PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

November 6, 2019

Mr. Robert Kenney
Pacific Gas and Electric Company
Vice President, Regulatory Affairs
77 Beale Street, MC B23A
San Francisco, CA 94105

SUBJECT: Review of the Pacific Gas and Electric Company 2016 Budget Report and 2017 – 2018 Spending Accountability Reports

Dear Mr. Kenney,

The California Public Utilities Commission (CPUC or Commission) received Pacific Gas and Electric Co.'s (PG&E) 2017 and 2018 Spending Accountability Reports filed March 30, 2018 and March 29, 2019, respectively. The Commission received the PG&E 2016 Budget Report filed on March 30, 2017. The Energy Division completed a review of these reports and provides PG&E with recommendations for its upcoming 2019 report. Attachment A provides background and details of staff's analysis on spending accountability. Attachment B provides spending variance tables by Major Work Category.

CONCLUSIONS

The Energy Division reviewed the utility's reports and finds that PG&E followed the Energy Division's guidance provided on February 12, 2019. For the 2018 report, PG&E provided a comparison of its CPUC-jurisdictional General Rate Case (GRC) actual and imputed safety, reliability and maintenance spending. PG&E correctly applied the selection criteria for its GRC programs according to the Energy Division Guidance for the Standardized Reporting and Outline of the Risk Spending Accountability Report dated August 31, 2018 filed in the Safety Model Assessment Proceeding (Application 15-05-002 et al.). In April 2019, after PG&E filed its 2018 report, the Commission issued Decision (D.) 19-04-020 that modified the selection criteria and revised the reporting guidance for utilities.

From 2016 – 2018, the data in the report show a pattern of overspending for both capital and expensed work in the Electric Distribution line of business. It also shows a pattern of overspending for expensed work for the Gas Distribution line of business**. In sum, PG&E spent over the imputed amounts for safety, reliability, and maintenance work over 2016 – 2018.**

The Energy Division concludes that PG&E reported spending for its programs related to safety, reliability, and maintenance in conformity with the Energy Division's guidance as well as applicable portions of D.19-04-020.

RECOMMENDATIONS

The Commission directed PG&E to apply the selection criteria for the report to all GRC gas, electric and other programs relating to safety, reliability or maintenance starting in 2021. Energy Division recommends that PG&E change its upcoming 2019 Spending Accountability Report to conform to this format, which will replace the Spending Accountability Report[1].

PG&E should note if any of the tables in the report include work that is not related to safety, reliability or maintenance because overlap between programs can complicate the report. PG&E should also take steps to ease verification of the report and ensure programs listed in the report are thoroughly described[2] (see Analysis of Selected Programs in Attachment A).

PG&E should serve and file the report on the GRC application that authorized that year's funding, any open PG&E GRC application and any open PG&E RAMP investigation. PG&E should also serve the report to the Office of Safety Advocate and Public Advocate's Office[3] and email an additional copy of the report to ED Tariff Unit[4]. Likewise, the report should direct parties to file any comments on the report in the most recent open GRC/RAMP proceeding to which their comments pertain and email an additional copy of their comments to Energy Division. The report should request parties to clearly identify the submissions upon which they are commenting. All comments must follow the filing and review schedule found in D.19-04-020 (p. 47) including the prioritization schedule[5].

Please contact Michael Zelazo of the Electric Costs Section at michael.zelazo@cpuc.ca.gov or (916) 327-6797 or Kevin Flaherty of the Natural Gas Section at kevin.flaherty@cpuc.ca.gov or (415) 703-3842 if you have any questions.

Sincerely,

Edward Randolph
Deputy Executive Director for Energy and Climate Policy/
Director, Energy Division

Cc: Erik Jacobson, Director, Regulatory Relations
Shilpa Ramaiya, 2020 GRC Case Manager
Dorothy Duda, Branch Manager, Market Structure, Costs and Natural Gas Branch
Franz Cheng, Supervisor, Electric Costs Section
Elizabeth La Cour, Supervisor, Natural Gas Section
Kevin Flaherty, Analyst, Natural Gas Section
Michael Zelazo, Senior Engineer, Electric Costs Section

[1] D.19-04-020 Ordering Paragraph (O.P.) 10(B) describes the selection criteria and O.P. 12 describes report format.
[2] Ibid. p. 34 and attachment 2 for discussion of verification, descriptions and overlap respectively.
[3] Ibid. p. 45.
[4] Email ED Tariff Unit here: edtariffunit@cpuc.ca.gov
[5] Ibid. pp. 47-48.

