



**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

FILED

06/17/24

04:59 PM

A2006012

Application of Pacific Gas and Electric Company (U 39 M) to Submit Its 2020 Risk Assessment and Mitigation Phase Report.

Application No. A.20-06-012
(Filed: June 30, 2020)

(NOT CONSOLIDATED)

Application of Pacific Gas and Electric Company (U 39 M) for Authority, Among Other Things, to Increase Rates and Charges for Electric and Gas Service Effective on January 1, 2023.

Application No. 21-06-021
(Filed June 30, 2021)

(NOT CONSOLIDATED)

Application of Pacific Gas and Electric Company (U 39 M) to Submit Its 2024 Risk Assessment and Mitigation Phase Report

Application No. 24-05-008
(Filed May 15, 2024)

**PACIFIC GAS AND ELECTRIC COMPANY'S (U39M)
AMENDMENT TO THE 2023 RISK SPENDING ACCOUNTABILITY REPORT**

WALKER MATTHEWS
PETER OUBORG

Pacific Gas and Electric Company
Law Department, 19th Floor
300 Lakeside Drive, Suite 210
Telephone: (925) 750-0041
Facsimile: (415) 973-5520
E-Mail: walker.matthews@pge.com

Dated: June 17, 2024

Attorneys for
PACIFIC GAS AND ELECTRIC COMPANY

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of Pacific Gas and Electric Company (U 39 M) to Submit Its 2020 Risk Assessment and Mitigation Phase Report.

Application No. A.20-06-012
(Filed: June 30, 2021)

(NOT CONSOLIDATED)

Application of Pacific Gas and Electric Company (U 39 M) for Authority, Among Other Things, to Increase Rates and Charges for Electric and Gas Service Effective on January 1, 2023.

Application No. 21-06-021
(Filed June 30, 2021)

(NOT CONSOLIDATED)

Application of Pacific Gas and Electric Company (U 39 M) to Submit Its 2024 Risk Assessment and Mitigation Phase Report

Application No. 24-05-008
(Filed May 15, 2024)

**PACIFIC GAS AND ELECTRIC COMPANY'S (U39M)
AMENDMENT TO THE 2023 RISK SPENDING ACCOUNTABILITY REPORT**

Pacific Gas and Electric Company (PG&E) submits this amendment to its 2023 Risk Spending Accountability Report (2023 RSAR) in compliance with Decision (D.) 19-04-020, the *Phase Two Decision Adopting Risk Spending Accountability Report Requirements And Safety Performance Metrics For Investor-Owned Utilities And Adopting A Safety Model Approach For Small And Multi-Jurisdictional Utilities*, and D.22-10-002, the *Decision Addressing Phase I Track 3 and 4 Issues*. The Report was timely filed on May 31, 2024 in accordance with D.19-04-020 and D.22-10-002. However, two minor errors were subsequently identified and this submission corrects those errors. The error is limited to one table, Table 3-4, 2023 GRC Cycle Electric Distribution Capital Comparison By Mat For Safety, Reliability And Maintenance Work. First, Table 3-4 in the PDF version of PG&E's 2023 RSAR was incorrect and is replaced in full. In addition, two data points for MAT Code 49R in Table 3-4 are being corrected (see table below for details). The Excel attachment including Table 3-4 (both the redline and clean version) is being corrected with this submission.

PACIFIC GAS AND ELECTRIC COMPANY

**AMENDMENT TO THE 2023 RISK SPENDING ACCOUNTABILITY
REPORT IN COMPLIANCE WITH CALIFORNIA PUBLIC UTILITIES
COMMISSION DECISION 19-04-020 AND DECISION 22-10-002**

JUNE 17, 2024



PACIFIC GAS AND ELECTRIC COMPANY
 AMENDMENT TO THE 2023 RISK SPENDING ACCOUNTABILITY
 REPORT IN COMPLIANCE WITH CALIFORNIA PUBLIC UTILITIES
 COMMISSION DECISION 19-04-020 AND DECISION 22-10-002
 JUNE 17, 2024

TABLE OF CONTENTS

Section	Title
1	INTRODUCTION AND OVERVIEW – NO CHANGE
2	GAS OPERATIONS IMPUTED ADOPTED VS. RECORDED COMPARISON – NO CHANGE
3	ELECTRIC DISTRIBUTION IMPUTED ADOPTED VS. RECORDED COMPARISON – AMENDED (TABLE 3-4 ONLY)
4	ENERGY SUPPLY IMPUTED ADOPTED VS. RECORDED COMPARISON – NO CHANGE
5	CUSTOMER AND COMMUNICATIONS IMPUTED ADOPTED VS. RECORDED COMPARISON – NO CHANGE
6	SHARED SERVICES/INFORMATION TECHNOLOGY IMPUTED ADOPTED VS. RECORDED COMPARISON – NO CHANGE
7	HUMAN RESOURCES IMPUTED ADOPTED VS. RECORDED COMPARISON – NO CHANGE
8	CORPORATE SERVICES (ADMINISTRATIVE AND GENERAL) IMPUTED ADOPTED VS. RECORDED COMPARISON – NO CHANGE
9	COMPANYWIDE ITEMS IMPUTED ADOPTED VS. RECORDED COMPARISON – NO CHANGE
10	COST RECOVERY: BALANCING AND MEMORANDUM ACCOUNTS – NO CHANGE
Appendix A	2023 GRC IMPUTED REGULATORY VALUES METHODOLOGY – NO CHANGE
Appendix B	2023-2026 IMPUTED REGULATORY VALUES BY FUNCTIONAL AREA – NO CHANGE

PACIFIC GAS AND ELECTRIC COMPANY

SECTION 1

INTRODUCTION AND OVERVIEW

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 1
INTRODUCTION AND OVERVIEW

TABLE OF CONTENTS

A. Introduction.....	1-2
B. Presentation Guidance	1-3
C. Compliance With D.22-10-002	1-5
D. 2023 Expense and Capital Comparison of Imputed Adopted and Actual Costs Summary	1-9
1. Expense	1-9
2. Capital.....	1-10
E. Summary Tables	1-11
F. 2023 Imputed vs. Actual Comparison by Functional Area	1-12
1. Gas Operations.....	1-12
a. Gas Distribution	1-12
b. Gas Transmission and Storage (GT&S).....	1-13
c. Gas Distribution and GT&S portfolio.....	1-14
2. Electric Distribution	1-14
3. Energy Supply.....	1-15
a. Energy Policy and Procurement	1-15
b. Nuclear Generation	1-15
c. Power Generation.....	1-16
4. Customer and Communications.....	1-17
5. Shared Services/IT.....	1-17
6. Human Resources	1-18
7. Corporate Services (A&G)	1-18
8. Companywide Items.....	1-18

1 **PACIFIC GAS AND ELECTRIC COMPANY**
2 **SECTION 1**
3 **INTRODUCTION AND OVERVIEW**

4 **A. Introduction**

5 Pacific Gas and Electric Company (PG&E or the Company) submits its 2023
6 Risk Spending Accountability Report (RSAR). The 2023 RSAR complies with
7 Decision (D.) 19-04-020¹ and D.22-10-002.² This report is organized as follows:

8 Section 1 provides an overview of PG&E’s 2023 General Rate Case (GRC)
9 2023 imputed adopted costs and recorded costs (also referred to as actual
10 costs) for Gas Distribution, Gas Transmission and Storage (GT&S), Electric
11 Distribution, Energy Supply, Customer and Communications, Shared
12 Services/Information Technology (IT), Human Resources (HR), Corporate
13 Services (Administrative and General or A&G), and Companywide Items.

14 Sections 2 through 9 compare PG&E’s 2023 GRC imputed adopted and
15 recorded costs by Functional Area.^{3,4} Specifically, Sections 2 through
16 9 contain:

- 17 1) PG&E’s imputed adopted and actual costs/units for PG&E’s 2023 GRC, by
18 Major Work Category (MWC) and/or Maintenance Activity Type (MAT) Code
19 (where applicable) for Gas Distribution, GT&S, Electric Distribution, Energy
20 Supply, Customer and Communications, Shared Services/IT; PG&E’s
21 imputed adopted and actual costs by functional area for HR, Corporate
22 Services (A&G), and Companywide Items.
23 2) Variance explanations for:

1 D.19-04-020 (*Phase Two Decision Adopting Risk Spending Accountability Report Requirements and Safety Performance Metrics for Investor-Owned Utilities and Adopting a Safety Model Approach for Small and Multi-Jurisdictional Utilities*).

2 D.22-10-022 (*Decision Addressing Phase I Tracks 3 and 4 Issues*).

3 Previous terminology was “Line of Business;” Corporate Services do not have costs that meet the variance explanation requirements.

4 In addition to costs, several data points per program are provided. See D.22-10-002, Appendix A and Appendix B for specific requirements and term definitions.

1 a) Imputed adopted versus actual costs/units for 2023 by MWC and/or
2 MAT for safety, reliability, and maintenance work subject to the following
3 thresholds.⁵

- 4 • Expense: A variance of at least \$10 million, or a percentage
5 variance of at least 20 percent subject to a minimum variance of
6 \$5 million;
- 7 • Capital: A variance of at least \$20 million, or a percentage variance
8 of at least 20 percent subject to a minimum variance of \$10 million;
9 and
- 10 • Units: A variance of at least 20 percent of work units performed.⁶

11 Section 10 discusses the cost recovery of expenditures that flow through
12 balancing or memorandum accounts in 2023.

13 D.19-04-020, as updated in D.21-11-009, requires programs that are related
14 to safety, reliability, or maintenance to “be separated into risk mitigation
15 programs identified in the Risk Assessment and Mitigation Phase (RAMP).”⁷
16 PG&E’s 2020 RAMP (as updated in the 2023 GRC) supported PG&E’s 2023
17 GRC. Accordingly, the RAMP risks, mitigations, and controls included in this
18 report are those presented in PG&E’s 2023 GRC, which updated the 2020
19 RAMP analysis. The data provided in the 2023 RSAR also includes non-RAMP
20 spending on safety, reliability, and maintenance programs.

21 **B. Presentation Guidance**

22 PG&E used Appendix A and Appendix B of D.22-10-002 to format and
23 populate its 2023 RSAR. Below PG&E explains the presentation of information
24 and general guidance used in its 2023 RSAR.

25 Throughout the RSAR tables, PG&E uses “N/A” for data points that are
26 either not available or not applicable.

27 For the “Project Life” and “Project Year,” if known, PG&E provided specific
28 values. For continuing programs that have no defined or published life, PG&E
29 noted that the programs are “On-going” or “Annual” respectively.

5 D.19-04-020, Table 4, p. 43.

6 D.19-04-020, p. 54, Ordering Paragraph (OP) 11.

7 D.19-04-020, Attachment 2, p. 1, p. 36. D.21-11-009 expanded this requirement to include both RAMP mitigations and controls, p. 15.

1 For the “Forecast Scope” column, PG&E used the imputed versus actual
2 units to determine the “Scope” status. If the program is not unitized, PG&E used
3 the “Status” column to populate the “Scope” status.

4 For the “Forecast Schedule” column, PG&E used the “Status” column to
5 populate.

6 For the “Forecast Budget” column, PG&E used the imputed versus actual
7 costs to determine the “Budget” status. For programs with \$0 imputed costs the
8 status of “Over” was used.

9 For the “Status” column, D.22-10-002, Appendix A defines the options as
10 “Proceeding as Planned”, “Deferred”, “Canceled”, “Expanded”, and “Emergent”.
11 PG&E did not use the drop-down option of “Deferred.” Per D.22-10-002,⁸ an
12 investor-owned utility (IOU) may use other terms as long as they define
13 additional terms. PG&E is using the term “Rescheduled” as the status for
14 program activities that have been delayed to a later date. On numerous
15 occasions, multiple of the “Status” descriptions could have reasonably been
16 selected for a particular activity; therefore, in these instances, PG&E exercised
17 its best professional judgment in populating all Status columns (“Forecast
18 Scope,” “Forecast Schedule,” “Forecast Budget,” and “Status”).

19 Regarding PG&E’s RAMP presentation, programs that are labeled as “SRM
20 Total (Non-RAMP)” represent programs that are safety, reliability, and/or
21 maintenance programs that have no RAMP risk mitigations. Spending for new
22 RAMP risk mitigation activities identified after PG&E’s 2023 GRC submission
23 that are safety, reliability, and maintenance activities are included in the “Post
24 2023 GRC Mitigation” category.

25 In 2023, PG&E continued its wildfire risk and electric risk reduction activities
26 and programs to continue delivering on the company’s wildfire mitigation plans.
27 For the majority of the year, there also was uncertainty associated with the
28 pending 2023 GRC Decision, which was not issued until November 2023. Given
29 so, variances resulted as PG&E executed all planning work and much of the
30 physical work before the decision. PG&E’s 2023 portfolio focused on wildfire
31 and electric risk reduction and support, and increased volume of customer
32 connection and emergency response demand. In addition, across the

8 D.22-10-002, p.18.

1 company's functional areas prioritization focused on implementing efficiency
2 opportunities, identifying lower-priority work to be rescheduled, and making
3 forecast refinements. When applicable, PG&E's variance explanations include
4 further details regarding changes in priority that led to a shifting of funds
5 between programs.

6 **C. Compliance With D.22-10-002**

7 This section addresses how and/or where PG&E has complied with the new
8 RSAR requirements in D.22-10-002, as defined in Appendix A and B.⁹

- 9 • Requirement 7: This requirement directs the IOUs to use a single
10 standardized table structure for programs, including canceled, deferred, or
11 expanded programs. PG&E used the table template provided in
12 Appendix B, including a column for overall status.
- 13 • Requirement 8: This requirement directs the IOUs to provide cites to
14 relevant GRC testimony and workpapers. The tables provided in this report
15 contain a column labeled "2023 GRC Testimony Reference." PG&E's
16 reference 2023 GRC testimony and associated workpapers are available at
17 the following link: <https://pgera.azurewebsites.net/Regulation/search> (or
18 available upon request).
- 19 • Requirement 9: This requirement directs the IOUs to provide the Excel
20 spreadsheets that support the RSAR tables. PG&E has attached all Excel
21 spreadsheets to this report and made them publicly available on its
22 website.¹⁰
- 23 • Requirement 10: This requirement directs the IOUs to provide an overview
24 of how they defined program completion status. PG&E defined program
25 completion status using the guidance provided in Appendix B for the
26 "Status" column. As permitted by D.22-10-002 and described above, PG&E
27 uses the word "Rescheduled" in place of "Deferred."
- 28 • Requirement 11: This requirement directs the IOUs to explain, when
29 applicable, why a program lacks units and cite the applicable workpapers.

⁹ The following requirements from Appendix A are not addressed: Requirements 1 and 2 change the RSAR schedule requirements; Requirements 3-6 address GRC to RAMP mapping; Requirements 19-22 apply to RAMP.

¹⁰ <https://pgera.azurewebsites.net/Regulation/search>.

1 Such instances are addressed in the “Unit Type” column and the “2023 GRC
2 Testimony Reference” column.

- 3 • Requirement 12: This requirement directs the IOUs to provide its applicable
4 imputation methodology. This information is provided in Appendix A and B.
- 5 • Requirement 13: This requirement directs the IOUs to explain when a
6 variance is the result of a forecast error, including identifying any
7 assumptions that resulted in the error. For any applicable variances, PG&E
8 addressed this requirement in one or more of the following columns: 2023
9 Cost Variance Explanation, 2023 Unit Variance Explanation, and/or
10 Completion Status Statement.
- 11 • Requirement 14: This requirement directs the IOUs to explain the actual
12 cost shifted or why the actual costs cannot be provided and imputed and
13 actual costs. For any applicable variances, PG&E addressed this in one or
14 more of the following columns: 2023 Cost Variance Explanation, 2023 Unit
15 Variance Explanation, and/or Completion Status Statement.
- 16 • Requirement 15: This requirement directs the IOUs to “mark programs with
17 less than 5 percent of authorized expenditures as either canceled or
18 deferred.” Alternatively, if canceled or deferred is not the program status, an
19 explanation is required. For any applicable variances, PG&E addressed this
20 requirement in one or more of the following columns: 2023 Cost Variance
21 Explanation, 2023 Unit Variance Explanation, Status, and/or Completion
22 Status Statement.
- 23 • Requirement 16: When a variance is the result of new in-scope activities,
24 this requirement directs the IOUs to explain what caused the new activities.
25 For any applicable variances, PG&E addressed this requirement in one or
26 more of the following columns: 2023 Cost Variance Explanation, 2023 Unit
27 Variance Explanation, Status, and/or Completion Status Statement.
- 28 • Requirement 17: When a variance is the result of expanded scope
29 activities, this requirement directs the IOUs to explain the reasons for the
30 scope changes. For any applicable variances, PG&E addressed this
31 requirement in one or more of the following columns: 2023 Cost Variance
32 Explanation, 2023 Unit Variance Explanation, Status, and/or Completion
33 Status Statement.

- 1 • Requirement 18: When a variance is the result of inaccurate forecasts or
2 recorded elsewhere, this requirement directs the IOUs to explain and to
3 provide enough information to explain the cause of the variance. For any
4 applicable variances, PG&E addressed this requirement in one or more of
5 the following columns: 2023 Cost Variance Explanation, 2023 Unit Variance
6 Explanation, and/or Completion Status Statement.
- 7 • Requirement 23: This requirement directs the IOUs to track programs over
8 a full GRC cycle in the RSAR, including the cumulative GRC imputed costs,
9 imputed costs to date, actual costs by year, cost to date, and variance to
10 date. Specifically, IOUs shall provide a statement regarding the anticipated
11 completion status for each line item as to whether the program is anticipated
12 to be completed during the GRC cycle. For the last year of the GRC cycle,
13 the completion status will summarize the entire GRC cycle and discuss any
14 deferred or cancelled scope. In this report, PG&E has included the imputed
15 and actual costs and units for year 2023. Generally, PG&E provided a
16 completion status statement for SRM programs where imputed adopted
17 exceeded actuals and triggered the variance threshold.
- 18 • Requirement 24: This requirement directs the IOUs in interim GRC cycle
19 years to provide a statement regarding the anticipated completion status for
20 programs that exceed the variance threshold. Since 2023 is the first year of
21 PG&E's 2023 GRC cycle, PG&E complied with this requirement by
22 completing Requirement 23 above.
- 23 • Requirement 25: This requirement directs the IOUs to include all GRC
24 expenditures, including non-SRM GRC programs (company-wide items) and
25 discuss how it has treated interest, overhead, and taxes in its submission.
26 This requirement went into effect starting with the IOUs' 2023 RSARs and is
27 now included in PG&E's 2023 RSAR.¹¹ PG&E included non-SRM expense
28 and capital tables in each functional area as applicable and includes
29 non-SRM costs tracked in a balancing or memorandum account in Section
30 10. PG&E is not required to provide a variance explanation for non-SRM
31 GRC programs. PG&E's discussion of how interest, overhead, and taxes
32 were treated is explained below.

¹¹ D.22-10-002, OP 1, p. 55.

- 1 • Imputed adopted: The expense and capital overheads are included in the
2 adopted costs at the MWCs, MATs or support organizations level, consistent
3 with the recorded methodology. Two exceptions for expense are: (1)
4 employee benefits and Post Retirement Benefits Other than Pension
5 (PBOP), which are treated as Companywide expenses included in Section
6 9 of this report, and (2) payroll taxes, which are included along with various
7 (property, business, other, state corporation franchise, and federal income)
8 adopted taxes in the Decision 23-11-069, Appendix A, Table 3. Adopted
9 interest expense on PG&E debt is also included in Appendix A, Table 3,
10 Line 31 as part of Net for Return. The interest and taxes are not included as
11 part of Companywide expenses in Section 9.
- 12 • Actual costs: Interest is excluded from actual costs, including the cost
13 recovery of expenditures that flow through balancing or memorandum
14 accounts in Section 10. Expense overheads such as Paid Time Off, Indirect
15 Labor, and Minor Materials may be included in the expense orders and
16 projects, including balancing account expenses. For capital, in addition to
17 Paid Time Off, Indirect Labor, Minor Material, other overheads such as
18 Benefits, Payroll Taxes, Operational Management and Support, Building
19 Services, IT Device Services, Fleet, and Capitalized A&G may be included
20 in capital orders and capital balancing accounts. PG&E's overhead costs
21 are aggregated or "pooled" together and an allocation rate is calculated,
22 typically by dividing the overhead pool by a chosen base (e.g., direct labor
23 hours). This rate is then applied to the specific amount of the base
24 associated with each project or process, allocating a proportionate share of
25 overhead costs to them. Unallocated balances are either corporate
26 expenses, or shared service expenses. PG&E manages its GRC imputed
27 adopted taxes (including Income Tax, Property Taxes, Payroll Taxes and
28 Other Business Taxes) on a total company basis in accordance with federal,
29 state, and local laws. These total company costs are allocated to all
30 customers jurisdictions (California Public Utilities Commission, Federal
31 Energy Regulatory Commission) across different regulatory proceedings
32 (GRC, Transmission Owner, other) and the GRC portion cannot be easily
33 separated. Therefore, taxes are not included in the A&G Section 8, or the
34 Companywide expense presented in Section 9.

1 **D. 2023 Expense and Capital Comparison of Imputed Adopted and**
2 **Actual Costs Summary**

3 This report provides a summary of PG&E's 2023 GRC cycle actual expense
4 and capital expenditures¹² compared to imputed adopted costs derived from the
5 Commission's decision on PG&E's 2023 GRC (2023 GRC Final Decision or
6 Decision).¹³ This report includes expenditures of core functional areas (Electric
7 Distribution, Gas Distribution, GT&S, and Energy Supply) and support
8 organizations (Customer and Communications, Shared Services, IT, Corporate
9 Services, and Companywide Items). PG&E's 2023 GRC application included
10 years 2023 through 2026.

11 This report complies with D.19-04-020 OP 8, D.22-10-002, and ED's most
12 recent guidance.¹⁴ While this report presents certain functional area
13 expenditures, it is not representative of total Company expenditures.
14 Specifically, this report does not include Electric Transmission costs, and does
15 not include emergency response and restoration costs that are recorded in the
16 Catastrophic Event Memorandum Account (CEMA). Costs that are recorded in
17 non-GRC memorandum accounts included in this report are those that are
18 recorded for certain activities tracked in the Fire Risk Mitigation Memorandum
19 Account (FRMMA) and the Wildfire Mitigation Plan Memorandum Account
20 (WMPMA) because these activities align with activities in PG&E's 2023 GRC,
21 although are incremental to the GRC.

22 **1. Expense**

23 PG&E's 2023 expense spending exceeded imputed adopted values by
24 \$197.5 million. The increase was primarily attributable to Companywide
25 Items and Corporate Services. Spending increases were primarily due
26 higher than expected fees and active employee benefit costs relative to
27 those adopted in the 2023 GRC Final Decision. These increases were

12 Data is as of January 18, 2024. The imputed values do not reflect any reorganizations. The recorded values do reflect any reorganizations and these reorganizations are explained in the variance explanations. The 2023 data is as filed in PG&E's 2023 GRC and 2020 RAMP.

13 D.20-12-005.

14 July 29, 2023, letter from ED Director, Edward Randolph, to PG&E's Executive Vice President of Corporate Affairs, Carla Peterman.

1 partially offset by lower levels of spending in Gas Distribution, GT&S,
2 Electric, and Shared Services and IT. Spending reductions for Gas
3 Distribution were primarily attributable to: (1) lower volume of third-party
4 tickets received in Locate and Mark, (2) less work performed in meter
5 protection, and (3) lower leak find rate for below ground service leak repairs.
6 Spending reductions for GT&S were primarily attributable to
7 (1) High-Consequence Area (HCA) locations requiring fewer External
8 Corrosion Direct Assessment (ECDA), Internal Corrosion Direct Assessment
9 (ICDA) and Stress Corrosion Cracking Direct Assessment (SCCDA)
10 inspections based on HCA classifications, and (2) reprioritization in support
11 of higher risk or compliance work which impacted project start and
12 construction. Spending reductions for Electric were primarily attributable to:
13 (1) fewer Public Safety Power Shutoff events, and (2) lower patrol response
14 costs for Enhanced Powerline Safety Settings. Spending reductions for
15 Shared Services and IT were primarily due to a change in IT's overhead
16 allocation cost pool that did not impact public or employee safety and
17 reliability.

18 **2. Capital**

19 In 2023, PG&E's capital spending exceeded imputed adopted values by
20 \$949.0 million. The increase was primarily attributable to additional
21 spending in Electric Distribution and Customer and Communications.
22 Spending increases for Electric Distribution were primarily attributable to:
23 (1) completing more miles of system hardening than adopted due to the
24 timing of the 2023 GRC Final Decision, (2) higher volumes and unit costs for
25 overhead maintenance, (3) increased routine emergency, and (4) increased
26 emergency substation equipment replacements. Spending increases for
27 Customer and Communications were primarily attributable to performing
28 activities relating to technology projects to enhance customer service, better
29 manage customer relationships, resolve customer issues, and improve
30 customer on-demand access. The increases were partially offset by lower
31 spending in HR, Corporate Services (A&G), Energy Supply, and GT&S.

1 **E. Summary Tables**

2 PG&E’s methodology to derive its imputed adopted costs from the
 3 2023 GRC Final Decision is described in Appendix A: 2023 GRC Imputed
 4 Regulatory Values Methodology. The tables below summarize PG&E’s 2023
 5 spending by expense and capital by Functional Area.

**TABLE 1-1
 2023 RSAR
 2023 GRC CYCLE EXPENSE BY FUNCTIONAL AREA
 (THOUSANDS OF DOLLARS)**

Line No.	A	B	C	D	E
	Functional Area	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (C-B)	Percent Variance for 2023 (%) ((C-B)/B*100)
1	Gas Distribution	539,970.8	398,877.9	(141,093.0)	-26.1%
2	Gas Transmission & Storage	575,614.2	471,341.3	(104,272.9)	-18.1%
3	Electric Distribution	2,276,311.8	2,174,314.7	(101,997.1)	-4.5%
4	Energy Supply	595,531.8	601,599.0	6,067.2	1.0%
5	Customer & Communications	346,342.9	347,943.2	1,600.3	0.5%
6	Shared Services/IT	705,344.5	685,161.8	(20,182.8)	-2.9%
7	Human Resources	87,921.5	105,205.7	17,284.2	19.7%
8	Corporate Services	157,044.6	186,038.3	28,993.7	18.5%
9	Companywide Items ^(a)	1,385,252.7	1,896,325.2	511,072.5	36.9%
10	Total	6,669,334.8	6,866,807.0	197,472.2	3.0%

(a) Actual costs have been adjusted to exclude amounts that are not recovered from customers. For example, reserves associated with claims, settlements, and worker’s compensation have been removed from recorded amounts.

**TABLE 1-2
2023 RSAR
2023 GRC CYCLE CAPITAL BY FUNCTIONAL AREA
(THOUSANDS OF DOLLARS)**

Line No.	A	B	C	D	E
	Functional Area	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (C-B)	Percent Variance for 2023 (%) ((C-B)/B*100)
1	Gas Distribution	942,055.0	976,623.1	34,568.1	3.7%
2	Gas Transmission & Storage	830,998.1	683,509.5	(147,488.6)	-17.8%
3	Electric Distribution	3,549,754.0	4,655,230.9	1,105,477.0	31.1%
4	Energy Supply	400,822.6	315,924.6	(84,898.0)	-21.2%
5	Customer & Communications	141,618.8	184,458.9	42,840.2	30.3%
6	Shared Services/IT	604,013.2	603,869.5	(143.6)	-0.02%
7	Human Resources	1,102.4	539.1	(563.3)	-51.1%
8	Corporate Services	2,756.0	1,996.7	(759.2)	-27.5%
9	Total	6,473,120.0	7,422,152.4	949,032.4	14.7%

F. 2023 Imputed vs. Actual Comparison by Functional Area

The significant drivers of the differences between 2023 imputed adopted and actual costs for each functional area within PG&E are summarized below.

IT costs are presented according to the functional area that drove or initiated the costs.

1. Gas Operations

a. Gas Distribution

Expense: Gas Distribution's total recorded expenses in 2023 were below the imputed adopted values by \$141.1 million, or 26.1 percent. For safety, reliability, and maintenance work, 2023 recorded expenses were below the imputed adopted values by \$79.3 million, or 18.1 percent.¹⁵ The decrease was primarily attributable to: (1) lower volume of third party tickets received in Locate and Mark, (2) less work performed in meter protection, and (3) lower leak find rate for below ground service leak repairs.

¹⁵ MWC Operational Management (OM) is included as a maintenance activity in accordance with D.19-04-020. Gas Distribution does not consider MWC OM as safety, reliability, and maintenance work.

1 Capital: Gas Distribution’s total 2023 recorded capital expenditures
2 exceeded imputed adopted values by \$34.5 million, or 3.5 percent. For
3 safety, reliability, and maintenance work, 2023 recorded capital
4 expenditures exceeded imputed adopted values by \$7.4 million, or
5 1.0 percent. The increase was primarily attributable to: (1) execution of
6 High Pressure Regulators, Supervisory Control and Data Acquisition
7 (SCADA) and Overpressure protection capital work prior to receiving the
8 2023 GRC Final Decision, and (2) emergent compliance work (e.g.,
9 copper service replacements) and customer driven/reliability work.

10 **b. Gas Transmission and Storage (GT&S)**

11 Expense: Gas Transmission’s total recorded expenses in 2023
12 were below the imputed adopted values by \$104.3 million, or
13 18.1 percent. For safety, reliability, and maintenance work, 2023
14 recorded expenses were below the imputed adopted values by
15 \$77.6 million, or 14.8 percent.¹⁶ The decrease was primarily
16 attributable to (1) HCA locations requiring fewer ECDA, ICDA and
17 SCCDA inspections based on HCA classifications, (2) reprioritization in
18 support of higher risk or compliance work which impacted project start
19 and construction, and (3) decrease in transmission leak find rate for
20 pipeline maintenance work.

21 Capital: Gas Transmission’s total 2023 recorded capital
22 expenditures were below the imputed adopted values by \$147.5 million,
23 or 17.8 percent. For safety, reliability, and maintenance work, 2023
24 recorded capital expenditures were below the imputed adopted values
25 by \$129.3 million, or 16.4 percent. The decrease was primarily
26 attributable to: (1) a lower volume of pre-1955 untested pipe identified
27 than expected, (2) a lower volume of identified capital work such as
28 capital upgrades needed to facilitate a strength test being executed, and
29 (3) reprioritization in support of higher risk or compliance work that
30 impacted project start and construction.

¹⁶ MWC Operational Management (OM) is included as a maintenance activity in accordance with D.19-04-020. GT&S does not consider MWC OM as safety, reliability, and maintenance work.

1 **c. Gas Distribution and GT&S portfolio**

2 Gas expense and capital programs were also impacted by in-year
3 reprioritization efforts within Gas and/or Enterprise wide, driven by cost
4 pressures due to an inflationary environment, the Gas workplan
5 exceeding the enterprise set budget, and a need to support higher risk
6 programs. Gas created a bottom-up forecast based on known work that
7 was executable and resource balanced. Gas utilized the Risk Based
8 Portfolio Prioritization Framework (RBPPF) to ensure that high priority
9 and compliance-based MATs were appropriately funded. Programs that
10 did not include mandatory compliance work, regulatory commitments, or
11 high-risk work were considered for funding reallocation after conducting
12 review to account for safety, reliability, capacity, and any other
13 operational risks.

14 **2. Electric Distribution**

15 Expense: Electric Distribution's total recorded expenses in 2023 were
16 below imputed adopted values by \$102.0 million, or 4.5 percent. For safety,
17 reliability, and maintenance work, 2023 recorded expenses were below
18 imputed adopted values by \$38.0 million or 1.7 percent. ¹⁷ The decrease
19 was primarily attributable to (1) fewer Public Safety Power Shutoff events,
20 (2) lower patrol response costs for Enhanced Powerline Safety Settings.
21 The underspend was offset by increased costs for inspections, overhead
22 maintenance, routine emergency, and wildfire mitigation work.

23 Capital: Electric Distribution's total recorded capital expenditures in
24 2023 exceeded imputed adopted values by \$1,105.5 million, or
25 31.1 percent. For safety, reliability, and maintenance work, 2023 recorded
26 capital expenditures exceeded imputed adopted values by \$592.3 million or
27 21.7 percent. The increase was primarily attributable to: (1) completion of
28 more miles of system hardening than adopted due to the timing of the 2023
29 GRC Final Decision, (2) higher volumes and unit costs for overhead
30 maintenance, (3) increased routine emergency, and (4) increased
31 emergency substation equipment replacements. These increases were

¹⁷ MWC Operational Management (OM) is included as a maintenance activity in accordance with D. 19-04-020. Electric Distribution does not consider MWC OM as safety, reliability, and/or maintenance work.

1 offset by reductions to: (1) Distribution underground and network proactive
2 asset replacements, (2) proactive reliability improvements, and (3) proactive
3 substation asset replacements. In addition to safety, reliability, and
4 maintenance capital activities, additional spending in New Customer
5 Connections and Work Requested by Others contributed to the total Electric
6 Distribution capital overspend.

7 **3. Energy Supply**

8 This section includes costs associated with Energy Policy and
9 Procurement, Nuclear Generation, and Power Generation other than power
10 purchase agreement and fuel costs.

11 **a. Energy Policy and Procurement**

12 Energy Policy and Procurement's total recorded expenses in 2023
13 were above imputed adopted values by \$2.6 million, or 5.8 percent.
14 Energy Policy and Procurement's total 2023 recorded capital
15 expenditures were below imputed adopted values by \$4.7 million, or
16 41.0 percent. The Energy Policy and Procurement Department does not
17 have safety, reliability, or maintenance related work.

18 **b. Nuclear Generation**

19 Expense: Nuclear Generation's total recorded expenses in 2023
20 were above imputed adopted values by \$9.9 million, or 3.2 percent. For
21 safety, reliability, and maintenance work, 2023 recorded expenses were
22 above imputed adopted values by \$11.1 million, or 4.3 percent. The
23 increase in spending is spread across several MWCs but is primarily
24 driven by higher than forecast spend in preventative and corrective
25 maintenance activities for systems, structures, and components at the
26 plant, and engineering services.

27 Capital: Nuclear Generation's total 2023 recorded capital
28 expenditures were above imputed adopted values by \$0.13 million, or
29 1.1 percent. For safety, reliability, and maintenance work, 2023
30 recorded capital expenditures were below imputed adopted by
31 \$1.5 million or 14.4 percent, primarily driven by Diablo Canyon Power
32 Plant capital replacements.

1 **c. Power Generation**

2 Expense: Power Generation's total expenses in 2023 were below
3 imputed adopted by \$6.5 million, or 2.7 percent. For safety, reliability,
4 and maintenance work, 2023 recorded expenses were below imputed
5 adopted values by \$17.6 million, or 7.9 percent. The decreases are
6 primarily attributable to: (1) the Long-Term Service Agreement costs for
7 Gateway Generation Station and Colusa Generation Station, which did
8 not incur major outage costs in 2023; and (2) a delay in the regulatory
9 process related to receipt of FERC operating license renewals for the
10 Drum-Spaulding license, McCloud-Pit license and the Upper North Fork
11 Feather River license. Delays in receiving license renewals create
12 delays in the start date of the expense work required as part of the new
13 operating license.

14 Capital: Power Generation's total 2023 recorded capital
15 expenditures were below imputed adopted values by \$80.3 million, or
16 21.3 percent. For safety, reliability, and maintenance work, 2023
17 recorded capital expenditures were below the imputed adopted values
18 by \$84.7 million, or 23.0 percent. The decreases were primarily
19 attributable to: (1) a delay in the regulatory process related to FERC
20 operating license renewals for the Drum-Spaulding license, McCloud-Pit
21 license and the Upper North Fork Feather River license which then
22 delayed the start date of the capital work required as part of the new
23 operating license; (2) rescheduled capital projects originating from the
24 spillway assessment recommendations from the 2017 Oroville spillway
25 incident; and (3) rescheduled capital projects related to employee or
26 public safety and regulatory requirements that are not connected with
27 relicensing for hydroelectric generation.

28 The costs were offset by increases related to: (1) a combination of
29 rescheduled work from 2021 and 2022 into 2023, and emergent work
30 exceeding the forecasted needs at the time of the 2023 GRC, for
31 projects supporting the installation/replacement of generating equipment
32 or components to support hydroelectric generation activities and the
33 installation/replacement of buildings, grounds and infrastructure to
34 support hydroelectric generation activities, including roads and bridges;

1 and (2) emergent work at Gateway, Colusa and Humboldt natural gas
2 facilities supporting the installation/replacement of generating equipment
3 and components.

4 **4. Customer and Communications**

5 Expense: Customer and Communications' total recorded expenses in
6 2023 exceeded imputed adopted values by \$1.6 million, or 0.5 percent. For
7 safety, reliability, and maintenance work, 2023 recorded expenses were
8 below imputed adopted values by \$4.9 million, or 9.0 percent. The decrease
9 in spending was primarily attributable to: (1) a reduction in Natural Gas
10 Appliance Testing (NGAT) work performed; and (2) a reduction in gas meter
11 maintenance activities.

12 Capital: Customer and Communications' total 2023 recorded capital
13 expenditures exceeded imputed adopted values by \$42.8 million, or
14 30.3 percent. For safety, reliability, and maintenance work, 2023 recorded
15 capital expenditures were below imputed adopted values by \$8.6 million or
16 7.7 percent. The decrease in spending was primarily attributable to a
17 reduction in new gas meter purchases and the associated labor to perform
18 gas meter installations, exchanges, removals, and retirements.

19 **5. Shared Services/IT**

20 Expense: Shared Services' and IT's total recorded expenses in 2023
21 were below imputed adopted values by \$20.2 million or 2.9 percent. For
22 safety, reliability, and maintenance work, 2023 recorded expenses
23 exceeded imputed adopted values by \$51.3 million or 7 percent. The
24 decrease was primarily attributable to a change in IT's overhead allocation
25 cost pool that did not impact safety, reliability, or maintenance. The
26 underspend above is partially offset by overspend in CRESS, in connection
27 with wildfire mitigation work that improved or maintained safety, reliability or
28 maintenance.

29 Capital: Shared Services and IT's total 2023 recorded capital
30 expenditures were below imputed adopted by \$0.14 million, or 0.02 percent.
31 For safety, reliability, and maintenance work, 2023 recorded expenditures
32 were below imputed adopted values by \$56.6 million or 9 percent. This
33 variance is primarily informed by work in safety, reliability, and maintenance.

1 The decrease was primarily due to delays in CRESS investments for
2 required upgrades to the Napa Regional Center, the Stockton Material
3 Center and the Vacaville Service Center as well as continued efforts to
4 complete Phase 2 of the Wildfire Emergency Generation Enhancement
5 program. The decrease was partially offset by increases in IT technology
6 solutions that addressed the life cycling of obsolete or low-health assets and
7 served to either improve or maintain safety, reliability or maintenance,
8 e.g., continued investments in asset lifecycle programs for Field Area
9 Network communication infrastructure and data center infrastructure (cloud
10 strategy).

11 **6. Human Resources**

12 Expense: HR total recorded expenses in 2023 were above imputed
13 adopted values by \$17.3 million, or 19.7 percent. For safety, reliability, and
14 maintenance work within PG&E Academy, 2023 recorded expenses were
15 below imputed adopted values by \$8.4 million, or 20.8 percent. The majority
16 of the decrease is a reduction in contract support for Electric and Gas
17 Curriculum Development.

18 Capital: HR total 2023 recorded capital expenditures were below
19 imputed adopted values by \$0.6 million, or 51.1 percent. The majority of the
20 underspend is related to underspend in PG&E Academy.

21 **7. Corporate Services (A&G)**

22 Expense: A&G total recorded expenses in 2023 exceeded imputed
23 adopted values by \$29.0 million, or 18.5 percent. The majority of the
24 increase is due to higher-than-expected legal fees in the Law Organization.

25 Capital: Total 2023 recorded capital expenditures were below imputed
26 adopted values by \$0.8 million or 27.5 percent. The majority of the
27 underspend is related to reprioritizing these dollars to higher prioritized
28 projects/programs.

29 **8. Companywide Items**

30 Expense: Companywide Items total recorded expenses in 2023
31 exceeded imputed adopted values by \$511 million, or 36.9 percent. The
32 majority of the increase is due to higher Short Term Incentive Plan and

- 1 active employee benefit costs relative to those adopted in the 2023 GRC
- 2 Final Decision.

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 2
GAS OPERATIONS
IMPUTED ADOPTED VS. RECORDED COMPARISON

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 2
GAS OPERATIONS
IMPUTED ADOPTED VS. RECORDED COMPARISON

TABLE OF CONTENTS

A. Introduction.....	2-2
B. Gas Safety Reporting	2-2
C. Gas Distribution Comparison Summary Tables.....	2-4
D. Gas Distribution Comparison by MAT for Safety, Reliability, and Maintenance Work Tables.....	2-6
E. Gas Distribution MWC Descriptions – Expense	2-16
F. Gas Distribution MWC Descriptions – Capital	2-22
G. Gas Distribution MAT Descriptions for Safety, Reliability, and Maintenance Work – Expense.....	2-26
H. Gas Distribution MAT Descriptions for Safety and Reliability Work – Capital	2-42
I. Gas Distribution Comparison by MAT for Non-Safety, Reliability, and Maintenance Work Tables.....	2-50
J. GT&S Comparison Summary Tables	2-52
K. GT&S Comparison by MAT for Safety, Reliability, and Maintenance Work Tables.....	2-54
L. GT&S MWC Descriptions – Expense	2-74
M. GT&S MWC Descriptions – Capital	2-80
N. GT&S MAT Descriptions for Safety and Reliability Work – Expense.....	2-84
O. GT&S MAT Descriptions for Safety and Reliability Work – Capital	2-111
P. GT&S Comparison by MAT for Non-Safety, Reliability, and Maintenance Work Tables	2-126
Q. GT&S Comparison by MAT for Non-Safety, Reliability, and Maintenance Work Tables	2-127

1 **PACIFIC GAS AND ELECTRIC COMPANY**
2 **SECTION 2**
3 **GAS OPERATIONS**
4 **IMPUTED ADOPTED VS. RECORDED COMPARISON**

5 **A. Introduction**

6 This section includes the following information for the Gas Operations
7 functional area: a comparison of the total 2023 imputed adopted spend to the
8 actual spend, as well as the required data points per program as defined and
9 required in Decision (D.) 22-10-002.¹ This section also includes, for programs
10 that are related to safety, reliability, or maintenance, the Major Work Category
11 (MWC)/Maintenance Activity Type (MAT) Code descriptions, imputed adopted
12 vs. actual cost comparison details and variance explanations. As required by
13 D.19-04-020,² the MWC/MAT Code descriptions include a discussion of how
14 each program/project relates to safety, reliability, or maintenance.

15 **B. Gas Safety Reporting**

16 On October 11, 2022, the California Public Utilities Commission (CPUC or
17 Commission) issued D.22-10-002 in the Order Instituting Rulemaking to Further
18 Develop a Risk-Based Decision-Making Framework for Electric and Gas Utilities
19 Decision to, among other things, modify Pacific Gas and Electric Company's
20 (PG&E) gas safety reporting requirements. Specific to Gas Transmission and
21 Storage (GT&S), D.22-10-002 eliminated the obligation for PG&E to submit a
22 separate GT&S Compliance Report.³ In compliance with D.22-10-002, PG&E is
23 no longer producing a separate GT&S Compliance Report. Information included
24 in the GT&S Compliance Report that was duplicative with the Risk Spending
25 Accounting Report (RSAR) is now met with the submission of the RSAR.
26 Information unique to the GT&S Compliance Report, which is not contained in
27 the RSAR is available through discovery upon request. This applies to the

1 D.22-01-002, Appendix A and B.

2 Attachment 2, p. 9.

3 D.22-10-002, Ordering Paragraph 2.

1 following sections of the GT&S Compliance Report, as identified in the joint
2 motion to eliminate separate gas safety reporting requirements:⁴

- 3 • Summary of PG&E’s progress on safety programs, inspections, and
4 progress toward rate case goal- Summary of Safety Developments Section
5 1-2;
- 6 • Integrated Planning Process—Strategic Planning and Prioritization of Work
7 Section 1-3;
- 8 • Safety development and Inspections records discrepancies—Safety
9 Developments Section 2-1 and Safety Appendix Table 2-1;⁵
- 10 • Transmission pipeline inspection plan details and progress to plan by work
11 stream—Pipeline Inspection Plan Section 2-2;
- 12 • Storage developments and updates to Natural Gas Storage Strategy—
13 Storage Section 2-3;
- 14 • Pipeline piggability status; adopted vs actual mileage for pipe replacement
15 and pipeline replacement completed project detail; adopted vs actual
16 mileage for strength test and strength test completed project detail; long
17 term goals established for these programs and progress towards those
18 goals—Safety related developments specific to ILI, Pipe Replacement, and
19 Strength Test Section 2-4;
- 20 • Status of compliance with Title 49 of the Code of Federal Regulations (CFR)
21 Part 192 Subpart O and provides copies of Integrity Management
22 procedures published in the reporting period—Status Compliance with
23 Federal Code on Pipeline Integrity Management Section 2-5 and Safety
24 Appendix Table 2-5;
- 25 • Status of Valve Automation and Gas Gathering Programs—Valve
26 Automation and Gas Gathering Programs Section 2-6;
- 27 • Status of Emergency Response Programs: Valve Automation, Public
28 Awareness, and Valve Safety and Reliability—Emergency Response
29 Programs Section 2-7;

⁴ Joint Motion of Southern California Gas Company, San Diego Gas & Electric Company, and Pacific Gas and Electric Company to Eliminate Separate Gas Safety Reporting Requirements, filed July 16, 2020, Attachment 3. For Sections 14b and 15 of the GDPSR Gas Distribution pipelines have not been a part of the Risk Management “Top 100” list.

⁵ Table 2-1 Inspections Records Discrepancies Report.

- 1 • Details the amount of funds budgeted at the beginning of each calendar
2 year, provides variance explanations between budget and adopted/imputed
3 regulatory values for SRM MATs, explains how budgets created, and
4 explains how imputed amounts were derived and their relationship to
5 Commission authorized amounts—Explanation of Funds Budgeted,
6 Adopted, and Spent for Each MWC and MAT Code Section 3-1;
- 7 • Appendix: Includes tables for Inspection Records discrepancies, Integrity
8 Management standards and procedures published during the reporting
9 period, and RAMP narrative explaining the six risks included in the 2018
10 RAMP that are applicable to the 2019 GT&S Rate Case—Safety Appendix
11 Table 2-6;⁶ and
- 12 • Transmission Pipeline Programs Appendix⁷:
 - 13 – Resource Planning and Contractor Selection Process—Section 1;
 - 14 – Quality Assurance and Quality Control—Section 2;
 - 15 – Procurement Policy and Practices—Section 3;
 - 16 – Pipeline Disposition Procedures and Costs—Section 4;
 - 17 – Public Outreach Costs—Section 5;
 - 18 – Service Outage Performance—Section 6; and
 - 19 – Shareholder Costs Absorbed—Section 7.

20 **C. Gas Distribution Comparison Summary Tables**

⁶ GT&S Compliance Report Safety Appendix Table 2-1 Inspections Records Discrepancies Report, Table 2-5 IM Procedures Published in the Reporting Year and Table 2-6 GT&S RAMP Risks and Mitigations.

⁷ GT&S Compliance Report Transmission Pipeline Programs Appendix.

**TABLE 2-1
2023 RSAR
2023 GRC CYCLE GAS DISTRIBUTION EXPENSE COMPARISON SUMMARY
(THOUSANDS OF DOLLARS)**

Line No	A	B	C1	C2	D	E	F	G
	Type (O&M Expense or Capital)	Functional Area	Spending Category - MWC	MWC	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (E-D)	Percent Variance for 2023 (%) ((E-D)/D)
1	O&M Expense	Gas Distribution	Misc Expense	AB	46,497.9	7,635.8	(38,862.2)	-83.6%
2	O&M Expense	Gas Distribution	Perf Reimburs Wk for Oth	BC	0.0	(49.5)	(49.5)	100.0%
3	O&M Expense	Gas Distribution	Provide Field Service	DD	58,056.1	53,446.0	(4,610.0)	-7.9%
4	O&M Expense	Gas Distribution	G Dist Leak Survey	DE	37,857.8	30,124.8	(7,733.0)	-20.4%
5	O&M Expense	Gas Distribution	G&E T&D Locate and Mark	DF	77,910.9	60,048.1	(17,862.8)	-22.9%
6	O&M Expense	Gas Distribution	G Dist Cathodic Protection	DG	27,696.7	25,958.5	(1,738.3)	-6.3%
7	O&M Expense	Gas Distribution	Develop & Provide Training	DN	2,726.3	606.0	(2,120.3)	-77.8%
8	O&M Expense	Gas Distribution	G Dist Meter Protection	EX	12,709.0	1,005.4	(11,703.7)	-92.1%
9	O&M Expense	Gas Distribution	G Dist Operate System	FG	10,009.8	8,092.6	(1,917.3)	-19.2%
10	O&M Expense	Gas Distribution	G Dist Preventive Maint	FH	50,183.4	28,305.9	(21,877.5)	-43.6%
11	O&M Expense	Gas Distribution	G Dist Corrective Maint	FI/LW	102,075.9	95,255.2	(6,820.7)	-6.7%
12	O&M Expense	Gas Distribution	Gas Trans & Dist Sys Mapping	GF	4,307.4	5,247.0	939.6	21.8%
13	O&M Expense	Gas Distribution	Gas Trans & Dist Sys Modeling	GG	9,446.6	4,935.1	(4,511.5)	-47.8%
14	O&M Expense	Gas Distribution	Manage Energy Efficiency-NonBA	GM	4,592.7	3,453.7	(1,139.0)	-24.8%
15	O&M Expense	Gas Distribution	R&D Non-Balancing Account	GZ	4,000.3	2,130.1	(1,870.3)	-46.8%
16	O&M Expense	Gas Distribution	Change/Maint Used Gas Meters	HY	920.5	794.0	(126.5)	-13.7%
17	O&M Expense	Gas Distribution	G Dist Integrity Mgt (Non Bal)	JQ	29,530.5	21,211.7	(8,318.8)	-28.2%
18	O&M Expense	Gas Distribution	Maintain IT Apps & Infra	JV	13,486.3	5,761.1	(7,725.1)	-57.3%
19	O&M Expense	Gas Distribution	G Dist WRO - Maintenance	LK	7,188.8	9,298.3	2,109.5	29.3%
20	O&M Expense	Gas Distribution	Operational Management	OM	13,394.4	21,468.8	8,074.4	60.3%
21	O&M Expense	Gas Distribution	Operational Support	OS	27,379.6	14,149.4	(13,230.2)	-48.3%
22	O&M Expense	Gas Distribution	TOTAL		539,970.8	398,877.9	(141,093.0)	-26.1%

**TABLE 2-2
2023 RSAR
2023 GRC CYCLE GAS DISTRIBUTION CAPITAL COMPARISON SUMMARY
(THOUSANDS OF DOLLARS)**

Line No	A	B	C1	C2	D	E	F	G
	Type (O&M Expense or Capital)	Functional Area	Spending Category - MWC	MWC	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (E-D)	Percent Variance for 2023 (%) ((E-D)/D)
1	Capital	Gas Distribution	Tools & Equipment	05	6,762.8	4,323.5	(2,439.3)	-36.1%
2	Capital	Gas Distribution	G Dist Pipeline Repl Program	14	510,132.5	470,726.0	(39,406.5)	-7.7%
3	Capital	Gas Distribution	Gas Meter Protection-Capital	27	5,475.7	3,042.8	(2,432.8)	-44.4%
4	Capital	Gas Distribution	G Dist Customer Connects	29	72,000.0	101,690.7	29,690.7	41.2%
5	Capital	Gas Distribution	Build IT Apps & Infra	2F	12,365.3	15,187.8	2,822.5	22.8%
6	Capital	Gas Distribution	G Dist Repl/Convert Cust HPR	2K	0.0	18,630.6	18,630.6	100.0%
7	Capital	Gas Distribution	NGV - Station Infrastructure	31	4,889.5	3,489.7	(1,399.8)	-28.6%
8	Capital	Gas Distribution	G Dist Capacity	47	41,830.5	21,979.3	(19,851.2)	-47.5%
9	Capital	Gas Distribution	G Dist Ctrl Operations Assets	4A	530.5	11,693.1	11,162.6	2104.1%
10	Capital	Gas Distribution	G Dist Reliability General	50/3P	209,328.3	239,016.3	29,687.9	14.2%
11	Capital	Gas Distribution	G Dist WRO	51	74,841.9	71,891.4	(2,950.5)	-3.9%
12	Capital	Gas Distribution	G Dist Leak Repl/Emergency	52	1,640.5	4,647.7	3,007.2	183.3%
13	Capital	Gas Distribution	Install New Gas Meters	74	2,257.4	10,296.8	8,039.4	356.1%
14	Capital	Gas Distribution	Manage Buildings	78	0.0	7.4	7.4	100.0%
15	Capital	Gas Distribution	TOTAL		942,055.0	976,623.1	34,568.1	3.7%

1 D. Gas Distribution Comparison by MAT for Safety, Reliability, and Maintenance Work Tables

**TABLE 2-3
2023 RSAR
2023 GRC CYCLE GAS DISTRIBUTION EXPENSE COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll- up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) (((H-G)/G)*100)	K Spending Variance Explanation Required (Y/N)	L Percentage Variance Explanation Required (Y/N)	M Unit Type	N 2023 Imputed Adopted Units	O 2023 Actual Units	P Difference for 2023 (# of Units) (O-N)	Q Unit Percent Variance for 2023 (%) (((O-N)/N)*100)	R Unit Variance Explanation Required (Y/N)	S 2023 Cost Variance Explanation	T 2023 Unit Variance Explanation	Forecast			V Status	W Completion Status Statement	
																											U1 Scope (U, G, or T)	U2 Schedule (U, G, or T)	U3 Budget (U, G, or T)			
1	O&M Expense	Gas Distribution	DD	Provide Field Service	DDA	Field Services: Other	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 3, Ch 8	No	On-going	Annual	0.0	(25.8)	(25.8)	100.0%	NO	NO	non-utilized. This MAT has no measurable units because it is used for other support costs for field services.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	Over	Proceeding as Planned	N/A	
2	O&M Expense	Gas Distribution	DD	Provide Field Service	DDD	Pilot Reight	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 3, Ch 8	No	On-going	Annual	12,170.2	11,078.3	(1,091.9)	-9.0%	NO	NO	service tickets	138,946	110,292	(28,654)	-20.6%	YES	Below variance threshold.	Actual units were lower than imputed due to lower customer demand of Pilot Reight calls.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's customer demand driven work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to serve customers and provide reight service as needed.	
3	O&M Expense	Gas Distribution	DD	Provide Field Service	DDE	Appliance Adjs	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 3, Ch 8	No	On-going	Annual	1,153.0	1,557.4	404.4	35.1%	NO	NO	service tickets	12,142	13,949	1,807	14.9%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
4	O&M Expense	Gas Distribution	DD	Provide Field Service	DDF	Gas Fumigation Activity	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	3,595.1	2,840.5	(754.6)	-21.0%	NO	NO	service tickets	34,152	23,250	(10,902)	-31.9%	YES	Below variance threshold.	Actual units were lower than imputed due to lower customer demand of Fumigation Activity calls.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's customer demand driven work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to serve customers and provide fumigation service as needed.	
5	O&M Expense	Gas Distribution	DD	Provide Field Service	DDF	Gas Fumigation Activity	Loss of Containment on Gas Customer Connected Equipment	CCEPO-C015 Gas Fumigation	Ex 3, Ch 8	No	N/A	N/A	3,595.1	2,840.5	(754.6)	-21.0%	N/A	N/A	N/A	34,152	23,250	(10,902)	-31.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	O&M Expense	Gas Distribution	DD	Provide Field Service	DDG	Gas Leaks & Emergencies	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	31,401.0	32,227.0	826.1	2.6%	NO	NO	service tickets	160,514	120,636	(39,878)	-24.8%	YES	Below variance threshold.	Actual units were lower than imputed due to lower customer demand of Gas Leak & Emergency calls.	On-Target	On-Target	On-Target	Proceeding as Planned.	This program's customer demand driven work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort for customer safety.	
7	O&M Expense	Gas Distribution	DD	Provide Field Service	DDG	Gas Leaks & Emergencies	Loss of Containment on Gas Customer Connected Equipment	CCEPO-C007 Gas Leaks and Emergencies	Ex 3, Ch 8	No	N/A	N/A	31,401.0	32,227.0	826.1	2.6%	N/A	N/A	N/A	160,514	120,636	(39,878)	-24.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
8	O&M Expense	Gas Distribution	DD	Provide Field Service	DDK	Gas Start	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 3, Ch 8	No	On-going	Annual	5,142.1	4,243.0	(899.1)	-17.5%	NO	NO	service tickets	45,509	32,056	(13,453)	-29.6%	YES	Below variance threshold.	Actual units were lower than imputed due to lower customer demand of Gas Start calls.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's customer demand driven work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to serve customers and provide gas start service and safety checks.	
9	O&M Expense	Gas Distribution	DD	Provide Field Service	DDL	Gas Stop	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 3, Ch 8	No	On-going	Annual	4,594.7	1,525.5	(3,069.2)	-66.8%	NO	NO	service tickets	77,877	16,453	(61,424)	-78.9%	YES	Below variance threshold.	Actual units were lower than imputed due to lower customer demand of Gas Stop calls.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's customer demand driven work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to serve customers and provide gas stop service.	
10	O&M Expense	Gas Distribution	DD	Provide Field Service	DD#	Not assigned	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 3, Ch 8	No	On-going	Annual	0.0	0.1	0.1	100.0%	NO	NO	non-utilized. This MAT has no measurable units because it is used for adjustments related to labor and overheads under MWC DD.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	Over	Proceeding as Planned	N/A	
11	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DEA	Leak Survey	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	10,306.7	15,558.2	5,251.5	51.0%	NO	YES	services surveyed	455,760	1,233,158	777,398	170.6%	YES	Program expenses exceeded imputed regulatory values due to a shift from MAT DEF to MAT DEA, leveraging Advanced Mobile Leak Detection (Picarro) cars to reduce emissions in the gas system faster, and drive down risk in the system utilizing the Super Emittor Program.	Actual units were higher than imputed units due to a shift from MAT DEF to MAT DEA, leveraging Advanced Mobile Leak Detection (Picarro) cars to reduce emissions in the gas system faster, and drive down risk in the system utilizing the Super Emittor Program.	Over	Over	Over	Emergent	N/A	
12	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DEA	Leak Survey	Loss of Containment on Gas Customer Connected Equipment	CCEPO-C004 CCE Leak Management	Ex 3, Ch 10	No	N/A	N/A	10,306.7	15,558.2	5,251.5	51.0%	N/A	N/A	N/A	455,760	1,233,158	777,398	170.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
13	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DEA	Leak Survey	Loss of Containment on Gas Distribution Main or Service	LOCMD-C014 Distribution Leak Management	Ex 3, Ch 10	No	N/A	N/A	10,306.7	15,558.2	5,251.5	51.0%	N/A	N/A	N/A	455,760	1,233,158	777,398	170.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
14	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DEB	Special Leak Survey	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	2,810.1	3,436.2	626.1	22.3%	NO	NO	non-utilized. This program has no measurable units because distribution leak survey units are typically counted in services surveyed, and there are no measurable units for main surveys. Special leak survey is not limited to services and at times is a main only survey, and includes super emittor leak survey for carbon emissions reduction which tracks the percent of system surveyed.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
15	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DEB	Special Leak Survey	Loss of Containment on Gas Customer Connected Equipment	CCEPO-C004 CCE Leak Management	Ex 3, Ch 10	No	N/A	N/A	2,810.1	3,436.2	626.1	22.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
16	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DEB	Special Leak Survey	Loss of Containment on Gas Distribution Main or Service	LOCMD-C014 Distribution Leak Management	Ex 3, Ch 10	No	N/A	N/A	2,810.1	3,436.2	626.1	22.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
17	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DEC	Downgrade No Repair	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	3,522.1	4,340.4	818.3	23.2%	NO	NO	Leaks Downgraded with no repair	8,936	2,272	(6,664)	-74.6%	YES	Below variance threshold.	Actual units were lower than imputed units due to grade three leaks that were downgraded from a grade two leak now being charged to the respective repair MAT (FIG, FIP or FIP).	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to reduce risk across gas assets through inspection. This includes instances where a leak is downgraded from its original grade to a grade which is less hazardous, non-hazardous, or if the leak is no longer found.	
18	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DEC	Downgrade No Repair	Loss of Containment on Gas Distribution Main or Service	LOCMD-C014 Distribution Leak Management	Ex 3, Ch 10	No	N/A	N/A	3,522.1	4,340.4	818.3	23.2%	N/A	N/A	N/A	8,936	2,272	(6,664)	-74.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
19	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DED	Rechecks	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	2,562.0	862.4	(1,699.5)	-66.3%	NO	NO	# of rechecks performed	43,484	22,431	(21,053)	-48.4%	YES	Below variance threshold.	Actual units were lower than imputed units due: 1) leak find rates have decreased since the years 2020-2022 due to more frequent leak surveys; 2) the program was targeting leak repairs prior to the leak's first required recheck date, regardless of the compliance due date; and 3) Grade three leaks were added to the schedule for repair versus prior years where these leaks were not on a repair cycle.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to reduce risk across gas assets through follow up leak rechecks.	
20	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DED	Rechecks	Loss of Containment on Gas Distribution Main or Service	LOCMD-C014 Distribution Leak Management	Ex 3, Ch 10	No	N/A	N/A	2,562.0	862.4	(1,699.5)	-66.3%	N/A	N/A	N/A	43,484	22,431	(21,053)	-48.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

**TABLE 2-3
2023 RSAR
2023 GRC CYCLE GAS DISTRIBUTION EXPENSE COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll- up (Yes/No)	E Program / Project Life (Years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K Spending Variance Explanation Required (Y/N)	L Percentage Variance Explanation Required (Y/N)	M Unit Type	N 2023 Imputed Adopted Units	O 2023 Actual Units	P Difference for 2023 (# of Units) (O-N)	Q Unit Percent Variance for 2023 (%) ((O-N)/N*100)	R Unit Variance Explanation Required (Y/N)	S 2023 Cost Variance Explanation	T 2023 Unit Variance Explanation	Forecast			V Status	W Completion Status Statement				
																											U1 Scope (U, O, or T)	U2 Schedule (U, O, or T)	U3 Budget (U, O, or T)						
21	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DEE	Customer Calls	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	789.1	0.0	(789.1)	-100.0%	NO	NO	# of Customer Calls	3,693	0	(3,693)	-100.0%	YES	Below variance threshold.			Under	Under	Under	Canceled	This program is being decommissioned with work transitioning to either MAT FIG or MAT FIP if a leak is found, or to MAT DDG if no leak was found when a surveyor is called out to investigate a customer initiated odor call.			
22	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DEE	Customer Calls	Loss of Containment on Gas Customer Connected Equipment	CCEPO-C04 CCE Leak Management	Ex 3, Ch 10	No	N/A	N/A	789.1	0.0	(789.1)	-100.0%	N/A	N/A	N/A	3,693	0	(3,693)	-100.0%	N/A	N/A	N/A			N/A	N/A	N/A	N/A	N/A		
23	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DEE	Customer Calls	Loss of Containment on Gas Distribution Main or Service	LOCDM-C014 Distribution Leak Management	Ex 3, Ch 10	No	N/A	N/A	789.1	0.0	(789.1)	-100.0%	N/A	N/A	N/A	3,693	0	(3,693)	-100.0%	N/A	N/A	N/A			N/A	N/A	N/A	N/A	N/A		
24	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DEF	Advanced Mobile Technology	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	12,396.0	2,785.5	(9,610.5)	-77.5%	NO	YES	services surveyed	905,956	244,897	(661,059)	-73.0%	YES	Program expenses were below imputed regulatory values due to a shift from MAT DEF to MAT DEA, leveraging Advanced Mobile Leak Detection (Picarro) cars to reduce emissions in the gas system faster, and drive down risk in the system utilizing the Super Emitter Program.	Actual units were lower than imputed units due to a shift from MAT DEF to MAT DEA, leveraging Advanced Mobile Leak Detection (Picarro) cars to reduce emissions in the gas system faster, and drive down risk in the system utilizing the Super Emitter Program.	Under	Under	Under	Rescheduled	This program will not meet the imputed units as all DEF units have now been optimized to DEA units.				
25	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DEF	Advanced Mobile Technology	Loss of Containment on Gas Customer Connected Equipment	CCEPO-C04 CCE Leak Management	Ex 3, Ch 10	No	N/A	N/A	12,396.0	2,785.5	(9,610.5)	-77.5%	N/A	N/A	N/A	905,956	244,897	(661,059)	-73.0%	N/A	N/A	N/A			N/A	N/A	N/A	N/A	N/A		
26	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DEF	Advanced Mobile Technology	Loss of Containment on Gas Distribution Main or Service	LOCDM-C014 Distribution Leak Management	Ex 3, Ch 10	No	N/A	N/A	12,396.0	2,785.5	(9,610.5)	-77.5%	N/A	N/A	N/A	905,956	244,897	(661,059)	-73.0%	N/A	N/A	N/A			N/A	N/A	N/A	N/A	N/A		
27	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DEH	GD Capacity Updates	SRM Total	SRM Total	Ex 3, Ch 11	No	On-going	Annual	2,434.8	1,962.6	(472.2)	-19.4%	NO	NO	non-utilized: This program has no measurable units because it includes various activities to support pressure changes (e.g. engineering activities, repairs as needed, temporary piping needed) which cannot be measured in a meaningful way using a single unit of measure.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.			On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
28	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DEH	GD Capacity Updates	Insufficient Capacity to Meet Customer Demand	CPCTY-M007 Distribution Updates and Downrates	Ex 3, Ch 11	No	N/A	N/A	2,434.8	1,962.6	(472.2)	-19.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A	N/A	N/A	N/A		
29	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DE#	Not assigned	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	3,036.9	1,179.4	(1,857.5)	-61.2%	NO	NO	non-utilized: This MAT has no measurable units because it is used to record other support costs for leak survey.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.			On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
30	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DE#	Not assigned	Loss of Containment on Gas Customer Connected Equipment	CCEPO-C04 CCE Leak Management	Ex 3, Ch 10	No	N/A	N/A	3,036.9	1,179.4	(1,857.5)	-61.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A	N/A	N/A	N/A		
31	O&M Expense	Gas Distribution	DE	G Dist Leak Survey	DE#	Not assigned	Loss of Containment on Gas Distribution Main or Service	LOCDM-C014 Distribution Leak Management	Ex 3, Ch 10	No	N/A	N/A	3,036.9	1,179.4	(1,857.5)	-61.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A	N/A	N/A	N/A		
32	O&M Expense	Gas Distribution	DF	G&E T&D Locate and Mark	DFA	Locate and Mark	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	75,271.7	57,524.8	(17,746.9)	-23.6%	YES	YES	# of USA Tickets worked	863,682	611,600	(252,082)	-29.2%	YES	Program expenses were below imputed regulatory values due to the ticket increase from third-party driven work not materializing as expected. A change in the ticket system used by USA North 811 resulted in less engagement of excavators with the 811 system.	Actual units were lower than imputed units due to the ticket increase from third-party driven work not materializing as expected. A change in the ticket system used by USA North 811 resulted in less engagement of excavators with the 811 system.	On-Target	On-Target	Under	Proceeding as Planned	This program's demand driven work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to protect underground PG&E assets and maintain excavator safety in accordance with state and federal code.				
33	O&M Expense	Gas Distribution	DF	G&E T&D Locate and Mark	DFA	Locate and Mark	Loss of Containment on Gas Distribution Main or Service	LOCDM-C017 Locate and Mark - Distribution	Ex 3, Ch 8	No	N/A	N/A	75,271.7	57,524.8	(17,746.9)	-23.6%	N/A	N/A	N/A	863,682	611,600	(252,082)	-29.2%	N/A	N/A	N/A			N/A	N/A	N/A	N/A	N/A		
34	O&M Expense	Gas Distribution	DF	G&E T&D Locate and Mark	DFB	Locate and Mark - Standby	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	447.9	288.1	(159.8)	-35.7%	NO	NO	# of sites requiring a standby	642	528	(114)	-17.8%	NO	Below variance threshold.	Below variance threshold.			On-Target	On-Target	On-Target	Proceeding as Planned	This program has no end date. The purpose of this program is a continuing effort to protect underground PG&E assets and maintain excavator safety in accordance with state and federal code. This work is demand driven.		
35	O&M Expense	Gas Distribution	DF	G&E T&D Locate and Mark	DFB	Locate and Mark - Standby	Loss of Containment on Gas Distribution Main or Service	LOCDM-C017 Locate and Mark - Distribution	Ex 3, Ch 8	No	N/A	N/A	447.9	288.1	(159.8)	-35.7%	N/A	N/A	N/A	642	528	(114)	-17.8%	N/A	N/A	N/A			N/A	N/A	N/A	N/A	N/A		
36	O&M Expense	Gas Distribution	DF	G&E T&D Locate and Mark	DF#	Not assigned	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	2,191.2	2,235.1	43.9	2.0%	NO	NO	non-utilized: This MAT has no measurable units because it is used to record other support costs and fees for locate and mark.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.			On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
37	O&M Expense	Gas Distribution	DF	G&E T&D Locate and Mark	DF#	Not assigned	Loss of Containment on Gas Distribution Main or Service	LOCDM-C014 Distribution Leak Management	Ex 3, Ch 8	No	N/A	N/A	0.0	2,235.1	2,235.1	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A	N/A	N/A	N/A		
38	O&M Expense	Gas Distribution	DF	G&E T&D Locate and Mark	DF#	Not assigned	Loss of Containment on Gas Distribution Main or Service	LOCDM-C014 Distribution Leak Management	Ex 3, Ch 8	No	N/A	N/A	2,191.2	0.0	(2,191.2)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A	N/A	N/A	N/A		
39	O&M Expense	Gas Distribution	DG	G Dist Cathodic Protection	DGA	Cath Protect - Monitoring	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	4,189.3	5,055.7	866.4	20.7%	NO	NO	# of monitoring points read	79,622	97,642	18,020	22.6%	YES	Below variance threshold.			On-Target	On-Target	On-Target	Proceeding as Planned	N/A	Actual units were higher than imputed units due to additional assets that required annual cathodic protection monitoring identified by the Electrically Connected Isolated Steel Service Program (MAT DGE). Annual cathodic protection monitoring is required by 49 CFR Section 192 Subpart I - Requirements for Corrosion Control.		
40	O&M Expense	Gas Distribution	DG	G Dist Cathodic Protection	DGA	Cath Protect - Monitoring	Loss of Containment on Gas Distribution Main or Service	LOCDM-C018 Distribution Corrosion Control Program	Ex 3, Ch 9	No	N/A	N/A	4,189.3	5,055.7	866.4	20.7%	N/A	N/A	N/A	79,622	97,642	18,020	22.6%	N/A	N/A	N/A			N/A	N/A	N/A	N/A	N/A		
41	O&M Expense	Gas Distribution	DG	G Dist Cathodic Protection	DGB	Cath Protect-Troubleshoot	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	5,017.2	7,483.6	2,466.4	49.2%	NO	NO	# of CPA's troubleshoot	14,103	14,872	769	5.5%	NO	Below variance threshold.	Below variance threshold.			On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
42	O&M Expense	Gas Distribution	DG	G Dist Cathodic Protection	DGB	Cath Protect-Troubleshoot	Loss of Containment on Gas Distribution Main or Service	LOCDM-C018 Distribution Corrosion Control Program	Ex 3, Ch 9	No	N/A	N/A	5,017.2	7,483.6	2,466.4	49.2%	N/A	N/A	N/A	14,103	14,872	769	5.5%	N/A	N/A	N/A			N/A	N/A	N/A	N/A	N/A		
43	O&M Expense	Gas Distribution	DG	G Dist Cathodic Protection	DGC	Cath Protect - Rectifier Maint	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	633.2	1,359.7	726.5	114.7%	NO	NO	# of rectifiers maintained	3,942	4,060	118	3.0%	NO	Below variance threshold.	Below variance threshold.			On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
44	O&M Expense	Gas Distribution	DG	G Dist Cathodic Protection	DGC	Cath Protect - Rectifier Maint	Loss of Containment on Gas Distribution Main or Service	LOCDM-C018 Distribution Corrosion Control Program	Ex 3, Ch 9	No	N/A	N/A	633.2	1,359.7	726.5	114.7%	N/A	N/A	N/A	3,942	4,060	118	3.0%	N/A	N/A	N/A			N/A	N/A	N/A	N/A	N/A		
45	O&M Expense	Gas Distribution	DG	G Dist Cathodic Protection	DGD	Cath Protect - Resurvey	SRM Total	SRM Total	Ex 3, Ch 9	No	5 Years	7	3,795.7	3,569.7	(226.0)	-6.0%	NO	NO	non-utilized: This program has no measurable units because of the nature of work, however, survey mileage is tracked to indicate overall program progress. Survey findings may lead to additional work in MAT DGB or MAT FIP.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.			On-Target	On-Target	On-Target	Proceeding as Planned	N/A	

**TABLE 2-3
2023 RSAR
2023 GRC CYCLE GAS DISTRIBUTION EXPENSE COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll- up (Yes/No)	E Program / Project (Years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K Spending Variance Explanation Required (Y/N)	L Percentage Variance Explanation Required (Y/N)	M Unit Type	N 2023 Imputed Adopted Units	O 2023 Actual Units	P Difference for 2023 (# of Units) (O-N)	Q Unit Percent Variance for 2023 (%) ((O-N)/N*100)	R Unit Variance Explanation Required (Y/N)	S 2023 Cost Variance Explanation	T 2023 Unit Variance Explanation	Forecast			V Status	W Completion Status Statement	
																											U1	U2	U3			
																											Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)			
71	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHC	Maint-Prev-G Farm Tap	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	422.3	170.3	(252.0)	-59.7%	NO	NO	non-utilized. This program has no measurable units because it encompasses a variety of different O&M activities. A court of the operations completed is captured in SAP.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
72	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHC	Maint-Prev-G Farm Tap	SRM Total	SRM Total	Ex 3, Ch 8	No	N/A	N/A	422.3	170.3	(252.0)	-59.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
73	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHC	Maint-Prev-G Farm Tap	SRM Total	SRM Total	Ex 3, Ch 8	No	N/A	N/A	422.3	170.3	(252.0)	-59.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
74	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHE	Maint-Prev-G Svcs	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	4,808.3	4,348.0	(460.4)	-9.6%	NO	NO	# services repaired	2,606	1,656	(950)	-36.5%	YES	Below variance threshold.	Actual units were lower than imputed units due to a lower find rate than forecast.	On-Target	On-Target	On-Target	Proceeding as planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to complete remediations to the AOC (Abnormal Operating Conditions) backlog and preventative maintenance on PG&E's distribution services in a reasonable amount of time while at the same time also performing ongoing AOC findings and repairs with available resources.	
75	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHE	Maint-Prev-G Svcs	SRM Total	SRM Total	Ex 3, Ch 8	No	N/A	N/A	4,808.3	4,348.0	(460.4)	-9.6%	N/A	N/A	N/A	2,606	1,656	(950)	-36.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
76	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHG	Maint-Prev-G Main Vlv	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	2,503.6	1,462.3	(1,041.3)	-41.6%	NO	NO	non-utilized. This program has no measurable units because it encompasses a variety of different O&M activities. A court of the operations completed is captured in SAP.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
77	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHG	Maint-Prev-G Main Vlv	SRM Total	SRM Total	Ex 3, Ch 8	No	N/A	N/A	2,503.6	1,462.3	(1,041.3)	-41.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
78	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHI	Maint-Corr G Svc Valves	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	8,267.2	1,904.8	(6,362.4)	-77.0%	NO	YES	# of valves replaced	32,345	3,045	(29,300)	-90.6%	YES	Program expenses were below imputed regulatory values due to reauthorization in support of higher risk or compliance work.	Actual units were lower than imputed units due to reauthorization in support of higher risk or compliance work.	On-Target	On-Target	On-Target	Proceeding as planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to complete remediations to the AOC (Abnormal Operating Conditions) backlog and preventative maintenance on PG&E's service valves in a reasonable amount of time while at the same time also performing ongoing AOC findings and repairs with available resources.	
79	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHI	Maint-Corr G Svc Valves	SRM Total	SRM Total	Ex 3, Ch 8	No	N/A	N/A	8,267.2	1,904.8	(6,362.4)	-77.0%	N/A	N/A	N/A	32,345	3,045	(29,300)	-90.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
80	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHI	Gas Non-Recurring Projects	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	3,884.0	1,379.3	(2,504.7)	-64.5%	NO	NO	non-utilized. This MAT has no measurable units because it includes one-time non-recurring maintenance projects.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as planned	N/A	
81	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHI	Gas Non-Recurring Projects	SRM Total	SRM Total	Ex 3, Ch 8	No	N/A	N/A	3,884.0	1,379.3	(2,504.7)	-64.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
82	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHK	GD Corrosion AC Inspections	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	145.3	200.5	55.2	38.0%	NO	NO	# of inspections completed	461	597	136	29.5%	YES	Below variance threshold.	Actual units were higher than imputed units due to increased volume of quarterly Atmospheric Corrosion inspections in 2023. Atmospheric Corrosion inspections are required for all Distribution Spans on a 3-year basis. Because of this, the number of spans inspected each year varies.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
83	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHK	GD Corrosion AC Inspections	SRM Total	SRM Total	Ex 3, Ch 9	No	N/A	N/A	145.3	200.5	55.2	38.0%	N/A	N/A	N/A	461	597	136	29.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
84	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHL	Atmospheric Corrn Main Rep	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	3,243.2	2,413.7	(829.5)	-25.6%	NO	NO	# spans repaired	145	143	(2)	-1.4%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
85	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHL	Atmospheric Corrn Main Rep	SRM Total	SRM Total	Ex 3, Ch 9	No	N/A	N/A	3,243.2	2,413.7	(829.5)	-25.6%	N/A	N/A	N/A	145	143	(2)	-1.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
86	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHM	Atmospheric Corrn Serv Rep	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	12,498.8	3,701.1	(8,797.8)	-70.4%	NO	YES	# services repaired	56,822	13,229	(43,593)	-76.7%	YES	Program expenses were below imputed regulatory values due to completing a lower volume of service riser wrap damage repairs observed as Abnormal Operating Conditions (AOCs) during annual Atmospheric Corrosion inspections materialized at a lower rate than expected, and 2) a records review was performed for existing 2017-2019 wrap damage locations to validate whether these locations still required mitigation.	Actual units were lower than imputed units due to 1) completing a lower volume of service riser wrap damage repairs observed as Abnormal Operating Conditions (AOCs) during annual Atmospheric Corrosion inspections materialized at a lower rate than expected, and 2) a records review was performed for existing 2017-2019 wrap damage locations to validate whether these locations still required mitigation.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to repair service riser wrap damage and Atmospheric Corrosion. It is too early to determine whether the reduced find rate for riser wrap units will result in completing less units compared to adopted for the rate case cycle.	
87	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHM	Atmospheric Corrn Serv Rep	SRM Total	SRM Total	Ex 3, Ch 9	No	N/A	N/A	12,498.8	3,701.1	(8,797.8)	-70.4%	N/A	N/A	N/A	56,822	13,229	(43,593)	-76.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
88	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHN	Atmospheric Corrn Reg Sln Rprs	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	1,050.6	1,746.6	696.0	66.2%	NO	NO	# of reg stations mitigated	60	51	(9)	-15.0%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
89	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHN	Atmospheric Corrn Reg Sln Rprs	SRM Total	SRM Total	Ex 3, Ch 9	No	N/A	N/A	1,050.6	1,746.6	696.0	66.2%	N/A	N/A	N/A	60	51	(9)	-15.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
90	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHO	PM SCADA	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	1,501.5	1,132.4	(369.1)	-24.6%	NO	NO	non-utilized. This program has no measurable units because it encompasses a variety of different O&M activities. A court of the operations completed is captured in SAP.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
91	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHO	PM SCADA	SRM Total	SRM Total	Ex 3, Ch 8	No	N/A	N/A	1,501.5	1,132.4	(369.1)	-24.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
92	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHO	PM SCADA	SRM Total	SRM Total	Ex 3, Ch 8	No	N/A	N/A	1,501.5	1,132.4	(369.1)	-24.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
93	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHO	PM SCADA	SRM Total	SRM Total	Ex 3, Ch 8	No	N/A	N/A	1,501.5	1,132.4	(369.1)	-24.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
94	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHP	CM SCADA	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	776.8	575.8	(201.0)	-25.9%	NO	NO	non-utilized. This program has no measurable units because it encompasses a variety of different O&M activities. A court of the operations completed is captured in SAP.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
95	O&M Expense	Gas Distribution	FH	G Dist Preventive Maint	FHP	CM SCADA	SRM Total	SRM Total	Ex 3, Ch 8	No	N/A	N/A	776.8	575.8	(201.0)	-25.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

