 adopted in the Phase 1 of this Rulemaking adopted monitoring, testing, reporting, and recordkeeping protocols. Phase 2 of this Rulemaking is to take up the issue of who should bear the costs of meeting the standards and requirements that the Commission adopted in D.14-01-034.

PG&E filed Advice Letter 3455-G on February 18, 2014 for revisions of PG&E Gas Rule 1 and 21 to adopt biomethane standards and requirements in compliance with D.14-01-034. In this proposed revision to Gas Rule 21, PG&E retains the tariff language stating "The Applicant shall pay PG&E's costs for all engineering and construction of facilities on PG&E's side of the interconnection point necessary to receive Applicant's gas." This filing clearly shows that PG&E expects the biomethane gas supplier to pay for biomethane connections capital expenditures.

¹⁵ Forecasted expenditures from PG&E Prepared Testimony, Volume 1 (White), page 6-55, Table 6-35.

PG&E's Opening Comments filed in Phase 2 of R.13-02-008 state

"In Accordance with PG&E's Commission-approved tariffs, PG&E provides open access to all new gas supplies on a non-discriminatory basis. In order to interconnect with PG&E's pipeline system for the purpose of injecting gas, suppliers are required to provide for the construction of facilities necessary for PG&E's Gas Plant to receive the supplier's gas, and fund all costs related to the construction of the Receipt Point. Such requirements apply to all existing sources of supply onto PG&E's gas system (interstate pipelines, third party storage and California production), and also apply to biomethane."

These Opening Comments also state,

"Additionally, PG&E notes that it included a forecast of approximately \$15M in capital costs for biomethane interconnection projects in its 2015 Gas Transmission and Storage (GT&S) rate case......Given that a determination on the allocation of responsibility for costs has not been determined yet in this proceeding or in R.11-05-005, PG&E intends to file a correction to its 2015 GT&S testimony to remove these costs from its 2015-2017 forecast at the appropriate time."

PG&E has shown in its advice letter filing and opening comments in R.13-02-008 that these capital expenditures should not be included in this GT&S rate case. ORA recommends no capital expenditures for Biomethane Interconnects. If R.13-02-008 finds the utilities responsible for the costs, PG&E can request a memorandum account to track the biomethane interconnects capital expenditures.

VIII. DISCUSSION / ANALYSIS OF GAS QUALITY PRACTICE ASSESSMENT

The purpose of the Gas Quality Practice Assessment program is to ensure the quality of gas entering the PG&E system. PG&E proposes to include provisions

to meet the requirements of the proposed new CPUC rules to require operators to accept and transport landfill gas (see discussion on R.13-02-008 in the above Biomethane Interconnects section).

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The following table summarizes PG&E's request and ORA's recommendation for Gas Quality Practice Assessment:

Table 6-8
Facilities Asset Family Expenses for TY2015
Gas Quality Practice Assessment
(In Thousands of Dollars)

Description (a)	ORA Recommended (b)	PG&E 16 Proposed (c)	
Gas Quality Practice Assessment	\$558	\$2,110	
Total	\$558	\$2,110	

ORA recommends an expense level of \$558,000 for Gas Quality Practice Assessment which is \$1.552 million (\$1.45 million in unescalated 2013 dollar) below PG&E's request. PG&E includes \$1.552 million for new expenditures related to the anticipated CPUC new rules to be implemented by R.13-02-008 on biomethane injection into the utility's pipeline system which ORA does not include in it forecast. As discussed in the last section on Biomethane Connections, cost assignment issues are being taking up in the Phase 2 of the Rulemaking. If R.13-02-008 should rule that the utilities will be responsible for new costs, PG&E can file an advice letter or application to establish a memorandum account to track the Gas Quality Practice Assessment expenses.

IX. DISCUSSION / ANALYSIS OF ROUTINE EXPENSE AND CAPITAL SPENDING

This section discusses the routine expense and capital projects that are performed in the course of normal operation of M&C and C&P facilities to maintain current levels of service reliability. PG&E indicates in its Workpapers that the

¹⁶ PG&E Prepared Testimony, Volume 1 (White), page 6-56, Table 6-36.

expense and capital spending is for projects that have been performed based on a historical 2008 to 2012 five-year data. The cost assumptions are also based on historical five-year (2008 to 2012) data and include an annual escalation factor.

ORA does not recommend any adjustment to PG&E's forecasted capital expenditures in this area.

The following tables summarize PG&E's request and ORA's recommendation for the Routine Expense Spending:

Table 6-9
Facilities Asset Family Expenses for TY2015
Routine Expense Spending
(In Thousands of Dollars)

Description (a)	ORA Recommended (b)	PG&E 19 Proposed (c)
C&P Asset Family	\$6,104	\$8,440
M&C Asset Family	\$6,379	\$8,390
Total	\$12,483	\$16,830

ORA recommends \$6.104 million, which is the average of 5 years of actual recorded data from 2008 to 2013 (Table 6-11) for the 2015 Routine Expense Spending in the C&P asset family, and \$6.390 million, which is the actual for 2013, the most recent recorded year (Table 6-11) for the M&C asset family.

PG&E had stated in its Workpapers that the cost assumption is based on historical five-year (2008 to 2012) data plus an annual escalation factor, but provided no additional evidence on how it derived the expense and capital expenditures it proposes for 2015. ORA requested PG&E to clarify the methodology in the derivation of these 2015 forecasted expenditures in the discovery process. In PG&E's response to ORA's data request, PG&E states "PG&E did not use a calculation methodology to come up with the 2015 forecast, but instead used subject

¹⁷ PG&E Workpapers, Chapter 6 (White), pages WP 6-7, 6-9, 6-52, and 6-55.

¹⁸ PG&E Workpapers, Chapter 6 (White), pages WP 6-8, 6-10, 6-53, and 6-56.

¹⁹ PG&E Prepared Testimony, Volume 1 (White), page 6-57, Table 6-38A.

- matter expert judgment...." Again, PG&E could not provide any details in the 1
- 2 derivation of their forecast. PG&E did provide 5 years of actual recorded data from
- 3 2009 to 2013 as shown in Table 6-11. ORA's recommendation of using the most
- 4 recent 5-year average of actual recorded expense spending data for 2015 C&P
- 5 spending is appropriate because these data show a pattern of year to year
- 6 fluctuation. For M&C expense spending, the 5 years of data show a general upward
- 7 trend with the highest in 2013, the most recent year with actual recorded data.
- 8 Therefore, the 2013 recorded expense amount is used for the 2015 M&C spending.
- 9 ORA's total expense recommendation for 2015 is \$12,483 million, a reduction of
- 10 \$4,347 million from PG&E's forecast.

Table 6-11 12 2008-2013 Recorded Data for Routine Expense Spending 13 (in Thousands of Dollars)

Description	2009	2010	2011	2012	2013
C&P Asset Family	\$6,046	\$4,852	\$8,161	\$7,160	\$4,301
M&C Asset Family	\$2,383	\$1,205	\$2,395	\$3,027	\$6,379

Source: 2009-2012 data from PG&E Response to ORA-DR-027, Q10. 2013 data from PG&E Response to ORA-DR-061,Q1.

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²⁰ PG&E Response to ORA-DR-034, Q4.