ATTACHMENT A:
Staff Risk Spending Accountability Review[6]

BACKGROUND

In 2011, the Commission ordered PG&E to file annual reports comparing the company's budgeted amounts to its recorded amounts with explanations of significant deviations. The Commission's Energy Division was directed to report to the Commission if it observed any spending patterns that were of concern with respect to the provision of safe and reliable service.

On March 30, 2017, PG&E filed its 2016 Budget Report with a comparison of its 2016 recorded and budgeted amounts and provided it to the service list of their 2014 Test Year General Rate Case (GRC; A.12-11-009).

In May 2017, the Commission issued D.17-05-013 which adopted a settlement agreement in the 2017 Test Year GRC (A.15-09-001) that, in addition to resolving many financial issues in the GRC, required PG&E to annually report its authorized and actual spending on electric distribution, electric generation and gas distribution work. For safety and reliability work, the reports would also compare units of work authorized to units of work performed.

In November 2017, PG&E filed a Risk Assessment and Mitigation Phase (RAMP; I.17-11-003) of the new risk-based decision-making framework adopted in D.14-12-025. In the RAMP report, PG&E identified risks to safety and reliability as well as mitigation activities to reduce those risks. In the 2017 Test Year GRC, PG&E presented their forecast spending for enterprise and operational risks for 2017 – 2019.

Public Utilities Code Section 591 was enacted on January 1, 2018, revised on June 27, 2018. Part (a) of the code orders the Commission to require electric and gas utilities to:

> "annually notify the commission, as part of an ongoing proceeding or in a report otherwise required to be submitted to the commission, of each time since that notification was last provided that capital or expense revenue authorized by the commission for maintenance, safety, or reliability was redirected by the electrical or gas corporation to other purposes."

Part (b) of the code orders the report to be "made available in a timely fashion to the Office of the Safety Advocate, Public Advocate's Office of the Public Utilities Commission, and parties on the service list of any relevant proceeding."

On March 30, 2018, PG&E filed its 2017 Spending Accountability Report in the 2017 Test Year GRC with the comparison of actual and imputed adopted safety and reliability spending and work units. The report also included the utility's budgeted amounts for the various categories for comparison purposes.

---

[6] This document fulfils the D.19-05-020 requirement for a Staff "Review" (p. 5; see p. 46 for details).

On December 13, 2018, PG&E filed its 2020 Test Year GRC application (A.18-12-009). The filing is PG&E's first GRC application to include the results of the RAMP investigation.

On February 12, 2019, the Energy Division sent a letter to PG&E (Energy Division guidance) requesting additional information to satisfy Public Utilities Code Section 591 that requires reporting of maintenance, safety, or reliability spending to be included in their 2018 report.

On March 29, 2019, PG&E filed its 2018 report in the 2017 Test Year GRC and the 2020 Test Year GRC to include the additional information requested by the Energy Division.

In April 2019, the Commission issued D.19-04-020 adopting specific requirements for PG&E for their annual reports beginning in 2020. These requirements include a revised set of criteria to select programs that require an explanation of the difference between authorized and actual spending for select programs.

<u>REPORTING REQUIREMENTS</u>

PG&E was directed to include the following information for the 2018 interim Risk Spending Accountability Report.

> The information and methods currently reported in the annual Spending Accountability Reports ordered by D.17-05-013 with the addition of the following:
>
> 1) Inclusion of other programs[7] within Customer Care, Shared Services, Information Technology, Human Resources, and Administrative and General that impact safety, reliability or are associated with a maintenance[8] activity, or were otherwise authorized or in effect during the record period.
> 2) Application of the selection criteria[9] for Electric Distribution and Gas Distribution to these other programs.
> 3) For those programs meeting the selection criteria in Item 2,
>   a. A description of each program,
>   b. The location in the 2017 and 2020 GRC testimony where the program is described,
>   c. A list of projects that were canceled or deferred within each program,
>   d. A list of projects which were not presented in the 2017 GRC but were taken up,
> 4) If applicable, the balancing or memorandum account where the spending for each program is recorded, the record year balances, and the disposition of any request for cost recovery.
> 5) The total company authorized spending for each record year categorized into expensed and capital programs.