**TABLE 2-3
2023 RSAR
2023 GRC CYCLE GAS DISTRIBUTION EXPENSE COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll- up (Yes/No)	E Program / Project Life (Years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K Spending Variance Explanation Required (Y/N)	L Percentage Variance Explanation Required (Y/N)	M Unit Type	N 2023 Imputed Adopted Units	O 2023 Actual Units	P Difference for 2023 (# of Units) (O-N)	Q Unit Percent Variance for 2023 (%) ((O-N)/N*100)	R Unit Variance Explanation Required (Y/N)	S 2023 Cost Variance Explanation	T 2023 Unit Variance Explanation	Forecast			V Status	W Completion Status Statement		
																											U1 Scope (U, O, or T)	U2 Schedule (U, O, or T)	U3 Budget (U, O, or T)				
121	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FJ	Maint-Corr: G Main Dig-in	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	995.7	1,278.9	283.2	28.4%	NO	NO	# of main dig-ins repaired	298	158	(140)	-47.0%	YES	Below variance threshold.				Proceeding as planned	The program's demand driven work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to remediate dig-in main leaks and other third party damage.			
122	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FJ	Maint-Corr: G Main Dig-in	Loss of Containment on Gas Distribution Main or Service	LOCMD-C014 Distribution Leak Management	Ex 3, Ch 10	No	N/A	N/A	995.7	1,278.9	283.2	28.4%	N/A	N/A	N/A	298	158	(140)	-47.0%	N/A	N/A						N/A	N/A	
123	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIK	Maint-Corr: G Svc Dig-in	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	1,595.9	2,085.2	489.3	30.7%	NO	NO	# of service dig-ins repaired	1,617	1,221	(396)	-24.5%	YES	Below variance threshold.				Proceeding as planned	The program's demand driven work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to remediate dig-in service leaks and other third party damage.			
124	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIK	Maint-Corr: G Svc Dig-in	Loss of Containment on Gas Distribution Main or Service	LOCMD-C014 Distribution Leak Management	Ex 3, Ch 10	No	N/A	N/A	1,595.9	2,085.2	489.3	30.7%	N/A	N/A	N/A	1,617	1,221	(396)	-24.5%	N/A	N/A						N/A	N/A	
125	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIM	Major Event-Distribution Gas	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	490.2	186.5	(303.7)	-62.0%	NO	NO	non-utilized. This MAT has no measurable units because it is used only in the event of a major event (i.e. wildfire, flood, earthquake) and does not include a standard unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold.				Proceeding as Planned	N/A	Not-Utilized.		
126	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIM	Major Event-Distribution Gas	Loss of Containment on Gas Customer Connected Equipment	CCEPO-C009 Major Event - Distribution Gas	Ex 3, Ch 10	No	N/A	N/A	490.2	186.5	(303.7)	-62.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						N/A	N/A
127	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIM	Major Event-Distribution Gas	Insufficient Capacity to Meet Customer Demand	CPCTY-C007 Operate Transmission Regulator Station	Ex 3, Ch 10	No	N/A	N/A	490.2	186.5	(303.7)	-62.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						N/A	N/A
128	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIM	Major Event-Distribution Gas	Insufficient Capacity to Meet Customer Demand	CPCTY-C008 Major Event - Distribution Gas	Ex 3, Ch 10	No	N/A	N/A	490.2	186.5	(303.7)	-62.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						N/A	N/A
129	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIM	Major Event-Distribution Gas	Loss of Containment on Gas Distribution Main or Service	LOCMD-C008 Major Event - Distribution Gas	Ex 3, Ch 10	No	N/A	N/A	490.2	186.5	(303.7)	-62.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						N/A	N/A
130	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIM	Major Event-Distribution Gas	Large Overpressure Event Downstream of Gas M&C Facility	LRGOP-C013 Major Event - Distribution Gas	Ex 3, Ch 10	No	N/A	N/A	490.2	186.5	(303.7)	-62.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						N/A	N/A
131	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIM	Major Event-Distribution Gas	Loss of Containment at Gas Measrm & Cntrl / Cmpnrs & Prcasn Faci	MCOPF-C013 Major Event - Distribution Gas	Ex 3, Ch 10	No	N/A	N/A	490.2	186.5	(303.7)	-62.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						N/A	N/A
132	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIO	Gas Overbuild - G	SRM Total	SRM Total	Ex 3, Ch 4	No	On-going	Annual	853.9	3,066.6	2,212.7	259.1%	NO	NO	number of services repaired	76	171	95	125.0%	YES	Below variance threshold.				Proceeding as Planned	Actual units were higher than imputed units due to: 1) more encroachments being identified in the field than anticipated (higher find rate), and 2) execution of a backlog of potential encroachments.			
133	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIO	Gas Overbuild - G	Loss of Containment on Gas Customer Connected Equipment	CCEPO-C002 Encroachment Program	Ex 3, Ch 4	Yes	N/A	N/A	213.5	766.7	553.2	259.1%	N/A	N/A	N/A	19	43	24	125.0%	N/A	N/A						N/A	N/A	
134	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIO	Gas Overbuild - G	Loss of Containment on Gas Distribution Main or Service	LOCMD-C009 Encroachment Program	Ex 3, Ch 4	Yes	N/A	N/A	640.4	2,300.0	1,659.5	259.1%	N/A	N/A	N/A	57	128	71	125.0%	N/A	N/A						N/A	N/A	
135	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIPLWH TM	Maint-Corr: G_Svc Leak_BG	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	31,649.4	27,893.8	(3,755.6)	-11.9%	NO	NO	number of service leak repairs, below ground	7,484	4,509	(2,975)	-39.6%	YES	Below variance threshold.				Proceeding as planned	The program's demand driven work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to mitigate leaks.			
136	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIPLWH TM	Maint-Corr: G_Svc Leak_BG	Loss of Containment on Gas Distribution Main or Service	LOCMD-C014 Distribution Leak Management	Ex 3, Ch 10	No	On-going	Annual	31,649.4	27,893.8	(3,755.6)	-11.9%	N/A	N/A	N/A	7,484	4,509	(2,975)	-39.8%	N/A	N/A						N/A	N/A	
137	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIQ	Atmospheric Corrosion Monitoring	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	1,356.1	457.6	(898.5)	-66.3%	NO	NO	number of locations inspected	15,524	33,508	17,984	115.8%	YES	Below variance threshold.				Proceeding as Planned	Actual units were higher than imputed units due to completing work in 2023 previously delayed by COVID-19.			
138	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIQ	Atmospheric Corrosion Monitoring	Loss of Containment on Gas Customer Connected Equipment	CCEPO-C017 Atmospheric Corrosion, Metersets	Ex 3, Ch 10	Yes	N/A	N/A	678.1	457.6	(220.5)	-32.5%	N/A	N/A	N/A	7,762	16,754	8,992	115.8%	N/A	N/A						N/A	N/A	
139	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIQ	Atmospheric Corrosion Monitoring	Loss of Containment on Gas Distribution Main or Service	LOCMD-C020 Atmospheric Corrosion, Mains and Services	Ex 3, Ch 10	Yes	N/A	N/A	678.1	915.2	237.2	35.0%	N/A	N/A	N/A	7,762	16,754	8,992	115.8%	N/A	N/A						N/A	N/A	
140	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIR	Tee-Cap Replacement Program	SRM Total	SRM Total	Ex 3, Ch 4	No	On-going	Annual	2,209.0	2,040.5	(168.5)	-7.6%	NO	NO	number of tee-caps replaced	1,165	1,196	31	2.7%	NO	Below variance threshold.				Proceeding as Planned	Below variance threshold.			
141	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIR	Tee-Cap Replacement Program	Loss of Containment on Gas Distribution Main or Service	LOCMD-C010 Tee Cap Replacement Program	Ex 3, Ch 4	No	N/A	N/A	2,209.0	2,040.5	(168.5)	-7.6%	N/A	N/A	N/A	1,165	1,196	31	2.7%	N/A	N/A						N/A	N/A	
142	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIS	Leak Survey Meter Repair	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	9,658.5	8,215.6	(1,442.8)	-14.9%	NO	NO	number of meters repaired	80,000	56,458	(23,542)	-29.4%	YES	Below variance threshold.				Proceeding as Planned	Actual units were lower than imputed units due to prioritization in support of higher risk or compliance work.			
143	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIS	Leak Survey Meter Repair	Loss of Containment on Gas Customer Connected Equipment	CCEPO-C004 CCE Leak Management	Ex 3, Ch 10	No	N/A	N/A	9,658.5	8,215.6	(1,442.8)	-14.9%	N/A	N/A	N/A	80,000	56,458	(23,542)	-29.4%	N/A	N/A						N/A	N/A	
144	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIF	Not assigned	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	4,149.0	1,726.7	(2,422.3)	-58.4%	NO	NO	non-utilized. This MAT has no measurable units because it is primarily used for Gas Distribution mappers for performing work that is not billable to orders, including map connection notifications from the Corrective Action Program (CAP), map delineation requests, request for work notifications (RWs), operating diagrams, Gas Distribution Geographic Information System (GD-GIS) corrections, data requests, and mapping tasks on orders that are financially closed.	N/A	N/A	N/A	N/A	NO	Below variance threshold.				Proceeding as Planned	Not-Utilized.			
145	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIF	Not assigned	Loss of Containment on Gas Customer Connected Equipment	CCEPO-C004 CCE Leak Management	Ex 3, Ch 10	No	N/A	N/A	4,149.0	1,726.7	(2,422.3)	-58.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						N/A	N/A
146	O&M Expense	Gas Distribution	FI	G Dist Corrective Maint	FIF	Not assigned	Loss of Containment on Gas Distribution Main or Service	LOCMD-C014 Distribution Leak Management	Ex 3, Ch 10	No	N/A	N/A	4,149.0	1,726.7	(2,422.3)	-58.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						N/A	N/A
147	O&M Expense	Gas Distribution	GF	Gas Trans & Dist Sys Mapping	GFO	Mapping Support-Distribution	SRM Total	SRM Total	Ex 3, Ch 13	No	On-going	Annual	4,307.4	4,573.2	265.8	6.2%	NO	NO	non-utilized. This MAT has no measurable units because it is primarily intended for Gas Distribution mappers for performing work that is not billable to orders, including map connection notifications from the Corrective Action Program (CAP), map delineation requests, request for work notifications (RWs), operating diagrams, Gas Distribution Geographic Information System (GD-GIS) corrections, data requests, and mapping tasks on orders that are financially closed.	N/A	N/A	N/A	N/A	NO	Below variance threshold.				Proceeding as Planned	Not-Utilized.			
148	O&M Expense	Gas Distribution	GF	Gas Trans & Dist Sys Mapping	GFQ	GT&D Data Management	SRM Total	SRM Total	N/A	No	On-going	Annual	0.0	673.7	673.7	100.0%	NO	NO	non-utilized. This MAT has no measurable units because it is primarily intended for Gas data enhancements in GD-GIS, Palantir Foundry implementation for Gas to enable data analysis, discrepancy identification and correction across core systems of record (i.e. GD-GIS and SAP), and Gas data maturity work in alignment with company data management standards.	N/A	N/A	N/A	N/A	NO	Below variance threshold.				Proceeding as Planned	Not-Utilized.			
149	O&M Expense	Gas Distribution	GG	Gas Trans & Dist Sys Modeling	GGA	Gas System Planning_GSO	SRM Total	SRM Total	Ex 3, Ch 11	No	On-going	Annual	6,923.6	4,935.1	(1,988.6)	-28.7%	NO	NO	non-utilized. This MAT has no measurable units because it is used to record labor costs.	N/A	N/A	N/A	N/A	NO	Below variance threshold.				Proceeding as Planned	Not-Utilized.			
150	O&M Expense	Gas Distribution	GG	Gas Trans & Dist Sys Modeling	GGA	Gas System Planning_GSO	Insufficient Capacity to Meet Customer Demand	CPCTY-C003 Gas System Planning	Ex 3, Ch 11	No	N/A	N/A	6,923.6	4,935.1	(1,988.6)	-28.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A						N/A	N/A	

**TABLE 2-3
2023 RSAR
2023 GRC CYCLE GAS DISTRIBUTION EXPENSE COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll- up (Yes/No)	E Program / Project Life (Years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K Spending Variance Explanation Required (Y/N)	L Percentage Variance Explanation Required (Y/N)	M Unit Type	N 2023 Imputed Adopted Units	O 2023 Actual Units	P Difference for 2023 (# of Units) (O-N)	Q Unit Percent Variance for 2023 (%) ((O-N)/N*100)	R Unit Variance Explanation Required (Y/N)	S 2023 Cost Variance Explanation	T 2023 Unit Variance Explanation	Forecast			V Status	W Completion Status Statement	
																											U1 Scope (U, O, or T)	U2 Schedule (U, O, or T)	U3 Budget (U, O, or T)			
151	O&M Expense	Gas Distribution	GG	Gas Trans & Dist Sys Modeling	GG#	Not assigned	SRM Total	SRM Total	Ex 3, Ch 11	No	On-going	Annual	2,522.9	0.0	(2,522.9)	-100.0%	NO	NO	non-utilized: This MAT has no measurable units because it is used to record labor costs.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
152	O&M Expense	Gas Distribution	GG	Gas Trans & Dist Sys Modeling	GG#	Not assigned	Insufficient Capacity to Meet Customer Demand	OPCTY-C004 Gas Distribution Portfolio Management and Engineering	Ex 3, Ch 11	No	N/A	N/A	2,522.9	0.0	(2,522.9)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
153	O&M Expense	Gas Distribution	GM	Manage Energy Efficiency-NorBA	GMC	GD LNG/CNG Station	SRM Total	SRM Total	Ex 3, Ch 6	No	On-going	Annual	4,592.7	3,453.7	(1,139.0)	-24.8%	NO	NO	non-utilized: This MAT has no measurable units because it is used to record costs for CNG station maintenance for various types of assets which are not comparable.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
154	O&M Expense	Gas Distribution	GM	Manage Energy Efficiency-NorBA	GMC	GD LNG/CNG Station	Loss of Containment on CNG Station Equipment	CNGEQ-C002 Gas Distribution LNG/CNG Station O&M	Ex 3, Ch 6	No	N/A	N/A	4,592.7	3,453.7	(1,139.0)	-24.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
155	O&M Expense	Gas Distribution	HY	Change/Maint Used Gas Meters	HY1	G Meter Atmospheric Corrosion	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	920.5	788.4	(132.1)	-14.3%	NO	NO	# of meters repaired	16,077	9,143	(6,934)	-43.1%	YES	Below variance threshold.	Actual units were lower than imputed units due to a reduction in incoming workload due to fewer identified instances of Atmospheric Corrosion.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to remediate Atmospheric Corrosion on customer gas meters and regulators as identified through the Atmospheric Corrosion Inspection Program.	
156	O&M Expense	Gas Distribution	HY	Change/Maint Used Gas Meters	HY1	G Meter Atmospheric Corrosion	Loss of Containment on Gas Customer Connected Equipment	CCEPO-C008 Meter Set Atmospheric Corrosion Remediation	Ex 3, Ch 8	No	N/A	N/A	920.5	788.4	(132.1)	-14.3%	N/A	N/A	N/A	16,077	0	(16,077)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
157	O&M Expense	Gas Distribution	HY	Change/Maint Used Gas Meters	HY#	Not assigned	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	0.0	5.6	5.6	100.0%	NO	NO	non-utilized: This MAT has no measurable units because it reflects standard cost variance related to field services provider cost centers.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	Over	Proceeding as Planned	N/A	
158	O&M Expense	Gas Distribution	JQ	G Dist Integrity Mgt	JQA	DIMP Leak Survey	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	861.3	843.5	(17.8)	-2.1%	NO	NO	non-utilized: This MAT has no measurable units as the scope of work varies from year to year.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
159	O&M Expense	Gas Distribution	JQ	G Dist Integrity Mgt	JQA	DIMP Leak Survey	Loss of Containment on Gas Distribution Main or Service	LOCDM-C014 Distribution Leak Management	Ex 3, Ch 10	No	N/A	N/A	861.3	843.5	(17.8)	-2.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
160	O&M Expense	Gas Distribution	JQ	G Dist Integrity Mgt	JQC	Mark and Locate Program	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	3,581.9	3,091.0	(491.0)	-13.7%	NO	NO	non-utilized: This MAT has no measurable units because it is used to record labor costs.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
161	O&M Expense	Gas Distribution	JQ	G Dist Integrity Mgt	JQC	Mark and Locate Program	Loss of Containment on Gas Distribution Main or Service	LOCDM-C025 Dig-In Reduction Team	Ex 3, Ch 8	No	N/A	N/A	3,581.9	3,091.0	(491.0)	-13.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
162	O&M Expense	Gas Distribution	JQ	G Dist Integrity Mgt	JQD	DIMP Emergent Work	SRM Total	SRM Total	Ex 3, Ch 4	No	On-going	Annual	4,162.1	1,531.7	(2,630.5)	-63.2%	NO	NO	non-utilized: This program has no measurable units because DIMP emergent work consists of work resulting from risk analysis and operational events. This work includes laboratory analysis, engineering, and incident investigations. Projects vary considerably and are not comparable so this work is not utilized.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
163	O&M Expense	Gas Distribution	JQ	G Dist Integrity Mgt	JQD	DIMP Emergent Work	Loss of Containment on Gas Customer Connected Equipment	CCEPO-C005 DIMP Emergent Work	Ex 3, Ch 4	Yes	N/A	N/A	208.1	76.6	(131.5)	-63.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
164	O&M Expense	Gas Distribution	JQ	G Dist Integrity Mgt	JQD	DIMP Emergent Work	Loss of Containment on Gas Distribution Main or Service	LOCDM-C011 DIMP Emergent Work	Ex 3, Ch 4	Yes	N/A	N/A	3,954.0	1,455.1	(2,498.9)	-63.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
165	O&M Expense	Gas Distribution	JQ	G Dist Integrity Mgt	JQE	Plastic Program	SRM Total	SRM Total	Ex 3, Ch 4	No	On-going	Annual	330.8	169.9	(160.9)	-48.6%	NO	NO	non-utilized: This program has no measurable units because it oversees selecting, testing, and development of plastic materials, tools and construction methods for PG&E's plastic gas distribution system. Projects vary considerably and are not comparable so this work is not utilized.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
166	O&M Expense	Gas Distribution	JQ	G Dist Integrity Mgt	JQE	Plastic Program	Loss of Containment on Gas Distribution Main or Service	LOCDM-C012 Plastics Program	Ex 3, Ch 4	No	N/A	N/A	330.8	169.9	(160.9)	-48.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
167	O&M Expense	Gas Distribution	JQ	G Dist Integrity Mgt	JQG	Fitting Mitigation Program	SRM Total	SRM Total	Ex 3, Ch 4	No	On-going	Annual	2,431.5	1,984.5	(447.0)	-18.4%	NO	NO	Fittings Mitigated	480	139	(341)	-71.0%	YES	Below variance threshold.	Actual units were lower than imputed units due to reauthorization in support of higher risk or compliance work.	Under	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to mitigate concern for mechanical fittings with known higher risk of failure. To do so, exploratory digs are performed and (if found) high risk fittings are repaired, replaced or replaced.	
168	O&M Expense	Gas Distribution	JQ	G Dist Integrity Mgt	JQG	Fitting Mitigation Program	Loss of Containment on Gas Distribution Main or Service	LOCDM-M005 Fitting Mitigation Program	Ex 3, Ch 4	No	N/A	N/A	2,431.5	1,984.5	(447.0)	-18.4%	N/A	N/A	N/A	480	139	(341)	-71.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
169	O&M Expense	Gas Distribution	JQ	G Dist Integrity Mgt	JQK	Cross Bored Sewer Project	SRM Total	SRM Total	Ex 3, Ch 4	No	On-going	Annual	13,294.7	13,439.4	144.6	1.1%	NO	NO	# of inspections	19,313	8,085	(11,228)	-58.1%	YES	Below variance threshold.	Actual units were lower than imputed units due to shift from work in Sacramento, Mission, and Diablo to higher risk units in San Francisco which cost more.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E 23 GRC period. The purpose of this program is to inspect sewer facilities that potentially have a cross bore, based on the method of installation of the gas facility.	
170	O&M Expense	Gas Distribution	JQ	G Dist Integrity Mgt	JQK	Cross Bored Sewer Project	Loss of Containment on Gas Distribution Main or Service	LOCDM-M006 Cross Bored Sewer Project	Ex 3, Ch 4	No	N/A	N/A	13,294.7	13,439.4	144.6	1.1%	N/A	N/A	N/A	19,313	8,085	(11,228)	-58.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
171	O&M Expense	Gas Distribution	JQ	G Dist Integrity Mgt	JQL	DIMP Program Management	SRM Total	SRM Total	Ex 3, Ch 4	No	On-going	Annual	4,868.1	151.9	(4,716.2)	-96.9%	NO	NO	non-utilized: This MAT has no measurable units because it is used to record labor costs and is not used to measure gas plant units repaired or replaced.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
172	O&M Expense	Gas Distribution	JQ	G Dist Integrity Mgt	JQL	DIMP Program Management	Loss of Containment on Gas Customer Connected Equipment	CCEPO-C010 DIMP Program Management	Ex 3, Ch 4	Yes	N/A	N/A	243.4	7.6	(235.8)	-96.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
173	O&M Expense	Gas Distribution	JQ	G Dist Integrity Mgt	JQL	DIMP Program Management	Loss of Containment on Gas Distribution Main or Service	LOCDM-C021 DIMP Program Management	Ex 3, Ch 4	Yes	N/A	N/A	4,624.7	144.3	(4,480.4)	-96.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
174	O&M Expense	Gas Distribution	OM	Operational Management	OM#	Not assigned	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 3, Ch 13	No	On-going	Annual	13,394.4	21,468.8	8,074.4	60.3%	NO	YES	non-utilized: This MAT has no measurable units because it is used to record labor and employee-related costs to provide supervision and management support.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Actual program expenses were above imputed regulatory values due to higher supervision and management labor costs. MWC OM represents labor costs to supervise or manage PG&E personnel who charge their time directly to orders. net of overhead allocations applied between capital and expense. The overhead is applied to both MWC OM and MWC OS, which represents labor costs in support of personnel. Due to a higher starting point in overall costs, driven by a mixture of different resources, a larger amount remained recorded in expense MWC OM.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A

(a) Includes below ground grade 3 leak repairs recorded under Leak Abatement MWC LW.

**TABLE 2-4
2023 RSAR
2023 GRC CYCLE GAS DISTRIBUTION CAPITAL COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll-up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$ (H-G))	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K Opening Variance Explanation Required (Y/N)	L Percentage Variance Explanation Required (Y/N)	M Unit Type	N 2023 Imputed Adopted Units	O 2023 Actual Units	P Difference for 2023 (# of Units) (O-N)	Q Unit Percent Variance for 2023 (%) ((O-N)/N*100)	R Unit Variance Explanation Required (Y/N)	S 2023 Cost Variance Explanation	T 2023 Unit Variance Explanation	Forecast			V Status	W Completion Status Statement		
																											U1 Scope (U, O, or T)	U2 Schedule (U, O, or T)	U3 Budget (U, O, or T)				
1	Capital	Gas Distribution	14	G Dist Pipeline Repl Program	14A	Pipeline Repl Pgm-Mains & Svcs	SRM Total	SRM Total	Ex 3, Ch 4	No	On-going	Annual	102,467.7	97,302.5	(5,165.3)	-5.0%	NO	NO	feet of main installed	128,832	93,523	(35,309)	-27.4%	YES	Below variance threshold.	Actual units were lower than imputed units due to weather impacts, crew reallocation to support higher risk or compliance work and projects being rescheduled due to high unit cost.	On-Target	On-Target	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to replace all cast iron, bare steel, non-cathodically protected, priority steel main installed before 1941 and may include post-1940 higher risk steel projects based on risk modeling.		
2	Capital	Gas Distribution	14	G Dist Pipeline Repl Program	14A	Pipeline Repl Pgm-Mains & Svcs	Loss of Containment on Gas Distribution Main or Service	LOCDM-M001 Pipeline Replacement Program (Steel)	Ex 3, Ch 4	No	N/A	N/A	102,467.7	97,302.5	(5,165.3)	-5.0%	N/A	N/A	N/A	128,832	93,523	(35,309)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3	Capital	Gas Distribution	14	G Dist Pipeline Repl Program	14B	Copper Service Replacements	SRM Total	SRM Total	Ex 3, Ch 4	No	On-going	Annual	0.0	757.8	757.8	100.0%	NO	NO	# of services replaced	0	2	2	100.0%	YES	Below variance threshold.	Actual units were higher than imputed units as this MAT is no longer used for capital service replacements driven by risk of copper. This work is tracked in MAT 50B moving forward.	On-Target	On-Target	Over	Proceeding as Planned	N/A		
4	Capital	Gas Distribution	14	G Dist Pipeline Repl Program	14B	Copper Service Replacements	Loss of Containment on Gas Distribution Main or Service	LOCDM-M007 Copper Service Replacements	Ex 3, Ch 4	No	N/A	N/A	0.0	757.8	757.8	100.0%	N/A	N/A	N/A	0	2	2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5	Capital	Gas Distribution	14	G Dist Pipeline Repl Program	14D	Plastic Pipe Replace Main/Svc	SRM Total	SRM Total	Ex 3, Ch 4	No	On-going	Annual	407,664.8	372,665.7	(34,999.1)	-8.6%	YES	NO	feet of main installed	733,920	444,837	(289,083)	-39.4%	YES	Program expenditures were below imputed regulatory values due to reprioritization in support of higher risk or compliance work.	Actual units were lower than imputed units due to weather impacts, crew reallocation to support higher risk or compliance work and projects being rescheduled due to high unit cost.	On-Target	On-Target	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to mitigate risks associated with leaks on distribution mains and services installed before 1985 with Aldy4 plastic and similar plastic materials.		
6	Capital	Gas Distribution	14	G Dist Pipeline Repl Program	14D	Plastic Pipe Replace Main/Svc	Loss of Containment on Gas Distribution Main or Service	LOCDM-M002 Pipeline Replacement Program (Plastic)	Ex 3, Ch 4	No	N/A	N/A	407,664.8	372,665.7	(34,999.1)	-8.6%	N/A	N/A	N/A	733,920	444,837	(289,083)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
7	Capital	Gas Distribution	27	Gas Meter Protection-Capital	27A	Meter Protection-Capital	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	5,475.7	3,042.8	(2,432.9)	-44.4%	NO	NO	# of services corrected	164	89	(95)	-51.6%	YES	Below variance threshold.	Actual units were lower than imputed units due to reprioritization in support of higher risk or compliance work.	Under	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to complete remediations to the AOC backlog in a reasonable amount of time while at the same time also performing ongoing AOC findings and repairs with available resources.		
8	Capital	Gas Distribution	27	Gas Meter Protection-Capital	27A	Meter Protection-Capital	Loss of Containment on Gas Customer Connected Equipment	CCEPO-C001 Meter Protection	Ex 3, Ch 8	Yes	N/A	N/A	219.0	121.7	(97.3)	-44.4%	N/A	N/A	N/A	7	4	(4)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
9	Capital	Gas Distribution	27	Gas Meter Protection-Capital	27A	Meter Protection-Capital	Loss of Containment on Gas Distribution Main or Service	LOCDM-C001 Meter Protection	Ex 3, Ch 8	Yes	N/A	N/A	5,256.7	2,921.1	(2,335.5)	-44.4%	N/A	N/A	N/A	177	85	(91)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10	Capital	Gas Distribution	2K	G Dist Repl/Convert Cust HPR	2K (a)	Cust HPR Reg Sta Convert Main	SRM Total	SRM Total	Ex 3, Ch 6	No	On-going	Annual	0.0	18,630.6	18,630.6	100.0%	NO	YES	# of HPRs mitigated	0	73	73	100.0%	YES	Program expenditures exceeded imputed values because PG&E executed work prior to receiving the 2023 GRC Final Decision which adopted \$0 for this program.	Actual units were higher than imputed units because PG&E executed work prior to receiving the 2023 GRC Final Decision which adopted \$0 for this program.	On-Target	On-Target	Over	Proceeding as Planned	N/A		
11	Capital	Gas Distribution	2K	G Dist Repl/Convert Cust HPR	2K (a)	Cust HPR Reg Sta Convert Main	Large Overpressure Event Downstream of Gas M&C Facility	LRGOP-M005 HPR Replacement	Ex 3, Ch 6	No	On-going	Annual	0.0	18,630.6	18,630.6	100.0%	N/A	N/A	N/A	0	73	73	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
12	Capital	Gas Distribution	2K	G Dist Repl/Convert Cust HPR	2K (a)	Cust HPR Reg Sta Convert Main	Loss of Contain at Gas Measrm & Cntrl / Cmpn & Procsn Faci	MCCPF-M002 HPR Replacement	Ex 3, Ch 6	No	On-going	Annual	0.0	18,630.6	18,630.6	100.0%	N/A	N/A	N/A	0	73	73	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
13	Capital	Gas Distribution	31	NGV - Station Infrastructure	31A	31A-LNG/CNG Stations	SRM Total	SRM Total	Ex 3, Ch 6	No	On-going	Annual	4,889.5	3,489.7	(1,399.8)	-28.6%	NO	NO	non-utilized: This MAT has no measurable units because it is used to record costs for CNG station upgrades. The type of upgrades performed at stations are not comparable.	NA	NA	NA	NA	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
14	Capital	Gas Distribution	31	NGV - Station Infrastructure	31A	31A-LNG/CNG Stations	Loss of Containment on CNG Station Equipment	CNDEQ-C001 GV-Station Infrastructure	Ex 3, Ch 6	No	N/A	N/A	4,889.5	3,489.7	(1,399.8)	-28.6%	N/A	N/A	N/A	NA	NA	NA	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
15	Capital	Gas Distribution	47	G Dist Capacity	47B	Cons/Acq New Fac-G-Cap-Mains	SRM Total	SRM Total	Ex 3, Ch 11	No	On-going	Annual	35,761.0	20,682.0	(15,078.9)	-42.2%	NO	YES	feet of main	46,200	11,612	(34,588)	-74.9%	YES	Program expenditures were below imputed regulatory values due to a lower materialization of system capacity demand than adopted. As a result, fewer capacity projects were installed than adopted and total spend was lower than adopted.	Actual units were lower than imputed units due to a lower materialization of system capacity demand than adopted. As a result, fewer capacity pipe units were installed than adopted.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to install gas main to provide additional capacity.		
16	Capital	Gas Distribution	47	G Dist Capacity	47B	Cons/Acq New Fac-G-Cap-Mains	Insufficient Capacity to Meet Customer Demand	CPCPY-C009 Construct/Acquire New Facilities - Gas - Capital Mains	Ex 3, Ch 11	No	N/A	N/A	35,761.0	20,682.0	(15,078.9)	-42.2%	N/A	N/A	N/A	46,200	11,612	(34,588)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17	Capital	Gas Distribution	47	G Dist Capacity	47C	Cons/Acq New Fac-G-Cap-RegSta	SRM Total	SRM Total	Ex 3, Ch 11	No	On-going	Annual	5,881.9	922.9	(4,959.1)	-84.3%	NO	NO	total # reg stations addressed	3	1	(2)	-66.7%	YES	Below variance threshold.	Actual units were lower than imputed units due to a lower materialization of system capacity load demand than adopted. As a result, fewer regulator stations were installed than adopted.	On-Target	On-Target	On-Target	Proceeding as Planned	This program has no end date. This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to build new regulator stations to address capacity needs as necessary.		
18	Capital	Gas Distribution	47	G Dist Capacity	47C	Cons/Acq New Fac-G-Cap-RegSta	Insufficient Capacity to Meet Customer Demand	CPCPY-C010 Construct/Acquire New Facilities - Gas Capital Regulator Sta	Ex 3, Ch 11	No	N/A	N/A	5,881.9	922.9	(4,959.1)	-84.3%	N/A	N/A	N/A	3	1	(2)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
19	Capital	Gas Distribution	47	G Dist Capacity	47D	Cons/Acq New Fac-G-Cap-RegSta	SRM Total	SRM Total	Ex 3, Ch 11	No	On-going	Annual	128.6	366.4	237.7	184.8%	NO	NO	# reg station components	4	6	2	50.0%	YES	Below variance threshold.	Actual units were higher than imputed units due to higher materialization of system capacity load demand than adopted. As a result, more components were installed than adopted.	On-Target	On-Target	On-Target	Proceeding as Planned	This program has no end date. This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to address capacity needs as necessary through component replacement.		
20	Capital	Gas Distribution	47	G Dist Capacity	47D	Cons/Acq New Fac-G-Cap-RegSta	Insufficient Capacity to Meet Customer Demand	CPCPY-C011 Construct/Acquire New Facilities - Gas Capital Replace Regu	Ex 3, Ch 11	No	N/A	N/A	128.6	366.4	237.7	184.8%	N/A	N/A	N/A	4	6	2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
21	Capital	Gas Distribution	47	G Dist Capacity	47F	Cons/Acquire New Fac-G-Cap-Oth	SRM Total	SRM Total	Ex 3, Ch 11	No	On-going	Annual	59.0	8.0	(50.9)	-86.4%	NO	NO	non-utilized: This MAT has no measurable units because it is used to record capacity related costs that are not captured by any other MAT.	NA	NA	NA	NA	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
22	Capital	Gas Distribution	47	G Dist Capacity	47F	Cons/Acquire New Fac-G-Cap-Oth	Insufficient Capacity to Meet Customer Demand	CPCPY-C012 Construct/Acquire New Facilities - Gas Capital Other	Ex 3, Ch 11	No	N/A	N/A	59.0	8.0	(50.9)	-86.4%	N/A	N/A	N/A	NA	NA	NA	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
23	Capital	Gas Distribution	4A	G Dist Cntrl Operations Assets	4AF	ERX Pressure Monitoring-6	SRM Total	SRM Total	Ex 3, Ch 11	No	On-going	Annual	530.5	375.7	(154.8)	-29.2%	NO	NO	# electronic pressure recorders	10	0	(10)	-100.0%	YES	Below variance threshold.	Actual units were lower than imputed units due to a process change in which we moved away from a revocable agreement to an easement process. As a result, turn around time is increased and no units were installed in 2023.	On-Target	On-Target	On-Target	Proceeding as Planned	This program has no end date. This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to install electronic pressure recording devices to monitor a regulator station or hydraulically independent system's performance and to maintain system visibility.		
24	Capital	Gas Distribution	4A	G Dist Cntrl Operations Assets	4AF	ERX Pressure Monitoring-6	Insufficient Capacity to Meet Customer Demand	CPCPY-M005 SCADA Service Monitor	Ex 3, Ch 11	No	N/A	N/A	530.5	375.7	(154.8)	-29.2%	N/A	N/A	N/A	10	0	(10)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
25	Capital	Gas Distribution	4A	G Dist Cntrl Operations Assets	4AF	ERX Pressure Monitoring-6	Large Overpressure Event Downstream of Gas M&C Facility	LRGOP-M006 SCADA Service Monitor	Ex 3, Ch 11	No	N/A	N/A	530.5	375.7	(154.8)	-29.2%	N/A	N/A	N/A	10	0	(10)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**TABLE 2-4
2023 RSAR
2023 GRC CYCLE GAS DISTRIBUTION CAPITAL COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll-up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K Sponsoring Variance Explanation Required (Y/N)	L Percentage Variance Explanation Required (Y/N)	M Unit Type	N 2023 Imputed Adopted Units	O 2023 Actual Units	P Difference for 2023 (# of Units) (O-N)	Q Unit Percent Variance for 2023 (%) ((O-N)/N*100)	R Unit Variance Explanation Required (Y/N)	S 2023 Cost Variance Explanation	T 2023 Unit Variance Explanation	Forecast			V Status	W Completion Status Statement						
																											U1 Scope (U, O, or T)	U2 Schedule (U, O, or T)	U3 Budget (U, O, or T)								
26	Capital	Gas Distribution	4A	G Dist Cntl Operations Assets	4AF	ERX Pressure Monitoring-6	Loss of Control at Gas Measrm & Cntrl / Cmpn & Prcssn Facil	MCCPF-M005 SCADA Service Monitor	Ex 3, Ch 11	No	N/A	N/A	\$30.5	\$37.5	(154.8)	-29.2%	N/A	N/A	N/A	10	0	(10)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
27	Capital	Gas Distribution	4A	G Dist Cntl Operations Assets	4AM	Reg Stat Mtrr Dual No Flow-3	SRM Total	SRM Total	Ex 3, Ch 11	No	On-going	Annual	0.0	11,317.4	11,317.4	100.0%	NO	YES	remote terminal units installed	0	27	27	100.0%	YES	Program expenditures exceeded imputed regulatory values because PG&E executed work prior to receiving the 2023 GRC Final Decision which adopted \$0 for this program.	Actual units were higher than imputed units because PG&E executed work prior to receiving the 2023 GRC Final Decision which adopted \$0 for this program.	On-Target	On-Target	Over	Proceeding as Planned	N/A						
28	Capital	Gas Distribution	50	G Dist Reliability General	50A	Impr Rel/Dep - Gas Mains	SRM Total	SRM Total	Ex 3, Ch 4	No	On-going	Annual	52,051.1	47,051.6	(4,999.5)	-9.6%	NO	NO	feet of main installed	79,200	50,495	(28,705)	-36.2%	YES	Below variance threshold.	Actual units were lower than imputed units due to weather impacts, crew reallocation to support higher risk or compliance work and projects being rescheduled due to high unit cost.	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to mitigate risks associated with deterioration or reduced reliability, and includes non-leak replacements driven by corrosion.	On-Target	On-Target	Over	Proceeding as Planned	N/A					
29	Capital	Gas Distribution	50	G Dist Reliability General	50A	Impr Rel/Dep - Gas Mains	Loss of Containment on Gas Distribution Main or Service	LOCDM-C002 Improve Reliability/System Dependability - Gas Main	Ex 3, Ch 4	No	N/A	N/A	52,051.1	47,051.6	(4,999.5)	-9.6%	N/A	N/A	N/A	79,200	50,495	(28,705)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
30	Capital	Gas Distribution	50	G Dist Reliability General	50B	Impr Rel/Dep - Gas Services	SRM Total	SRM Total	Ex 3, Ch 4	No	On-going	Annual	12,094.9	25,005.9	12,911.0	106.7%	NO	YES	# of services replaced	427	608	181	42.4%	YES	Program expenditures exceeded imputed regulatory values as additional units were required to be completed due to compliance drivers such as corrosion.	Actual units were higher than imputed units as additional units were required to be completed due to compliance drivers such as corrosion.	Over	Over	Over	Emergent	N/A						
31	Capital	Gas Distribution	50	G Dist Reliability General	50B	Impr Rel/Dep - Gas Services	Loss of Containment on Gas Distribution Main or Service	LOCDM-C003 Improve Reliability/System Dependability - Gas Services	Ex 3, Ch 4	No	On-going	Annual	12,094.9	25,005.9	12,911.0	106.7%	N/A	N/A	N/A	427	608	181	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
32	Capital	Gas Distribution	50	G Dist Reliability General	50C	Impr Rel/Dep Gas Regulation	SRM Total	SRM Total	Ex 3, Ch 6	No	On-going	Annual	49,887.2	45,583.4	(4,303.9)	-8.6%	NO	NO	# of regulator stations addressed	25	16	(9)	-36.0%	YES	Below variance threshold.	Actual units were lower than imputed units due to re-prioritization in support of higher risk or compliance work, which delayed some work into 2024.	This program has no end date. This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to replace and rebuild regulator stations as necessary.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A					
33	Capital	Gas Distribution	50	G Dist Reliability General	50C	Impr Rel/Dep Gas Regulation	Large Overpressure Event Downstream of Gas M&C Facility	LRGDP-C008 Gas Distribution Reg Station Rebuild	Ex 3, Ch 6	No	N/A	N/A	49,887.2	45,583.4	(4,303.9)	-8.6%	N/A	N/A	N/A	25	16	(9)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
34	Capital	Gas Distribution	50	G Dist Reliability General	50C	Impr Rel/Dep Gas Regulation	Loss of Control at Gas Measrm & Cntrl / Cmpn & Prcssn Facil	MCCPF-C009 Gas Distribution Reg Station Rebuild	Ex 3, Ch 6	No	N/A	N/A	49,887.2	45,583.4	(4,303.9)	-8.6%	N/A	N/A	N/A	25	16	(9)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
35	Capital	Gas Distribution	50	G Dist Reliability General	50D	Impr Rel/Dep Gas CP Systems	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	1,383.5	1,291.0	(92.5)	-6.7%	NO	NO	RMUs, Casing Mitigation and CP Systems	80	62	(18)	-22.5%	YES	Below variance threshold.	Actual units were lower than imputed units due to fewer rectifiers and Remote Monitoring Units (RMUs) being replaced compared to the anticipated failure rate. Of the 62 units completed, 11 were RMUs, 47 were rectifiers, and 4 were span re-coat projects exceeding 100 Feet.	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to perform span re-coats over 100 Feet long, replace rectifiers, and replace Remote Monitoring Units (RMUs) which are connected to rectifiers.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A					
36	Capital	Gas Distribution	50	G Dist Reliability General	50D	Impr Rel/Dep Gas CP Systems	Loss of Containment on Gas Distribution Main or Service	LOCDM-C018 Distribution Corrosion Control Program	Ex 3, Ch 9	No	N/A	N/A	1,383.5	1,291.0	(92.5)	-6.7%	N/A	N/A	N/A	80	11	(69)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
37	Capital	Gas Distribution	50	G Dist Reliability General	50E	Impr Rel/Dep Gas Valves	SRM Total	SRM Total	Ex 3, Ch 4	No	On-going	Annual	5,775.8	10,229.8	4,454.0	77.1%	NO	NO	# of valves installed	100	74	(26)	-26.0%	YES	Below variance threshold.	Actual units were lower than imputed units as PG&E performed fewer find-it/fix-it valve replacements than expected. This is because the find rate was lower compared to previous years. This is "find-it and fix-it" type of work.	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to replace gas distribution valves of size 2 inch or greater.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A					
38	Capital	Gas Distribution	50	G Dist Reliability General	50E	Impr Rel/Dep Gas Valves	Loss of Containment on Gas Distribution Main or Service	LOCDM-C004 Improve Reliability/Dependability - Gas Valves	Ex 3, Ch 4	No	N/A	N/A	5,775.8	10,229.8	4,454.0	77.1%	N/A	N/A	N/A	100	74	(26)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
39	Capital	Gas Distribution	50	G Dist Reliability General	50F	Impr Rel/Dep Gas Other Equip	SRM Total	SRM Total	Ex 3, Ch 4	No	On-going	Annual	488.0	1,193.9	705.9	144.7%	NO	NO	non-utilized: This MAT has no measurable units because units of measure such as number of deactivated services, valves, and mains are not comparable.	NA	NA	NA	NA	NO	Below variance threshold.	Not-Utilized.	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to remove/cut-off idle stubs and risers identified in the field by locate and mark.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A					
40	Capital	Gas Distribution	50	G Dist Reliability General	50F	Impr Rel/Dep Gas Other Equip	Loss of Containment on Gas Distribution Main or Service	LOCDM-C005 Improve Reliability/Dependability - Gas Other Equipment	Ex 3, Ch 4	No	N/A	N/A	488.0	1,193.9	705.9	144.7%	N/A	N/A	N/A	NA	NA	NA	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
41	Capital	Gas Distribution	50	G Dist Reliability General	50G/3PB (b)	Impr Rel/Dep-Gas Svc Regd Leak	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	14,809.4	24,303.0	9,493.6	64.1%	NO	NO	# of services replaced	978	1,036	58	5.9%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
42	Capital	Gas Distribution	50	G Dist Reliability General	50G/3PB (b)	Impr Rel/Dep-Gas Svc Regd Leak	Loss of Containment on Gas Distribution Main or Service	LOCDM-C014 Distribution Leak Management	Ex 3, Ch 10	No	N/A	N/A	14,809.4	24,303.0	9,493.6	64.1%	N/A	N/A	N/A	978	1,036	58	5.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
43	Capital	Gas Distribution	50	G Dist Reliability General	50H	Impr Rel/Dep-CutOff Idle G Svc	SRM Total	SRM Total	Ex 3, Ch 4	No	On-going	Annual	3,161.0	3,925.0	764.0	24.2%	NO	NO	cut off idle services	313	215	(98)	-31.3%	YES	Below variance threshold.	Actual units were lower than imputed units as the number of idle stubs/risers addressed were reduced in order to fund other compliance-driven work such as encroachments.	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to remove/cut-off idle stubs and risers identified in the field by locate and mark.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A					
44	Capital	Gas Distribution	50	G Dist Reliability General	50H	Impr Rel/Dep-CutOff Idle G Svc	Loss of Containment on Gas Distribution Main or Service	LOCDM-C006 Improve Reliability/System Dependability - Cut-Off Idle Gas	Ex 3, Ch 4	No	N/A	N/A	3,161.0	3,925.0	764.0	24.2%	N/A	N/A	N/A	313	215	(98)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
45	Capital	Gas Distribution	50	G Dist Reliability General	50I	Impr Rel/Dep-Deac Only-M/R/V	SRM Total	SRM Total	Ex 3, Ch 4	No	On-going	Annual	8,924.2	10,239.5	1,315.4	14.7%	NO	NO	non-utilized: This MAT has no measurable units because units of measure such as number of deactivated services, valves, and mains are not comparable.	NA	NA	NA	NA	NO	Below variance threshold.	Not-Utilized.	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to remove/cut-off idle stubs and risers identified in the field by locate and mark.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A					
46	Capital	Gas Distribution	50	G Dist Reliability General	50I	Impr Rel/Dep-Deac Only-M/R/V	Loss of Containment on Gas Distribution Main or Service	LOCDM-C007 Improve Reliability/System Dependability - Deac Only-M/R/V	Ex 3, Ch 4	No	N/A	N/A	8,924.2	10,239.5	1,315.4	14.7%	N/A	N/A	N/A	NA	NA	NA	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
47	Capital	Gas Distribution	50	G Dist Reliability General	50J	Gas Overbuild - G	SRM Total	SRM Total	Ex 3, Ch 4	No	On-going	Annual	16,738.4	21,049.6	4,311.3	25.8%	NO	NO	# of services replaced	578	466	(112)	-19.4%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
48	Capital	Gas Distribution	50	G Dist Reliability General	50J	Gas Overbuild - G	Loss of Containment on Gas Distribution Main or Service	LOCDM-C009 Encroachment Program	Ex 3, Ch 4	No	N/A	N/A	16,738.4	21,049.6	4,311.3	25.8%	N/A	N/A	N/A	578	462	(116)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
49	Capital	Gas Distribution	50	G Dist Reliability General	50K	Emergent Leaking Main Replace	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	5,757.3	2,557.1	(3,200.3)	-55.6%	NO	NO	feet of main installed	7,707	1,947	(5,760)	-74.7%	YES	Below variance threshold.	Actual units were lower than imputed units due to re-prioritization in support of higher risk or compliance work.	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to mitigate leaks.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A					
50	Capital	Gas Distribution	50	G Dist Reliability General	50K	Emergent Leaking Main Replace	Loss of Containment on Gas Distribution Main or Service	LOCDM-C014 Distribution Leak Management	Ex 3, Ch 10	No	N/A	N/A	5,757.3	2,557.1	(3,200.3)	-55.6%	N/A	N/A	N/A	7,707	1,947	(5,760)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

**TABLE 2-4
2023 RSAR
2023 GRC CYCLE GAS DISTRIBUTION CAPITAL COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll-up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K Spending Variance Explanation Required (Y/N)	L Percentage Variance Explanation Required (Y/N)	M Unit Type	N 2023 Imputed Adopted Units	O 2023 Actual Units	P Difference for 2023 (# of Units) (O-N)	Q Unit Percent Variance for 2023 (%) ((O-N)/N*100)	R Unit Variance Explanation Required (Y/N)	S 2023 Cost Variance Explanation	T 2023 Unit Variance Explanation	Forecast			V Status	W Completion Status Statement	
																											U1 Scope (U, O, or T)	U2 Schedule (U, O, or T)	U3 Budget (U, O, or T)			
51	Capital	Gas Distribution	50	G Dist Reliability General	50L	Impr Rel Dep Gas Reg Component	SRM Total	SRM Total	Ex 3, Ch 6	No	On-going	Annual	10,669.3	13,723.3	3,054.0	28.6%	NO	NO	# regulator station components	150	130	(20)	-13.3%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
52	Capital	Gas Distribution	50	G Dist Reliability General	50L	Impr Rel Dep Gas Reg Component	Large Overpressure Event Downstream of Gas M&C Facility	LRGOP-C009 Gas Distribution Reg Station Component Replacements	Ex 3, Ch 6	No	N/A	N/A	10,669.3	13,723.3	3,054.0	28.6%	N/A	N/A	N/A	150	130	(20)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
53	Capital	Gas Distribution	50	G Dist Reliability General	50L	Impr Rel Dep Gas Reg Component	Loss of Contm at Gas Measrm & Cntrl / Cmpsrn & Procsn Facil	MCCPF-C010 Gas Distribution Reg Station Component Replacements	Ex 3, Ch 6	No	N/A	N/A	10,669.3	13,723.3	3,054.0	28.6%	N/A	N/A	N/A	150	130	(20)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
54	Capital	Gas Distribution	50	G Dist Reliability General	50M/3PC ^(a)	Complex-Gas Svc Rep Leak	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	1,125.0	1,717.3	592.3	52.6%	NO	NO	# of services	63	40	(23)	-36.5%	YES	Below variance threshold.	Actual units were lower than imputed units due to less actual service replacements materializing than expected. The GRC imputed units was based on an average conversation rate from a below ground leak to a full service replacement; however, when executing the work, the number of services replaced varies.	On-Target	On-Target	On-Target	Proceeding as planned	This program's demand-driven work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to mitigate leaks.	
55	Capital	Gas Distribution	50	G Dist Reliability General	50M/3PC ^(a)	Complex-Gas Svc Rep Leak	Loss of Containment on Gas Distribution Main or Service	LOCDM-C014 Distribution Leak Management	Ex 3, Ch 10	No	N/A	N/A	1,125.0	1,717.3	592.3	52.6%	N/A	N/A	N/A	63	40	(23)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
56	Capital	Gas Distribution	50	G Dist Reliability General	50N	GD Over Pressure Protection	SRM Total	SRM Total	Ex 3, Ch 6	No	On-going	Annual	0.0	10,259.4	10,259.4	100.0%	NO	YES	# of stations addressed	0	68	68	100.0%	YES	Program expenditures exceeded imputed regulatory values because PG&E executed work prior to receiving the 2023 GRC Final Decision which adopted \$0 for this program.	Actual units were higher than imputed units because PG&E executed work prior to receiving the 2023 GRC Final Decision which adopted 0 units for this program.	On-Target	On-Target	Over	Proceeding as Planned	N/A	
57	Capital	Gas Distribution	50	G Dist Reliability General	50N	GD Over Pressure Protection	Large Overpressure Event Downstream of Gas M&C Facility	LRGOP-M003 GD Overpressure Protection	Ex 3, Ch 6	No	N/A	N/A	0.0	10,259.4	10,259.4	100.0%	N/A	N/A	N/A	0	68	68	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
58	Capital	Gas Distribution	50	G Dist Reliability General	50P	ImprRel/SysDepd-G-DpWellAnode	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	17,989.1	14,505.1	(3,484.0)	-19.4%	NO	NO	# of CP system installed	65	58	(7)	-10.8%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
59	Capital	Gas Distribution	50	G Dist Reliability General	50P	ImprRel/SysDepd-G-DpWellAnode	Loss of Containment on Gas Distribution Main or Service	LOCDM-C018 Distribution Corrosion Control Program	Ex 3, Ch 9	No	N/A	N/A	17,989.1	14,505.1	(3,484.0)	-19.4%	N/A	N/A	N/A	65	58	(7)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
60	Capital	Gas Distribution	50	G Dist Reliability General	50Q	Casings	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	2,698.4	3,137.0	438.6	16.3%	NO	NO	RMUs, Casing Mitigation and CP Systems	10	8	(2)	-20.0%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is Casing removal or remediation of size greater than 100 feet.	
61	Capital	Gas Distribution	50	G Dist Reliability General	50Q	Casings	Loss of Containment on Gas Distribution Main or Service	LOCDM-C019 Casings	Ex 3, Ch 9	No	N/A	N/A	2,698.4	3,137.0	438.6	16.3%	N/A	N/A	N/A	10	8	(2)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
62	Capital	Gas Distribution	50	G Dist Reliability General	50R	Rep/Inst EmerShdn&SafeOps Val	SRM Total	SRM Total	Ex 3, Ch 4	No	On-going	Annual	5,775.8	3,244.4	(2,531.4)	-43.8%	NO	NO	# of valves installed	100	36	(64)	-64.0%	YES	Below variance threshold.	Actual units were lower than imputed units due to re-prioritization in support of higher risk or compliance work.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is install new gas distribution valves of size 2 inch or greater.	
63	Capital	Gas Distribution	50	G Dist Reliability General	50R	Rep/Inst EmerShdn&SafeOps Val	Loss of Containment on Gas Distribution Main or Service	LOCDM-M004 New Valve Installations	Ex 3, Ch 4	No	N/A	N/A	5,775.8	3,244.4	(2,531.4)	-43.8%	N/A	N/A	N/A	100	36	(64)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
64	Capital	Gas Distribution	52	G Dist Leak Repl/Emergen cy	52#	Not assigned	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	0.0	82.0	82.0	100.0%	NO	NO	non-utilized: This MAT has no measurable units because it is used to record other support costs for third party damage service repair.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized	On-Target	On-Target	On-Target	Proceeding as Planned		
65	Capital	Gas Distribution	52	G Dist Leak Repl/Emergen cy	52B	Emerg Resp-G-Dig-Ins-Svcs	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	1,343.9	2,855.3	1,511.4	112.5%	NO	NO	# of services replaced	178	151	(27)	-15.2%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as planned	N/A	
66	Capital	Gas Distribution	52	G Dist Leak Repl/Emergen cy	52B	Emerg Resp-G-Dig-Ins-Svcs	Loss of Containment on Gas Distribution Main or Service	LOCDM-C014 Distribution Leak Management	Ex 3, Ch 10	No	N/A	N/A	1,343.9	2,855.3	1,511.4	112.5%	N/A	N/A	N/A	178	151	(27)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
67	Capital	Gas Distribution	52	G Dist Leak Repl/Emergen cy	52C	Emerg Resp-G-Dig-Ins-Main	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	296.5	1,710.2	1,413.7	476.7%	NO	NO	feet of main replaced	1,122	1,288	166	14.8%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as planned	N/A	
68	Capital	Gas Distribution	52	G Dist Leak Repl/Emergen cy	52C	Emerg Resp-G-Dig-Ins-Main	Loss of Containment on Gas Distribution Main or Service	LOCDM-C014 Distribution Leak Management	Ex 3, Ch 10	No	N/A	N/A	296.5	1,710.2	1,413.7	476.7%	N/A	N/A	N/A	1,122	1,288	166	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
69	Capital	Gas Distribution	74	Install New Gas Meters	74A	Install Regulators	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	2,257.4	10,296.8	8,039.4	356.1%	NO	NO	# of regulators	6,833	28,283	21,450	313.9%	YES	Below variance threshold.	Actual units were higher than imputed units due to a change in reporting practice which resulted in more regulator replacement units being captured in this MAT. Historically, regulator changes completed while in the field performing other gas field services work was captured in the MAT that drove the initial job.	Over	Over	Over	Emergent	N/A	
70	Capital	Gas Distribution	74	Install New Gas Meters	74A	Install Regulators	Loss of Containment on Gas Customer Connected Equipment	CCEPO-C016 Gas Reg Replacement	Ex 3, Ch 8	No	N/A	N/A	2,257.4	10,296.8	8,039.4	356.1%	N/A	N/A	N/A	6,833	28,283	21,450	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

(a) 2023 actual costs by MAT are as follows: 2KA - \$10,773.7, 2KB - \$1,193.8, and 2KC - \$6,663.0 (costs in thousands). 2023 actual units by MAT are as follows: 2KA - 56, 2KB - 0, and 2KC - 17.
(b) Includes below ground Grade 3 leak repairs recorded under Leak Abatement MWC 3P.

1 **E. Gas Distribution MWC Descriptions – Expense**

2 **MWC AB – Support** – Encompasses miscellaneous gas distribution costs
3 not aligned with other MWCs or MATs, including, but not limited to:
4 (1) miscellaneous expenses such as industry association dues and
5 miscellaneous contract spend; and (2) collection point for zero sum allocation
6 type work such as Standard Cost Variance (SCV),⁸ blanket purchase orders and
7 working stock.

8 This MWC does not relate directly to safety and/or reliability and/or
9 maintenance.

10 **MWC BC – Perform Reimbursable Work for Others** – Includes costs and
11 the reimbursable expenses incurred to provide mutual assistance support to
12 other utilities.

13 This MWC does not relate directly to safety and/or reliability and/or
14 maintenance.

15 **MWC DD – Provide Field Service** – Includes customer generated requests
16 for service that require site visit by a field technician, as well as immediate
17 response standby costs. Service requests include investigating reports of
18 possible gas leaks, carbon monoxide monitoring, customer requests for
19 stop/starts of gas service, appliance pilot relights, appliance adjustment and
20 safety checks.

21 This MWC relates to safety and/or reliability and/or maintenance as it
22 includes customer generated requests for service that require site visit by field
23 technician to address issues such as possible gas leaks or safety checks.

⁸ SCV represents the difference between actual costs incurred and the amount charged out by employees at a predetermined rate (i.e., standard cost). Costs charged out are calculated using productive hours multiplied by a planned standard hourly rate. When results match initial estimates, SCV should be minimal. That said, while initial estimates do factor in external factors (e.g., extreme weather) based on historical data, actual results inevitably vary resulting in a SCV. The following is a simplified example of the standard cost calculation and how SCVs occur. Based on the historic pattern of Team A's productivity and anticipated workload, it is projected that Team A will have a monthly cost of \$100,000 for 10 employees and will perform 1,000 hours of work in a month. The resulting standard rate for Team A is \$100 per hour (\$100,000/1,000 hours). If Team A completes 1,000 hours of work in the month according to plan, Team A will have a zero SCV. However, if Team A does not complete all the planned work, e.g., due to unanticipated bad weather, and only completes 950 hours of work, Team A will have an unfavorable SCV of \$5,000 (50 hours × \$100 per hour).

1 **MWC DE – Leak Survey** – Includes periodic or routine leak surveys
2 performed by PG&E on its distribution system that are necessary to comply with
3 pipeline safety regulations. MWC DE also includes special leak surveys
4 conducted by PG&E on its gas distribution system that are outside of the routine
5 leak survey schedule for either operating reasons or to assess the integrity of
6 the pipe.

7 This MWC relates to safety and/or reliability and/or maintenance as it
8 includes periodic or routine leak surveys performed by PG&E on its distribution
9 system that are necessary to comply with pipeline safety regulations.

10 **MWC DF – Locate and Mark** – Includes the work necessary to comply with
11 federal pipeline safety regulations and state law that requires PG&E to belong to
12 and share the costs of operating the regional “one--call” notification systems.
13 Builders, contractors, and others planning to excavate use these systems to
14 notify underground facility owners, like PG&E, of their intent to excavate. PG&E
15 then provides the excavators with information about the location of its
16 underground facilities by visiting the work site and placing color-coded- surface
17 markings to show the location of pipes and wires. Excavation activities that are
18 within specified distances of high priority facilities require field meets or standby.

19 This MWC relates to safety and/or reliability and/or maintenance as it
20 includes the work necessary to comply with federal pipeline safety regulations
21 and state law that requires PG&E to belong to, respond to notifications, and
22 share the costs of operating the regional “one-call” notification systems.

23 **MWC DG – Cathodic Protection (CP)** – Includes work related to mitigating
24 the effects of corrosion on metallic gas distribution pipelines. Corrosion of gas
25 piping systems can cause leaks and other potential safety hazards. In the case
26 of steel gas lines, the pipe is coated or wrapped before installation, followed by
27 the application of CP through the use of either an impressed system or galvanic
28 anodes as required by federal pipeline safety regulations. The CP system
29 requires continual monitoring on regular intervals to ensure that adequate levels
30 of current are maintained. Maintenance tasks include monitoring CP levels on
31 metallic pipe by taking required pipe to soil reads and reading rectifiers to verify
32 correct operation. If the CP system is found to read below protected levels,
33 corrective action is taken by troubleshooting the CP systems to identify the
34 location of the problem (e.g., electrically shorted meters, underground electrical

1 contacts with other metallic structures, electrical interference, malfunctioning
2 impressed current system, or depleted galvanic anodes). Appropriate corrective
3 action is subsequently performed to restore the CP system to satisfactory
4 protection levels.

5 This MWC relates to safety and/or reliability and/or maintenance as it
6 includes work related to mitigating the effects of corrosion on metallic gas
7 distribution pipelines. Corrosion of gas piping systems can cause leaks and
8 other potential safety hazards.

9 **MWC DN – Curriculum Development/Gas Qualifications** – The Gas
10 Qualifications program creates new and revises existing training materials
11 ensuring that the Gas workforce is competent, safe, and qualified and includes
12 costs associated with field employee operator qualifications. It does not include
13 curriculum development, the general maintenance, or delivery of training
14 materials.

15 This MWC does not relate directly to safety and/or reliability and/or
16 maintenance.

17 **MWC EX – Meter Protection** – Includes efforts to ensure that gas meter
18 locations that do not conform to current PG&E standards and/or federal pipeline
19 safety regulations are addressed. The program focuses on two types of
20 non-conforming meter locations: those with inadequate protection from potential
21 damage by vehicles; and those with inaccessible service or shutoff valves. The
22 work to correct these non-conforming facilities generally involves one of
23 three work activities: installing barrier posts, installing a new valve or relocating
24 the meter set.

25 This MWC relates to safety and/or reliability and/or maintenance as it
26 includes efforts to ensure that gas meter locations that do not conform to current
27 PG&E standards and/or federal pipeline safety regulations are addressed. The
28 Meter Protection Program (MPP) focuses on two types of non-conforming meter
29 locations: those with inadequate protection from potential damage by vehicles;
30 and those with inaccessible service or shutoff valves.

31 **MWC FG – Operate Gas Distribution System** – Includes a broad range of
32 operations which include monitoring system pressures and flows, checking
33 odorant intensity levels for leak detection, operating valves, regulator stations,
34 and changing pressure recorder charts. Additionally, this program includes

1 occasional manual operations to provide necessary capacity during peak
2 demand periods in the morning (e.g., using a Compressed Natural Gas (CNG)
3 or Liquefied Natural Gas natural gas tanker to inject gas, manually opening
4 separation valves to redirect gas, or manually bypassing regulator station
5 equipment to flow more gas).

6 This MWC relates to safety and/or reliability and/or maintenance as it
7 includes a broad range of operations to keep the system safe, such as
8 monitoring the system pressures and flows, checking odorant intensity levels for
9 leak detection; operating valves and regulator stations, and changing pressure
10 recorder charts.

11 **MWC FH – Gas Preventive Maintenance** – Includes work to comply with
12 pipeline safety regulations that require PG&E to conduct periodic inspection and
13 maintenance on its gas distribution system. Preventive maintenance work
14 includes regulator station maintenance, maintenance on mains and services,
15 distribution valve replacement, service valve replacement, atmospheric
16 corrosion (AC) inspections, and overall gas maintenance support.

17 This MWC relates to safety and/or reliability and/or maintenance as it
18 includes work to comply with pipeline safety regulations that require PG&E to
19 conduct periodic inspection and maintenance on its gas distribution system.

20 **MWC FI – Gas Corrective Maintenance** – Includes work to repair or
21 replace damaged or failed gas facilities. In many cases, the need for such
22 restoration is identified during the preventive maintenance activities described in
23 MWC FH. Corrective maintenance includes leak repair, dig-in repair, CP
24 restoration, regulator station repair, and distribution valve repair. Below ground
25 Grade 3 leak repairs are recorded under MWC LW – Leak Abatement.

26 This MWC relates to safety and/or reliability and/or maintenance as it
27 includes work to repair or replace damaged or failed gas facilities.

28 **MWC GF – Gas Mapping** – Gas Mapping encompasses tracking the size,
29 material type, location, configuration, and other essential information needed to
30 identify gas transmission lines and over 42,000 miles of underground gas
31 distribution main and nearly 3.3 million gas services in support of the Company's
32 4.1 million residential, commercial and industrial gas customers (accounts).
33 Similar to electric mapping, gas mapping updates and maintains the gas

1 transmission and distribution system maps and records that serve many
2 purposes and are critical to the safe and successful operation of the gas system.

3 This MWC relates to safety and/or reliability and/or maintenance as it
4 involves tracking the size, material type, location, configuration, and other
5 essential information needed to identify gas main and services.

6 **MWC GG – Gas Distribution Planning and Operations Engineering –**

7 Includes local gas planning engineers modeling the gas distribution system to
8 ensure a safe and reliable supply of natural gas to customers and to ensure that
9 the system can accommodate future load growth. By simulating changes in load
10 demand, engineers use modeling to identify potential constraints in the system
11 to support service reliability.

12 This MWC relates to safety and/or reliability and/or maintenance as it
13 includes local gas planning engineers modeling the gas distribution system to
14 ensure a safe and reliable supply of natural gas to customers and to ensure that
15 the system can accommodate future load growth.

16 **MWC GM – Natural Gas Fueling Facilities Operation and Maintenance –**

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

23 This MWC relates to safety and/or reliability and/or maintenance as it
24 includes the work required to maintain and operate existing natural gas fueling
25 facilities.

26 **MWC GZ – Gas Research, Development, and Demonstration – Gas**

27 Research, Development & Demonstration includes research, development, and
28 demonstration (RD&D) work in targeted areas of gas transmission and
29 distribution. The objectives of gas RD&D are to explore new opportunities,
30 concepts, and technologies to continue to provide safe and reliable service to
31 customers at a lower cost, where possible.

32 This MWC does not relate directly to safety and/or reliability and/or
33 maintenance.

1 **MWC HY – Gas Meter Maintenance** – The meter set is defined as the
2 facilities between the shut-off valve (i.e., service valve and inlet valve) and
3 service tee or meter outlet valve.

4 Maintenance includes:

- 5 • Corrective Maintenance work performed on meter sets greater than
6 1,000 cubic feet per hour (chi) and less than or equal to 1,000 chi. Outlet
7 Valve greater than or equal to 2 inches in diameter and less than 2 inches in
8 diameter.
- 9 • Preventive Maintenance work performed on meter sets greater than
10 1,000 cfh. Preventive maintenance work includes: Differential Pressure
11 Tests, Regulator A Inspections, Pressure Verification, Electronic Corrector
12 Maintenance, Turbine Spin Test, Delta A Turbine and Ultra-Sonic Diagnostic
13 Testing.

14 This MWC relates to safety and/or reliability and/or maintenance as it
15 includes corrective and preventative maintenance work performed on meter
16 sets.

17 **MWC JQ – Gas Distribution Integrity Management Program (DIMP) –**

18 This program is mandated by Federal regulations and includes efforts to
19 enhance gas distribution system safety by identifying risks to the gas distribution
20 system and addressing those risks. The types of work in this MWC include
21 development and improvements in the following areas: DIMP Program,
22 preventative maintenance, DIMP leak surveys, operator qualifications, training,
23 and programs including the Cross Bore Inspection Program, and Plastics
24 Program.

25 This MWC relates to safety and/or reliability and/or maintenance as it
26 includes efforts to enhance gas distribution system safety by identifying risks to
27 the gas distribution system and addressing those risks.

28 **MWC JV – Information Technology (IT)** – Includes costs for ongoing
29 maintenance, operations and repair for PG&E's IT applications, systems, and
30 infrastructure.

31 This MWC was not presented in the 2023 General Rate Case (GRC) as
32 related directly to safety and/or reliability and/or maintenance. However, certain
33 projects within this MWC provide support for safety and/or reliability and/or
34 maintenance projects.

1 **MWC LK – Gas Expense Work Requested by Others (WRO) –**
2 Encompasses work required by tariff, third-party requests, and franchise
3 compliance, including relocations and rearrangement of gas facilities, potholing,
4 and other WRO support work.

5 This MWC does not relate directly to safety and/or reliability and/or
6 maintenance.

7 **MWC OM – Operational Management** – Includes labor and employee
8 related- costs to provide supervision and management support. MWC OM also
9 includes costs incurred by the administrative staff working for the
10 Supervisors/Managers.

11 This MWC is included as a maintenance activity in accordance with
12 D.19-04-020. Gas Distribution does not consider MWC OM as related directly to
13 safety and/or reliability and/or maintenance work.

14 **MWC OS – Operational Support** – Includes labor and employee
15 related- costs to provide services and support that are unrelated to supervision
16 and management.

17 This MWC does not relate directly to safety and/or reliability and/or
18 maintenance.

19 **F. Gas Distribution MWC Descriptions – Capital**

20 **MWC 05 – Tools and Equipment** – Includes the costs of miscellaneous
21 tools and equipment. expenditures are necessary to replace damaged, worn
22 out, or obsolete tools and to ensure specialized tools are available to perform
23 testing and other functions.

24 This MWC does not relate directly to safety and/or reliability and/or
25 maintenance.

26 **MWC 14 – Gas Pipeline Replacement Program (GPRP)** – Primarily
27 encompasses three gas distribution asset replacement programs: (1) the GPRP;
28 (2) Copper Service Replacement Program (CSRP); and (3) Plastic Pipe
29 Replacement Program. The GPRP targets cast iron and pre-1940 steel gas
30 mains. PG&E uses age, materials, seismic factors, and gas leaks to identify and
31 prioritize gas mains for replacement. In addition to gas main replacement, the
32 program includes related service replacement because copper services were
33 determined to have a similar relative risk as compared to GPRP pipe.

1 Subsequently, plastic pipe replacement was included in MWC 14 because of an
2 increase in the relative risk of vintage plastic material such as Aldyl-A.

3 This MWC relates to safety and/or reliability and/or maintenance as it
4 includes gas distribution pipe replacement and service replacement programs
5 for safety and reliability reasons.

6 **MWC 27 – Gas Meter Protection** – Includes efforts to ensure that gas
7 meter locations that do not conform to current PG&E standards and/or federal
8 pipeline safety regulations are addressed. The program focuses on two types of
9 non-conforming meter locations: those with inadequate protection from potential
10 damage by vehicles; and those with inaccessible service or shutoff valves. The
11 work to correct these non-conforming facilities generally involves one of
12 three work activities: installing barrier posts, installing a new valve or relocating
13 the meter set.

14 This MWC relates to safety and/or reliability and/or maintenance as it
15 includes efforts to ensure that gas meter locations that do not conform to current
16 PG&E standards and/or federal pipeline safety regulations are addressed. The
17 program focuses on two types of non-conforming meter locations: those with
18 inadequate protection from potential damage by vehicles; and those with
19 inaccessible service or shutoff valves.

20 **MWC 29 – Gas Distribution Customer Connections** – Includes building
21 new gas distribution systems to provide service to new customers and the costs
22 of regulators purchased for emergency response, regulator change outs, and
23 system upgrades.

24 This MWC does not relate directly to safety and/or reliability and/or
25 maintenance.

26 **MWC 31 – NGV Station Infrastructure** – Includes keeping PG&E’s natural
27 gas fueling infrastructure safe and in compliance for PG&E’s fleet and
28 customers. This work includes: (1) CP and underground corrosion protection;
29 (2) upgrading stations to better serve the vehicles being produced in the market
30 today; (3) increasing the reliability of stations; (4) security monitoring as required
31 at some public access stations; and (5) remote monitoring of stations.

32 This MWC relates to safety and/or reliability and/or maintenance as it
33 includes capital work to keep PG&E’s natural gas fueling infrastructure safe.

1 **MWC 47 – Gas Distribution Capacity** – Includes capacity additions to
2 meet load growth by reinforcing the existing gas systems.

3 This MWC relates to safety and/or reliability and/or maintenance as it
4 includes capacity additions to meet load growth.

5 **MWC 50 – Gas Distribution Reliability** – Includes installation or
6 replacement of gas facilities to: improve system safety and reliability, replace
7 aging facilities, and maintain compliance with pipeline safety regulations.
8 Facilities replaced include mains, services, regulator stations, CP equipment,
9 and remote CP monitoring equipment. Below ground Grade 3 leak repairs are
10 recorded under MWC 3P – Leak Abatement.

11 This MWC relates to safety and/or reliability and/or maintenance as it
12 includes installation or replacement of gas facilities to improve system safety
13 and reliability, replace aging facilities, and maintain compliance with pipeline
14 safety regulations.

15 **MWC 51 – Gas Capital WRO** – Includes relocating gas distribution main
16 and service facilities at the request of a governmental agency or other third
17 parties (e.g., customers and developers). This work could be due to road
18 widening, street improvements, sewer improvements and other similar work.

19 This MWC does not relate directly to safety and/or reliability and/or
20 maintenance.

21 **MWC 52 – Gas Distribution Emergency Response** – Includes work and
22 materials required to replace damaged or failed facilities including replacement
23 of mains and services due to gas dig-ins and external forces such as landslides
24 and earthquakes.

25 This MWC relates to safety and/or reliability and/or maintenance as it
26 includes work and materials required to replace damaged or failed facilities.

27 **MWC 74 – Install New Gas Meters** – Includes regulator replacement labor
28 to remove and install new regulators and meters and regulators for new
29 business connections and labor to install. The meter set is defined as the
30 facilities between the shut-off valve (i.e., service valve and inlet valve) and
31 service tee or meter outlet valve. Maintenance includes: (1) Compliance –
32 Scheduled Meter Change Outs less than or equal 1,000 cfh; (2) Compliance –
33 Periodic Meter Change outs, every 10 years greater than 1,000 cfh;
34 (3) Corrective Maintenance work with replacement of meter performed on meter

1 sets less than or equal to 1,000 cfh and greater than 1,000 cfh; Meter outlet
2 valve greater than or equal to 2 inches diameter; (4) Meter removal (retire) less
3 than or equal to 1,000 cfh and greater than 1,000 cfh; (5) New Business less
4 than 400 cfh and 400 - 1,000 cfh; (6) Capital projects (i.e., Replacement); and
5 (7) SmartMeter™ gas module replacements.

6 This MWC relates to safety and/or reliability and/or maintenance as it
7 includes regulator replacement labor to remove and install new regulators and
8 meters.

9 **MWC 78 – Manage Buildings** – Includes capital buildings projects
10 (i.e., facility upgrades/improvements as well as new construction) for GO.

11 This MWC does not relate directly to safety and/or reliability and/or
12 maintenance.

13 **MWC 2F – Build IT Applications and Infrastructure** – Includes the costs
14 to design, develop and enhance applications, systems, and infrastructure
15 technology solutions.

16 This MWC was not presented in the 2023 GRC as related directly to safety
17 and/or reliability and/or maintenance. However, certain projects within this MWC
18 provide support for safety and/or reliability and/or maintenance projects.

19 **MWC 2K – High Pressure Regulator (HPR) Program** – Includes the
20 replacement of gas HPRs or the reconstruction of gas distribution systems to
21 eliminate the need for HPRs.⁹

22 This MWC relates to safety and/or reliability and/or maintenance as it
23 includes activities such as the replacement of gas customer HPR or the
24 reconstruction of gas distribution systems to eliminate the need for HPRs.

25 **MWC 4A – Gas Distribution Control Operations Assets** – Includes costs
26 associated with the installation of Supervisory Control and Data Acquisition
27 (SCADA) devices, electronic recorders (ERX), and associated field equipment.
28 MWC 4A captures costs associated with the development of software tools to
29 support the collection, retention, and presentation of data related to the Control

9 The HPR Program is presented at the MWC level because the 2023 GRC HPR replacement forecast was at the MWC level. The unit of measure is number of HPRs mitigated. For visibility, costs and units are recorded by MAT as follows: MAT 2KA – Customer HPR Station Main Conversion, MAT 2KB – Customer HPR Station Conversion to District Regulator Station, and MAT 2KC – Customer HPR Reg Station Replacement.

1 Center as well as support telecommunication radio system assets to monitor and
2 control the gas distribution network.

3 This MWC relates to safety and/or reliability and/or maintenance as it
4 includes costs to support the collection, retention, and presentation of data
5 related to the Control Center as well as support costs for telecommunication
6 radio system assets to monitor and control the gas distribution network.

7 **G. Gas Distribution MAT Descriptions for Safety, Reliability, and Maintenance**
8 **Work – Expense**

9 For descriptions of how the following Gas Distribution expense programs
10 relate to safety, reliability, or maintenance, please see the MAT descriptions
11 which explain the type of work associated with each MAT below.

12 **MAT DDA –Field Service, Other** – Other Support costs for Field Services.

13 This MAT relates to safety and/or reliability and/or maintenance as it
14 involves other support costs for MWC DD Provide Field Services.

15 **MAT DDD – Pilot Relight** – Seasonal and other gas pilot relight activities at
16 customer’s request. Does not include: (1) relight for GPRP; (2) “off by crew”
17 relights; and (3) service restoration following a major gas event.

18 This program relates to safety and/or reliability and/or maintenance as it
19 involves seasonal and other gas pilot relight activities at a customer’s request.

20 **MAT DDE – Appliance Adjustments** – Includes input, primary air, cleaning
21 burner or pilot, safety checks and energy cost inquiries.

22 This program relates to safety and/or reliability and/or maintenance as it
23 includes input, primary air, cleaning burner or pilot, safety checks and energy
24 cost inquiries.

25 **MAT DDF – Gas Fumigation** – Gas starts/stops to facilitate fumigation work
26 at customer premise.

27 This program relates to safety and/or reliability and/or maintenance as it
28 involves gas starts/stops to facilitate fumigation work at a customer premise.

29 **MAT DDG – Gas Leaks and Emergencies** – Responding to
30 customer-reported gas emergencies, includes high/low pressure, leaks, fires,
31 explosions, carbon monoxide investigations, etc. on the customer’s side of the
32 gas meter. Includes flame pack call-out initiated by Gas Field Service where no
33 leak is found on the distribution service or main. Does not include: (1) leak
34 survey generated non-hazardous leak repairs at meter; (2) leak survey initiated

1 hazardous gas leak repair at the meter set; (3) gas dig-in response or stand-by,
2 company or non-company equipment; (4) repair or replacement of gas valve;
3 (5) replacement of gas regulators; (6) meter replacement; and (7) leaks on
4 distribution main or service.

5 This program relates to safety and/or reliability and/or maintenance as it
6 involves responding to customer reported gas emergencies, including high/low
7 pressure, leaks, fires, explosions, carbon monoxide investigations, etc. on the
8 customer's side of the gas meter.

9 **MAT DDK – Gas Start** – Turn-on (start) gas service at customer's request
10 using routine change of account process. Requires site visit and manual
11 operation. Does not include: (1) company-generated field credit activity; and
12 (2) New Business generated customer connects.

13 This program relates to safety and/or reliability and/or maintenance as it
14 involves turning-on (starting) gas service at customer's request.

15 **MAT DDL – Gas Stop** – Turn-off (stop) gas service at customer's request
16 using routine change of account process. Requires site visit and manual
17 operation. Does not include: (1) company-generated field credit activity; and
18 (2) gas disconnect and removal for obsolete facilities.

19 This program relates to safety and/or reliability and/or maintenance as it
20 involves turning-off (stopping) gas service at customer's request.

21 **MAT DD# - Provide Field Service, Other** – Other costs related to customer
22 generated requests for service that require site visit by field technician.

23 See MWC DD Provide Field Service for how this MAT relates to safety
24 and/or reliability and/or maintenance.

25 **MAT DEA – Leak Survey** – Perform compliance foot and mobile surveys of
26 distribution mains and services only. Includes cost of equipment calibration,
27 e.g., flame pack units. Also includes AC Inspections of exposed mains, exposed
28 services, service risers, and meter sets being conducted in the course of the
29 leak survey. Does not include Grade 1 leak standby unless the surveyor is
30 actively helping with the repair (i.e., bar-hole pinpointing, digging etc.).

31 This program relates to safety and/or reliability and/or maintenance as it
32 involves performing compliance foot and mobile gas leak surveys of distribution
33 mains and services. It also includes AC Inspections of exposed mains, exposed

1 services, service risers, and meter sets being conducted in the course of the
2 leak survey.

3 **MAT DEB – Special Leak Survey** – Perform special (non-compliance) foot
4 and mobile leak survey of distribution mains and services, by special request
5 (city paving, customer callout, emergencies, engineering, and risk mitigation).
6 Includes calibration of the instruments associated to this work. It does not
7 include costs to investigate leaks found at or downstream of the service valve.

8 This program relates to safety and/or reliability and/or maintenance as it
9 involves special (non-compliance) foot and mobile leak survey of distribution
10 mains and services, by special request (city paving, customer callout,
11 emergencies, engineering, and risk mitigation). It also includes calibration of the
12 instruments associated to this work.

13 **MAT DEC – Leak Downgrade, No Repair** – Includes instances where a
14 repairable leak (Grade 1, 2, or 3)¹⁰ is downgraded to a non-hazardous leak
15 (Grade 3) that does not require repair, the leak is not found (Grade 0) or leak is
16 due to non-PG&E gas.

17 This program relates to safety and/or reliability and/or maintenance as it
18 includes instances where a repairable leaks (Grade 1, 2, or 3) are downgraded
19 to a non-hazardous leak (Grade 3) that do not require repair, instances where
20 the leak is not found (Grade 0) or the leak is due to non-PG&E gas.

21 **MAT DED – Leak Rechecks** – Includes routine above and below ground
22 Grade 3 and Grade 2 leak rechecks, follow-up Grade 0 rechecks, and/or
23 post-repair rechecks.

24 This program relates to safety and/or reliability and/or maintenance as it
25 includes routine above and below ground Grade 3 and Grade 2 leak rechecks,
26 follow-up Grade 0 rechecks, and/or post-repair rechecks.

27 **MAT DEE – Customer Calls** – Survey/Investigation of leaks found on the
28 distribution system where investigation is initiated by customer odor complaint.
29 Does not include: (1) leak repair (pinpointing, digging, etc.), (2) distribution

¹⁰ Grade 1 leaks (also referred to as “hazardous” leaks) represent existing or probable hazards to persons or property and require immediate repair or continuous action until conditions are no longer hazardous. Grade 2 leaks are non-hazardous to persons or property at the time of detection, but still require a scheduled repair because they present probable future hazards. Grade 3 leaks are non-hazardous at the time of detection and can reasonably be expected to remain non-hazardous.

1 assets, (3) investigation of customer odor complaint where leak is found on the
2 customer side of the service valve (4) leak repair (no meter exchange/rebuild).

3 This program relates to safety and/or reliability and/or maintenance as it
4 involves survey and/or investigation of leaks found on the distribution system
5 where the investigation is initiated by a customer odor complaint.

6 **MAT DEF – Picarro Leak Survey** – Includes: (1) use of Picarro Surveyor to
7 perform compliance leak survey (drive) of distribution mains and services only,
8 (2) perform foot survey of leak indication search areas (LISA) and Gap Survey
9 (foot survey performed for service and mains not in the field of view of Picarro
10 surveyor); and (3) Field of View Survey (five feet from building survey sweep).
11 Does not include: If the surveyor is actively helping with the repair (i.e., bar-hole
12 pinpointing, digging etc.).

13 This program relates to safety and/or reliability and/or maintenance as it
14 includes: (1) Use of Picarro Surveyor to perform compliance leak survey (drive)
15 of distribution mains and services only (2) Perform foot survey of LISA and Gap
16 Survey (foot survey performed for service & mains not in the field of view of
17 Picarro surveyor) and (3) Field of View Survey (five feet from building survey
18 sweep).

19 **MAT DEH – Gas Capacity Upgrades** – Involves expense work to upgrade
20 existing distribution systems to a higher Maximum Allowable Operating Pressure
21 (MAOP) for the primary purpose of creating new capacity.

22 This program relates to safety and/or reliability as it involves expense work
23 to upgrade existing distribution systems to a higher MAOP for the primary
24 purpose of creating new capacity. The program also includes activities to
25 downrate or lower the pressure of a transmission pipeline so that it becomes a
26 distribution pipeline.

27 **MAT DE# – Leak Survey Support** – Support costs for Leak Survey.

28 This MAT relates to safety and/or reliability and/or maintenance as it
29 includes other support costs such as labor and other support for MWC DE Leak
30 Survey.

31 **MAT DFA – Locate and Mark** – Locate and Mark underground Gas and
32 Electric Distribution facilities per Underground Service Alert (USA) requests.
33 Preparation of maps, process tickets, and perform administrative work, and Gas
34 and Electric damage prevention activities. Also includes USA delineation

1 marking and calibration/repair of equipment. Does not include locate and mark
2 for Gas and Electric Transmission.

3 This program relates to safety and/or reliability and/or maintenance as it
4 involves locating and marking underground Gas and Electric Distribution
5 facilities per USA requests and additional damage prevention activities like
6 preparation of maps, processing tickets, and calibration/repair of equipment.