---

[7] Programs are defined as Major Work Categories or Maintenance Activity Types where available.

[8] Federal Energy Regulatory Commission Accounts 510-515, 528-532, 541-545, 551-554, 568-574, 576, 590-598, and 935 or associated with the preservation of utility property or equipment in good condition to prevent failure.

[9] See D.19-04-020 Ordering Paragraph (O.P.) 10(B) regarding selection criteria.

STAFF ANALYSIS

Energy Division completed its Review of the Pacific Gas and Electric Company 2016 Budget Report and 2017 – 2018 Spending Accountability Reports. The 2018 report provides a comparison of actual spending to imputed regulatory values for the utility's lines of business within the GRC that relate to safety, reliability or maintenance work. The lines of business include core functions (Electric Distribution, Gas Distribution and Energy Supply) and support organizations (Customer Care, Shared Services and Information Technology, and Corporate Services).

The report does not compare amounts for the Federal Energy Regulatory Commission (FERC)-jurisdictional Electric Transmission line of business, the Gas Transmission and Storage Rate Case-jurisdictional Gas Transmission and Storage line of business; separately-funded activities, e.g., energy efficiency and low-income programs; and company-wide items, e.g., liability insurance premiums and employee benefits. PG&E currently reports on the Gas Transmission and Storage line of business in the annual Gas Transmission and Storage safety reports.[10] PG&E states they do not have any separately-funded or company-wide items that relate to safety, reliability or maintenance. Therefore, we conclude PG&E has reported all CPUC-jurisdictional programs relating to safety, reliability or maintenance with recorded and authorized quantities at the time of filing.

PG&E derived imputed regulatory values from the GRC for authorized amounts that were not specifically identified. In addition, PG&E converted the adopted quantities from prior GRC decisions to incorporate the new cost allocation that uses a "labor only" rate which, excludes support or overhead costs. More information on PG&E's methods can be found in Appendix A of the 2018 report and in PG&E's 2017 GRC testimony.

It is informative to show a trend in spending over time to identify any patterns of over or under spending. As noted in the Background section above, PG&E began showing imputed regulatory values in 2017 which may not be comparable to the budgeted amounts shown in prior reports. The tables below summarize the expense and capital spending for the core functions within the GRC over the 2016 – 2018 period and show the variance between the recorded and budgeted (or imputed) spending over that time.

Table 1: PG&E Expense Spending 2016 – 2018 ($000)[11]

Core Function	2016 Recorded	2017 Recorded	2018 Recorded	**2016-2018**	2016 Budget	2017 Imputed	2018 Imputed	**2016-2018**	**Total Variance**	
Gas Distribution	390	362	388	1,140	336	359	337	1,032	109	11%
Electric Distribution	644	772	1,343	2,759	549	595	630	1,774	985	56%
Nuclear Generation	352	360	333	1,045	367	353	377	1,098	-53	-5%
Power Generation	202	185	161	548	199	201	216	616	-67	-11%
Total	**1,588**	**1,679**	**2,225**	**5,492**	**1,451**	**1,508**	**1,560**	**4,519**	**973**	**22%**

[10] PG&E's Gas Transmission and Storage Safety Report No. 2018-02 was submitted to the Commission on March 1, 2019 pursuant to D.16-06-056.

[11] Negative variance means recorded exceeded budgeted or imputed.

Table 2: PG&E Capital Spending 2016 – 2018 ($000)										
Core Function	2016 Recorded	2017 Recorded	2018 Recorded	**2016-2018**	2016 Budget	2017 Imputed	2018 Imputed	**2016-2018**	**Total Variance**	
Gas Distribution	933	836	965	2,734	636	973	909	2,518	215	9%
Electric Distribution	1,594	1,762	2,223	5,579	1,357	1,662	1,533	4,552	1,026	23%
Nuclear Generation	224	195	55	474	225	178	166	570	-96	-17%
Power Generation	276	280	226	782	293	291	272	856	-74	-9%
Total	**3,027**	**3,073**	**3,469**	**9,569**	**2,512**	**3,104**	**2,880**	**8,496**	**1,072**	**13%**

From 2016 – 2018, the data show a pattern of overspending for both capital and expensed work in the Electric Distribution line of business. It also shows a pattern of overspending for expensed work for the Gas Distribution line of business. In sum, PG&E spent over the imputed amounts for safety, reliability, and maintenance work in this period. The tables above only contain those lines of business reported in all the reports covered for this review because the 2017 report covered only a subset of the information found in the 2016 and 2018 reports.

ELECTRIC DISTRIBUTION

Much of the spending variance is driven by the Electric Distribution line of business. Over the 2016 – 2018 period, the major work categories with the largest amount of spending variance for expense and capital spending are shown in Attachment B to this report. The programs shown in the attachment were chosen if the spending variance (over/under) exceeded the selection criteria adopted in D.19-04-020. That means, any expense program variance exceeding $10 million or 20%, subject to a minimum variance of $5 million is selected. Any capital program variance exceeding $20 million or 20%, subject to a minimum variance of $10 million is selected.

The costs of several programs are tracked in balancing accounts or memorandum accounts that, upon approval, can adjust the authorized amount. These programs include Electric Distribution Major Emergency, the Vegetation Management, and the Electric Rule 20A[12] program. Recorded costs above what are authorized are not recoverable from ratepayers. Programs subject to balancing or memorandum accounts can be reviewed in the annual electric true-up process, the GRC, or a separate application, so analysis of those programs is not included here.

GAS DISTRIBUTION

A significant portion of the spending variance is driven by the Gas Distribution line of business. Staff analysis found no significant issues with the Reliability Main Replacement capital program, the Corrective Maintenance Operations and Maintenance program and PG&E's responses to data requests. While reported Gas Distribution spending was not recovered through balancing or memorandum accounts, many costs detailed in this section are Catastrophic Event Memorandum Account[13] eligible and therefore may be recovered at a future date via the annual gas true-up or through an application.

[12] More on these Major Work Categories may be found here: www.pge.com/tariffs
[13] The Catastrophic Event Memorandum Account (CEMA) is found here: www.pge.com/tariffs

ANALYSIS OF SELECTED PROGRAMS

Energy Division analysis of selected programs below revealed that PG&E could have taken steps to ease verification of the report. PG&E could have also made changes to enhance PG&E's program descriptions[14].

Electric Distribution – Expense
"Support and Emergency Preparedness and Response" –
"Miscellaneous Expenses"

According to the 2018 recorded data provided in the 2020 GRC, PG&E spent a total of $24,417 for miscellaneous costs within "Support and Emergency Preparedness and Response" ($22,558 for Support Activities and $1,859 for Emergency Preparedness and Response). This differs from the amount of $24,288 included in the 2018 report. In the 2017 GRC testimony (Exhibit 4, Ch. 19, pp. 19-19 to 19-21), PG&E explains that the efficiency savings are forecasted as a credit in Major Work Category AB. A forecast within this Major Work Category for "affordability initiatives" is included in the 2020 GRC testimony (Exhibit 4, Ch. 18, pp. 18-19 – 18-20).

Staff recommends PG&E explain the differences between testimony and the report[15]. PG&E should provide a description of the "Miscellaneous Expenses" Maintenance Activity Type program along with the other Maintenance Activity Types[16].

Electric Distribution – Expense
"Preventive Maintenance and Equipment Repair, Overhead" –
"Surge Arresters"

Testimony in the 2020 GRC states that the "Preventive Maintenance and Equipment Repair, Overhead" program was stopped in 2015 while the standards were updated and was incorporated into the capital replacement program (the "Surge Arrester Replacement" Maintenance Activity Type). However, PG&E reported 1,430 units replaced in 2016 after the program stopped. Some recorded costs in 2016 carried over into 2017, and into 2018 according to data on actual spending in PG&E's 2020 GRC. PG&E states[17] that the unspent funds for the program called Surge Arrester Replacement are not expected to remain within Electric Distribution Maintenance. Instead, the funding was made available for other unspecified work within Electric Operations.