7 **MAT DFB – Locate and Mark, Standby** – Includes observation of work
8 performed within five feet of a gas or electric transmission facility or for
9 excavation activity within close proximity of a critical distribution facility. Unit of
10 measure is number of sites requiring a standby.

11 This program relates to safety and/or reliability and/or maintenance as it
12 includes observation of work performed within five feet of a gas or electric
13 transmission facility or for excavation activity within close proximity of a critical
14 distribution facility.

15 **MAT DF# – Locate and Mark, Other** – Support costs for Locate and Mark,
16 including membership costs for USA.

17 This MAT relates to safety and/or reliability and/or maintenance as it
18 includes support costs for MWC DF Locate and Mark.

19 **MAT DGA – CP: Monitoring** – Include all types of pipe-to-soil reads,
20 including isolated steel, rectifier reads, and remote monitoring. Also includes
21 remote rectifier monitoring unit communication and software costs, and electric
22 utility costs for rectifiers.

23 This program relates to safety and/or reliability and/or maintenance as it
24 includes all types of pipe-to-soil reads (which provides information about the CP
25 levels on the pipeline), including isolated steel, rectifier reads, and remote
26 monitoring. Also includes remote rectifier monitoring unit communication and
27 software costs, and electric utility costs for rectifiers.

28 **MAT DGB – CP: Troubleshooting** – Includes troubleshooting and
29 identification of problems with down Cathodic Protection Areas (CPA) and
30 performing any remedial actions.

31 This program relates to safety and/or reliability and/or maintenance as it
32 includes troubleshooting Cathodic Protection Areas which are operating outside
33 of allowable range and determining necessary corrective action.

1 **MAT DGC – CP: Rectifier Maintenance** – Perform rectifier maintenance
2 and associated costs.

3 This program relates to safety and/or reliability and/or maintenance as it
4 involves performing rectifier maintenance.

5 **MAT DGD – CP: Enhanced Survey** – Conduct enhanced CP survey and
6 associated activities.

7 This program relates to safety and/or reliability and/or maintenance as it
8 involves conducting enhanced CP survey and associated activities.

9 **MAT DGE – Electrically Connected Isolated Steel Services**– Identify and
10 evaluate electrically connected isolated steel services and associated activities.

11 This program relates to safety and/or reliability and/or maintenance as it
12 involves identifying and evaluating electrically connected isolated steel services
13 and associated activities.

14 **MAT DGG – Installing Casing Test Stations** – Install casing test stations.

15 This program relates to safety and/or reliability and/or maintenance as it
16 involves installing casing test stations, which are utilized to monitor for contacts
17 between the casing and carrier pipe.

18 **MAT DGH – Casing Short Mitigation Less Than 100 Feet** – Clear casing
19 shorts or replace cased pipe less than 100 feet in length.

20 This program relates to safety and/or reliability and/or maintenance as it
21 involves clearing casing shorts or replacing cased pipe less than 100 feet in
22 length.

23 **MAT EXB – MPP Protection** – Includes installing barrier posts in order to
24 protect above ground gas facilities (meters and risers) from damage by vehicles.
25 Does not include: relocation requiring re-running the service from the main,
26 which is under MWC 27.

27 This program relates to safety and/or reliability as it involves installing barrier
28 posts in order to protect above ground gas facilities (meters and risers) from
29 damage by vehicles.

30 **MAT FGA – Gas Distribution Control Center (GDCC) Operations** –
31 Includes gas control personnel, contractor support, increased main Remote
32 Terminal Unit (RTU) and ERXs, apprentice training program, damage
33 prevention, abnormal conditions, emergency response, compliance, systems
34 operations, data collection, clearance process and benchmarking.

1 This program relates to safety and/or reliability and/or maintenance as it
2 includes gas control personnel, contractor support, increased main RTU and
3 ERXs, apprentice training program, damage prevention, abnormal conditions,
4 emergency response, compliance, systems operations, data collection,
5 clearance process and benchmarking.

6 **MAT FGB – Operate Distribution Mains and Services** – Includes:
7 changing winter and station pressure recorder charts (including downloading
8 ERX), performing instrument calibrations (test equipment, gauges, portable
9 pressure recorders, etc.) operating valves (including changes in emergency
10 zones), removing distribution system pipeline liquids and monitoring system
11 pressure. Does not include: calibration of Distribution Regulator Station
12 mechanical pressure recorders during station maintenance or distribution
13 SCADA, including ERX calibrations.

14 This program relates to safety and/or reliability and/or maintenance as it
15 includes changing winter and station pressure recorder charts (including
16 downloading ERX), performing instrument calibrations (test equipment, gauges,
17 portable pressure recorders, etc.) operating valves (including changes in
18 emergency zones), removing distribution system pipeline liquids and monitoring
19 system pressure.

20 **MAT FGC – Operate Distribution Regulator General** – Control the supply
21 and flow of gas through the distribution system via direction from the GDCC,
22 adjust and change Distribution Regulator Station pressure set points, maintain
23 station pressure in conjunction with winter or planned operational clearances.

24 This program relates to safety and/or reliability and/or maintenance as it
25 involves controlling the supply and flow of gas through the distribution system
26 via direction from the GDCC, adjusting and changing Distribution Regulator
27 Station pressure set points, and maintaining station pressure in conjunction with
28 winter or planned operational clearances.

29 **MAT FHA – Preventative Maintenance, Gas Mains** – Includes:
30 (1) non-leak repairs to distribution gas mains; (2) rewrap, lower, or paint gas
31 distribution mains; (3) replace cover; protect shallow pipe; (4) replace/repair pipe
32 hangars; (5) replace/relocate less than 100 feet of gas distribution main;
33 (6) identify pipe; and (7) install Electrolytic Test Station (ETS) for the purpose of
34 locating the main. Does not include: (1) main leak repairs; (2) any work related

1 to gas transmission; (3) any work caused by work or alteration by a customer or
2 third party; (4) pothole gas facilities for potential conflicts with third-party work;
3 (5) third-party damage; (6) AC; (7) install ETS for purposes of corrosion
4 prevention; (8) fire valve repair or replacement; (9) main or service alterations
5 due to “sewer cross-bores”; and (10) any corrective work related to sunk
6 trenches or sunk bell holes.

7 This program relates to safety and/or reliability and/or maintenance as it
8 includes: (1) non-leak repairs to distribution gas mains; (2) rewrapping,
9 lowering, or painting gas distribution mains; (3) replacing cover or protecting
10 shallow pipe; (4) replacing/repairing pipe hangars; (5) replacing/relocating
11 greater than 100 feet of gas distribution main; (6) identifying pipe; and
12 (7) installing ETS for the purpose of locating the main.

13 **MAT FHB – Preventative Maintenance, Gas Regulator Station** – Includes
14 scheduled preventative maintenance inspections on distribution regulator
15 stations, required maintenance work for all associated equipment inside the
16 district regulator station, and vault dewatering. Does not include: (1) repairs to
17 inlet and outlet fire valves with a pressure greater than 60 pounds per square
18 inch gauge; (2) SCADA calibration of GDCC RTUs and ERXs installed at a
19 regulator station; and (3) calibration of pressure recorders for planning “winter
20 chart” applications (non-GDCC).

21 This program relates to safety and/or reliability and/or maintenance as it
22 includes scheduled preventative maintenance inspections on distribution
23 regulator stations.

24 **MAT FHC – Preventative Maintenance, Gas Farm Tap** – Performing
25 atmospheric inspections on customer HPR sets, including Class “A” inspections.

26 This program relates to safety and/or reliability and/or maintenance as it
27 involves performing atmospheric inspections on customer HPR sets, including
28 Class “A” inspections.

29 **MAT FHE – Preventative Maintenance, Gas Services** – Includes:
30 (1) repair non-leaking gas distribution services; (2) riser replacement; (3) rewrap,
31 lower, or paint gas distribution services; (4) clear and/or repair plugged services;
32 (5) replace cover or protect shallow pipe; (6) repair, replace, relocate, or cut-off
33 less than a full service; (7) repair, replace curb valves less than 2 inches;
34 (8) investigate idle gas stub service cut-offs; (9) install ETS for the purpose of

1 locating the service; (10) installation of excess flow valve (EFV) (when not
2 related to leak repair); (11) repairing inoperative bypass valves including
3 exposing buried/inaccessible bypass valves and raising the riser; and
4 (12) repairing non-gradable leaks on buried valves that require riser
5 replacement. Does not include: (1) stub or service cut-off; (2) any work caused
6 by work or alteration by a customer or third party; (3) third-party damage; (4) AC;
7 (5) service valve replacement; (6) work above the service valve; (7) install ETS
8 for the purpose of corrosion prevention; (8) service leak repairs; (9) main or
9 service alterations due to “sewer cross-bores”; and (10) any corrective work
10 related to sunk trenches or sunk bell holes.

11 This program relates to safety and/or reliability and/or maintenance as it
12 includes: (1) repairing non-leaking gas distribution services; (2) riser
13 replacement; (3) rewrapping, lowering, or painting gas distribution services;
14 (4) clearing and/or repairing plugged services; (5) replacing cover; protecting
15 shallow pipe; (6) repairing, replacing, relocating, or cutting-off less than a full
16 service; (7) repairing or replacing curb valves less than 2 inches;
17 (8) investigating idle gas stub service cut-offs; (9) installing ETS for the purpose
18 of locating the service; and (10) installation of EFV (when not related to leak
19 repair).

20 **MAT FHG – Preventative Maintenance, Gas Valves** – Perform scheduled
21 inspections and operation checks of emergency, curb, and sectionalizing valves.

22 This program relates to safety and/or reliability and/or maintenance as it
23 involves performing scheduled inspections and operation checks of distribution
24 main valves such as emergency valves and curb valves.

25 **MAT FHI – Corrective Maintenance, Gas Service Valves** – Includes repair
26 or replace inoperative service valves less than 2 inches which involves exposing
27 buried/inaccessible service valves and raising the riser and relocation of an
28 existing service valve less than 2 inches. Does not include: (1) valves greater
29 than or equal to 2 inches; (2) work above the service valve; (3) encroachment
30 related work; (4) installation or relocation of an existing service valve less than
31 2 inches that results in re-running the entire service from the main; and (5) repair
32 or replace curb valves less than 2 inches.

33 This program relates to safety and/or reliability and/or maintenance as it
34 involves repairing or replacing inoperative service valves less than 2 inches.

1 **MAT FHJ – Gas Non-Recurring Projects** – One-time non-recurring
2 maintenance projects.

3 This program relates to safety and/or reliability and/or maintenance as it
4 includes one-time non-recurring maintenance projects.

5 **MAT FHK – AC Monitoring** – Inspect exposed gas mains and services, for
6 AC.

7 This program relates to safety and/or reliability and/or maintenance as it
8 involves inspecting exposed gas mains and services for AC.

9 **MAT FHL – AC Main Repairs** – Perform expense repair of AC on mains.

10 This program relates to safety and/or reliability and/or maintenance as it
11 involves performing expense repairs of AC on mains.

12 **MAT FHM – AC Service Repairs** – Expense repairs of AC on services to
13 below the shut-off valve. Does not include: AC repairs of customer gas
14 regulators, HPRs, and meter sets.

15 This program relates to safety and/or reliability and/or maintenance as it
16 involves expense repairs of AC on services to below the shut-off valve.

17 **MAT FHN – AC Distribution Regulator Station Repair** – Expense repairs
18 of AC on distribution district regulator stations.

19 This program relates to safety and/or reliability and/or maintenance as it
20 involves expense repairs of AC on distribution district regulator stations.

21 **MAT FHO – Preventative Maintenance SCADA** – SCADA preventive
22 maintenance to RTU, SCADA Transmitters and ERXs. Activities may include
23 normal operation checks, input/output checks, check/set power supply and other
24 activities.

25 This program relates to safety and/or reliability and/or maintenance as it
26 involves performing SCADA Preventive Maintenance to RTUs, SCADA
27 Transmitters and ERXs.

28 **MAT FHP – Corrective Maintenance SCADA** – SCADA corrective
29 maintenance to RTUs, SCADA Transmitters, ERXs, as well as GDCC RTUs and
30 GDCC ERXs. Activities may include response and investigation of SCADA
31 alarms at the request of the control center and maintenance or repair of failed or
32 inoperative electronic permanent pressure recorder at a regulator station.

1 This program relates to safety and/or reliability and/or maintenance as it
2 involves performing SCADA Corrective Maintenance to RTUs, SCADA
3 Transmitters and ERXs.

4 **MAT FHQ – Over Pressure Protection (OPP) Enhancements** – Includes:
5 installation of pilot filters, system planning studies to identify the most effective
6 secondary OPP option, revision of standard and procedures, program
7 management for developing and maintaining the over pressure elimination plan
8 and pilot studies on new equipment technologies for applicability to the PG&E
9 system.

10 This program relates to safety and/or reliability and/or maintenance as it
11 includes installation of pilot filters, system planning studies to identify the most
12 effective secondary OPP option, revision of standard and procedures, program
13 management for developing and maintaining the over pressure elimination plan,
14 and pilot studies on new equipment technologies for applicability to the PG&E
15 system.

16 **MAT FHR – Distribution Pipeline Markers** – Perform patrols on distribution
17 mains.

18 This MAT relates to safety and/or reliability and/or maintenance as it
19 includes performing patrols on distribution mains.

20 **MAT FHS – GD One-Time Non-Recur Exp Projects** – Includes one-time
21 non-recurring maintenance projects. This work includes re-dig validations for
22 missing documentation, map corrections or unmapped assets.

23 This MAT relates to safety and/or reliability and/or maintenance as this work
24 includes non-recurring maintenance projects driven by investigations and also
25 includes validations performed for documentation and mapping purposes.

26 **MAT FH#** – Preventative Maintenance, Other – Includes field support costs.

27 This MAT relates to safety and/or reliability and/or maintenance as it
28 includes compliance support costs for MWC FH Preventative Maintenance.

29 **MAT FIB – Corrective Maintenance, Gas Regulator Station** – Maintain
30 and repair failed or inoperative distribution district regulation equipment. Does
31 not include: repair of SCADA equipment at a district regulator station; corrective
32 paint work; or repairs for vault lids or station fencing.

1 This program relates to safety and/or reliability and/or maintenance as it
2 involves maintaining and repairing failed or inoperative distribution district
3 regulation equipment.

4 **MAT FIC – Corrective Maintenance, Gas Farm Tap** – Perform repairs on
5 customer HPR sets.

6 This program relates to safety and/or reliability and/or maintenance as it
7 involves performing repairs on customer HPR sets.

8 **MAT FIF – Corrective Maintenance, Gas Main Valves** – Includes
9 replacing valves less than 2 inches and repairing all distribution main valves.

10 This program relates to safety and/or reliability and/or maintenance as it
11 includes replacing valves less than 2 inches and repairing distribution main
12 valves.

13 **MAT FIG –Main Leak Repair** – Expense repair of non-dig-in leaks less than
14 100 feet on any distribution main and appurtenances (flanges, valves, etc.).
15 Includes leak pinpointing. Includes repair of service leak by replacing a portion
16 of main (100 feet or less). Includes repair of leak on existing cut-off service tee
17 (24 inches or less). Does not include: If a suspected leak is excavated and
18 downgraded to a 3 or 0 that will not be repaired, non-PG&E gas, and if service
19 tee is cut off within 12 inches of main and no service exists. Below ground
20 Grade 3 leak repairs are recorded under Leak Abatement MAT LWG.

21 This program relates to safety and/or reliability and/or maintenance as it
22 involves expense repairs of non-dig-in leaks less than 100 feet on any
23 distribution main and appurtenances (flanges, valves, etc.). It includes leak
24 pinpointing, repair of service leak by replacing a portion of main (100 feet or
25 less), and repair of leak on existing cut-off service tee (24 inches or less).

26 **MAT FIH – Gas Service Leak Repair, Above Ground** – Leak pin-pointing
27 and repair of non-dig-in leaks below the service valve on the above ground
28 portion of the service. Does not include: If a suspected leak is excavated and
29 downgraded to a 3 or 0 that will not be repaired, or non-PG&E gas.

30 This program relates to safety and/or reliability and/or maintenance as it
31 includes leak pin-pointing and repair of non-dig-in leaks below the service valve
32 on the above ground portion of the service.

33 **MAT FII – Corrective Maintenance, CP** – Includes: repair existing anodes
34 or rectifiers; dig up gas facilities to install insulating material; install new anodes

1 on isolated steel as necessary; install an ETS; restore a down CPA without
2 replacing capital plant. Does not include: any CP remediation or restoration
3 activities.

4 This program relates to safety and/or reliability and/or maintenance as it
5 relates to restoring a down CPA, which may include: (1) repairing existing
6 anodes or rectifiers; (2) digging up gas facilities to install insulating material or
7 clear an underground contact; (3) installing new anodes on isolated steel as
8 necessary; (4) installing an ETS.

9 **MAT FIJ – Main Dig-In Repair** – Expense repair of dig-in leaks and other
10 third-party damage to any distribution main and appurtenances (flanges, valves,
11 etc.).

12 This program relates to safety and/or reliability and/or maintenance as it
13 involves expense repairs of dig-in leaks and other third-party damage to any
14 distribution main and appurtenances (flanges, valves, etc.).

15 **MAT FIK – Service Dig-In Repair** – Expense repair of dig-in leaks and
16 other third-party damage to any service (including curb valves).

17 This program relates to safety and/or reliability and/or maintenance as it
18 involves expense repairs of dig-in leaks and other third-party damage to any
19 service (including curb valves).

20 **MAT FIM –Major Event** – Includes gas major events and also emergencies.

21 This program relates to safety and/or reliability and/or maintenance as it
22 involves work in response to gas major events and emergencies.

23 **MAT FIO – Encroachment Program (formerly Overbuild)** – Relocation of
24 partial gas service and/or main (less than 100 feet) due to encroachment
25 condition.

26 This program relates to safety and/or reliability and/or maintenance as it
27 involves the relocation of a partial gas service and/or main (less than 100 feet)
28 due to encroachment conditions.

29 **MAT FIP – Service Leak Repair, Below Ground** – Leak pinpointing and
30 repair of non-dig in leak on below ground section of any service (includes curb
31 valves) from tee to where riser breaks ground. Includes: (1) above ground leak
32 that requires below ground repair (i.e., must replace section of below ground
33 pipe or riser); and (2) riser replacement including section of below ground
34 service. Does not include if a suspected leak is excavated and downgraded to a

1 3 or 0 or non-PG&E gas. Below ground Grade 3 leak repairs are recorded
2 under Leak Abatement MAT LWH.

3 This program relates to safety and/or reliability and/or maintenance as it
4 involves leak pinpointing and repair of non-dig in leak on below ground section
5 of any service (includes curb valves) from tees to where risers breaks ground. It
6 includes: (1) above ground leak that requires below ground repair (i.e., must
7 replace section of below ground pipe or riser); and (2) riser replacement
8 including section of below ground service.

9 **MAT FIQ – AC Monitoring** – Inspect atmospherically risers, customer gas
10 regulators (including HPRs), and meter sets for AC where not completed by
11 routine leak survey work.

12 This program relates to safety and/or reliability and/or maintenance as it
13 involves inspecting atmospherically risers, customer gas regulators (including
14 HPRs), and meter sets for AC where not completed by routine leak survey work.

15 **MAT FIR – Tee-Cap Replacement Program** – Projects specified by the
16 plastic tee cap repair team to lower risks in the plastic system.

17 This program relates to safety and/or reliability and/or maintenance as it
18 involves projects specified by the plastic tee cap repair team to lower risks in the
19 plastic system.

20 **MAT FIS – Leak Survey Meter Repair** – Scheduled repair of
21 non-hazardous gas leaks at the meter set. Does not include: (1) hazardous gas
22 leak repair at the meter set initiated by Leak Survey; (2) customer generated
23 field orders for gas leak investigation; (3) repair or replacement of gas valve;
24 (4) replacement of gas regulators; (5) meter replacement; and (6) leak surveys
25 performed by Leak Surveyors.

26 This program relates to safety and/or reliability and/or maintenance as it
27 involves scheduled repair of non-hazardous gas leaks at the meter set.

28 **MAT FI# – Gas Corrective Maintenance, Other** – This includes support
29 costs for Gas Corrective Maintenance including leak repair support.

30 This MAT relates to safety and/or reliability and/or maintenance as it
31 includes support costs for MWC FI Gas Corrective Maintenance.

32 **MAT GFO – Mapping Support** – Includes: (1) distribution mapping activities
33 not directly charged to orders such as posting obsolete orders, delineations,
34 data management non-posting and map reprographics, annexations, posting

1 corrections, operating maps and diagrams, asset registry and request for work,
2 Corrective Action Program (CAP) mapping and information and data requests;
3 and (2) special distribution mapping projects.

4 This program relates to safety and/or reliability and/or maintenance as it
5 includes: (1) distribution mapping activities not directly charged to orders such
6 as posting obsolete orders, delineations, data management non-posting and
7 map reprographics, annexations, posting corrections, operating maps and
8 diagrams, asset registry and request for work, CAP mapping and information
9 and data requests; and (2) special distribution mapping projects.

10 **MAT GFQ – GT&D Data Management** – Includes Gas Distribution data
11 management expense for gas data stewardship, data quality improvement, and
12 program implementation.

13 This program relates to safety and/or reliability and/or maintenance as it
14 includes Gas Distribution and Transmission data management expenses
15 including gas data stewardship, data quality improvement, and program
16 implementation for data assets under the Data Asset Family management.

17 **MAT GGA – Gas System Planning** – Perform hydraulic analysis on gas
18 distribution systems to support operations and long-term design. Build and
19 maintain computer models of the gas distribution system.

20 This program relates to safety and/or reliability and/or maintenance as it
21 involves performing hydraulic analysis on gas distribution systems to support
22 operations and long-term design. It also includes building and maintaining
23 computer models of the gas distribution system.

24 **MAT GG# – Gas Distribution Portfolio Management and Engineering** –
25 Preliminary engineering prior to determining the type of work (install vs. repair)
26 to be performed, such as, defining economic alternatives, field checking of asset
27 conditions, approximate scope/cost of work, and economic analysis.

28 This MAT relates to safety and/or reliability and/or maintenance as it
29 includes support costs for gas distribution pre-engineering and scoping activities.

30 **MAT GMC – CNG Station Expense** – Corrective and Preventative
31 Maintenance on CNG Stations.

32 This program relates to safety and/or reliability and/or maintenance as it
33 involves maintenance and operating expenditure for CNG Stations.

1 **MAT HY# - Gas Meter Maintenance - Meter Sets** – Includes other support
2 costs related to Gas meter maintenance. This MAT relates to safety and/or
3 reliability and/or maintenance as it includes support costs for MWC HY Meter
4 Set AC Remediation.

5 **MAT HYI – Meter Set AC Remediation** – Perform remediation of AC on
6 customer gas meters and regulators as identified through AC inspection. Does
7 not include: (1) AC inspection; (2) AC repair on HPRs; (3) AC repair on
8 distribution mains, services, valves, etc.; (4) meter replacement; and
9 (5) regulator replacement.

10 This program relates to safety and/or reliability and/or maintenance as it
11 involves performing remediation of AC on customer gas meters and regulators
12 as identified through AC inspection.

13 **MAT JQA – DIMP Leak Survey** – Leak survey enhancements.

14 This program relates to safety and/or reliability and/or maintenance as it
15 involves system integrity leak surveys.

16 **MAT JQC – Damage Prevention Dig-In Reduction Team (DiRT)** – Costs
17 associated with the DiRT. The costs include investigations of dig-ins,
18 documentation of damage incidents, 811 outreach and education,
19 811 Ambassador program management and response and other damage
20 prevention activities by DiRT Members. These damage prevention activities
21 include: field contacts at excavation sites, follow-up on reports of unsafe
22 excavation activities and meetings with excavators. Also, costs associated with
23 the ticket management system (i.e., licensing fees, data storage and required
24 formatting changes).

25 See MWC DF Locate and Mark for how this MAT relates to safety and/or
26 reliability and/or maintenance.

27 **MAT JQD – DIMP Emergent Work** – Emergent work associated with
28 operational events and risk mitigation activities identified by the DIMP.

29 This program relates to safety and/or reliability as it manages and executes
30 the DIMP emergent work.

31 **MAT JQE – Plastic Program** – Supports the selection, testing and
32 development of plastic materials, tools, and associated construction methods for
33 use on the distribution system. Also includes: laboratory testing, sample
34 material, and prototype tools and equipment purchases.

1 This program relates to safety and/or reliability and/or maintenance as it
2 oversees selection, testing and development of plastic materials, tools, and
3 associated construction methods for use on the PG&E distribution system. It
4 also includes laboratory testing, sample material, and prototype tools and
5 equipment purchases.

6 **MAT JQG – Mechanical Fitting Replacement Program** – Replacement
7 program for removal of mechanical fittings with known failures. Includes removal
8 of compression style mechanical fittings with risk of corrosion and leak.

9 This program relates to safety and/or reliability as it replaces mechanical
10 fittings with known failures, including the removal of compression style mechanical
11 fittings with risk of corrosion and leaks.

12 **MAT JQK – Cross Bore Program** – Includes: research of records, create
13 and execute legacy storm and sewer inspections, and repair costs to remove
14 legacy cross bores. It does not include replacement of gas pipe beyond the
15 cross bore segment.

16 This program relates to safety and/or reliability as it involves conducting
17 storm and sewer inspections, repair costs to remediate cross bores, and records
18 research.

19 **MAT JQL – DIMP Program Management** – Costs for DIMP staff.

20 This program relates to safety and/or reliability and/or maintenance as it
21 involves costs by DIMP for Geosciences

22 **MWC OM – Operational Management** – includes labor and
23 employee-related costs to provide supervision and management support.
24 MWC OM also includes costs incurred by the administrative staff working for the
25 Supervisors/Managers.

26 MWC OM is included as a maintenance activity in accordance with
27 D.19-04-020. Gas Distribution does not consider MWC OM as related directly to
28 safety and/or reliability and/or maintenance work.

29 **H. Gas Distribution MAT Descriptions for Safety and Reliability Work –** 30 **Capital**

31 For descriptions of how the following Gas Distribution capital programs
32 relate to safety, reliability, or maintenance, please see the MAT descriptions
33 which explain the type of work associated with each MAT below.

1 **MAT 14A – GPRP** – Replace main and services qualifying for replacement
2 under the GPRP. Does not include: deactivation with no capital main installation
3 less than 100 feet.

4 This program relates to safety and/or reliability as it involves replacing main
5 and services qualifying for replacement under the GPRP.

6 **MAT 14B – Copper Service Replacement** – Replace copper services
7 identified under the CSRP. Going forward, outstanding copper services work
8 and emergent copper services work will be completed under Reliability Service
9 Replacement MAT 50B.

10 This program relates to safety and/or reliability and/or maintenance as it
11 historically involved replacing copper services identified under the CSRP. Going
12 forward, outstanding copper services work and emergent copper services work
13 will be completed under Reliability Service Replacement MAT 50B.

14 **MAT 14D – Plastic Pipe Replacement**– Replace main and services
15 qualifying for replacement under the Plastic Pipeline Replacement Program.
16 Does not include: deactivation with no capital main installation less than
17 100 feet.

18 This program relates to safety and/or reliability and/or maintenance as it
19 involves replacing main and services qualifying for replacement under the
20 Plastic Pipeline Replacement Program.

21 **MAT 27A – Meter Protection-Capital** – Includes: (1) meters that cannot be
22 adequately protected by barrier posts and require relocation with re-running the
23 service from the main; and (2) services with inaccessible service valves that
24 require re-running the service from the main. Does not include: minor
25 relocations or service valve installations that do not require re-running the
26 service from the main.

27 This program relates to safety and/or reliability and/or maintenance as it
28 includes: (1) meters that cannot be adequately protected by barrier posts and
29 require relocation with re-running the service from the main, and (2) services
30 with inaccessible service valves that require re-running the service from the
31 main.

1 **MAT 31A – CNG Stations** – Capital work on CNG stations.

2 This program relates to safety and/or reliability and/or maintenance as it
3 involves capital work to replace obsolete equipment that no longer can meet the
4 demands of the station or is not in acceptable working condition.

5 **MAT 4AF – ERX Pressure Monitoring, SCADA Type 6** – Includes
6 regulator station, Hydraulically Independent System (HIS) pipeline or valve
7 pressure, and ERX pressure monitoring.

8 This program relates to safety, reliability, and compliance as it involves
9 electronic recorder pressure monitoring. includes regulator stations, HIS
10 pipeline or valve pressure.

11 **MAT 4AM¹¹ – Regulator Station Monitoring Dual No Flow, SCADA**
12 **Type 3** – High and low regulator station monitoring-dual run: includes upstream,
13 midstream, downstream pressure, differential pressure, and flow.

14 This program relates to safety and/or reliability and/or maintenance as it
15 involves high- and low-pressure regulator station monitoring (dual run). It
16 includes upstream, midstream, downstream pressure, differential pressure, and
17 flow.

18 **MAT 47B – Gas Capacity, Mains** – Installation of gas main to provide
19 additional capacity.

20 This program relates to safety and/or reliability and/or maintenance as it
21 involves installation of gas main to provide additional capacity.

22 **MAT 47C – Gas Capacity, Regulator Station** – Installation of new district
23 regulator station to provide additional capacity (including cost to install SCADA).

24 This program relates to safety and/or reliability and/or maintenance as it
25 involves installation of new district regulator station to provide additional capacity
26 (including cost to install SCADA).

27 **MAT 47D – Gas Capacity, Replace Regulator Station Component** –
28 Install or replace gas regulation equipment at an existing district regulator station
29 to provide additional capacity. Includes valves, filters, regulators, and other
30 capital equipment within the station.

¹¹ In the 2023 GRC, PG&E presented the recorded and forecast costs formerly presented under 10 separate MATs (4AA, 4AB, 4AC, 4AE, 4AH, 4AI, 4AJ, 4AK, 4AL, and 4AM) under a single MAT, 4AM.

1 This program relates to safety and/or reliability and/or maintenance as it
2 involves installation or replace gas regulation equipment at an existing district
3 regulator station to provide additional capacity.

4 **MAT 47F – Gas Capacity, Other Enhancements** – Install or replace facility
5 for capacity.

6 This program relates to safety and/or reliability and/or maintenance as it
7 involves installing or replacing a facility for capacity.

8 **MAT 50A – Reliability Main Replacement** – Replace/install greater than or
9 equal to 100 feet of gas distribution main due to deterioration or reduced
10 reliability, and includes non-leak replacements driven by corrosion. Does not
11 include: deactivation of main, shallow mains and services, and if the condition
12 was caused by work or alteration by a customer/third party.

13 This program relates to safety and/or reliability and/or maintenance as it
14 involves replacing and/or installing greater than or equal to 100 feet of gas
15 distribution main due to deterioration or reduced reliability.

16 **MAT 50B – Reliability Service Replacement** – Includes: (1) replace entire
17 service due to deterioration or reduced reliability including non-leak
18 replacements driven by corrosion; and (2) re-establishing an existing electronic
19 recorder to a service that is being replaced. Does not include: capital service
20 leak repairs, opportunistic service replacements, idle stub cut-offs, shallow
21 services, if the condition was caused by work or alteration by a customer/third
22 party, or new installations of ERXs.

23 This program relates to safety and/or reliability and/or maintenance as it
24 includes replacing an entire service due to deterioration or reduced reliability.

25 **MAT 50C – Gas Regulator Station Rebuild** – Includes: replacement of an
26 entire district regulator station due to deterioration or reduced reliability, and to
27 upgrade configuration to meet current standards and system needs.

28 This program relates to safety and/or reliability and/or maintenance as it
29 includes replacement of an entire district regulator station due to deterioration or
30 reduced reliability, and to upgrade configuration to meet current standards and
31 system needs.

32 **MAT 50D – Impr Rel/Dep Gas CP Systems** – Includes: (1) installation of
33 five or more ETS stations at a single location; (2) rectifier replacement, including

1 insert, or new installation; (3) pipe coating greater than or equal to 100 feet, and
2 Remote Monitoring Units (RMUs).

3 This program relates to safety and/or reliability and/or maintenance as it
4 includes installation of five or more test stations, rectifier replacement (inserts
5 and new installations), capital coating projects, RMUs installations.

6 **MAT 50E – Reliability Gas Valve Replacement** – Includes: replace/install
7 gas distribution valves greater or equal to two inches (e.g., emergency
8 shutdown, riser valves two inches or greater, and therm billing area valves).
9 Does not include station fire valve or block valve replacement.

10 This program relates to safety and/or reliability and/or maintenance as it
11 includes replacing or installing gas distribution valves greater or equal to
12 two inches (e.g., emergency shutdown, riser valves two inches or greater, and
13 therm billing area valves).

14 **MAT 50F – Reliability Gas Other Equipment Replacement** – Includes:
15 replace/install/deactivate other units of gas capital (e.g., permanent pressure
16 recorders, new pits/vaults, and all deactivation-only jobs for CP systems). Does
17 not include partial pit/vault rebuilds and/or lids only.

18 This program relates to safety and/or reliability and/or maintenance as it
19 includes: (1) replacing, installing, or deactivating other units of gas capital;
20 (2) permanent pressure recorders and new pits or vaults; and (3) all
21 deactivation-only jobs for CP systems.

22 **MAT 50G – Leak Management – Simple Service Replacement** –
23 Replace/deactivate entire or stub services due to leaks, not due to idle facilities
24 or “dig-ins.” Below ground Grade 3 leak replacements are recorded under Leak
25 Abatement MAT 3PB.

26 This program relates to safety and/or reliability and/or maintenance as it
27 includes replacement or deactivation of an entire stub or stub service due to
28 leaks that are not due to idle facilities or dig-ins.

29 **MAT 50H – Reliability, Cut-Off Idle Gas Service** – Remove/deactivate
30 entire or stub services due to idle facilities and not due to leaks, overbuilds,
31 “dig-ins,” or demolitions. Does not include capital work for demolition.

32 This program relates to safety and/or reliability and/or maintenance as it
33 involves removal or deactivation of an entire service or stub services due to idle
34 facilities and not due to leaks, overbuilds, dig-ins, or demolitions.

1 **MAT 50I – Improve Reliability – Deactivation** – Deactivate gas mains (and
2 the associated services), regulator stations, or valves. Does not include new
3 mains limited to less than 100 feet; those with greater than or equal to 100 feet
4 or gas service deactivations with no main deactivation.

5 This program relates to safety and/or reliability and/or maintenance as it
6 involves deactivation of gas main (and the associated services), regulator
7 stations, or valves.

8 **MAT 50J – Encroachment Program** – Relocation/rearrangement of gas
9 main (greater than 100 continuous feet) and/or complete gas service
10 replacement to clear encroachment conflicts. Does not include customer
11 requested relocations to clear encroachment.

12 This program relates to safety and/or reliability and/or maintenance as it
13 involves relocation or rearrangement of a gas main (greater than 100 continuous
14 feet) and/or complete gas service replacement to clear encroachment conflicts.

15 **MAT 50K – Emergent Leaking Main Replacement** – Replace/install
16 greater than or equal to 100 feet of gas distribution main due to leaks. Does not
17 include: Deactivation of main only jobs.

18 This program relates to safety and/or reliability and/or maintenance as it
19 involves replacement or installation of greater than or equal to 100 feet of gas
20 distribution main due to leaks.

21 **MAT 50L – Gas Regulator Station Component Rebuilds** – Replacement
22 of regulator station components due to deterioration or reduced reliability.

23 This program relates to safety and/or reliability and/or maintenance as it
24 involves replacement of regulator station components due to deterioration or
25 reduced reliability.

26 **MAT 50M – Leak Management – Complex Service Replacements** –
27 Replace/deactivate entire or stub complex services due to leaks, not due to idle
28 facilities or “dig-ins.” Also includes large commercial meter sets, and any
29 complex load calculations that require Gas Distribution Engineering and Design.
30 Below ground Grade 3 leak replacements are recorded under Leak Abatement
31 MAT 3PC.

32 This program relates to safety and/or reliability and/or maintenance as it
33 involves replacement or deactivation of an entire or stub complex services due
34 to leaks not due to idle facilities or dig-ins. It also includes large commercial

1 meter sets, and any complex load calculations that require Gas Distribution
2 Engineering and Design.

3 **MAT 50N – GD Overpressure Protection Enhancements** – Includes: the
4 retrofit of high-pressure and low-pressure district regulator stations with OPP
5 modifications. These additional devices may include slam shuts valves, monitor
6 valves, relief valves, or alternate technologies to prevent overpressure events
7 from occurring; and installation of pressure transmitters system wide for
8 enhanced visibility.

9 This program relates to safety and/or reliability and/or maintenance as it
10 includes the retrofit of high-pressure and low-pressure district regulator stations
11 with OPP modifications. These additional devices may include slam shuts
12 devices, monitor valves, relief valves, or alternate technologies to prevent
13 overpressure events from occurring; and installation of pressure transmitters
14 system wide for enhanced visibility.

15 **MAT 50P – New/Replace CP System** – Installation of impressed current
16 ground bed, deep or shallow.

17 This program relates to safety and/or reliability and/or maintenance as it
18 involves installation of impressed current ground bed, deep or shallow.

19 **MAT 50Q – Casings** – Casing removal or remediation > 100 feet. This may
20 involve replacing end seals, removing segments of the casing, replacing link
21 seals and insulation spacers, flushing, and draining casings, repairing coatings,
22 and gelling the casing after site restoration. A casing project is considered
23 capital if a casing greater than 100 feet in length is mitigated and successfully
24 gelled or if a casing of any length is removed.

25 This program relates to safety and/or reliability and/or maintenance as it
26 involves work related to Casing removal or remediation.

27 **MAT 50R - Rep/Inst Emer Shut down and Safe Operations Valves** –
28 Install gas distribution valves greater than or equal to 2 inches on new
29 installations. (e.g., emergency shutdown, riser valves 2 inches or greater).

30 This program relates to safety and/or reliability and/or maintenance as it
31 involves work related to installation of gas distribution valves during an
32 emergency shutdown.

33 **MAT 52# - Emergency Response Support** - Includes support work and
34 materials required to replace damaged or failed facilities.

1 This program relates to safety and/or reliability and/or maintenance as it
2 involves work related to emergency response support required to replace
3 damaged or failed facilities.

4 **MAT 52B – Emergency Response to Dig-Ins, Services –**
5 Replace/deactivate entire or stub services due to “dig-in,” outside forces, or
6 third-party damage. Also, includes service cut-offs due to emergencies
7 (e.g., due to fire).

8 This program relates to safety and/or reliability and/or maintenance as it
9 involves replacing or deactivating an entire service or stub services due to
10 “dig-ins,” outside forces, or third-party damage. It also includes service cut-offs
11 due to emergencies (e.g., due to fire).

12 **MAT 52C – Emergency Response to Dig-Ins, Mains –** Replace greater
13 than or equal to 100 feet gas distribution main due to dig-in or damage by
14 outside forces or third party. Deactivate greater than or equal to 1-foot gas
15 distribution main due to dig-in or damage by outside forces.

16 This program relates to safety and/or reliability and/or maintenance as it
17 involves replacing greater than or equal to 100 feet gas distribution main due to
18 dig-ins, damage by outside forces, or third parties. It also includes deactivations
19 of greater than or equal to 1-foot gas distribution main due to dig-ins or damage
20 by outside forces.

21 **MAT 74A – Gas Regulator Replacement –** Labor to replace failed or
22 deteriorating residential and non-residential regulators while performing routine
23 maintenance or other field activity. Includes targeted regulator replacement
24 programs and filter replacement with regulator replacement for large meter work
25 2 inches and greater. Does not include: (1) regulator replacement in conjunction
26 with a meter set, (2) the cost of the regulator; (3) HPR replacement;
27 (4) distribution district regulation equipment; and (5) replacement of strainer.

28 This program relates to safety and/or reliability and/or maintenance as it
29 involves labor to replace failed or deteriorating residential and non-residential
30 regulators while performing routine maintenance or other field activity.
31 It includes targeted regulator replacement programs and filter replacement with
32 regulator replacement for large meter work two inches and greater.

1 I. Gas Distribution Comparison by MAT for Non-Safety, Reliability, and Maintenance Work Tables

**TABLE 2-5
2023 RSAR
2023 GRC CYCLE GAS DISTRIBUTION EXPENSE COMPARISON BY MAT FOR NON-SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll-up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)
1	O&M Expense	Gas Distribution	AB	Misc Expense	AB7	Safety, Qual, & Contract Mgmt	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 13	No	On-going	Annual	531.1	285.9	(245.2)	-46.2%
2	O&M Expense	Gas Distribution	AB	Misc Expense	AB#	Not assigned	Non-SRM Total	Non-SRM Total	Ex 3, Ch 13	No	On-going	Annual	45,966.9	7,349.9	(38,617.0)	-84.0%
3	O&M Expense	Gas Distribution	AB	Misc Expense	AB#	Not assigned	Loss of Containment on Gas Customer Connected Equipment	CCEPQ-C012 Other Support	Ex 3, Ch 13	No	N/A	N/A	45,966.9	7,349.9	(38,617.0)	-84.0%
4	O&M Expense	Gas Distribution	BC	Perf Reimburs Wk for Oth	BC#	Not assigned	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	N/A	No	On-going	Annual	0.0	(49.5)	(49.5)	100.0%
5	O&M Expense	Gas Distribution	DN	Develop & Provide Trainng	DN2	Gas Qualifications	Non-SRM Total	Non-SRM Total	Ex 3, Ch 13	No	On-going	Annual	2,726.3	606.0	(2,120.3)	-77.8%
6	O&M Expense	Gas Distribution	DN	Develop & Provide Trainng	DN2	Gas Qualifications	Loss of Containment on Gas Customer Connected Equipment	CCEPQ-C014 Training, Gas Qualifications	Ex 3, Ch 13	No	N/A	N/A	2,726.3	606.0	(2,120.3)	-77.8%
7	O&M Expense	Gas Distribution	GZ	Research and Development (R&D)	GZA	Gas R&D and Deployment	Non-SRM Total	Non-SRM Total	Ex 3, Ch 13	No	On-going	Annual	4,000.3	2,130.1	(1,870.3)	-46.8%
8	O&M Expense	Gas Distribution	GZ	R&D	GZA	Gas R&D and Deployment	Loss of Containment on Gas Customer Connected Equipment	CCEPQ-C003 Gas R&D and Deployment	Ex 3, Ch 13	No	N/A	N/A	4,000.3	2,130.1	(1,870.3)	-46.8%
9	O&M Expense	Gas Distribution	GZ	R&D	GZA	Gas R&D and Deployment	Loss of Containment on Gas Distribution Main or Service	LOCDM-C016 Gas R&D and Deployment	Ex 3, Ch 13	No	N/A	N/A	4,000.3	2,130.1	(1,870.3)	-46.8%
10	O&M Expense	Gas Distribution	JV	Maintain IT Apps & Infra	JVA	ISvcs: Wrkplce End User SW Ste	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 12	No	On-going	Annual	12,200.6	3,672.8	(8,527.9)	-69.9%
11	O&M Expense	Gas Distribution	JV	Maintain IT Apps & Infra	JVT	ASvcs: Applications Support	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 12	No	On-going	Annual	0.0	1,671.4	1,671.4	100.0%
12	O&M Expense	Gas Distribution	JV	Maintain IT Apps & Infra	JV#	Not assigned	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 12	No	On-going	Annual	1,285.6	417.0	(868.6)	-67.6%
13	O&M Expense	Gas Distribution	LK	G Dist WRO - Maintenance	LK7	WRO Main Relocations - G	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	1,828.6	3,290.3	1,461.7	79.9%
14	O&M Expense	Gas Distribution	LK	G Dist WRO - Maintenance	LK8	WRO Relocation Partial Svc - G	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	1,135.3	2,668.4	1,533.1	135.0%
15	O&M Expense	Gas Distribution	LK	G Dist WRO - Maintenance	LK9	WRO Raise Frame & Covers - G	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	559.8	315.6	(244.2)	-43.6%
16	O&M Expense	Gas Distribution	LK	G Dist WRO - Maintenance	LKL	WRO Svc Cutoff at Prop Line - G	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	324.8	271.1	(53.7)	-16.5%
17	O&M Expense	Gas Distribution	LK	G Dist WRO - Maintenance	LKN	WRO Rule 13 G Temp Pwr < 1yr G	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	0.0	0.0	0.0	89.2%
18	O&M Expense	Gas Distribution	LK	G Dist WRO - Maintenance	LKO	WRO Pothole 3rd Pty Conflict-G	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	1,203.4	619.8	(583.7)	-48.5%
19	O&M Expense	Gas Distribution	LK	G Dist WRO - Maintenance	LKQ	WRO Gas Sup & Wk Around SF - G	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	1,950.0	1,651.8	(298.2)	-15.3%
20	O&M Expense	Gas Distribution	LK	G Dist WRO - Maintenance	LK#	Not assigned	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	186.9	481.2	294.3	157.4%
21	O&M Expense	Gas Distribution	OS	Operational Support	OS#	Not assigned	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 13	No	On-going	Annual	27,379.6	14,149.4	(13,230.2)	-48.3%

**TABLE 2-6
2023 RSAR
2023 GRC CYCLE GAS DISTRIBUTION CAPITAL COMPARISON BY MAT FOR NON-SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll-up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)
1	Capital	Gas Distribution	05	Tools & Equipment	05A	Tools	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 13	No	On-going	Annual	6,763.0	4,324.0	(2,439.0)	-36.1%
2	Capital	Gas Distribution	29	G Dist Customer Connects	29C	NB-G-Res Svc R16 Only	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	9,465.0	16,500.0	7,035.0	74.3%
3	Capital	Gas Distribution	29	G Dist Customer Connects	29D	NB-G-CIA R15 and/or R16 MLX	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	15,665.0	22,267.0	6,602.0	42.1%
4	Capital	Gas Distribution	29	G Dist Customer Connects	29H	29H-G-Res R15/R16 MLX 1-4 Lots	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	4,184.0	144.0	(4,040.0)	-96.6%
5	Capital	Gas Distribution	29	G Dist Customer Connects	29I	NB-G-Res R15/16 MLX - Apts	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	4,213.0	4,270.0	57.0	1.4%
6	Capital	Gas Distribution	29	G Dist Customer Connects	29J	NB-G-Res R15/16 MLX >=5 lots	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	23,257.0	36,046.0	12,789.0	55.0%
7	Capital	Gas Distribution	29	G Dist Customer Connects	29M	Prod Subdiv Res Svc Comp - G	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	10,199.0	15,028.0	4,829.0	47.3%
8	Capital	Gas Distribution	29	G Dist Customer Connects	29#	Not assigned	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	5,018.0	7,435.0	2,417.0	48.2%
9	Capital	Gas Distribution	2F	Build IT Apps & Infra	2FA	ASvcs: Development	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 12	No	On-going	Annual	12,365.0	15,188.0	2,823.0	22.8%
10	Capital	Gas Distribution	51	G Dist WRO	51E	WRO Relocate Mn & Svcs - G	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	40,335.0	23,859.0	(16,476.0)	-40.8%
11	Capital	Gas Distribution	51	G Dist WRO	51F	WRO Svc Only Alteration - G	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	11,174.0	17,403.0	6,229.0	55.7%
12	Capital	Gas Distribution	51	G Dist WRO	51G	WRO Gas Svc Cutoff at Main - G	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	15,942.0	23,987.0	8,045.0	50.5%
13	Capital	Gas Distribution	51	G Dist WRO	51I	WRO Remove Idle Main >100' - G	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	2,163.0	1,874.0	(289.0)	-13.4%
14	Capital	Gas Distribution	51	G Dist WRO	51J	WRO Relocate CP Area/Reg Sta-G	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	831.0	1,705.0	874.0	105.2%
15	Capital	Gas Distribution	51	G Dist WRO	51K	WRO G CAP Proj>\$50K	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	4,863.0	20.0	(4,843.0)	-99.6%
16	Capital	Gas Distribution	51	G Dist WRO	51L	3rd Party WRO Pd.on Actuals	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	277.0	1,933.0	1,656.0	597.8%
17	Capital	Gas Distribution	51	G Dist WRO	51#	Not assigned	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	(742.0)	1,111.0	1,853.0	-249.7%
18	Capital	Gas Distribution	78	Manage Buildings	78A	Office Facilities	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 13	No	On-going	Annual	0.0	7.0	7.0	100.0%

1 J. GT&S Comparison Summary Tables

**TABLE 2-7
2023 RSAR
2023 GRC CYCLE GT&S EXPENSE COMPARISON SUMMARY
(THOUSANDS OF DOLLARS)**

Line No	A	B	C1	C2	D	E	F	G
	Type (O&M Expense or Capital)	Functional Area	Spending Category - MWC	MWC	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (E-D)	Percent Variance for 2023 (%) ((E-D)/D)
1	O&M Expense	GT&S	Maint Gas Trans-Subsid	34	2,738.3	2,090.9	(647.4)	-23.6%
2	O&M Expense	GT&S	Misc Expense	AB	20,062.5	10,713.1	(9,349.4)	-46.6%
3	O&M Expense	GT&S	Maint Gas Storage Fac	AH	21,521.5	13,554.5	(7,967.0)	-37.0%
4	O&M Expense	GT&S	Manage Environmental Oper	AK	3,157.3	3,760.4	603.1	19.1%
5	O&M Expense	GT&S	GT Operate System	CM	43,454.2	49,298.4	5,844.2	13.4%
6	O&M Expense	GT&S	Mnge Waste Disp & Transp	CR	716.5	644.5	(72.0)	-10.1%
7	O&M Expense	GT&S	GT Marketing/Sales/Strategy	CX	5,786.8	6,171.8	385.0	6.7%
8	O&M Expense	GT&S	G&E T&D Locate and Mark	DF	6,767.0	5,876.5	(890.5)	-13.2%
9	O&M Expense	GT&S	Develop & Provide Training	DN	1,931.8	567.8	(1,364.0)	-70.6%
10	O&M Expense	GT&S	Gas Trans & Dist Sys Mapping	GF	5,563.2	3,470.7	(2,092.5)	-37.6%
11	O&M Expense	GT&S	Gas Transmission Mitigate Corr	GJ	24,485.2	17,026.2	(7,459.0)	-30.5%
12	O&M Expense	GT&S	Manage Energy Efficiency-NonBA	GM	2,650.8	3,617.0	966.2	36.4%
13	O&M Expense	GT&S	R&D Non-Balancing Account	GZ	3,861.2	1,402.8	(2,458.4)	-63.7%
14	O&M Expense	GT&S	CGT Balancing Accounts	HP	239,910.2	240,518.5	608.3	0.3%
15	O&M Expense	GT&S	GT Pipeline Maintenance	JO	39,076.6	25,653.6	(13,422.9)	-34.4%
16	O&M Expense	GT&S	GT Station Maintenance	JP	24,953.1	25,824.7	871.6	3.5%
17	O&M Expense	GT&S	GT Reliability & General Maint	JT	101,236.3	55,382.8	(45,853.5)	-45.3%
18	O&M Expense	GT&S	Maintain IT Apps & Infra	JV	3,203.2	3,495.8	292.6	9.1%
19	O&M Expense	GT&S	GT PL Safety Enhance Plan-Exp	KE	0.0	207.4	207.4	100.0%
20	O&M Expense	GT&S	GTS Manage Critical Documts-BA	LU	0.0	467.7	467.7	100.0%
21	O&M Expense	GT&S	GTS Station Assessments-BA	LV	5,474.2	3,063.5	(2,410.7)	-44.0%
22	O&M Expense	GT&S	Operational Management	OM	8,663.8	3,708.9	(4,954.8)	-57.2%
23	O&M Expense	GT&S	Operational Support	OS	10,400.5	(5,176.2)	(15,576.7)	-149.8%
24	O&M Expense	GT&S	TOTAL		575,614.2	471,341.3	(104,272.9)	-18.1%

**TABLE 2-8
2023 RSAR
2023 GRC CYCLE GT&S CAPITAL COMPARISON SUMMARY
(THOUSANDS OF DOLLARS)**

Line No	A	B	C1	C2	D	E	F	G
	Type (O&M Expense or Capital)	Functional Area	Spending Category - MWC	MWC	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (E-D)	Percent Variance for 2023 (%) ((E-D)/D)
1	Capital	GT&S	Tools & Equipment	05	3,502.2	445.4	(3,056.8)	-87.3%
2	Capital	GT&S	Implement Environment Projects	12	0.0	891.6	891.6	100.0%
3	Capital	GT&S	Misc Capital	21	0.0	2,914.9	2,914.9	100.0%
4	Capital	GT&S	GT Customer Connects	26	8,858.0	405.4	(8,452.6)	-95.4%
5	Capital	GT&S	Build IT Apps & Infra	2F	12,988.4	11,895.0	(1,093.4)	-8.4%
6	Capital	GT&S	GT PL Safety Enhance Plan-Cap	2H	0.0	25.3	25.3	100.0%
7	Capital	GT&S	Gas Trans Remediate Corrosion	3K	44,732.8	35,714.1	(9,018.7)	-20.2%
8	Capital	GT&S	Gas Trans Storage Wells	3L	87,630.0	115,635.9	28,005.9	32.0%
9	Capital	GT&S	Gas Capital:GasTrans-Sub	44	3,242.6	434.2	(2,808.4)	-86.6%
10	Capital	GT&S	GT Pipeline Capacity	73	12,231.2	30,505.3	18,274.1	149.4%
11	Capital	GT&S	GT Pipeline Reliability	75	373,015.3	189,478.7	(183,536.6)	-49.2%
12	Capital	GT&S	GT Station Reliability	76	193,484.6	136,834.6	(56,650.0)	-29.3%
13	Capital	GT&S	Manage Buildings	78	0.0	846.0	846.0	100.0%
14	Capital	GT&S	GT WRO	83	17,880.8	9,044.3	(8,836.5)	-49.4%
15	Capital	GT&S	GT Gas Gathering System Manage	84	12,290.6	3,283.2	(9,007.4)	-73.3%
16	Capital	GT&S	GT Integrity Management	98	61,141.6	145,155.5	84,013.9	137.4%
17	Capital	GT&S	TOTAL		830,998.1	683,509.5	(147,488.6)	-17.8%

1 K. GT&S Comparison by MAT for Safety, Reliability, and Maintenance Work Tables

TABLE 2-9
2023 RSAR
2023 GRC CYCLE GT&S EXPENSE COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)

Line No	Type (O&M Expense or Capital)	Functional Area	MWC	MWC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Year/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$ (H-G))	Spending Percent Variance for 2023 (%) ((H-G)/G*100)	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Imputed Adopted Units	2023 Actual Units	Difference for 2023 (# of Units) (O-N)	Unit Percent Variance for 2023 (%) ((O-N)/N*100)	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	Forecast			Status	Completion Status Statement
																											Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)		
1	Expense	GT&S	34	Maint Gas Trans-Subsid	34A ^{RM}	Stan-Pac Expense	SRM Total	SRM Total	Ex 3, Ch 13	No	On-going	Annual	2,738.3	2,090.9	(647.4)	-23.6%	NO	NO	Various	0	0	0	0.0%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
2	Expense	GT&S	34	Maint Gas Trans-Subsid	34A ^{RM}	Stan-Pac Expense	Loss of Containment on Gas Transmission Pipeline	LOCTM-C038 Stan-Pac Expense	Ex 3, Ch 13	No	N/A	N/A	2,738.3	2,090.9	(647.4)	-23.6%	N/A	N/A	N/A	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3	Expense	GT&S	AH	Maint Gas Storage Fac	AH1 ^{RM}	WELL - Integrity Assessments	SRM Total	SRM Total	Ex 3, Ch 7	No	On-going	Annual	9,806.7	6,542.9	(3,263.8)	-33.3%	NO	NO	Various	268	255	(13)	-4.9%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
4	Expense	GT&S	AH	Maint Gas Storage Fac	AH1 ^{RM}	WELL - Integrity Assessments	Loss of Containment at Natural Gas Storage Well or Reservoir	NGSWR-C003 Well Inspections and Rework	Ex 3, Ch 7	No	N/A	N/A	9,806.7	6,542.9	(3,263.8)	-33.3%	N/A	N/A	N/A	268	255	(13)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5	Expense	GT&S	AH	Maint Gas Storage Fac	AH2	WELL - Reworks	SRM Total	SRM Total	Ex 3, Ch 7	No	On-going	Annual	3,427.6	0.0	(3,427.6)	-100.0%	NO	NO	# Reworks	2	0	(2)	-100.0%	YES	Below variance threshold.	Actual units were lower than imputed units due to units now being capitalized under WELL Reworks MAT 3L3.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
6	Expense	GT&S	AH	Maint Gas Storage Fac	AH2	WELL - Reworks	Loss of Containment at Natural Gas Storage Well or Reservoir	NGSWR-C003 Well Inspections and Rework	Ex 3, Ch 7	No	N/A	N/A	3,427.6	0.0	(3,427.6)	-100.0%	N/A	N/A	N/A	2	0	(2)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
7	Expense	GT&S	AH	Maint Gas Storage Fac	AH3	WELL - Other	SRM Total	SRM Total	Ex 3, Ch 7	No	On-going	Annual	2,832.4	1,995.6	(836.9)	-29.5%	NO	NO	non-utilized: This MAT has no measurable units because it captures miscellaneous engineering support.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
8	Expense	GT&S	AH	Maint Gas Storage Fac	AH3	WELL - Other	Loss of Containment at Natural Gas Storage Well or Reservoir	NGSWR-C004 Well Emergent and Emergency Support	Ex 3, Ch 7	No	N/A	N/A	2,832.4	1,995.6	(836.9)	-29.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
9	Expense	GT&S	AH	Maint Gas Storage Fac	AH4	Gil Ranch Operations & Maint	SRM Total	SRM Total	Ex 3, Ch 7	No	On-going	Annual	3,189.1	4,539.2	1,350.2	42.3%	NO	NO	non-utilized: This MAT has no measurable units because it is used to record costs for Gil Ranch Storage. The type of the work performed at the storage are different and are not comparable.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
10	Expense	GT&S	AH	Maint Gas Storage Fac	AH4	Gil Ranch Operations & Maint	Loss of Containment at Natural Gas Storage Well or Reservoir	NGSWR-C003 Well Inspections and Rework	Ex 3, Ch 7	No	N/A	N/A	3,189.1	4,539.2	1,350.2	42.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
11	Expense	GT&S	AH	Maint Gas Storage Fac	AH ^{RM}	Not assigned	SRM Total	SRM Total	Ex 3, Ch 7	No	On-going	Annual	2,265.7	476.8	(1,788.9)	-79.0%	NO	NO	non-utilized: This MAT has no measurable units because it is used to record various engineering support costs.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
12	Expense	GT&S	AH	Maint Gas Storage Fac	AH ^{RM}	Not assigned	Loss of Containment at Natural Gas Storage Well or Reservoir	NGSWR-C003 Well Inspections and Rework	Ex 3, Ch 7	No	N/A	N/A	2,265.7	476.8	(1,788.9)	-79.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
13	Expense	GT&S	CM	GT Operate System	CMA	GT&S Operations	SRM Total	SRM Total	Ex 3, Ch 11	No	On-going	Annual	15,572.9	13,898.3	(1,674.6)	-10.8%	NO	NO	non-utilized: This MAT has no measurable units because MAT CMA represents a chargeback MAT for Gas Control related headcount (operators). It represents non-workstream program that it is a continuous program with no unit completions associated with the charges.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
14	Expense	GT&S	CM	GT Operate System	CMA	GT&S Operations	Insufficient Capacity to Meet Customer Demand	CPCTY-C002 GT&S Operations	Ex 3, Ch 11	No	N/A	N/A	15,572.9	13,898.3	(1,674.6)	-10.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
15	Expense	GT&S	CM	GT Operate System	CMA	GT&S Operations	Loss of Containment on Gas Transmission Pipeline	LOCTM-C021 GT&S Operations	Ex 3, Ch 11	No	N/A	N/A	15,572.9	13,898.3	(1,674.6)	-10.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
16	Expense	GT&S	CM	GT Operate System	CMA	GT&S Operations	Large Overpressure Event Downstream of Gas M&C Facility	LRGOP-C015 GT&S Operations	Ex 3, Ch 11	No	N/A	N/A	15,572.9	13,898.3	(1,674.6)	-10.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
17	Expense	GT&S	CM	GT Operate System	CMA	GT&S Operations	Loss of Contain at Gas Measrm & Cntrl / Cmpren & Procsn Faci	MCCPF-C026 GT&S Operations	Ex 3, Ch 11	No	N/A	N/A	15,572.9	13,898.3	(1,674.6)	-10.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
18	Expense	GT&S	CM	GT Operate System	CMA	GT&S Operations	Loss of Containment at Natural Gas Storage Well or Reservoir	NGSWR-C001 GT&S Operations	Ex 3, Ch 11	No	N/A	N/A	15,572.9	13,898.3	(1,674.6)	-10.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
19	Expense	GT&S	CM	GT Operate System	CMB	ElecPwr CompFuel & Oth Elec Eq	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 3, Ch 11	No	On-going	Annual	27,881.2	35,400.1	7,518.8	27.0%	NO	YES	non-utilized: Its MAT has no measurable units because it includes electricity costs for electrically connected gas equipment, and electrically powered gas compressor stations.	N/A	N/A	N/A	N/A	NO	Program expenses exceeded the imputed values due to system operating conditions and increased electricity costs for electrically powered gas compressor stations.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
20	Expense	GT&S	DF	G&E T&D Locate and Mark	DFA	Locate and Mark	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	1,345.4	697.0	(648.4)	-48.2%	NO	NO	# of Tickets	6,073	3,402	(2,671)	-44.0%	YES	Below variance threshold.	Actual units were lower than imputed units due to the ticket increase from third-party driven work not materializing as expected. A change in the ticket system used by USA North 811 was found to be difficult to use by excavators, resulting in less engagement with the 811 system.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's demand driven work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of the program is a continuing effort to protect underground PG&E assets and maintain excavator safety in accordance with state and federal code.

**TABLE 2-9
2023 RSAR
2023 GRC CYCLE GT&S EXPENSE COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	Type (O&M Expense or Capital)	A	B	C1	C2	C3	C4	C5	C6	C7	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	Forecast			Status	Completion Status Statement						
																												U1	U2	U3								
																												Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)								
21	Expense	GT&S	DF	G&E T&D Locate and Mark	DFA	Locate and Mark	Loss of Containment on Gas Transmission Pipeline	LOCTM-C009 Locate and Mark - Transmission	Ex 3, Ch 8	No	N/A	N/A	N/A	1,346.4	697.0	(849.4)	-48.2%	N/A	N/A	N/A		6,073	3,402	(2,671)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
22	Expense	GT&S	DF	G&E T&D Locate and Mark	DFB	Locate and Mark - Standby	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	5,420.7	5,179.5	(241.1)	-4.4%	NO	NO	# of Requests		5,381	5,658	277	5.1%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
23	Expense	GT&S	DF	G&E T&D Locate and Mark	DFB	Locate and Mark - Standby	Loss of Containment on Gas Transmission Pipeline	LOCTM-C010 Locate and Mark - Transmission Standby	Ex 3, Ch 8	No	N/A	N/A	5,420.7	5,179.5	(241.1)	-4.4%	N/A	N/A	N/A		5,381	5,658	277	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
24	Expense	GT&S	GF	Gas Trans & Dist Sys Mapping	GFP	Mapping Support-Transmission	SRM Total	SRM Total	Ex 3, Ch 13	No	On-going	Annual	5,563.2	2,434.4	(3,128.8)	-56.2%	NO	NO	non-unitized: This MAT has no measurable units because the work encompassed is varied with no consistent unit of measure. This largely includes responding to requests, research, and remediation to data in gas systems (T&D) of record for assets not encompassed in an order.		N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Unitized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
25	Expense	GT&S	GF	Gas Trans & Dist Sys Mapping	GFP	Mapping Support-Transmission	Loss of Containment on Gas Transmission Pipeline	LOCTM-C036 Production Mapping Transmission	Ex 3, Ch 13	No	N/A	N/A	5,563.2	2,434.4	(3,128.8)	-56.2%	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
26	Expense	GT&S	GF	Gas Trans & Dist Sys Mapping	GFO	GT&D Data Management	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	N/A	No	On-going	Annual	0.0	1,036.2	1,036.2	100.0%	NO	NO	non-unitized: This MAT has no measurable units because the work encompassed is varied with no consistent unit of measure. This largely includes responding to requests, research, and remediation to data in gas systems (T&D) of record for assets not encompassed in an order.		N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Unitized.	On-Target	On-Target	Over	Proceeding as Planned	N/A						
27	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJA ¹⁸	Electrical Interference - AC	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	1,539.3	1,266.0	(273.3)	-17.8%	NO	NO	Various		329	159	(170)	-51.7%	YES	Below variance threshold.	Actual units were lower than imputed units due to: (1) completion of the multi-year arc fault program, and (2) no new locations were investigated due to the multi-year program clean-up.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to investigate and mitigate AC interference.						
28	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJA ¹⁸	Electrical Interference - AC	Loss of Containment on Gas Transmission Pipeline	LOCTM-C033 Electrical Interference Program	Ex 3, Ch 9	No	N/A	N/A	1,539.3	1,266.0	(273.3)	-17.8%	N/A	N/A	N/A		329	159	(170)	-51.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
29	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJA ¹⁸	Electrical Interference - AC	Loss of Containment on Gas Measurm & Ctrnl / Cntrn & Procsn Facil	MCCPF-C019 Electrical Interference	Ex 3, Ch 9	No	N/A	N/A	1,539.3	1,266.0	(273.3)	-17.8%	N/A	N/A	N/A		329	159	(170)	-51.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
30	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJB	Atmospheric Corrosion	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	3,841.7	7,167.5	3,325.7	86.6%	NO	NO	# of span and station recoats		94	62	(32)	-34.0%	YES	Below variance threshold.	Actual units were lower than imputed units due to: 1) long lead permit delays and scope changes, 2) projects beginning in 2023 that won't materialize until completion in 2024, and 3) the projects in progress in 2023 were on large pipelines thus creating more complex jobs.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to mitigate atmospheric corrosion on transmission main spans found during atmospheric corrosion inspections, required to maintain compliance with 49 CFR Section 192, Subpart 1 - Requirements for Corrosion Control.						
31	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJB	Atmospheric Corrosion	Loss of Containment on Gas Transmission Pipeline	LOCTM-C034 Atmospheric Corrosion Program	Ex 3, Ch 9	No	N/A	N/A	3,841.7	7,167.5	3,325.7	86.6%	N/A	N/A	N/A		94	62	(32)	-34.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
32	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJB	Atmospheric Corrosion	Loss of Containment on Gas Measurm & Ctrnl / Cntrn & Procsn Facil	MCCPF-C017 Facility Corrosion Control Program	Ex 3, Ch 9	No	N/A	N/A	3,841.7	7,167.5	3,325.7	86.6%	N/A	N/A	N/A		94	62	(32)	-34.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
33	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJC ¹⁸	Cathodic Protection Exp	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	414.4	291.7	(122.7)	-29.6%	NO	NO	Various		1,000	889	(111)	-11.1%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
34	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJC ¹⁸	Cathodic Protection Exp	Loss of Containment on Gas Transmission Pipeline	LOCTM-C019 Cathodic Protection	Ex 3, Ch 9	No	N/A	N/A	414.4	291.7	(122.7)	-29.6%	N/A	N/A	N/A		1,000	889	(111)	-11.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
35	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJD	Test Station Exp	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	247.1	242.6	(4.5)	-1.8%	NO	NO	# of test stations installed		10	2	(8)	-80.0%	YES	Below variance threshold.	Actual units were lower than imputed units due to the lower number of test stations discovered during annual monitoring that required repair.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
36	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJD	Test Station Exp	Loss of Containment on Gas Transmission Pipeline	LOCTM-C019 Cathodic Protection	Ex 3, Ch 9	No	N/A	N/A	247.1	242.6	(4.5)	-1.8%	N/A	N/A	N/A		10	2	(8)	-80.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
37	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJE ¹⁸	Close Interval Survey (CIS)	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	4,141.9	1,877.2	(2,264.8)	-54.7%	NO	NO	Various		451	178	(273)	-60.5%	YES	Below variance threshold.	Actual units were lower than imputed units due to reprioritization in support of higher risk or compliance work. program activities have been delayed.	Under	Under	Under	Rescheduled	Due to reprioritization to higher risk or compliance work, program activities have been delayed.						
38	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJE ¹⁸	Close Interval Survey (CIS)	Loss of Containment on Gas Transmission Pipeline	LOCTM-C019 Cathodic Protection	Ex 3, Ch 9	No	N/A	N/A	4,141.9	1,877.2	(2,264.8)	-54.7%	N/A	N/A	N/A		451	178	(273)	-60.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
39	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJE ¹⁸	Close Interval Survey (CIS)	Loss of Containment on Gas Measurm & Ctrnl / Cntrn & Procsn Facil	MCCPF-C018 Cathodic Protection	Ex 3, Ch 9	No	N/A	N/A	4,141.9	1,877.2	(2,264.8)	-54.7%	N/A	N/A	N/A		451	178	(273)	-60.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
40	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJF	Electrical Interference - DC	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	801.9	1,616.5	814.6	101.6%	NO	NO	non-unitized: This MAT has no measurable units because the MAT code is to perform Dynamic/Static DC Reactive/Proactive investigation, and it is mainly vendor or employee's time charged to perform the investigation.		N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Unitized.	Over	Over	Over	Expanded	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to investigate DC interference locations. The program's scope was expanded to meet requirements in PHMSA MegaRule Part 2.						