In the above example related to the Surge Arrester Replacement capital program, staff was unable to verify the actual recorded costs for Electric Distribution Maintenance because of the diversion of unspent funds. Staff recommends PG&E improve its explanation by incorporating information about the status of the program and the nature of recorded costs that were carried over[18].

---

[14] See Attachment B for descriptions of Major Work Categories and Maintenance Activity Types.
[15] D.19-04-020, p. 34 for a discussion of report verification.
[16] Ibid attachment 2 p. 9
[17] 2018 Spending Accountability Report pp. 76, 88 and 116.
[18] D.19-04-020, p. 34 for a discussion of report verification.

Electric Distribution – Capital
"Electric Distribution Substation Capacity" –
"Distribution Substation Support Transmission or Substation Related Work"

Staff was unable to identify the drivers for each Maintenance Activity Type because, according to 2020 GRC testimony, PG&E reorganized the "Electric Distribution Substation Capacity" Major Work Category since the 2017 GRC to be based on equipment types for replacement rather than project type. PG&E did not identify any projects in the "Substation Support Transmission or Substation Related Work" program in the forecast for 2018 – 2022.

PG&E's reports did not show the actual costs for this Maintenance Activity Type prior to the reclassification within the major work category to allow staff to conduct its verification and comparison to the authorized amounts

Gas Distribution – Expense
"Gas Distribution Corrective Maintenance" –
"Corrective Maintenance, Gas Service Valves"

The 2020 GRC recorded costs for "Gas Distribution Corrective Maintenance" as $28,291 and this agrees with the information presented in the report. Both PG&E's 2017 (Exhibit 3, chapter 6A, pp. 6A-2 to 6A-16) and 2020 GRC testimony, combine multiple preventive and corrective maintenance activities under the same titles due to their complementary nature. Each filing provides an explanation of how some activities in this category would be moved (see the section in Chapter 2 titled "Changes in Major Work Categories" in each exhibit).

The variance explanations for "Corrective Maintenance, Gas Service Valves" indicated that there had been an increase in work volumes which resulted in more contracted labor. PG&E's responses to requests for information referred to the report and 2020 GRC Workpapers to understand how AC Inspection, Leak Survey and Service Replacement Tags contributed to Corrective Maintenance, Gas Service Valves activities.

Gas Distribution – Capital
"General Gas Distribution Reliability" –
"Reliability Main Replacement"

The 2020 GRC recorded costs for "General Gas Distribution Reliability" as $75,248. This broadly agrees with the $76,308 presented in the report. Line 28 of the 2018 report (p. B2-40) explained that the program is meant to pay for pipeline replacement related to federally mandated integrity management requirements (see Exhibit 3, Ch. 4, p. 4-24). Requests for information regarding how the wildfire recovery work pertained to gas main replacement revealed that most of the work was meant to replace lost infrastructure.

ATTACHMENT B

The following tables show the expense and capital programs (Major Work Categories) for the Electric Distribution GRC Line of Business and the variance in total GRC spending. Variances for 2016 reference PG&E's budgeted amount. Variances for 2017 – 2018 reference imputed regulatory values.

Table 1: PG&E Electric Distribution Expense Spending 2016 - 2018

		Variance $000			Variance %			Variance $000	Variance %
Major Work Category Description	**MWC**	**2016**	**2017**	**2018**	**2016**	**2017**	**2018**	**2016-2018**	**2016-2018**
Electric Distribution Major Emergency	IF	72,339	246,664	275,655	154%	480%	507%	594,658	389%
Fire Hazard Prevention Memorandum Account (FHPMA)	IG			399,529			NA	399,529	NA
Vegetation Management Balancing Account	HN	-64	423	47,089	0%	0%	22%	47,448	8%
Preventive Maintenance and Equipment Repair, Overhead	KA	-6,876	-19,022	-16,045	-18%	-41%	-33%	-41,943	-31%
Support and Emergency Preparedness and Response	AB	-1,075	8,618	26,670	-4%	91%	274%	34,213	72%
Operational Support	OS	-3,001	-24,644	-5,508	-13%	-101%	-21%	-33,153	-45%
Electric Distribution Routine Emergency	BH	16,879	5,347	4,670	38%	10%	9%	26,896	18%
Operational Management	OM	1,758	-11,456	-15,846	17%	-61%	-80%	-25,544	-52%
Patrols and Inspections	BF	1,360	-8,331	-9,807	5%	-24%	-27%	-16,778	-17%
Electric Distribution Operation Activities	BA	1,215	-10,349	-5,003	5%	-40%	-18%	-14,137	-18%
Work Requested by Others (WRO)	EW	1,749	-8,888	-5,611	17%	-69%	-41%	-12,750	-34%
Develop & Provide Training	DN	-362	-4,277	-7,686	-12%	-59%	-100%	-12,325	-68%
Read & Investigate Meters	AR			11,190			NA	11,190	NA
Customer Field Service Work	DD	1,848	3,170	3,815	14%	20%	23%	8,833	19%
Poles-Intrusive Inspection/Test and Treat	GA	-3,010	-777	-3,332	-25%	-6%	-24%	-7,119	-18%
New Customer Connection Service Inquiry Activities	EV	803	2,091	3,124	9%	25%	35%	6,018	23%
Change/Maintain Used Electric Meter	EY			5,975			NA	5,975	NA

ATTACHMENT B (cont.)

Table 2: PG&E Capital Expenditures 2016 - 2018

		Variance $000			**Variance %**			**Variance $000**	**Variance %**
Major Work Category Description	**MWC**	**2016**	**2017**	**2018**	**2016**	**2017**	**2018**	**2016-2018**	**2016-2018**
Electric Distribution Major Emergency	95	754	222,183	256,966	1.4%	393.4%	489.8%	479,903	292.4%
Pole Replacement	7	8,723	13,067	159,287	12.1%	15.1%	232.3%	181,077	79.7%
Electric Distribution Routine Emergency	17	39,774	37,060	51,287	30.2%	25.2%	37.6%	128,121	30.9%
Electric Dist. Preventive Maintenance, Overhead	2A	-1,871	-3,446	114,899	-1.6%	-2.9%	104.8%	109,582	32.0%
Electric Distribution Substation Capacity	46	-7,265	-50,393	-50,566	-14.5%	-74.4%	-80.3%	-108,224	-59.9%
Electric Dist. Work at the Request by Others - Rule 20A	30	-50,116	-29,664	-21,194	-61.7%	-51.2%	-39.4%	-100,974	-52.3%
Electric Work at the Request of Others	10	17,735	20,804	50,040	22.0%	27.2%	70.5%	88,579	38.8%
Electric Distribution Substation Emergency Replacement	59	25,616	37,205	20,598	77.2%	81.7%	48.7%	83,419	69.0%
Targeted Reliability Program	49	17,803	-35,286	-48,932	31.1%	-43.9%	-65.5%	-66,415	-31.3%
Electric Distribution Line and Equipment Capacity	6	-16,067	-33,268	-15,323	-14.8%	-37.2%	-18.5%	-64,658	-23.0%
Electric Distribution Automation and Protection	9	14,672	6,451	27,980	34.2%	13.4%	62.5%	49,103	36.2%
Tools and Equipment	5	1,160	23,428	24,041	14.4%	129.1%	142.8%	48,629	180.7%
Electric Dist. Preventive Maintenance, Underground	2B	4,919	6,300	29,685	11.2%	14.4%	73.0%	40,904	31.9%

ATTACHMENT B (cont.)

The tables below show expense and capital programs (Major Work Categories) for the Gas Distribution GRC Line of Business and the variance in total GRC spending. Variances for 2016 reference PG&E's budgeted amount. Variances for 2017 – 2018 reference imputed regulatory values.