**TABLE 2-9
2023 RSAR
2023 GRC CYCLE GT&S EXPENSE COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	Type (O&M Expense or Capital)	A	B	C1	C2	C3	C4	C5	C6	C7	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	Forecast			Status	Completion Status Statement				
																												U1 Scope (I, O, or T)	U2 Schedule (I, O, or T)	U3 Budget (I, O, or T)						
41	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJF	Electrical Interference - DC	Loss of Containment on Gas Transmission Pipeline	LOCTM-C033 Electrical Interference Program	Ex 3, Ch 9	No	NA	NA	801.9	1,616.5	814.6	101.6%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
42	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJF	Electrical Interference - DC	Loss of Contain at Gas Measrm & Cntrl / Cntrsn & Procsn Faci	MCCPF-C019 Electrical Interference	Ex 3, Ch 9	No	NA	NA	801.9	1,616.5	814.6	101.6%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
43	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJH ¹	Internal Corrosion	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	6,066.1	838.3	(5,227.8)	-86.2%	NO	YES	Various	Various	2,743	1,395	(1,348)	-49.1%	YES	Program expenses were below imputed regulatory values due to less units being performed.	Actual units were lower than imputed units because: 1) work was done and paid by a third party, so no rate case units are claimed, 2) fewer internal corrosion monitoring devices were installed than anticipated that required monitoring, 3) strips required less frequent maintenance than anticipated, and 4) fewer internal corrosion non-destructive examinations were performed.	Under	On-Target	Under	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to monitor internal corrosion. Less work is required to be performed than anticipated in the 2023 GRC.				
44	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJH ¹	Internal Corrosion	Loss of Containment on Gas Transmission Pipeline	LOCTM-C032 Internal Corrosion Program	Ex 3, Ch 9	No	NA	NA	6,066.1	838.3	(5,227.8)	-86.2%	NA	NA	NA	NA	2,743	1,395	(1,348)	-49.1%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
45	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJJ	Low Read Investigations	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	290.9	0.0	(290.9)	-100.0%	NO	NO	non-unitized: This MAT has no measurable units because the type of work varies by situation. Complex corrosion investigations are driven by requests from corrosion field services to corrosion engineering to help troubleshoot complex corrosion issues as needed, and the level of support varies based on the unique circumstances of each problem.	non-unitized: This MAT has no measurable units because the type of work varies by situation. Complex corrosion investigations are driven by requests from corrosion field services to corrosion engineering to help troubleshoot complex corrosion issues as needed, and the level of support varies based on the unique circumstances of each problem.	NA	NA	NA	NA	NA	Below variance threshold.	Not-Unitized.	On-Target	On-Target	On-Target	Proceeding as Planned	NA				
46	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJJ	Low Read Investigations	Loss of Containment on Gas Transmission Pipeline	LOCTM-C019 Cathodic Protection	Ex 3, Ch 9	No	NA	NA	290.9	0.0	(290.9)	-100.0%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
47	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJK	Corrosion Support	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	2,865.2	1,445.9	(1,419.3)	-49.5%	NO	NO	non-unitized: This MAT has no measurable units because it reflects labor costs supporting data and program management.	non-unitized: This MAT has no measurable units because it reflects labor costs supporting data and program management.	NA	NA	NA	NA	NA	Below variance threshold.	Not-Unitized.	On-Target	On-Target	On-Target	Proceeding as Planned	NA				
48	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJK	Corrosion Support	Loss of Containment on Gas Transmission Pipeline	LOCTM-C035 Transmission Corrosion Control Program	Ex 3, Ch 9	No	NA	NA	2,865.2	1,445.9	(1,419.3)	-49.5%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
49	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJK	Corrosion Support	Loss of Contain at Gas Measrm & Cntrl / Cntrsn & Procsn Faci	MCCPF-C017 Facility Corrosion Control Program	Ex 3, Ch 9	No	NA	NA	2,865.2	1,445.9	(1,419.3)	-49.5%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJL	Casings Monitoring	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	0.0	0.5	0.5	100.0%	NO	NO	# of casings tested	# of casings tested	0	0	0	0.0%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	Over	Proceeding as Planned	NA				
51	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJL	Casings Monitoring	Loss of Containment on Gas Transmission Pipeline	LOCTM-C035 Transmission Corrosion Control Program	Ex 3, Ch 9	No	NA	NA	0.0	0.5	0.5	100.0%	NA	NA	NA	NA	0	0	0	0.0%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJM ¹	Casings	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	4,276.6	2,280.0	(1,996.6)	-46.7%	NO	NO	Various	Various	1,181	1,137	(44)	-3.7%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	NA				
53	Expense	GT&S	GJ	Gas Transmission Mitigate Corr	GJM ¹	Casings	Loss of Containment on Gas Transmission Pipeline	LOCTM-C035 Transmission Corrosion Control Program	Ex 3, Ch 9	No	NA	NA	4,276.6	2,280.0	(1,996.6)	-46.7%	NA	NA	NA	NA	1,181	1,137	(44)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
54	Expense	GT&S	GM	Manage Energy Efficiency-NonBA	GMD	LNG / CNG	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	2,650.8	3,617.0	966.2	36.4%	NO	NO	non-unitized: This MAT has no measurable units due to the variability in O&M activities the MAT includes.	non-unitized: This MAT has no measurable units due to the variability in O&M activities the MAT includes.	NA	NA	NA	NA	NO	Below variance threshold.	Not-Unitized.	On-Target	On-Target	On-Target	Proceeding as Planned	NA				
55	Expense	GT&S	GM	Manage Energy Efficiency-NonBA	GMD	LNG / CNG	Loss of Containment on LNG/CNG Portable Equipment	LNCG-C002 LNG/CNG Portable Equipment	Ex 3, Ch 5	No	NA	NA	2,650.8	3,617.0	966.2	36.4%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
56	Expense	GT&S	GM	Manage Energy Efficiency-NonBA	GMD	LNG / CNG	Loss of Containment on Gas Transmission Pipeline	LOCTM-C002 LNG/CNG to Support Strength Testing	Ex 3, Ch 5	No	NA	NA	2,650.8	3,617.0	966.2	36.4%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
57	Expense	GT&S	HP	CGT Balancing Accounts	HPA	TIMP - Other	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	9,804.2	9,706.6	(97.5)	-1.0%	NO	NO	non-unitized: This MAT has no measurable units because it is used to record costs for Subpart O Integrity Management Risk Analysis. The type of work performed are not comparable.	non-unitized: This MAT has no measurable units because it is used to record costs for Subpart O Integrity Management Risk Analysis. The type of work performed are not comparable.	NA	NA	NA	NA	NO	Below variance threshold.	Not-Unitized.	On-Target	On-Target	On-Target	Proceeding as Planned	NA				
58	Expense	GT&S	HP	CGT Balancing Accounts	HPA	TIMP - Other	Loss of Containment on Gas Transmission Pipeline	LOCTM-C029 Risk Analysis	Ex 3, Ch 5	No	NA	NA	9,804.2	9,706.6	(97.5)	-1.0%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59	Expense	GT&S	HP	CGT Balancing Accounts	HPB	Traditional I/LI Runs	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	33,561.8	70,894.2	37,332.4	111.2%	YES	YES	Miles Inspected	Miles Inspected	337.27	457.00	119.73	35.5%	YES	Program expenses exceeded imputed regulatory values because the 2023 work plan was set in 2022 and the 2023 GRC Final Decision was received at the end of 2023. Because of this, the work plan could not be adjusted to be consistent with the adopted dollars.	Actual units were higher than imputed units because the 2023 work plan was set in 2022 and the 2023 GRC Final Decision was received at the end of 2023. Because of this, the work plan could not be adjusted to be consistent with the adopted units.	On-Target	On-Target	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to assess pipeline integrity for the internal and external condition of transmission line pipe as required by 49 CFR Subpart O.				
60	Expense	GT&S	HP	CGT Balancing Accounts	HPB	Traditional I/LI Runs	Loss of Containment on Gas Transmission Pipeline	LOCTM-C005 In-Line Inspection	Ex 3, Ch 5	No	NA	NA	33,561.8	70,894.2	37,332.4	111.2%	NA	NA	NA	NA	337.27	457.00	119.73	35.5%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**TABLE 2-9
2023 RSAR
2023 GRC CYCLE GT&S EXPENSE COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll-up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K Spending Variance Explanation Required (Y/N)	L Percentage Variance Explanation Required (Y/N)	M Unit Type	N 2023 Imputed Adopted Units	O 2023 Actual Units	P Difference for 2023 (# of units) (O-N)	Q Unit Percent Variance for 2023 (%) ((O-N)/N*100)	R Unit Variance Explanation Required (Y/N)	S 2023 Cost Variance Explanation	T 2023 Unit Variance Explanation	Forecast			Status	Completion Status Statement			
																											U1 Scope (U, O, or T)	U2 Schedule (U, O, or T)	U3 Budget (U, O, or T)					
61	Expense	GT&S	HP	CGT Balancing Accounts	HPC	ECCA Indirect Inspections	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	7,382.6	8,316.1	933.4	12.6%	NO	NO	Miles inspected	67.13	38.99	(28.14)	-41.9%	YES	Below variance threshold.	Actual units were lower than imputed units due to fewer miles of pipeline assessed with EDCA. This was due to the decision to utilize other assessment technologies which led to lower scope of work than anticipated when forecasting the GRC.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to proactively address time-dependent threats of external corrosion and to prevent anomalies from growing to a size that affects the structural integrity of the pipeline.			
62	Expense	GT&S	HP	CGT Balancing Accounts	HPC	ECCA Indirect Inspections	Loss of Containment on Gas Transmission Pipeline	LOCTM-C022 Direct Assessment	Ex 3, Ch 5	No	N/A	N/A	7,382.6	8,316.1	933.4	12.6%	N/A	N/A	N/A	67.13	39.00	(28.13)	-41.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
63	Expense	GT&S	HP	CGT Balancing Accounts	HPE	Integrity Manage Leak Survey	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	276.1	179.4	(96.7)	-35.0%	NO	NO	non-utilized. This MAT has no measurable units because this programs records costs associated with transmission leak surveys conducted on conducted on Class 3/4 non-HCA pipeline operating under 30 percent Specified Minimum Yield Strength as required by Subpart O.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
64	Expense	GT&S	HP	CGT Balancing Accounts	HPE	Integrity Manage Leak Survey	Loss of Containment on Gas Transmission Pipeline	LOCTM-C029 Risk Analysis	Ex 3, Ch 5	No	N/A	N/A	276.1	179.4	(96.7)	-35.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
65	Expense	GT&S	HP	CGT Balancing Accounts	HPP	Hydrostatic Testing - IM	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	21,325.6	35,560.3	14,234.7	66.7%	YES	YES	Miles	3.27	12.02	8.75	267.6%	YES	Program expenses exceeded imputed regulatory values due to a larger scope of in year compliance work.	Actual units were higher than imputed units due to in year compliance driven work and project carryover from 2022 to 2023. Project delays resulted in a 6.7 mile carryover for the program from 2022 to 2023.	Over	On-Target	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to validate the integrity of pipe that is located in HCAs, Class 3 and 4, non-HCA, and potentially new MCAs as required by 49 CFR Subpart O and 49 CFR Part 192.			
66	Expense	GT&S	HP	CGT Balancing Accounts	HPP	Hydrostatic Testing - IM	Loss of Containment on Gas Transmission Pipeline	LOCTM-C026 TIMP Strength Testing	Ex 3, Ch 5	No	N/A	N/A	21,325.6	35,560.3	14,234.7	66.7%	N/A	N/A	N/A	3.27	12.02	8.75	267.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
67	Expense	GT&S	HP	CGT Balancing Accounts	HPI	ILI Direct Exam and Repair	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	48,185.8	47,027.7	(1,158.0)	-2.4%	NO	NO	non-utilized. This MAT has no measurable units because it involves direct examination and repair work that is based on data collected through both Traditional and Non-Traditional ILI runs.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
68	Expense	GT&S	HP	CGT Balancing Accounts	HPI	ILI Direct Exam and Repair	Loss of Containment on Gas Transmission Pipeline	LOCTM-C005 In-Line Inspection	Ex 3, Ch 5	No	N/A	N/A	48,185.8	47,027.7	(1,158.0)	-2.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
69	Expense	GT&S	HP	CGT Balancing Accounts	HPJ	ICDA Indirect Inspections	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	718.5	32.6	(685.8)	-95.5%	NO	NO	# of projects	11	0	(11)	-100.0%	YES	Below variance threshold.	Actual units were lower than imputed units due to fewer miles of pipeline assessed with ICDA. This was due to fewer HCAs that required ICDA assessments which led to lower scope of work than anticipated when forecasting the GRC.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
70	Expense	GT&S	HP	CGT Balancing Accounts	HPJ	ICDA Indirect Inspections	Loss of Containment on Gas Transmission Pipeline	LOCTM-C022 Direct Assessment	Ex 3, Ch 5	No	N/A	N/A	718.5	32.6	(685.8)	-95.5%	N/A	N/A	N/A	11	0	(11)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
71	Expense	GT&S	HP	CGT Balancing Accounts	HPK	SCCDA Indirect Inspections	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	1,745.3	839.7	(905.5)	-51.9%	NO	NO	Miles	15.87	0.00	(15.87)	-100.0%	YES	Below variance threshold.	Actual units were lower than imputed units due to no risk and threat data for SCC threat requiring 2023 SCCDA assessments.	Under	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to utilize direct assessment for stress corrosion cracking threat assessment. This is time-dependent threat compliance data driven work.			
72	Expense	GT&S	HP	CGT Balancing Accounts	HPK	SCCDA Indirect Inspections	Loss of Containment on Gas Transmission Pipeline	LOCTM-C022 Direct Assessment	Ex 3, Ch 5	No	N/A	N/A	1,745.3	839.7	(905.5)	-51.9%	N/A	N/A	N/A	15.87	0.00	(15.87)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
73	Expense	GT&S	HP	CGT Balancing Accounts	HPL	Repairs / Replace < 50ft	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	4,446.4	139.0	(4,307.3)	-96.9%	NO	NO	non-utilized. This MAT has no measurable units because it is used to record costs for very short pipe replacements in lieu of test (<50ft).	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
74	Expense	GT&S	HP	CGT Balancing Accounts	HPL	Repairs / Replace < 50ft	Loss of Containment on Gas Transmission Pipeline	LOCTM-C026 TIMP Strength Testing	Ex 3, Ch 5	No	N/A	N/A	4,446.4	139.0	(4,307.3)	-96.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
75	Expense	GT&S	HP	CGT Balancing Accounts	HPN	ECCA Direct Examinations	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	36,825.3	27,086.2	(9,739.1)	-26.4%	NO	YES	Digs	168	122	(46)	-27.4%	YES	Program expenses were below imputed regulatory values due to fewer miles of pipeline assessed with EDCA. This was due to fewer miles of HCAs that required EDCA assessments which led to lower costs.	Actual units were lower than imputed units due to fewer miles of pipeline assessed with EDCA. This was due to the decision to utilize other assessment technologies which led to lower scope of work.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to proactively address time-dependent threats of stress corrosion cracking and to prevent anomalies from growing to a size that affects the structural integrity of the pipeline.			
76	Expense	GT&S	HP	CGT Balancing Accounts	HPN	ECCA Direct Examinations	Loss of Containment on Gas Transmission Pipeline	LOCTM-C022 Direct Assessment	Ex 3, Ch 5	No	N/A	N/A	36,825.3	27,086.2	(9,739.1)	-26.4%	N/A	N/A	N/A	168	122	(46)	-27.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
77	Expense	GT&S	HP	CGT Balancing Accounts	HPO	ICDA Direct Examinations	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	12,665.6	1,242.7	(11,422.8)	-90.2%	YES	YES	Digs	43	4	(39)	-90.7%	YES	Program expenses were below imputed regulatory values due to risk and threat data updates for internal corrosion threat that impacted the 2023 identified scope, leading to no ICDA projects in 2023.	Actual units were lower than imputed units due to risk and threat data updates for internal corrosion threat that impacted the 2023 identified scope, leading to no ICDA projects in 2023.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to proactively address time-dependent threats of internal corrosion and to prevent anomalies from growing to a size that affects the structural integrity of the pipeline.			
78	Expense	GT&S	HP	CGT Balancing Accounts	HPO	ICDA Direct Examinations	Loss of Containment on Gas Transmission Pipeline	LOCTM-C022 Direct Assessment	Ex 3, Ch 5	No	N/A	N/A	12,665.6	1,242.7	(11,422.8)	-90.2%	N/A	N/A	N/A	43	4	(39)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
79	Expense	GT&S	HP	CGT Balancing Accounts	HPP	SCCDA Direct Examinations	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	17,035.2	17.6	(17,017.5)	-99.9%	YES	YES	Digs	77	0	(77)	-100.0%	YES	Program expenses were below imputed regulatory values due to fewer miles of pipeline assessed with SCCDA. This was due to fewer miles of HCAs that required SCCDA assessments which led to lower costs.	Actual units were lower than imputed units due to fewer miles of pipeline assessed with SCCDA. This was due to fewer miles of HCAs that required SCCDA assessments which led to lower scope of work.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to proactively address time-dependent threats of stress corrosion cracking and to prevent anomalies from growing to a size that affects the structural integrity of the pipeline.			
80	Expense	GT&S	HP	CGT Balancing Accounts	HPP	SCCDA Direct Examinations	Loss of Containment on Gas Transmission Pipeline	LOCTM-C022 Direct Assessment	Ex 3, Ch 5	No	N/A	N/A	17,035.2	17.6	(17,017.5)	-99.9%	N/A	N/A	N/A	77	0	(77)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**TABLE 2-9
2023 RSAR
2023 GRC CYCLE GT&S EXPENSE COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	Type (O&M Expense or Capital)	Functional Area	MWC	MWC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$ (H-G))	Spending Percent Variance for 2023 (%) ((H-G)/G*100)	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Imputed Adopted Units	2023 Actual Units	Difference for 2023 (# of Units (O-N))	Unit Percent Variance for 2023 (%) ((O-N)/N*100)	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	Forecast			Status	Completion Status Statement			
																											Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)					
81	Expense	GT&S	HP	CGT Balancing Accounts	HPR	Non-Traditional I/LI Runs	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	14,392.6	17,293.3	2,900.6	20.2%	NO	NO	Miles	6.23	4.10	-2.13	-34.2%	YES	Below variance threshold.	Actual units were lower than imputed units because alternative assessment methods, such as ECDA, Pipe Replacement, and Strength Testing, were used in lieu of non-traditional to address integrity issues in 2023.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of the program is to complete integrity assessments for sections of HCA pipe that may be infeasible for assessment by direct assessment to comply with requirements of 49 CFR Subpart O.			
82	Expense	GT&S	HP	CGT Balancing Accounts	HPR	Non-Traditional I/LI Runs	Loss of Containment on Gas Transmission Pipeline	LOCTM-C005 In-Line Inspection	Ex 3, Ch 5	No	N/A	N/A	14,392.6	17,293.3	2,900.6	20.2%	N/A	N/A	N/A	6.23	4.10	-2.13	-34.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
83	Expense	GT&S	HP	CGT Balancing Accounts	HPS	Geo-Hazard Studies	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	3,014.5	1,927.3	(1,087.2)	-36.1%	NO	NO	non-utilized. This MAT has no measurable units because it is used to record costs for identifying geo-hazards such as soil-creep, dormant landslides with potential to re-activate, and subsidence. The type of work performed are not comparable.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
84	Expense	GT&S	HP	CGT Balancing Accounts	HPS	Geo-Hazard Studies	Loss of Containment on Gas Transmission Pipeline	LOCTM-C001 Geo-Hazard Threat Identification and Mitigation	Ex 3, Ch 5	No	N/A	N/A	3,014.5	1,927.3	(1,087.2)	-36.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
85	Expense	GT&S	HP	CGT Balancing Accounts	HPT	Root Cause Analysis	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	2,871.0	1,048.0	(1,823.0)	-63.5%	NO	NO	non-utilized. This MAT has no measurable units because it is used to record costs for identifying geo-hazards such as soil-creep, dormant landslides with potential to re-activate, and subsidence. The type of work performed are not comparable.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
86	Expense	GT&S	HP	CGT Balancing Accounts	HPT	Root Cause Analysis	Loss of Containment on Gas Transmission Pipeline	LOCTM-C030 Root Cause Analysis	Ex 3, Ch 5	No	N/A	N/A	2,871.0	1,048.0	(1,823.0)	-63.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
87	Expense	GT&S	HP	CGT Balancing Accounts	HPU	TIMP Direct Examinations	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	25,659.9	19,207.7	(6,452.2)	-25.1%	NO	YES	Digs	24	17	(7)	-29.2%	YES	Program expenses were below imputed regulatory value due to HCA removal on eight (8) pipeline segments and pressure reduction on one (1) segment.	Actual units were lower than imputed units due to HCA removal on eight (8) pipeline segments and pressure reduction on one (1) segment.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of the program is to utilize direct examination to perform threat assessments, which includes excavation, examination, and repair.			
88	Expense	GT&S	HP	CGT Balancing Accounts	HPU	TIMP Direct Examinations	Loss of Containment on Gas Transmission Pipeline	LOCTM-C022 Direct Assessment	Ex 3, Ch 5	No	N/A	N/A	25,659.9	19,207.7	(6,452.2)	-25.1%	N/A	N/A	N/A	24	17	(7)	-29.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
89	Expense	GT&S	JO	GT Pipeline Maintenance	JO1	PM Scada Maintenance	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	349.0	355.1	6.1	1.7%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
90	Expense	GT&S	JO	GT Pipeline Maintenance	JO1	PM Scada Maintenance	Insufficient Capacity to Meet Customer Demand	CPCTY-C005 Transmission SCADA Maintenance	Ex 3, Ch 8	No	N/A	N/A	349.0	0.0	(349.0)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
91	Expense	GT&S	JO	GT Pipeline Maintenance	JO1	PM Scada Maintenance	Large Overpressure Event Downstream of Gas M&C Facility	LRGOP-C016 Transmission SCADA Maintenance	Ex 3, Ch 8	No	N/A	N/A	349.0	355.1	6.1	1.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
92	Expense	GT&S	JO	GT Pipeline Maintenance	JO1	PM Scada Maintenance	Loss of Contnrm at Gas Measrm & Ctrfl / Cnpran & Procan Facil	MCCPF-C002 Transmission SCADA Maintenance	Ex 3, Ch 8	No	N/A	N/A	349.0	355.1	6.1	1.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
93	Expense	GT&S	JO	GT Pipeline Maintenance	JO2	CM Scada Maintenance	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	251.4	186.3	(65.1)	-25.9%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
94	Expense	GT&S	JO	GT Pipeline Maintenance	JO2	CM Scada Maintenance	Insufficient Capacity to Meet Customer Demand	CPCTY-C005 Transmission SCADA Maintenance	Ex 3, Ch 8	No	N/A	N/A	251.4	186.3	(65.1)	-25.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
95	Expense	GT&S	JO	GT Pipeline Maintenance	JO2	CM Scada Maintenance	Large Overpressure Event Downstream of Gas M&C Facility	LRGOP-C016 Transmission SCADA Maintenance	Ex 3, Ch 8	No	N/A	N/A	251.4	186.3	(65.1)	-25.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
96	Expense	GT&S	JO	GT Pipeline Maintenance	JO2	CM Scada Maintenance	Loss of Contnrm at Gas Measrm & Ctrfl / Cnpran & Procan Facil	MCCPF-C002 Transmission SCADA Maintenance	Ex 3, Ch 8	No	N/A	N/A	251.4	0.0	(251.4)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
97	Expense	GT&S	JO	GT Pipeline Maintenance	JOA	Cath Prot Rectifier Maintenance	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	118.3	326.6	208.3	176.1%	NO	NO	# of rectifiers maintained	919	944	25	2.7%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
98	Expense	GT&S	JO	GT Pipeline Maintenance	JOA	Cath Prot Rectifier Maintenance	Loss of Containment on Gas Transmission Pipeline	LOCTM-C019 Cathodic Protection	Ex 3, Ch 9	No	N/A	N/A	118.3	326.6	208.3	176.1%	N/A	N/A	N/A	919	944	25	2.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
99	Expense	GT&S	JO	GT Pipeline Maintenance	JOB	Cath Prot Monitoring	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	1,289.6	1,882.4	592.8	46.0%	NO	NO	# of CP monitoring point reads (PIS reads)	13,674	18,750	5,076	37.1%	YES	Below variance threshold.	Actual units were higher than imputed units due to Rectifier Bi-Monthly reads, specifically those taken via Remote Monitoring Line (RML) which were not counted as completed units before.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
100	Expense	GT&S	JO	GT Pipeline Maintenance	JOB	Cath Prot Monitoring	Loss of Containment on Gas Transmission Pipeline	LOCTM-C019 Cathodic Protection	Ex 3, Ch 9	No	N/A	N/A	1,289.6	0.0	(1,289.6)	-100.0%	N/A	N/A	N/A	13,674	18,750	5,076	37.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**TABLE 2-9
2023 RSAR
2023 GRC CYCLE GT&S EXPENSE COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	Type (O&M Expense or Capital)	Functional Area	MWC	MWC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (B) (H-O)	Spending Percent Variance for 2023 (%) ((H-O)/B*100)	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Imputed Adopted Units	2023 Actual Units	Difference for 2023 (# of Units) (O-N)	Unit Percent Variance for 2023 (%) ((O-N)/N*100)	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	Forecast			Status	Completion Status Statement				
																											Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)						
101	Expense	GT&S	JO	GT Pipeline Maintenance	JOB	Cath Prot Monitoring	Loss of Contnrm at Gas Measrm & Critrl / Cnpran & Procsn Facil	MCCPF-C018 Cathodic Protection	Ex 3, Ch 9	No	N/A	N/A	1,289.6	1,882.4	592.8	46.0%	N/A	N/A	N/A	13,674	18,750	5,076	37.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
102	Expense	GT&S	JO	GT Pipeline Maintenance	JOB	Cath Prot Monitoring	Loss of Containment at Natural Gas Storage Well or Reservoir	NSWR-C007 Cathodic Protection	Ex 3, Ch 9	No	N/A	N/A	1,289.6	1,882.4	592.8	46.0%	N/A	N/A	N/A	13,674	18,750	5,076	37.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
103	Expense	GT&S	JO	GT Pipeline Maintenance	JOC	Cath Prot Troubleshoot	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	812.5	1,299.7	487.2	60.0%	NO	NO	# of CPA's troubleshoot	1,787	3,032	1,245	69.7%	YES	Below variance threshold.	Actual units were higher than imputed units due to more units requiring troubleshoots based upon moving to the -850mV "Off" Criteria in 2022, which is more conservative compared to the prior -850mV "on" criteria.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to troubleshoot situations where the Cathodic Protection System is providing inadequate protection for gas transmission assets, based upon the -850mV "off" criteria. -850mV "Off" refers to the acceptance criteria applied when performing annual Corrosion pipe-to-soil reads on Gas Transmission assets (MAT JOB). Any read not meeting -850mV "Off" generates a Troubleshoot Notification under this program.				
104	Expense	GT&S	JO	GT Pipeline Maintenance	JOC	Cath Prot Troubleshoot	Loss of Containment on Gas Transmission Pipeline	LOCTM-C019 Cathodic Protection	Ex 3, Ch 9	No	N/A	N/A	812.5	1,299.7	487.2	60.0%	N/A	N/A	N/A	1,787	3,032	1,245	69.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
105	Expense	GT&S	JO	GT Pipeline Maintenance	JOE	Ground Leak Survey	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	989.5	637.2	(352.3)	-35.6%	NO	NO	Miles Ground Leak Surveyed	440	477	37	8.4%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A				
106	Expense	GT&S	JO	GT Pipeline Maintenance	JOE	Ground Leak Survey	Loss of Containment on Gas Transmission Pipeline	LOCTM-C020 Transmission Leak Management	Ex 3, Ch 10	No	N/A	N/A	989.5	637.2	(352.3)	-35.6%	N/A	N/A	N/A	440	477	37	8.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
107	Expense	GT&S	JO	GT Pipeline Maintenance	JOE	Require Ground Pipeline Patrol	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	1,036.7	842.6	(194.1)	-18.7%	NO	NO	Hours	10,461	5,880	(4,581)	-43.8%	YES	Below variance threshold.	Actual units were lower than imputed units due to a change in the aerial patrol frequency. Aerial patrols were reduced from monthly to quarterly which reduced the number of ground patrol hours needed to support the flights.	Under	On-Target	Under	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to perform patrols for compliance, as well as special investigations including, but not limited to, excavation, structural encroachments, earth movements, and changes to human occupancy.				
108	Expense	GT&S	JO	GT Pipeline Maintenance	JOE	Require Ground Pipeline Patrol	Loss of Containment on Gas Transmission Pipeline	LOCTM-C012 Required Pipeline Patrol Program	Ex 3, Ch 8	No	N/A	N/A	1,036.7	842.6	(194.1)	-18.7%	N/A	N/A	N/A	10,461	5,880	(4,581)	-43.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
109	Expense	GT&S	JO	GT Pipeline Maintenance	JOG	PM G Regulator General	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	3,957.0	3,671.1	(285.9)	-7.2%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A				
110	Expense	GT&S	JO	GT Pipeline Maintenance	JOG	PM G Regulator General	Large Overpressure Event Downstream of Gas MAC Facility	LRGOP-C020 Transmission Regulator Maintenance	Ex 3, Ch 8	No	N/A	N/A	3,957.0	3,671.1	(285.9)	-7.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
111	Expense	GT&S	JO	GT Pipeline Maintenance	JOG	PM G Regulator General	Loss of Contnrm at Gas Measrm & Critrl / Cnpran & Procsn Facil	MCCPF-C014 Transmission Regulator Maintenance	Ex 3, Ch 8	No	N/A	N/A	3,957.0	3,671.1	(285.9)	-7.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
112	Expense	GT&S	JO	GT Pipeline Maintenance	JOH	PM Gas Pipeline Valve Manual	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	1,485.4	1,448.5	(46.9)	-3.1%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A				
113	Expense	GT&S	JO	GT Pipeline Maintenance	JOH	PM Gas Pipeline Valve Manual	Loss of Containment on Gas Transmission Pipeline	LOCTM-C013 PM Gas Pipeline Valves Program	Ex 3, Ch 8	No	N/A	N/A	1,485.4	1,448.5	(46.9)	-3.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
114	Expense	GT&S	JO	GT Pipeline Maintenance	JOI	PM Gas Pipeline Valve Automate	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	39.6	43.2	3.6	9.0%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A				
115	Expense	GT&S	JO	GT Pipeline Maintenance	JOI	PM Gas Pipeline Valve Automate	Loss of Containment on Gas Transmission Pipeline	LOCTM-C013 PM Gas Pipeline Valves Program	Ex 3, Ch 8	No	N/A	N/A	39.6	43.2	3.6	9.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
116	Expense	GT&S	JO	GT Pipeline Maintenance	JOJ	Gas Holders Maintenance	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	126.6	96.6	(30.0)	-23.7%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A				
117	Expense	GT&S	JO	GT Pipeline Maintenance	JOJ	Gas Holders Maintenance	Loss of Containment on Gas Transmission Pipeline	LOCTM-C031 Gas Holder Maintenance	Ex 3, Ch 8	No	N/A	N/A	126.6	96.6	(30.0)	-23.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
118	Expense	GT&S	JO	GT Pipeline Maintenance	JOK	Oper Transmission Pipelines	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	730.9	440.0	(290.9)	-39.8%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A				
119	Expense	GT&S	JO	GT Pipeline Maintenance	JOK	Oper Transmission Pipelines	Loss of Containment on Gas Transmission Pipeline	LOCTM-C023 Operate Transmission Pipelines	Ex 3, Ch 8	No	N/A	N/A	730.9	440.0	(290.9)	-39.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
120	Expense	GT&S	JO	GT Pipeline Maintenance	JOK	Oper Transmission Pipelines	Large Overpressure Event Downstream of Gas MAC Facility	LRGOP-C010 Operate Transmission Pipelines	Ex 3, Ch 8	No	N/A	N/A	730.9	440.0	(290.9)	-39.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

**TABLE 2-9
2023 RSAR
2023 GRC CYCLE GT&S EXPENSE COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	Type (O&M Expense or Capital)	Functional Area	MWC	MWC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$ (H-O))	Spending Percent Variance for 2023 (%) ((H-O)/G*100)	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Imputed Adopted Units	2023 Actual Units	Difference for 2023 (# of Units) (O-N)	Unit Percent Variance for 2023 (%) ((O-N)/N*100)	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	Forecast			Status	Completion Status Statement	
																											Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)			
121	Expense	GT&S	JO	GT Pipeline Maintenance	JOL	Oper Transmission Regl Station	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	461.3	627.9	166.6	36.1%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
122	Expense	GT&S	JO	GT Pipeline Maintenance	JOL	Oper Transmission Regl Station	Large Overpressure Event Downstream of Gas M&C Facility	LRGOP-C020 Transmission Regulator Maintenance	Ex 3, Ch 8	No	N/A	N/A	461.3	627.9	166.6	36.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
123	Expense	GT&S	JO	GT Pipeline Maintenance	JOL	Oper Transmission Regl Station	Loss of Contrm at Gas Measrm & Cntrl / Cntrln & Prosn Faci	MCCPF-C014 Transmission Regulator Maintenance	Ex 3, Ch 8	No	N/A	N/A	461.3	627.9	166.6	36.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
124	Expense	GT&S	JO	GT Pipeline Maintenance	JOM	CM G Regl Genl	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	1,117.1	1,276.3	159.2	14.3%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
125	Expense	GT&S	JO	GT Pipeline Maintenance	JOM	CM G Regl Genl	Large Overpressure Event Downstream of Gas M&C Facility	LRGOP-C020 Transmission Regulator Maintenance	Ex 3, Ch 8	No	N/A	N/A	1,117.1	1,276.3	159.2	14.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
126	Expense	GT&S	JO	GT Pipeline Maintenance	JOM	CM G Regl Genl	Loss of Contrm at Gas Measrm & Cntrl / Cntrln & Prosn Faci	MCCPF-C014 Transmission Regulator Maintenance	Ex 3, Ch 8	No	N/A	N/A	1,117.1	1,276.3	159.2	14.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
127	Expense	GT&S	JO	GT Pipeline Maintenance	JON	CM Gas Pipeline Valve Manual	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	950.0	724.2	(225.8)	-23.8%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
128	Expense	GT&S	JO	GT Pipeline Maintenance	JON	CM Gas Pipeline Valve Manual	Loss of Containment on Gas Transmission Pipeline	LOCTM-C014 CM Gas Pipeline Valves Program	Ex 3, Ch 8	No	N/A	N/A	950.0	724.2	(225.8)	-23.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
129	Expense	GT&S	JO	GT Pipeline Maintenance	JOJ	CM Gas Pipeline Valve Automate	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	222.3	603.8	381.6	171.7%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
130	Expense	GT&S	JO	GT Pipeline Maintenance	JOJ	CM Gas Pipeline Valve Automate	Loss of Containment on Gas Transmission Pipeline	LOCTM-C014 CM Gas Pipeline Valves Program	Ex 3, Ch 8	No	N/A	N/A	222.3	603.8	381.6	171.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
131	Expense	GT&S	JO	GT Pipeline Maintenance	JOP	CM G Main Lk	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	11,169.5	1,556.1	(9,613.4)	-86.1%	NO	YES	Leak Repaired	3,281	1,041	(2,240)	-68.3%	YES	Program expenses were below imputed regulatory values due to a decrease in the transmission leak find rate.	Actual units were lower than imputed units due to a decrease in the transmission leak find rate.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's demand driven work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to mitigate leaks.	
132	Expense	GT&S	JO	GT Pipeline Maintenance	JOP	CM G Main Lk	Loss of Containment on Gas Transmission Pipeline	LOCTM-C020 Transmission Leak Management	Ex 3, Ch 10	No	N/A	N/A	11,169.5	1,556.1	(9,613.4)	-86.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
133	Expense	GT&S	JO	GT Pipeline Maintenance	JOQ	Cath Protection Corr Maintnc	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	358.0	353.7	(4.3)	-1.2%	NO	NO	# of corrective work orders completed	324	237	(87)	-26.9%	YES	Below variance threshold.	Actual units were lower than imputed units due to less repairs required to resolve transmission troubleshooting. This is find after it work. The number of low reads founds in 2023 was below the historic find rate.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to inspect gas transmission piping which is exposed to the atmosphere (i.e. spans and stations) for the presence of Atmospheric Corrosion.	
134	Expense	GT&S	JO	GT Pipeline Maintenance	JOQ	Cath Protection Corr Maintnc	Loss of Containment on Gas Transmission Pipeline	LOCTM-C019 Cathodic Protection	Ex 3, Ch 9	No	N/A	N/A	358.0	353.7	(4.3)	-1.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
135	Expense	GT&S	JO	GT Pipeline Maintenance	JOR	Leak Rechecks	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	264.5	75.6	(188.9)	-71.4%	NO	NO	Leak Rechecks	2,816	884	(1,932)	-68.6%	YES	Below variance threshold.	Actual units were lower than imputed units due to a reduction in transmission leak find rates.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's demand driven work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to mitigate leaks.	
136	Expense	GT&S	JO	GT Pipeline Maintenance	JOR	Leak Rechecks	Loss of Containment on Gas Transmission Pipeline	LOCTM-C020 Transmission Leak Management	Ex 3, Ch 10	No	N/A	N/A	264.5	75.6	(188.9)	-71.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
137	Expense	GT&S	JO	GT Pipeline Maintenance	JOS	Pipeline Marker Maintenance	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	1,762.0	912.1	(849.9)	-48.2%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
138	Expense	GT&S	JO	GT Pipeline Maintenance	JOS	Pipeline Marker Maintenance	Loss of Containment on Gas Transmission Pipeline	LOCTM-C015 Pipeline Marker Maintenance	Ex 3, Ch 8	No	N/A	N/A	1,762.0	912.1	(849.9)	-48.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
139	Expense	GT&S	JO	GT Pipeline Maintenance	JOT	Vegetation Management	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	1,521.5	1,446.9	(74.6)	-4.9%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
140	Expense	GT&S	JO	GT Pipeline Maintenance	JOT	Vegetation Management	Loss of Containment on Gas Transmission Pipeline	LOCTM-C016 Vegetation Management	Ex 3, Ch 8	No	N/A	N/A	1,521.5	0.0	(1,521.5)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**TABLE 2-9
2023 RSAR
2023 GRC CYCLE GT&S EXPENSE COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll-up (Yes/No)	E Program / Project Life (Years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$ (H-G))	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K Spending Variance Explanation Required (Y/N)	L Percentage Variance Explanation Required (Y/N)	M Unit Type	N 2023 Imputed Adopted Units	O 2023 Actual Units	P Difference for 2023 (# of Units) (O-N)	Q Unit Percent Variance for 2023 (%) ((O-N)/N*100)	R Unit Variance Explanation Required (Y/N)	S 2023 Cost Variance Explanation	T 2023 Unit Variance Explanation	Forecast			V Status	W Completion Status Statement		
																											U1 Scope (U, O, or T)	U2 Schedule (U, O, or T)	U3 Budget (U, O, or T)				
141	Expense	GT&S	JO	GT Pipeline Maintenance	JOT	Vegetation Management	Large Overpressure Event Downstream of Gas M&C Facility	LRGOP-C011 Vegetation Management	Ex 3, Ch 8	No	N/A	N/A	1,521.5	1,446.9	(74.6)	-4.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
142	Expense	GT&S	JO	GT Pipeline Maintenance	JOT	Vegetation Management	Loss of Contm at Gas Measrm & Crtfl / Cmprsn & Procsn Facil	MCCPF-C008 Vegetation Management	Ex 3, Ch 8	No	N/A	N/A	1,521.5	1,446.9	(74.6)	-4.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
143	Expense	GT&S	JO	GT Pipeline Maintenance	JOV	Requid Aerial Pipeline Patrol	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	4,822.8	2,450.6	(2,372.1)	-49.2%	NO	NO	Miles Aerial Patrolled	125,656	25,769	(99,887)	-79.5%	YES	Below variance threshold.	Actual units were lower than imputed units due to a change in the patrol frequency from monthly to quarterly, in alignment with regulatory requirements.	Under	On-Target	Under	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of the program is to conduct aerial pipeline patrol to observe surface conditions on and adjacent to the gas transmission pipeline right-of-way (ROW).		
144	Expense	GT&S	JO	GT Pipeline Maintenance	JOV	Requid Aerial Pipeline Patrol	Loss of Containment on Gas Transmission Pipeline	LOCTM-C012 Required Pipeline Patrol Program	Ex 3, Ch 8	No	N/A	N/A	4,822.8	2,450.6	(2,372.1)	-49.2%	N/A	N/A	N/A	125,656	25,769	(99,887)	-79.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
145	Expense	GT&S	JO	GT Pipeline Maintenance	JOW	Aerial Leak Survey	SRM Total	SRM Total	Ex 3, Ch 10	No	On-going	Annual	2,493.7	1,653.9	(839.8)	-33.7%	NO	NO	Miles Aerial Leak Surveyed	12,807	12,487	(320)	-2.5%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
146	Expense	GT&S	JO	GT Pipeline Maintenance	JOW	Aerial Leak Survey	Loss of Containment on Gas Transmission Pipeline	LOCTM-C020 Transmission Leak Management	Ex 3, Ch 10	No	N/A	N/A	2,493.7	1,653.9	(839.8)	-33.7%	N/A	N/A	N/A	12,807	12,487	(320)	-2.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
147	Expense	GT&S	JO	GT Pipeline Maintenance	JOX	PM Meter Maintenance	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	1,948.5	2,247.7	299.2	15.4%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
148	Expense	GT&S	JO	GT Pipeline Maintenance	JOX	PM Meter Maintenance	Large Overpressure Event Downstream of Gas M&C Facility	LRGOP-C012 Meter Maintenance	Ex 3, Ch 8	No	N/A	N/A	1,948.5	2,247.7	299.2	15.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
149	Expense	GT&S	JO	GT Pipeline Maintenance	JOY	CM Meter Maintenance	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	288.8	301.8	12.9	4.5%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
150	Expense	GT&S	JO	GT Pipeline Maintenance	JOY	CM Meter Maintenance	Large Overpressure Event Downstream of Gas M&C Facility	LRGOP-C012 Meter Maintenance	Ex 3, Ch 8	No	N/A	N/A	288.8	301.8	12.9	4.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
151	Expense	GT&S	JO	GT Pipeline Maintenance	JOZ	Atmospheric Corrosion Inspect	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	500.2	87.9	(412.3)	-82.4%	NO	NO	# of inspections completed	487	226	(261)	-53.6%	YES	Below variance threshold.	Actual units were lower than imputed units due to the number of atmospheric corrosion (AC) inspections required to be completed in 2023. AC inspections are performed on a three year cycle (per Subpart I of 49 CFR 192) and the annual unit counts are not balanced.	On-Target	On-Target	On-Target	Proceeding as Planned	This program has no end date. The purpose of this program is to inspect Gas Transmission piping which is exposed to the atmosphere (i.e. spans and stations) for the presence of Atmospheric Corrosion.		
152	Expense	GT&S	JO	GT Pipeline Maintenance	JOZ	Atmospheric Corrosion Inspect	Loss of Containment on Gas Transmission Pipeline	LOCTM-C034 Atmospheric Corrosion Program	Ex 3, Ch 9	No	N/A	N/A	500.2	87.9	(412.3)	-82.4%	N/A	N/A	N/A	487	226	(261)	-53.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
153	Expense	GT&S	JO	GT Pipeline Maintenance	JOs ¹¹	Not assigned	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	0.0	105.9	105.9	100.0%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.	On-Target	On-Target	Over	Proceeding as Planned	N/A	
154	Expense	GT&S	JP	GT Station Maintenance	JPA	PM StorCompStat Piping Assets	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	960.5	1,222.3	241.7	24.7%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
155	Expense	GT&S	JP	GT Station Maintenance	JPA	PM StorCompStat Piping Assets	Loss of Contm at Gas Measrm & Crtfl / Cmprsn & Procsn Facil	MCCPF-C001 Transm Comprsr Station Corrective & Prevent Maintn	Ex 3, Ch 8	No	N/A	N/A	960.5	1,222.3	241.7	24.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
156	Expense	GT&S	JP	GT Station Maintenance	JPB	CM StorCompStat Piping Assets	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	473.1	188.0	(285.1)	-60.3%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
157	Expense	GT&S	JP	GT Station Maintenance	JPB	CM StorCompStat Piping Assets	Loss of Contm at Gas Measrm & Crtfl / Cmprsn & Procsn Facil	MCCPF-C001 Transm Comprsr Station Corrective & Prevent Maintn	Ex 3, Ch 8	No	N/A	N/A	473.1	188.0	(285.1)	-60.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
158	Expense	GT&S	JP	GT Station Maintenance	JPC	PM StorCompStat GasProcess	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	1,919.6	2,375.0	455.3	23.7%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
159	Expense	GT&S	JP	GT Station Maintenance	JPC	PM StorCompStat GasProcess	Loss of Contm at Gas Measrm & Crtfl / Cmprsn & Procsn Facil	MCCPF-C001 Transm Comprsr Station Corrective & Prevent Maintn	Ex 3, Ch 8	No	N/A	N/A	1,919.6	2,375.0	455.3	23.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
160	Expense	GT&S	JP	GT Station Maintenance	JPD	PM StorCompStat GasCompressor	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	1,610.3	3,335.1	1,524.9	84.2%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	

**TABLE 2-9
2023 RSAR
2023 GRC CYCLE GT&S EXPENSE COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	Type (O&M Expense or Capital)	Functional Area	MWC	MWC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$ (H-G))	Spending Percent Variance for 2023 (%) ((H-G)/G*100)	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Imputed Adopted Units	2023 Actual Units	Difference for 2023 (# of Units) (O-N)	Unit Percent Variance for 2023 (%) ((O-N)/N*100)	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	Forecast			Status	Completion Status Statement				
																											Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)						
161	Expense	GT&S	JP	GT Station Maintenance	JPD	PM StorCompStat GasCompressor	Loss of Control at Gas Measrm & Ctrlr / Cntrn & Procen Facil	MCCPF-C001 Transm Comprsr Station Corrective & Prevent Maint	Ex 3, Ch 8	No	N/A	N/A	1,810.3	3,335.1	1,524.9	84.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
162	Expense	GT&S	JP	GT Station Maintenance	JPE	PM StorCompStat Support	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	2,279.9	2,467.9	187.9	8.2%	NO	NO	non-utilized: This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
163	Expense	GT&S	JP	GT Station Maintenance	JPE	PM StorCompStat Support	Loss of Control at Gas Measrm & Ctrlr / Cntrn & Procen Facil	MCCPF-C001 Transm Comprsr Station Corrective & Prevent Maint	Ex 3, Ch 8	No	N/A	N/A	2,279.9	2,467.9	187.9	8.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
164	Expense	GT&S	JP	GT Station Maintenance	JPG	CM StorCompStat GasProcess	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	983.5	1,628.4	644.9	65.6%	NO	NO	non-utilized: This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
165	Expense	GT&S	JP	GT Station Maintenance	JPG	CM StorCompStat GasProcess	Loss of Control at Gas Measrm & Ctrlr / Cntrn & Procen Facil	MCCPF-C001 Transm Comprsr Station Corrective & Prevent Maint	Ex 3, Ch 8	No	N/A	N/A	983.5	1,628.4	644.9	65.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
166	Expense	GT&S	JP	GT Station Maintenance	JPH	CM StorCompStat GasCompress	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	2,071.3	2,625.3	554.0	26.7%	NO	NO	non-utilized: This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
167	Expense	GT&S	JP	GT Station Maintenance	JPH	CM StorCompStat GasCompress	Loss of Control at Gas Measrm & Ctrlr / Cntrn & Procen Facil	MCCPF-C001 Transm Comprsr Station Corrective & Prevent Maint	Ex 3, Ch 8	No	N/A	N/A	2,071.3	2,625.3	554.0	26.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
168	Expense	GT&S	JP	GT Station Maintenance	JPI	CM StorCompStat Support	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	1,525.4	687.9	(837.5)	-54.9%	NO	NO	non-utilized: This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
169	Expense	GT&S	JP	GT Station Maintenance	JPI	CM StorCompStat Support	Loss of Control at Gas Measrm & Ctrlr / Cntrn & Procen Facil	MCCPF-C001 Transm Comprsr Station Corrective & Prevent Maint	Ex 3, Ch 8	No	N/A	N/A	1,525.4	687.9	(837.5)	-54.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
170	Expense	GT&S	JP	GT Station Maintenance	JPK	PM Power Units	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	139.2	330.5	191.3	137.4%	NO	NO	non-utilized: This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
171	Expense	GT&S	JP	GT Station Maintenance	JPK	PM Power Units	Loss of Control at Gas Measrm & Ctrlr / Cntrn & Procen Facil	MCCPF-C015 Power Units Maintenance	Ex 3, Ch 8	No	N/A	N/A	139.2	330.5	191.3	137.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
172	Expense	GT&S	JP	GT Station Maintenance	JPL	CM Power Units	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	276.9	386.6	109.7	39.6%	NO	NO	non-utilized: This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
173	Expense	GT&S	JP	GT Station Maintenance	JPL	CM Power Units	Loss of Control at Gas Measrm & Ctrlr / Cntrn & Procen Facil	MCCPF-C015 Power Units Maintenance	Ex 3, Ch 8	No	N/A	N/A	276.9	386.6	109.7	39.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
174	Expense	GT&S	JP	GT Station Maintenance	JPN	Station Operations	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	6,026.6	6,033.3	6.7	0.1%	NO	NO	non-utilized: This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
175	Expense	GT&S	JP	GT Station Maintenance	JPN	Station Operations	Large Overpressure Event Downstream of Gas MSC Facility	LNOP-C007 Station Operations	Ex 3, Ch 8	No	N/A	N/A	6,026.6	6,033.3	6.7	0.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
176	Expense	GT&S	JP	GT Station Maintenance	JPN	Station Operations	Loss of Control at Gas Measrm & Ctrlr / Cntrn & Procen Facil	MCCPF-C016 Station Operations	Ex 3, Ch 8	No	N/A	N/A	6,026.6	6,033.3	6.7	0.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
177	Expense	GT&S	JP	GT Station Maintenance	JPO	PM Storage Wells	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	570.3	384.9	(185.3)	-32.5%	NO	NO	non-utilized: This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
178	Expense	GT&S	JP	GT Station Maintenance	JPO	PM Storage Wells	Loss of Containment at Natural Gas Storage Well or Reservoir	NGSWR-C005 Preventive and Corrective Maintenance	Ex 3, Ch 8	No	N/A	N/A	570.3	384.9	(185.3)	-32.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
179	Expense	GT&S	JP	GT Station Maintenance	JPP	CM Storage Wells	SRM Total	SRM Total	Ex 3, Ch 8	No	On-going	Annual	81.3	9.8	(71.5)	-88.0%	NO	NO	non-utilized: This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
180	Expense	GT&S	JP	GT Station Maintenance	JPP	CM Storage Wells	Loss of Containment at Natural Gas Storage Well or Reservoir	NGSWR-C005 Preventive and Corrective Maintenance	Ex 3, Ch 8	No	N/A	N/A	81.3	9.8	(71.5)	-88.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

**TABLE 2-9
2023 RSAR
2023 GRC CYCLE GT&S EXPENSE COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll-up (Yes/No)	E Program / Project Life (Years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K Spending Variance Explanation Required (Y/N)	L Percentage Variance Explanation Required (Y/N)	M Unit Type	N 2023 Imputed Adopted Units	O 2023 Actual Units	P Difference for 2023 (# of Units) (O-N)	Q Unit Percent Variance for 2023 (%) ((O-N)/N*100)	R Unit Variance Explanation Required (Y/N)	S 2023 Cost Variance Explanation	T 2023 Unit Variance Explanation	Forecast			V Status	W Completion Status Statement
																											U1 Scope (U, O, or T)	U2 Schedule (U, O, or T)	U3 Budget (U, O, or T)		
181	Expense	GT&S	JP	GT Station Maintenance	JPG	CARB Leak Survey	SRM Total	SRM Total	Ex 3, Ch 10	No	Ongoing	Annual	3,270.3	3,332.5	62.2	1.9%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
182	Expense	GT&S	JP	GT Station Maintenance	JPG	CARB Leak Survey	Loss of Containment at Natural Gas Storage Well or Reservoir	NGSWR-C006 CARB Leak Management	Ex 3, Ch 10	No	N/A	N/A	3,270.3	3,332.5	62.2	1.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
183	Expense	GT&S	JP	GT Station Maintenance	JPR	CARB Leak Repairs	SRM Total	SRM Total	Ex 3, Ch 10	No	Ongoing	Annual	2,544.7	416.1	(2,128.6)	-83.6%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
184	Expense	GT&S	JP	GT Station Maintenance	JPR	CARB Leak Repairs	Loss of Containment at Gas Measurm & Ctril / Cnpran & Procan Facil	MCOPF-C001 Transm Comprir Station Corrective & Preent Maintn	Ex 3, Ch 10	No	N/A	N/A	2,544.7	416.1	(2,128.6)	-83.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
185	Expense	GT&S	JP	GT Station Maintenance	JPR	CARB Leak Repairs	Loss of Containment at Natural Gas Storage Well or Reservoir	NGSWR-C006 CARB Leak Management	Ex 3, Ch 10	No	N/A	N/A	2,544.7	416.1	(2,128.6)	-83.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
186	Expense	GT&S	JP	GT Station Maintenance	JPPH	Not assigned	SRM Total	SRM Total	Ex 3, Ch 8	No	Ongoing	Annual	0.0	401.1	401.1	100.0%	NO	NO	non-utilized. This MAT has no measurable units because majority of the orders under these MATs exist as Asset Maintenance Backbone and Station (AMBS) orders. AMBS records "operations" which are not necessarily equivalent to a unit.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	Over	Proceeding as Planned	N/A
187	Expense	GT&S	JT	GT Reliability & General Maint	JT0	Public Awareness	SRM Total	SRM Total	Ex 3, Ch 5	No	Ongoing	Annual	3,436.6	2,117.3	(1,319.3)	-38.4%	NO	NO	non-utilized. This MAT has no measurable units because it is our funding for the Public Awareness program management. This MAT supports the outreach required pursuant to AP1 RP 1162 which contains many activities to include direct mailings to parties with properties within 1000' of a pipeline, other educational material publication, social media postings, etc. This program also manages per Public Awareness and Damage Prevention program documentation. There are no specific units associated with the activities performed in the Public Awareness MAT to meet the requirements of RP 1162.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
188	Expense	GT&S	JT	GT Reliability & General Maint	JT0	Public Awareness	Loss of Containment on Gas Transmission Pipeline	LOCTM-C011 Public Awareness	Ex 3, Ch 5	No	N/A	N/A	3,436.6	2,117.3	(1,319.3)	-38.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
189	Expense	GT&S	JT	GT Reliability & General Maint	JT1	Engineering Support	SRM Total	SRM Total	Ex 3, Ch 5	No	Ongoing	Annual	2,572.2	(33.9)	(2,606.0)	-101.3%	NO	NO	non-utilized. This MAT has no measurable units because it is used to record costs for various types of non-capitalizable work related to pipe investigations and field engineering support.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
190	Expense	GT&S	JT	GT Reliability & General Maint	JT1	Engineering Support	Loss of Containment on Gas Transmission Pipeline	LOCTM-C027 Pipe Investigations and Field Engineering	Ex 3, Ch 5	No	N/A	N/A	2,572.2	(33.9)	(2,606.0)	-101.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
191	Expense	GT&S	JT	GT Reliability & General Maint	JT2	Water and Levee Crossings	SRM Total	SRM Total	Ex 3, Ch 5	No	Ongoing	Annual	1,386.5	465.7	(920.9)	-66.4%	NO	NO	non-utilized. This MAT has no measurable units because it is used to record costs for monitoring jurisdictional water crossings, jurisdictional levee crossings, and non-jurisdictional water crossings. The type of work performed are not comparable.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
192	Expense	GT&S	JT	GT Reliability & General Maint	JT2	Water and Levee Crossings	Loss of Containment on Gas Transmission Pipeline	LOCTM-C007 Shallow and Exposed Pipe (Including Water and Levee Crossing)	Ex 3, Ch 5	No	N/A	N/A	1,386.5	465.7	(920.9)	-66.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
193	Expense	GT&S	JT	GT Reliability & General Maint	JT3	Fault Crossings	SRM Total	SRM Total	Ex 3, Ch 5	No	Ongoing	Annual	1,076.2	180.3	(895.9)	-83.2%	NO	NO	non-utilized. This MAT has no measurable units because it is used to record costs for conducting studies of where gas transmission pipelines cross active and potentially active earthquake fault lines, and monitoring fault creep. The type of work performed are not comparable.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
194	Expense	GT&S	JT	GT Reliability & General Maint	JT3	Fault Crossings	Loss of Containment on Gas Transmission Pipeline	LOCTM-C004 Earthquake Fault Crossings	Ex 3, Ch 5	No	N/A	N/A	1,076.2	180.3	(895.9)	-83.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
195	Expense	GT&S	JT	GT Reliability & General Maint	JT4	Shallow and Exposed Pipe	SRM Total	SRM Total	Ex 3, Ch 5	No	Ongoing	Annual	2,751.3	942.1	(1,809.1)	-65.8%	NO	NO	Miles	4.00	1.00	(3.00)	-75.0%	YES	Below variance threshold.	Actual units were lower than imputed units due to reprioritization in support of higher risk or compliance work.	Under	On-Target	On-Target	Proceeding as Planned	This programs work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to mitigate locations where a pipeline has insufficient cover, is vulnerable to damage from third parties, or has become exposed due to natural forces.
196	Expense	GT&S	JT	GT Reliability & General Maint	JT4	Shallow and Exposed Pipe	Loss of Containment on Gas Transmission Pipeline	LOCTM-C007 Shallow and Exposed Pipe (Including Water and Levee Crossing)	Ex 3, Ch 5	No	N/A	N/A	2,751.3	942.1	(1,809.1)	-65.8%	N/A	N/A	N/A	4.00	1.00	(3.00)	-75.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
197	Expense	GT&S	JT	GT Reliability & General Maint	JT6	Pipe Replacements - (<50F)	SRM Total	SRM Total	Ex 3, Ch 5	No	Ongoing	Annual	11,283.9	697.6	(10,586.3)	-93.8%	YES	YES	Miles	0.17	0	(0)	-100.0%	YES	Program expenses were below imputed regulatory values because less work materialized owing to scope of work not meeting the 50 foot threshold.	Actual units were lower than imputed units due to less work materialized owing to scope of work not meeting the 50 foot threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to implement Non-TIMP expense pipe replacements as an alternative option to strength testing.
198	Expense	GT&S	JT	GT Reliability & General Maint	JT6	Pipe Replacements - (<50F)	Loss of Containment on Gas Transmission Pipeline	LOCTM-M003 Non-TIMP Strength Testing	Ex 3, Ch 5	No	N/A	N/A	11,283.9	697.6	(10,586.3)	-93.8%	N/A	N/A	Miles	0.17	0	(0)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
199	Expense	GT&S	JT	GT Reliability & General Maint	JT8	Gas Quality Assessment - Exp	SRM Total	SRM Total	Ex 3, Ch 6	No	Ongoing	Annual	2,124.3	1,559.8	(564.5)	-26.6%	NO	NO	non-utilized. This MAT has no measurable units because MAT includes programmatic costs for ongoing activities which are not utilized.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
200	Expense	GT&S	JT	GT Reliability & General Maint	JT8	Gas Quality Assessment - Exp	Large Overpressure Event Downstream of Gas MAC Facility	LRCOP-C025 Gas Quality Assessment - Expense	Ex 3, Ch 6	No	N/A	N/A	2,124.3	1,559.8	(564.5)	-26.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**TABLE 2-9
2023 RSAR
2023 GRC CYCLE GT&S EXPENSE COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	Type (O&M Expense or Capital)	Functional Area	MWC	MWC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$ (H-G))	Spending Percent Variance for 2023 (%) ((H-G)/G*100)	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Imputed Adopted Units	2023 Actual Units	Difference for 2023 (# of Units) (O-N)	Unit Percent Variance for 2023 (%) ((O-N)/N*100)	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	Forecast			Status	Completion Status Statement
																											Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)		
231	Expense	GT&S	JT	GT Reliability & General Maint	JTX	GT Over Pressure Protection	SRM Total	SRM Total	Ex 3, Ch 6	No	On-going	Annual	0.0	1,056.6	1,056.6	100.0%	NO	NO	non-utility: This MAT has no measurable units because it is an expense code that captures a variety of studies, reports, and small projects that support PG&E's Overpressure Elimination program objectives, all of which have different tasks and costs that are not comparable.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	Over	Proceeding as Planned	NA
232	Expense	GT&S	JT	GT Reliability & General Maint	JTX	GT Over Pressure Protection	Large Overpressure Event Downstream of Gas M&C Facility	LRGOP-M002 GT Overpressure Protection	Ex 3, Ch 6	No	N/A	N/A	0.0	1,056.6	1,056.6	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA
233	Expense	GT&S	JT	GT Reliability & General Maint	JTY	Routine Spend C&P Expense	SRM Total	SRM Total	Ex 3, Ch 6	No	On-going	Annual	8,776.7	9,186.7	410.0	4.7%	NO	NO	non-utility: This MAT has no measurable units because this is a routine spend MAT. Includes a combination non-fungible project work and programmatic activities.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	NA
234	Expense	GT&S	JT	GT Reliability & General Maint	JTY	Routine Spend C&P Expense	Loss of Contm at Gas Measrm & Cntrl / Cmpn & Prcasn Fac	MCCPF-C020 Routine Spend C&P	Ex 3, Ch 6	No	N/A	N/A	8,776.7	9,186.7	410.0	4.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA
235	Expense	GT&S	KE	GT FC Safety Enhance Plan-Exp	KEX	PSEP Pipeline Other Expense	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 3, Ch 5	No	On-going	Annual	0.0	207.4	207.4	100.0%	NO	NO	non-utility: This MAT has no measurable units as it is being used to capture extended environmental remediation costs related to completed PSEP projects.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	Over	Proceeding as Planned	NA
236	Expense	GT&S	LU	GTS Manage Critical Documents	LU1	Critical Documents - Expense	SRM Total	SRM Total	Ex 3, Ch 6	No	On-going	Annual	0.0	467.7	467.7	100.0%	NO	NO	non-utility: This MAT has no measurable units because project work that occurs under this MAT is non-fungible and covers a wide range of asset types, and scope of assets requiring work.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	Over	Proceeding as Planned	NA
237	Expense	GT&S	LU	GTS Manage Critical Documents	LU1	Critical Documents - Expense	Large Overpressure Event Downstream of Gas M&C Facility	LRGOP-M004 Critical Documents Program	Ex 3, Ch 6	No	N/A	N/A	0.0	467.7	467.7	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA
238	Expense	GT&S	LU	GTS Manage Critical Documents	LU1	Critical Documents - Expense	Loss of Contm at Gas Measrm & Cntrl / Cmpn & Prcasn Fac	MCCPF-M001 Critical Documents Program	Ex 3, Ch 6	No	N/A	N/A	0.0	467.7	467.7	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA
239	Expense	GT&S	LV	GTS Station Assessments-BA	LV1	Engineering Ctrd Assmnt 1	SRM Total	SRM Total	Ex 3, Ch 6	No	On-going	Annual	0.0	1.6	1.6	100.0%	NO	NO	non-utility: This MAT has no measurable units because project work that occurs under this MAT is non-fungible and covers a wide range of asset types, and scope of assets requiring work.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	Over	Proceeding as Planned	NA
240	Expense	GT&S	LV	GTS Station Assessments-BA	LV1	Engineering Ctrd Assmnt 1	Loss of Contm at Gas Measrm & Cntrl / Cmpn & Prcasn Fac	MCCPF-M007 Engineering Critical Assessment 1	Ex 3, Ch 6	No	N/A	N/A	0.0	1.6	1.6	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA
241	Expense	GT&S	LV	GTS Station Assessments-BA	LV2	Engineering Ctrd Assmnt 2	SRM Total	SRM Total	Ex 3, Ch 6	No	15	4	5,474.2	3,061.9	(2,412.3)	-44.1%	NO	NO	non-utility: This MAT has no measurable units because project work that occurs under this MAT is non-fungible and covers a wide range of asset types, and scope of assets requiring work.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	NA
242	Expense	GT&S	LV	GTS Station Assessments-BA	LV2	Engineering Ctrd Assmnt 2	Loss of Contm at Gas Measrm & Cntrl / Cmpn & Prcasn Fac	MCCPF-M008 Engineering Critical Assessment 2	Ex 3, Ch 6	No	N/A	N/A	5,474.2	3,061.9	(2,412.3)	-44.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA
243	Expense	GT&S	OM	Operational Management	OM#	Not assigned	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 3, Ch 13	No	On-going	Annual	8,663.8	3,708.9	(4,954.8)	-57.2%	NO	NO	non-utility: This MAT has no measurable units because this program records labor costs.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-Utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	NA

(a) Stamp MAT 34A is a consolidation of the recorded spend and work completed under various programs including IJ Direct Exam & Repair, Requird Ground Patrols and Electrical Interference-AC.

(b) Units for WELL Integrity Assessments MAT AM1 can include # Barrier Inspection Surveys, # Gamma-Ray Neutron Surveys, # Noise/Temperature Surveys.

(c) A MWC with a # captures other support costs and miscellaneous orders recorded within a MWC, that are not assigned to a specific MAT.

(d) Units for Electrical Interference - AC MAT GJA can include # of electric poles/towers investigated, # of electric poles/towers mitigated, # of AC induced investigations completed, and # of stations investigated (arc fault).

(e) Units for Cathodic Protection MAT QJC can include # of miles surveyed and # of RMU covered by service fees.

(f) Units for Close Interval Survey (CIS) MAT GJE can include # of CIS miles surveyed and # of CIS Digs.

(g) Units for Internal Corrosion MAT GJH can include # of casing projects completed, # of corrosion meters replaced/installed, # of IC investigations performed, # of UT probes installed, # of non destructive examinations performed, # of filter separator read points taken, # of monitoring point reads taken, # of well-head monitoring reads taken, # of bi-monthly drip monitoring reads taken, # of EM Coupon installations, # of EM Coupon reads taken, # of weightloss coupon reads taken, # of UT probes reads taken, # of drip monitoring reads taken, and # of corrosion monitoring reads taken.

(h) Units for Castings MAT GJM can include # of casing test stations installed, # of leak surveys performed on cased crossings, and # of projects completed.

(i) Units for Fault Crossings MAT JTS can include # of surveys and # of marker balls / arrays.

**TABLE 2-10
2023 RSAR
2023 GRC CYCLE GT&S CAPITAL COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll-up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K Spending Variance Explanation Required (Y/N)	L Percentage Variance Explanation Required (Y/N)	M Unit Type	N 2023 Imputed Adopted Units	O 2023 Actual Units	P Difference for 2023 (# of Units) (O-N)	Q Unit Percent Variance for 2023 (%) ((O-N)/N*100)	R Unit Variance Explanation Required (Y/N)	S 2023 Cost Variance Explanation	T 2023 Unit Variance Explanation	Forecast			V Status	W Completion Status Statement	
																											U1 Scope (U, O, or T)	U2 Schedule (U, O, or T)	U3 Budget (U, O, or T)			
1	Capital	GT&S	21	Misc Capital	21C	GPOM Non-Engineering Capital	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	N/A	No	On-going	Annual	0.0	1,373.1	1,373.1	100.0%	NO	NO	non-utilized: This MAT has no measurable units because it encompasses a variety of different activities - it is used to capture GPOM non-engineering capital routine transmission spend.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-utilized.	On-Target	On-Target	Over	Proceeding as Planned	N/A	
2	Capital	GT&S	2H	GT PL Safety Enhance Plan-Cap	2H1	PSEP	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 3, Ch 5	No	On-going	Annual	0.0	25.3	25.3	100.0%	NO	NO	non-utilized: This MAT has no measurable units as it is no longer used for project execution. This captures ongoing settlement costs related to acquisitions of easements for completed PSEP projects.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-utilized.	On-Target	On-Target	Over	Proceeding as Planned	N/A	
3	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3K1	Drip Replacement	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	14,161.5	2,622.5	(11,539.0)	-81.5%	NO	YES	Drips Replaced	5	5	0	0.0%	NO	Program expenditures were below imputed regulatory values due to work bundling with projects near a drip resulting in a lower unit cost.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to mitigate Internal Corrosion by removing drips.	
4	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3K1	Drip Replacement	Loss of Containment on Gas Transmission Pipeline	LOCTM-C032 Internal Corrosion Program	Ex 3, Ch 9	No	N/A	N/A	14,161.5	2,622.5	(11,539.0)	-81.5%	N/A	N/A	N/A	5	5	0	0.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3K1	Drip Replacement	Loss of Contnrm at Gas Measrm & Cntrl / Cmpsrn & Prcsn Facil	MCCPF-C017 Facility Corrosion Control Program	Ex 3, Ch 9	No	N/A	N/A	14,161.5	2,622.5	(11,539.0)	-81.5%	N/A	N/A	N/A	5	5	0	0.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3K4	AC Interf Mitigation	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	3,276.6	3,813.2	536.6	16.4%	NO	NO	Various	14	9	(5)	-32.8%	YES	Below variance threshold.	Actual units were lower than imputed units due to: 1) a shortage of custom-order main materials for AC Mitigation projects, which are not stock materials and require 6-months to receive from the manufacturer, and 2) reprioritization in support of higher risk or compliance work.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to mitigate AC Interference.	
7	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3K4	AC Interf Mitigation	Loss of Containment on Gas Transmission Pipeline	LOCTM-C033 Electrical Interference Program	Ex 3, Ch 9	No	N/A	N/A	3,276.6	3,813.2	536.6	16.4%	N/A	N/A	N/A	14	9	(5)	-32.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3K5	Casing Mitigation	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	14,765.6	12,540.6	(2,225.0)	-15.1%	NO	NO	Various	11	14	3	27.3%	YES	Below variance threshold.	Actual units were higher than imputed units due to bundling casing pipeline replacement with three casing pipelines being replaced under one project.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to mitigate contacted casings.	
9	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3K5	Casing Mitigation	Loss of Containment on Gas Transmission Pipeline	LOCTM-C035 Transmission Corrosion Control Program	Ex 3, Ch 9	No	N/A	N/A	14,765.6	12,540.6	(2,225.0)	-15.1%	N/A	N/A	N/A	11	14	3	27.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3K6	Cathodic Protection-New	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	1,644.0	2,765.7	1,121.7	68.2%	NO	NO	# of new CP systems installed	5	5	0	0.0%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	

**TABLE 2-10
2023 RSAR
2023 GRC CYCLE GT&S CAPITAL COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	A Type (OSM Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll-up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$ (H-G))	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K Spending Variance Explanation Required (Y/N)	L Percentage Variance Explanation Required (Y/N)	M Unit Type	N 2023 Imputed Units	O 2023 Actual Units	P Difference for 2023 (# of Units) (O-N)	Q Unit Percent Variance for 2023 (%) ((O-N)/N*100)	R Unit Variance Explanation Required (Y/N)	S 2023 Cost Variance Explanation	T 2023 Unit Variance Explanation	Forecast			V Status	W Completion Status Statement		
																											U1	U2	U3				
																											Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)				
11	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3K6	Cathodic Protection-New	Loss of Containment on Gas Transmission Pipeline	LOCTM-C019 Cathodic Protection	Ex 3, Ch 9	No	NA	NA	1,644.0	2,763.2	1,119.2	68.1%	NA	NA	NA	5	5	0	0.0%	NA	NA	NA	NA	NA	NA	NA	NA		
12	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3K6	Cathodic Protection-New	Loss of Contnrm at Gas Measrm & Cntrl / Cmprsn & Prcsn Facil	MCCPF-C018 Cathodic Protection	Ex 3, Ch 9	No	NA	NA	1,644.0	2,765.7	1,121.7	68.2%	NA	NA	NA	5	5	0	0.0%	NA	NA	NA	NA	NA	NA	NA	NA	NA	
13	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3K6	Cathodic Protection-New	Loss of Containment at Natural Gas Storage Well or Reservoir	NGSWR-C007 Cathodic Protection	Ex 3, Ch 9	No	NA	NA	1,644.0	2,765.7	1,121.7	68.2%	NA	NA	NA	5	5	0	0.0%	NA	NA	NA	NA	NA	NA	NA	NA	NA	
14	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3K7 (9)	Cathodic Protection-Replacemen	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	4,174.7	7,192.2	3,017.5	72.3%	NO	NO	Various	22	30	8	36.4%	YES	Below variance threshold.	Actual units were higher than imputed units due to a higher volume of grounded replacements required to maintain effective levels of cathodic protection.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to replace fail Cathodic Protection systems.		
15	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3K7 (9)	Cathodic Protection-Replacemen	Loss of Containment on Gas Transmission Pipeline	LOCTM-C019 Cathodic Protection	Ex 3, Ch 9	No	NA	NA	4,174.7	7,192.2	3,017.5	72.3%	NA	NA	NA	22	30	8	36.4%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3K7 (9)	Cathodic Protection-Replacemen	Loss of Contnrm at Gas Measrm & Cntrl / Cmprsn & Prcsn Facil	MCCPF-C018 Cathodic Protection	Ex 3, Ch 9	No	NA	NA	4,174.7	7,192.2	3,017.5	72.3%	NA	NA	NA	22	30	8	36.4%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
17	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3K7 (9)	Cathodic Protection-Replacemen	Loss of Containment at Natural Gas Storage Well or Reservoir	NGSWR-C007 Cathodic Protection	Ex 3, Ch 9	No	NA	NA	4,174.7	7,192.2	3,017.5	72.3%	NA	NA	NA	22	30	8	36.4%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3K8	Test Station Installation	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	129.9	7.3	(122.7)	-94.4%	NO	NO	# of test stations installed	5	0	(5)	-100%	YES	Below variance threshold.	Actual units were lower than imputed units due to no capital test station (CTS) installation (over 5 units) required to be installed. Only 1 CTS per mile is required, which was met and completed.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to install Coupon Test Stations to monitor the pipeline.		
19	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3K8	Test Station Installation	Loss of Containment on Gas Transmission Pipeline	LOCTM-C019 Cathodic Protection	Ex 3, Ch 9	No	NA	NA	129.9	7.3	(122.7)	-94.4%	NA	NA	NA	5	0	(5)	-100%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
20	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3K9	Electrical Interference-DC	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	6,254.1	4,724.8	(1,529.3)	-24.5%	NO	NO	# of projects completed	40	6	(34)	-85.0%	YES	Below variance threshold.	Actual units were lower than imputed units due to: 1) delays on permits required to perform the work, and 2) reprioritization in support of higher risk or compliance work.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to mitigate DC interference.		
21	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3K9	Electrical Interference-DC	Loss of Containment on Gas Transmission Pipeline	LOCTM-C033 Electrical Interference Program	Ex 3, Ch 9	No	NA	NA	6,254.1	4,724.8	(1,529.3)	-24.5%	NA	NA	NA	40	6	(34)	-85.0%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
22	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3KA	Atmospheric Corrosion	SRM Total	SRM Total	Ex 3, Ch 9	No	On-going	Annual	326.4	2,047.8	1,721.4	527.5%	NO	NO	# of spans and stations recoated	5	1	(4)	-80.0%	YES	Below variance threshold.	Actual units were lower than imputed units as the majority of project costs were realized in 2023 but completed units weren't captured until early 2024. The length of the job determines whether it becomes capital, and this is not always known until the job occurs.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's customer demand driven work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to mitigate atmospheric corrosion on transmission main spans found during atmospheric corrosion inspections when the length of the coating remediation exceeds 100 continuous feet.		
23	Capital	GT&S	3K	Gas Trans Remediate Corrosion	3KA	Atmospheric Corrosion	Loss of Containment on Gas Transmission Pipeline	LOCTM-C034 Atmospheric Corrosion Program	Ex 3, Ch 9	No	NA	NA	326.4	2,047.8	1,721.4	527.5%	NA	NA	NA	5	1	(4)	-80.0%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24	Capital	GT&S	3L	Gas Trans Storage Wells	3L1	WELL - Drilling	SRM Total	SRM Total	Ex 3, Ch 7	No	On-going	annual	19,867.0	23,992.3	4,125.2	20.8%	NO	NO	# of wells drilled	3	1	(2)	-66.7%	YES	Below variance threshold.	Actual units were lower than imputed units due to: 1) majority of the work for one new well was done in 2023, but the unit was not completed until 2024, and 2) another unit was not completed owing to permit delays that impacted the drilling start date	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to drill wells or redrill (replace) wells, including installation and cementing of production tubing, gravel pack completion, tubing and packer installation, wellhead components and any ancillary or surface equipment required.		
25	Capital	GT&S	3L	Gas Trans Storage Wells	3L1	WELL - Drilling	Loss of Containment at Natural Gas Storage Well or Reservoir	NGSWR-M001 Well - Drilling	Ex 3, Ch 7	No	NA	NA	19,867.0	23,992.3	4,125.2	20.8%	NA	NA	NA	3	1	(2)	-66.7%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
26	Capital	GT&S	3L	Gas Trans Storage Wells	3L3 (9)	WELL - Reworks	SRM Total	SRM Total	Ex 3, Ch 7	No	On-going	annual	66,326.2	89,198.9	22,872.8	34.5%	YES	YES	Various	19	25	6	28.7%	YES	Program expenditures exceeded imputed regulatory values due to carryover costs from 2022 work that was recorded in 2023.	Actual units were higher than imputed units due to incremental wells scheduled to complete required compliance activities.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to rework and retrofit wells.		
27	Capital	GT&S	3L	Gas Trans Storage Wells	3L3 (9)	WELL - Reworks	Loss of Containment at Natural Gas Storage Well or Reservoir	NGSWR-C003 Well Inspections and Rework	Ex 3, Ch 7	No	NA	NA	66,326.2	89,198.9	22,872.8	34.5%	NA	NA	NA	19	25	6	28.7%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28	Capital	GT&S	3L	Gas Trans Storage Wells	3L4 (9)	WELL - Repair and Replace	SRM Total	SRM Total	Ex 3, Ch 7	No	On-going	annual	0.0	2,290.3	2,290.3	100.0%	NO	NO	non-utilized: This MAT has no measurable units because it contains a mix of rework units and other project work which is not utilized.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-utilized.	On-Target	On-Target	Over	Proceeding as Planned	NA		
29	Capital	GT&S	3L	Gas Trans Storage Wells	3L4 (9)	WELL - Repair and Replace	Loss of Containment at Natural Gas Storage Well or Reservoir	NGSWR-C008 Well Repair and Replace	Ex 3, Ch 7	No	NA	NA	0.0	2,290.3	2,290.3	100.0%	NA	NA	NA	N/A	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30	Capital	GT&S	3L	Gas Trans Storage Wells	3L5 (9)	WELL - Cntrls & Cntrls Monitoring	SRM Total	SRM Total	Ex 3, Ch 7	No	On-going	annual	1,436.8	154.4	(1,282.4)	-89.3%	NO	NO	non-utilized: This MAT has no measurable units because it contains miscellaneous component work.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	NA		

**TABLE 2-10
2023 RSAR
2023 GRC CYCLE GT&S CAPITAL COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	Type (O&M Expense or Capital)	Functional Area	MWC	MWC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$ (H-G))	Spending Variance Percent for 2023 (%) ((H-G)/G*100)	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Imputed Adopted Units	2023 Actual Units	Difference for 2023 (# of Units) (O-N)	Unit Percent Variance for 2023 (%) ((O-N)/N*100)	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	Forecast			Status	Completion Status Statement					
																											Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)							
51	Capital	GT&S	75	GT Pipeline Reliability	75I	Valve Automation	Loss of Containment on Gas Transmission Pipeline	LOCTM-M004 Valve Automation	Ex 3, Ch 5	No	N/A	N/A	23,608.2	5,006.2	(18,602.0)	-78.8%	N/A	N/A	N/A	18	2	(16)	-88.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
52	Capital	GT&S	75	GT Pipeline Reliability	75J	Geo-Hazard Mitigations	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	8,486.1	5,199.4	(3,286.7)	-38.7%	NO	NO	non-utilized: This MAT has no measurable units because it is used to record costs for mitigating geo-hazards such as soil-creep, dormant landslides with potential to re-activate, and subsidence. The type of mitigation work performed are not comparable.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A					
53	Capital	GT&S	75	GT Pipeline Reliability	75J	Geo-Hazard Mitigations	Loss of Containment on Gas Transmission Pipeline	LOCTM-C001 Geo-Hazard Threat Identification and Mitigation	Ex 3, Ch 5	No	N/A	N/A	8,486.1	5,199.4	(3,286.7)	-38.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
54	Capital	GT&S	75	GT Pipeline Reliability	75K	Water and Levee Crossings	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	2,549.9	12,771.9	10,222.1	400.9%	NO	YES	Program expenditures exceeded imputed regulatory values as MATs 75M, 75T, and 75K combined make up the Shallow/Exposed/Water and Levee Crossings Mitigation program and the dollars/units can shift between these MATs, as needed. Overall, these programs focused on higher risk water and levee crossings pipe projects. In 2023, PG&E completed a large pipe replacement project on L-130 within the Sacramento River. This project reduced rupture or leak risk from dredging activities and increased public safety during recreational boating season.	1	1	0	0.0%	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to address the risks posed by shallow and exposed pipe on locations of water/levee crossings.						
55	Capital	GT&S	75	GT Pipeline Reliability	75K	Water and Levee Crossings	Loss of Containment on Gas Transmission Pipeline	LOCTM-M002 Shallow and Exposed Pipe (Including Water and Levee Crossing	Ex 3, Ch 5	No	N/A	N/A	2,549.9	12,771.9	10,222.1	400.9%	N/A	N/A	N/A	1	1	0	0.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
56	Capital	GT&S	75	GT Pipeline Reliability	75L	Fault Crossings	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	13,542.1	9,749.3	(3,792.8)	-28.0%	NO	NO	Actual units were lower than imputed units due to prioritization in support of higher risk or compliance work.	8	2	(6)	-75.0%	YES	Below variance threshold.	Actual units were lower than imputed units due to prioritization in support of higher risk or compliance work.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to address the specific threat of land movement strains at known earthquake faults damaging a pipeline due to seismic events.					
57	Capital	GT&S	75	GT Pipeline Reliability	75L	Fault Crossings	Loss of Containment on Gas Transmission Pipeline	LOCTM-C004 Earthquake Fault Crossings	Ex 3, Ch 5	No	N/A	N/A	13,542.1	9,749.3	(3,792.8)	-28.0%	N/A	N/A	N/A	8	2	(6)	-75.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
58	Capital	GT&S	75	GT Pipeline Reliability	75M	Shallow Pipe	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	10,178.4	328.2	(9,850.2)	-96.8%	NO	NO	Actual units were lower than imputed units due to prioritization in support of higher risk or compliance work. MATs 75M, 75T, and 75K combined make up the Shallow/Exposed/Water and Levee Crossings Mitigation program and the dollars/units can shift between these MATs, as needed. See Water and Levee Crossings MAT 75K for more detail.	4	0	(4)	-100.0%	YES	Below variance threshold.	Actual units were lower than imputed units due to prioritization in support of higher risk or compliance work.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to address the risks posed by shallow pipe on land.					
59	Capital	GT&S	75	GT Pipeline Reliability	75M	Shallow Pipe	Loss of Containment on Gas Transmission Pipeline	LOCTM-M002 Shallow and Exposed Pipe (Including Water and Levee Crossing	Ex 3, Ch 5	No	N/A	N/A	10,178.4	328.2	(9,850.2)	-96.8%	N/A	N/A	N/A	4	0	(4)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
60	Capital	GT&S	75	GT Pipeline Reliability	75N	Hydrostatic Testing	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	44,061.9	9,545.3	(34,516.6)	-78.3%	YES	YES	Program expenditures were below imputed regulatory values due to a lower volume of identified capital work being executed such as capital upgrades needed to facilitate a strength test. A procedural update to the working assessment plan was implemented aligning 49 CFR Part 192 Subpart J drivers with the external corrosion threats, resulting in a lower amount of scheduled strength tests in 2023 that required capital work.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
61	Capital	GT&S	75	GT Pipeline Reliability	75N	Hydrostatic Testing	Loss of Containment on Gas Transmission Pipeline	LOCTM-M003 Non-TIMP Strength Testing	Ex 3, Ch 5	No	N/A	N/A	44,061.9	9,545.3	(34,516.6)	-78.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
62	Capital	GT&S	75	GT Pipeline Reliability	75O	Pipe Rplcmnt - Oth PL Sfty Inv	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	33,831.5	34,385.4	553.9	1.6%	NO	NO	non-utilized: This MAT is non-utilized because it is used to record costs for various types of work.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A					
63	Capital	GT&S	75	GT Pipeline Reliability	75O	Pipe Rplcmnt - Oth PL Sfty Inv	Loss of Containment on Gas Transmission Pipeline	LOCTM-C008 Pipeline Safety and Reliability	Ex 3, Ch 5	No	N/A	N/A	33,831.5	34,385.4	553.9	1.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
64	Capital	GT&S	75	GT Pipeline Reliability	75P	ILI Capital Repair (Non-BA)	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	14,431.1	1,983.7	(12,447.4)	-86.3%	NO	YES	non-utilized: This MAT has no measurable units since work is not known until anomalous results from previous year's Traditional and Non-Traditional ILI inspections are found.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. ILI Capital Repair is driven by the requirements under 49 CFR Part 192 and PG&E's procedures to repair anomalous findings from both Traditional and Non-Traditional ILI inspections the year before. It supports capital repairs that are necessary as a result of the findings from Traditional and Non-Traditional ILI inspections.					
65	Capital	GT&S	75	GT Pipeline Reliability	75P	ILI Capital Repair (Non-BA)	Loss of Containment on Gas Transmission Pipeline	LOCTM-C005 In-Line Inspection	Ex 3, Ch 5	No	N/A	N/A	14,431.1	1,983.7	(12,447.4)	-86.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
66	Capital	GT&S	75	GT Pipeline Reliability	75Q	Pipe Replacement (IM)	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	20,044.6	12,948.4	(7,096.1)	-35.4%	NO	NO	Actual units were higher than imputed units due to: 1) more projects classified as capital (3-50ft and/or capital installation/replacement), and 2) one project starting construction in 2022 but completing construction and capturing units in January 2023 due to weather delays.	0.16	0.44	0.28	173.1%	YES	Below variance threshold.	Actual units were higher than imputed units due to: 1) more projects classified as capital (3-50ft and/or capital installation/replacement), and 2) one project starting construction in 2022 but completing construction and capturing units in January 2023 due to weather delays.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to implement Non-TIMP capital pipe replacements in lieu of testing when it is a more prudent option.					
67	Capital	GT&S	75	GT Pipeline Reliability	75Q	Pipe Replacement (IM)	Loss of Containment on Gas Transmission Pipeline	LOCTM-C026 TIMP Strength Testing	Ex 3, Ch 5	No	N/A	N/A	20,044.6	12,948.4	(7,096.1)	-35.4%	N/A	N/A	N/A	0.16	0.44	0.28	173.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
68	Capital	GT&S	75	GT Pipeline Reliability	75R	Pipe Rplcmnt In-Lieu of Hydro	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	41,134.6	23,753.2	(17,381.4)	-42.3%	NO	YES	Program expenditures were below imputed regulatory values due to: 1) project cancellations driven by working assessment plan updates; 2) other assessment methods selected over replacement.	0.71	2.27	1.56	219.7%	YES	Below variance threshold.	Actual units were higher than imputed units due to a multi-year project which started construction in 2021 and ended in 2023 capturing the units in 2023.	Over	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to implement Non-TIMP capital pipe replacements in lieu of testing when it is a more prudent option.					
69	Capital	GT&S	75	GT Pipeline Reliability	75R	Pipe Rplcmnt In-Lieu of Hydro	Loss of Containment on Gas Transmission Pipeline	LOCTM-M003 Non-TIMP Strength Testing	Ex 3, Ch 5	No	N/A	N/A	41,134.6	23,753.2	(17,381.4)	-42.3%	N/A	N/A	N/A	0.71	2.27	1.56	219.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
70	Capital	GT&S	75	GT Pipeline Reliability	75S	Direct Assessment	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	annual	1,774.2	549.2	(1,225.0)	-69.0%	NO	NO	non-utilized: This MAT has no measurable units because it is used to record costs for direct assessment capital repairs that arise from ECCA, ICCA, SOCCA or Direct Examination findings. The types of repair work performed are not comparable.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A					

**TABLE 2-10
2023 RSAR
2023 GRC CYCLE GT&S CAPITAL COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	A Type (OSM Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll-up (Yes/No)	E Program/Project Life (years)	F Program/Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$ (H-G))	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K Spending Variance Explanation Required (Y/N)	L Percentage Variance Explanation Required (Y/N)	M Unit Type	N 2023 Imputed Adopted Units	O 2023 Actual Units	P Difference for 2023 (# of Units) (O-N)	Q Unit Percent Variance for 2023 (%) ((O-N)/N*100)	R Unit Variance Explanation Required (Y/N)	S 2023 Cost Variance Explanation	T 2023 Unit Variance Explanation	Forecast			V Status	W Completion Status Statement			
																											Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)					
71	Capital	GT&S	75	GT Pipeline Reliability	75S	Direct Assessment	Loss of Containment on Gas Transmission Pipeline	LOCTM-C022 Direct Assessment	Ex 3, Ch 5	No	N/A	N/A	1,774.2	549.2	(1,225.0)	-69.0%	NO	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
72	Capital	GT&S	75	GT Pipeline Reliability	75T	Exposed Pipe	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	10,178.4	7,012.5	(3,165.9)	-31.1%	NO	NO	Projects	4	0	(4)	-100%	YES	Below variance threshold.	Actual units were lower than imputed units due to re-prioritization in support of higher risk or compliance work. MATs 75M, 75T, and 75K combined make up the Shallow/Exposed/Water and Levee Crossings Mitigation program and the dollars/units can shift between these MATs, as needed. See Water and Levee Crossings MAT 75K for more detail.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to address the risks posed by exposed pipe on land.			
73	Capital	GT&S	75	GT Pipeline Reliability	75T	Exposed Pipe	Loss of Containment on Gas Transmission Pipeline	LOCTM-M002 Shallow and Exposed Pipe (Including Water and Levee Crossing	Ex 3, Ch 5	No	N/A	N/A	10,178.4	7,012.5	(3,165.9)	-31.1%	NO	NO	N/A	4	0	(4)	-100%	YES	Below variance threshold.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
74	Capital	GT&S	75	GT Pipeline Reliability	75U	Non-TIMP Strength Testing	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	69,859.2	18,663.6	(51,195.6)	-73.3%	YES	YES	Miles	39.40	9.00	-30.40	-77.2%	YES	Program expenditures were below imputed regulatory values due to a lower volume of pre-1955 untested pipe identified than expected as a result of lower volume scoped due to threat assessment method changes, working assessment plan updates, and test records found resulting in less untested mileage.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to validate the integrity and assure a margin of safety by strength testing in accordance with 49 CFR § 192.619 for those gas transmission pipelines that: 1) Lack a documented TVC strength test record that is consistent with D-11-06-017, D-12-12-030, and NTSB Safety Recommendation P-10-4 (prioritizing strength testing of gas transmission pipelines with the highest risk factors); 2) Need to have MAOP re-confirmed under 49 CFR §192.624 via either a strength test or pipe replacement; or 3) Need to be either tested or replaced to comply with 49 CFR §192.917 because the manufacturing threat is deemed unstable because it either does not have a TVC record of a test or does not have a 49 CFR Subpart J test to at least 1.25 times MACP.				
75	Capital	GT&S	75	GT Pipeline Reliability	75U	Non-TIMP Strength Testing	Loss of Containment on Gas Transmission Pipeline	LOCTM-M003 Non-TIMP Strength Testing	Ex 3, Ch 5	No	N/A	N/A	69,859.2	18,663.6	(51,195.6)	-73.3%	NO	NO	N/A	39.4	9.0	-30.4	-77.2%	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
76	Capital	GT&S	75	GT Pipeline Reliability	75V	TIMP Direct Exam-Capital Recoat	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	annual	2,328.2	329.9	(1,998.3)	-85.8%	NO	NO	Mitigations	2	0	(2)	-100%	YES	Below variance threshold.	Actual units were lower than imputed units due to fewer capital repairs (replacements in excess of 50K or recoats in excess of 100K) required as a result of direct examination integrity assessments.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to perform capital repairs or recoat during completion of threat assessments required by Subpart O and PG&E's procedures.			
77	Capital	GT&S	75	GT Pipeline Reliability	75V	TIMP Direct Exam-Capital Recoat	Loss of Containment on Gas Transmission Pipeline	LOCTM-C022 Direct Assessment	Ex 3, Ch 5	No	N/A	N/A	2,328.2	329.9	(1,998.3)	-85.8%	NO	NO	N/A	2	0	(2)	-100%	NO	Below variance threshold.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
78	Capital	GT&S	75	GT Pipeline Reliability	76Z	Gill Ranch Capital	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 3, Ch 6	No	On-going	Annual	999.1	289.8	(709.3)	-71.0%	NO	NO	non-utilized: This MAT has no measurable units due to various types of projects included.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
79	Capital	GT&S	76	GT Station Reliability	763	Perform Simple Station Rblds	SRM Total	SRM Total	Ex 3, Ch 6	No	On-going	Annual	7,394.1	10,429.0	3,035.0	41.0%	NO	NO	# of Simple Stations Rebuilt	2	2	0	0%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
80	Capital	GT&S	76	GT Station Reliability	763	Perform Simple Station Rblds	Large Overpressure Event Downstream of Gas M&C Facility	LRGOP-C001 Perform Simple Station Rebuilds	Ex 3, Ch 6	No	N/A	N/A	7,394.1	10,429.0	3,035.0	41.0%	NO	NO	N/A	2	2	0	0%	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
81	Capital	GT&S	76	GT Station Reliability	763	Perform Simple Station Rblds	Loss of Containment at Gas Measrm & Cntrl / Cmpnsn & Prcsn Facil	MCCPF-C004 Perform Simple Station Rebuilds	Ex 3, Ch 6	No	N/A	N/A	7,394.1	10,429.0	3,035.0	41.0%	NO	NO	N/A	2	2	0	0%	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
82	Capital	GT&S	76	GT Station Reliability	764	Perform Complex Station Rblds	SRM Total	SRM Total	Ex 3, Ch 6	No	On-going	Annual	47,094.2	21,179.6	(25,914.5)	-55.0%	YES	YES	# of Complex Stations Rebuilt	1.5	1	(0.5)	-33.3%	YES	Program expenditures were below imputed regulatory values due to re-prioritization in support of higher risk or compliance work which impacted project start and construction. In addition, program expenditures were impacted by delays in the Bidder station rebuild.	Actual units were lower than imputed units due to the execution of the Bidder station rebuild being delayed to a future year as pre-work, such as replacing a valve and the construction of a building, needed to be completed before the start of the construction when the unit will be captured.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. This program is to maintain reliability of our complex stations through rebuilds.			
83	Capital	GT&S	76	GT Station Reliability	764	Perform Complex Station Rblds	Large Overpressure Event Downstream of Gas M&C Facility	LRGOP-C002 Perform Complex Station Rebuilds	Ex 3, Ch 6	No	N/A	N/A	47,094.2	21,179.6	(25,914.5)	-55.0%	NO	NO	N/A	1.5	0.0	(1.5)	-100%	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
84	Capital	GT&S	76	GT Station Reliability	764	Perform Complex Station Rblds	Loss of Containment at Gas Measrm & Cntrl / Cmpnsn & Prcsn Facil	MCCPF-C005 Perform Complex Station Rebuilds	Ex 3, Ch 6	No	N/A	N/A	47,094.2	21,179.6	(25,914.5)	-55.0%	NO	NO	N/A	1.5	0.0	(1.5)	-100%	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
85	Capital	GT&S	76	GT Station Reliability	765	Perform Transm Terminal Upgrd	SRM Total	SRM Total	Ex 3, Ch 6	No	On-going	Annual	10,771.9	8,749.9	(2,022.0)	-18.8%	NO	NO	non-utilized: This MAT has no measurable units because it captures individual projects that address specific upgrades inside the terminals in addition to routine terminal work.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. This program is to maintain reliability of our terminals by performing upgrades.			
86	Capital	GT&S	76	GT Station Reliability	765	Perform Transm Terminal Upgrd	Large Overpressure Event Downstream of Gas M&C Facility	LRGOP-C003 Perform Transmission Terminal Upgrade	Ex 3, Ch 6	No	N/A	N/A	10,771.9	8,749.9	(2,022.0)	-18.8%	NO	NO	N/A	N/A	N/A	N/A	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
87	Capital	GT&S	76	GT Station Reliability	765	Perform Transm Terminal Upgrd	Loss of Containment at Gas Measrm & Cntrl / Cmpnsn & Prcsn Facil	MCCPF-C006 Perform Transmission Terminal Upgrade	Ex 3, Ch 6	No	N/A	N/A	10,771.9	8,749.9	(2,022.0)	-18.8%	NO	NO	N/A	N/A	N/A	N/A	N/A	N/A	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
88	Capital	GT&S	76	GT Station Reliability	766	Becker Sys Upgrade	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 3, Ch 6	No	On-going	Annual	0.0	0.9	0.9	100.0%	NO	NO	non-utilized: This MAT was not forecast in the 2023 GRC and includes Becker control valve system upgrade activities.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-utilized.	On-Target	On-Target	Over	Proceeding as Planned	N/A			
89	Capital	GT&S	76	GT Station Reliability	76F	Emergency Shutdown Upgrade	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 3, Ch 6	No	On-going	Annual	0.0	1,061.5	1,061.5	100.0%	NO	NO	non-utilized: This MAT has no measurable units as this work was consolidated into Compressor Controls Upgrade MAT 76T.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-utilized.	On-Target	On-Target	Over	Proceeding as Planned	N/A			
90	Capital	GT&S	76	GT Station Reliability	76G	GT Over Pressure Protection	SRM Total	SRM Total	Ex 3, Ch 6	No	On-going	Annual	0.0	24,613.5	24,613.5	100.0%	YES	YES	# of rebuilds and retrofits	0	0	0	0%	NO	Program expenditures exceeded imputed values because PG&E executed work prior to receiving the 2023 GRC Final Decision which adopted \$0 for this program.	Below variance threshold.	On-Target	On-Target	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to install filters and separators at strategic locations within the system to reduce the likelihood of debris and liquids from entering the system and impacting pilot operated regulators and monitors. This program executed work prior to the 2023 GRC Final Decision.			