Table 1: PG&E Gas Distribution Expense Spending 2016 - 2018

		Variance $000			Variance %			Variance $000	Variance %
Major Work Category Description	**MWC**	**2016**	**2017**	**2018**	**2016**	**2017**	**2018**	**2016-2018**	**2016-2018**
Support	AB	24,602	24,445	8,794	206%	390%	152%	57,841	240.89%
Provide Field Service	DD	-6,747	41,594	-5,089	-13%	85%	-11%	29,758	20.36%
Leak Survey	DE	-2,345	16,283	9,462	-9%	84%	52%	23,400	35.96%
Locate & Mark	DF	7,128	29,885	13,121	33%	126%	55%	50,134	72.51%
Cathodic Protection	DG	-205	18,978	7,105	-2%	205%	82%	25,878	93.82%
Develop & Provide Training	DN	1,376	4,699	1,478	79%	120%	41%	7,553	81.61%
Meter Protection Program	EX	174	346	-547	25%	35%	-60%	-27	-1.04%
Operate Gas Distribution System	FG	1,357	9,218	-3,301	15%	70%	-27%	7,274	21.08%
Preventive Maintenance (Gas)	FH	2,408	17,699	14,769	18%	122%	109%	34,876	84.93%
Corrective Maintenance (Gas)	FI	-26,967	66,462	-20,896	-27%	78%	-26%	18,599	7.04%
Gas Mapping	GF	532	4,920	304	13%	128%	8%	5,756	49.90%
Gas Distribution Planning & Operations Engineering	GG	-2,978	5,774	-819	-37%	76%	-11%	1,977	8.65%
Manage Energy Efficiency-Non-BA	GM	-1,916	3,836	331	-35%	108%	10%	2,251	18.34%
Gas Research, Development & Demonstration	GZ	-300	2,200	704	-12%	149%	52%	2,604	49.64%
Change/Maintain Used Gas Meters	HY	1,566	3,342	2,465	111%	185%	145%	7,373	150.16%
Gas Distribution Integrity Management (Non-BA)	JQ	-205	19,366	11,714	-1%	64%	42%	30,875	35.00%
Gas Distribution Leak Survey & Repair	JU	10,023			53%			10,023	52.94%
Maintain IT Applications & Infrastructure	JV	883	26,279	-8,669	4%	100%	-36%	18,493	25.59%
Provide Executive Services	KT	428			36%			428	35.67%
Gas Expense WRO Activities	LK	346	4,253	2,034	6%	100%	53%	6,633	49.49%
Catastrophic Events	LX			36,661			NA	36,661	NA
Operational Management	OM	1,251	14,294	-8,743	-4%	100%	-65%	6,802	18.41%
Operational Support	OS	-391	40,552	-9,622	0%	100%	-25%	30,539	29.14%

ATTACHMENT B (cont.)

Table 2: PG&E Capital Expenditures 2016 - 2018										
		Variance $000			**Variance %**			**Variance $000**	**Variance %**
Major Work Category Description	**MWC**	**2016**	**2017**	**2018**	**2016**	**2017**	**2018**	**2016-2018**	**2016-2018**
Tools and Equipment	05	-14,322	237	3,222	-97%	8%	119%	-10,863	-54%
Gas Pipeline Replacement Program	14	75,712	998	78,451	26%	0%	22%	155,161	15%
Gas Meter Protection	27	397	387	710	203%	112%	220%	1,494	173%
Gas Distribution Customer Connections	29	22,548	2,317	24,519	33%	3%	35%	49,384	23%
NGV – Station Infrastructure	31	277	2,780	555	7%	70%	15%	3,612	31%
Catastrophic Events	3Q			21,776			NA	21,776	NA
Gas Distribution New Capacity	47	4,616	-15,375	-15,130	13%	-35%	-37%	-25,889	-21%
Gas Distribution Reliability	50	39,802	-87,891	-28,420	22%	-34%	-12%	-76,509	-11%
Gas Work at the Request of Others	51	11,132	-870	673	14%	-1%	1%	10,935	6%
Gas Distribution Emergency Response	52	914	10,185	1,044	139%	1356%	149%	12,143	576%
Install New Gas Meters	74	-1,034	-1,464	-965	-35%	-50%	-35%	-3,463	-40%
Manage Buildings	78	-3,111	-10,848	-16,580	-17%	-66%	-109%	-30,539	-61%
Build IT Applications & Infrastructure	2F	12,033	-20,325	-19,452	38%	-51%	-52%	-27,744	-26%
Gas Distribution Replace/Convert Customer HPRs	2K	-4,162	-2,487	17,693	-13%	-6%	47%	11,044	10%