**TABLE 2-10
2023 RSAR
2023 GRC CYCLE GT&S CAPITAL COMPARISON BY MAT FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll-up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$ (H-G))	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K Spending Variance Explanation Required (Y/N)	L Percentage Variance Explanation Required (Y/N)	M Unit Type	N 2023 Imputed Adopted Units	O 2023 Actual Units	P Difference for 2023 (# of Units) (O-N)	Q Unit Percent Variance for 2023 (%) ((O-N)/N*100)	R Unit Variance Explanation Required (Y/N)	S 2023 Cost Variance Explanation	T 2023 Unit Variance Explanation	Forecast			V Status	W Completion Status Statement
																											U1 Scope (U, O, or T)	U2 Schedule (U, O, or T)	U3 Budget (U, O, or T)		
111	Capital	GT&S	84	GT Gas Gathering System Manage	84C	GG- Reliability/Safety	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 3, Ch 5	No	On-going	Annual	0.0	4.4	4.4	100.0%	NO	NO	non-utilized: This MAT has no measurable units as this is no longer used to capture work and reflects close out costs for odorant installation projects on gas gathering lines.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not-utilized.	On-Target	On-Target	Over	Proceeding as Planned	N/A
112	Capital	GT&S	84	Gas Gathering System Manage	84D	Gas Gathering	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	Annual	12,290.6	3,278.8	(9,011.8)	-73.3%	NO	NO	Meters	11	2	(9)	-81.8%	YES	Below variance threshold.	Actual units were lower than imputed units due to reprioritization in support of higher risk or compliance work.	Under	Under	Under	Rescheduled	Due to reprioritization to higher risk or compliance work, program activities have been delayed.
113	Capital	GT&S	84	Gas Gathering System Manage	84D	Gas Gathering	Loss of Containment on Gas Transmission Pipeline	LOCTM-C006 Gas Gathering Divestiture	Ex 3, Ch 5	No	N/A	N/A	12,290.6	3,278.8	(9,011.8)	-73.3%	N/A	N/A	N/A	11	2	(9)	-81.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
114	Capital	GT&S	98	GT Integrity Management	98C	ILI Upgrades	SRM Total	SRM Total	Ex 3, Ch 5	No	On-going	2038	61,141.6	145,155.5	84,013.9	137.4%	YES	YES	Projects	4.0	6.0	2.0	50.0%	YES	Program expenditures exceeded imputed regulatory values due to several drivers. First, the program executed two units over imputed units due to project maturity, these projects were already in construction or finished by the time the 2023 GRC Final Decision was received. Second, this program is completing a more complex scope of work as compared to historical upgrades performed on smaller diameter pipe projects, for example. Finally, the program completed a high amount of non-utilized work in 2023 which resulted in a higher program cost, without that work being reflected in unit totals.	Actual units were higher than imputed units due to project maturity; projects were already in construction or finished by the time the 2023 GRC decision was received.	On-Target	On-Target	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to upgrade natural GT pipelines in order to be capable of in-line inspection (where warranted) as outlined in PG&E's Pipeline Safety Enhancement Plan.
115	Capital	GT&S	98	GT Integrity Management	98C	ILI Upgrades	Loss of Containment on Gas Transmission Pipeline	LOCTM-M005 Traditional ILI Upgrades	Ex 3, Ch 5	No	N/A	N/A	61,141.6	145,155.5	84,013.9	137.4%	N/A	N/A	N/A	4.0	6.0	2.0	50.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

(a) Units for AC Interference Mitigation MAT 3K4 can include # of Alternating Current Coupon Test Station, # of ground rods installed, and # of zinc ribbons installed.
(b) Units for Cathodic Protection replacement MAT 3K7 can include # of groundbed replacements performed, and # of rectifiers repaired.
(c) Units for WELL - Reworks MAT 3L3 can include # of cementing wells, # of new gas wells, and # of tubing and packer, reliability/down hole safety valves.
(d) Workpapers clearly showed WELL Repair and Replace MAT 3L4 was based on a dollar forecast, not units x unit cost (i.e., non-utilized). WP 6-2 included a "1" under units to represent non-utilized work and this was misinterpreted to be an actual physical unit.
(e) WELL Controls and Continuous Monitoring MAT 3L5 includes unitized (# wells) and non-utilized work.
(f) StarPac MAT 44A is a consolidation of the recorded spend and work completed under various GT Integrity Management and GT Pipeline reliability programs.

1 **L. GT&S MWC Descriptions – Expense**

2 **MWC AB – Support** – Support encompasses quality management and
3 miscellaneous gas transmission costs not aligned with other MWCs or MATs.

4 This MWC does not relate directly to safety and/or reliability and/or
5 maintenance.

6 **MWC AH – Maint Gas Storage Facilities** – Expense-related programs for
7 PG&E’s underground storage field operations.

8 This MWC relates to safety and/or reliability and/or maintenance as it
9 involves work related to underground storage field operations.

10 **MWC AK – Manage Environmental Operations** – Manage Environmental
11 Operations refers to the coordination of policies and procedures regarding
12 hazardous materials. This includes the following:

- 13 • Investigating, cleaning, coordinating disposal, and maintaining records
14 on all hazardous materials;
- 15 • The facility based fees (i.e., underground storage tanks, facility permits,
16 discharge permits, agency inspection fees, and storm water vault discharge
17 permits);
- 18 • Materials and supplies such as drums, containers, labels, signs, absorbent
19 materials as well as the lab testing costs; and
- 20 • Environmental compliance plans.

21 MWC AK does not include PG&E labor for spill response, third party claims, and
22 site relocation costs.

23 This MWC does not relate directly to safety and/or reliability and/or
24 maintenance.

25 **MWC CM – Gas Transmission Operations** – Gas Transmission
26 Operations comprises expense related to the remote monitoring and control of
27 the gas system by operators in the Gas Transmission Control Center. Operators
28 use a SCADA system and related tools to monitor and control various aspects of
29 the GT&S system, including pressure, flow, gas routing, and emergency
30 response. Gas Transmission Operations also comprises work performed by gas
31 planning engineers who model the GT&S system to support a safe, reliable, and
32 cost-effective supply of natural gas to customers and to enable the system to
33 accommodate future load growth. SCADA gathers information from field
34 devices that measure pressure, flow, temperature, and other physical

1 characteristics of the gas system. The SCADA system then converts these
2 measurements into electronic signals that are transmitted through a network of
3 radio, telephone, microwave, and other telecommunications systems. Supplied
4 from these systems, computers process and graphically display this data for gas
5 control-room operators. This MWC also includes the cost of electricity to
6 operate the GT&S system, notably the electric-powered gas compressors.

7 This MWC relates to safety and/or reliability and/or maintenance as it
8 involves work related to monitoring and controlling gas system remotely using
9 SCADA system and tools. This includes overseeing pressure, flow, gas routing
10 and emergency response. Gas planning engineers model the system to ensure
11 a safe, reliable and cost-effective supply of natural gas anticipating future load
12 growth and identifying constraints enabling proactive maintenance to prevent
13 system failures.

14 **MWC CR – Manage Hazardous Waste Disposal and Transportation –**

15 Manage Hazardous Waste Disposal and Transportation refers to the contract
16 costs for hazardous waste disposal, universal waste disposal, and other
17 materials regulated as industrial wastes. This includes:

- 18 • Gas operations labor to manage waste disposal arrangements
19 and profiles;
- 20 • Taxes and fees (manifest fees) paid to the state for generation
21 and disposal of hazardous waste and costs to manage
22 payments; and
- 23 • Pole disposal costs.

24 MWC CR does not include the disposal of non-routine wastes from spill events.

25 This MWC does not relate directly to safety and/or reliability and/or
26 maintenance.

27 **MWC CX – Gas Marketing, Sales, and Strategy –** Gas Marketing, Sales,

28 and Strategy includes costs associated with the promotion and selling of utility
29 services to present and prospective customers, and with maintaining the
30 associated records.

31 This MWC does not relate directly to safety and/or reliability and/or
32 maintenance.

33 **MWC DF – Locate and Mark –** Mark and Locate includes the work

34 necessary to comply with Federal pipeline safety regulations and state law that
35 requires PG&E to belong to and share the costs of operating the regional
36 “one-call” notification system. Builders, contractors, and others planning to

1 excavate use this system to notify underground facility owners, like PG&E, of
2 their plans. PG&E then provides the excavators with information about the
3 location of its underground facilities by having Company personnel visit the work
4 site and place color-coded surface markings to show where any pipes and wires
5 are located.

6 This MWC relates to safety and/or reliability and/or maintenance as it
7 involves work related to Locate and Mark where underground facility owners are
8 notified on the color-coded surface markings to show where pipes and wires are
9 located.

10 **MWC DN – Develop and Provide Training** – The Gas Qualifications
11 program creates new and revises existing training materials ensuring that the
12 Gas workforce is competent, safe, and qualified and includes costs associated
13 with field employee operator qualifications. It does not include curriculum
14 development, the general maintenance, or delivery of training materials.

15 This MWC does not relate directly to safety and/or reliability and/or
16 maintenance.

17 **MWC GF – Gas Transmission and Distribution System Mapping** –

18 Gas Mapping encompasses tracking the size, material type, location,
19 configuration, and other essential information needed to identify gas
20 transmission lines and over 42,000 miles of underground gas distribution main
21 and nearly 3.3 million gas services in support of the Company’s 4.1 million
22 residential, commercial, and industrial gas customers (accounts). Similar to
23 electric mapping, gas mapping updates and maintains the gas transmission and
24 distribution system maps and records that serve many purposes and are critical
25 to the safe and successful operation of the gas system.

26 This MWC relates to safety and/or reliability and/or maintenance as it
27 involves tracking the size, material type, location and configuration, and other
28 essential information needed to identify GT&S assets

29 **MWC GJ – Corrosion Control** – Includes compliance expenses for 49 CFR
30 § 192, Subpart I – Requirements for Corrosion Control. These include
31 investigating and mitigating stray currents, atmospheric corrosion, internal
32 corrosion, performing close interval survey, testing casings without leads,
33 restoring cathodic protection at non-routine monitoring points to adequate levels,
34 and restoring electrical isolation at cased crossings.

1 This MWC relates to safety and/or reliability and/or maintenance as it
2 involves work related to safety and integrity of infrastructure by investigating and
3 mitigating as stray currents, atmospheric corrosion, internal corrosion,
4 performing close interval survey, testing casings without leads, restoring
5 cathodic protection at non-routine monitoring points to adequate levels, and
6 restoring electrical isolation at cased crossings.

7 **MWC GM – Natural Gas Fueling Facilities Operations and Maintenance**

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

14 This MWC relates to safety and/or reliability and/or maintenance as it
15 involves work related to ensure the operations and maintenance of natural gas
16 fueling facilities. These facilities can serve as backups for customer owned
17 stations during breakdowns or maintenance thus enabling reliability.

18 **MWC GZ – Gas Research, Development & Demonstration (RD&D) –**

19 Gas Research, Development & Demonstration includes research, development,
20 and demonstration (RD&D) work in targeted areas of gas transmission and
21 distribution. The objectives of gas RD&D are to explore new opportunities,
22 concepts, and technologies to continue to provide safe and reliable service to
23 customers at a lower cost, where possible.

24 This MWC does not relate directly to safety and/or reliability and/or
25 maintenance.

26 **MWC HP – Transmission Integrity Management Program**

27 **(TIMP)/California Gas Transmission (CGT) Balancing Accounts** – Includes:

28 Team costs, ILI, ECDA, Corrosion, ICDA, SCCDA, Leak Survey and RMDA.
29 Pipeline Integrity Management Program includes costs to assess and manage
30 the integrity of all gas transmission pipelines whose potential impact circle
31 encompasses High Consequence Areas (HCA). HCAs are defined as areas
32 with 20 or more dwellings, public gathering places, or structures difficult to
33 evacuate.

1 This MWC relates to safety and/or reliability and/or maintenance as it
2 involves work related to maintenance within the pipeline systems including
3 activities like ILI, ECDA, Corrosion, ICDA, SCCDA, Leak Survey and RMDA.
4 These assessments identify and mitigate integrity issues like 3rd Party damage,
5 corrosion, stress corrosion cracking and leaks.

6 **MWC JO – GT Pipeline Maintenance** – Routine maintenance on the
7 Backbone including Bay Loops and Local Transmission Pipelines.

8 This MWC relates to safety and/or reliability and/or maintenance as it
9 involves work related to Routine maintenance on Bay Loops and LT Pipelines.

10 **MWC JP – GT Station Maintenance** – Preventative maintenance and
11 corrective repairs to Storage, Compressor Station, or Terminal equipment not
12 covered by another specific MAT, including: repairs to valves, regulators and
13 relief valves, manual and automated valves, regulators, monitors and reliefs;
14 repairs to electrical generating equipment; compressor station Power Units,
15 standby generators, Motor Control Center (MCC) and Uninterruptible Power
16 Supply (UPS) systems; and repairs to gas, water and oil cooling systems and
17 holding ponds, heat exchangers, pumps, fans, motors, gearboxes, filters, tanks
18 and sumps.

19 This MWC relates to safety and/or reliability and/or maintenance as it
20 involves work related to preventive maintenance, corrective repairs to storage,
21 compressor station or terminal equipment. Additionally, maintaining these
22 systems ensures operational efficiency and reduces the risk of unexpected
23 breakdowns.

24 **MWC JT – GT Reliability & General Maintenance** – Reliability and general
25 maintenance for GT pipeline and stations.

26 This MWC relates to safety and/or reliability and/or maintenance as it
27 involves assessing and maintaining the quality of the gas and the Gas
28 Transmission pipeline and stations assets.

29 **MWC JV – Information Technology (IT)** – Includes costs for ongoing
30 maintenance, operations and repair for PG&E’s IT applications, systems, and
31 infrastructure.

32 This MWC was not presented in the 2023 General Rate Case (GRC) as
33 related directly to safety and/or reliability and/or maintenance. However, certain

1 projects within this MWC provide support for safety and/or reliability and/or
2 maintenance projects.

3 **MWC KE – Pipeline Safety Enhance Plan** – This category includes
4 expenses associated with strength testing pipelines that are in service.

5 This MWC relates to safety and/or reliability and/or maintenance as it
6 involves work related to strength testing pipelines that are in service.

7 **MWC LU – Critical Documents Program** – Addresses critical
8 documentation delineated in PG&E’s Standard TD 4551S, and identifies,
9 modifies, and/or develops documentation to comply with TD 4551S.

10 This MWC relates to safety and/or reliability and/or maintenance as it
11 involves work related to critical documentation to comply with PG&E’s Standard
12 TD 4551S.

13 **MWC LV – GTS Station Assessments** – Covers work associated with
14 Engineering Critical Assessments (ECA) phase 1 and phase 2.

15 This MWC relates to safety and/or reliability and/or maintenance as it
16 involves work related to conducting Engineering critical assessments.

17 **MWC 34 – StanPac, Expense** – Includes costs associated with maintaining
18 StanPac gas transmission (gas compressors, pipeline, measuring, and
19 regulating) facilities. Maintenance is generally defined as work that keeps a
20 facility operational. It involves repairs and upkeep to the facility.

21 This MWC relates to safety and/or reliability and/or maintenance as it
22 involves work related to maintaining StanPac gas transmission (gas
23 compressors, pipeline, measuring, and regulating) facilities, repair, and upkeep
24 of facilities.

25 **MWC OM – Operational Management** – Includes labor and employee
26 related- costs to provide supervision and management support. MWC OM also
27 includes costs incurred by the administrative staff working for the
28 Supervisors/Managers.

29 This MWC is included as a maintenance activity in accordance with
30 D.19-04-020. GT&S does not consider MWC OM as related directly to safety
31 and/or reliability and/or maintenance work.

32 **MWC OS – Operational Support** – Includes labor and employee
33 related- costs to provide services and support that are unrelated to supervision
34 and management.

1 This MWC does not relate directly to safety and/or reliability and/or
2 maintenance.

3 **M. GT&S MWC Descriptions – Capital**

4 **MWC 05 – Tools and Equipment** – Includes the costs of miscellaneous
5 tools and equipment. expenditures are necessary to replace damaged, worn
6 out, or obsolete tools and to ensure specialized tools are available to perform
7 testing and other functions.

8 This MWC does not relate directly to safety and/or reliability and/or
9 maintenance.

10 **MWC 12 – Implement Environment Projects** - Environmental Capital
11 includes Spill Prevention Control and Countermeasures (SPCC) upgrades
12 covering improvements at various substations that are necessary to comply with
13 federal requirements. These upgrades include, but are not limited to, catch
14 basin enhancements and basin size increases to capture maximum equipment
15 volumes including water from storm events.

16 In addition, MWC 12 includes the mitigation (or compensation) component of the
17 habitat conservation plan currently in development for San Joaquin Valley. Such
18 mitigation includes expenditures for acquisition and/or restoration of habitat.

19 This MWC does not relate directly to safety and/or reliability and/or
20 maintenance.

21 **MWC 21 – Miscellaneous Capital** – Miscellaneous capital projects not
22 aligned with any other Gas Transmission MAT.

23 This MWC relates to safety and/or reliability and/or maintenance as it
24 involves work related to gas pipeline operations and maintenance.

25 **MWC 26 – GT Customer Connects** – GT Customer Connects covers
26 capital costs to provide service to a new gas customer. This includes all gas
27 facilities extended from the gas transmission system to the meter outlet flange or
28 valve that defines the start of the customer’s house line to provide service to a
29 new gas customer. The work includes procuring land rights and easements,
30 facility design (i.e., estimating, mapping, and engineering), pipe and equipment,
31 meters, permitting, construction, and initial operation of the pipeline system.

32 This MWC does not relate directly to safety and/or reliability and/or
33 maintenance.

1 **MWC 2F – Build IT Applications and Infrastructure** – Includes the costs
2 to design, develop and enhance applications, systems, and infrastructure
3 technology solutions.

4 This MWC was not presented in the 2023 GRC as related directly to safety
5 and/or reliability and/or maintenance. However, certain projects within this MWC
6 provide support for safety and/or reliability and/or maintenance projects.

7 **MWC 2H – Pipeline Safety Enhance Plan, Capital** – This category includes
8 the capital expenditures to replace gas transmission pipelines and perform
9 capital pipe replacements resulting from Pipeline Program strength testing.

10 This MWC relates to safety and/or reliability and/or maintenance as it
11 involves work related to pipe replacements resulting from Pipeline Program
12 strength testing.

13 **MWC 3K – Corrosion Control** – Includes plant PG&E installs, replaces,
14 and/or relocates to comply with 49 CFR § 192, Subpart I – Requirements for
15 Corrosion Control.

16 This MWC relates to safety and/or reliability and/or maintenance as it
17 involves work related to Corrosion Control.

18 **MWC 3L – Storage Compliance** – Includes safety and reliability work
19 required for gas storage wells. This category of work includes retrofit, repair, or
20 assessment of the storage well to (a) mitigate single point of failure; (b) assess
21 the condition of a well; or (c) perform corrective work.

22 This MWC relates to safety and/or reliability and/or maintenance
23 work required for gas storage wells which includes retrofit, repair, or assessment
24 of the storage well.

25 **MWC 44 – StanPac, Capital** – Includes capital cost of improving the safety
26 and reliability of the StanPac transmission pipeline system. Examples of
27 expenditures in this category include replacing high risk, high consequence
28 pipeline segments and pressure regulating facilities identified by PG&E's
29 Pipeline Risk Management Program. This also includes New Business, WRO,
30 valves, and CP.

31 This MWC relates to safety and/or reliability and/or maintenance as it
32 involves work related to improving the safety and reliability of the StanPac
33 transmission pipeline system.

1 **MWC 73 – GT Pipeline Capacity** – Covers capital costs of installing GT
2 facilities to increase the capacity of the GT system to meet customer demand.
3 This work includes installing new gas pipelines, installing pipelines parallel to
4 existing gas pipelines, replacing existing pipelines with a larger diameter and/or
5 higher pressure pipeline, increasing regulating station throughput, adding new
6 gas regulating stations, installing a main to interconnect existing gas systems,
7 and replacing facilities to allow the system to be updated, which increases
8 operating pressure and capacity.

9 This MWC relates to safety and/or reliability and/or maintenance as it
10 involves work related to installation of new gas transmission facilities, upgrading
11 existing facilities and replacing facilities to allow the system to be updated, which
12 increases operating pressure and provides for needed additional capacity.

13 **MWC 75 – GT Pipeline Reliability** – Includes capital cost of improving the
14 safety and reliability of the GT pipeline system. Examples of expenditures in this
15 category include replacing high risk, high consequence pipeline segments and
16 pressure regulating facilities identified by PG&E’s Pipeline Risk Management
17 Program. This MWC also includes expenditures necessary for PG&E to comply
18 with the many subparts in 49 CFR, Part 192, which governs the construction,
19 maintenance, and operation of natural GT pipelines.

20 This MWC relates to safety and/or reliability and/or maintenance as it
21 involves work related to improving the safety and reliability of the GT pipeline
22 system including replacing high risk, high consequence pipeline segments and
23 pressure regulating facilities.

24 **MWC 76 – GT Station Reliability** – Includes costs related to maintaining
25 and/or improving the safety and reliability of GT Stations and the auxiliary
26 equipment located at these stations. MWC 76 is divided into four areas of focus:
27 (1) Line 300 Station Reliability – funds capital investment made at compressor,
28 metering, and regulating stations along PG&E’s Line 300. It includes costs
29 associated with maintaining and/or improving the safety and reliability of the
30 compressor, measurement, regulating, and auxiliary equipment located at these
31 stations. (2) Line 400/401 Station Reliability – funds capital investments made
32 within PG&E’s Line 400/401 Compressor Stations. It includes costs associated
33 with maintaining and/or improving the safety and reliability of the gas
34 compressor and auxiliary equipment located at these stations.

1 (3) Gas Terminals – funds capital investment made within PG&E’s gas terminals
2 and at smaller monitoring and control stations located along the GT pipeline
3 system. (4) Storage Facility Reliability – funds capital investments required to
4 maintain reliable operations at PG&E’s three underground storage facilities
5 McDonald Island, Los Medanos, and Pleasant Creek.

6 This MWC relates to safety and/or reliability and/or maintenance as it
7 involves work related to maintaining and/or improving the safety and reliability of
8 gas transmission stations and the auxiliary equipment located at these stations.

9 **MWC 78 – Manage Buildings** – Capital Buildings Projects (i.e., facility
10 upgrades/improvements as well as new construction) for Gas Operations.

11 This MWC does not relate directly to safety and/or reliability and/or
12 maintenance.

13 **MWC 83 – Gas Transmission Work Requested by Others** - Gas
14 Transmission Work Requested by Others includes plant PG&E installs, replaces
15 and/or relocates at the request of third parties, typically governmental agencies
16 for public works projects. Cities, counties, developers, and transportation
17 agencies drive the typical WRO relocations.

18 This MWC does not relate directly to safety and/or reliability and/or
19 maintenance.

20 **MWC 84 – GT Gas Gathering System Manage** – Covers capital costs
21 associated with third -party gas well connections/receipts, retirements, and
22 divestitures of PG&E’s gas gathering system.

23 This MWC relates to safety and/or reliability and/or maintenance as it
24 involves work related to third -party gas well connections/receipts, retirements,
25 and divestitures of PG&E’s gas gathering system.

26 **MWC 98 – Gas Transmission Integrity Management, Capital** – Includes
27 capital costs of upgrading pipelines to enable PG&E to inspect them with an ILI
28 tool, and mitigating damage found as a result of the inspection. PG&E operates
29 its IM Program in compliance with the requirements of the Department of
30 Transportation (DOT), 49 CFR, Part 192, Subpart O – Pipeline IM.

31 This MWC relates to safety and/or reliability and/or maintenance as it
32 involves work related to upgrading pipelines to enable PG&E to inspect them
33 with ILI and mitigating significant integrity concerns found as a result of the
34 inspection.

1 **N. GT&S MAT Descriptions for Safety and Reliability Work – Expense**

2 **MAT AH1 – Well Integrity Management Plan (WELL) – Integrity**

3 Assessments – Storage wellbore surveys and assessments, including Gamma
4 Ray Neutron, Cement Bond Log, Noise/Temperature, Magnetic Flux Leakage
5 and Sonic surveys and other similar assessments. Does not include
6 assessments that are completed as part of well rework projects.

7 This MAT relates to safety and/or reliability and/or maintenance as it
8 involves work related to Integrity Assessments and Storage wellbore surveys.

9 **MAT AH2 – WELL Reworks – Well assessments and other expenses that**

10 are completed as part of storage well integrity assessment rework projects
11 including preparing and isolating wells for assessment activities.

12 This MAT relates to safety and/or reliability and/or maintenance as it
13 involves work related to completion of storage and well integrity assessment
14 projects.

15 **MAT AH3 – WELL, Other – Miscellaneous storage expenses, such as**

16 engineering support, IM analysis software, site plans, emergent and emergency
17 support. Also includes wellhead and associated well injection and withdrawal
18 equipment maintenance within the Storage Asset Family boundary. Does not
19 include costs for storage well reworks and integrity assessments that are
20 recorded in MATs AH1 and AH2.

21 This MAT relates to safety and/or reliability and/or maintenance as it
22 involves work related to engineering support and maintenance, emergency
23 preparedness and identification of potential integrity issues early using IM
24 analysis software.

25 **MAT AH4 – Gill Ranch Operations and Maintenance (O&M) – Expense**

26 funds contributed to, or expenses incurred to fulfill PG&E’s obligations under its
27 joint ownership agreement with Gill Ranch Storage LLC.

28 This MAT relates to safety and/or reliability and/or maintenance as it
29 involves work related to Gill Ranch Operations and Maintenance.

30 **MAT AH# - Maint Gas Storage Facilities - Expense-related programs for**

31 PG&E’s underground storage field operations.

32 This MAT relates to safety and/or reliability and/or maintenance as it
33 involves work related to underground storage field operations.

1 **MAT CMA – GT&S Operations** – Operate and control the GT&S system;
2 account and bill for wholesale customer activity; plan and conduct engineering
3 analysis for daily operations and to determine capacity available for marketing;
4 plan and conduct engineering analysis for long term backbone, storage, and LT
5 capacity, facility requirements, and operations. These costs are largely for staff.
6 They can also include contract costs, subscription costs, and similar expenses.

7 This MAT relates to safety and/or reliability and/or maintenance as it
8 involves work related to operations and control of GT&S System, conduct
9 engineering analysis for daily operations and to determine capacity available for
10 marketing.

11 **MAT CMB – Electric Power for Gas Compressors** – Intercompany Energy
12 Usage Charge for all electric powered GT&S gas compressors.

13 This MAT relates to safety and/or reliability and/or maintenance as it involves
14 work related to ensuring energy supply to gas compressors to maintain proper
15 functioning.

16 **MAT DFA – L&M** – L&M underground Gas and Electric Distribution facilities
17 per Underground Service Alert requests. Preparation of maps, process tickets,
18 and perform administrative work, and Gas and Electric damage prevention
19 activities. Does not include L&M for Gas and Electric Distribution or Electric
20 Transmission facilities. Does include calibration/repair of equipment.

21 This MAT relates to safety and/or reliability and/or maintenance as it
22 involves work related to performing damage prevention activities that helps
23 prevent accidental damage to underground facilities and reduces risk of gas
24 leaks.

25 **MAT DFB – Locate and Mark, Standby** – Includes observation of work
26 performed within 5 feet of a gas or electric transmission facility or for excavation
27 activity within close proximity of a critical transmission facility.

28 This MAT relates to safety and/or reliability and/or maintenance as it
29 involves monitoring work conducted in close proximity to transmission facilities
30 minimizing accidental damage and prevents service interruptions.

31 **MAT GFP – Mapping Support Transmission** – Transmission Mapping and
32 PFL work that is not directly chargeable to orders. This work includes:
33 (1) transmission mapping (including PFL) activities not directly charged to orders
34 such as posting obsolete orders, delineations, posting corrections, updating

1 operating maps and diagrams, asset registry updates and requests for work
2 (RWs), CAP mapping and information and data requests; and (2) special
3 transmission mapping projects related to the integrity and consistency of the
4 data in our systems of record.

5 This MAT relates to safety and/or reliability and/or maintenance as it
6 includes: (1) transmission mapping (including PFL) activities not directly
7 charged to orders such as posting obsolete orders, delineations, posting
8 corrections, updating operating maps and diagrams, asset registry updates and
9 requests for work (RWs), CAP mapping and information and data requests; and
10 (2) special transmission mapping projects related to the integrity and
11 consistency of the data in our systems of record.

12 **MAT GFQ – GT&D Data Management** – Gas Operations Gas Distribution
13 and Transmission data management expenses including gas data stewardship,
14 data quality improvement, and program implementation for data assets under
15 the Data Asset Family management.

16 This program relates to safety and/or reliability and/or maintenance as it
17 includes Gas Distribution and Transmission data management expenses
18 including gas data stewardship, data quality improvement, and program
19 implementation for data assets under the Data Asset Family management.

20 **MAT GJA – Electrical Interference, Alternating Current** – 49 CFR
21 192.467 requires that protective measures be taken where pipelines run in
22 proximity to alternating current electrical equipment such as substations,
23 transmission towers, and wooden pole -supported power lines. Proximity to
24 these may result in alternating current fault strikes, a significant safety hazard for
25 personnel, or induced alternating current, both of which may also cause
26 accelerated corrosion. This MAT captures work associated with investigation to
27 identify locations with a possible alternating current interference threat, data
28 analyses, risk ranking of inspection data, and non-capital mitigation efforts. In
29 addition, this MAT funds work associated with mitigating arc fault conditions
30 through installation of grounding equipment on electric assets.

31 This MAT relates to safety and/or reliability and/or maintenance as it
32 involves work related to mitigation of risks posed by AC interference near
33 pipelines caused by induced corrosion or fault currents.

1 **MAT GJB – AC** – 49 CFR 192.479 481 requires that pipeline operators
2 inspect exposed piping for AC at least once every 3 years. AC may occur when
3 exposed pipeline interacts with moisture in the environment, degrading pipeline
4 integrity. When AC is indicated during AC Patrol (see MAT JOZ), a follow up
5 inspection occurs, which is captured in MAT GJB. Should that inspection show
6 the need for remediation, PG&E may recoat the affected piping and conduct
7 pipeline repairs and pipeline support work to better address the AC. These
8 activities should also be captured in MAT GJB.

9 This MAT relates to safety and/or reliability and/or maintenance as it
10 involves remediating Atmospheric Corrosion on exposed Gas Transmission
11 piping.

12 **MAT GJC – CP Expense** – 49 CFR 192.463 requires the application of CP
13 to buried metallic pipeline to mitigate the threat of external corrosion. If CP
14 levels are inadequate and cannot be made adequate through troubleshooting,
15 PG&E may have to perform additional expense activities to restore CP to
16 adequate levels. Examples include installing insulators, bonds, and recoating
17 less than 100 feet of buried piping. This MAT also covers the expense costs of
18 implementing the 850 Off criterion.

19 This MAT relates to safety and/or reliability and/or maintenance as it
20 involves work related to mitigation of threat of external corrosion and restoring
21 CP to adequate levels thus reducing the risk of corrosion related failures and
22 leaks.

23 **MAT GJD – Test Stations** – 49 CFR 192.469 requires PG&E to maintain
24 sufficient test stations or other contact points for electrical measurement to
25 determine the adequacy of CP. Prior to installing test stations to meet this
26 criterion, PG&E must assess the sufficiency of its test stations and other contact
27 points with surveys. Costs associated with these surveys as well as the
28 installation of test stations that do not meet PG&E’s capital criteria are recorded
29 in MAT GJD.

30 This MAT relates to safety and/or reliability and/or maintenance as it
31 involves work related to ensuring the adequacy of CP through sufficient test
32 stations or contact points thereby preventing corrosion related deterioration.

33 **MAT GJE – CIS** – CIS is a method for determining the adequacy of CP
34 between corrosion monitoring points. This data is used to evaluate the health of

1 the corrosion control system. Locations of possible active external corrosion are
2 identified and analyzed through excavation and/or direct examination. This MAT
3 is associated with costs for the survey work as well as subsequent
4 excavations/DAs.

5 This MAT relates to safety and/or reliability and/or maintenance as it
6 involves work related to determining the adequacy of CP between corrosion
7 monitoring points which is used to evaluate the health of the corrosion control
8 system.

9 **MAT GJF – Electrical Interference Direct Current (DC) – 49 CFR**
10 192.473 requires each operator whose pipeline system is subjected to stray
11 currents to have a continuing program to minimize the detrimental effects of DC
12 Interference. DC interference expense work includes program management,
13 galvanic anode installation, data analysis, bond wire installation, and
14 coordination efforts with the other asset owners outside of PG&E.

15 This MAT relates to safety and/or reliability and/or maintenance as it
16 involves work related to minimizing detrimental effects of DC interference thus
17 reducing the risk of corrosion related failures and leaks.

18 **MAT GJH – IC – 49 CFR 192.475 192.477** prohibits transportation of
19 corrosive gas unless the corrosivity of the gas is investigated and steps are
20 taken to minimize IC. IC may occur if moisture or corrosive agents are
21 introduced into PG&E's gas system through storage or gas gathering facilities.
22 Routine monitoring for IC includes inline cleaning, testing internal
23 probes/coupons, monitoring drips, and performing liquid analyses. This MAT
24 holds costs for these activities and other IC expense work, such as site specific
25 plans, coupon/probe replacement, and IC investigations conducted by Corrosion
26 Engineering (not ICDA).

27 This MAT relates to safety and/or reliability and/or maintenance as it
28 involves work related to investigating the corrosivity of gas, monitoring for IC and
29 conducting related activities such as inline cleaning, testing internal probes/
30 coupons, and performing liquid analysis.

31 **MAT GJJ – Low Read Investigations** – Low read investigations is non
32 routine testing of low pipe to soil reads documented during transmission leak
33 repairs, direct examinations, ECDA and CIS to ensure appropriate levels of CP

1 on transmission pipelines. This could include minor mitigation work (such as
2 adjusting a rectifier).

3 This MAT relates to safety and/or reliability and/or maintenance as it
4 involves work related to conducting low read investigations to identify instances
5 where CP levels are insufficient and performing necessary mitigation work such
6 as adjusting rectifiers.

7 **MAT GJK – Corrosion Support** – Holds expense costs related to coatings
8 research, data/program management, field support, and remote monitoring unit
9 licenses.

10 This MAT relates to safety and/or reliability and/or maintenance as it
11 involves work related to monitoring coating performance allowing data/program
12 management, field support, and remote monitoring unit licenses.

13 **MAT GJL – Casings Monitoring** – Per internal gas standards, all casings
14 must be monitored on an annual basis to ensure proper isolation from the carrier
15 pipe and compliance with 49 CFR 192.467. However, there are some casings in
16 PG&E’s GT system without test stations, leads, vents, or other facilities required
17 to take casing to soil readings. MAT GJL captures costs associated with the
18 specialized testing required to monitor this set of casings.

19 This MAT relates to safety and/or reliability and/or maintenance as it
20 involves work related to monitoring of all casings to ensure proper isolation from
21 the carrier pipe.

22 **MAT GJM – Casings** – 49 CFR 192.467 requires that each buried or
23 submerged pipeline be electrically isolated from the protective metallic casings
24 in which they are nested. A metallic or electrolytic contact between these two
25 structures may cause corrosion and requires remediation. This may involve
26 replacing end seals, removing segments of the casing, replacing link seals and
27 insulation spacers, flushing, and draining casings, repairing coatings, and gelling
28 the casing after site restoration. A casing project is considered expense related
29 if a casing less than 100 feet in length is mitigated or if a casing greater than 100
30 feet is not successfully gelled. Costs associated with casing test station
31 installation are also recorded in MAT GJM.

32 This MAT relates to safety and/or reliability and/or maintenance as it
33 involves work related to remediation activities from corrosion of metallic or
34 electrolytic contact between submerged pipeline and protective metallic casings.

1 **MAT GMD – LNG/CNG** – Corrective and Preventive Maintenance on
2 CNG/LNG Trailer.

3 This MAT relates to safety and/or reliability and/or maintenance as it
4 involves work related to Corrective and Preventive Maintenance on CNG/LNG
5 Trailer.

6 **MAT HPA – TIMP, Other** – Covers all work and services associated with
7 supporting TIMP. This includes overhead costs and any services and products
8 not specific to any other MAT.

9 This MAT relates to safety and/or reliability and/or maintenance as it
10 involves work related to Transmission Integrity Management program.

11 **MAT HPB – Traditional ILI Runs Pigging** – Covers work associated with
12 conducting traditional ILI cleaning and inspection runs on GT pipelines with tools
13 propelled by gas flow. Expense examination and repairs (i.e., digs), are
14 recorded in MAT HPI.

15 This MAT relates to safety and/or reliability and/or maintenance as it involves
16 work associated with conducting traditional ILI cleaning and inspection runs on
17 GT pipelines.

18 **MAT HPC – ECDA Indirect Inspections** – Engineering – Covers all work
19 associated with the following three of the four phases of ECDA including:
20 (1) Phase 1: Pre-Assessment; (2) Phase 2: Indirect Inspection Testing; and
21 (3) Phase 4: Post Assessment. Phase 3 Direct Examination, ECDA
22 excavations and repairs are recorded in MAT HPN.

23 This MAT relates to safety and/or reliability and/or maintenance as it
24 involves work related to Direct assessment for external corrosion threat
25 assessment, as required by CFR 49, Subpart O.

26 **MAT HPE – TIMP Semi-annual Leak Surveys** – Covers leak surveys per
27 192.935 (d)(3), which requires semi-annual leak surveys conducted on Class 3/4
28 non HCA pipeline operating under 30 percent Specified Minimum Yield Strength
29 as required by Subpart O.

30 This MAT relates to safety and/or reliability and/or maintenance as it
31 involves work related to leak surveys implemented as P&M measures.

32 **MAT HPF – Hydrostatic Testing, IM** – Covers hydrostatic tests conducted
33 for the purpose of assessing pipeline identified by TIMP to be in compliance with
34 49 CFR Part 192, Subpart O. The hydrostatic testing work involves three efforts

1 (1) Review and validation of records to prove a pipeline has had a prior
2 hydrostatic test performed; (2) Pipeline replacement where necessary to prepare
3 a pipeline for testing; and (3) Filling the inside of the pipeline with water and
4 raising the pressure to a predetermined value and holding it for a period of time.

5 This MAT relates to safety and/or reliability and/or maintenance as it
6 involves work related to hydrostatic tests performed to assess for threats in
7 HCA, as required by CFR 49, Subpart O.

8 **MAT HPI – ILI Direct Exam and Repair** – Covers direct examination digs
9 and repairs made as a result of the ILI results.

10 This MAT relates to safety and/or reliability and/or maintenance as it
11 involves work related to direct examination digs and repairs made as a result of
12 the ILI runs.

13 **MAT HPJ – ICDA Indirect Inspections** – Covers all work associated with
14 the following three of the four phases of ICDA including: (1) Phase 1:
15 Pre-assessment, (2) Phase 2: Region Identification, and (3) Phase 4: Post
16 Assessment. Phase 3: Direct Examination, ECDA excavations and repairs, are
17 recorded in MAT HPO.

18 This MAT relates to safety and/or reliability and/or maintenance as it
19 involves work related to Direct assessment for internal corrosion threat
20 assessment, as required by CFR 49, Subpart O.

21 **MAT HPK – SCCDA Indirect Inspections** – Covers all work associated
22 with the following three of the four phases of SCCDA including: (1) Phase 1:
23 Pre assessment; (2) Phase 2: Indirect Inspection Testing; and (3) Phase 4: Post
24 Assessment. Phase 3: Direct Examination, ECDA excavations and repairs, are
25 recorded in MAT HPP.

26 This MAT relates to safety and/or reliability and/or maintenance as it
27 involves work related to Direct assessment for stress corrosion cracking threat
28 assessment, as required by CFR 49, Subpart O.

29 **MAT HPM – Replacements** – Replacements on pipe segments less than
30 50 feet due to IM threats.

31 This MAT relates to safety and/or reliability and/or maintenance as it
32 involves work related to pipe replacements, less than 50 feet, due to integrity
33 concerns identified during threat assessments.

1 **MAT HPN – ECDA Direct Examinations** – Costs related to ECDA Phase
2 3, Direct Examination, which includes the excavations and repairs including Dig
3 Program Management Office (PMO) overhead, excavation costs, permitting,
4 mapping, etc.

5 This MAT relates to safety and/or reliability and/or maintenance as it
6 involves the excavations, direct examinations and any repairs required by ECDA
7 indirect inspections.

8 **MAT HPO – ICDA Direct Examinations** – Costs related to ICDA Phase 3,
9 Direct Examination, which includes ICDA excavations and repairs including Dig
10 PMO overhead, excavation costs, permitting, mapping, etc.

11 This MAT relates to safety and/or reliability and/or maintenance as it
12 involves the excavations, direct examinations and any repairs required by ICDA
13 indirect inspections.

14 **MAT HPP – SCCDA Direct Examinations** – Costs related to SCCDA
15 Phase 3, Direct Examination, which includes SCCDA excavations and repairs
16 including Dig PMO overhead, excavation costs, permitting, mapping, etc.

17 This MAT relates to safety and/or reliability and/or maintenance as it
18 involves the excavations, direct examinations and any repairs required by
19 SCCDA indirect inspections.

20 **MAT HPR – Non-Traditional ILI Runs Pigging** – Covers work associated
21 with conducting non-traditional ILI cleaning and inspection runs on GT pipelines
22 with tools propelled by robot or cable.

23 This MAT relates to safety and/or reliability and/or maintenance as it
24 involves work related to non-traditional ILI cleaning and inspection runs on GT
25 pipelines.

26 **MAT HPS – Geo-hazard Studies** – Consists of identification,
27 characterization, and monitoring of geo-hazards along the gas transmission
28 corridor.

29 This MAT relates to safety and/or reliability and/or maintenance as it involves
30 annual work related to failure, incident and leak causal investigations to better
31 inform threat identification required by CFR 49, subpart O.

32 **MAT HPT – Root Cause Analysis** – Failure, incident, and leak
33 investigations for IM. This is for engineering lab analysis; not for performing cut
34 outs or repairs.

1 This MAT relates to safety and/or reliability and/or maintenance as it
2 involves work related to Failure, incident, and leak investigations for IM.

3 **MAT HPU – TIMP Direct Examinations** – Direct Examination as an
4 assessment method. Activities include excavation, examination, repair, and
5 continual evaluation.

6 This MAT relates to safety and/or reliability and/or maintenance as it
7 involves work related to utilizing direct examination to perform threat
8 assessments, which includes include excavation, examination, and repair, as
9 required by CFR 49, Subpart O.

10 **MAT JOA – Rectifier Maintenance** – 49 CFR 192.465(b) requires that each
11 CP system rectifier (or other impressed current source) be inspected six times
12 per calendar year, with intervals not exceeding two and a half months. In
13 addition, PG&E requires annual maintenance on rectifiers, which includes safety
14 requirement inspection, ground resistance measurements, and rectifier output
15 recordings. MAT JOA captures costs associated with these activities.

16 This MAT relates to safety and/or reliability and/or maintenance as it involves
17 work related to annual maintenance on rectifiers, which includes safety
18 requirement inspection, ground resistance measurements, and rectifier output
19 recordings.

20 **MAT JOB – CP Monitoring** – 49 CFR 192.465(a) requires that all pipeline
21 under CP must be tested at least annually, with intervals not exceeding
22 15 months. Similarly, 49 CFR 192.465(c) requires that each current switch,
23 diode, and critical interference bond be examined for proper performance six
24 times annually, with intervals not exceeding two and a half months. Routine
25 monitoring activities intended to comply with these provisions include: pipe to
26 soil reads, casing to soil reads, anode measurements, switch and diode
27 inspections, bond inspections, and soil resistivity measurements. Costs
28 associated with these activities are recorded in MAT JOB.

29 This MAT relates to safety and/or reliability and/or maintenance as it involves
30 work related to testing of all pipeline under CP which includes activities like pipe
31 to soil reads, casing to soil reads, anode measurements, switch and diode
32 inspections, bond inspections, and soil resistivity measurements.

33 **MAT JOC – CP Troubleshooting** – 49 CFR 192.465(d) requires PG&E to
34 take prompt remedial action to correct any deficiencies indicated by routine CP

1 monitoring. Troubleshooting is a critical component of this remedial action.
2 MAT JOC captures all costs associated with troubleshooting performed by
3 corrosion mechanics. Note, corrective work performed by construction crews is
4 recorded in MAT JOQ.

5 This program relates to safety and/or reliability and/or maintenance as it
6 includes troubleshooting Cathodic Protection Areas which are operating outside
7 of allowable range and determining necessary corrective action.

8 **MAT JOE – Ground Leak Survey** – Perform foot and mobile surveys of
9 transmission pipelines (including on waterways). Includes related mapping and
10 contract work in support of activity (e.g., preparing survey map packages,
11 entering leak check/recheck information into the leak tracking program, etc.).
12 TIMP leak survey (second of semi-annual surveys) is recorded in MAT HPE.
13 Includes leak survey equipment calibration. Station leak survey is recorded in
14 MAT JPE.

15 This MAT relates to safety and/or reliability and/or maintenance as it involves
16 work related to foot and mobile surveys of transmission pipelines.

17 **MAT JOF – Required Ground Pipeline Patrol** – Perform ground Pipeline
18 Patrols for compliance, as well as special investigations including, but not limited
19 to, excavation, structural encroachments, earth movements, and changes in
20 human occupancy. Includes ground patrol within no-fly zones and ground patrol
21 investigations in response to aerial patrol observations.

22 This MAT relates to safety and/or reliability and/or maintenance as it involves
23 work related to ground Pipeline Patrols for compliance and investigations
24 conducted including excavation, structural encroachments, earth movements,
25 and changes in human occupancy.

26 **MAT JOG – PM Gas Regulator General** – PM at regulator stations and/or
27 PLS “inside the fence,” including regulators, automated valves, manual valves,
28 odorizers, separators, filters, and vault inspections. Costs to dewater the vault
29 to perform PM and inspection are recorded to PM. SCADA maintenance is
30 recorded in MAT JO1. Meter and Chromatograph Maintenance are recorded in
31 MAT JOX.

32 This MAT relates to safety and/or reliability and/or maintenance as it involves
33 work related to Preventative maintenance at regulator stations and/or pressure
34 limiting stations (PLS) (inside the fence).

1 **MAT JOH – PM Gas Pipeline Valve Manual** – Perform scheduled
2 inspection of Transmission manual valves, outside of stations. Clean/pump out
3 vaults/enclosures. MAT includes maintenance performed on fire valves
4 (inlet/outlet valves) on distribution regulator stations.

5 This MAT relates to safety and/or reliability and/or maintenance as it involves
6 work related to scheduled inspection of Transmission manual valves, outside of
7 stations and maintenance performed on fire valves (inlet/outlet valves) on
8 distribution regulator stations.

9 **MAT JOI – PM Gas Pipeline Valve Automated** – Perform scheduled
10 inspection of Transmission automated valves and actuators, outside of stations.
11 Clean/pump out vaults/enclosures. SCADA transmitter inspection/maintenance
12 is recorded in MAT JO1.

13 This MAT relates to safety and/or reliability and/or maintenance as it involves
14 work related to inspection of Transmission automated valves and actuators,
15 outside of stations. Clean/pump out vaults/enclosures.

16 **MAT JOJ – Gas Holders Maintenance** – PM and CM on GT Holders and
17 associated equipment.

18 This MAT relates to safety and/or reliability and/or maintenance as it involves
19 work related to gas transmission holders and maintaining equipment like GT
20 Holders. maintenance.

21 **MAT JOK – Operate Transmission Pipelines** – Take odorometer readings
22 (“sniff tests”); calibrate fixed test gauges and portable pressure recorders;
23 calibrate tools and equipment (excluding those used for leak survey or L&M);
24 monitor pressures; remove line liquids; service separators; and replace filters.

25 This MAT relates to safety and/or reliability and/or maintenance as it involves
26 work related to calibration of calibrating tools and equipment, monitoring of
27 pressures fixing test gauges, removing line liquids and replacement of replacing
28 filters.

29 **MAT JOL – Operate Transmission Regulator Station** – Control the supply
30 and flow of gas through the Transmission system; adjust regulator flow rates;
31 change transmission station charts; maintain station pressure; troubleshoot
32 system pressure or gauges. Perform maintenance on mechanical permanent
33 chart recorders. Note: The downloading of electronic recorder transmitter

1 (ERX) chart data is counted as one unit, regardless of the number of charts
2 downloaded.

3 This MAT relates to safety and/or reliability and/or maintenance as it involves
4 work related to controlling the supply and flow of gas through the Transmission
5 system; adjusting regulator flow rates, maintaining the station pressure,
6 troubleshooting the system pressure or gauges, maintaining mechanical
7 permanent chart recorders.

8 **MAT JOM – CM Gas Regulator General** – CM at regulator stations and/or
9 PLS “inside the fence,” including regulators, automated valves, manual valves,
10 odorizers, separators, filters, and vaults. Costs to dewater the vault to perform
11 CM is recorded in MAT JOM. SCADA CM is recorded in MAT JO2. Meter and
12 Chromatograph Maintenance are recorded in MAT JOY.

13 This MAT relates to safety and/or reliability and/or maintenance as it involves
14 work related to corrective maintenance at regulator stations and/or pressure
15 limiting stations (PLS) (inside the fence).

16 **MAT JON – CM Gas Pipeline Valve Manual** – Repair or replace (up to two
17 inches) Transmission pipeline manual valves, outside of stations. Repair/seal
18 vaults and lids. MAT includes CM performed on fire valves (inlet/outlet valves)
19 on distribution regulator stations.

20 This MAT relates to safety and/or reliability and/or maintenance as it involves
21 work related to repair and replacement of Transmission pipeline manual valves,
22 outside of stations.

23 **MAT JOO – CM Gas Pipeline Valve Automated** – Repair or replace (up to
24 two inches) Transmission automated pipeline valves and actuators, outside of
25 stations. Repair/seal vaults and lids. SCADA transmitter repair is recorded in
26 MAT JO2.

27 This MAT relates to safety and/or reliability and/or maintenance as it involves
28 work related to repair and replacement of Transmission automated pipeline
29 valves and actuators, outside of stations.

30 **MAT JOP – CM Gas Main Leak** – Expense repair of all non dig-in leaks on
31 any transmission pipelines and associated appurtenances (flanges, valves, etc.,)
32 including repair at pipeline stations. Excludes leak repair at Compressor
33 stations and Brentwood and Milpitas Terminals. Includes leak pinpointing and
34 related mapping work in support of activity.

1 This MAT relates to safety and/or reliability and/or maintenance as it involves
2 work related to Expense repair of all non-dig in leaks on any transmission
3 pipelines including repair at pipeline stations.

4 **MAT JOQ – CP CM** – 49 CFR 192.465(d) requires PG&E to take prompt
5 remedial action to correct any deficiencies indicated by routine CP monitoring. If
6 troubleshooting conducted by corrosion mechanics fails to remedy the
7 deficiency, CP may be necessary. CM may include: repairing existing anodes
8 or rectifiers, excavating gas facilities to install insulating material, or restoring a
9 downed CPA w/o replacing capital plant.

10 This MAT relates to safety and/or reliability and/or maintenance as it involves
11 work related to remedial actions taken to correct any deficiencies indicated by
12 routine CP monitoring.

13 **MAT JOR – Leak Rechecks** – Recheck leaks according to leak grade.

14 This MAT relates to safety and/or reliability and/or maintenance as it involves
15 work related to leak rechecks.

16 **MAT JOS – Pipeline Marker Maintenance** – Repair or replace pipeline
17 markers and indicators on transmission lines, includes warning signs where the
18 pipeline crosses navigable waterways.

19 This MAT relates to safety and/or reliability and/or maintenance as it involves
20 work related to repair and replacement of pipeline markers and indicators on
21 transmission lines.

22 **MAT JOT – Routine Weed Abatement** – This subprogram covers weed
23 abatement surrounding PG&E facilities, such as compressor stations, storage
24 fields, regulator stations, and meter stations. Vegetation management and
25 remediation efforts to maintain GT pipeline ROW and ensure safe access to
26 pipelines for maintenance or repair is recorded in MAT JTK.

27 This MAT relates to safety and/or reliability and/or maintenance as it involves
28 work related to weed abatement surrounding PG&E facilities, such as
29 compressor stations, storage fields, regulator stations, and meter stations.

30 **MAT JOV – Required Aerial Pipeline Patrol** – Pipeline patrol performed via
31 helicopter or fixed wing aircraft.

32 This MAT relates to safety and/or reliability and/or maintenance as it involves
33 work related to required pipeline patrol.

1 **MAT JOW – Aerial Leak Survey** – Perform aerial leak surveys of
2 transmission pipelines. Includes related mapping and contract work in support
3 of activity (e.g., preparing survey map packages, entering leak check/recheck
4 information into the leak tracking program, flight costs etc.) TIMP leak survey
5 (second of semi-annual surveys) is recorded in MAT HPE.

6 This MAT relates to safety and/or reliability and/or maintenance as it involves
7 work related to aerial leak surveys of transmission pipelines.

8 **MAT JOX – PM Meter Maintenance, Meter and Chromatograph** –includes
9 scheduled inspection, calibration, and planned maintenance of gas metering
10 equipment including transmission meters, chromatographs, sulfur analyzers and
11 odorizers.

12 This MAT relates to safety and/or reliability and/or maintenance as it involves
13 work related to inspection, calibration, and planned maintenance of gas metering
14 equipment.

15 **MAT JOY – CM Meter Maintenance** – Repairs and CM to gas metering
16 equipment including transmission meters, chromatographs, Sulfur Analyzers and
17 odorizers.

18 This MAT relates to safety and/or reliability and/or maintenance as it involves
19 work related to Repairs and CM to gas metering equipment.

20 **MAT JOZ – AC Patrol** – 49 CFR 192.481 requires PG&E to inspect each
21 pipeline or portion of pipeline that is exposed to the atmosphere for evidence of
22 AC at least once every 3 calendar years. AC inspections consist of two
23 components, an initial survey and a follow up investigation when potential AC is
24 indicated. MAT JOZ captures costs associated with the initial survey and MAT
25 GJB captures costs associated with the follow up investigation and remediation
26 if necessary.

27 This MAT relates to safety and/or reliability and/or maintenance as it involves
28 work related to patrols and inspection of pipelines for remediation from
29 atmospheric corrosion.

30 **MAT JO1 – PM SCADA Maintenance** – Inspection and PM on transmission
31 SCADA equipment including Remote Terminal Units (RTU), ERXs, transmitters,
32 and transducers.

33 This MAT relates to safety and/or reliability and/or maintenance as it involves

1 work related to Inspection and preventive maintenance on transmission SCADA
2 equipment.

3 **MAT JO2 – CM SCADA Maintenance** – Repairs and CM on transmission
4 SCADA equipment including RTUs, ERXs, transmitters, and transducers.

5 This MAT relates to safety and/or reliability and/or maintenance as it involves
6 work related to repairs and corrective maintenance on transmission SCADA
7 equipment.

8 **MAT JO# - GT Pipeline Maintenance** – routine maintenance on the
9 Backbone including Bay Loops and Local Transmission Pipelines.

10 This MAT relates to safety and/or reliability and/or maintenance as it involves
11 work/costs related to MWC JO, including standard cost variance.

12 **MAT JPA – PM StorCompStat Piping Assets** – PM on station piping
13 outside the compressor building at backbone compressor stations, PG&E
14 storage facilities and terminals. Include maintenance of instruments, regulators,
15 valves, meters, orifice plates, sulfur analyzers and chromatographs.

16 This MAT relates to safety and/or reliability and/or maintenance as it involves
17 work related to preventive maintenance on station piping outside the compressor
18 building at backbone compressor stations, PG&E storage facilities and
19 terminals.

20 **MAT JPB – CM StorCompStat Piping Assets** – CM and repair on station
21 piping outside the compressor building at backbone compressor stations, PG&E
22 storage facilities and terminals. Include maintenance to instruments, regulators,
23 valves, meters, orifice plates, sulfur analyzers and chromatographs.

24 This MAT relates to safety and/or reliability and/or maintenance as it involves
25 work related to Corrective maintenance and repair on station piping outside the
26 compressor building at backbone compressor stations, PG&E storage facilities
27 and terminals.

28 **MAT JPC – PM StorCompStat GasProcess** – Routine PM to gas
29 processing equipment, including: (1) reboilers: all equipment on skids, including,
30 but not limited to pumps, motors, heat exchangers, burners, controls, filters, and
31 gauges; (2) thermal oxidizer unit: all equipment, including: Variable Frequency
32 Drivers (VFD), blowers, burner, fuel gas; (3) methanol: pumps, gauges, reliefs,
33 vapor testing, ordering of methanol; (4) filter separators: elements, gauges,
34 dump valve; (5) glycol, coolant and odorant; and (6) cooling towers.

1 This MAT relates to safety and/or reliability and/or maintenance as it involves
2 work related to routine preventive maintenance to gas processing equipment
3 including reboilers, thermal oxidizer unit, methanol pumps and filter separators.

4 **MAT JPD – PM StorCompStat Gas Compressor** – PM inside the
5 compressor building at backbone compressor stations and storage facilities.
6 Includes maintenance to (1) compressor drive units; controls, turbines, heads,
7 plugs; (2) compressors; valves, engine control equipment; (3) turbo chargers;
8 (4) auxiliary compressor equipment; fuel, lubrication, filters, Condition Based
9 Maintenance (CBM); (5) gas, water, and oil cooling systems; and
10 (6) consumables used for compressors and power generators; lube oil, cylinder
11 oil.

12 This MAT relates to safety and/or reliability and/or maintenance as it involves
13 work related to preventive maintenance inside the compressor building at
14 backbone compressor stations and storage facilities.

15 **MAT JPE – PM StorCompStat Support** – Routine PM to equipment at
16 backbone compressor stations, PG&E storage facilities and terminals, including
17 (1) Programmable Logic Controllers (PLC), Human Machine Interface (HMI),
18 SCADA, and alarm systems; (2) air compressors, air dryers, air systems;
19 (3) evaporation ponds; (4) hydraulic systems; (5) fire water systems; (6) raw
20 water or freshwater systems; and (7) tool calibrations. Includes leak survey of
21 backbone compressor stations, storage facilities and terminals. Storage well
22 leak surveys are recorded in MAT JPO.

23 This MAT relates to safety and/or reliability and/or maintenance as it involves
24 work related to routine preventive maintenance to equipment at backbone
25 compressor stations, PG&E storage facilities and terminals.

26 **MAT JPG – CM StorCompStat Gas Process** – CM and repair to gas
27 processing equipment, including: (1) reboilers; all equipment on skids including
28 but not limited to pumps, motors, heat exchangers, burners, controls, filters, and
29 gauges; (2) Thermal Oxidizer (ToX) unit: all equipment including VFD, blowers,
30 burner, fuel Gas; (3) methanol: pumps, gauges, reliefs; (4) filter separators:
31 elements, gauges, dump valve repair; and (5) cooling towers.

32 This MAT relates to safety and/or reliability and/or maintenance as it involves
33 work related to corrective maintenance and repair to gas processing equipment
34 including reboilers, ToX unit, Methanol Pumps and Filter Separators.

1 **MAT JPH – CM StorCompStat Gas Compress** – CM and repair inside the
2 compressor building at backbone compressor stations and storage facilities.
3 Includes maintenance to: (1) Compressor Drive Units; Controls, Turbines,
4 Heads, Plugs; (2) Compressors; Valves, Engine Control Equipment; (3) Turbo
5 Chargers; and (4) Auxiliary Compressor Equipment; Fuel, Lubrication, Filters,
6 CBM, Gas, water, and oil cooling Systems.

7 This MAT relates to safety and/or reliability and/or maintenance as it involves
8 work related to corrective maintenance and repair inside the compressor
9 building at backbone compressor stations and storage facilities.

10 **MAT JPI – CM StorCompStat Support** – CM and repair to equipment at
11 backbone compressor stations, storage facilities and terminals, including: (1)
12 PLC, HMI, SCADA, and alarm systems; (2) air compressors, air dryers, air
13 systems; (3) evaporation ponds; (4) Hydraulic systems; (5) fire water systems;
14 and (6) raw water or fresh water systems. For minor leak repairs, costs are
15 recorded in the MAT tied to the asset being repaired.

16 This MAT relates to safety and/or reliability and/or maintenance as it involves
17 work related to corrective maintenance and repair to equipment at backbone
18 compressor stations.

19 **MAT JPK – PM Power Units** – Routine PM to all Power Unit equipment,
20 including: Electrical Generation Power units; Standby/Emergency Generators;
21 UPS; MCC switchgear, Auto Transfer Switch (ATS).

22 This MAT relates to safety and/or reliability and/or maintenance as it involves
23 work related to routine preventive maintenance to all Power Unit equipment.

24 **MAT JPL – CM Power Units** – CM and repairs to all Power Unit equipment
25 including Electrical Generation Power units; Standby/Emergency Generators;
26 UPS; MCC switchgear, ATS.

27 This MAT relates to safety and/or reliability and/or maintenance as it involves
28 work related to corrective maintenance and repair to all Power Unit equipment.

29 **MAT JPN – Station Operations** – Costs associated with the daily, 24 hour
30 operations of station facilities, including: (1) operators' labor on shift; (2)
31 Emergency Shutdown (ESD) Testing; (3) maintenance plan required inspections
32 of fire extinguishers, first Aid/AED; and (4) eyewash inspections.

1 This MAT relates to safety and/or reliability and/or maintenance as it involves
2 work related to station operations (24-hr operations of station facilities),
3 inspection plans involving fire extinguishers and first aid/AED.

4 **MAT JPO – PM Storage Wells** – PM of equipment from the well head down,
5 including: (1) well heads; uphole safety valve (UHSV), downhole safety valve
6 (DHSV), master sates; (2) sand inspections, surface casings, wire lines; (3)
7 reservoir engineering support; (4) well meter runs; orifice plates, gauges, line
8 rupture controls, solenoids, UHSV and DHSV Controls; and (5) leak survey of
9 the well heads.

10 This MAT relates to safety and/or reliability and/or maintenance as it involves
11 work related to preventative maintenance of storage wells and its equipment (i.e.
12 preventative maintenance of all equipment from the well head down).

13 **MAT JPP – CM Storage Wells** – CM of equipment from the well head down,
14 including: (1) well heads; UHSV, DHSV, master gates; (2) surface casings, wire
15 lines; (3) reservoir engineering support; (4) well meters; orifice plates, gauges,
16 line rupture controls, solenoids, UHSV, and DHSV Controls; and (5) leak repair
17 at the well heads.

18 This MAT relates to safety and/or reliability and/or maintenance as it involves
19 work related to corrective maintenance and repair to storage wells (i.e.
20 corrective maintenance of all equipment from the well head down).

21 **MAT JPQ – CARB Leak Survey** – Expense survey includes Method 21
22 quarterly surveys at 12 facilities, inventory inspection, leak pin pointing, audio
23 visual inspections. Includes the CalGEM daily leak surveys at the storage
24 facilities.

25 This MAT relates to safety and/or reliability and/or maintenance as it involves
26 work related to performing quarterly surveys at facilities, carrying out inventory
27 and audio-visual inspections and also by carrying out daily leak surveys at
28 storage facilities.

29 **MAT JPR – CARB Leak Repairs** – Expense repairs attributed to leaks
30 found as a result of a quarterly Method 21 survey at one of the 12 transmission
31 facilities (three storage: McDonald Island, Pleasant Creek, Los Medanos and 9
32 compressor stations: Tionesta, Burney, Gerber, Delevan, Bethany, Santa Rosa,
33 Kettleman, Hinkley, Topock). Includes repairs of leaks found by the CalGEM
34 leak survey.

1 This MAT relates to safety and/or reliability and/or maintenance as it involves
2 work related to identification and repair of leaks through quarterly method 21
3 surveys and CALGEM leak surveys at transmission facilities.

4 **MAT JP# - GT Station Maintenance** - Preventative maintenance and
5 corrective repairs to Storage, Compressor Station, or Terminal equipment not
6 covered by another specific MAT.

7 This MAT relates to safety and/or reliability and/or maintenance as it involves
8 work/costs related to MWC JO, including standard cost variance.

9 **MAT JTB – Pipeline Repair** – Expense pipeline repair projects: Pipeline
10 repairs (leak, corrosion, weld, or damage, etc.) where a non-capital asset was
11 installed (clamp, sleeve, etc.), and/or pipe <50 feet was cut out and replaced;
12 Third -party damage or dig-ins; and other safety and reliability expense repairs
13 (gas gathering sales, etc.).

14 This MAT relates to safety and/or reliability and/or maintenance as it involves
15 work related to identification and repair of leaks, corrosion, weld, and damages
16 by installing non-capital assets. This includes third party damage, and other
17 safety or reliability expense repairs.

18 **MAT JTC – Hydrostatic Testing, D.11-06-017** – Costs for hydrotesting
19 when driven by the TVC records (CPUC D.11 06 017). Class Location change
20 hydrotests are recorded in MAT JT9, and IM hydrotests are recorded in MAT
21 HPF.

22 This MAT relates to safety and/or reliability and/or maintenance as it involves
23 work related to carrying out hydrotests to ensure the safety of our gas pipelines.

24 **MAT JTD – Pipeline Other Expense** – Pipeline Other work includes:
25 Scoping studies and field investigations (such as Maximum Allowable Operating
26 Pressure (MAOP) discoveries), potential mechanical damage investigations,
27 anomaly investigations, operational pigging when necessary, for assessment of
28 liquids after a liquid upset condition and other investigatory work where
29 excavation or internal assessment is required at pipe related facilities.
30 Depending on the results, repair work may be required.

31 This MAT relates to safety and/or reliability and/or maintenance as it involves
32 work related to pipeline investigations.

33 **MAT JTH – Permits & Fees Projects** – Permits and fees associated with
34 the operations of transmission stations, including, but not limited to McDonald

1 Island Reclamation Fees, Gas Lease Fees, DOT Fees, American Gas
2 Association Nonlobbying Dues, Lease Payments etc.

3 This MAT relates to safety and/or reliability and/or maintenance as it involves
4 payment of permits and fees associated with the operations of Gas
5 Transmission stations.

6 **MAT JTK – GT Vegetation Management** – Vegetation Management
7 Operations take place to support the safety and integrity of gas pipelines through
8 removal and abatement of vegetation encroachments on the ROW per IM
9 standards. This work includes a foot patrol to document conditions of
10 surrounding vegetation and identify new plantings. This work is conducted to
11 help provide safe access to operate, maintain, and respond in the event of an
12 emergency.

13 This MAT relates to safety and/or reliability and/or maintenance as it involves
14 work related to removal and abatement of vegetation encroachments on the
15 ROW per IM standards, a foot patrol to document conditions of surrounding
16 vegetation and identify new plantings, also to help provide safe access to
17 operate, maintain, and respond in the event of an emergency.

18 **MAT JTL – Station Gas Safety Excellence** – Includes project costs for the
19 support and enhancement of the development of the Facility IM Program; this
20 includes risk identification, algorithm development, data integration, prioritization
21 of mitigation activities, root cause analysis, process safety support, and related
22 activities that align with PG&E’s Gas Safety Excellence principles.

23 This MAT relates to safety and/or reliability and/or maintenance as it involves
24 work related to support and enhancement of the development of the Facility IM
25 Program; this includes risk identification, algorithm development, data
26 integration, prioritization of mitigation activities, root cause analysis, process
27 safety support.

28 **MAT JTM – GT Capacity Uprates** – Conduct hydrotests and similar
29 activities to increase the MAOP-S of a hydraulically independent system for the
30 primary purpose of increasing its capacity, as an alternative to increasing system
31 capacity by installing new facilities. This is in contrast to hydro testing and
32 similar activities undertaken primarily to restore the MAOP of a pipe segment
33 (not necessarily a system) for which the pressure was reduced for safety
34 reasons.

1 This MAT relates to safety and/or reliability and/or maintenance as it involves
2 work related to conducting hydrotests to increase the MAOP-S of a hydraulically
3 independent system for the primary purpose of increasing its capacity.

4 **MAT JTO – Encroachments Structures and ROW** – Mitigation of pipeline
5 encroachments such as stockpiling, equipment, or structures on ROW,
6 maintenance of pipeline access roads, ROW clean up and access issues not
7 related to vegetation management.

8 This MAT relates to safety and/or reliability and/or maintenance as it involves
9 work related to Mitigation of pipeline encroachments such as stockpiling,
10 equipment, or structures on ROW, maintenance of pipeline access roads, ROW
11 clean up.

12 **MAT JTQ – Class Location Studies** – Costs for routine Class Location
13 studies, including orthographically corrected aerial photography, occupancy field
14 verification, creation of a digitized structures layer, and annual class analysis.

15 This MAT relates to safety and/or reliability and/or maintenance as it involves
16 work related to orthographically correction of aerial photography, occupancy field
17 verification, creation of a digitized structures layer, and annual class analysis as
18 well as maintaining costs for routine Class Location studies.

19 **MAT JTR – Valve Program** – Expense costs for valve replacements of
20 inoperable or hard to operate valves that are greater than two inches in diameter
21 and valve repair (non-CP type repairs such as replacement of operator
22 extension, gearbox, etc.), regardless of valve size. May also include valves that
23 are replaced for class location changes; valves that are leaking; and
24 replacement of other reliability valves.

25 This MAT relates to safety and/or reliability and/or maintenance as it involves
26 work related to replacement of valves in case of class location changes or
27 valves which were leaking, replacement of other reliability valves.

28 **MAT JTT – Geohazard Mitigations** – Expense geohazard mitigation work
29 triggered by recommendations from Geohazard Studies. Includes but not limited
30 to drainage redirection, riprap, sandbags, and gabion baskets.

31 This MAT relates to safety and/or reliability and/or maintenance as it involves
32 work related to carrying out mitigation work based on recommendations from
33 geohazard studies, carrying out drainage redirection, riprap, sandbags, and
34 gabion baskets.

1 **MAT JTV – Station Strength Tests** – Includes work associated with
2 strength testing of station piping and components identified by ECA 1 or ECA2
3 at both compression and processing (C&P) and M&C facilities. This MAT will
4 only include the recoverable portion of the costs (i.e., Strength Testing costs
5 associated with stations built on or before January 1, 1956).

6 This MAT relates to safety and/or reliability and/or maintenance as it involves
7 work related to strength testing of station piping and components identified by
8 engineering critical assessments at GT facilities.

9 **MAT JTW – Routine Spend M&C** – Includes costs for M&C Routine Spend
10 Expense for the following work:

- 11 • Station Auxiliary M&C Projects: includes wide assortment of projects within
12 the M&C Asset Family that are typically unique occurrences and do not
13 qualify for another M&C program, examples of this type of work include:
14 retirements, odorant, odorizer modifications, traffic barriers, containment
15 repairs, filter separator maintenance, major chromatograph maintenance,
16 temporary clamp on meters, process improvement, meter repairs, etc.
- 17 • Station Valves & Actuators M&C Projects: Includes expense projects
18 related to the assessment and repair of all valves, actuators, monitors, and
19 controllers within the station boundary and not otherwise encompassed in
20 specific M&C programs with the following exception.
- 21 • Any Inoperable valves or Hard to Operate Valves even the ones within
22 station boundary that are not specifically addressed in a station rebuild
23 project are recorded in in MAT JTR.
- 24 • Station Electric/Instr/Controls M&C: This program includes expense
25 projects related to the assessment and repair of controls, transfer switches,
26 grounding grids, batteries, SCADA RTUs, data capture and trending,
27 lighting, electrical circuits, etc., that are not otherwise encompassed in
28 specific M&C programs and are not included as part of MWC JT.

29 This MAT relates to safety and/or reliability and/or maintenance as it involves
30 work related to targeted component replacement and maintenance at
31 measurement and control stations, such as repair of failed equipment and
32 instrumentation and modifications to address equipment safety or performance
33 issues.

34 **MAT JTX – GT OPP** – Includes: Installation of pilot filters (e.g., Sulfur-gon
35 filters) to reduce the likelihood of pilot operated regulator or monitor failure due
36 to sulfur; system planning studies to identify the most effective secondary OPP
37 option for specific stations; development of new design of new standards for
38 Transmission Large Volume Customers (LVC); program management for
39 developing and maintaining the master over pressure elimination plan and

1 schedule; and pilot studies on new equipment technologies for applicability to
2 the PG&E system.

3 This MAT relates to safety and/or reliability and/or maintenance as it involves
4 work related to overpressure protection activities, such as installation of pilot
5 filters.

6 **MAT JTY – Routine Spend C&P Expense** – Includes Routine Spend C&P
7 expense for the following work:

- 8 • Station Auxiliary C&P Projects: Includes a wide assortment of projects
9 within the C&P Asset Family that are typically unique occurrences and do
10 not qualify for another C&P program, examples of this type of work include:
11 inspection and repair for To X units, standby generators, cooling towers,
12 containments, discharge piping, vessels, crane access platforms, reboilers,
13 water pumps, unit gaskets, inverters, etc. It can also include station
14 baseline assessments, environmental assessments, records review, and
15 implementation plans.
- 16 • Station Compression C&P Projects: Includes costs related to equipment
17 leases, service contracts, maintenance agreements, equipment overhauls
18 and other related repairs.
- 19 • Station Electric/Instr/Controls C&P Projects: Includes expense projects
20 related to the assessment and repair of MCCs, relays, control panels,
21 batteries, wiring and conduits, data capture and trending, PLCs, lighting,
22 conductors, electric buckets, ATS, switchgear, etc., that are not otherwise
23 encompassed in specific C&P programs and are not included as part of
24 MAT JP.
- 25 • Station Valves & Actuators C&P Projects: Includes expense projects related
26 to the assessment and repair of all valves, actuators, monitors & controllers
27 not otherwise encompassed in specific C&P programs and are not included
28 as part of MWC JP.

29 This MAT relates to safety and/or reliability and/or maintenance as it
30 involves work related to compression and processing facilities, such as for
31 station auxiliary projects, station compression projects, station instrumentation
32 projects and station valves/actuator projects.

33 **MAT JT0 – Public Awareness** – Covers all work that supports the PAP
34 requirements based on the American Petroleum Institute’s Recommended

1 Practice 1162 (RP1162), 1st Edition, December 2003, that requires pipeline
2 operators to develop and implement gas safety and damage prevention focused
3 on public education programs that address key stakeholder audiences including
4 the affected public, emergency officials, public officials, and excavators.

5 This MAT relates to safety and/or reliability and/or maintenance as it involves
6 work related to developing pipeline operators and implementing gas safety and
7 damage prevention.

8 **MAT JT1 – Engineering Support** – Pipeline Engineering support orders for
9 work done throughout the system.

10 This MAT relates to safety and/or reliability and/or maintenance as it involves
11 work related to engineering support for pipelines.

12 **MAT JT2 – Water and Levee Crossings** – Expense costs for the Water and
13 Levee Crossing Program. These costs include the assessment and monitoring
14 of water and levee crossings. These costs are not limited to jurisdictional water
15 and levee crossings.

16 This MAT relates to safety and/or reliability and/or maintenance as it involves
17 work related to assessment and monitoring of water and levee crossings.

18 **MAT JT3 – Fault Crossings** – Costs for: (1) conducting studies of locations
19 where GT pipelines cross known earthquake fault lines; and (2) long term
20 ongoing monitoring of fault creep of mitigated crossings.

21 This MAT relates to safety and/or reliability and/or maintenance as it involves
22 work related to long term monitoring of fault creep of mitigated crossings and
23 deep diving to figure out locations where pipelines cross earthquake fault lines.

24 **MAT JT4 – Shallow and Exposed Pipe** – Expense costs for assessing and
25 mitigating shallow and exposed pipe as required. Expense remediation options
26 include excavation along the length of the pipeline to allow lowering to an
27 acceptable depth of cover (only an option if the required depth of cover can be
28 met without adding excessive external stresses to the pipeline) and protection of
29 the pipeline by installing additional cover, concrete cap, or permanent bridging
30 structure over the shallow location.

31 This MAT relates to safety and/or reliability and/or maintenance as it involves
32 work related to remediation options that include excavation, protection of
33 pipeline by installing additional cover.

1 **MAT JT6 – Non-IM Pipe Replacements In lieu of Hydrotest** – Includes
2 pipe replacements that are less than 50 feet in length and are being replaced in
3 lieu of hydrostatic testing for programs such as the hydrostatic testing program
4 being done to address TVC records (D.11 06 017). IM pipe replacements in lieu
5 of hydrotest are recorded in MAT HPM.

6 This MAT relates to safety and/or reliability and/or maintenance as it involves
7 work related to pipe replacements that are less than 50 feet in length and are
8 being replaced in lieu of hydrostatic testing for programs such as the hydrostatic
9 testing program being done to address TVC records (D.11-06-017).

10 **MAT JT8 – Gas Quality Assessment, Expense** – Includes the cost for the
11 following – Development of a comprehensive program description and execution
12 plan, Preparation of guidance documents including Standard(s) and supporting
13 Work Procedures, Preparation of training materials, Performance of
14 Interchangeability study for Chico and Sacramento areas (due to British thermal
15 unit fluctuations) (example; similar programs should use this MAT Code),
16 Research and Mapping locations of sulfur and liquids, and study costs to
17 determine the system wide impact of biomethane on gas quality.

18 This MAT relates to safety and/or reliability and/or maintenance as it involves
19 work related to ensuring that the quality of the gas delivered is suitable for
20 transmission and distribution by PGE and for end users, is properly odorized and
21 meets regulatory requirements.

22 **MAT JT9 – Hydrostatic Testing, Class Location** – Costs to hydrotest pipe
23 where hydrotesting is the appropriate mitigation when the Class location study
24 program has identified a need to mitigate due to a class location change.

25 This MAT relates to safety and/or reliability and/or maintenance as it involves
26 work related to hydrotest pipes.

27 **MAT KEX - PSEP Pipeline Other Expense** – Includes Pipeline Safety
28 Enhancement Plan expenses. PSEP was an extensive, multi-year plan for
29 enhancing the safety of PG&E's transmission pipeline system.

30 This MAT relates to safety and/or reliability and/or maintenance as it involves
31 work related to review of the Integrated Asset Register/GIS for the core source
32 of data and mobile capabilities and asset analytics.

33 **MAT LU1 – Critical Documents Expense** – Covers work associated with
34 the Critical Documents project, which addresses critical documentation

1 delineated in PG&E's Standard TD 4551S, and identifies, modifies, and/or
2 develops documentation to comply with TD 4551S. Projects involve research of
3 the existing documents, review, validation (with field verification), and update of
4 the existing documentation. This MAT will only include a recoverable portion of
5 the costs for Critical Documents (i.e., costs associated with developing critical
6 documents for stations built on or before January 1, 1956).

7 This MAT relates to safety and/or reliability and/or maintenance as it involves
8 work related to critical documents project, which addresses critical
9 documentation delineated in PG&E's Standard and identifies, modifies, and/or
10 develops documentation to comply with the standards.

11 **MAT LV1 – ECA 1** – Involves research of construction and manufacturing
12 documentation to create and modify Station Feature Lists, which contain an
13 itemized record of station assets and associated specifications, supporting
14 documentation for the assets, and tools to identify possible discrepancies of
15 MAOP compliance which may require field investigation or remediation to
16 resolve. Project will help identify changes to equipment or operations required
17 to achieve compliance and will help prioritize downstream projects of ECA 2 and
18 Strength Testing. This BA will only include a recoverable portion of the ECA 1
19 work. Recoverable costs are defined as: (1) Pre 1956: Costs are recoverable if
20 component was installed before January 1, 1956; and (2) Post 1955: Costs are
21 recoverable if component is installed on or after January 1, 1956 only if PG&E
22 has TVC records of the asset component strength test.

23 This MAT relates to safety and/or reliability and/or maintenance as it involves
24 work related to research of construction and manufacturing documentation to
25 create and modify Station Feature Lists.

26 **MAT LV2 – ECA 2** – Addresses remediation of discrepancies through
27 procedures which may carry lower risk than strength testing within stations.
28 Project may identify changes to equipment or operations required to achieve
29 compliance. This BA will only include a recoverable portion of the ECA 2 work.
30 Recoverable costs are defined as: (1) Pre 1956: Costs are recoverable if
31 component was installed before January 1, 1956; and (2) Post 1955: Costs are
32 recoverable if component is installed on or after January 1, 1956 only if PG&E
33 has TVC records of the asset component strength test.

1 This MAT relates to safety and/or reliability and/or maintenance as it involves
2 work related to remediation of station components that lack test records and
3 material properties.

4 **MAT 34A – Stan Pac Expense** – Maintenance is generally defined as work
5 that keeps a facility operational. It involves repairs and upkeep to the facility.
6 These costs are not a PG&E expense and are billable to StanPac.

7 This MAT relates to safety and/or reliability and/or maintenance as it involves
8 work related to maintenance, repair to keep the facility operational.

9 **O. GT&S MAT Descriptions for Safety and Reliability Work – Capital**

10 **MAT 21C – Gas Pipeline Operations and Maintenance (GPOM) Non**
11 **Engineering, Capital** – Gas transmission non-engineering capital expenditures,
12 covering district transmission facilities for routine spend.

13 This MAT relates to safety and/or reliability and/or maintenance as it involves
14 work related to gas pipeline operations and maintenance.

15 **MAT 2H1 – PSEP Pipe Replacement** – Replace pipeline, targeting pipeline
16 segments that are in highly populated urban areas, have vintage seam welds, or
17 have not been strength tested.

18 This MAT relates to safety and/or reliability and/or maintenance as it involves
19 work related to replacing pipeline, targeting pipeline segments that are in highly
20 populated urban areas, have vintage seam welds, or have not been strength
21 tested.

22 **MAT 3K1 – IC** – 49 CFR 192.475 et seq. prohibits transportation of corrosive
23 gas unless the corrosivity of the gas is investigated and steps are taken to
24 minimize IC. IC may occur if moisture or corrosive agents are introduced into
25 PG&E’s gas system through storage or gas gathering facilities. Monitoring and
26 mitigation efforts are required to control the adverse effects of IC. Capital IC
27 mitigation includes the installation of chemical injection pumps, drip
28 replacement, Electron Microscopy coupon mounting devices, and permanently
29 mounted Ultrasonic Thickness sensors.

30 This MAT relates to safety and/or reliability and/or maintenance as it involves
31 work related to Monitoring and mitigation efforts to control the adverse effects of
32 IC which includes the installation of chemical injection pumps, drip replacement,
33 Electron Microscopy coupon mounting devices.

1 **MAT 3K4 – Electrical Interference – Alternating Current** – 49 CFR
2 192.467 requires that protective measures be taken where pipelines run in
3 proximity to electric transmission lines. Proximity to these may result in the
4 induction of alternating current to the pipe as well as fault strikes. These may
5 cause accelerated corrosion and pose a significant safety hazard. Capital
6 mitigation activities include relocating the electric facility or gas piping, placing
7 high resistance media between the two facilities, creating “shields” to absorb the
8 fault, installing polymer casings, reducing the tower to ground resistance,
9 installing/replacing ground rods, and installing decoupling equipment.

10 This MAT relates to safety and/or reliability and/or maintenance as it involves
11 work related to relocating the electric facility or gas piping, placing high
12 resistance media between the two facilities, creating “shields” to absorb the fault,
13 installing polymer casings, reducing the tower to ground resistance,
14 installing/replacing ground rods, and installing decoupling equipment.

15 **MAT 3K5 – Casings** – 49 CFR 192.467 requires that each buried or
16 submerged pipeline be electrically isolated from the metallic casing it is within. A
17 metallic or electrolytic contact between these two structures may cause
18 corrosion and requires mitigation. This may involve replacing end seals,
19 removing segments of the casing, replacing link seals and insulation spacers,
20 flushing, and draining casings, repairing coatings, and gelling the casing after
21 site restoration. A casing project is considered capital if a casing greater than
22 100 feet in length is mitigated and successfully gelled or if a casing of any length
23 is removed.

24 This MAT relates to safety and/or reliability and/or maintenance as it involves
25 work related to casing greater than 100 feet in length which is mitigated and
26 successfully gelled or if a casing of any length is removed.

27 **MAT 3K6 – New CP Systems** – 49 CFR 192.463 requires the application of
28 CP to buried metallic pipeline to mitigate the threat of external corrosion. If CP
29 levels are inadequate and cannot be made adequate through troubleshooting,
30 PG&E must either replace existing systems or install new equipment. This MAT
31 encompasses the latter: the installation of new CP equipment, such as anodes
32 (ground beds), rectifiers, and remote monitoring units.

33 This MAT relates to safety and/or reliability and/or maintenance as it involves

1 work related to mitigation of the external corrosion threat, installation of new CP
2 equipment, such as anodes (ground beds), rectifiers, and remote monitoring
3 units.

4 **MAT 3K7 – CP Replacement** – 49 CFR 192.463 requires the application of
5 CP to buried metallic pipeline to mitigate the threat of external corrosion. If CP
6 levels are found to be inadequate and cannot be made adequate through
7 troubleshooting, PG&E must either replace existing systems or install new
8 equipment. This MAT encompasses the former: the replacement of rectifiers,
9 anode beds, and remote monitoring units. It also encompasses recoating
10 100 feet or more of pipeline.

11 This MAT relates to safety and/or reliability and/or maintenance as it involves
12 work related to mitigation of the external corrosion threat, replacement of
13 rectifiers, anode beds, and remote monitoring units.

14 **MAT 3K8 – Test Station Installation** – Work intended to meet the
15 requirements of 49 CFR 192.469 to achieve “sufficient test stations” on PG&E’s
16 transmission pipeline system. PG&E’s corrosion control standard requires a CP
17 test point at intervals of approximately one per mile. These test points are either
18 a valve, high pressure regulator, Coupon Test Station (CTS) or an ETS. When
19 five or more CTSs or ETSs are installed on a pipeline, it is considered a capital
20 project. Note that this MAT also records test stations installed to monitor AC, as
21 well as casings test stations, so long as they meet the capitalization criterion
22 above.

23 This MAT relates to safety and/or reliability and/or maintenance as it involves
24 work related to by installing test stations on PG&E’s transmission pipeline also
25 that this MAT also records test stations installed to monitor AC, as well as
26 casings test stations, so long as they meet the capitalization.

27 **MAT 3K9 – Electrical Interference DC** – 49 CFR 192.473 requires each
28 operator whose pipeline system is subjected to stray currents to have a
29 continuing program to minimize the detrimental effects of DC Interference from
30 foreign CP systems, mass transit systems, and other sources. Capital mitigation
31 methods include upgrading rectifiers, installing new impressed current CP
32 systems, replacing depleted impressed current anodes, and shielding pipeline
33 from foreign operators. Note that drain anodes and galvanic CP systems are
34 expense activities and should be recorded in MAT GJF.

1 This MAT relates to safety and/or reliability and/or maintenance as it involves
2 work related to minimizing the detrimental effects of DC interference on the
3 pipeline system.

4 **MAT 3KA – AC Remediation** – 49 CFR 192.479 481 requires that pipeline
5 operators inspect exposed piping for AC at least once every 3 years. AC may
6 occur when exposed pipeline interacts with moisture in the environment,
7 degrading pipeline integrity. PHMSA enforcement guidance states that pipeline
8 operators must mitigate AC before the next scheduled inspection. PG&E
9 capitalizes these mitigations when they involve recoating more than 100
10 continuous feet of piping.

11 This MAT relates to safety and/or reliability and/or maintenance as it involves
12 work related to AC mitigation before next scheduled inspection.

13 **MAT 3L1 – Drilling** – All work required to drill wells or redrill (replace) wells,
14 including installation and cementing of production tubing, gravel pack
15 completion, tubing and packer installation, wellhead components and any
16 ancillary or surface equipment required. Abandonment order would be
17 established for removing existing well that is being redrilled or replaced.

18 This MAT relates to safety and/or reliability and/or maintenance as it involves
19 work related to drill wells or redrill (replace) wells, including installation and
20 cementing of production tubing, gravel pack completion, tubing and packer
21 installation, wellhead components and any ancillary or surface equipment
22 required.

23 **MAT 3L3 – WELL Reworks** – All work required for gas storage well reworks,
24 including installation of DHSVs, gravel pack, tubing and casing tubular, wellhead
25 components, and replacing rework equipment.

26 This MAT relates to safety and/or reliability and/or maintenance as it involves
27 work related to gas storage well reworks, including installation of DHSVs, gravel
28 pack, tubing and casing tubular, wellhead components, and replacing rework
29 equipment.

30 **MAT 3L4 – WELL Repair and Replace** – Equipment replacement not
31 associated with well reworks, rework equipment and DHSVs, gravel pack, tubing
32 and casing tubular, and wellhead components. Includes replacement of UHSV,
33 well pipelines between wellheads and gas processing and compression station
34 equipment, and sand inspection valves.

1 This MAT relates to safety and/or reliability and/or maintenance as it involves
2 work related to replacement of UHSV, well pipelines between wellheads and gas
3 processing and compression station equipment, and sand inspection valves.

4 **MAT 3L5 – WELL Controls and Continuous Monitoring** – Installation of
5 monitoring and control devices such as equipment for annular monitoring,
6 injection measurement and replacement of well controls, and valves for injection
7 and withdrawal operation. Costs for overflow protection are included here.

8 This MAT relates to safety and/or reliability and/or maintenance as it involves
9 work related to Installation of monitoring and control devices such as equipment
10 for annular monitoring, injection measurement and replacement of well controls.

11 **MAT 44A – Stan Pac Capital** – Includes capital cost of improving the safety
12 and reliability of the StanPac transmission pipeline system. Examples of
13 expenditures in this category include replacing high risk, high consequence
14 pipeline segments and pressure regulating facilities identified by PG&E’s
15 Pipeline Risk Management Program. This also includes new business, WRO,
16 valves and CP.

17 This MAT relates to safety and/or reliability and/or maintenance as it involves
18 work related to improving the safety and reliability of the StanPac transmission
19 pipeline system.

20 **MAT 73A – Capacity for Load Growth** – Install pipeline and related
21 facilities to meet system capacity requirements driven by customer demand
22 growth. Transmission capacity must provide sufficient gas to satisfy customer
23 demands at design day conditions. Capacity constraints must be relieved by
24 reinforcing the transmission system before the design day conditions occur.

25 This MAT relates to safety and/or reliability and/or maintenance as it involves
26 work related to pipeline installation and related facilities to meet system capacity
27 requirements driven by customer demand growth.

28 **MAT 73B – Capacity Betterment** – Increase capacity by up-sizing the
29 diameter or length of a planned “like for like” pipeline replacement (as may occur
30 with a safety related pipeline replacement project) to reduce the risk of having to
31 perform costly incremental capacity projects in the future. Betterment of a
32 project that had been planned for non-capacity purposes results in cost savings
33 compared to the total costs of the “like-for-like” project plus the future
34 incremental project. Costs to be captured in this MAT are for the incremental

1 capacity only; costs for the original project are to be captured in the original
2 MWC/MAT.

3 This MAT relates to safety and/or reliability and/or maintenance as it involves
4 work related to reducing the risk of having to perform costly incremental capacity
5 projects in the future.

6 **MAT 73D – Liquefied Natural Gas (LNG)/Compressed Natural Gas**
7 **(CNG) for Capacity** – Capital costs including, but not limited to LNG/CNG
8 emission reduction equipment, trailers, vaporizers, some capital repair
9 components, etc., whose primary design purpose is to support customer loads
10 during capacity reductions.

11 This MAT relates to safety and/or reliability and/or maintenance as it involves
12 LNG/CNG work related to support customer loads during capacity reductions.

13 **MAT 75C – Routine Spend M&C Capital** – Includes Routine M&C capital costs
14 for the following work:

- 15 • Station Auxiliary M&C Projects: Includes wide assortment of capital projects
16 within the M&C Asset Family that are typically unique occurrences and do
17 not qualify for another M&C program. Examples of this type of work include
18 retirements; gas cooling; Heating, Ventilation and Air Conditioning (HVAC)
19 systems; fencing; meter buildings; gas racks; traffic barriers; etc.
- 20 • Station Valves and Actuators M&C Projects: Includes capital projects
21 related to all valves, actuators, monitors & controllers within the station
22 boundary and are not specifically addressed in a station rebuild project with
23 the following exceptions;* Limatorque actuator replacements should be in
24 MAT 764;* Bristol Controller replacements should be in MAT 761; * Becker
25 upgrades and retrofits should be in MAT 766;* Any Inoperable valves or
26 Hard to Operate Valves even the ones within station boundary that are not
27 specifically addressed in a station rebuild project should be included in MAT
28 75D – Valve replacement.
- 29 • Station Electric/Instr/Controls M&C Projects: Includes capital projects
30 related to controls, transfer switches, grounding grids, batteries, SCADA
31 RTUs, data capture and trending, electrical circuits, etc., that are not
32 otherwise encompassed in specific M&C programs and any costs related to
33 Electrical upgrades program.

1 This MAT relates to safety and/or reliability and/or maintenance as it
2 involves work related to routine targeted component replacement and
3 maintenance at measurement and control stations, such as repair of failed
4 equipment and instrumentation and modifications to address equipment safety
5 or performance issues.

6 **MAT 75D – Valve Program** – Capital costs for valve replacements of
7 inoperable or hard to operate valves that are greater than two inches in
8 diameter. It may also include valves that are replaced for class location
9 changes; valves that are leaking; deactivated valves that are being removed;
10 and removal or replacement of other reliability valves.

11 This MAT relates to safety and/or reliability and/or maintenance as it involves
12 work related to valve replacements of inoperable or hard to operate valves that
13 are greater than two inches in diameter.

14 **MAT 75E – Vintage Pipe Replacement** – Capital costs for replacement of
15 pipe where vintage construction/fabrication threats interact with land movement.
16 Vintage construction/fabrication threats include pipe that was installed using
17 wrinkle bends, mechanical/compression couplings, miter bends and other
18 non-standard fittings like orange peel reducers, chill ring welds, bell and spigot,
19 pipe that was constructed with the acetylene girth welding process, and branch
20 connections made with unsupported saddle connections.

21 This MAT relates to safety and/or reliability and/or maintenance as it involves
22 work related to replacement of pipe where vintage construction/fabrication
23 threats interact with land movement.

24 **MAT 75H – Class Location** – Costs for replacement of pipe due to class
25 location change as identified by the Class Location Study Program.

26 This MAT relates to safety and/or reliability and/or maintenance as it involves
27 work related to replacement of pipe due to class location change as identified by
28 the Class Location Study Program.

29 **MAT 75I – Valve Automation** – Costs for Valve Automation projects,
30 including three types of automation: (1) remote control automation of existing
31 valves, (2) replacement or installation of new valve with remote control
32 automation, and (3) upgrades to existing automated valves. This program is
33 driven by NTSB recommendation P 11 27 from San Bruno and California
34 Assembly Bill 56 and Senate Bill 216.

1 This MAT relates to safety and/or reliability and/or maintenance as it involves
2 work related to remote control automation, replacement or installation of new
3 automated valves, or upgrades to existing automated valves.

4 **MAT 75J – Geo-Hazards Mitigations** – Costs for mitigation of land
5 movement sites which impinges upon PG&E pipelines and creates an elevated,
6 short-term Geo-Hazard. These Geo-Hazards may be found as a result of
7 continuing surveillance, aerial/ground patrol, and the Geo-Hazard studies
8 Program.

9 This MAT relates to safety and/or reliability and/or maintenance as it involves
10 work related to mitigation of land movement sites which impinge upon PG&E
11 pipelines and create an elevated, short-term Geo-Hazard.

12 **MAT 75K – Water and Levee Crossings** – Costs for the Water and Levee
13 Crossing Program. These costs include the capital mitigation required to
14 reinforce or relocate pipeline at water and levee crossings. These mitigations
15 are not limited to jurisdictional water and levee crossings.

16 This MAT relates to safety and/or reliability and/or maintenance as it
17 involves work related to the capital mitigation required to reinforce or relocate
18 pipeline at water and levee crossings.

19 **MAT 75L – Fault Crossings** – Costs for capital mitigation as a result of
20 Fault Crossing Program studies.

21 This MAT relates to safety and/or reliability and/or maintenance as it involves
22 work related to capital mitigation as a result of Fault Crossing Program studies.

23 **MAT 75M – Shallow Pipe** – Capital remediation options include
24 replacement or relocation of the pipeline at an acceptable depth of cover in
25 parallel, or along an alternate route and retirement of the shallow location and
26 retirement of those shallow pipelines not necessary for operations.

27 This MAT relates to safety and/or reliability and/or maintenance as it involves
28 work related to capital reformation options include replacement or relocation of
29 the pipeline at an acceptable depth of cover in parallel.

30 **MAT 75N – Hydrostatic Testing** – Capital costs associated with the
31 hydrotest program such as the purchase of capital equipment or an emergency
32 replacement as required following a failed Hydrotest. This MAT also includes
33 piggability improvements made specifically when driven by the requirements of a
34 hydrotest project.

1 This MAT relates to safety and/or reliability and/or maintenance as it involves
2 work related to the hydrotest program such as the purchase of capital equipment
3 or an emergency replacement as required following a failed Hydrotest.

4 **MAT 75O – Other Pipeline Safety and Reliability** – Costs to replace pipe >
5 50 feet in length where there are pipeline safety or reliability issues, not captured
6 by other MATs. Generally, these costs include pipe replacements required as a
7 result of leaks, dig ins, corrosion Integrity Issues, overbuilds/encroachments,
8 other pipeline safety/reliability issues, or retirements/deactivations.

9 This MAT relates to safety and/or reliability and/or maintenance as it involves
10 work related to replace pipe > 50 feet in length where there are pipeline safety or
11 reliability issues, not captured by other MATs.

12 **MAT 75P – ILI Capital Repair** – Capital repairs required as a result of an ILI
13 assessment such as pipe replacements greater than 50 feet or coating greater
14 than 100 feet, for example.

15 This MAT relates to safety and/or reliability and/or maintenance as it involves
16 work related to repairs, such as pipe replacements greater or coating, required
17 as a result of an ILI assessment.

18 **MAT 75Q – Pipe Replacement** – IM (In Lieu of Hydro) – Pipe replacements
19 for the purpose of assessing pipeline identified by TIMP to be in compliance with
20 49 CFR Part 192, Subpart O in lieu of hydrostatic testing. This MAT includes
21 pipe replacements that are >50 feet in length and are being replaced in lieu of
22 hydrostatic testing to address an integrity threat, such as the manufacturing
23 threat.

24 This MAT relates to safety and/or reliability and/or maintenance as it involves
25 work related to Pipe replacements for the purpose of assessing pipeline
26 identified by TIMP.

27 **MAT 75R – Non-IM Pipe Replacement In Lieu of Hydrotest** – Costs for
28 Non-IM replacements of pipe greater than 50 feet in length in lieu of
29 Hydrotesting. This does not include Class Location change replacements. Use
30 MAT 75H for Class Location change replacements.

31 This MAT relates to safety and/or reliability and/or maintenance as it involves
32 work related to replacements of pipe greater than 50 feet in length in lieu of
33 Hydrotesting.

1 **MAT 75S – DA** – Capital costs of repairs or replacements related to ICDA,
2 ECDA, and SCCDA Phase 3 such as pipe replacements greater than 50 feet,
3 coating greater than 100 feet, for example.

4 This MAT relates to safety and/or reliability and/or maintenance as it involves
5 work related to repairs or replacements due to ICDA, ECDA, and SCCDA Phase
6 3 such as pipe replacements and coating.

7 **MAT 75T – Exposed Pipe** – Capital costs for mitigation and/or replacement
8 of Exposed Pipe. Capital remediation options include: replacement or
9 relocation of the pipeline at an acceptable depth of cover in parallel, or along an
10 alternate route and retirement of the exposed location and retirement of those
11 exposed pipelines not necessary for operations.

12 This MAT relates to safety and/or reliability and/or maintenance as it involves
13 work related to mitigation and/or replacement of Exposed Pipe.

14 **MAT 75U – Non-TIMP Strength Testing Capital** – Capital costs for
15 Non-TIMP strength testing sub-program which validates the integrity of gas
16 pipelines by strength testing pipelines, including pipelines either (a) lacking a
17 traceable, verifiable, and complete record or (b) needing MAOP reconfirmation.

18 This MAT relates to safety and/or reliability and/or maintenance as it involves
19 work related to validating the integrity of gas pipelines by strength testing
20 pipelines lacking a traceable, verifiable, and complete record or needing MAOP
21 reconfirmation.

22 **MAT 75V – TIMP Direct Exam Capital Recoat** – Capital repair as a result of
23 Direct Examination integrity assessments. Examples include, but are not limited
24 to replacements in excess of 50 feet as a result of direct examination, recoats in
25 excess of 100 feet, etc.

26 This MAT relates to safety and/or reliability and/or maintenance as it involves
27 work related to repair from Direct Examination integrity assessments.

28 **MAT 76F – ESD Upgrade** – includes ESD upgrade costs at the GT C&P
29 facilities for the following types of projects: (1) Installation of ultraviolet/infrared
30 Fire detection and Gas detection sensors; and (2) Installation of local control
31 panels, conduits & wiring, and any dedicated PLCs for ESD system.

32 This program relates to safety and/or reliability and/or maintenance as it
33 involves work related to upgrades at the GT C&P facilities for installation of

1 ultraviolet/infrared Fire detection and Gas detection sensors and installation of
2 local control panels.

3 **MAT 76G – GT OPP** – Includes: Installation of filters and separators at
4 strategic locations within the system to reduce the likelihood of debris and liquids
5 from entering the system and impacting pilot operated regulators and monitors;
6 installation of secondary OPP devices at stations with pilot operated regulators
7 and monitors. These additional devices may include slam shuts valves, adding
8 monitor valves, relief valves or alternate technologies to prevent overpressure
9 events from occurring; installation of pressure transmitters system wide for
10 enhanced visibility; and removal or installation of additional MAOP separation
11 valves.

12 This program relates to safety and/or reliability and/or maintenance as it
13 involves work related to retrofitting/rebuilding simple stations, LVCRs and
14 LVCMs with OPP modifications.

15 **MAT 76M – GT SCADA Visibility** – Install field instruments (e.g., RTUs) to
16 enable SCADA for the GT Control Center. SCADA provides visibility into the
17 GT&S system to support safe operation and emergency response. Includes
18 software and equipment modifications related to the operation of the RTUs and
19 SCADA terminals, such as telecommunications and SCADA host computer
20 operations.

21 This MAT relates to safety and/or reliability and/or maintenance as it involves
22 work related to installing field instruments (e.g., RTUs) to enable SCADA for the
23 GT Control Center.

24 **MAT 76N – Routine Spend C&P Capital** – Includes Routine Spend C&P
25 capital costs for the following work.

- 26 • Station Auxiliary C&P Projects: Includes a wide assortment of projects
27 within the C&P Asset Family that are typically unique occurrences and do
28 not qualify for another C&P program, examples of this type of work include:
29 air compressors, dryers, pond liners, water systems, aqua tower piping, fire
30 water systems, reboilers, cooling towers, gas detection, Automated Meter
31 Reading equipment, seal contaminant filtration, oil heaters, generator
32 modifications, suction separation, davit arms, fuel gas line, building HVAC,
33 silencers, transfer pumps, methanol injection systems, containment pumps,
34 oxidizers, Nitrogen Oxides upgrades, equipment removal, road stabilization,

1 etc. and includes the costs for Upgrading Pleasant Creek Processing
2 Equipment.

- 3 • Station Compression C&P Projects: Includes projects related to
4 engineering, procurement, construction and installation of compressor
5 systems that are not otherwise encompassed in specific C&P programs
6 (Bethany K2, Los Medanos K1, Hinkley Retrofit, etc.);
- 7 • Station Electric/Instr/Controls C&P Projects: Includes projects related to
8 MCCs, relays, control panels, batteries, wiring and conduits, data capture
9 and trending, PLCs, lighting, conductors, electric buckets, ATS, switchgear,
10 etc., that are not otherwise encompassed in specific C&P programs. Also
11 includes costs for Santa Rosa Sub Station Rebuild project and costs for
12 Electrical upgrades for compressor stations other than Hinkley/Topock; and
- 13 • Station Valves and Actuators C&P Projects: Includes all valves, actuators,
14 monitors, and controllers not otherwise encompassed in specific C&P
15 programs (Bristols, Limitorque, Beckers, etc.), and any valve related costs
16 identified in MAT 76E.

17 This MAT relates to safety and/or reliability and/or maintenance as it
18 involves work related to compression and processing facilities, such as for
19 station auxiliary projects, station compression projects, station instrumentation
20 projects and station valves/actuator projects.

21 **MAT 76P – GT Electrical Upgrade** Hinkley & Topock – Includes costs for
22 upgrading the electrical equipment at Hinkley or Topock Compressor Stations.
23 The electrical equipment targeted by this program is switch gear sections and
24 MCC sections. These are located within station fences.

25 This MAT relates to safety and/or reliability and/or maintenance as it involves
26 work related to upgrading the electrical equipment at Hinkley or Topock
27 Compressor Stations.

28 **MAT 76Q – ECA 1** – Capital work is performed to remediate design
29 anomalies required for compliance at the GT stations. This MAT covers project
30 costs related to replacement of equipment or other components as a result of
31 ECA 1 work.

32 This MAT relates to safety and/or reliability and/or maintenance as it involves
33 work related to Capital work to refine design anomalies required for compliance
34 at the GT stations.

1 **MAT 76R – Compressor Unit Control Replacement** – Includes costs for
2 replacing compressor unit controls that are becoming obsolete. Each
3 compressor unit is installed with a PLC that monitors and controls the operation
4 of the compressor unit, ensuring safe and reliable operation. Project cost
5 includes removal of the existing PLC and associated control equipment,
6 installation of a new PLC and associated control panel, PLC programming, and
7 system integration.

8 This MAT relates to safety and/or reliability and/or maintenance as it involves
9 work related to replacing compressor unit controls that are becoming obsolete.

10 **MAT 76S – ECA 2** – Includes work performed to enable the
11 destructive/non-destructive examination of components installed at the GT
12 stations. This MAT covers project costs related to replacement of equipment or
13 other components as a result of ECA 2 work.

14 This program relates to safety and/or reliability and/or maintenance as it
15 involves work related to enabling the destructive/non-destructive examination of
16 components installed at the GT stations to remediate the lack of strength test
17 records in lieu of other methods such as strength testing.

18 **MAT 76T – Upgrade Station Controls** – Includes costs for upgrading the
19 station controls at the GT C&P facilities. Project cost includes removal of the
20 existing control systems and associated control equipment, the installation of the
21 new PLC based controllers, programming, additional computer, and terminal
22 stations, and a rebuild of existing panels in the control room.

23 This MAT relates to safety and/or reliability and/or maintenance as it involves
24 work related to upgrading the station controls at the GT C&P facilities.

25 **MAT 76V – Station Strength Testing** – Capital work performed to enable
26 the strength testing of components installed at the GT stations. This MAT
27 covers project costs related to replacement of equipment or other components
28 as a result of station strength testing.

29 This MAT relates to safety and/or reliability and/or maintenance as it involves
30 work related to the strength testing of the GT stations.

31 **MAT 76X – Compressor Replacements** – Includes costs for compressor
32 unit replacements at the GT compressor stations. Projects are specifically
33 identified in the Compressor Replacement Study. Includes project costs such
34 as: (1) Burney K 2 Compressor replacement – includes replacement of Burney

1 K-2 unit GE LM 1500 and relevant control systems; and (2) Future compressor
2 replacements—identified from Compressor Replacement Study.

3 This program relates to safety and/or reliability and/or maintenance as it
4 involves work related to compressor unit replacements/overhauls/retirements at
5 the GT compressor stations.

6 **MAT 76Z – Physical Security** – Includes costs for Physical Security capital
7 projects for GT C&P and M&C Facilities for stations that are identified as critical
8 facilities as determined by Corporate Security study and includes the following
9 projects: (1) Specific security enhancements projects such as utilizing ballistic
10 protection around critical components such as compressor stations and tanks;
11 (2) Improving protection of exposed transmission pipe, valves by adding anti
12 climbing or concrete barriers; and (3) Security enhancements related to
13 communication systems such as adding visual and audible alarm annunciations,
14 upgrading existing security technology to include video analytics etc.

15 This MAT relates to safety and/or reliability and/or maintenance as it involves
16 work related to the implementation of physical security measures at critical C&P
17 and M&C Facilities as required by the TSA guidelines.

18 **MAT 762 – Gill Ranch Capital** – Capital funds contributed to or capital work
19 performed to fulfill PG&E’s obligations under its joint ownership agreement with
20 Gill Ranch Storage LLC.

21 This MAT relates to safety and/or reliability and/or maintenance as it involves
22 work related to capital work performed to fulfill PG&E’s obligations under its joint
23 ownership agreement with Gill Ranch Storage LLC.

24 **MAT 763 – Perform Simple Station Rebuilds** – Includes costs for simple
25 station rebuild projects. The simple station rebuild projects are intended to
26 address station equipment aging and obsolescence of M&C GT stations and
27 Transmission LVC. Simple GT stations contain only self-contained and pilot
28 operated pressure regulation and OPP equipment and simple operational
29 metering devices. Stations may also include SCADA RTU’s or electronic
30 pressure recorder which monitor operating parameters. Simple transmission
31 stations are located above or below ground and include odorant stations, meter
32 stations, custody transfer stations and dehydrator systems. The project scope
33 includes a complete rebuild of the station (above and below ground) to ensure
34 replacement of older and obsolete equipment and piping, to upgrade

1 configuration to meet current system needs, and to address any outstanding
2 issues with station O&M. Station rebuilds which are primarily addressing
3 capacity or WRO should be assigned to those associated MATs.

4 This MAT relates to safety and/or reliability and/or maintenance as it involves
5 work related to simple station rebuild projects which includes complete rebuild of
6 the station (above and below ground) to ensure replacement of older and/or
7 obsolete equipment and piping, to upgrade configuration to meet current system
8 needs, and to address any outstanding issues with station O&M.

9 **MAT 764 – Perform Complex Station Rebuilds** – Includes costs for
10 complex station rebuild projects. The Complex station rebuild projects are
11 intended to address station equipment aging and obsolescence of M&C GT
12 stations. Complex GT stations contain valves and equipment that is controller
13 operated or controlled by either an algorithm in a PLC or RTU. Complex
14 stations include Underground Gas Holder Stations and PLS. The project scope
15 includes a complete rebuild of the station (above and below ground) to ensure
16 replacement of older and obsolete equipment and piping, to upgrade
17 configuration to meet current system needs, and to address any outstanding
18 issues with station O&M. The project scope also includes costs to replace
19 obsolete valve actuators manufactured by Limitorque currently installed
20 throughout the GT system.

21 This MAT relates to safety and/or reliability and/or maintenance as it involves
22 work related to complex station rebuild projects which includes complete rebuild
23 of the station (above and below ground) to ensure replacement of older and/or
24 obsolete equipment and piping, to upgrade configuration to meet current system
25 needs, and to address any outstanding issues with station O&M.

26 **MAT 765 – Perform Transmission Terminal Upgrades** – Includes cost for
27 upgrades and rebuilding GT terminals. Terminal upgrade program is designed
28 to upgrade or rebuild the three existing transmission terminals—Milpitas,
29 Brentwood, and Antioch. The upgrade work includes buildings, electrical and all
30 associated equipment at the terminals such as piping, manual valves, control
31 valves, metering equipment, pipe supports, SCADA equipment etc. within the
32 station block valves as warranted and not otherwise encompassed in specific
33 M&C programs (Bristols, Beckers, etc.).

1 This program relates to safety and/or reliability and/or maintenance as it
2 involves work related to upgrading's and rebuilding GT terminals to address
3 aging and obsolescence.

4 **MAT 766 – Becker System Upgrades** – Includes costs for Becker System
5 Upgrades and retrofits. The purpose of retrofitting a Becker unit is to address
6 identified safety and compliance deficiencies and eliminate the need to replace
7 the entire cabinet.

8 This MAT relates to safety and/or reliability and/or maintenance as it involves
9 work related to Becker System Upgrades and retrofits by identifying safety and
10 compliance deficiencies and eliminating the need to replace the entire cabinet.

11 **MAT 84C – Gas Gathering** – Pipe Reliability/Safety – Safety or reliability
12 work associated with gas gathering pipelines.

13 This MAT relates to safety and/or reliability and/or maintenance as it involves
14 work related to safety or reliability work associated with gas gathering pipelines.

15 **MAT 84D – Gas Gathering Divestiture** – Work associated with the sale
16 and/or retirement of pipe on the gas gathering system.

17 This MAT relates to safety and/or reliability and/or maintenance as it
18 involves work related to sale and/or retirement of pipe on the gas gathering
19 system.

20 **MAT 98C – ILI Upgrade Pipeline** – Making one time pipeline modifications
21 which allow the smart pig to run unimpeded through the pipeline (e.g., removing
22 elbows and other physical constraints and install of valves, pig launchers and
23 receivers).

24 This program relates to safety and/or reliability and/or maintenance as it
25 involves work related to pipeline modifications which allow the smart pig to run
26 unimpeded through the pipeline.

27 **P. GT&S Comparison by MAT for Non-Safety, Reliability, and Maintenance**
28 **Work Tables**

1 Q. GT&S Comparison by MAT for Non-Safety, Reliability, and Maintenance Work Tables

TABLE 2-11
2023 RSAR

2023 GRC CYCLE GAS DISTRIBUTION EXPENSE COMPARISON BY MAT FOR NON-SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll- up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$ (H-G)	J Spending Percent Variance for 2023 (%) (H-G)/G*100)
1	O&M Expense	GT&S	AB	Misc Expense	AB1	Support	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex.3, Ch.13	No	Ongoing	Annual	0.0	(8.3)	(8.3)	100.0%
2	O&M Expense	GT&S	AB	Misc Expense	AB7	Safety, Qual. & Contract Mgmt	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex.3, Ch.13	No	Ongoing	Annual	795.2	405.9	(389.3)	-49.0%
3	O&M Expense	GT&S	AB	Misc Expense	AB#	Not assigned	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex.3, Ch.13	No	Ongoing	Annual	19,267.4	10,315.6	(8,951.8)	-46.5%
4	O&M Expense	GT&S	AK	Manage Environmental Oper	AKA	Haz Waste Mgmt	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex.3, Ch.13	No	Ongoing	Annual	3,157.3	3,760.4	603.1	19.1%
5	O&M Expense	GT&S	CR	Manage Waste Disp & Transp	CRA	Hazard Waste Disp & Transp	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex.3, Ch.13	No	Ongoing	Annual	716.5	644.5	(72.0)	-10.1%
6	O&M Expense	GT&S	CX	GT Marketing/Sales/Strategy	CXA	GT&S Marketing/Sales/Strategy	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex.3, Ch.11	No	Ongoing	Annual	5,786.8	6,171.8	385.0	6.7%
7	O&M Expense	GT&S	DN	Develop & Provide Training	DN2	Gas Qualifications	Non-SRM Total	Non-SRM Total	Ex.3, Ch.13	No	Ongoing	Annual	1,931.8	567.8	(1,364.0)	-70.6%
8	O&M Expense	GT&S	DN	Develop & Provide Training	DN2	Gas Qualifications	Loss of Containment on Gas Distribution Main or Service	LOCDM-C013 Training, Gas Qualifications	Ex.3, Ch.13	No	N/A	N/A	1,931.8	567.8	(1,364.0)	-70.6%
9	O&M Expense	GT&S	GZ	R&D Non-Balancing Account	GZA	Gas R&D and Deployment	Non-SRM Total	Non-SRM Total	Ex.3, Ch.13	No	Ongoing	Annual	3,861.2	1,402.8	(2,458.4)	-63.7%
10	O&M Expense	GT&S	GZ	R&D Non-Balancing Account	GZA	Gas R&D and Deployment	Loss of Containment on Gas Transmission Pipeline	LOCDM-C003 Gas R&D and Deployment	Ex.3, Ch.13	No	N/A	N/A	3,861.2	1,402.8	(2,458.4)	-63.7%
11	O&M Expense	GT&S	JT	GT Reliability & General Maint	JTA	Pipeline WRO Expense	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex.3, Ch.14	No	Ongoing	Annual	634.6	1,500.3	865.7	136.4%
12	O&M Expense	GT&S	JV	Maintain IT Apps & Infra	JVA	IS/CS: Workforce End User, SW Ste	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex.3, Ch.12	No	Ongoing	Annual	2,346.1	2,200.8	(145.3)	-6.2%
13	O&M Expense	GT&S	JV	Maintain IT Apps & Infra	JVT	ASes, Applications Support	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex.3, Ch.12	No	Ongoing	Annual	0.0	1,295.0	1,295.0	100.0%
14	O&M Expense	GT&S	JV	Maintain IT Apps & Infra	JV#	Not assigned	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex.3, Ch.12	No	Ongoing	Annual	857.1	0.0	(857.1)	-100.0%
15	O&M Expense	GT&S	OS	Operational Support	OS#	Not assigned	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex.3, Ch.13	No	Ongoing	Annual	10,400.5	(5,176.2)	(15,576.7)	-149.8%

**TABLE 2-12
2023 RSAR
2023 GRC CYCLE GAS DISTRIBUTION CAPITAL COMPARISON BY MAT FOR NON-SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll-up (Yes/No)	E Program / Project Life (Years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)
1	Capital	GT&S	05	Tools & Equipment	05A	Tools	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 13	No	On-going	Annual	3,502.0	445.0	(3,057.0)	-87.3%
2	Capital	GT&S	12	Implement Environment Projects	12A	Environmental - Water Qual	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 13	No	On-going	Annual	0.0	892.0	892.0	100.0%
3	Capital	GT&S	21	Misc Capital	21#	Not assigned	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 13	No	On-going	Annual	0.0	1,542.0	1,542.0	100.0%
4	Capital	GT&S	2F	Build IT Apps & Infra	2FA	ASvcs: Development	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 12	No	On-going	Annual	12,988.0	11,438.0	(1,550.0)	-11.9%
5	Capital	GT&S	2F	Build IT Apps & Infra	2F#	Not assigned	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	N/A	No	On-going	Annual	0.0	457.0	457.0	100.0%
6	Capital	GT&S	26	GT Customer Connects	26A	New Business	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	8,858.0	405.0	(8,453.0)	-95.4%
7	Capital	GT&S	78	Manage Buildings	78A	Office Facilities	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 13	No	On-going	Annual	0.0	846.0	846.0	100.0%
8	Capital	GT&S	83	GT WRO	83A	Work Requested by Others	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 3, Ch 14	No	On-going	Annual	17,881.0	9,044.0	(8,837.0)	-49.4%

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 3
ELECTRIC DISTRIBUTION
IMPUTED ADOPTED VS. RECORDED COMPARISON

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 3
ELECTRIC DISTRIBUTION
IMPUTED ADOPTED VS. RECORDED COMPARISON

TABLE OF CONTENTS

A. Introduction.....	3-1
B. Comparison Summary Table.....	3-2
C. Comparison by MAT Code for Safety, Reliability, and Maintenance Work Tables.....	3-4
D. MWC Descriptions – Expense.....	3-20
E. MWC Descriptions – Capital.....	3-29
F. MAT Code Descriptions – Expense.....	3-36
G. MAT Code Descriptions – Capital.....	3-57
H. Comparison by MAT Code for Non-Safety, Reliability, and Maintenance Work Tables.....	3-80
I. Electric Distribution Supplemental Reporting.....	3-81

1 **PACIFIC GAS AND ELECTRIC COMPANY**
2 **SECTION 3**
3 **ELECTRIC DISTRIBUTION**
4 **IMPUTED ADOPTED VS. RECORDED COMPARISON**

5 **A. Introduction**

6 This section includes the following information for the Electric Distribution
7 functional area: a comparison of the total 2023 imputed adopted spend vs. the
8 actual spend as well as the required data points per program as defined and
9 required in Decision (D.) 23-11-069.¹ This section also includes, for programs
10 that are related to safety, reliability, or maintenance, the Major Work Category
11 (MWC)/Maintenance Activity Type (MAT) Code descriptions, imputed adopted
12 vs. actual cost comparison details and variance explanations. As required by
13 D.19-04-020,² the MWC/MAT Code descriptions include a discussion of how
14 each program/project relates to safety, reliability, or maintenance.

1 D.23-11-069, Appendix A and B.

2 Attachment 2, p. 9.

1 B. Comparison Summary Table

**TABLE 3-1
2023 RSAR
2023 GRC CYCLE ELECTRIC DISTRIBUTION EXPENSE COMPARISON SUMMARY
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 Spending Category - MWC	C2 MWC	D 2023 Imputed Adopted Costs	E 2023 Actual Costs	F Difference for 2023 (\$) (E-D)	G Percent Variance for 2023 (%) ((E-D)/D)
1	Expense	Electric Distribution	Support and Emergency Preparedness and Response (EP&R)	AB	256,409.7	107,875.4	(148,534.3)	-57.9%
2	Expense	Electric Distribution	Read & Investigate Meters	AR	10,437.6	9,189.5	(1,248.1)	-12.0%
3	Expense	Electric Distribution	Emerging Technology	AT	2,185.1	0.0	(2,185.1)	-100.0%
4	Expense	Electric Distribution	Electric Distribution Operations Activities	BA	32,067.8	24,383.0	(7,684.8)	-24.0%
5	Expense	Electric Distribution	Electric Distribution Patrols and Inspections	BF	87,153.6	150,040.6	62,887.0	72.2%
6	Expense	Electric Distribution	Electric Distribution Routine Emergency	BH	193,157.5	119,478.8	(73,678.7)	-38.1%
7	Expense	Electric Distribution	Maint Other Equipment	BK	1,975.3	2,001.3	26.0	1.3%
8	Expense	Electric Distribution	Customer Field Service Work	DD	24,314.6	31,780.9	7,466.3	30.7%
9	Expense	Electric Distribution	Manage Service Inquiries	EV	13,917.4	12,446.4	(1,471.0)	-10.6%
10	Expense	Electric Distribution	Electric Distribution Work Requested by Others (WRO)	EW	11,537.9	8,414.4	(3,123.6)	-27.1%
11	Expense	Electric Distribution	Change/Maintain Used Electric Meters	EY	8,478.8	9,001.3	522.5	6.2%
12	Expense	Electric Distribution	Electric Distribution Engineering and Planning	FZ	25,831.9	24,276.1	(1,555.8)	-6.0%
13	Expense	Electric Distribution	Poles - Intrusive Inspection/Test and Treat Program	GA	44,147.5	49,974.8	5,827.3	13.2%
14	Expense	Electric Distribution	Operate and Maintain Substations	GC	54,755.1	50,107.9	(4,647.2)	-8.5%
15	Expense	Electric Distribution	Electric Distribution Mapping	GE	19,272.2	24,668.4	5,396.1	28.0%
16	Expense	Electric Distribution	Electric Distribution Operational Technology	HG	23,207.3	18,540.5	(4,666.8)	-20.1%
17	Expense	Electric Distribution	Vegetation Management	HN	972,013.0	859,187.1	(112,825.9)	-11.6%
18	Expense	Electric Distribution	Distribution Automation & Protection Support	HX	3,118.3	2,693.8	(424.5)	-13.6%
19	Expense	Electric Distribution	Perform Gas Meter Maintenance	HY	687.1	250.6	(436.5)	-63.5%
20	Expense	Electric Distribution	Electric Distribution Major Emergency	IF	45,380.8	38,356.9	(7,023.9)	-15.5%
21	Expense	Electric Distribution	Various Balancing and Memorandum Accounts	IG	286,594.6	430,012.4	143,417.8	50.0%
22	Expense	Electric Distribution	Streetlight Support	IS	1,830.7	572.6	(1,258.1)	-68.7%
23	Expense	Electric Distribution	Collect Revenue	IU	1,589.9	1,088.0	(501.9)	-31.6%
24	Expense	Electric Distribution	Maintain IT Applications and Infrastructure	JV	8,419.0	4,430.2	(3,988.8)	-47.4%
25	Expense	Electric Distribution	Preventive Maintenance and Equipment Repair, OH	KA	40,243.1	89,175.9	48,932.8	121.6%
26	Expense	Electric Distribution	Preventive Maintenance and Equipment Repair, UG	KB	20,324.7	16,071.1	(4,253.6)	-20.9%
27	Expense	Electric Distribution	Preventive Maintenance and Equipment Repair, Network	KC	5,157.3	6,152.8	995.5	19.3%
28	Expense	Electric Distribution	Operational Management	OM	19,950.4	12,753.0	(7,197.4)	-36.1%
29	Expense	Electric Distribution	Operational Support	OS	62,153.6	2,903.9	(59,249.7)	-95.3%
30	Expense	Electric Distribution	Wildfire Mitigation	WF	0.0	68,487.3	68,487.3	100.0%
31	Expense	Electric Distribution	TOTAL		2,276,311.8	2,174,314.7	(101,997.1)	-4.5%

TABLE 3-2
2023 RSAR
2023 GRC CYCLE ELECTRIC DISTRIBUTION CAPITAL COMPARISON SUMMARY
(THOUSANDS OF DOLLARS)

Line No.	A Type (O&M Expense or Capital)	B Functional Area	C1 Spending Category - MWC	C2 MWC	D 2023 Imputed Adopted Costs	E 2023 Actual Costs	F Difference for 2023 (\$) (E-D)	G Percent Variance for 2023 (%) ((E-D)/D)
1	Capital	Electric Distribution	Tools & Equipment	05	7,607.7	9,412.7	1,804.9	23.7%
2	Capital	Electric Distribution	Electric Distribution Line and Equipment Capacity	06	143,580.3	155,262.0	11,681.7	8.1%
3	Capital	Electric Distribution	Electric Distribution Install/Replace OH Poles	07	362,645.3	360,984.4	(1,660.9)	-0.5%
4	Capital	Electric Distribution	Electric Distribution OH Asset Replacement	08	813,396.1	1,025,728.2	212,332.1	26.1%
5	Capital	Electric Distribution	Electric Distribution Automation and Protection	09	29,595.1	28,545.5	(1,049.6)	-3.5%
6	Capital	Electric Distribution	Electric Distribution WRO General	10	138,483.9	242,275.6	103,791.7	74.9%
7	Capital	Electric Distribution	Electric Distribution Customer Connections ^(a)	16	653,710.2	1,069,650.2	415,940.0	63.6%
8	Capital	Electric Distribution	Electric Distribution Routine Emergency	17	249,483.0	395,409.8	145,926.8	58.5%
9	Capital	Electric Distribution	Miscellaneous Capital and EP&R	21	28,274.9	33,687.6	5,412.7	19.1%
10	Capital	Electric Distribution	Install New Electric Meters	25	31,396.1	30,469.0	(927.2)	-3.0%
11	Capital	Electric Distribution	Electric Distribution Preventive Maintenance Overhead	2A	232,654.3	397,122.7	164,468.3	70.7%
12	Capital	Electric Distribution	Electric Distribution Preventive Maintenance Underground	2B	66,474.2	86,589.4	20,115.2	30.3%
13	Capital	Electric Distribution	Electric Distribution Preventive Maintenance Network	2C	14,135.3	16,064.2	1,928.9	13.6%
14	Capital	Electric Distribution	Build IT Applications & Infrastructure	2F	70,173.5	105,258.8	35,085.3	50.0%
15	Capital	Electric Distribution	Electric Distribution WRO Rule 20A	30	30,456.7	23,890.4	(6,566.3)	-21.6%
16	Capital	Electric Distribution	Electric Distribution WRO Rule 20A	3U	0.0	82,404.3	82,404.3	100.0%
17	Capital	Electric Distribution	Electric Distribution Substation Capacity	46	60,582.4	67,282.6	6,700.2	11.1%
18	Capital	Electric Distribution	Electric Distribution Substation Replace Other Equipment	48	100,521.3	57,355.9	(43,165.5)	-42.9%
19	Capital	Electric Distribution	Electric Distribution Circuit/Zone Reliability Program	49	88,299.8	62,065.6	(26,234.2)	-29.7%
20	Capital	Electric Distribution	Electric Distribution Substation Transformer Replacements	54	22,157.0	24,821.5	2,664.6	12.0%
21	Capital	Electric Distribution	Electric Distribution UG Asset Replacements	56	126,794.3	31,270.2	(95,524.1)	-75.3%
22	Capital	Electric Distribution	Electric Distribution Substation Safety and Security	58	8,586.7	3,410.1	(5,176.5)	-60.3%
23	Capital	Electric Distribution	Electric Distribution Substation Emergency Replacements	59	85,866.8	172,615.2	86,748.4	101.0%
24	Capital	Electric Distribution	EO Control Center Facility and Operational Technology	63	118,519.2	124,367.7	5,848.5	4.9%
25	Capital	Electric Distribution	Electric Distribution Major Emergency	95	66,359.7	49,287.5	(17,072.2)	-25.7%
26	Capital	Electric Distribution	TOTAL		3,549,754.0	4,655,230.9	1,105,477.0	31.1%

(a) Amount for MWC 16 does not include approximately \$39 million recorded to the AB 841 Memorandum Account

C. Comparison by MAT Code for Safety, Reliability, and Maintenance Work Tables

**TABLE 3-3
2023 RSAR
2023 GRC CYCLE ELECTRIC DISTRIBUTION EXPENSE COMPARISON BY MAT CODE FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	Type (OMB Expense or Capital)	Functional Area	MWC	MWC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Y/N)	Program / Project Life (years)	Program / Project Year	2023 Imputed Actual Costs	2023 Actual Costs	Difference for 2023 (\$ (N-Q))	Spending Percent Variance for 2023 (%) (R-Q/Q-R)	Spending Variance Explanation Received (Y/N)	Percentage Variance Explanation Received (Y/N)	Unit Type	2023 Imputed Actual Units	2023 Actual Units	Difference for 2023 # of Units (O-N)	Unit Percent Variance for 2023 (%) (O-N/N-O)	Unit Variance Explanation Received (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	Scope (L, O, or T)	Schedule (N, O, or T)	Budget (L, O, or T)	Status	Completion Status Statement								
1	Expense	Electric Distribution	AB	Misc Expense	AB6	EPR Expense	SRM Total	SRM Total	E4.4, O4.1 E4.4, O4.2 E4.4, O4.5	No	Ongoing	Annual	193,126.4	21,533.0	(181,603.3)	-93.7%	Y	Y	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	Actual program expenses were below imputed regulatory values because programs that were forecasted in SRM and recorded in MAT codes under MISC 807. The following program expenses were forecasted in MAT AB6 in the 2023 GRC and are reflected in the imputed regulatory values: Emergency Preparedness and Response (EPAR), Camera, Public Safety Power Shutoff (PSPS), the Safety and Infrastructure Protection Team (SIFT), and Wildlife Mitigation Support. Actual expenses for EPAR remain recorded in MAT AB6 with a small portion also recorded in MAT 807. Actual expenses for Camera, EPSS, PSPS, SIFT and Weather Station Maintenance are recorded in various MAT codes under MISC 807 and are explained further below. The difference between the imputed regulatory value and actual expenses for the EPAR portion remaining in MAT AB6 is below the variance threshold through higher than imputed than higher than forecasted contract costs for the Community Wildlife Safety Program (CWSM) (see WILDFR005).	Not Utilized	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The following wildlife mitigation initiatives were forecasted in MAT AB6 in the 2023 GRC and are reflected in the imputed regulatory values: EPAR, Camera, EPSS, PSPS, SIFT and Wildlife Mitigation Support. EPAR remains under MAT AB6 with a small portion also in MAT 807. Camera, EPSS, PSPS, SIFT and Weather Station Maintenance are explained in further detail in various MAT codes under MISC 807 below.								
2	Expense	Electric Distribution	AB	Misc Expense	AB6	EPR Expense	Emergency Preparedness & Response	EPNDR000: EPAR Controls	E4.4, O4.1 E4.4, O4.2	Yes	N/A	N/A	5,307.5	3,670.3	(1,727.2)	-32.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
3	Expense	Electric Distribution	AB	Misc Expense	AB6	EPR Expense	Emergency Preparedness & Response	EPNDR001: Situational Awareness and Forecasting Initiatives - SCOP Improvements	E4.4, O4.1 E4.4, O4.2 E4.4, O4.5	Yes	N/A	N/A	2,206.5	-	(2,206.5)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
4	Expense	Electric Distribution	AB	Misc Expense	AB6	EPR Expense	Emergency Preparedness & Response	EPNDR002: Situational Awareness and Forecasting Initiatives - WSCC	E4.4, O4.1 E4.4, O4.2 E4.4, O4.5	Yes	N/A	N/A	7,808.8	4,644.8	(3,163.9)	-40.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
5	Expense	Electric Distribution	AB	Misc Expense	AB6	EPR Expense	Emergency Preparedness & Response	EPNDR005: EPAR Field Operations	E4.4, O4.1 E4.4, O4.2 E4.4, O4.5	Yes	N/A	N/A	634.9	630.5	(4.4)	-0.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
6	Expense	Electric Distribution	AB	Misc Expense	AB6	EPR Expense	Emergency Preparedness & Response	EPNDR008: EPAR Distribution Support Readout	E4.4, O4.1 E4.4, O4.2 E4.4, O4.5	Yes	N/A	N/A	7,026.5	4,577.4	(2,449.1)	-34.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
7	Expense	Electric Distribution	AB	Misc Expense	AB6	EPR Expense	Emergency Preparedness & Response	EPNDR009: EPAR Mitigation	E4.4, O4.1 E4.4, O4.2 E4.4, O4.5	Yes	N/A	N/A	4,416.1	3,005.9	(1,410.2)	-31.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
8	Expense	Electric Distribution	AB	Misc Expense	AB6	EPR Expense	Wildlife	WILDFR006: Public Safety Power Shutoff - PSPS Event Distribution	E4.4, O4.1 E4.4, O4.2 E4.4, O4.5	Yes	N/A	N/A	75,982.2	-	(75,982.2)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
9	Expense	Electric Distribution	AB	Misc Expense	AB6	EPR Expense	Wildlife	WILDFR006: PSPS Production Initiatives	E4.4, O4.1 E4.4, O4.2 E4.4, O4.5	Yes	N/A	N/A	43,987.7	-	(43,987.7)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10	Expense	Electric Distribution	AB	Misc Expense	AB6	EPR Expense	Wildlife	WILDFR076: Situational Awareness and Forecasting Initiatives - Weather Station	E4.4, O4.1 E4.4, O4.2 E4.4, O4.5	Yes	N/A	N/A	1,892.2	-	(1,892.2)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
11	Expense	Electric Distribution	AB	Misc Expense	AB6	EPR Expense	Wildlife	WILDFR076: Situational Awareness and Forecasting Initiatives - Camera	E4.4, O4.1 E4.4, O4.2 E4.4, O4.5	Yes	N/A	N/A	8,588.8	-	(8,588.8)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
12	Expense	Electric Distribution	AB	Misc Expense	AB6	EPR Expense	Wildlife	WILDFR076: Situational Awareness and Forecasting Initiatives - Wildlife Fire Detection	E4.4, O4.1 E4.4, O4.2 E4.4, O4.5	Yes	N/A	N/A	276.8	-	(276.8)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
13	Expense	Electric Distribution	AB	Misc Expense	AB6	EPR Expense	Wildlife	WILDFR076: Situational Awareness and Forecasting Initiatives - Partial Voltage Detection	E4.4, O4.1 E4.4, O4.2 E4.4, O4.5	Yes	N/A	N/A	242.2	-	(242.2)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
14	Expense	Electric Distribution	AB	Misc Expense	AB6	EPR Expense	Wildlife	WILDFR076: Situational Awareness and Forecasting Initiatives - Advanced Fire Modeling	E4.4, O4.1 E4.4, O4.2 E4.4, O4.5	Yes	N/A	N/A	8,602.7	-	(8,602.7)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
15	Expense	Electric Distribution	AB	Misc Expense	AB6	EPR Expense	Wildlife	WILDFR076: Situational Awareness and Forecasting Initiatives - Meteorology	E4.4, O4.1 E4.4, O4.2 E4.4, O4.5	Yes	N/A	N/A	455.3	-	(455.3)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
16	Expense	Electric Distribution	AB	Misc Expense	AB6	EPR Expense	Wildlife	WILDFR076: Situational Awareness and Forecasting Initiatives - Fire Potential Index	E4.4, O4.1 E4.4, O4.2 E4.4, O4.5	Yes	N/A	N/A	383.9	-	(383.9)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
17	Expense	Electric Distribution	AB	Misc Expense	AB6	EPR Expense	Wildlife	WILDFR008: Safety and Restorative Protection	E4.4, O4.1 E4.4, O4.2 E4.4, O4.5	Yes	N/A	N/A	26,919.2	-	(26,919.2)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
18	Expense	Electric Distribution	AB	Misc Expense	AB6	EPR Expense	Wildlife	WILDFR009: Community Wildlife Safety Program PMO	E4.4, O4.1 E4.4, O4.2 E4.4, O4.5	Yes	N/A	N/A	-	14,994.2	14,994.2	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
19	Expense	Electric Distribution	AB	Misc Expense	8	Not assigned	SRM Total	SRM Total	E4.4, O4.1 E4.4, O4.2 E4.4, O4.3 E4.4, O4.4	No	Ongoing	Annual	63,301.4	76,372.4	13,071.0	20.0%	Y	Y	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	Actual program expenses were above imputed regulatory values due to a reduction in funding to this program in the 2023 GRC Final Decision. PG&E's forecast for SRM miscellaneous expenses for Electric Distribution in the 2023 GRC was reduced in the 2023 GRC Final Decision. PG&E continues to incur costs for the support activities described in the completion status statement.	Not Utilized	On-Target	On-Target	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. MAT AB6 tracks costs for maintenance ongoing programs that include special activities that support electric operations including Regulatory Compliance and Quality Assurance, the Corrective Action Program Case Response Unit, and the Compliance Group. PG&E expects to continue to be over budget for this program in the 2023 GRC cycle.							
20	Expense	Electric Distribution	AB	Misc Expense	8	Not assigned	Distribution Outback	DOVDH005: Additional Asset Data Capture	E4.4, O4.1 E4.4, O4.2 E4.4, O4.3 E4.4, O4.4	Yes	N/A	N/A	898.1	-	(898.1)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
21	Expense	Electric Distribution	AB	Misc Expense	8	Not assigned	Distribution Outback	DOVDH009: Improved Distribution Risk Model	E4.4, O4.1 E4.4, O4.2 E4.4, O4.3 E4.4, O4.4	Yes	N/A	N/A	803.0	-	(803.0)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
22	Expense	Electric Distribution	AB	Misc Expense	8	Not assigned	Wildlife	WILDFR006: PSPS Production Initiatives	E4.4, O4.1 E4.4, O4.2 E4.4, O4.3 E4.4, O4.4	Yes	N/A	N/A	2,037.1	-	(2,037.1)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
23	Expense	Electric Distribution	AB	Misc Expense	8	Not assigned	Wildlife	WILDFR009: Community Wildlife Safety Program PMO	E4.4, O4.1 E4.4, O4.2 E4.4, O4.3 E4.4, O4.4	Yes	N/A	N/A	14,007.3	15,987.6	1,980.3	14.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
24	Expense	Electric Distribution	AB	Misc Expense	8	Not assigned	Wildlife	WILDFR076: Situational Awareness and Forecasting Initiatives - Sensor ID	E4.4, O4.1 E4.4, O4.2 E4.4, O4.3 E4.4, O4.4	Yes	N/A	N/A	3,936.4	0.0	(3,936.4)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
25	Expense	Electric Distribution	AB	Misc Expense	8	Not assigned	Wildlife	WILDFR076: System Hardening - Remote Grid	E4.4, O4.1 E4.4, O4.2 E4.4, O4.3 E4.4, O4.4	Yes	N/A	N/A	-	2,458.5	2,458.5	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
26	Expense	Electric Distribution	AB	Misc Expense	8	Not assigned	Wildlife	WILDFR002: System Hardening	E4.4, O4.1 E4.4, O4.2 E4.4, O4.3 E4.4, O4.4	Yes	N/A	N/A	-	877.7	877.7	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
27	Expense	Electric Distribution	AB	Misc Expense	8	Not assigned	Wildlife	WILDFR076: System Hardening - Remote Grid	E4.4, O4.1 E4.4, O4.2 E4.4, O4.3 E4.4, O4.4	Yes	N/A	N/A	1,023.7	-	(1,023.7)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
28	Expense	Electric Distribution	AB	Misc Expense	8	Not assigned	Distribution Outback	DOVDH011: Remote Grid	E4.4, O4.1 E4.4, O4.2 E4.4, O4.3 E4.4, O4.4	Yes	N/A	N/A	1,023.7	-	(1,023.7)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
29	Expense	Electric Distribution	AB	Misc Expense	8	Not assigned	Wildlife	POST-GRC Post-GRC Mitigation	E4.4, O4.1 E4.4, O4.2 E4.4, O4.3 E4.4, O4.4	Yes	N/A	N/A	-	24.88	24.88	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
30	Expense	Electric Distribution	AB	Misc Expense	8	Not assigned	SRM (NON-RAMP)	SRM (NON-RAMP)	E4.4, O4.1 E4.4, O4.2 E4.4, O4.3 E4.4, O4.4	Yes	N/A	N/A	40,305.4	61,987.3	21,681.9	53.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

**TABLE 3-3
2023 GRC CYCLE ELECTRIC DISTRIBUTION EXPENSE COMPARISON BY MAT CODE FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	Type (OSM Expense or Capital)	Functional Area	MWC	MWC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Treasury Reference	RAMP Roll-up (Yes/No)	Program / Project Life (Years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$ (K))	Spending Percent Variance for 2023 (%) (SI/OP/MS)	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Imputed Adopted Units	2023 Actual Units	Difference for 2023 # of Units (O/N)	Unit Percent Variance for 2023 (%) (SI/OP/MS)	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	Scope (L, O, or T)	Schedule (L, O, or T)	Budget (L, O, or T)	Status	Completion Status Statement			
31	Expense	Electric Distribution	AB	Road & Highways Maintenance	N/A	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 8	No	Ongoing	Annual	10,437.8	9,189.5	(1,248.3)	-12.0%	No	No	# of Field Closes	854,733	765,485	(89,248)	-10.4%	No	Below variance threshold	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
32	Expense	Electric Distribution	AT	Emerging Technology	#	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 21	No	Ongoing	Annual	2,185.1	-	(2,185.1)	-100.0%	No	No	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	No	Below variance threshold	Not utilized	On-Target	On-Target	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to fund Research and Development (R&D) Emerging Technology public partnership. Actual research and development (R&D) support costs that were adopted in MAT Code AT in the 2023 GRC were recorded in MAT Code AB. PG&E incurred approximately two million dollars in 2023, recorded in MAT Code AB, for emerging technology utility partnerships, which is aligned with the GRC-allocated amounts.			
33	Expense	Electric Distribution	DA	Dist. Operate System	BAF	Dist. Operate	SRM Total	SRM Total	Ex 4, Ch 4.6 Ex 4, Ch 7	No	Ongoing	Annual	27,814.9	18,147.8	(9,667.1)	-34.8%	No	No	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	No	Actual program expenses were below imputed regulatory values due to some work forecast in this MAT Code being recorded to routine and major emergency. In addition, weather conditions were favorable in 2023 and weather related costs, like distribution operations to support EPSS, were lower than forecasted.	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. This program includes routine maintenance work to support programs like EPSS. MAT BAF primarily covers labor costs for the Distribution Operators, who manage and control the electric system distribution grid. Their activities include: monitoring the distribution system, performing system configuration changes, such as switching and circuit reconfiguration, and processing switching applications for work that enables construction to maintain and improve electric distribution system infrastructure.			
34	Expense	Electric Distribution	BA	Dist. Operate System	BAF	Dist. Operate	Wide	WLDPR-M003: Enhanced Powerline Safety Settings	Ex 4, Ch 4.6 Ex 4, Ch 7	Yes	N/A	N/A	1,822.2	791.8	(1,030.4)	-56.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
35	Expense	Electric Distribution	BA	Dist. Operate System	BAF	Dist. Operate	SRM (NON-RAMP)	SRM (NON-RAMP)	Ex 4, Ch 4.6 Ex 4, Ch 7	Yes	N/A	N/A	25,992.9	17,398.0	(8,594.9)	-33.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
36	Expense	Electric Distribution	BA	Dist. Operate System	BAH	FLSR Maintenance	SRM Total	SRM Total	Ex 4, Ch 4.6 Ex 4, Ch 7	No	Ongoing	Annual	4,252.9	3,794.5	(458.5)	-11.0%	No	No	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	No	Below variance threshold	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
37	Expense	Electric Distribution	BA	Dist. Operate System	BAH	FLSR Maintenance	Wide	WLDPR-M003: Enhanced Powerline Safety Settings	Ex 4, Ch 4.6 Ex 4, Ch 7	Yes	N/A	N/A	489.6	348.0	(141.6)	-29.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
38	Expense	Electric Distribution	BA	Dist. Operate System	BAH	FLSR Maintenance	SRM (NON-RAMP)	SRM (NON-RAMP)	Ex 4, Ch 4.6 Ex 4, Ch 7	Yes	N/A	N/A	3,763.3	3,436.9	(326.4)	-8.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
39	Expense	Electric Distribution	DA	Dist. Operate System	#	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 4.6 Ex 4, Ch 7	No	Ongoing	Annual	-	2,450.3	2,450.3	100.0%	No	No	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	No	Below variance threshold	Not utilized	On-Target	On-Target	Over	Proceeding as Planned	N/A			
40	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BF1	Dist. Aerial Inspections	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 10	No	Ongoing	Annual	-	7,431.9	7,431.9	100.0%	No	No	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	No	Actual program expenses were above imputed regulatory values due to this program not being forecasted in the 2023 GRC. PG&E incurred costs in 2023 to pilot an aerial inspection program in WFD, which allows us to detect conditions that are challenging to detect from ground inspections. The addition of aerial inspections to PG&E's distribution inspection portfolio enabled PG&E to address an "Area of Continued Improvement" from the WMP proceeding, and bring PG&E into consistency with ISO&E and SCE, which also conduct risk-based aerial inspections in WFD.	Not utilized	Over	Over	Over	Emerging	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to identify abnormal conditions on PG&E assets through aerial inspection.			
41	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BF3	UG BART Cable Test/Insp	SRM Total	SRM Total	Ex 4, Ch 10	No	Ongoing	Annual	89.0	-	(89.0)	-100.0%	No	No	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	No	Below variance threshold	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
42	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BF3	UG BART Cable Test/Insp	Underground	DUNDC001: Patrols	Ex 4, Ch 10	No	N/A	N/A	89.0	-	(89.0)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
43	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BF4	UG Auto Mer Bath Test/Insp	SRM Total	SRM Total	Ex 4, Ch 10	No	Ongoing	Annual	146.2	89.0	(57.3)	-39.2%	No	No	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	No	Below variance threshold	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
44	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BF4	UG Auto Mer Bath Test/Insp	Underground	DUNDC001: Patrols	Ex 4, Ch 10	No	N/A	N/A	146.2	89.0	(57.3)	-39.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
45	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BFA	OH Patrol	SRM Total	SRM Total	Ex 4, Ch 10	No	Ongoing	Annual	6,096.3	7,613.3	2,517.0	41.3%	No	No	# of Poles Patrolled	1,368,233	1,344,289	(23,944)	-1.8%	No	Below variance threshold	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
46	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BFA	OH Patrol	Distribution Overhead	DOVHD-C013: Patrols - Distribution Overhead	Ex 4, Ch 10	No	N/A	N/A	6,096.3	7,613.3	2,517.0	41.3%	N/A	N/A	# of Poles Patrolled	1,368,233	1,344,289	(23,944)	-1.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
47	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BFA	OH Patrol	Wide	WLDPR-C011: Patrols - Distribution Overhead	Ex 4, Ch 10	No	N/A	N/A	6,096.3	7,613.3	2,517.0	41.3%	N/A	N/A	# of Poles Patrolled	1,368,233	1,344,289	(23,944)	-1.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
48	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BFB	OH Insp	SRM Total	SRM Total	Ex 4, Ch 10	No	Ongoing	Annual	53,673.8	65,428.3	11,754.5	21.9%	No	No	# of Poles Inspected	508,807	550,762	41,955	8.2%	No	Actual program expenses were above imputed regulatory values due to new inspection criteria and the implementation of higher inspection frequencies in WFD. PG&E conducted approximately 42,000 more inspections than were adopted in the 2023 GRC, along with increases in costs above imputed adopted. In addition, the 2023 GRC Final Decision reduced PG&E's forecast for Fault Safety Assessments that PG&E completed in connection with this program.	Below variance threshold	Over	Over	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to identify abnormal conditions on PG&E assets. See cost variance explanation for additional details.			
49	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BFB	OH Insp	Distribution Overhead	DOVHD-C006: Inspections - Distribution Overhead	Ex 4, Ch 10	No	N/A	N/A	53,673.8	65,428.3	11,754.5	21.9%	N/A	N/A	# of Poles Inspected	508,807	550,762	41,955	8.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
50	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BFB	OH Insp	Wide	WLDPR-C01A: Inspections - Distribution Overhead	Ex 4, Ch 10	No	N/A	N/A	53,673.8	65,428.3	11,754.5	21.9%	N/A	N/A	# of Poles Inspected	508,807	550,762	41,955	8.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
51	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BFC	OH Insp Infrared	SRM Total	SRM Total	Ex 4, Ch 10	No	Ongoing	Annual	2,836.0	20.9	(2,815.1)	-99.3%	No	No	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	No	Below variance threshold	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
52	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BFC	OH Insp Infrared	Distribution Overhead	DOVHD-C008: Infrared Inspections - Distribution Overhead	Ex 4, Ch 10	No	N/A	N/A	2,836.0	20.9	(2,815.1)	-99.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
53	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BFC	OH Insp Infrared	Wide	WLDPR-C01B: Infrared Inspections - Distribution Overhead	Ex 4, Ch 10	No	N/A	N/A	2,836.0	20.9	(2,815.1)	-99.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
54	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BFD	UG Patrol	SRM Total	SRM Total	Ex 4, Ch 10	No	Ongoing	Annual	2,881.1	3,142.4	461.3	17.2%	No	No	# of Enclosures Patrolled	275,158	288,305	(1,853)	-0.7%	No	Below variance threshold	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
55	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BFD	UG Patrol	Underground	DUNDC001: Patrols	Ex 4, Ch 10	No	N/A	N/A	2,881.1	3,142.4	461.3	17.2%	N/A	N/A	# of Enclosures Patrolled	275,158	288,305	(1,853)	-0.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
56	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BFE	UG Insp Infrared	SRM Total	SRM Total	Ex 4, Ch 10	No	Ongoing	Annual	14,646.4	16,029.2	1,482.7	10.2%	No	No	# of Enclosures Inspected	134,679	148,058	14,019	10.4%	No	Below variance threshold	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
57	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BFE	UG Insp Infrared	Underground	DUNDC001: Patrols	Ex 4, Ch 10	No	N/A	N/A	14,646.4	16,029.2	1,482.7	10.2%	N/A	N/A	# of Enclosures Inspected	134,679	148,058	14,019	10.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
58	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BFH	UG Manhole Insp Annual	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 10	No	Ongoing	Annual	596.7	-	(596.7)	-100.0%	No	No	# of Manholes/Vaults Inspected	1,546	-	(1,546)	-100.0%	No	Below variance threshold	Actual program units were below imputed units due to prioritization to other work in MWC BF	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to inspect manholes. Note that manholes are also inspected as part of GDO. No underground inspections program. It is not known at this time if this will continue to be a lower priority.			
59	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BFG	OH Equip Test	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 10	No	Ongoing	Annual	2,603.8	3,717.3	1,063.5	40.8%	No	No	# of Equipment Inspected	25,076	34,150	(1,448)	-5.7%	No	Below variance threshold	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
60	Expense	Electric Distribution	BF	E-TAD Patrol/Insp	BFH	Inspection Projects	SRM Total	SRM Total	Ex 4, Ch 10	No	Ongoing	Annual	4,832.0	6,470.0	1,637.9	33.9%	No	No	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	No	Below variance threshold	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			

TABLE 3-3
2023 GRC CYCLE ELECTRIC DISTRIBUTION EXPENSE COMPARISON BY MAT CODE FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)

Line No	Type (G&M Expense or Capital)	Functional Area	MWC	MWC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Treasury Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Impacted Assets Costs	2023 Actual Costs	Difference for 2023 (\$ (K))	Spending Percent Variance for 2023 (%) (SI/SP/SA)	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Impacted Assets Units	2023 Actual Units	Difference for 2023 # of Units (O/N)	Unit Percent Variance for 2023 (%) (SI/SP/SA)	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	Scope (L, O, or T)	Schedule (L, O, or T)	Budget (L, O, or T)	Status	Completion Status Statement				
61	Expense	Electric Distribution	BF	E-TAD Patrol/Inspection	BFH	Inspection Projects	Wide	WLDPR-CO1E Inspection	Ex 4, Cl 10	No	N/A	N/A	4,832.5	6,470.0	1,637.5	33.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
62	Expense	Electric Distribution	BF	E-TAD Patrol/Inspection	BFJ	OH Patrol CRT Post Outage	SRM Total	SRM Total	Ex 4, Cl 10	No	Changing	Annual	186.0	146.3	(139.7)	-75.4%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not Utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
63	Expense	Electric Distribution	BF	E-TAD Patrol/Inspection	BFJ	OH Patrol CRT Post Outage	Wide	WLDPR-M02S Enhanced Powerline Safety Settings	Ex 4, Cl 10	Yes	N/A	N/A	-	51.4	51.4	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
64	Expense	Electric Distribution	BF	E-TAD Patrol/Inspection	BFJ	OH Patrol CRT Post Outage	SRM (NON-RAMP)	SRM (NON-RAMP)	Ex 4, Cl 10	Yes	N/A	N/A	186.0	94.8	(71.2)	-38.2%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
65	Expense	Electric Distribution	BF	E-TAD Patrol/Inspection	F	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Cl 10	No	Changing	Annual	-	39,972.3	39,972.3	100.0%	YES	YES	Actual program expenses were above impacted regulatory values due to the recorded costs in this program were not tracked in the 2023 GRC. These increased expenses are associated with headcount for the System Inspections Quality Control (QC) team, formed to perform system inspection QC audits and enforce the associated quality plans for HPTD assets.	N/A	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not Utilized	Over	Over	Over	Emergent	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to provide electric service turn-on and shut-off based on customer requests.			
66	Expense	Electric Distribution	BH	E-Dist Routine Emergency	N/A	Not assigned	SRM Total	SRM Total	Ex 4, Cl 4.6 Ex 4, Cl 4.8	No	Changing	Annual	103,127.6	118,478.8	(15,351.2)	-14.9%	N/A	N/A	Not Utilized - The variety of work activities in this program makes it difficult to identify a single unit of measure.	N/A	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not Utilized	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to provide electric service turn-on and shut-off based on customer requests and to restore customers to service as soon as possible. Program spend over the course of the remainder of the GRC cycle is dependent on weather conditions.			
67	Expense	Electric Distribution	BH	E-Dist Routine Emergency	N/A	Not assigned	Wide	WLDPR-M02S Enhanced Powerline Safety Settings	Ex 4, Cl 4.6 Ex 4, Cl 4.8	Yes	N/A	N/A	117,183.8	15,278.9	(101,904.9)	-8.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
68	Expense	Electric Distribution	BH	E-Dist Routine Emergency	N/A	Not assigned	SRM (NON-RAMP)	SRM (NON-RAMP)	Ex 4, Cl 4.6 Ex 4, Cl 4.8	Yes	N/A	N/A	75,073.7	106,201.9	31,128.2	41.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
69	Expense	Electric Distribution	BK	Main Other Equip	BKA	Transformer Repr Emeryville	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Cl 11	No	Changing	Annual	1,075.3	1,997.6	(922.3)	-85.9%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	1,023	1,903	880	86.7%	YES	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to repair and refurbish transformers to meet demand.					
70	Expense	Electric Distribution	BK	Main Other Equip	BKJ	Equip Overhaul Emeryville	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Cl 11	No	Changing	Annual	-	104.1	104.1	100.0%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
71	Expense	Electric Distribution	BK	Main Other Equip	BKC	Equip Warranty Repr Emeryville	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Cl 11	No	Changing	Annual	-	298.6	298.6	100.0%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
72	Expense	Electric Distribution	CD	Provide Field Service	COO	Electric Start/Stop	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Cl 9	No	Changing	Annual	482.3	245.7	(236.6)	-49.1%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	# of Commercial Turn-On/Off	3,604	1,710	(1,894)	-52.4%	YES	Below variance threshold.	Actual program units were below impacted regulatory values due to fewer customer-generated start/stop requests than forecast.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to provide electric service turn-on and shut-off based on customer requests.			
73	Expense	Electric Distribution	CD	Provide Field Service	COH	Electric Trouble Call Equip	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Cl 7	No	Changing	Annual	6,050.1	7,150.0	1,099.9	17.0%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
74	Expense	Electric Distribution	CD	Provide Field Service	COU	Electric - Other	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Cl 7	No	Changing	Annual	11,131.9	17,159.1	6,027.3	54.1%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
75	Expense	Electric Distribution	CD	Provide Field Service	F	Not assigned	SRM Total	SRM Total	Ex 4, Cl 7	No	Changing	Annual	6,050.3	7,217.1	666.8	9.2%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
76	Expense	Electric Distribution	CD	Provide Field Service	F	Not assigned	Wide	WLDPR-M02S Enhanced Powerline Safety Settings	Ex 4, Cl 7	Yes	N/A	N/A	-	298.3	298.3	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
77	Expense	Electric Distribution	CD	Provide Field Service	F	Not assigned	SRM (NON-RAMP)	SRM (NON-RAMP)	Ex 4, Cl 7	Yes	N/A	N/A	6,050.3	6,992.7	942.4	9.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
78	Expense	Electric Distribution	EY	Change/Maint Job Elec Meter	N/A	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Cl 8	No	Changing	Annual	8,478.8	9,001.3	522.5	6.2%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	# of Field Orders	36,758	35,024	(1,734)	-4.7%	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A				
79	Expense	Electric Distribution	FZ	E-Dist Planning & Ops Engineer	FZA	Genl Engineer	SRM Total	SRM Total	Ex 4, Cl 17	No	Changing	Annual	22,543.5	17,070.7	(5,472.8)	-24.3%	NO	YES	Not Utilized - The variety of work activities in this program makes it difficult to identify a single unit of measure.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
80	Expense	Electric Distribution	FZ	E-Dist Planning & Ops Engineer	FZA	Genl Engineer	Distribution Overhaul	DOVHD-028 Annual Protection Review	Ex 4, Cl 17	Yes	N/A	N/A	16,913.8	12,145.3	(4,768.5)	-28.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
81	Expense	Electric Distribution	FZ	E-Dist Planning & Ops Engineer	FZA	Genl Engineer	Wide	WLDPR-M02S Enhanced Powerline Safety Settings	Ex 4, Cl 4.6	Yes	N/A	N/A	2,111.4	2,226.6	115.2	5.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
82	Expense	Electric Distribution	FZ	E-Dist Planning & Ops Engineer	FZA	Genl Engineer	Wide	WLDPR-M07A Structural Assessment and Forecasting Initiatives - Line Sensors	Ex 4, Cl 4.3	Yes	N/A	N/A	3,516.4	2,698.8	(817.6)	-23.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
83	Expense	Electric Distribution	FZ	E-Dist Planning & Ops Engineer	FZB	Village Complaints Invest	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Cl 17	No	Changing	Annual	653.4	1,791.8	1,138.4	175.8%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
84	Expense	Electric Distribution	FZ	E-Dist Planning & Ops Engineer	FZC	Transformer Reports Manage	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Cl 17	No	Changing	Annual	237.1	-	(237.1)	-100.0%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
85	Expense	Electric Distribution	FZ	E-Dist Planning & Ops Engineer	FZD	Field Work Plan	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Cl 17	No	Changing	Annual	899.1	283.3	(615.8)	-68.5%	NO	NO	Not Utilized - The variety of work activities in this program makes it difficult to identify a single unit of measure.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
86	Expense	Electric Distribution	FZ	E-Dist Planning & Ops Engineer	FZE	Troubleshoot Field Work	SRM Total	SRM Total	Ex 4, Cl 17	No	Changing	Annual	1,638.8	6,180.9	4,542.1	277.3%	NO	NO	Not Utilized - The variety of work activities in this program makes it difficult to identify a single unit of measure.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
87	Expense	Electric Distribution	FZ	E-Dist Planning & Ops Engineer	FZE	Troubleshoot Field Work	Wide	WLDPR-M02S Enhanced Powerline Safety Settings	Ex 4, Cl 4.3	Yes	N/A	N/A	-	2,617.8	2,617.8	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
88	Expense	Electric Distribution	FZ	E-Dist Planning & Ops Engineer	FZE	Troubleshoot Field Work	SRM (NON-RAMP)	SRM (NON-RAMP)	Ex 4, Cl 17	Yes	N/A	N/A	1,638.8	2,642.7	1,003.9	61.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
89	Expense	Electric Distribution	GA	E-TAD Maint On Poles	GAA	Pole Test & Treat	SRM Total	SRM Total	Ex 4, Cl 12	No	Changing	Annual	21,699.8	34,048.8	12,349.0	57.1%	N/A	N/A	# of Inspections	268,833	117,091	(151,742)	-56.9%	N/A	Actual program expenses were above impacted regulatory values due to an increase in unit costs on the higher risk circuits performed in 2023. In addition, in 2023 PG&E obtained a new inspection method to, under certain conditions, conduct both ground and aerial inspections simultaneously. The costs for the pilot are included in the 2023 and 2024 costs. The pilot was successful and PG&E is incorporating the method into this program.	Actual program units were below impacted regulatory values due to increase in unit costs, leading to fewer program units being completed. In 2023 PG&E focused on higher risk circuits which tend to cost more than lower risk circuits.	Under	Under	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to inspect and treat wood poles intensively, to ensure the poles are in good condition and prevent generation failure in accordance with OSHA. During the 2023 GRC cycle, PG&E expects to continue to perform fewer units due to an increase in unit costs.				
90	Expense	Electric Distribution	GA	E-TAD Maint On Poles	GAA	Pole Test & Treat	Distribution Overhaul	DOVHD-011 Pole	Ex 4, Cl 12	No	N/A	N/A	21,699.8	34,048.8	12,349.0	57.1%	N/A	N/A	# of Inspections	268,833	117,091	(151,742)	-56.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

**TABLE 3-3
2023 GRC CYCLE ELECTRIC DISTRIBUTION EXPENSE COMPARISON BY MAT CODE FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	Type (OMB Expense or Capital)	Functional Area	MVC	MVC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Treasury Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (\$K)	Spending Variance for 2023 (%) (\$K/2023)	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Imputed Adopted Units	2023 Actual Units	Difference for 2023 (# of Units) (#K)	Unit Variance for 2023 (%) (\$K/2023)	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	Scope (L, O, or T)	Schedule (L, O, or T)	Budget (L, O, or T)	Status	Completion Status Statement					
91	Expense	Electric Distribution	GA	E-TAD Maint On-Pole	DAA	Pole Test & Treat	Wildfire	WLDPR-C12A: Road Pole Inspection Program	Ex 4, O: 12	No	N/A	N/A	21,689.8	34,048.8	12,359.0	57.1%	N/A	N/A	# of inspections	268,833	117,091	(151,742)	-54.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
92	Expense	Electric Distribution	GA	E-TAD Maint On-Pole	DAB	Pole Joint USI Maint Reimb	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, O: 12	No	Charging	Annual	-	177.5	177.5	100.0%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not Utilized	On-Target	On-Target	Over	Proceeding as Planned	N/A					
93	Expense	Electric Distribution	GA	E-TAD Maint On-Pole	DAC	Pole Analyze Loading	SRM Total	SRM Total	Ex 4, O: 12	No	Charging	Annual	22,710.1	13,502.1	(9,208.0)	-40.5%	NO	N/A	# of Poles Analyzed	205,000	162,050	(42,950)	-19.0%	NO	Actual program expenses were below imputed regulatory values due to reutilization within MFWC CA to perform higher priority work, such as intrusive inspections in MAT DAA.	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to review and analyze pole loading in order to prevent overloaded poles and premature pole break. Over the remainder of the GRC cycle, PG&E plans to increase program spending and complete more units consistent with imputed adopted amounts.					
94	Expense	Electric Distribution	GA	E-TAD Maint On-Pole	DAC	Pole Analyze Loading	Wildfire	WLDPR-C12B: Pole Analyze Loading	Ex 4, O: 12	No	N/A	N/A	22,710.1	13,502.1	(9,208.0)	-40.5%	NO	N/A	# of Poles Analyzed	205,000	162,050	(42,950)	-19.0%	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
95	Expense	Electric Distribution	GA	E-TAD Maint On-Pole	DAD	Pole Reinforce	SRM Total	SRM Total	Ex 4, O: 12	No	Charging	Annual	4,403.5	7,800.1	3,396.6	72.8%	NO	N/A	# of Reinforcements	4,500	3,982	(518)	-11.5%	NO	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
96	Expense	Electric Distribution	GA	E-TAD Maint On-Pole	DAD	Pole Reinforce	Distribution Overhead	DOVHC-D011 Pole	Ex 4, O: 12	No	N/A	N/A	4,403.5	7,800.1	3,396.6	72.8%	NO	N/A	# of Reinforcements	4,500	3,982	(518)	-11.5%	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
97	Expense	Electric Distribution	GA	E-TAD Maint On-Pole	DAD	Pole Reinforce	Wildfire	WLDPR-C12E: Pole Reinforcement Program	Ex 4, O: 12	No	N/A	N/A	4,403.5	7,800.1	3,396.6	72.8%	NO	N/A	# of Reinforcements	4,500	3,982	(518)	-11.5%	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
98	Expense	Electric Distribution	GA	E-TAD Maint On-Pole	DAF	Telco Engr New Non-Reimburs	SRM Total	SRM Total	Ex 4, O: 12	No	Charging	Annual	176.2	-	(176.2)	-100.0%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not Utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A					
99	Expense	Electric Distribution	GA	E-TAD Maint On-Pole	DAF	Telco Engr New Non-Reimburs	Distribution Overhead	DOVHC-D011 Pole	Ex 4, O: 12	No	N/A	N/A	176.2	-	(176.2)	-100.0%	NO	NO	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not Utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A					
100	Expense	Electric Distribution	GA	E-TAD Maint On-Pole	DAH	Pole Joint USI Maint Non-Reimb	SRM Total	SRM Total	Ex 4, O: 12	No	Charging	Annual	476.8	444.4	(32.4)	-6.8%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not Utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A					
101	Expense	Electric Distribution	GA	E-TAD Maint On-Pole	DAH	Pole Joint USI Maint Non-Reimb	Distribution Overhead	DOVHC-D011 Pole	Ex 4, O: 12	No	N/A	N/A	476.8	444.4	(32.4)	-6.8%	NO	NO	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not Utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A					
102	Expense	Electric Distribution	GA	E-TAD Maint On-Pole	8	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, O: 12	No	Charging	Annual	(5,287.8)	(5,607.0)	(319.2)	-6.0%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not Utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A					
103	Expense	Electric Distribution	GC	E-Dist Subst O&M	OC1	IS O&M-Engg. Maint Support	SRM Total	SRM Total	Ex 4, O: 15	No	Charging	Annual	5,705.6	4,831.0	(1,069.6)	-18.8%	NO	NO	Not Utilized - The variety of work activities in this program makes it difficult to identify a single unit of measure.	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not Utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A					
104	Expense	Electric Distribution	GC	E-Dist Subst O&M	OC1	IS O&M-Engg. Maint Support	Substation	SBSTN-C008: Design Criteria	Ex 4, O: 15	Yes	N/A	N/A	544.3	2,289.2	1,744.9	320.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
105	Expense	Electric Distribution	GC	E-Dist Subst O&M	OC1	IS O&M-Engg. Maint Support	Substation	SBSTN-C017: Proactive Maintenance	Ex 4, O: 15	Yes	N/A	N/A	4,024.4	2,341.8	(1,682.6)	-41.8%	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	N/A					
106	Expense	Electric Distribution	GC	E-Dist Subst O&M	OC1	IS O&M-Engg. Maint Support	SRM (NON-RAMP)	SRM (NON-RAMP)	Ex 4, O: 15	Yes	N/A	N/A	1,131.9	-	(1,131.9)	-100.0%	NO	NO	Not Utilized - The variety of work activities in this program makes it difficult to identify a single unit of measure.	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not Utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A					
107	Expense	Electric Distribution	GC	E-Dist Subst O&M	OC2	IS O&M-Major Emerg. Clear Maint	SRM Total	SRM Total	Ex 4, O: 15	No	Charging	Annual	15,750.3	4,651.2	(11,099.1)	-70.5%	NO	N/A	Actual program expenses were below imputed regulatory values due to reutilization and funding transfers in our preventative substation programs.	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not Utilized	On-Target	On-Target	Under	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is substation corrective work. PG&E anticipates completing the work as the need arises within the overall priority of the substation portfolio of work over the remainder of the course of the GRC cycle.					
108	Expense	Electric Distribution	GC	E-Dist Subst O&M	OC2	IS O&M-Major Emerg. Clear Maint	Wildfire	WLDPR-M003: Enhanced Powerline Safety Settings	Ex 4, O: 15	Yes	N/A	N/A	807.8	210.5	(597.3)	-73.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	N/A					
109	Expense	Electric Distribution	GC	E-Dist Subst O&M	OC2	IS O&M-Major Emerg. Clear Maint	SRM (NON-RAMP)	SRM (NON-RAMP)	Ex 4, O: 15	Yes	N/A	N/A	14,882.4	4,440.4	(10,442.0)	-70.2%	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	N/A					
110	Expense	Electric Distribution	GC	E-Dist Subst O&M	OC5	Dist Sub enhanced inspections	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, O: 15	No	Charging	Annual	-	1,083.5	1,083.5	100.0%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not Utilized	On-Target	On-Target	Over	Proceeding as Planned	N/A					
111	Expense	Electric Distribution	GC	E-Dist Subst O&M	OCA	Dist: T&R - present maint	SRM Total	SRM Total	Ex 4, O: 15	No	Charging	Annual	1,146.7	1,519.2	372.5	32.5%	NO	NO	# of Transformers Maintained	4,674	5,373	799	17.0%	NO	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
112	Expense	Electric Distribution	GC	E-Dist Subst O&M	OCA	Dist: T&R - present maint	Substation	SBSTN-C017: Proactive Maintenance	Ex 4, O: 15	No	N/A	N/A	1,146.7	1,519.2	372.5	32.5%	NO	N/A	# of Transformers Maintained	4,674	5,373	799	17.0%	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
113	Expense	Electric Distribution	GC	E-Dist Subst O&M	OCB	Dist: Breaker - present maint	SRM Total	SRM Total	Ex 4, O: 15	No	Charging	Annual	833.8	962.1	128.3	15.4%	NO	N/A	# of Breakers Maintained	1,882	1,167	(715)	-38.0%	NO	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	Actual program units were below imputed program units due to higher actual unit costs than forecast. Higher unit costs are generally driven by labor, and resulted in lower program units achieved.						
114	Expense	Electric Distribution	GC	E-Dist Subst O&M	OCB	Dist: Breaker - present maint	Substation	SBSTN-C017: Proactive Maintenance	Ex 4, O: 15	No	N/A	N/A	833.8	962.1	128.3	15.4%	NO	N/A	# of Breakers Maintained	1,882	1,167	(715)	-38.0%	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
115	Expense	Electric Distribution	GC	E-Dist Subst O&M	OC6	Dist Sub: Substation Test Opt	SRM Total	SRM Total	Ex 4, O: 15	No	Charging	Annual	1,028.4	3,607.2	2,027.8	197.3%	NO	NO	# of Relays Maintained	1,423	1,364	(59)	-4.1%	NO	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
116	Expense	Electric Distribution	GC	E-Dist Subst O&M	OC6	Dist Sub: Substation Test Opt	Substation	SBSTN-C017: Proactive Maintenance	Ex 4, O: 15	No	N/A	N/A	1,028.4	3,607.2	2,027.8	197.3%	NO	N/A	# of Relays Maintained	1,423	1,364	(59)	-4.1%	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
117	Expense	Electric Distribution	GC	E-Dist Subst O&M	OC7	Dist: Station Read - present maint	SRM Total	SRM Total	Ex 4, O: 15	No	Charging	Annual	3,311.3	3,254.1	(57.2)	-1.7%	NO	NO	# of Substation Inspections	6,850	6,671	(179)	-2.6%	NO	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
118	Expense	Electric Distribution	GC	E-Dist Subst O&M	OC7	Dist: Station Read - present maint	Substation	SBSTN-C017: Proactive Maintenance	Ex 4, O: 15	No	N/A	N/A	3,311.3	3,254.1	(57.2)	-1.7%	NO	N/A	# of Substation Inspections	6,850	6,671	(179)	-2.6%	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
119	Expense	Electric Distribution	GC	E-Dist Subst O&M	OC7	Dist: Station Read - present maint	Wildfire	WLDPR-C003: Patrols and Inspections - Substation	Ex 4, O: 15	No	N/A	N/A	3,311.3	3,254.1	(57.2)	-1.7%	NO	N/A	# of Substation Inspections	6,850	6,671	(179)	-2.6%	NO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
120	Expense	Electric Distribution	GC	E-Dist Subst O&M	OC8	Dist: Gnd station - present maint	SRM Total	SRM Total	Ex 4, O: 15	No	Charging	Annual	536.5	676.5	140.0	26.3%	NO	NO	# of Substation Preventative tasks	1,177	1,866	689	58.5%	N/A	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	Actual program units were above imputed program units in 2023 due to the handling of work for exceptional circumstances, which resulted in additional program units being pulled into scope in 2023 for a lower unit cost.						

**TABLE 3-3
2023 GRC CYCLE ELECTRIC DISTRIBUTION EXPENSE COMPARISON BY MAT CODE FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	Type (OGM Expense or Capital)	Functional Area	MVC	MVC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Treasury Reference	RAMP Rollup (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Actual Costs	2023 Actual Costs	Difference for 2023 (\$ (K))	Spending Percent Variance for 2023 (%) (SI/OP/MS)	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Imputed Actual Units	2023 Actual Units	Difference for 2023 # of Units (O/N)	Unit Percent Variance for 2023 (%) (SI/OP/MS)	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	Scope (L, O, or T)	Schedule (L, O, or T)	Budget (L, O, or T)	Status	Completion Status Statement		
121	Expense	Electric Distribution	QC	E Dist Subst O&M	OCF	Dist: One station prevent maint	Substation	SBSTNCD17: Preventive Maintenance	Ex 4, Ch 15	No	N/A	N/A	639.5	676.5	137.1	21.4%	N/A	N/A	# of Substation Preventative tasks	1,177	1,866	689	58.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
122	Expense	Electric Distribution	QC	E Dist Subst O&M	OCF	Dist: Batteries - prev maint	SRM Total	SRM Total	Ex 4, Ch 15	No	Charging	Annual	628.9	498.1	(130.8)	-20.8%	N/A	N/A	# of Batteries Maintained	1,239	1,306	67	5.4%	N/A	Below variance threshold	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
123	Expense	Electric Distribution	QC	E Dist Subst O&M	OCF	Dist: Batteries - prev maint	Substation	SBSTNCD17: Preventive Maintenance	Ex 4, Ch 15	No	N/A	N/A	628.9	498.1	(130.8)	-20.8%	N/A	N/A	# of Batteries Maintained	1,239	1,306	67	5.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
124	Expense	Electric Distribution	QC	E Dist Subst O&M	ODD	Vegetation Management	SRM Total	SRM Total	Ex 4, Ch 15	No	Charging	Annual	10,476.9	9,039.8	(1,437.1)	-13.6%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
125	Expense	Electric Distribution	QC	E Dist Subst O&M	ODD	Vegetation Management	Substation	SBSTNCD01: Vegetation Management	Ex 4, Ch 15	No	N/A	N/A	10,476.9	9,039.8	(1,437.1)	-13.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
126	Expense	Electric Distribution	QC	E Dist Subst O&M	ODD	Vegetation Management	Wildfire	WLDPRCD06: Vegetation Management - Substation	Ex 4, Ch 15	No	N/A	N/A	10,476.9	9,039.8	(1,437.1)	-13.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
127	Expense	Electric Distribution	QC	E Dist Subst O&M	SOH	Building Maintenance	SRM Total	SRM Total	Ex 4, Ch 15	No	Charging	Annual	1,101.2	3,638.9	2,537.7	230.0%	N/A	N/A	Not Utilized - The variety of work activities in this program makes it difficult to identify a single unit of measurement.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
128	Expense	Electric Distribution	QC	E Dist Subst O&M	SOH	Building Maintenance	Substation	SBSTNCD17: Preventive Maintenance	Ex 4, Ch 15	No	N/A	N/A	1,101.2	3,638.9	2,537.7	230.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
129	Expense	Electric Distribution	QC	E Dist Subst O&M	OCI	Dist: Switches - prevent maint	SRM Total	SRM Total	Ex 4, Ch 15	No	Charging	Annual	108.8	152.7	43.9	40.3%	N/A	N/A	# of Switches Maintained	112	71	(41)	-37.0%	N/A	Below variance threshold	Actual program units were below imputed program units due to higher actual unit costs than forecast. Higher unit costs are generally driven by labor, and resulted in fewer program units performed.	Under	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The scope of work for this program is performed in accordance with GO174, which sets both requirements for electric utility substation inspections and maintenance.		
130	Expense	Electric Distribution	QC	E Dist Subst O&M	OCI	Dist: Switches - prevent maint	Substation	SBSTNCD17: Preventive Maintenance	Ex 4, Ch 15	No	N/A	N/A	108.8	152.7	43.9	40.3%	N/A	N/A	# of Switches Maintained	112	70	(42)	-37.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
131	Expense	Electric Distribution	QC	E Dist Subst O&M	OCU	Dist Sub: Corrective (TR)	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 15	No	Charging	Annual	10,697.0	13,911.3	3,214.3	30.0%	N/A	N/A	# of Substation Corrective tasks	4,227	8,811	3,904	92.0%	N/A	Below variance threshold	Actual program units were above imputed program units in 2023 due to the bundling of work for executional efficiencies, which resulted in additional program units being pulled into scope in 2023 for a lower unit cost.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The scope of work for this program is performed in accordance with GO174, which sets both requirements for electric utility substation inspections and maintenance.		
132	Expense	Electric Distribution	QC	E Dist Subst O&M	OCM	Breaker Mechanism Services	SRM Total	SRM Total	Ex 4, Ch 15	No	Charging	Annual	1,589.8	2,527.6	937.8	59.1%	N/A	N/A	# of Mechanism Services	710	844	134	18.9%	N/A	Below variance threshold	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
133	Expense	Electric Distribution	QC	E Dist Subst O&M	OCM	Breaker Mechanism Services	Substation	SBSTNCD17: Preventive Maintenance	Ex 4, Ch 15	No	N/A	N/A	1,589.8	2,527.6	937.8	59.1%	N/A	N/A	# of Mechanism Services	710	844	134	18.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
134	Expense	Electric Distribution	QC	E Dist Subst O&M	OCQ	Transformer Overhauls	SRM Total	SRM Total	Ex 4, Ch 15	No	Charging	Annual	1,291.8	824.1	(467.7)	-36.2%	N/A	N/A	# of Mechanism Services	151	80	(71)	-46.3%	N/A	Below variance threshold	Actual program units were below imputed program units due to higher actual unit costs than forecast. Higher unit costs are generally driven by labor, and resulted in fewer program units performed.	Under	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The scope of work for this program is performed in accordance with GO174, which sets both requirements for electric utility substation inspections and maintenance.		
135	Expense	Electric Distribution	QC	E Dist Subst O&M	OCQ	Transformer Overhauls	Substation	SBSTNCD17: Preventive Maintenance	Ex 4, Ch 15	No	N/A	N/A	1,291.8	824.1	(467.7)	-36.2%	N/A	N/A	# of Mechanism Services	151	80	(71)	-46.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
136	Expense	Electric Distribution	QC	E Dist Subst O&M	OCB	OKSW MOAS Mechanism Services	SRM Total	SRM Total	Ex 4, Ch 15	No	Charging	Annual	214.7	258.4	43.7	20.4%	N/A	N/A	# of Overhauls	80	91	(11)	-13.7%	N/A	Below variance threshold	Actual program units were below imputed program units due to higher actual unit costs than forecast. Higher unit costs are generally driven by labor, and resulted in fewer program units performed.	Under	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The scope of work for this program is performed in accordance with GO174, which sets both requirements for electric utility substation inspections and maintenance.		
137	Expense	Electric Distribution	QC	E Dist Subst O&M	OCB	OKSW MOAS Mechanism Services	Substation	SBSTNCD17: Preventive Maintenance	Ex 4, Ch 15	No	N/A	N/A	214.7	258.4	43.7	20.4%	N/A	N/A	# of Overhauls	80	91	(11)	-13.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
138	Expense	Electric Distribution	QC	E Dist Subst O&M	OCV	Breaker Overhauls	SRM Total	SRM Total	Ex 4, Ch 15	No	Charging	Annual	21.2	105.3	84.2	397.0%	N/A	N/A	# of Overhauls	5	10	14	280.0%	N/A	Below variance threshold	Actual program units were above imputed program units based on objective to ensure circuit breakers are operating as intended, resulting in more overhauls than forecast.	Over	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The scope of work for this program is performed in accordance with GO174, which sets both requirements for electric utility substation inspections and maintenance.		
139	Expense	Electric Distribution	QC	E Dist Subst O&M	OCV	Breaker Overhauls	Substation	SBSTNCD17: Preventive Maintenance	Ex 4, Ch 15	No	N/A	N/A	21.2	105.3	84.2	397.0%	N/A	N/A	# of Overhauls	5	10	14	280.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
140	Expense	Electric Distribution	QC	E Dist Subst O&M	OCW	Dist Sub: Station Washes	SRM Total	SRM Total	Ex 4, Ch 15	No	Charging	Annual	463.3	410.2	(53.1)	-11.5%	N/A	N/A	# of Substation Preventative tasks	430	460	30	6.5%	N/A	Below variance threshold	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
141	Expense	Electric Distribution	QC	E Dist Subst O&M	OCW	Dist Sub: Station Washes	Substation	SBSTNCD17: Preventive Maintenance	Ex 4, Ch 15	No	N/A	N/A	463.3	410.2	(53.1)	-11.5%	N/A	N/A	# of Substation Preventative tasks	430	460	30	6.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
142	Expense	Electric Distribution	OE	E Dist Mapping	N/A	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 20	No	Charging	Annual	19,272.2	24,968.4	5,696.2	29.6%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not utilized	On-Target	On-Target	Over	Proceeding as Planned	Actual program expenses were above imputed regulatory values due to: (1) expenses to develop and implement PG&E's Asset Data Management Plan; data management standards, tools, analytic products, and data quality improvement projects; and (2) expenses from emergent programs created to improve well-validated data, identify utility data and analytic products, and respond to wildfire related data requirements including the Wildfire Safety Decision GIS Data Standard.	
143	Expense	Electric Distribution	HO	Elec Trans Dist Eng & Tech	NOC	Advanced Dist Mgmt System Dev	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 21	No	10	8	17,229.3	11,059.0	(6,170.3)	-35.8%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not utilized	On-Target	On-Target	Under	Proceeding as Planned	The ADMS program is a one-time program, and is projected to be completed prior to the end of the 2023 GRC cycle. PG&E anticipates continuing to spend below imputed amounts for the remainder of the GRC cycle because the program involves project-based work that may have peaked in the GRC last year.	
144	Expense	Electric Distribution	HO	Elec Trans Dist Eng & Tech	NOD	Distribution Operational Tech	SRM Total	SRM Total	Ex 4, Ch 7	No	Charging	Annual	5,978.0	7,481.5	1,503.5	25.2%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
145	Expense	Electric Distribution	HO	Elec Trans Dist Eng & Tech	NOD	Distribution Operational Tech	Wildfire	WLDPRM02B: Enhanced Protective Safety Settings	Ex 4, Ch 7	Yes	N/A	N/A	-	82.8	82.8	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
146	Expense	Electric Distribution	HO	Elec Trans Dist Eng & Tech	NOD	Distribution Operational Tech	SRM (NON-RAMP)	SRM (NON-RAMP)	Ex 4, Ch 7	Yes	N/A	N/A	5,978.0	7,398.7	1,420.7	23.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
147	Expense	Electric Distribution	HN	E Dist Tree Trim Bal Anct	N/A	Not assigned	SRM Total	SRM Total	Ex 4, Ch 9	No	Charging	Annual	972,013.0	855,187.1	(116,825.9)	-12.0%	N/A	N/A	# of Veg Mgmt Times	1,546,783	1,241,025	(305,758)	-19.8%	N/A	Below variance threshold	Actual program expenses were below imputed regulatory values due to the rescheduling of routine tree work following the fatigue of tree crew and contract inspection workforce to facilitate contract changes. Pre-inspection was 100% completed at this time.	Below variance threshold	Under	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to perform routine tree work. Given the rescheduling that occurred in 2023, PG&E anticipates continuing to perform fewer units than adopted over the remainder of the GRC cycle.	
148	Expense	Electric Distribution	HN	E Dist Tree Trim Bal Anct	N/A	Not assigned	Distribution Overhaul	DOVHD001: Vegetation Management - Distribution Overhaul	Ex 4, Ch 9	No	N/A	N/A	972,013.0	855,187.1	(116,825.9)	-11.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
149	Expense	Electric Distribution	HN	E Dist Tree Trim Bal Anct	N/A	Not assigned	Wildfire	WLDPRM04M: Vegetation Management - Distribution Overhaul	Ex 4, Ch 9	No	N/A	N/A	972,013.0	855,187.1	(116,825.9)	-11.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
150	Expense	Electric Distribution	HO	E T&D Automation & Protection	N/A	Not assigned	SRM Total	SRM Total	Ex 4, Ch 16	No	Charging	Annual	3,118.3	2,893.6	(224.7)	-7.2%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
151	Expense	Electric Distribution	HO	E T&D Automation & Protection	N/A	Not assigned	Distribution Overhaul	DOVHD007: Supervisory Control and Data Acquisition	Ex 4, Ch 16	Yes	N/A	N/A	3,118.3	2,893.6	(224.7)	-7.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
152	Expense	Electric Distribution	HO	E T&D Automation & Protection	N/A	Not assigned	Wildfire	WLDPRM02B: Enhanced Protective Safety Settings	Ex 4, Ch 16	Yes	N/A	N/A	-	72.5	72.5	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
153	Expense	Electric Distribution	HO	Change/Max Asset Cap Mgmt	N/A	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 8	No	Charging	Annual	897.1	203.6	(693.5)	-77.3%	N/A	N/A	# of Asset Orders	1,466	2,027	1,461	99.7%	N/A	Below variance threshold	Actual program units were above imputed program units because of an increase in the need to maintain or change used gas meters. This demand is from either (1) customer requests - e.g. single in-place - or (2) automated system notification for resolution of a meter issue.	Over	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to continue effort to provide gas meter maintenance, based on (1) customer-driven requests, and (2) automated system notifications for meter issue resolution.		
154	Expense	Electric Distribution	IF	E Dist Meter Replacement	N/A	N/A	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 8	No	Charging	Annual	45,380.8	38,396.9	(6,983.9)	-15.4%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	

**TABLE 3-3
2023 GRC CYCLE ELECTRIC DISTRIBUTION EXPENSE COMPARISON BY MAT CODE FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No.	Type (OMB Expense or Capital)	Functional Area	MWC	MWC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Reference	RAMP Rollup (Yes/No)	Program / Project LIn (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$ (K))	Spending Percent Variance for 2023 (%) (Budget/Mile)	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Imputed Adopted Units	2023 Actual Units	Difference for 2023 (\$ of Units (K))	Unit Percent Variance for 2023 (%) (Budget/Mile)	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)	Status	Completion Status Statement					
185	Expense	Electric Distribution	IS	Manage Var Ref Act Processes	OH	Dead and Dying Trees	SRM Total	SRM Total	Ex 4, Ch 9	No	Ongoing	Annual	77,991.5	136,577.1	58,585.7	75.1%	N/A	N/A	# of Vtg Mgmt Trees	65,000	81,281	16,281	25.0%	N/A	Actual program expenses were above imputed regulatory values due to an increase in tree units removed and the average cost of those units. Volume of work increased due to 1) mechanized work from previous year, and 2) more work was identified due to changes in scope of patrol procedures. For example, including not just dead trees but healthy trees with defects. Further, the average cost of work increased due to time and material charges for priority trees.	Actual program units were above imputed program units because of Second Patrol completing inspections and tree work on approximately 48.8 thousand (65%) dead and dying trees in 2023. The remaining approximately 32.4 thousand (65%) program units were being trees and represented a significant increase from prior year primarily driven by the change in the inspection scope implemented in Q2 2023. The scope of PG&E's Second Patrol program, which was previously targeted to identifying the incidence of tree mortality between the annual patrol inspections, was updated to align with the annual patrol cycle inspection scope. This scope includes mitigation of trees with defects in addition to dead, dying, or evidence of decline in health.	Over	On-Target	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. Beginning in October 2023, PG&E began to delay tree work while pre-inspection was completed. This program is scheduled to continue through 2025, and PG&E anticipates continuing to perform more units than selected in the 2023 GRC.					
186	Expense	Electric Distribution	IS	Manage Var Ref Act Processes	OH	Dead and Dying Trees	Distribution Overhead	DOVHD-C002: Vegetation Management - CEMA/Tree Mortality	Ex 4, Ch 9	No	N/A	N/A	77,991.5	136,577.1	58,585.7	75.1%	N/A	N/A	# of Vtg Mgmt Trees	65,000	81,281	16,281	25.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
187	Expense	Electric Distribution	IS	Manage Var Ref Act Processes	OH	Dead and Dying Trees	Wildfire	WLDPR-C007: Vegetation Management - CEMA/Tree Mortality	Ex 4, Ch 9	No	N/A	N/A	77,991.5	136,577.1	58,585.7	75.1%	N/A	N/A	# of Vtg Mgmt Trees	65,000	81,281	16,281	25.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
188	Expense	Electric Distribution	IS	Manage Var Ref Act Processes	OH	Enhanced Vegetation Management	SRM Total	SRM Total	Ex 4, Ch 9	No	Ongoing	Annual	131,816.5	161,012.9	29,197.4	22.1%	N/A	N/A	# of Miles	1,800	274	(1,526)	-84.8%	N/A	Actual program expenses were above imputed regulatory values due to Over/OT work in MAT CU, which was expected to be completed in 2022, and was not forecast for 2023. Over/OT is an ongoing application with allocated costs for use in Vegetation Management (VMS), routine maintenance, and normal wildfire management / tree mortality throughout the 2023 GRC cycle. Other expenses were incurred across six primary programs: 1) Focused Tree Inspection; 2) Vegetation Management for Operational Mitigation; 3) Tree Removal Inventory; 4) Wood Management; 5) URSR Subordinate Source (USSR); and 6) Over/OT.	Actual program units were below imputed program units because of the Enhanced Vegetation Management (EVM) program was changed to focus on four primary programs: 1) Focused Tree Inspection, including approximately 274 miles of inspection and the mitigation of approximately 2,700 trees; 2) Vegetation Management for Operational Mitigation (VMS); including the inspection of approximately 340 miles of distribution lines and the mitigation of approximately 8,400 trees; 3) Tree Removal Inventory, including the inspection of approximately 87,688 trees and the mitigation of approximately 15,600 trees; and 4) Wood Management, including the removal and deposition of approximately 54,600 program units.	Under	Under	Over	Revised/Not	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The Enhanced Vegetation Management (EVM) program was changed, and the scope of the program was changed as described in the unit variance explanation. PG&E anticipates continuing with the adjusted scope of the program, focusing on Focused Tree Inspection, VMS, Tree Removal Inventory, and Wood Management, with similar spend and pace as occurred in 2023.					
189	Expense	Electric Distribution	IS	Manage Var Ref Act Processes	OH	Enhanced Vegetation Management	Wildfire	WLDPRM001: Enhanced Vegetation Management	Ex 4, Ch 9	No	N/A	N/A	131,816.5	161,012.9	29,197.4	22.1%	N/A	N/A	# of Miles	1,800	274	(1,526)	-84.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
190	Expense	Electric Distribution	IS	Manage Var Ref Act Processes	#	Not assigned	SRM Total	SRM Total	Ex 4, Ch 21 Ex 4, Ch 4.5 Ex 4, Ch 4.6	No	Ongoing	Annual	76,787.2	132,422.4	55,635.3	72.5%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	Actual program expenses were above imputed regulatory values due to the forecast in MAT CGR only included the Customer and Program Management (CPMG) aspects of EPIS activities. This was due to the increase in the EPIS program and limited pilot season at the time of the February 2023, implementation being a portion of EPIS activities were also forecast in BMIC. BIC - PG&E recorded EPIS costs for helicopter standby, temporary generation, battery programs, and other labor costs in MAT CGR which were not captured as part of the forecast. When looking at the EPIS program as a whole, actual expenses were below imputed regulatory values.	Actual program units were below imputed program units because of the forecast in MAT CGR only included the Customer and Program Management (CPMG) aspects of EPIS activities. This was due to the increase in the EPIS program and limited pilot season at the time of the February 2023, implementation being a portion of EPIS activities were also forecast in BMIC. BIC - PG&E recorded EPIS costs for helicopter standby, temporary generation, battery programs, and other labor costs in MAT CGR which were not captured as part of the forecast. When looking at the EPIS program as a whole, actual expenses were below imputed regulatory values.	Not Utilized	On-Target	On-Target	Emergent	This work is ongoing and will continue in PG&E's 2023 GRC period. This MAT is used to record various balancing and memorandum account activities. The EPIS program anticipates that this program will be used for the 2023 GRC cycle imputed-regulatory values due to emergent activities that were not forecast in the GRC for EPIS (see unit variance explanation).				
191	Expense	Electric Distribution	IS	Manage Var Ref Act Processes	#	Not assigned	Distribution Overhead	DOVHD-0005: Additional Asset Data Capture	Ex 4, Ch 21 Ex 4, Ch 4.5 Ex 4, Ch 4.6	Yes	N/A	N/A	-	189.9	189.9	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
192	Expense	Electric Distribution	IS	Manage Var Ref Act Processes	#	Not assigned	Emergency Preparedness & Response	EPNDR-C000: EPAR Controls	Ex 4, Ch 21 Ex 4, Ch 4.5 Ex 4, Ch 4.6	Yes	N/A	N/A	-	232.2	232.2	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
193	Expense	Electric Distribution	IS	Manage Var Ref Act Processes	#	Not assigned	Emergency Preparedness & Response	EPNDR-C002: Situational Awareness and Forecasting Initiatives - WFOC	Ex 4, Ch 21 Ex 4, Ch 4.5 Ex 4, Ch 4.6	Yes	N/A	N/A	-	2,724.7	3,724.1	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
194	Expense	Electric Distribution	IS	Manage Var Ref Act Processes	#	Not assigned	Emergency Preparedness & Response	EPNDRM000: EPAR Mitigations	Ex 4, Ch 21 Ex 4, Ch 4.5 Ex 4, Ch 4.6	Yes	N/A	N/A	-	186.0	186.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
195	Expense	Electric Distribution	IS	Manage Var Ref Act Processes	#	Not assigned	Wildfire	WLDPRM006: PPS Production Initiatives	Ex 4, Ch 21 Ex 4, Ch 4.5 Ex 4, Ch 4.6	Yes	N/A	N/A	-	7,202.6	7,202.6	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
196	Expense	Electric Distribution	IS	Manage Var Ref Act Processes	#	Not assigned	Wildfire	WLDPRM007: Wildfire IT Work	Ex 4, Ch 21 Ex 4, Ch 4.5 Ex 4, Ch 4.6	Yes	N/A	N/A	38,724.4	36,126.5	(2,615.9)	-6.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
197	Expense	Electric Distribution	IS	Manage Var Ref Act Processes	#	Not assigned	Wildfire	WLDPRM009: Enhanced Powerline Safety Settings	Ex 4, Ch 21 Ex 4, Ch 4.5 Ex 4, Ch 4.6	Yes	N/A	N/A	34,856.1	34,222.4	(633.7)	-1.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
198	Expense	Electric Distribution	IS	Manage Var Ref Act Processes	#	Not assigned	Wildfire	POST-GRC Post-GRC Mitigation	Ex 4, Ch 21 Ex 4, Ch 4.5 Ex 4, Ch 4.6	Yes	N/A	N/A	-	18,404.1	18,404.1	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
199	Expense	Electric Distribution	IS	Manage Var Ref Act Processes	#	Not assigned	SRM (NON-RAMP)	SRM (NON-RAMP)	Ex 4, Ch 21 Ex 4, Ch 4.5 Ex 4, Ch 4.6	Yes	N/A	N/A	3,157.0	3,131.2	(25.8)	-0.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
170	Expense	Electric Distribution	IS	SRM (NON-RAMP)	N/A	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 22	No	Ongoing	Annual	1,637.7	572.6	(1,065.1)	-68.7%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	N/A				
171	Expense	Electric Distribution	IS	SRM (NON-RAMP)	N/A	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 8	No	Ongoing	Annual	1,089.8	1,089.8	(501.8)	-31.6%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	N/A				
172	Expense	Electric Distribution	JV	Maintain IT Apps & Info	N/A	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 20 Ex 4, Ch 21	No	Ongoing	Annual	8,419.0	4,432.2	(3,986.8)	-47.4%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	N/A				
173	Expense	Electric Distribution	JV	Maintain IT Apps & Info	N/A	Not assigned	Emergency Preparedness & Response	EPNDR-C002: Situational Awareness and Forecasting Initiatives - WFOC	Ex 4, Ch 20 Ex 4, Ch 21	Yes	N/A	N/A	-	735.6	735.6	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
174	Expense	Electric Distribution	JV	Maintain IT Apps & Info	N/A	Not assigned	SRM (NON-RAMP)	SRM (NON-RAMP)	Ex 4, Ch 20 Ex 4, Ch 21	Yes	N/A	N/A	8,419.0	3,674.6	(4,744.5)	-56.4%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	On-Target	On-Target	Over	Proceeding as Planned	N/A				
175	Expense	Electric Distribution	KA	E-Data Maint OH General	KAA	OH Genl CM Tag	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	22,085.7	76,395.0	53,309.3	241.4%	N/A	N/A	# of Notifications Completed	24,151	28,955	2,404	10.0%	N/A	Actual program expenses were above imputed regulatory values due to a reduction in unit cost in the 2023 GRC bid decision. The compressed adopted unit cost based on PG&E's unit costs for 2016 and prior. This is significantly below observed costs in years since 2020, often by higher contract costs.	Actual program units were below imputed program units due to lower bid rates than forecast.	On-Target	On-Target	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is the repair of overhead (OH) facilities or replacement of individual components that are not per treatment hazard and have not caused an outage. PG&E anticipates the program scope will remain on target while spending more than the GRC imputed adopted costs over the remainder of the cycle.					
176	Expense	Electric Distribution	KA	E-Data Maint OH General	KAA	OH Genl CM Tag	Distribution Overhead	DOVHD-C003: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	22,085.7	76,395.0	53,309.3	241.4%	N/A	N/A	# of Notifications Completed	24,151	28,955	2,404	10.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
177	Expense	Electric Distribution	KA	E-Data Maint OH General	KAA	OH Genl CM Tag	Wildfire	WLDPR-C006: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	22,085.7	76,395.0	53,309.3	241.4%	N/A	N/A	# of Notifications Completed	24,151	28,955	2,404	10.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
178	Expense	Electric Distribution	KA	E-Data Maint OH General	KAC	Rail Safe Retrofit	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	1,231.4	683.1	(548.3)	-44.5%	N/A	N/A	# of Notifications Completed	638	402	(236)	-37.0%	N/A	Actual program units were below imputed program units due to lower bid rates than forecast.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
179	Expense	Electric Distribution	KA	E-Data Maint OH General	KAC	Rail Safe Retrofit	Distribution Overhead	DOVHD-C003: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	1,231.4	683.1	(548.3)	-44.5%	N/A	N/A	# of Notifications Completed	638	402	(236)	-37.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
180	Expense	Electric Distribution	KA	E-Data Maint OH General	KAC	Rail Safe Retrofit	Wildfire	WLDPR-C011: Annual Abatement	Ex 4, Ch 11	No	N/A	N/A	1,231.4	683.1	(548.3)	-44.5%	N/A	N/A	# of Notifications Completed	638	402	(236)	-37.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
181	Expense	Electric Distribution	KA	E-Data Maint OH General	KAD	Rail Safe Retrofit Annual	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	1,436.3	312.7	(1,123.6)	-78.2%	N/A	N/A	# of Notifications Completed	1,022	224	(798)	-78.1%	N/A	Actual program units were below imputed program units based on a lower bid rate for bid items on overhead equipment requiring renovation.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to perform Rail Safe Retrofits, which are based on bid rate.						
182	Expense	Electric Distribution	KA	E-Data Maint OH General	KAD	Rail Safe Retrofit Annual	Wildfire	WLDPR-C011: Annual Abatement	Ex 4, Ch 11	No	N/A	N/A	1,436.3	312.7	(1,123.6)	-78.2%	N/A	N/A	# of Notifications Completed	1,022	224	(798)	-78.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
183	Expense	Electric Distribution	KA	E-Data Maint OH General	KAF	OH COE CM Tag	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	7,213.0	6,418.9	(794.1)	-11.0%	N/A	N/A	# of Notifications Completed	1,380	1,141	(239)	-17.3%	N/A	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
184	Expense	Electric Distribution	KA	E-Data Maint OH General	KAF	OH COE CM Tag	Wildfire	WLDPR-C006: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	7,213.0	6,418.9	(794.1)	-11.0%	N/A	N/A	# of Notifications Completed	1,380	1,141	(239)	-17.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
185	Expense	Electric Distribution	KA	E-Data Maint OH General	KAH	Insights/Right Rail Runouts	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	2,171.8	1,768.7	(403.1)	-18.5%	N/A	N/A	# of Railroad Reports	11,714	6,901	(4,813)	-41.1%	N/A	Actual program units were below imputed program units due to fewer turnouts of streetlights leading back, because of process corrections to IEDs.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to repair streetlights when a streetlight outage has occurred. PG&E underperforms in this program due to a lower bid rate than anticipated.						

**TABLE 3-3
2023 GRC CYCLE ELECTRIC DISTRIBUTION EXPENSE COMPARISON BY MAT CODE FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	Type (OM Expense or Capital)	Functional Area	MWC	MWC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Treatment Reference	RAMP Rollup (Year)	Program / Project Life (Year)	Program / Project Year	2023 Invoiced Actual Costs	2023 Actual Costs	Difference for 2023 (\$)	Spending Percent Variance for 2023 (%) (2023/2022)	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Invoiced Actual Units	2023 Actual Units	Difference for 2023 (Q, G, or T)	Unit Percent Variance for 2023 (%) (2023/2022)	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	U1	U2	U3	U4	U5	W						
186	Expense	Electric Distribution	KA	E Dist Maint OH General	KAH	Streetlights Rep/Burnouts	Distribution Overhead	DVHDC-0003: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	2,171.8	1,787.7	(484.2)	-22.3%	N/A	N/A	# of Burnout Repairs	11,714	6,191	(5,523)	-47.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
187	Expense	Electric Distribution	KA	E Dist Maint OH General	KAK	STU Insect/Rep	SRM Total (NCR/RAMP)	SRM Total (NCR/RAMP)	Ex 4, Ch 11	No	Ongoing	Annual	136.4	88.8	(47.6)	-34.9%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
188	Expense	Electric Distribution	KA	E Dist Maint OH General	KAM	Insulators Wash	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	281.3	358.8	77.5	27.2%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
189	Expense	Electric Distribution	KA	E Dist Maint OH General	KAM	Insulators Wash	Distribution Overhead	DVHDC-0003: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	281.3	358.8	77.5	27.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
190	Expense	Electric Distribution	KA	E Dist Maint OH General	KAD	Site Fax Insect - Site Plug	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	214.7	2,056.1	1,841.4	858.0%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
191	Expense	Electric Distribution	KA	E Dist Maint OH General	KAD	Site Fax Insect - Site Plug	Distribution Overhead	DVHDC-0003: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	214.7	2,056.1	1,841.4	858.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
192	Expense	Electric Distribution	KA	E Dist Maint OH General	KAP	OH EWP Projects	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	1,792.6	25.8	(1,766.8)	-98.5%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
193	Expense	Electric Distribution	KA	E Dist Maint OH General	KAP	OH EWP Projects	Distribution Overhead	DVHDC-0003: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	1,792.6	25.8	(1,766.8)	-98.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
194	Expense	Electric Distribution	KA	E Dist Maint OH General	KAD	Wood Pole Bridge Bonding	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	1.1	881.8	880.7	98.9%	N/A	N/A	# of Notifications Completed	2	266	264	(2)	-0.8%	N/A	Below variance threshold	Actual program units were above inputted program units based on inspections that identified the need for a higher number of wood pole bridge bonding repairs than anticipated.	Over	On-Target	Over	Proceeding as Planned	N/A						
195	Expense	Electric Distribution	KA	E Dist Maint OH General	KAD	Wood Pole Bridge Bonding	Wildfire	WLDFR-0008: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	1.1	881.8	880.7	98.9%	N/A	N/A	# of Notifications Completed	2	266	264	(2)	-0.8%	N/A	Below variance threshold	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
196	Expense	Electric Distribution	KA	E Dist Maint OH General	KAS	FAS Overhead Expense	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	1,737.0	1,193.3	(543.7)	-31.3%	N/A	N/A	# of Notifications Completed	15,453	8,302	(7,151)	-46.0%	N/A	Below variance threshold	Actual units were below inputted units because there were fewer notifications to respond to a 2023 than forecasted.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A							
197	Expense	Electric Distribution	KA	E Dist Maint OH General	KAS	FAS Overhead Expense	Distribution Overhead	DVHDC-0003: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	1,737.0	1,193.3	(543.7)	-31.3%	N/A	N/A	# of Notifications Completed	15,453	8,302	(7,151)	-46.0%	N/A	Below variance threshold	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
198	Expense	Electric Distribution	KA	E Dist Maint OH General	KAT	Remote Grid SPS Maintenance	SRM Total	SRM Total	Ex 4, Ch 4.3	No	Ongoing	Annual	1,038.7	125.6	(913.1)	-87.9%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
199	Expense	Electric Distribution	KA	E Dist Maint OH General	KAT	Remote Grid SPS Maintenance	Distribution Overhead	DVHDCM011: Remote Grid	Ex 4, Ch 4.3	No	N/A	N/A	1,038.7	125.6	(913.1)	-87.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
200	Expense	Electric Distribution	KA	E Dist Maint OH General	KAT	Remote Grid SPS Maintenance	Wildfire	WLDFR4011: System Recovery - Remote Grid	Ex 4, Ch 4.3	No	N/A	N/A	1,038.7	125.6	(913.1)	-87.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
201	Expense	Electric Distribution	KA	E Dist Maint OH General	?	Not assigned	SRM Total (NCR/RAMP)	SRM Total (NCR/RAMP)	Ex 4, Ch 11	No	Ongoing	Annual	881.1	(24.2)	(905.3)	-103.0%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
202	Expense	Electric Distribution	KB	E Dist Maint US	KBA	US Grid CM Tag	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	17,192.2	15,627.4	(1,564.8)	-9.1%	N/A	N/A	# of Notifications Completed	6,183	4,916	(1,267)	-20.5%	N/A	Below variance threshold	Actual program units were below inputted program units due to optimizing resources to focus on completing higher priority maintenance tags within MWCA KA and KB.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A							
203	Expense	Electric Distribution	KB	E Dist Maint US	KBA	US Grid CM Tag	Underground	DUNDC-0002: Underground Insulators	Ex 4, Ch 11	No	N/A	N/A	17,192.2	15,627.4	(1,564.8)	-9.1%	N/A	N/A	# of Notifications Completed	6,183	4,916	(1,267)	-20.5%	N/A	Below variance threshold	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
204	Expense	Electric Distribution	KB	E Dist Maint US	KBC	US COE CM Tag	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	1,547.5	493.6	(1,053.9)	-68.3%	N/A	N/A	# of Notifications Completed	175	103	(72)	-41.1%	N/A	Below variance threshold	Actual program units were below inputted program units due to optimizing resources to focus on completing higher priority maintenance tags within MWCA KA and KB.	Under	Under	Under	Rescheduled	N/A							
205	Expense	Electric Distribution	KB	E Dist Maint US	KBC	US COE CM Tag	Underground	DVHDC-0003: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	1,547.5	493.6	(1,053.9)	-68.3%	N/A	N/A	# of Notifications Completed	175	103	(72)	-41.1%	N/A	Below variance threshold	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
206	Expense	Electric Distribution	KB	E Dist Maint US	KBD	Nitrogen Cylinders CM	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	26.7	8.4	(18.3)	-68.5%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
207	Expense	Electric Distribution	KB	E Dist Maint US	KBD	Nitrogen Cylinders CM	Underground	DVHDC-0003: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	26.7	8.4	(18.3)	-68.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
208	Expense	Electric Distribution	KB	E Dist Maint US	KBE	BART Cable Repr	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	70.8	0.5	(70.3)	-99.2%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
209	Expense	Electric Distribution	KB	E Dist Maint US	KBE	BART Cable Repr	Underground	DVHDC-0003: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	70.8	0.5	(70.3)	-99.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
210	Expense	Electric Distribution	KB	E Dist Maint US	KBP	US EWP Projects	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	788.8	1.1	(787.7)	-99.9%	N/A	N/A	# of Locations	255	-	(255)	-100.0%	N/A	Below variance threshold	Actual units were below inputted units because this is a project-based repair program. In 2023 PG&E did not identify any underground repair projects.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A							
211	Expense	Electric Distribution	KB	E Dist Maint US	KBP	US EWP Projects	Underground	DUNDC-0004: Planned Major Projects	Ex 4, Ch 11	No	N/A	N/A	788.8	1.1	(787.7)	-99.9%	N/A	N/A	# of Locations	255	-	(255)	-100.0%	N/A	Below variance threshold	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
212	Expense	Electric Distribution	KB	E Dist Maint US	?	Not assigned	SRM Total (NCR/RAMP)	SRM Total (NCR/RAMP)	Ex 4, Ch 11	No	Ongoing	Annual	757.7	-	(757.7)	-100.0%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
213	Expense	Electric Distribution	KC	E Dist Maint Network	KCA	Netk Equip Connect Maint NWTX	SRM Total	SRM Total	Ex 4, Ch 14	No	Ongoing	Annual	448.8	39.6	(409.2)	-91.2%	N/A	N/A	# of Locations	80	17	(63)	-78.8%	N/A	Below variance threshold	Actual units were below inputted units because fewer tags were generated from abnormal operating conditions.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A							
214	Expense	Electric Distribution	KC	E Dist Maint Network	KCA	Netk Equip Connect Maint NWTX	Distribution Network	DNTWK-0002: Maintenance and Connective Work	Ex 4, Ch 14	No	N/A	N/A	448.8	39.6	(409.2)	-91.2%	N/A	N/A	# of Locations	80	17	(63)	-78.8%	N/A	Below variance threshold	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
215	Expense	Electric Distribution	KC	E Dist Maint Network	KCB	Netk Oil Repr & 90Day FIU NWTX	SRM Total	SRM Total	Ex 4, Ch 14	No	Ongoing	Annual	33.9	5.2	(28.7)	-84.6%	N/A	N/A	# of Locations	25	8	(17)	-68.0%	N/A	Below variance threshold	Actual units were below inputted units because of a transition to a new maintenance tracking software for tracking network maintenance work. Some replacements were not recorded due to issues with SAMP Asset Manager in the early implementation phase in 2023, which has since been corrected.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A							
216	Expense	Electric Distribution	KC	E Dist Maint Network	KCB	Netk Oil Repr & 90Day FIU NWTX	Distribution Network	DNTWK-0002: Maintenance and Connective Work	Ex 4, Ch 14	No	N/A	N/A	33.9	5.2	(28.7)	-84.6%	N/A	N/A	# of Locations	25	8	(17)	-68.0%	N/A	Below variance threshold	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
217	Expense	Electric Distribution	KC	E Dist Maint Network	KCC	Netk Vault Connect Maint NWTX	SRM Total	SRM Total	Ex 4, Ch 14	No	Ongoing	Annual	136.5	7.7	(128.8)	-94.4%	N/A	N/A	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A						
218	Expense	Electric Distribution	KC	E Dist Maint Network	KCC	Netk Vault Connect Maint NWTX	Distribution Network	DNTWK-0002: Maintenance and Connective Work	Ex 4, Ch 14	No	N/A	N/A	136.5	7.7	(128.8)	-94.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
219	Expense	Electric Distribution	KC	E Dist Maint Network	KCD	Netk New Pre-Assembled NWTX	SRM Total	SRM Total	Ex 4, Ch 14	No	Ongoing	Annual	2,898.7	4,486.7	1,588.0	54.8%	N/A	N/A	# of Transformers	3,600	1,363	(2,237)	-62.3%	N/A	Below variance threshold	Actual units were below inputted units because PG&E changed the unit of measure for this MAT in 2023 from (1) the number of transformers to which we draw oil samples from, to (2) the number of transformers maintained. The 2023 GRC unit forecast was based on the number of transformers that each network transformer can have network transformers can have up to 5 transformers.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A							
220	Expense	Electric Distribution	KC	E Dist Maint Network	KCD	Netk New Pre-Assembled NWTX	Distribution Network	DNTWK-0002: Maintenance and Connective Work	Ex 4, Ch 14	No	N/A	N/A	2,898.7	4,486.7	1,588.0	54.8%	N/A	N/A	# of Transformers	3,600	1,363	(2,237)	-62.3%	N/A	Below variance threshold	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
221	Expense	Electric Distribution	KC	E Dist Maint Network	KCE	Netk Protector Phase Maint NWTX	SRM Total	SRM Total	Ex 4, Ch 14	No	Ongoing	Annual	719.9	1,428.1	708.2	98.4%	N/A	N/A	# of Network Protectors	402	374	(28)	-7.0%	N/A	Below variance threshold	Below variance threshold	On-Target	On-Target	On-Target	Proceeding as Planned	N/A							
222	Expense	Electric Distribution	KC	E Dist Maint Network	KCE	Netk Protector Phase Maint NWTX	Distribution Network	DNTWK-0002: Maintenance and Connective Work	Ex 4, Ch 14	No	N/A	N/A	719.9	1,428.1	708.2	98.4%	N/A	N/A	# of Network Protectors	402	374	(28)	-7.0%	N/A	Below variance threshold	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**TABLE 3-3
2023 GRC CYCLE ELECTRIC DISTRIBUTION EXPENSE COMPARISON BY MAT CODE FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

A	B	C1	C2	C3	C4	C5	C6	C7	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U1	U2	U3	V	W					
Line No	Type (OSM Expense or Capital)	Functional Area	MWC	MWC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Treasury Reference	RAMP Roll-up (Yes/No)	Program / Project Line (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$ (k))	Spending Percent Variance for 2023 (%) (M/GP/MS)	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Imputed Adopted Units	2023 Actual Units	Difference for 2023 # of Units (N/A)	Unit Percent Variance for 2023 (%) (G/N/A/P/MS)	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	Scope (L, G, or T)	Schedule (L, G, or T)	Budget (L, G, or T)	Status	Completion Status Statement				
223	Expense	Electric Distribution	NC	E Dist Maint Network	DCF	Fluor/SCADA Comm Rng MNTX	SRM Total	SRM Total	Ex 4, Ch 14	No	Ongoing	Annual	1,011.5	185.5	(826.0)	-81.7%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	NO	Below variance threshold	Not Utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A				
224	Expense	Electric Distribution	NC	E Dist Maint Network	DCF	Fluor/SCADA Comm Rng MNTX	Distribution Network	DNWKC002 Maintenance and Corrective Work	Ex 4, Ch 14	No	N/A	N/A	1,011.5	185.5	(826.0)	-81.7%	NO	NO	N/A	N/A	N/A	N/A	N/A	NO	N/A	Actual program expenses were below imputed regulatory values due to higher allocation of overhead to capital than forecast, partially offset by higher supervision and management labor costs. MWC O&M represents the non-billable labor costs to operate or manage PG&E personnel who charge their time directly to orders, not of an overhead allocation applied to Capital orders. The overhead is applied to both MWC O&M and MWC CA, which represents similar non-billable labor costs in support of billable PG&E personnel. Since the overhead allocation is based on actual costs, and since the ratio of capital versus expense continues to grow within Electric, a higher percent of these costs were allocated to Capital orders and a lower percent remained in expense MWC O&M.	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
225	Expense	Electric Distribution	CM	Operational Management	8	Net assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 22	No	Ongoing	Annual	19,955.4	12,730.5	(7,197.4)	-36.1%	NO	YES	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	NO	Actual program expenses were below imputed regulatory values because costs for this program were imputed in MAT ABE. The following expenses were forecast in MAT ABE in the 2023 GRC: SR&R, Camera, P&PS, SPT, Weather Station Maintenance, and Wildlife Mitigation Support. Actual expenses for cameras are recorded in MAT WFC and the variance threshold but excluded imputed regulatory values due to 1) the implementation of artificial intelligence (AI) selection on the cameras which was not forecast in the 2023 GRC, and 2) higher vendor costs to manage the camera program.	N/A	N/A	On-Target	On-Target	Under	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to record enterprise-related costs to provide supervision and management support. For the 2023 GRC cycle, PG&E expects this program to continue to be below imputed as explained in the cost variance expansion.			
226	Expense	Electric Distribution	WF	Wildlife Mitigation	WFC	Cameras	SRM Total	SRM Total	Ex 4, Ch 4.1	No	Ongoing	Annual	-	12,342.4	12,342.4	100.0%	NO	NO	2 of Wildlife Cameras	-	10	10	100.0%	NO	Actual program expenses were above imputed regulatory values because costs for this program were imputed in MAT ABE. The following expenses were forecast in MAT ABE in the 2023 GRC: SR&R, Camera, P&PS, SPT, Weather Station Maintenance, and Wildlife Mitigation Support. Actual expenses for cameras are recorded in MAT WFC and the variance threshold but excluded imputed regulatory values due to 1) the implementation of artificial intelligence (AI) selection on the cameras which was not forecast in the 2023 GRC, and 2) higher vendor costs to manage the camera program.	N/A	N/A	Over	On-Target	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. This program supports the installation, operation and maintenance of wildlife cameras.			
227	Expense	Electric Distribution	WF	Wildlife Mitigation	WFC	Cameras	Wildlife	WLDPRM070 Situational Awareness and Forecasting Initiatives - Cameras	Ex 4, Ch 4.1	No	N/A	N/A	-	12,342.4	12,342.4	100.0%	NO	NO	8 of Wildlife Cameras	10	10	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
228	Expense	Electric Distribution	WF	Wildlife Mitigation	WFM	OtherWildlifeSupport-Exp	SRM Total	SRM Total	Ex 4, Ch 4.1 Ex 4, Ch 4.5	No	Ongoing	Annual	-	8,300.7	8,300.7	100.0%	NO	YES	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	NO	Actual program expenses were above imputed regulatory values because costs for this program were imputed in MAT ABE. The following expenses were forecast in MAT ABE in the 2023 GRC: SR&R, Camera, P&PS, SPT, Weather Station Maintenance, and Wildlife Mitigation Support. Actual expenses for Other Wildlife Support are recorded in MAT WFM and the difference between the imputed regulatory value and actual expenses is below the variance threshold.	Not Utilized	On-Target	On-Target	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. This program supports PG&E's development, operations, and maintenance of the five potential index and other models that support P&PS, EP&S, and wildlife mitigations.				
229	Expense	Electric Distribution	WF	Wildlife Mitigation	WFM	OtherWildlifeSupport-Exp	Emergency Preparedness & Response	EPNDR001 Situational Awareness and Forecasting Initiatives - SCPP Improvements	Ex 4, Ch 4.1 Ex 4, Ch 4.5	Yes	N/A	N/A	-	1,892.8	1,892.8	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
230	Expense	Electric Distribution	WF	Wildlife Mitigation	WFM	OtherWildlifeSupport-Exp	Wildlife	WLDPRM070 Situational Awareness and Forecasting Initiatives - Stability Fire Detection	Ex 4, Ch 4.1 Ex 4, Ch 4.5	Yes	N/A	N/A	-	89.7	89.7	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
231	Expense	Electric Distribution	WF	Wildlife Mitigation	WFM	OtherWildlifeSupport-Exp	Wildlife	WLDPRM070 Situational Awareness and Forecasting Initiatives - Advanced Fire Modeling	Ex 4, Ch 4.1 Ex 4, Ch 4.5	Yes	N/A	N/A	-	8,044.7	8,044.7	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
232	Expense	Electric Distribution	WF	Wildlife Mitigation	WFM	OtherWildlifeSupport-Exp	Wildlife	WLDPRM070 Situational Awareness and Forecasting Initiatives - Meteorology	Ex 4, Ch 4.1 Ex 4, Ch 4.5	Yes	N/A	N/A	-	103.8	103.8	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
233	Expense	Electric Distribution	WF	Wildlife Mitigation	WFM	OtherWildlifeSupport-Exp	Wildlife	WLDPRM070 Situational Awareness and Forecasting Initiatives - Fire Potential Index	Ex 4, Ch 4.1 Ex 4, Ch 4.5	Yes	N/A	N/A	-	141.0	141.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
234	Expense	Electric Distribution	WF	Wildlife Mitigation	WFM	P&PS Non-Event Expense	SRM Total	SRM Total	Ex 4, Ch 4.2	No	Ongoing	Annual	-	19,942.6	19,942.6	100.0%	NO	YES	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	NO	Actual program expenses were above imputed regulatory values because costs for this program were imputed in MAT ABE. The following expenses were forecast in MAT ABE in the 2023 GRC: SR&R, Camera, P&PS, SPT, Weather Station Maintenance, and Wildlife Mitigation Support. Actual expenses for P&PS non-event actual expenses were below forecast due to 1) lower than forecast costs for enclosed case hydrologic controls, and 2) lower costs for Community Resource Center (CRC) preparedness projects.	Not Utilized	On-Target	On-Target	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to prepare for P&PS events and improve the P&PS program when activated.				
235	Expense	Electric Distribution	WF	Wildlife Mitigation	WFM	P&PS Non-Event Expense	Emergency Preparedness & Response	EPNDR005 EPAR Fuel Operations	Ex 4, Ch 4.2	Yes	N/A	N/A	-	203.5	203.5	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
236	Expense	Electric Distribution	WF	Wildlife Mitigation	WFM	P&PS Non-Event Expense	Emergency Preparedness & Response	EPNDR006 EPAR Distribution Support Personnel	Ex 4, Ch 4.2	Yes	N/A	N/A	-	1,926.9	1,926.9	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
237	Expense	Electric Distribution	WF	Wildlife Mitigation	WFM	P&PS Non-Event Expense	Wildlife	WLDPRM006 P&PS Reduction Initiatives	Ex 4, Ch 4.2	Yes	N/A	N/A	-	16,155.7	16,155.7	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
238	Expense	Electric Distribution	WF	Wildlife Mitigation	WFM	P&PS Non-Event Expense	SRM (NON-RAMP)	SRM (NON-RAMP)	Ex 4, Ch 4.2	Yes	N/A	N/A	-	2,057.8	2,057.8	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
239	Expense	Electric Distribution	WF	Wildlife Mitigation	WFP	P&PS Event Expense	SRM Total	SRM Total	Ex 4, Ch 4.2	No	Ongoing	Annual	-	5,556.2	5,556.2	100.0%	NO	YES	Not Utilized - The variety of work activities in the program makes it infeasible to identify a single unit of measure.	N/A	N/A	N/A	N/A	NO	Actual program expenses were above imputed regulatory values because costs for this program were imputed in MAT ABE. The following expenses were forecast in MAT ABE in the 2023 GRC: SR&R, Camera, P&PS, SPT, Weather Station Maintenance, and Wildlife Mitigation Support. Actual expenses for active P&PS events are recorded in MAT WFP and MAT E&P and were below imputed regulatory values due to 1) staffing constraints causing labor costs to be lower than forecast, 2) equipment delivery delays, and 3) fewer catastrophic events requiring deployment of the SPT.	Not Utilized	On-Target	On-Target	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. This program supports wildlife mitigation through P&PS to mitigate wildlife risk.				
240	Expense	Electric Distribution	WF	Wildlife Mitigation	WFP	P&PS Event Expense	Wildlife	WLDPRM003 Public Safety Power Shutoff - P&PS Event Distribution	Ex 4, Ch 4.2	Yes	N/A	N/A	-	6,455.4	6,455.4	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
241	Expense	Electric Distribution	WF	Wildlife Mitigation	WFP	P&PS Event Expense	Wildlife	POST-GRC Post-GRC Mitigation	Ex 4, Ch 4.2	Yes	N/A	N/A	-	100.8	100.8	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
242	Expense	Electric Distribution	WF	Wildlife Mitigation	WFS	Safety&ProtectTeam(SPT)	SRM Total	SRM Total	Ex 4, Ch 4.1	No	Ongoing	Annual	-	19,860.7	19,860.7	100.0%	NO	YES	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	NO	Actual program expenses were above imputed regulatory values because costs for this program were imputed in MAT ABE. The following expenses were forecast in MAT ABE in the 2023 GRC: SR&R, Camera, P&PS, SPT, Weather Station Maintenance, and Wildlife Mitigation Support. Actual expenses for SPT are recorded in MAT WFS and were below imputed regulatory values due to 1) staffing constraints causing labor costs to be lower than forecast, 2) equipment delivery delays, and 3) fewer catastrophic events requiring deployment of the SPT.	Not Utilized	On-Target	On-Target	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. This program supports PG&E crews performing work in high risk areas.				
243	Expense	Electric Distribution	WF	Wildlife Mitigation	WFS	Safety&ProtectTeam(SPT)	Wildlife	WLDPRM008 Safety and Infrastructure Protection Teams	Ex 4, Ch 4.1	Yes	N/A	N/A	-	19,860.7	19,860.7	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
244	Expense	Electric Distribution	WF	Wildlife Mitigation	WFW	Weather Station Maintenance	SRM Total	SRM Total	Ex 4, Ch 4.1	No	Ongoing	Annual	-	2,468.4	2,468.4	100.0%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	NO	Below variance threshold	Not Utilized	On-Target	On-Target	Over	Proceeding as Planned	N/A				
245	Expense	Electric Distribution	WF	Wildlife Mitigation	WFW	Weather Station Maintenance	Wildlife	WLDPRM070 Situational Awareness and Forecasting Initiatives - Weather Station	Ex 4, Ch 4.1	No	N/A	N/A	-	2,468.4	2,468.4	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

94 Program work for Camera, P&PS, SPT, Wildlife Mitigation Support, and Weather Station Maintenance were imputed in MAT code ABE and recorded in MWC WF MAT codes.

**TABLE 3-4
2023 RSAR
2023 GRC CYCLE ELECTRIC DISTRIBUTION CAPITAL COMPARISON BY MAT CODE FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

	A	B	C1	C2	C3	C4	C5	C6	C7	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U1	U2	U3	V	W		
Line No	Type (O&M Expense or Capital)	Functional Area	MWC	MWC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Costs	2023 Actual Costs	Difference for 2023 (\$) (H-I)	Spending Variance Percent Variance for 2023 (%) (H-I/G*100)	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Imputed Units	2023 Actual Units	Difference for 2023 (# of Units) (O-N)	Unit Percent Variance for 2023 (%) (O-N/N*100)	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)	Status	Completion Status Statement		
1	Capital	Electric Distribution	05	Tools & Equipment	N/A	Not assigned	SRM Total	SRM Total	Ex 4, Ch 22	No	Ongoing	Annual	7,607.7	9,412.7	1,804.9	23.7%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
2	Capital	Electric Distribution	05	Tools & Equipment	N/A	Not assigned	Wildfire	WLDPR-M020: Enhanced Powerline Safety Settings	Ex 4, Ch 22	Yes	N/A	N/A	-	89.9	89.9	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3	Capital	Electric Distribution	05	Tools & Equipment	N/A	Not assigned	SRM (NON-RAMP)	SRM (NON-RAMP)	Ex 4, Ch 22	Yes	N/A	N/A	7,607.7	9,322.8	1,715.0	22.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
4	Capital	Electric Distribution	06	E Dist. Line Capacity	06A	F&P Assoc w/Subst Capacity	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 17	No	Ongoing	Annual	10,498.8	24,351.1	13,852.3	131.9%	NO	YES	Not Utilized - The variety of work activities in this program makes it infeasible to identify a single unit of measure.	N/A	N/A	N/A	N/A	NO	Program expenditures were above imputed regulatory values due to 1) projects had higher costs due to of complex scope; 2) inflation increased costs of material and contract labor; and 3) new capacity work was completed as added scope to emergency substation replacement projects for efficiency purposes.	Not utilized.	On-Target	Over	Over	Expanded	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to perform continued secondary transformer requirements. In the 2023 GRC cycle, PG&E expects to continue to do more work in this program than forecasted due to SB410 requirements, as discussed in PG&E's 2023 GRC capacity phase filing.		
5	Capital	Electric Distribution	06	E Dist Line Capacity	06B	Transformer Repl Overloaded	SRM Total	SRM Total	Ex 4, Ch 17	No	Ongoing	Annual	8,523.9	1,383.8	(7,140.1)	-83.8%	NO	NO	# of Transformers	240	34	(206)	-85.8%	YES	Below variance threshold.	Actual program units were below imputed program units due to prioritization of other work in MWC 06, like O&A, O&D and O&M. Transformers may have been replaced under emergency in MWC 17.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to perform continued secondary transformer requirements. In the 2023 GRC cycle, PG&E expects to replace overloaded transformers at a higher pace than in 2023, in support of the Distribution Overhead risk.		
6	Capital	Electric Distribution	06	E Dist Line Capacity	06B	Transformer Repl Overloaded	Distribution Overhead	DOVHO-C08A: Overloaded Transformers Replacement	Ex 4, Ch 17	No	N/A	N/A	8,523.9	1,383.8	(7,140.1)	-83.8%	N/A	N/A	# of Transformers	240	34	(206)	-85.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
7	Capital	Electric Distribution	06	E Dist Line Capacity	06D	Circuits Reinforce-CP Managed	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 17	No	Ongoing	Annual	4,674.2	377.5	(4,296.8)	-91.9%	NO	NO	Not Utilized - The variety of work activities in this program makes it infeasible to identify a single unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
8	Capital	Electric Distribution	06	E Dist Line Capacity	06E	Circuits Reinforce-PS Managed	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 17	No	Ongoing	Annual	25,025.8	12,634.5	(12,391.3)	-49.5%	NO	YES	Not Utilized - The variety of work activities in this program makes it infeasible to identify a single unit of measure.	N/A	N/A	N/A	N/A	NO	Program expenditures were below imputed regulatory values due to prioritization of other work in MWC 06, like O&A, O&D and O&M.	Not utilized.	On-Target	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. This program performs distribution circuit reinforcements. This is part of a continuing effort to mitigate distribution line overloads and to meet non-safety related planning criteria. This program is expected to increase when new business-driven capacity needs in MATs 06A and 06H decrease, and/or when the balancing account proposed by PG&E in the GRC capacity phase is approved.		
9	Capital	Electric Distribution	06	E Dist Line Capacity	06C	Voltage Correct Secondary	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 17	No	Ongoing	Annual	2,889.7	4,022.7	1,133.0	40.2%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
10	Capital	Electric Distribution	06	E Dist Line Capacity	06H	Dist Line New Business Prof	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 17	No	Ongoing	Annual	74,966.3	102,968.7	28,002.4	37.4%	YES	YES	Not Utilized - The variety of work activities in this program makes it infeasible to identify a single unit of measure.	N/A	N/A	N/A	N/A	NO	Program expenditures were above imputed regulatory values due to scope changes and cost escalations for identified work. In addition costs increased due to newly identified projects to create capacity necessary to engage customers who have submitted new applications for service.	Not utilized.	On-Target	Over	Over	Expanded	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to provide the capacity necessary to complete new customer applications for service. There has been an increase in new applications for service and added loads that require capacity work to serve, especially in the areas of transportation electrification, internet based distribution centers, data centers, high tech campuses, state and local infrastructure, agricultural well pumping, dairy bio digesters, and indoor cultivation. PG&E expects to continue to do more work in this program than forecasted due to SB410 requirements, as discussed in PG&E's 2023 GRC capacity phase filing.		
11	Capital	Electric Distribution	06	E Dist Line Capacity	06I	Operational Capacity Proj	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 17	No	Ongoing	Annual	7,014.7	1,975.9	(5,038.7)	-71.8%	NO	NO	Not Utilized - The variety of work activities in this program makes it infeasible to identify a single unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
12	Capital	Electric Distribution	06	E Dist Line Capacity	06K	Power Factor Management	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 17	No	Ongoing	Annual	1,167.4	162.5	(1,004.9)	-86.1%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
13	Capital	Electric Distribution	06	E Dist Line Capacity	06P	REP Enable DG Dist Line	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 17	No	Ongoing	Annual	1,401.3	109.2	(1,292.2)	-92.2%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
14	Capital	Electric Distribution	06	E Dist Line Capacity	#	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 17	No	Ongoing	Annual	7,436.3	7,246.1	(190.2)	-2.6%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
15	Capital	Electric Distribution	07	E Dist Inst/Repl OH Poles	07A	Tree Connect W&I Assessments	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 12	No	Ongoing	Annual	-	(1,366.7)	(1,366.7)	-100.0%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
16	Capital	Electric Distribution	07	E Dist Inst/Repl OH Poles	07C	Special Criteria Pole Repl	SRM Total	SRM Total	Ex 4, Ch 12	No	Ongoing	Annual	3,150.4	15,717.4	12,567.0	398.9%	NO	YES	# of Poles	270	581	311	115.4%	YES	Program expenditures were above imputed regulatory values due to a higher volume of tree connect attachments were identified as needing replacement than forecast in the 2023 GRC. Tree connects are identified during inspections and prioritized according to urgency for replacement. The 2023 GRC Final Decision adopted a lower unit cost than PG&E's forecast, also contributing to the higher amount of actual costs for this program.	Actual program units were above imputed program units due to higher volume of tree connect attachments identified as needing replacement than forecast in the 2023 GRC. Tree connects are identified during inspections and prioritized according to the urgency for replacement. For this program the costs are directly associated with the number of poles installed.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to proactively replace dead, dying, and declining trees being used as a utility power pole prior to premature failure. This program is demand driven based on field rates and associated notifications, and the urgency of the notifications. The 2023 GRC Final Decision adopted a lower unit cost than PG&E forecasted, also contributing to the higher amount of actuals for this program. At this time PG&E has not forecasted how this program will proceed during the GRC timeframe.		
17	Capital	Electric Distribution	07	E Dist Inst/Repl OH Poles	07C	Special Criteria Pole Repl	Wildfire	WLDPR-M013: Pole Programs - Replace Tree Attachments	Ex 4, Ch 12	No	N/A	N/A	3,150.4	15,717.4	12,567.0	398.9%	N/A	N/A	# of Poles	270	581	311	115.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
18	Capital	Electric Distribution	07	E Dist Inst/Repl OH Poles	07D	Pole Repl	SRM Total	SRM Total	Ex 4, Ch 12	No	Ongoing	Annual	352,006.1	333,775.8	(18,230.4)	-5.2%	NO	NO	# of Poles	15,964	13,788	(2,176)	-13.6%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
19	Capital	Electric Distribution	07	E Dist Inst/Repl OH Poles	07D	Pole Repl	Distribution Overhead	DOVHO-C011: Pole Programs	Ex 4, Ch 12	No	N/A	N/A	352,006.1	333,775.8	(18,230.4)	-5.2%	N/A	N/A	# of Poles	15,964	13,788	(2,176)	-13.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
20	Capital	Electric Distribution	07	E Dist Inst/Repl OH Poles	07D	Pole Repl	Wildfire	WLDPR-C12C: Pole Replacement	Ex 4, Ch 12	No	N/A	N/A	352,006.1	333,775.8	(18,230.4)	-5.2%	N/A	N/A	# of Poles	15,964	13,788	(2,176)	-13.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
21	Capital	Electric Distribution	07	E Dist Inst/Repl OH Poles	07G	Pole Joint Util Telco Reimb	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 12	No	Ongoing	Annual	-	0.0	0.0	100.0%	NO	NO	Not Utilized - The variety of work activities in this program makes it infeasible to identify a single unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
22	Capital	Electric Distribution	07	E Dist Inst/Repl OH Poles	07L	Steel Lattice Structures	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 12	No	Ongoing	Annual	-	7.2	7.2	100.0%	NO	NO	Not Utilized - The variety of work activities in this program makes it infeasible to identify a single unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	Over	Proceeding as Planned	N/A		
23	Capital	Electric Distribution	07	E Dist Inst/Repl OH Poles	07O	Overloaded Pole Replacements	SRM Total	SRM Total	Ex 4, Ch 12	No	Ongoing	Annual	7,488.8	12,424.4	4,935.6	65.9%	NO	NO	# of Poles	262	304	42	16.1%	NO	Below variance threshold.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
24	Capital	Electric Distribution	07	E Dist Inst/Repl OH Poles	07O	Overloaded Pole Replacements	Distribution Overhead	DOVHO-C011: Pole Programs	Ex 4, Ch 12	No	N/A	N/A	7,488.8	12,424.4	4,935.6	65.9%	N/A	N/A	# of Poles	262	304	42	16.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
25	Capital	Electric Distribution	07	E Dist Inst/Repl OH Poles	07O	Overloaded Pole Replacements	Wildfire	WLDPR-C12D: Overloaded Pole Replacement	Ex 4, Ch 12	No	N/A	N/A	7,488.8	12,424.4	4,935.6	65.9%	N/A	N/A	# of Poles	262	304	42	16.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
26	Capital	Electric Distribution	07	E Dist Inst/Repl OH Poles	#	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 12	No	Ongoing	Annual	-	426.4	426.4	100.0%	NO	NO	Not Utilized - This program has no measurable units because it is used to record costs.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	Over	Proceeding as Planned	N/A		
27	Capital	Electric Distribution	08	E Dist Replace OH Asset	08J	Repl Deteriorated OH Conductor	SRM Total	SRM Total	Ex 4, Ch 13	No	Ongoing	Annual	44,888.1	17,008.8	(27,879.3)	-62.1%	YES	YES	# of Circuit Miles	74	27	(47)	-63.6%	YES	Program expenditures were below imputed regulatory values due to prioritization of the MWC to focus on System Hardening work (08W) in HFD areas, to reduce ignition risk.	Actual program units were below imputed program units due to prioritization of the MWC to focus on System Hardening work (08W) in HFD areas, to reduce ignition risk.	Under	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to replace deteriorated OH conductor in non-HFDs prior to premature failure. For the remainder of the GRC cycle, PG&E anticipates that this program will continue to be lower priority than other work in Electric Distribution like wildfire mitigation and capacity work.		
28	Capital	Electric Distribution	08	E Dist Replace OH Asset	08J	Repl Deteriorated OH Conductor	Distribution Overhead	DOVHO-C004: Overhead Conductor Replacement	Ex 4, Ch 13	No	N/A	N/A	44,888.1	17,008.8	(27,879.3)	-62.1%	N/A	N/A	# of Circuit Miles	74	27	(47)	-63.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
29	Capital	Electric Distribution	08	E Dist Replace OH Asset	08S	Replace Obsolete OH Switches	SRM Total	SRM Total	Ex 4, Ch 13	No	Ongoing	Annual	314.9	125.0	(189.9)	-60.3%	NO	NO	# of Switches Installed/Replaced	9	1	(8)	-89.2%	YES	Below variance threshold.	Actual program units were below imputed program units due to prioritization of the MWC to focus on System Hardening work (08W) in HFD areas, to reduce ignition risk.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to replace obsolete OH switches and minimize potential safety issues.		
30	Capital	Electric Distribution	08	E Dist Replace OH Asset	08S	Replace Obsolete OH Switches	Distribution Overhead	DOVHO-M006: Grasshopper and KFF Switch Replacement	Ex 4, Ch 13	No	N/A	N/A	314.9	125.0	(189.9)	-60.3%	N/A	N/A	# of Switches Installed/Replaced	9	1	(8)	-89.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

**TABLE 3-4
2023 GRC CYCLE ELECTRIC DISTRIBUTION CAPITAL COMPARISON BY MAT CODE FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	Type (OMB Expense or Capital)	Functional Area	MWC	MWC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$ (H-G))	Spending Percent Variance for 2023 (%) (H-G)/(H-G)	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Imputed Adopted Units	2023 Actual Units	Difference for 2023 (# of Units) (O-N)	Unit Percent Variance for 2023 (%) (O-N)/(O-N)	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	Scope (U, G, or T)	Schedule (U, O, or T)	Budget (U, O, or T)	Status	Completion Status Statement				
31	Capital	Electric Distribution	08/3U	E Dist Replace OH Asset	08W/3UJ	Wildfire Resiliency projects	SRM Total	SRM Total	Ex 4, Ch 4.3	No	Ongoing	Annual	768,193.1	1,091,088.1	322,895.0	42.0%	YES	YES	# of Circuit Miles	304	425	121	40.0%	YES	Program expenditures were above imputed regulatory values due to a higher volume of system hardening miles completed. The program executed mileage in 2023 in alignment with what was submitted in the 2023 GRC and aligned with the 2023-2025 Wildfire Mitigation Plan; however the 2023 GRC Final Decision issued in November 2023 approved a lower volume of work to be completed, resulting in the overrun in 2023.	Actual program units were above imputed program units due to the system hardening program having executed mileage in 2023 in alignment with what was submitted in the 2023 GRC and aligned with the 2023-2025 Wildfire Mitigation Plan; however the 2023 GRC Final Decision issued in November 2023 approved a lower volume of work to be completed, resulting in the overrun in 2023.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to conduct System Hardening for wildfire mitigation. Since filing the 2023 GRC, PG&E began recording underlying costs associated with this program to new MWC code 3U, so PG&E is combining the codes because the work is the same as what was imputed in 08W. PG&E is reporting the status as "Proceeding as Planned" because PG&E intends to manage the program according to the 2023 GRC Final Decision.				
32	Capital	Electric Distribution	08/3U	E Dist Replace OH Asset	08W/3UJ	Wildfire Resiliency projects	Distribution Overhead	DOVHD-M002: System Hardening	Ex 4, Ch 4.3	No	N/A	N/A	768,193.1	1,091,088.1	322,895.0	42.0%	N/A	N/A	# of Circuit Miles	304	425	121	40.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
33	Capital	Electric Distribution	08/3U	E Dist Replace OH Asset	08W/3UJ	Wildfire Resiliency projects	Wildfire	WLDFR-M002: System Hardening	Ex 4, Ch 4.3	Yes	N/A	N/A	768,193.1	1,090,579.8	322,386.7	42.0%	N/A	N/A	# of Circuit Miles	304	425	121	40.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
34	Capital	Electric Distribution	08/3U	E Dist Replace OH Asset	08W/3UJ	Wildfire Resiliency projects	Wildfire	POST-GRC: Post-GRC Mitigation	Ex 4, Ch 4.3	Yes	N/A	N/A	-	508.3	508.3	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
35	Capital	Electric Distribution	08	E Dist Replace OH Asset	#	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 13	No	Ongoing	Annual	-	(89.4)	(89.4)	-100.0%	NO	NO	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not utilized	On-Target	On-Target	Under	Proceeding as Planned	N/A			
36	Capital	Electric Distribution	09	E Dist Automation & Protection	09A	ED Line SCADA Inst/Repl	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 16	No	Ongoing	Annual	-	3.0	3.0	100.0%	NO	NO	Not Utilized - The variety of work activities in this program makes it infeasible to identify a single unit of measure.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not utilized	On-Target	On-Target	Over	Proceeding as Planned	This MAT code was not forecasted in the 2023 GRC. Electric Distribution Line SCADA, install and replace, is now being forecast and recorded in MAT 49A. Although nominal dollars were recorded here when the data was pulled in January, this MAT code is not being used for specific program costs at this time.			
37	Capital	Electric Distribution	09	E Dist Automation & Protection	09B	ED Sub SCADA/RTU Replace	SRM Total	SRM Total	Ex 4, Ch 16	No	Ongoing	Annual	20,074.1	16,713.0	(3,361.2)	-16.7%	NO	NO	Not Utilized - The variety of work activities in this program makes it infeasible to identify a single unit of measure.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
38	Capital	Electric Distribution	09	E Dist Automation & Protection	09B	ED Sub SCADA/RTU Replace	Distribution Overhead	DOVHD-C007: Supervisory Control and Data Acquisition	Ex 4, Ch 16	Yes	N/A	N/A	20,074.1	2,825.9	(17,248.2)	-85.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
39	Capital	Electric Distribution	09	E Dist Automation & Protection	09B	ED Sub SCADA/RTU Replace	Wildfire	WLDFR-M020: Enhanced Powerline Safety Settings	Ex 4, Ch 16	Yes	N/A	N/A	-	13,887.1	13,887.1	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
40	Capital	Electric Distribution	09	E Dist Automation & Protection	09D	ED Sub SCADA/RTU Instal	SRM Total	SRM Total	Ex 4, Ch 16	No	Ongoing	Annual	-	517.7	421.7	(96.0)	-18.5%	NO	NO	Not Utilized - The variety of work activities in this program makes it infeasible to identify a single unit of measure.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
41	Capital	Electric Distribution	09	E Dist Automation & Protection	09D	ED Sub SCADA/RTU Instal	Distribution Overhead	DOVHD-C007: Supervisory Control and Data Acquisition	Ex 4, Ch 16	No	N/A	N/A	-	517.7	421.7	(96.0)	-18.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
42	Capital	Electric Distribution	09	E Dist Automation & Protection	09E	ED Sub Protect Relay Inst/Repl	SRM Total	SRM Total	Ex 4, Ch 16	No	Ongoing	Annual	3,032.9	228.4	(2,806.5)	-92.5%	NO	NO	Not Utilized - The variety of work activities in this program makes it infeasible to identify a single unit of measure.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
43	Capital	Electric Distribution	09	E Dist Automation & Protection	09E	ED Sub Protect Relay Inst/Repl	Distribution Overhead	DOVHD-C007: Supervisory Control and Data Acquisition	Ex 4, Ch 16	No	N/A	N/A	3,032.9	228.4	(2,806.5)	-92.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
44	Capital	Electric Distribution	09	E Dist Automation & Protection	09F	ED Sub SCADA Emergency Repl	SRM Total	SRM Total	Ex 4, Ch 16	No	Ongoing	Annual	5,970.5	11,181.5	5,211.0	87.3%	NO	NO	Not Utilized - The variety of work activities in this program makes it infeasible to identify a single unit of measure.	N/A	N/A	N/A	N/A	N/A	N/A	Below variance threshold.	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
45	Capital	Electric Distribution	09	E Dist Automation & Protection	09F	ED Sub SCADA Emergency Repl	Distribution Overhead	DOVHD-C007: Supervisory Control and Data Acquisition	Ex 4, Ch 16	No	N/A	N/A	5,970.5	11,181.5	5,211.0	87.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
46	Capital	Electric Distribution	17	E Dist Routine Emergency	N/A	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 6	No	Ongoing	Annual	249,483.0	395,409.8	145,926.8	58.5%	YES	YES	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	N/A	N/A	Program expenditures were above imputed regulatory values due to higher cost escalation than expected and a substantially higher volume of emergency work in 2023. The higher volumes of emergency work were largely due to a special emphasis placed in 2023 on identifying & addressing deteriorated OH Service Conductors in HFTDs.	Not utilized	Over	Over	Over	Emergent	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to address routine emergencies and conditions in the field that require immediate attention. PG&E expects to continue to spend more on this program than forecasted in order to address deteriorated OH Service Conductors in HFTDs as a routine emergency, as noted in the cost variance explanation.			
47	Capital	Electric Distribution	21	Misc Capital	N/A	Not assigned	SRM Total	SRM Total	Ex 4, Ch 4.1 Ex 4, Ch 4.2 Ex 4, Ch 4.3 Ex 4, Ch 20-22	No	Ongoing	Annual	28,274.9	33,887.6	5,612.7	19.1%	NO	NO	# of Weather Stations	150	102	(48)	-32.0%	YES	Actual program units were below imputed program units due to two factors: 1) through 2022, weather stations were installed ahead of plan allowing for a scale back of program units in 2023; and 2) costs for environmental and federal land permitting has increased since the GRC was forecasted, therefore fewer program units were completed for the costs allocated.	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to conduct various capital activities that enable electric operations. This program includes costs for activities like the Emergency Operating Centers (EOCs), facilities upgrades, IT enhancements, and Applied Technology Services (ATS) lab safety and upgrades. PG&E is on target in this program for the 2023 GRC cycle.	On-Target	On-Target	On-Target	Proceeding as Planned					
48	Capital	Electric Distribution	21	Misc Capital	N/A	Not assigned	Emergency Preparedness & Response	EPNDR-C002: Situational Awareness and Forecasting Initiatives - WSOE	Ex 4, Ch 4.1 Ex 4, Ch 4.2 Ex 4, Ch 4.3 Ex 4, Ch 5	Yes	N/A	N/A	113.1	21.2	(91.9)	-81.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
49	Capital	Electric Distribution	21	Misc Capital	N/A	Not assigned	Emergency Preparedness & Response	EPNDR-C004: EP&R Field Operations Technology	Ex 4, Ch 4.1 Ex 4, Ch 4.2 Ex 4, Ch 4.3 Ex 4, Ch 5	Yes	N/A	N/A	3,562.9	1,471.8	(2,111.1)	-58.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
50	Capital	Electric Distribution	21	Misc Capital	N/A	Not assigned	Emergency Preparedness & Response	EPNDR-M000: EP&R Mitigations	Ex 4, Ch 4.1 Ex 4, Ch 4.2 Ex 4, Ch 4.3 Ex 4, Ch 5	Yes	N/A	N/A	2,235.6	4,574.6	2,339.1	104.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
51	Capital	Electric Distribution	21	Misc Capital	N/A	Not assigned	Wildfire	WLDFR-M008: PSPS Reduction Initiatives	Ex 4, Ch 4.1 Ex 4, Ch 4.2 Ex 4, Ch 4.3 Ex 4, Ch 5	Yes	N/A	N/A	277.0	5.0	(272.0)	-98.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
52	Capital	Electric Distribution	21	Misc Capital	N/A	Not assigned	Wildfire	WLDFR-M07B: Situational Awareness and Forecasting Initiatives - Weather Station	Ex 4, Ch 4.1 Ex 4, Ch 4.2 Ex 4, Ch 4.3 Ex 4, Ch 5	Yes	N/A	N/A	3,587.1	3,955.8	368.7	10.3%	N/A	N/A	# of Weather Stations	150	102	(48)	-32.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
53	Capital	Electric Distribution	21	Misc Capital	N/A	Not assigned	Wildfire	WLDFR-M07F: Situational Awareness and Forecasting Initiatives - Sensor IQ	Ex 4, Ch 4.1 Ex 4, Ch 4.2 Ex 4, Ch 4.3 Ex 4, Ch 5	Yes	N/A	N/A	11,119.0	(0.0)	(11,119.0)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
54	Capital	Electric Distribution	21	Misc Capital	N/A	Not assigned	Wildfire	WLDFR-M07G: Situational Awareness and Forecasting Initiatives - Partial Voltage Detection	Ex 4, Ch 4.1 Ex 4, Ch 4.2 Ex 4, Ch 4.3 Ex 4, Ch 5	Yes	N/A	N/A	-	0.1	0.1	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
55	Capital	Electric Distribution	21	Misc Capital	N/A	Not assigned	Wildfire	WLDFR-M07J: Situational Awareness and Forecasting Initiatives - Meteorology	Ex 4, Ch 4.1 Ex 4, Ch 4.2 Ex 4, Ch 4.3 Ex 4, Ch 5	Yes	N/A	N/A	1,187.7	904.4	(283.3)	-23.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
56	Capital	Electric Distribution	21	Misc Capital	N/A	Not assigned	Wildfire	WLDFR-M008: Safety and Infrastructure Protection Teams	Ex 4, Ch 4.1 Ex 4, Ch 4.2 Ex 4, Ch 4.3 Ex 4, Ch 5	Yes	N/A	N/A	262.2	6.1	(256.1)	-97.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
57	Capital	Electric Distribution	21	Misc Capital	N/A	Not assigned	Wildfire	WLDFR-M009: Community Wildfire Safety Program PMO	Ex 4, Ch 4.1 Ex 4, Ch 4.2 Ex 4, Ch 4.3 Ex 4, Ch 5	Yes	N/A	N/A	-	12,915.1	12,915.1	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
58	Capital	Electric Distribution	21	Misc Capital	N/A	Not assigned	Wildfire	WLDFR-M017: System Hardening - Remote Grid	Ex 4, Ch 4.1 Ex 4, Ch 4.2 Ex 4, Ch 4.3 Ex 4, Ch 5	Yes	N/A	N/A	-	4,538.5	4,538.5	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
59	Capital	Electric Distribution	21	Misc Capital	N/A	Not assigned	SRM (NON-RAMP)	SRM (NON-RAMP)	Ex 4, Ch 4.1 Ex 4, Ch 4.2 Ex 4, Ch 4.3 Ex 4, Ch 5	Yes	N/A	N/A	5,910.3	5,294.8	(615.5)	-10.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
60	Capital	Electric Distribution	25	Install New Electric Meters	N/A	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 8	No	Ongoing	Annual	31,396.1	30,489.0	(907.2)	-3.0%	NO	NO	# of Field Orders	129,890	142,008	13,108	10.1%	NO	Below variance threshold.	Below variance threshold.	Over	On-Target	On-Target	Proceeding as Planned	N/A				

**TABLE 3-4
2023 GRC CYCLE ELECTRIC DISTRIBUTION CAPITAL COMPARISON BY MAT CODE FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	Type (O&M Expense or Capital)	Functional Area	MWC	MWC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (H-G/G-100)	Spending Variance for 2023 (%) (H-G/G-100)	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Imputed Adopted Units	2023 Actual Units	Difference for 2023 (# of Units) (O-N/N*-100)	Unit Percent Variance for 2023 (%) (O-N/N*-100)	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)	Status	Completion Status Statement		
61	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AA	OH Genl Repl	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	138,779.5	291,909.8	153,130.1	110.3%	YES	YES	# of Notifications Completed	19,548	20,136	588	3.0%	NO	Program expenditures were above imputed regulatory values due to higher volume of units completed at higher unit costs than adopted in the 2023 GRC Final Decision. PG&E's actual unit cost remain higher than imputed unit costs driven by the higher labor costs for this work.	Below variance threshold.	On-Target	On-Target	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of the program is to replace deteriorated overhead facilities that are not an imminent hazard, and have not caused an outage. Because this program is associated with important mitigations, PG&E will continue to prioritize this work. PG&E anticipates that the unit costs will remain higher than imputed throughout the 2023 GRC cycle.		
62	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AA	OH Genl Repl	Distribution Overhead	DOVHD-C003: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	138,779.5	291,909.8	153,130.1	110.3%	N/A	N/A	# of Notifications Completed	19,548	20,136	588	3.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
63	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AA	OH Genl Repl	Wildfire	WLDPR-C008: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	138,779.5	291,909.8	153,130.1	110.3%	N/A	N/A	# of Notifications Completed	19,548	20,136	588	3.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
64	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AB	Bird Safe Inst/Repl	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	3,823.2	2,018.7	(1,804.6)	-44.3%	NO	NO	# of Notifications Completed	967	407	(560)	-57.9%	YES	Actual program units were below imputed program units due to prioritizing the completion of high priority SR tags within MWC 2A. Additionally there was a lower find rate of bird-safe notifications for this program in 2023.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of the program is to perform capital modifications to bird-safe incident and/or adjacent poles in response to a bird electrocution, per US Fish and Wildlife Services (USFWS) requirements and utility operating standard S2321. Spending in this program is based on find rates and the prioritization of tags within the 2A MWC.		
65	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AB	Bird Safe Inst/Repl	Distribution Overhead	DOVHD-C003: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	3,823.2	2,018.7	(1,804.6)	-44.3%	N/A	N/A	# of Notifications Completed	967	407	(560)	-57.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
66	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AB	Bird Safe Inst/Repl	Wildfire	WLDPR-C011: Animal Abatement	Ex 4, Ch 11	No	N/A	N/A	3,823.2	2,018.7	(1,804.6)	-44.3%	N/A	N/A	# of Notifications Completed	967	407	(560)	-57.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
67	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AC	Bird Safe Inst/Repl Annual	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	3,770.4	1,728.4	(2,042.1)	-54.2%	NO	NO	# of Notifications Completed	978	296	(682)	-69.7%	YES	Actual program units were below imputed program units due to prioritizing the completion of high priority SR tags within MWC 2A. Additionally there was a lower find rate of bird-safe notifications for this program in 2023.	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of the program is to perform capital modifications to bird-safe incident and/or adjacent poles in response to a bird electrocution, per US Fish and Wildlife Services (USFWS) requirements and utility operating standard S2321. Spending in this program is based on find rates and the prioritization of tags within the 2A MWC.		
68	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AC	Bird Safe Inst/Repl Annual	Wildfire	WLDPR-C011: Animal Abatement	Ex 4, Ch 11	No	N/A	N/A	3,770.4	1,728.4	(2,042.1)	-54.2%	N/A	N/A	# of Notifications Completed	978	296	(682)	-69.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
69	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AE	OH COE Repl	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	29,330.1	65,524.3	36,194.2	123.4%	YES	YES	# of Notifications Completed	823	1,031	208	25.3%	YES	Program expenditures were above imputed regulatory values due to the higher volume of tags completed, increased unit costs, and increased costs associated with the types of facilities addressed in 2023.	Actual program units were above imputed program units because PG&E needed to complete more program units to improve customer reliability and prevent outages.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to identify overhead die facilities for removal based on investigations, and take appropriate remedial measures. In the 2023 GRC cycle, PG&E expects to continue to spend more and achieve more units than imputed because it is an important wildfire mitigation.		
70	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AE	OH COE Repl	Distribution Overhead	DOVHD-C003: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	29,330.1	65,524.3	36,194.2	123.4%	N/A	N/A	# of Notifications Completed	823	1,031	208	25.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
71	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AF	OH Idle Facility Remove	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	2,843.7	9,538.3	6,694.6	235.4%	NO	NO	# of Locations	323	1,005	682	211.3%	YES	Actual program units were above imputed program units because life facility completions are part of PG&E's commitment to wildfire mitigation. More program units were completed to mitigate fire risk.	Below variance threshold.	Over	Over	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to identify overhead die facilities for removal based on investigations, and take appropriate remedial measures. In the 2023 GRC cycle, PG&E expects to continue to spend more and achieve more units than imputed because it is an important wildfire mitigation.		
72	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AF	OH Idle Facility Remove	Distribution Overhead	DOVHD-C003: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	2,843.7	9,538.3	6,694.6	235.4%	N/A	N/A	# of Locations	323	1,005	682	211.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
73	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AF	OH Idle Facility Remove	Wildfire	WLDPR-C008: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	2,843.7	9,538.3	6,694.6	235.4%	N/A	N/A	# of Locations	323	1,005	682	211.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
74	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AG	SF Series Streetlights	SRM Total	SRM Total	Ex 4, Ch 11	No	12	11	2,584.9	280.8	(2,314.1)	-89.2%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
75	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AG	SF Series Streetlights	Distribution Overhead	DOVHD-M007: Regulated Output Streetlight Replacement	Ex 4, Ch 11	No	N/A	N/A	2,584.9	280.8	(2,314.1)	-89.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
76	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AH	LED Streetlights	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	7,379.7	608.9	(6,770.8)	-91.7%	NO	NO	# of Streetlights	8,000	382	(7,618)	-95.1%	YES	Actual program units were below imputed program units because resources were directed to higher priority work within MWC 2A like wildfire mitigation work in MAT 2AA.	Below variance threshold.	Under	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to replace PG&E's LED-1 non-decorative streetlights with Light Emitting Diode (LED) fixtures and new photocells. PG&E expects that this program will continue to be lower priority than other work in MWC 2A for the remainder of the GRC cycle.		
77	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AH	LED Streetlights	Distribution Overhead	DOVHD-C003: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	7,379.7	608.9	(6,770.8)	-91.7%	N/A	N/A	# of Streetlights	8,000	-	(8,000)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
78	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AI	SF Historical Streetlights	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	1,038.0	8.0	(1,030.0)	-99.2%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to replace or refurbish cast-iron decorative streetlights in the Golden Gate/Union Square area of San Francisco that have been found to have corroded steel support poles. PG&E expects that this program will continue to be lower priority than other work in MWC 2A for the remainder of the GRC cycle.		
79	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AI	SF Historical Streetlights	Distribution Overhead	DOVHD-C003: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	1,038.0	8.0	(1,030.0)	-99.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
80	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AJ ^(H)	CWSP Non-Exempt/Fuse/Repl	SRM Total	SRM Total	Ex 4, Ch 11 Ex 4, Ch 4.3	No	Ongoing	Annual	-	18,271.0	18,271.0	100.0%	NO	YES	# of Locations	-	3,144	3,144	100.0%	YES	Actual program units were above imputed regulatory values due to this program was forecasted in MAT 2AP but recorded in MAT 2AJ. MAT 2AJ was created in 2022 for greater visibility for the non-exempt expulsi	Actual program units were above imputed program units because 1) the program units were imputed in 2AP, 2) PG&E conducted more program units than imputed because of RAMP commitments, and 3) PG&E was able to do the additional program units at a lower unit cost than imputed because of efforts to negotiate vendor contract to provide more work, which were bundled for higher efficiency.	Over	Over	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is non-exempt fuse replacement for the mitigation of wildfire risks. During the 2023 GRC cycle PG&E will continue to expedite the replacement of non-exempt fuses (which are located in HTD areas) to mitigation ignition risks. Note that this program was imputed in MAT 2AP but recorded here in MAT 2AJ. See variance explanations for more details.		
81	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AJ	CWSP Non-Exempt/Fuse/Repl	Distribution Overhead	DOVHD-M004: Expulsion Fuse Replacement	Ex 4, Ch 11 Ex 4, Ch 4.3	No	N/A	N/A	-	18,271.0	18,271.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
82	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AJ	CWSP Non-Exempt/Fuse/Repl	Wildfire	WLDPR-M004: Expulsion Fuse Replacement	Ex 4, Ch 11 Ex 4, Ch 4.3	No	N/A	N/A	-	18,271.0	18,271.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
83	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AP ^(H)	OH CAP Projects	SRM Total	SRM Total	Ex 4, Ch 11 Ex 4, Ch 4.3	No	Ongoing	Annual	17,835.4	1,808.1	(16,027.3)	-89.9%	NO	YES	# of Locations	1,188	-	(1,188)	-100.0%	YES	Program expenditures were below imputed regulatory as most non-exempt fuses forecasted in 2AP were recorded under MAT code 2AJ. PG&E will continue to record work other than expulsion fuse replacements, forecasted in 2AP, to this program like Non-Wood Streetlight Pole Replacements and costs for equipment with access issues.	Actual program units were below imputed program units because the utilized work for non-exempt fuses, was forecast in MAT 2AP, however they were recorded in MAT 2AJ. The work remaining on 2AP is not utilized, see completion status statement for additional details.	Under	On-Target	Under	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. This work was forecasted in MAT 2AP but recorded in MAT 2AJ. PG&E will continue to record work, other than expulsion fuse replacements, forecasted in 2AP, to this program like Non-Wood Streetlight Pole Replacements and costs for equipment with access issues.		
84	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AP	OH CAP Projects	Distribution Overhead	DOVHD-M004: Expulsion Fuse Replacement	Ex 4, Ch 11 Ex 4, Ch 4.3	Yes	N/A	N/A	16,835.9	-	(16,835.9)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
85	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AP	OH CAP Projects	Wildfire	WLDPR-M004: Expulsion Fuse Replacement	Ex 4, Ch 11 Ex 4, Ch 4.3	Yes	N/A	N/A	16,835.9	-	(16,835.9)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
86	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AP	OH CAP Projects	SRM (NON-RAMP)	SRM (NON-RAMP)	Ex 4, Ch 11 Ex 4, Ch 4.3	Yes	N/A	N/A	1,199.5	1,808.1	608.6	50.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
87	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AQ	Ceramic Post Insulators	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	6,071.1	(8.8)	(6,079.9)	-100.1%	NO	NO	# of Ceramic Post Insulators Replaced	2,093	-	(2,093)	-100.0%	YES	Actual program units were below imputed program units due to the re-prioritization of this work to other capital work in electric distribution, like MAT 2AA.	Below variance threshold.	Under	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is the replacement of ceramic post insulators that were manufactured in or prior to 1972 and are currently installed on PG&E poles. PG&E is anticipating that this program will continue to be lower priority in the GRC cycle.		
88	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AQ	Ceramic Post Insulators	Distribution Overhead	DOVHD-M008: Ceramic Post Insulator Replacement	Ex 4, Ch 11	No	N/A	N/A	6,071.1	(8.8)	(6,079.9)	-100.1%	N/A	N/A	# of Ceramic Post Insulators Replaced	2,093	-	(2,093)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
89	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AR	Surge Arrester Replacement	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	18,523.0	5,194.6	(13,328.4)	-72.0%	NO	YES	# of Replacements	3,952	683	(3,269)	-83.2%	YES	Program expenditures were below imputed regulatory values due to PG&E's focus on completing replacements in HTD Tier 2 and Tier 3 areas in prior years. Beginning in 2023, PG&E began conducting replacements in non-HTD areas, but at a slower rate than forecasted. This allowed PG&E to allocate resources to higher priority work in MWC 2A.	Actual program units were below imputed program units because PG&E is conducting the non-HTD replacements at a slower rate, as explained in the cost variance explanation.	Under	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is the replacement of surge arresters. Surge arresters limit the voltage surge caused by lightning and protects the equipment installed in parallel. By 2023, PG&E had completed work in HTDs and began working in non-HTDs. PG&E is working on the non-HTD units at a slower pace than forecasted in order to allocate resources to higher priority work in MWC 2A.		
90	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AR	Surge Arrester Replacement	Distribution Overhead	DOVHD-M003: Non-Exempt Surge Arrester Replacement	Ex 4, Ch 11	No	N/A	N/A	18,523.0	5,194.6	(13,328.4)	-72.0%	N/A	N/A	# of Replacements	3,952	683	(3,269)	-83.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**TABLE 3-4
2023 GRC CYCLE ELECTRIC DISTRIBUTION CAPITAL COMPARISON BY MAT CODE FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	Type (OMB Expense or Capital)	Functional Area	MWC	MWC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (R-C)	Spending Percent Variance for 2023 (%) (R-C)/R	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Imputed Adopted Units	2023 Actual Units	Difference (# of Units) (O-N)	Unit Percent Variance for 2023 (%) (O-N)/N	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)	Status	Completion Status Statement			
81	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AS	FAS Overhead Capital	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	865.3	331.0	(534.3)	-61.7%	NO	NO	# of Notifications Completed	2,625	-	(2,625)	-100.0%	YES	Below variance threshold	Actual program units were below imputed program units because fewer problems requiring remediation by troubleshooters were identified.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to record costs for Field Automation System (FAS) Overhead work, that is identified during a field job and completed by a troubleshooter. Spending in this program is based on find rates.			
82	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	2AS	FAS Overhead Capital	Distribution Overhead	DOVHD-C003: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 11	No	N/A	N/A	865.3	331.0	(534.3)	-61.7%	N/A	N/A	# of Notifications Completed	2,625	-	(2,625)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
83	Capital	Electric Distribution	2A	E Dist Inst/Repl OH General	#	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 11	No	Ongoing	Annual	-	(60.2)	(60.2)	-100.0%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold	Not utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
84	Capital	Electric Distribution	2B	E Dist Inst/Repl UG DBA	UG Genl Repl	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	49,864.3	73,659.3	23,795.0	47.7%	YES	YES	# of Notifications Completed	1,817	2,235	418	23.0%	YES	Program expenditures were above imputed regulatory values due to higher than forecasted unit costs and the completion of a higher volume of units than forecasted. See the unit variance explanation for further details.	Actual program units were above imputed program units because PG&E found that the frames for lids that provide access to underground facilities needed to be replaced rather than repaired, and therefore the work became capitalized under DBA. In addition more frames were prioritized for replacement for safety reasons.	Over	Over	Over	Emergent	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to provide underground preventative maintenance for deteriorated facilities that are not an imminent hazard, and have not caused an outage. Facilities include transformers, conduit, enclosures, pads, and side equipment. At this time, PG&E expects to continue to spend more and conduct more units during the GRC cycle. (See unit variance explanation)				
85	Capital	Electric Distribution	2B	E Dist Inst/Repl UG DBA	UG Genl Repl	Underground	DUNG-C003: Equipment Maintenance and Replacement	Ex 4, Ch 11	No	N/A	N/A	49,864.3	73,659.3	23,795.0	47.7%	N/A	N/A	# of Notifications Completed	1,817	2,235	418	23.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
86	Capital	Electric Distribution	2B	E Dist Inst/Repl UG DBA	UG Genl Repl	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	899.7	566.5	(333.2)	-37.0%	NO	NO	# of Notifications Completed	3,238	2,241	(997)	-30.8%	YES	Below variance threshold	Actual program units were below imputed program units because fewer than expected Fault Indicators were identified as needing replacement during inspections.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is for the replacement of deteriorated fault indicators that are not an imminent hazard, and have not caused an outage. Spending in this program is based on inspection find rates.				
87	Capital	Electric Distribution	2B	E Dist Inst/Repl UG DBA	UG Genl Repl	Underground	DUNG-C003: Equipment Maintenance and Replacement	Ex 4, Ch 11	No	N/A	N/A	899.7	566.5	(333.2)	-37.0%	N/A	N/A	# of Notifications Completed	3,238	2,241	(997)	-30.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
88	Capital	Electric Distribution	2B	E Dist Inst/Repl UG DBA	UG COE Repl	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	7,223.9	9,026.6	1,802.7	25.0%	NO	NO	# of Tags Completed	144	88	(56)	-38.9%	YES	Below variance threshold	Actual program units were above imputed program units because unit costs were above forecasted. In order to manage overall costs in the 2B program, PG&E did fewer program units in 2B0.	Under	Under	On-Target	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is for the replacement of deteriorated fault indicators that are not an imminent hazard, and have not caused an outage. Spending in this program is based on inspection find rates.				
89	Capital	Electric Distribution	2B	E Dist Inst/Repl UG DBA	UG COE Repl	Underground	DUNG-C003: Equipment Maintenance and Replacement	Ex 4, Ch 11	No	N/A	N/A	7,223.9	9,026.6	1,802.7	25.0%	N/A	N/A	# of Tags Completed	144	88	(56)	-38.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
100	Capital	Electric Distribution	2B	E Dist Inst/Repl UG DBA	UG Life Facility Remove	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	29.6	317.3	287.6	970.5%	NO	NO	# of Locations	2	14	12	600.0%	YES	Below variance threshold	Actual program units were above imputed program units because more life facilities were identified for removal than forecasted.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is the removal of underground life facilities deemed necessary for removal.				
101	Capital	Electric Distribution	2B	E Dist Inst/Repl UG DBA	UG Life Facility Remove	Underground	DUNG-C005: UG Life Facility Remove	Ex 4, Ch 11	No	N/A	N/A	29.6	317.3	287.6	970.5%	N/A	N/A	# of Locations	2	14	12	600.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
102	Capital	Electric Distribution	2B	E Dist Inst/Repl UG DBA	UG CAP Projects	SRM Total	SRM Total	Ex 4, Ch 11	No	Ongoing	Annual	8,456.7	2,988.1	(5,468.6)	-64.7%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold	Not utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A				
103	Capital	Electric Distribution	2B	E Dist Inst/Repl UG DBA	UG CAP Projects	Underground	DUNG-C004: Planned Major Projects	Ex 4, Ch 11	No	N/A	N/A	8,456.7	2,988.1	(5,468.6)	-64.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
104	Capital	Electric Distribution	2B	E Dist Inst/Repl UG DBA	#	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 11	No	Ongoing	Annual	-	31.7	31.7	100.0%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold	Not utilized.	On-Target	On-Target	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to record Standard Cost Variance (SCV) for the Electric Distribution Preventative Maintenance UG program. SCV is the difference between actual costs incurred and the amount charged out by employees at a predetermined rate. PG&E does not forecast Standard Cost Variance.			
105	Capital	Electric Distribution	2C	E Dist Inst/Repl Network	2CA	Network Misc	SRM Total	SRM Total	Ex 4, Ch 14	No	Ongoing	Annual	338.9	6.9	(332.0)	-98.0%	NO	NO	# of Relays Replaced	25	3	(22)	-88.0%	YES	Below variance threshold	Actual program units were below imputed program units due to the transition to new maintenance tracking software. In addition, PG&E performed relay replacements related to weather-related events in other MWC line 17, which depleted inventory that could be used for MAT 2CA.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to replace network protector relays to maintain a safe and reliable distribution network system. Relay installations and replacements are performed for both reliability in MAT 2CA, and in connection with emergency or weather-related events in other programs, both of which are dependent of PG&E's available inventory. This is a defect demand-driven program. The purpose of this program is in the 2023 GRC cycle, PG&E may not complete forecasted units for MAT 2CA because the work can also be completed in connection with emergency or weather-related events, which cannot be forecasted. Because weather related events can not be forecasted PG&E is proceeding as planned for this program.			
106	Capital	Electric Distribution	2C	E Dist Inst/Repl Network	2CA	Network Misc	Distribution Network	DNTWK-C003: Network Component Replacements - Condition Based	Ex 4, Ch 14	No	N/A	N/A	338.9	6.9	(332.0)	-98.0%	N/A	N/A	# of Relays Replaced	25	3	(22)	-88.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
107	Capital	Electric Distribution	2C	E Dist Inst/Repl Network	2CB	Fiber/SCADA Communication Repl	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 14	No	Ongoing	Annual	-	2.6	2.6	100.0%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold	Not utilized.	On-Target	On-Target	Over	Proceeding as Planned	N/A			
108	Capital	Electric Distribution	2C	E Dist Inst/Repl Network	2CC	Transformer & Protector Repl	SRM Total	SRM Total	Ex 4, Ch 14	No	Ongoing	Annual	4,057.5	6,051.4	1,993.9	49.1%	NO	NO	# of Transformers/Network Protectors Replaced	25	49	24	84.0%	YES	Below variance threshold	Actual program units were above imputed program units due to an unexpected high volume of condition-based replacements due to adverse weather events and aging infrastructure.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to replace network transformers and protectors to maintain a safe and reliable distribution network system.			
109	Capital	Electric Distribution	2C	E Dist Inst/Repl Network	2CC	Transformer & Protector Repl	Distribution Network	DNTWK-C003: Network Component Replacements - Condition Based	Ex 4, Ch 14	Yes	N/A	N/A	1,029.0	3,206.3	2,177.3	211.6%	N/A	N/A	# of Transformers/Network Protectors Replaced	2	27	25	1250.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
110	Capital	Electric Distribution	2C	E Dist Inst/Repl Network	2CC	Transformer & Protector Repl	Distribution Network	DNTWK-M005: Network Component Replacements - High-Rise Dry-Type Transformers	Ex 4, Ch 14	Yes	N/A	N/A	2,796.8	2,062.6	(734.2)	-26.3%	N/A	N/A	# of Transformers/Network Protectors Replaced	8	4	(4)	-50.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
111	Capital	Electric Distribution	2C	E Dist Inst/Repl Network	2CC	Transformer & Protector Repl	Distribution Network	DNTWK-M006: Network Component Replacements - Targeted Network Protector Replacements	Ex 4, Ch 14	Yes	N/A	N/A	228.7	752.5	523.8	229.1%	N/A	N/A	# of Transformers/Network Protectors Replaced	15	15	-	0.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
112	Capital	Electric Distribution	2C	E Dist Inst/Repl Network	2CD	Venting Manhole Covers Repl	SRM Total	SRM Total	Ex 4, Ch 14	No	Ongoing	Annual	-	88.3	88.3	100.0%	NO	NO	# of Venting Manhole Cover Replacements	-	-	-	N/A	NO	Below variance threshold	Below variance threshold	On-Target	On-Target	Over	Proceeding as Planned	The purpose of this program is the replacement of venting manhole covers in PG&E's network system. PG&E forecast that this network program would be completed at the end of 2022; however, some additional locations were identified. Due to PG&E's focus on other high priority work, no work is expected to be performed under this program for the remainder of the 2023 GRC cycle.			
113	Capital	Electric Distribution	2C	E Dist Inst/Repl Network	2CD	Venting Manhole Covers Repl	Distribution Network	DNTWK-M002: Venting Manhole Cover Replacements	Ex 4, Ch 14	No	N/A	N/A	-	88.3	88.3	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
114	Capital	Electric Distribution	2C	E Dist Inst/Repl Network	2CE	SCADA Communication is Upped	SRM Total	SRM Total	Ex 4, Ch 14	No	Ongoing	Annual	9,738.9	9,937.6	198.7	2.0%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold	Not utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
115	Capital	Electric Distribution	2C	E Dist Inst/Repl Network	2CE	SCADA Communication is Upped	Distribution Network	DNTWK-M003: Installation of SCADA Equipment for Safety Monitoring	Ex 4, Ch 14	No	N/A	N/A	9,738.9	9,937.6	198.7	2.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
116	Capital	Electric Distribution	2C	E Dist Inst/Repl Network	#	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 14	No	Ongoing	Annual	-	(22.5)	(22.5)	-100.0%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold	Not utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
117	Capital	Electric Distribution	2F	Build IT Apps & Infra	N/A	Not assigned	SRM Total	SRM Total	Ex 4, Ch 4.5 Ex 4, Ch 20-21	No	Ongoing	Annual	70,173.5	105,268.8	35,095.3	50.0%	YES	YES	Program expenditures were above imputed regulatory values due to unplanned general IT expenditures on Field Area Network assets that experienced performance issues. The asset replacements have been prioritized to address the areas of greatest risk first. For Wildlife Mitigation, Program expenditures were above imputed regulatory values due to increased development and deployment of technology solutions in support of Wildlife Mitigation. These solutions range from 1) additional capabilities that address scope P-SPR events, 2) adding functionality to products that help to identify highest risks for inspection, and 3) enhanced mobile products that provide field inspectors the ability to package jobs digitally.	N/A	N/A	N/A	N/A	NO	Below variance threshold	Not utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is 1) provide technology solution support for the development and implementation of the Integrated Grid Platform, and 2) provide technology solutions that support wildfire mitigations. The program specifically provides hardware and software network and telecommunications solutions as well as enhancements to software planning tools in support of wildfire mitigation.			
118	Capital	Electric Distribution	2F	Build IT Apps & Infra	N/A	Not assigned	Distribution Overhead	DOVHD-M005: Additional Asset Data Capture	Ex 4, Ch 4.5 Ex 4, Ch 20-21	Yes	N/A	N/A	-	677.8	677.8	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
119	Capital	Electric Distribution	2F	Build IT Apps & Infra	N/A	Not assigned	IT Asset Failure	ITAF-M005: Multi-Faceted Mitigations	Ex 4, Ch 4.5 Ex 4, Ch 20-21	Yes	N/A	N/A	-	34,788.0	34,788.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
120	Capital	Electric Distribution	2F	Build IT Apps & Infra	N/A	Not assigned	Emergency Preparedness & Response	EPDR-C002: Situational Awareness and Forecasting Initiatives - WSOC	Ex 4, Ch 4.5 Ex 4, Ch 20-21	Yes	N/A	N/A	-	2,408.0	2,408.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

**TABLE 3-4
2023 GRC CYCLE ELECTRIC DISTRIBUTION CAPITAL COMPARISON BY MAT CODE FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	Type (G/M Expense or Capital)	Functional Area	MWC	MWC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Year)	Program / Project Life (years)	Program / Project Year	2023 Impacted Adopted Costs	2023 Actual Costs	Difference for 2023 (\$ (H-G))	Spending Percent Variance for 2023 (%) (H-G)/G	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Impacted Adopted Units	2023 Actual Units	Difference for 2023 (# of Units) (O-N)	Unit Percent Variance for 2023 (%) (O-N)/N	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)	Status	Completion Status Statement			
121	Capital	Electric Distribution	2F	Build IT Apps & Info	N/A	Not assigned	Wildfire	WLDFR-MOT: Wildfire IT Work	Ex 4, Ch 4.5 Ex 4, Ch 20-21	Yes	N/A	N/A	27,890.2	45,036.3	17,146.1	61.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
122	Capital	Electric Distribution	2F	Build IT Apps & Info	N/A	Not assigned	Wildfire	POST-GRC: Post-GRC Mitigation	Ex 4, Ch 4.5 Ex 4, Ch 20-21	Yes	N/A	N/A	-	4,257.9	4,257.9	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
123	Capital	Electric Distribution	2F	Build IT Apps & Info	N/A	Not assigned	SRM (NON-RAMP)	SRM (NON-RAMP)	Ex 4, Ch 4.5 Ex 4, Ch 20-21	Yes	N/A	N/A	42,263.3	18,090.7	(24,172.6)	-57.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
124	Capital	Electric Distribution	4E	E Dist Subst Capacity	46A	DSub Nor Capacity	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 17	No	Ongoing	Annual	16,420.4	18,203.9	1,783.5	10.9%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized	On-Target	Over	Over	Expanded	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to add substation capacity necessary to address existing overloads and forecasted load growth. PG&E expects to continue to do more work in this program than forecasted due to SB410 requirements, as discussed in PG&E's 2023 GRC capacity phase filing.		
125	Capital	Electric Distribution	4E	E Dist Subst Capacity	46F	DSub Em and Op Capacity	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 17	No	Ongoing	Annual	1,019.2	2,547.3	1,528.2	149.9%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
126	Capital	Electric Distribution	4E	E Dist Subst Capacity	46H	DSub New Bus Related Capacity	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 17	No	Ongoing	Annual	43,142.9	46,817.4	3,674.6	8.5%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized	On-Target	Over	Over	Expanded	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to provide substation capacity necessary to complete new customer applications for service. PG&E expects to continue to do more work in this program than forecasted due to SB410 requirements, as discussed in PG&E's 2023 GRC capacity phase filing.		
127	Capital	Electric Distribution	4E	E Dist Subst Capacity	46N	DSub Land Purchase, New Sub	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 17	No	Ongoing	Annual	-	(286.0)	(286.0)	-100.0%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized	On-Target	Over	Over	Emergent	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is for new land purchases for distribution substations. While there was a credit in 2023, PG&E expects that there will be land purchases recorded to this MAT code during the 2023 GRC cycle.		
128	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48A	Repl Disb Other Equipment	SRM Total	SRM Total	Ex 4, Ch 15	No	Ongoing	Annual	4,401.6	769.8	(3,631.9)	-82.5%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized	On-Target	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is ongoing capital infrastructure replacement work to maintain system operations and reliability. In 2023, PG&E prioritized substation work (for example in MAT 48L, 48A, and MWC 59) over MAT 48A. For the 2023 GRC cycle, PG&E anticipates that this work will continue to be lower priority than other Substation work.		
129	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48A	Repl Disb Other Equipment	Substation	SBSN-C16A: Proactive Asset Replacement - Ground Grid	Ex 4, Ch 15	No	N/A	N/A	4,401.6	769.8	(3,631.9)	-82.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
130	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48A	Repl Disb Other Equipment	Wildfire	WLDFR-C16A: Substation Proactive Asset Replacement - Ground Grid	Ex 4, Ch 15	Yes	N/A	N/A	4,401.6	759.4	(3,642.2)	-82.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
131	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48A	Repl Disb Other Equipment	Wildfire	POST-GRC: Post-GRC Mitigation	Ex 4, Ch 15	Yes	N/A	N/A	-	10.3	10.3	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
132	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48B	Repl Disb Regulation	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 15	No	Ongoing	Annual	-	2.2	2.2	100.0%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized	On-Target	On-Target	Over	Proceeding as Planned	This program was not forecasted in the 2023 GRC. Replacement of distribution substation regulators is integrated under MAT 54A. The program has not been cancelled but this MAT code is no longer being used for that purpose.		
133	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48C	Repl Disb Batteries	SRM Total	SRM Total	Ex 4, Ch 15	No	Ongoing	Annual	3,389.5	2.1	(3,387.4)	-99.9%	NO	NO	# of Batteries	10	-	(10)	-100.0%	YES	Below variance threshold.	Actual program units were below imputed program units because of the decision to reschedule proactive battery replacements to support higher priority substation work. Rescheduling of these proactive replacements does not compromise safety or reliability.	Under	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is capital infrastructure replacement work to maintain system operations and reliability. In 2023, PG&E prioritized substation work (for example in MAT 48L, 48A, and MWC 59) over MAT 48C. At this time, PG&E anticipates that this program will continue to be prioritized below other substation work.			
134	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48C	Repl Disb Batteries	Substation	SBSN-C16C: Proactive Asset Replacement - Batteries	Ex 4, Ch 15	No	N/A	N/A	3,389.5	2.1	(3,387.4)	-99.9%	N/A	N/A	# of Batteries	10	-	(10)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
135	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48C	Repl Disb Batteries	Wildfire	WLDFR-C16C: Substation Proactive Asset Replacement - Batteries	Ex 4, Ch 15	No	N/A	N/A	3,389.5	2.1	(3,387.4)	-99.9%	N/A	N/A	# of Batteries	10	-	(10)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
136	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48D	Repl Disb Breakers	SRM Total	SRM Total	Ex 4, Ch 15	No	Ongoing	Annual	29,793.9	9,238.0	(20,555.9)	-69.0%	YES	YES	# of Circuit Breakers Replaced	40	9	(31)	-77.5%	YES	Program expenditures were below imputed regulatory values due to prioritization of funding as explained in the cost variance explanation for this MAT code.	Actual program units were below imputed program units due to prioritization of funding as explained in the cost variance explanation for this MAT code.	Under	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is capital infrastructure replacement work, like breakers, to maintain system operations and reliability. For 2023, PG&E prioritized funding from MAT 48D to higher priority work in other programs as described in the cost variance explanation. At this time, PG&E anticipates that this program will continue to be lower priority for the remainder of the GRC cycle. Breakers may be replaced under MWC 59.			
137	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48D	Repl Disb Breakers	Substation	SBSN-C16D: Proactive Asset Replacement - Circuit Breakers	Ex 4, Ch 15	Yes	N/A	N/A	29,793.9	4,708.8	(25,085.1)	-84.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
138	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48D	Repl Disb Breakers	Wildfire	WLDFR-C16D: Substation Proactive Asset Replacement - Circuit Breakers	Ex 4, Ch 15	Yes	N/A	N/A	29,793.9	4,708.8	(25,085.1)	-84.2%	N/A	N/A	# of Circuit Breakers Replaced	40	9	(31)	-77.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
139	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48D	Repl Disb Breakers	Wildfire	WLDFR-M020: Enhanced Powerline Safety Settings	Ex 4, Ch 15	Yes	N/A	N/A	-	4,530.2	4,530.2	100.0%	N/A	N/A	# of Circuit Breakers Replaced	40	9	(31)	-77.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
140	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48E	Repl Disb Switches	SRM Total	SRM Total	Ex 4, Ch 15	No	Ongoing	Annual	2,304.0	(244.0)	(2,548.0)	-110.6%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized	On-Target	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is capital infrastructure replacement work, like switches, to maintain system operations and reliability. For the 2023 GRC cycle, PG&E anticipates that this work will continue to be lower priority than other Substation work. Switches may be replaced under MWC 59.		
141	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48E	Repl Disb Switches	Substation	SBSN-C16E: Substation Proactive Asset Replacement - Switches	Ex 4, Ch 15	No	N/A	N/A	2,304.0	(244.0)	(2,548.0)	-110.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
142	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48E	Repl Disb Switches	Wildfire	WLDFR-C16E: Substation Proactive Asset Replacement - Switches	Ex 4, Ch 15	No	N/A	N/A	2,304.0	(244.0)	(2,548.0)	-110.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
143	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48F	Repl Disb Switchgear	SRM Total	SRM Total	Ex 4, Ch 15	No	Ongoing	Annual	33,829.2	17,542.4	(16,286.9)	-48.1%	NO	YES	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	N/A	NO	Program expenditures were below imputed regulatory values to support higher priority emergency work in MWC 59.	Not utilized	On-Target	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is capital infrastructure replacement work to maintain system operations and reliability. For 2023, PG&E prioritized this work to higher priority emergency work in MWC 59. At this time, PG&E foresees this program will continue to be lower priority.		
144	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48F	Repl Disb Switchgear	Substation	SBSN-C16F: Substation Proactive Asset Replacement - Switchgear	Ex 4, Ch 15	No	N/A	N/A	33,829.2	17,542.4	(16,286.9)	-48.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
145	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48F	Repl Disb Switchgear	Wildfire	WLDFR-C16F: Substation Proactive Asset Replacement - Switchgear	Ex 4, Ch 15	No	N/A	N/A	33,829.2	17,542.4	(16,286.9)	-48.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
146	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48H	Repl DSub Civil Structures	SRM Total	SRM Total	Ex 4, Ch 15	No	Ongoing	Annual	5,649.1	833.0	(4,816.2)	-85.3%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized	On-Target	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is capital infrastructure replacement work to maintain system operations. At this time, PG&E anticipates this program will continue to be lower priority.		
147	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48H	Repl DSub Civil Structures	Substation	SBSN-C005: Civil Structures Replacement	Ex 4, Ch 15	Yes	N/A	N/A	4,230.6	835.5	(3,395.0)	-80.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
148	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48H	Repl DSub Civil Structures	Substation	SBSN-M006: Minimize Wood in Substations	Ex 4, Ch 15	Yes	N/A	N/A	1,418.6	(2.8)	(1,421.1)	-100.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
149	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48L	Dist Line Work Support Substat	SRM Total	SRM Total	Ex 4, Ch 15	No	Ongoing	Annual	9,496.8	29,062.4	19,565.6	206.0%	NO	YES	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	N/A	NO	Program expenditures were above imputed regulatory values due to a higher volume of substation replacements needed to support distribution line work. This program is for the replacement of substation equipment specifically to support distribution line work.	Not utilized	On-Target	Over	Over	Emergent	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is substation capital infrastructure replacement work which to support distribution line work. This program includes both proactive and emergency substation replacements. Due to aging infrastructure and the prioritization of funding in related areas of MWC 48, PG&E anticipates there will continue to be an increased amount of costs than forecasted through the 2023 GRC cycle.		
150	Capital	Electric Distribution	4E	E Dist Subst Repl Other Equip	48L	Dist Line Work Support Substat	Substation	SBSN-C16G: Proactive Asset Replacement - Line Support Work	Ex 4, Ch 15	No	N/A	N/A	9,496.8	29,062.4	19,565.6	206.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

TABLE 3-4
2023 GRC CYCLE ELECTRIC DISTRIBUTION CAPITAL COMPARISON BY MAT CODE FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)

Line No	Type (OMB Expend or Capital)	Functional Area	MWC	MWC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (H-G)	Spending Percent Variance for 2023 (%) (H-G/Y-100)	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Imputed Adopted Units	2023 Actual Units	Difference for 2023 (# of Units) (O-N)	Unit Percent Variance for 2023 (%) (O-N/N*100)	Unit Variance Explanation Required (Y/N)	Cost Variance Explanation	2023 Unit Variance Explanation	Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)	Status	Completion Status Statement				
151	Capital	Electric Distribution	48	E Dist Subst Repl Other Equip	48L	Dist Line Work Support Substat	Wildfire	WLDFR-C10H: Substation Proactive Asset Replacement - Line Support Work	Ex 4, Ch 15	No	N/A	N/A	9,496.8	29,062.4	19,565.6	206.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
152	Capital	Electric Distribution	48	E Dist Subst Repl Other Equip	48N	DSub Insulators	SRM Total	SRM Total	Ex 4, Ch 15	No	Ongoing	Annual	5,649.1	0.3	(5,648.8)	-100.0%	NO	NO	N/A	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is capital infrastructure replacement work, like insulators, to maintain system operations and reliability. For 2023, PG&E prioritized funding to MATs 48L and 54A. For the 2023 GRC cycle, PG&E anticipates that this work will continue to be lower priority than other Substation work.				
153	Capital	Electric Distribution	48	E Dist Subst Repl Other Equip	48N	DSub Insulators	Substation	SBSTN-C19H: Proactive Asset Replacement - Insulators	Ex 4, Ch 15	No	N/A	N/A	5,649.1	0.3	(5,648.8)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
154	Capital	Electric Distribution	48	E Dist Subst Repl Other Equip	48N	DSub Insulators	Wildfire	WLDFR-C10H: Substation Proactive Asset Replacement - Insulators	Ex 4, Ch 15	No	N/A	N/A	5,649.1	0.3	(5,648.8)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
155	Capital	Electric Distribution	48	E Dist Subst Repl Other Equip	48X	DSub Animal Abatement	SRM Total	SRM Total	Ex 4, Ch 15	No	Ongoing	Annual	6,098.2	149.0	(5,949.2)	-97.5%	NO	NO	N/A	N/A	N/A	17	-	(17)	-100.0%	YES	Below variance threshold.	Under	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is capital infrastructure replacement work, like Animal Abatement, to maintain system operations and reliability. At this time, PG&E foresees this program to continue to be lower priority than other programs.			
156	Capital	Electric Distribution	48	E Dist Subst Repl Other Equip	48X	DSub Animal Abatement	Substation	SBSTN-C022: Animal Abatement	Ex 4, Ch 15	No	N/A	N/A	6,098.2	149.0	(5,949.2)	-97.5%	N/A	N/A	N/A	N/A	N/A	17	-	(17)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
157	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49A	Distribution Line Automation	SRM Total	SRM Total	Ex 4, Ch 13	No	Ongoing	Annual	1,500.7	12,785.5	10,864.8	565.7%	NO	YES	N/A	N/A	N/A	18	-	(18)	-100.0%	YES	Program expenditures were above imputed regulatory values due to a change in how PG&E mitigates risks addressed by this work. In 2023 PG&E began implementing the Downed Conductor Detection (DCD) program and recording costs and units to MAT 49A. The DCD program mitigates ignitions for high impedance faults and is a wildfire mitigation. Actual program units were below imputed program units due to a change in how the program mitigates risk from what was forecasted in the 2023 GRC. In 2023 PG&E began recording work associated with the new Downed Conductor Detection (DCD) program. The DCD program mitigates ignitions for high impedance faults and is a wildfire risk mitigation. The DCD program uses harmonic analysis to detect arcing present during high impedance faults and provides an immediate response. Note that the program units forecasted in 49A were completed in MAT 49B. See unit variance explanation for additional details.	Under	Over	Over	Emergent	This program's work is ongoing and will continue in PG&E's 2023 GRC period. This program was forecasted in the 2023 GRC for the replacement of Reclosers and Recloser controllers for reliability and wildfire risks. In 2023 PG&E began implementing the Downed Conductor Detection (DCD) program and recording costs to 49A. The costs and units that were forecasted to MAT 49A in 2023, were recorded in MAT 49B. The DCD program mitigates ignitions for high impedance faults and is a wildfire mitigation. For the remaining GRC cycle, PG&E will continue to record DCD costs to 49A and be over-imposed on costs but under on units because units are recorded to 49B.			
158	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49A	Distribution Line Automation	Distribution Overhead	DOVHD-M010: 3A and 4C Line Recloser Replacement	Ex 4, Ch 13	Yes	N/A	N/A	1,500.7	(9.5)	(1,500.2)	-100.5%	N/A	N/A	N/A	N/A	N/A	18	-	(18)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
159	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49A	Distribution Line Automation	Wildfire	WLDFR-M020: Enhanced Powerline Safety Settings	Ex 4, Ch 13	Yes	N/A	N/A	-	12,744.4	12,744.4	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
160	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49A	Distribution Line Automation	Wildfire	WLDFR-M10A: Additional System Automation and Protection	Ex 4, Ch 13	Yes	N/A	N/A	-	50.6	50.6	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
161	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49B	Rec Cnts Inst/Repl	SRM Total	SRM Total	Ex 4, Ch 13	No	Ongoing	Annual	4,587.1	1,684.9	(2,902.2)	-63.3%	NO	NO	N/A	N/A	N/A	44	18	(26)	-59.1%	YES	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	Actual program units were below imputed program units due to changes in the 49A program, as explained in the variance explanation for MAT 49A. In 2023, the costs and program units recorded in 49B are associated with the work forecasted in 49A. The program units that were forecasted in 49B were rescheduled.			
162	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49B	Rec Cnts Inst/Repl	Distribution Overhead	DOVHD-M010: 3A and 4C Line Recloser Replacement	Ex 4, Ch 13	No	N/A	N/A	4,587.1	1,684.9	(2,902.2)	-63.3%	N/A	N/A	N/A	N/A	N/A	44	18	(26)	-59.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
163	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49C	OH Fuses Inst/Repl	SRM Total	SRM Total	Ex 4, Ch 13	No	Ongoing	Annual	1,827.0	2,178.2	551.2	33.9%	NO	NO	N/A	N/A	N/A	129	75	(54)	-41.8%	YES	Below variance threshold.	Under	Under	Over	Rescheduled	Actual program units were below imputed program units due to higher unit costs than forecasted in the GRC. PG&E attributes the higher costs to general inflation.			
164	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49C	OH Fuses Inst/Repl	Distribution Overhead	DOVHD-C033: Equipment Maintenance and Replacement - Distribution Overhead	Ex 4, Ch 13	NO	N/A	N/A	1,827.0	2,178.2	551.2	33.9%	N/A	N/A	N/A	N/A	N/A	129	75	(54)	-41.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
165	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49D	OH Rec/Sect/Swch Inst/Repl	SRM Total	SRM Total	Ex 4, Ch 13	No	Ongoing	Annual	-	1,537.6	1,537.6	100.0%	NO	NO	N/A	N/A	N/A	-	35	35	100.0%	YES	Below variance threshold.	On-Target	Over	Over	Emergent	Actual program units were above imputed program units due to the installation of trip saws that remained in inventory and were not forecasted in the 2023 GRC.			
166	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49D	OH Rec/Sect/Swch Inst/Repl	Distribution Overhead	DOVHD-C014: Additional System Automation and Protection - FuseSaver	Ex 4, Ch 13	Yes	N/A	N/A	-	1,560.0	1,560.0	100.0%	N/A	N/A	N/A	N/A	N/A	35	35	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
167	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49D	OH Rec/Sect/Swch Inst/Repl	SRM (NON-RAMP)	SRM (NON-RAMP)	Ex 4, Ch 13	Yes	N/A	N/A	-	(22.5)	(22.5)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
168	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49E	Genl Inst/Repl Ckt/Zone	SRM Total	SRM Total	Ex 4, Ch 13	No	Ongoing	Annual	-	1,597.6	1,597.6	100.0%	NO	NO	N/A	N/A	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	Over	Proceeding as Planned	Not utilized.			
169	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49E	Genl Inst/Repl Ckt/Zone	Wildfire	WLDFR-M020: Enhanced Powerline Safety Settings	Ex 4, Ch 13	Yes	N/A	N/A	-	6.4	6.4	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
170	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49E	Genl Inst/Repl Ckt/Zone	SRM (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 13	Yes	N/A	N/A	-	1,591.1	1,591.1	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
171	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49G	JUG Rec/Sect/Swch Inst/Repl	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 13	No	Ongoing	Annual	-	0.1	0.1	100.0%	NO	NO	N/A	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	Over	Proceeding as Planned	N/A	N/A			
172	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49H	PPSP Sect Device Inst/Repl	SRM Total	SRM Total	Ex 4, Ch 4.3	No	Ongoing	Annual	12,602.4	13,962.6	1,360.2	11.0%	NO	NO	N/A	N/A	N/A	100	82	(18)	-18.0%	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A			
173	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49H	PPSP Sect Device Inst/Repl	Wildfire	WLDFR-M006: PPSP Reduction Initiatives	Ex 4, Ch 4.3	No	N/A	N/A	12,602.4	13,962.6	1,360.2	11.0%	N/A	N/A	N/A	N/A	N/A	100	82	(18)	-18.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
174	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49I	49I OH FibraLNSnr Inst/Repl	SRM Total	SRM Total	Ex 4, Ch 4.3	No	Ongoing	Annual	23,925.0	4,108.5	(19,816.5)	-82.8%	NO	YES	N/A	N/A	N/A	1,268	322	(946)	-74.6%	YES	Program expenditures were below imputed regulatory values due to the 1) priority use given to develop streamlined processes and automation to analyze sensor data as part of Wildfire Mitigation Plan (WMP) Objective (A-03) before ramping up sensor deployments; 2) Early Fault Detection (EFD) / Distribution Fault Anticipation (DFA) deployment funds were re-allocated to Down Conductor Detection in MAT 49A.	Under	Under	Under	Rescheduled	Actual program units were below imputed program units due to rescheduling the deployment of a new tool to process sensor data as explained in the cost variance explanation.			
175	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49I	49I OH FibraLNSnr Inst/Repl	Wildfire	WLDFR-M07A: Situational Awareness and Forecasting Initiatives - Line Sensors	Ex 4, Ch 4.3	Yes	N/A	N/A	8,717.0	3,037.2	(5,679.8)	-65.2%	N/A	N/A	N/A	N/A	N/A	304	36	(268)	-88.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
176	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49I	49I OH FibraLNSnr Inst/Repl	Wildfire	WLDFR-M011: Situational Awareness and Forecasting Initiatives - EFD	Ex 4, Ch 4.3	Yes	N/A	N/A	5,739.5	644.1	(5,095.4)	-88.6%	N/A	N/A	N/A	N/A	N/A	501	-	(501)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
177	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49I	49I OH FibraLNSnr Inst/Repl	Wildfire	WLDFR-M012: Situational Awareness and Forecasting Initiatives - DFA	Ex 4, Ch 4.3	Yes	N/A	N/A	9,468.5	180.4	(9,288.1)	-98.1%	N/A	N/A	N/A	N/A	N/A	481	288	(193)	-39.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
178	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49I	49I OH FibraLNSnr Inst/Repl	SRM (NON-RAMP)	SRM (NON-RAMP)	Ex 4, Ch 4.3	Yes	N/A	N/A	-	248.8	248.8	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
179	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49M	PH1 / Microgrids: non-gen	SRM Total	SRM Total	Ex 4, Ch 4.3	No	Ongoing	Annual	-	262.4	262.4	100.0%	NO	NO	N/A	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	Over	Proceeding as Planned	N/A	N/A			
180	Capital	Electric Distribution	49	E Dist Reliability Ckt/Zone	49M	PH1 / Microgrids: non-gen	Wildfire	WLDFR-M006: PPSP Reduction Initiatives	Ex 4, Ch 4.3	No	N/A	N/A	-	262.4	262.4	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

**TABLE 3-4
2023 GRC CYCLE ELECTRIC DISTRIBUTION CAPITAL COMPARISON BY MAT CODE FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	Type (G&M Expense or Capital)	Functional Area	MVC	MVC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Impacted Adopted Costs	2023 Actual Costs	Difference for 2023 (\$ (H-G))	Spending Percent Variance for 2023 (%) (H-G)/G	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Impacted Adopted Units	2023 Actual Units	Difference for 2023 (# of Units) (O-N)	Unit Variance for 2023 (%) (O-N)/N	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	U1 Scope (U, O, or T)	U2 Schedule (U, O, or T)	U3 Budget (U, O, or T)	U4 Status	U5 Completion Status Statement		
181	Capital	Electric Distribution	49	E Dist Reliability ChZone	49R	Grid Mod Tech SRM Total	SRM Total		Ex.4, Ch.4.3	No	On-going	Annual	18,304.1	71.6	(18,222.5)	-99.6%	NO	YES	Not Unlimited - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	NO	Program expenditures were below implied regulatory values due to delays in the Rapid Earth Fault Current Limiter (REFCL) demonstration project.	Not utilized	On-Target	Under	Under	Rescheduled	The purpose of this program is the evaluation of the effectiveness of the REFCL technology to mitigate the need for PSPS. PG&E has not made a decision on the scope of REFCL installation in the GRC cycle.		
182	Capital	Electric Distribution	49	E Dist Reliability ChZone	49R	Grid Mod Tech Wldfrs	WLDFR-M10C: Additional System Automation and Protection - REFCL		Ex.4, Ch.4.3	Yes	N/A	N/A	18,304.10	71.6	-18,222.50	-99.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
184	Capital	Electric Distribution	49	E Dist Reliability ChZone	49S	Elect Reliability Inst FLISR	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex.4, Ch.13	No	On-going	Annual	3,881.7	964.3	(2,917.3)	-75.2%	NO	NO	# of FLISR Circuit Activations	12	1	(11)	-91.7%	YES	Below variance threshold.	Actual program units were below implied program units due to re-prioritization to other higher priority programs like Emergency Replacements (MVC 17 and 55) and Overhead Maintenance Replacements (MVC 24).	Under	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is the installation of technology to detect and isolate outages, and restore service to customers. PG&E anticipates that this program will continue to be lower priority for the remainder of the GRC cycle.		
185	Capital	Electric Distribution	49	E Dist Reliability ChZone	49T	D-Single Phase Recloser	SRM Total	SRM Total	Ex.4, Ch.13 Ex.4, Ch.4.3	No	On-going	Annual	4,527.8	7,061.8	2,504.0	54.9%	NO	NO	# of FuseSavers installed	117	49	(68)	-58.3%	YES	Below variance threshold.	Actual program units were below implied program units due to higher unit costs than forecasted.	Under	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to install Fuse Savers; for the 2023 GRC cycle PG&E is exploring options that would allow PG&E to install more units for the same amount of funding.		
186	Capital	Electric Distribution	49	E Dist Reliability ChZone	49T	D-Single Phase Recloser	Distribution Overhead	DOVHD-C014: Additional System Automation and Protection - FuseSaver	Ex.4, Ch.13 Ex.4, Ch.4.3	Yes	N/A	N/A	1,432.8	-	(1,432.8)	-100.0%	N/A	N/A	# of TripSavers installed	38	-	(38)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
187	Capital	Electric Distribution	49	E Dist Reliability ChZone	49T	D-Single Phase Recloser	Wldfrs	WLDFR-M10B: Additional System Automation and Protection - FuseSaver	Ex.4, Ch.13 Ex.4, Ch.4.3	Yes	N/A	N/A	3,105.0	7,061.8	3,956.8	127.4%	N/A	N/A	# of FuseSavers installed	80	49	(31)	-38.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
188	Capital	Electric Distribution	49	E Dist Reliability ChZone	49X	Emerging Dist Rel Improvements	SRM Total	SRM Total	Ex.4, Ch.13	No	On-going	Annual	3,883.3	16,114.6	12,248.4	316.6%	NO	YES	Not Unlimited - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	NO	Program expenditures were above implied regulatory values due to EPSS work being recorded to this program. PG&E did not forecast EPSS capital work in the 2023 GRC due to the program was new and PG&E was not able to develop a forecast for the 2023 GRC.	Not utilized	On-Target	Over	Over	Emergent	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is reliability work to address routine, localized reliability issues as they emerge. PG&E expects to continue to record costs in 49X, to install equipment like fuse savers and fault indicators to support the EPSS program.		
189	Capital	Electric Distribution	49	E Dist Reliability ChZone	49X	Emerging Dist Rel Improvements	Distribution Overhead	DOVHD-C012: Targeted Reliability Programs	Ex.4, Ch.13	Yes	N/A	N/A	3,883.3	9,114.6	5,246.4	135.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
190	Capital	Electric Distribution	49	E Dist Reliability ChZone	49X	Emerging Dist Rel Improvements	Wldfrs	WLDFR-M020: Enhanced Powerline Safety Settings	Ex.4, Ch.13	Yes	N/A	N/A	-	7,000.0	7,000.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
191	Capital	Electric Distribution	49	E Dist Reliability ChZone	#	Not assigned	SRM Total	SRM Total	Ex.4, Ch.13	No	On-going	Annual	13,025.8	(294.1)	(13,319.9)	-102.2%	NO	YES	# of Line Reclosers	694	1,307	613	88.3%	YES	Actual program units were above implied regulatory values due to PG&E's decision to record the associated material costs to the actual projects in various other programs such as critical operating equipment, EPSS related work, and capacity projects, rather than to this MAT code. This program purchases and maintains inventory of line reclosers.	On-Target	On-Target	Under	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is for purchases and maintains inventory of line reclosers; the costs were centrally forecasted in 49R in the 2023 GRC. In the 2023 GRC cycle, PG&E will record the recloser material costs to individual projects in various programs however the reclosers will be captured here in 49R.			
192	Capital	Electric Distribution	49	E Dist Reliability ChZone	#	Not assigned	Wldfrs	WLDFR-M006: PSPS Reduction Initiatives	Ex.4, Ch.13	Yes	N/A	N/A	-	31.8	31.8	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
193	Capital	Electric Distribution	49	E Dist Reliability ChZone	#	Not assigned	SRM (NON-RAMP)	SRM (NON-RAMP)	Ex.4, Ch.13	Yes	N/A	N/A	13,025.8	(325.9)	(13,351.6)	-102.5%	N/A	N/A	# of Line Reclosers	694	1,307	613	88.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
194	Capital	Electric Distribution	54	E Dist Subst Repl Transformer	54A	E Dist Subst Repl Transfm	SRM Total	SRM Total	Ex.4, Ch.15	No	On-going	Annual	18,797.5	24,886.1	6,088.6	32.2%	NO	NO	Not Unlimited - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A		
195	Capital	Electric Distribution	54	E Dist Subst Repl Transformer	54A	E Dist Subst Repl Transfm	Substation	SSS-TN-C19K: Proactive Asset Replacement - Transformer	Ex.4, Ch.15	Yes	N/A	N/A	16,703.1	22,502.6	5,799.5	34.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
196	Capital	Electric Distribution	54	E Dist Subst Repl Transformer	54A	E Dist Subst Repl Transfm	Substation	SSS-TN-M002: Increase Capitalized Emergency (CEM) Stock for Transformers, Emergency Mobile Transformers	Ex.4, Ch.15	Yes	N/A	N/A	2,064.4	2,204.9	140.4	6.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
197	Capital	Electric Distribution	54	E Dist Subst Repl Transformer	54A	E Dist Subst Repl Transfm	Wldfrs	WLDFR-C10K: Substation Proactive Asset Replacement - Transformer	Ex.4, Ch.15	Yes	N/A	N/A	16,703.1	22,502.6	5,799.5	34.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
198	Capital	Electric Distribution	54	E Dist Subst Repl Transformer	54A	E Dist Subst Repl Transfm	SRM (NON-RAMP)	SRM (NON-RAMP)	Ex.4, Ch.15	Yes	N/A	N/A	-	98.6	98.6	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
199	Capital	Electric Distribution	54	E Dist Subst Repl Transformer	54L	E Dist Subst Life Est Transfm	SRM Total	SRM Total	Ex.4, Ch.15	No	On-going	Annual	3,389.5	15.4	(3,374.1)	-99.5%	NO	NO	Not Unlimited - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to recondition older substation transformers to extend their life expectancy by replacing a specific combination of components. For 2023 PG&E prioritized funding from MAT 54L to higher priority work in MAT 54A. Over the GRC cycle, PG&E expects to continue to re-prioritize this program to higher priority work within the MVC 54 program.		
200	Capital	Electric Distribution	54	E Dist Subst Repl Transformer	54L	E Dist Subst Life Est Transfm	Substation	SSS-TN-M001: Transformer Life Extension	Ex.4, Ch.15	No	N/A	N/A	3,389.5	15.4	(3,374.1)	-99.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
201	Capital	Electric Distribution	56	E Dist Replace UG Asset-Gen	#	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex.4, Ch.14	No	On-going	Annual	-	(226.3)	(226.3)	-100.0%	NO	NO	Not Unlimited - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	Under	Proceeding as Planned	N/A		
202	Capital	Electric Distribution	56	E Dist Replace UG Asset-Gen	56A	UG Cable Other Repl	SRM Total	SRM Total	Ex.4, Ch.13	No	On-going	Annual	38,597.0	20,512.8	(18,084.2)	-46.8%	NO	YES	# of Circuit Miles	18	7	(11)	-60.7%	YES	Program expenditures were below implied regulatory values due to re-prioritization to emergency replacements (MVC 17), underground/network maintenance replacements (MVCs 25 & 2C), and capacity improvements (MVC 06).	Actual program units were below implied program units due to re-prioritization as discussed in the cost variance explanation.	Under	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to replace underground primary cables in areas with history of failures. PG&E anticipates that this program will continue to be lower priority for the remainder of the GRC cycle.		
203	Capital	Electric Distribution	56	E Dist Replace UG Asset-Gen	56A	UG Cable Other Repl	Underground	DUNGD-C05A: Primary Cable Replacement Program	Ex.4, Ch.13	No	N/A	N/A	38,597.0	20,512.8	(18,084.2)	-46.8%	N/A	N/A	# of Circuit Miles	18	7	(11)	-60.7%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
204	Capital	Electric Distribution	56	E Dist Replace UG Asset-Gen	56B	UG Cable Inject	SRM Total	SRM Total	Ex.4, Ch.13	No	On-going	Annual	1,164.6	45.8	(1,118.8)	-96.1%	NO	NO	# of Miles Cable Testing and Rejuvenation	6	-	(6)	-100.0%	YES	Below variance threshold.	Actual program units were below implied program units due to re-prioritizing emergency replacements (MVC 17), underground/network maintenance replacements (MVCs 25 & 2C), and capacity improvements (MVC 06).	Under	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to test or rejuvenate UG primary cables as part of targeted replacement strategy. PG&E anticipates that this program will continue to be lower priority for the remainder of the GRC cycle.		
205	Capital	Electric Distribution	56	E Dist Replace UG Asset-Gen	56B	UG Cable Inject	Underground	DUNGD-C05B: Primary Cable Rejuvenation Program	Ex.4, Ch.13	Yes	N/A	N/A	1,164.6	45.8	(1,118.8)	-96.1%	N/A	N/A	# of Miles Cable Testing and Rejuvenation	6	-	(6)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
206	Capital	Electric Distribution	56	E Dist Replace UG Asset-Gen	56C	UG Cable COE Repl	SRM Total	SRM Total	Ex.4, Ch.13	No	On-going	Annual	37,551.1	7,943.6	(29,607.5)	-78.8%	YES	YES	# of Projects	197	23	(174)	-88.3%	YES	Program expenditures were below implied regulatory values due to re-prioritizing emergency replacements (MVC 17), underground/network maintenance replacements (MVCs 25 & 2C), and capacity improvements (MVC 06).	Actual program units were below implied program units due to re-prioritization as discussed in the cost variance explanation.	Under	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to replace failed underground primary cables in 200A loop systems. PG&E anticipates that this program will continue to be lower priority for the remainder of the GRC cycle.		
207	Capital	Electric Distribution	56	E Dist Replace UG Asset-Gen	56C	UG Cable COE Repl	Underground	DUNGD-C003: Equipment Maintenance and Replacement	Ex.4, Ch.13	No	N/A	N/A	37,551.1	7,943.6	(29,607.5)	-78.8%	N/A	N/A	# of Projects	197	23	(174)	-88.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
208	Capital	Electric Distribution	56	E Dist Replace UG Asset-Gen	56D	TGRAM/TGRM Switch Replacement	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex.4, Ch.13	No	On-going	Annual	-	(7.6)	(7.6)	-100.0%	NO	NO	# of TGRAM/TGRM Switches	-	-	-	0.0%	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	Under	Proceeding as Planned	N/A		
209	Capital	Electric Distribution	56	E Dist Replace UG Asset-Gen	56N	Network Cable Replacement	SRM Total	SRM Total	Ex.4, Ch.14	No	On-going	Annual	32,200.1	261.4	(31,938.7)	-99.2%	YES	YES	# of Circuit Feet	56,889	-	(56,889)	-100.0%	YES	Program expenditures were below implied regulatory values due to re-prioritizing emergency replacements (MVC 17), underground/network maintenance replacements (MVCs 25 & 2C), and capacity improvements (MVC 06).	Actual program units were below implied program units due to re-prioritization as discussed in the cost variance explanation.	Under	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to replace network cable assets, prior to premature failure. PG&E anticipates that this program will continue to be lower priority for the remainder of the GRC cycle.		
210	Capital	Electric Distribution	56	E Dist Replace UG Asset-Gen	56N	Network Cable Replacement	Distribution Network	DNTWK-C001: Network Cable Replacement	Ex.4, Ch.14	Yes	N/A	N/A	32,200.1	261.4	(31,938.7)	-99.2%	N/A	N/A	# of Circuit Feet	50,099	-	(50,099)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

**TABLE 3-4
2023 GRC CYCLE ELECTRIC DISTRIBUTION CAPITAL COMPARISON BY MAT CODE FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

A	B	C1	C2	C3	C4	C5	C6	C7	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U1	U2	U3	V	W		
Line No	Type (O&M Expense or Capital)	Functional Area	MWC	MWC Name	MAT	MAT Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$ (K))	Spending Percent Variance for 2023 (%) (H-G)/G*100	Spending Variance Explanation Required (Y/N)	Percentage Variance Explanation Required (Y/N)	Unit Type	2023 Imputed Adopted Units	2023 Actual Units	Difference for 2023 (# of Units) (O-N)	Unit Percent Variance for 2023 (%) (O-N)/N*100	Unit Variance Explanation Required (Y/N)	2023 Cost Variance Explanation	2023 Unit Variance Explanation	Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)	Status	Completion Status Statement	
211	Capital	Electric Distribution	58	E Dist Replace UG Asset-Gen	58N	Network Cable Replacement	DNTWK-M004: Incremental Primary Network Cable Replacement	Ex 4, Ch 14		No	N/A	N/A	32,200.1	261.4	(31,938.7)	-99.2%	N/A	N/A	# of Circuit Feet	6,780	-	(6,780)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
212	Capital	Electric Distribution	58	E Dist Replace UG Asset-Gen	56S	Replace Obsolete UG Switches	SRM Total	SRM Total	Ex 4, Ch 13	No	Ongoing	Annual	8,473.9	(834.7)	(9,308.6)	-109.9%	NO	NO	# of LBOR Switch Replacements	77	-	(77)	-100.0%	YES	Below variance threshold.	Actual program units were below imputed program units due to repositioning emergency replacements (MVC 17), underground/network maintenance replacements (MVCs 2B & 2C), and capacity improvements (MVC-06).	Under	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to replace UG oil-filled switches, prior to premature failure. PG&E anticipates the work in this program will increase over the GRC cycle.	
213	Capital	Electric Distribution	56	E Dist Replace UG Asset-Gen	56S	Replace Obsolete UG Switches	DUNGD-C007: LBOR Switch Replacement	Ex 4, Ch 13		No	N/A	N/A	8,473.9	(834.7)	(9,308.6)	-109.9%	N/A	N/A	# of LBOR Switch Replacements	77	-	(77)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
214	Capital	Electric Distribution	56	E Dist Replace UG Asset-Gen	56T	Install Temperature Indicator	SRM Total	SRM Total	Ex 4, Ch 13	No	Ongoing	Annual	8,837.6	3,575.2	(5,262.4)	-59.5%	NO	NO	# of Installations	2,294	-	(2,294)	-100.0%	YES	Below variance threshold.	Actual program units were below imputed program units due to funding being allocated to higher priority work as discussed in the cost variance explanations in MAT 52A.	Under	Under	Under	Rescheduled	The purpose of this program is a continuing effort to install temperature alarm devices to monitor UG asset condition and identify proactive replacements, prior to premature failure. The costs recorded in 2023 were for hardware purchases, therefore no units were completed. PG&E anticipates the work in this program will increase.	
215	Capital	Electric Distribution	56	E Dist Replace UG Asset-Gen	56T	Install Temperature Indicator	DUNGD-C008: UG Transformers Temperature Sensor	Ex 4, Ch 13		No	N/A	N/A	8,837.6	3,575.2	(5,262.4)	-59.5%	N/A	N/A	# of Installations	2,294	-	(2,294)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
216	Capital	Electric Distribution	58	E Dist Repl Substation Safety	58A	DSub Safety&Emer&F ire Protect	SRM Total	SRM Total	Ex 4, Ch 15	No	Ongoing	Annual	3,389.5	(4.7)	(3,394.2)	-100.1%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	Under	Under	Rescheduled	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program concerns fire protection and suppression installs, replacements, or upgrades as required by local fire marshals and state regulations. At this time, PG&E foresees this program to continue to be lower priority than other programs.	
217	Capital	Electric Distribution	58	E Dist Repl Substation Safety	58A	DSub Safety&Emer&F ire Protect	Substation	SBSIN-C009: Fire Protection / Suppression Systems	Ex 4, Ch 15	No	N/A	N/A	3,389.5	(4.7)	(3,394.2)	-100.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
218	Capital	Electric Distribution	58	E Dist Repl Substation Safety	58A	DSub Safety&Emer&F ire Protect	Wildfire	WLDFR-C018: Fire Protection / Suppression Systems	Ex 4, Ch 15	No	N/A	N/A	3,389.5	(4.7)	(3,394.2)	-100.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
219	Capital	Electric Distribution	58	E Dist Repl Substation Safety	58C	Repl Dist Sub Misc Equip	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 15	No	Ongoing	Annual	-	9.2	9.2	100.0%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	Over	Proceeding as Planned	N/A	
220	Capital	Electric Distribution	58	E Dist Repl Substation Safety	58S	DSub Security Upgrades	SRM Total	SRM Total	Ex 4, Ch 15	No	Ongoing	Annual	5,197.2	3,405.6	(1,791.6)	-34.5%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	Over	Over	Expanded	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to install, upgrade, or replacements of physical security measures within substations. This program represents ongoing capital infrastructure replacement work to maintain system operations and reliability. For the remainder of the 2023 GRC PG&E expects to spend more than imputed on the program in order to include physical security improvement at fee substations to meet CPUC Decision 19-01-018 (SB 699) requirements. This decision has requirements for critical distribution security commitments. PG&E developed and released a mitigation plan to upgrade the physical security at fee critical distribution substations by 2026.	
221	Capital	Electric Distribution	58	E Dist Repl Substation Safety	58S	DSub Security Upgrades	Substation	SBSIN-C001: Substation Security Enhancements	Ex 4, Ch 15	No	N/A	N/A	5,197.2	3,405.6	(1,791.6)	-34.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
222	Capital	Electric Distribution	58	E Dist Repl Substation Safety	58S	DSub Security Upgrades	Wildfire	WLDFR-C10M: Substation Security Enhancements	Ex 4, Ch 15	No	N/A	N/A	5,197.2	3,405.6	(1,791.6)	-34.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
223	Capital	Electric Distribution	59	E Dist Subst Emergency Repl	N/A	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 15	No	Ongoing	Annual	85,866.8	172,615.2	86,748.4	101.0%	YES	YES	Not Utilized - The variety of work activities in this program makes it infeasible to identify a single unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	Over	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is for emergency capital infrastructure replacement work to maintain system operations and reliability. PG&E anticipates that a higher volume of work in this program may materialize due to repositioning of other substation work.	
224	Capital	Electric Distribution	63	E T&D Control System/ Facility	63C ^(a)	Advanced Dist Mgmt System Dev	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 21	No	7	6	113,742.8	112,433.5	(1,309.3)	-1.2%	NO	NO	Not Utilized - This program has no measurable units because there is no standard unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	The Distributed Energy Resource Management System (DERMS) costs that were forecasted in the 2023 GRC as 63C, are being recorded in 63B.	
225	Capital	Electric Distribution	63	E T&D Control System/ Facility	63D	Distribution Operational Tech	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 7	No	Ongoing	Annual	4,778.4	4,878.3	101.9	2.1%	NO	NO	Not Utilized - The variety of work activities in this program makes it infeasible to identify a single unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
226	Capital	Electric Distribution	63	E T&D Control System/ Facility	63 ^(a)	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 7	No	Ongoing	Annual	-	7,055.9	7,055.9	100.0%	NO	NO	Not Utilized - The variety of work activities in this program makes it infeasible to identify a single unit of measure.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	Over	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is for the Distributed Energy Resource Management System (DERMS), which was forecasted in MAT 63C, but recorded in MAT 63B.	
227	Capital	Electric Distribution	95	E Dist Major Emergency	N/A	Not assigned	SRM Total (NON-RAMP)	SRM Total (NON-RAMP)	Ex 4, Ch 6	No	Ongoing	Annual	66,359.7	49,287.5	(17,072.2)	-25.7%	NO	YES	Not Utilized - There is no applicable unit of measure for this program.	N/A	N/A	N/A	N/A	NO	Below variance threshold.	Not utilized.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is for major emergencies. This program has no end and is responsive to conditions that require immediate attention.	

(a) During 2023 PG&E began recording costs for eruption fuse replacements that were imputed in MAT 2AP to MAT 2AJ.
(b) The Distributed Energy Resource Management System (DERMS) costs that were forecasted in the 2023 GRC as 63C, are being recorded in 63B.

1 **D. MWC Descriptions – Expense**

2 **MWC AB – Support and Emergency Preparedness and Response**

3 **(EP&R)** – Involves general support of the electric distribution system, including
4 performance improvement initiatives, interdepartmental meter costs, and
5 consulting fees. This MWC also includes costs for PG&E’s EP&R organization,
6 recorded in MAT code AB6. This program relates to safety, reliability, or
7 maintenance because the initiatives are for emergency preparedness for all
8 employees and for customers. Employees are trained to respond to the
9 Emergency Operations Center (EOC) activations during emergencies,
10 specifically in how to perform their function within the Incident Command
11 Structure organization.

12 This MWC includes the forecast for Public Safety Power Shutoffs (PSPS)
13 event activities and costs and PSPS non-event preparation. This MWC also
14 includes wildfire situational awareness related programs including the Hazard
15 Awareness and Warning Center, Safety, and Infrastructure Protection Team
16 (SIPT), Meteorology-related projects (including Advanced Fire Modeling), and
17 wildfire cameras. These activities are for the purpose of responding to
18 emergencies and restoring customer service in a safe and timely manner to
19 minimize reliability impacts. In addition, this MWC includes Public Awareness
20 Outreach, the Advanced Technology Services (ATS) organization responsible
21 for equipment testing and calibration and coordinating the EMF Program, and
22 the Regulatory Compliance & Quality Assurance (QA) organization. This MWC
23 also includes Community Wildfire Safety Program (CWSP) and System
24 Hardening PMO work related expenses. This MWC also includes PMO work
25 related expenses for PG&E Remote Grids including team staffing, IT expenses,
26 development of Remote Grid technical specifications and contract templates,
27 and Line Elimination Incentive Program expenses. This MWC also includes
28 Emerging Technology public partnership expenses.

29 Some activities forecasted in MWC AB were recorded to a new MWC WF
30 including, PSPS event and non-event costs, Enhanced Powerline Safety
31 Settings (EPSS) costs, SIPT costs and Situational Awareness and Forecasting
32 costs.

33 **MWC AR – Read and Investigate Meters** – Involves activities for field
34 resources performing manual meter reading activities, and the systems,

1 administration, and clerical support necessary to effectively perform these
2 activities. This program relates to safety, reliability, or maintenance because it
3 supports the proper functioning of PG&E's metering infrastructure necessary to
4 reliably deliver timely and accurate customer billing.

5 **MWC AT – Emerging Technology** – Involves support for the Electric
6 Emerging Technology Program which funds and administers a series of external
7 partnerships and initiatives to keep PG&E informed of the external technology
8 landscape and industry trends, and facilitate coordination with industry,
9 academia, and other external groups to identify and apply technology solutions
10 to address PG&E's greatest challenges. External partnerships and initiatives
11 include formal external innovation challenges, industry technology and vendor
12 landscaping, participation in emerging technology consortia, and targeted
13 partnerships with academia and national labs. This program relates to safety,
14 reliability, or maintenance because it supports emerging technology solutions
15 that may eventually be implemented to improve PG&E's grid.

16 **MWC BA – Electric Distribution Operation Activities** – Involves electric
17 Distribution Control Center (DCC) and field operations, including work performed
18 by Distribution Operators (DO) and engineers. This work includes operating
19 switches to transfer load between circuits, isolating customer services or
20 deenergizing sections of line during planned construction or maintenance, and
21 reconfiguring circuits to mitigate unplanned situations such as dig-ins, car pole
22 accidents, and storms. This work also includes the daily enablement and
23 disablement of EPSS on distribution protection devices to provide fast tripping to
24 mitigate ignitions from fault activity during periods of elevated wildfire risk. This
25 program relates to safety, reliability, or maintenance because it provides for
26 timely response and restoration during emergencies and power outages and the
27 execution of system configuration changes such as switching and circuit
28 reconfigurations to reduce customer impacts from planned work.

29 **MWC BF – Electric Distribution Patrols and Inspections** – Involves
30 patrols and inspections of overhead (OH) and underground (UG) electric
31 distribution facilities per General Order (GO) 165; patrols and detailed
32 inspections of OH facilities in wildfire areas; infrared inspections; testing and
33 inspections of OH and UG line equipment; special patrols and inspections; and
34 other work associated with electric distribution system maintenance. This

1 program relates to safety, reliability, or maintenance because it proactively
2 identifies assets needing repair or replacement and generates corrective work
3 orders to mitigate equipment failures and restore the distribution facilities to safe
4 and reliable operating conditions..

5 **MWC BH – Electric Distribution Routine Emergency** – Involves repair or
6 replacement of Electric Distribution OH or UG infrastructure that are an imminent
7 hazard or have caused an outage during normal Level 1 conditions. This
8 includes routine emergency response work, as well as work issued using
9 PG&E’s Field Automation System (FAS) for either emergency response or
10 system reliability, e.g., arcing wire, wire down, patrol on lines before
11 re-energizing due to fast tripping settings on devices to mitigate fire risk. This
12 also includes costs associated with EPSS to mitigate wildfire ignition risk. This
13 program relates to safety, reliability, or maintenance because it concerns timely
14 restoration of power following outages, investigating voltage or power quality
15 complaints, and putting an imminent hazard in a safe condition.

16 **MWC BK – Maintenance of Other Equipment** – Involves repair of
17 specialized equipment, such as transformers, voltage regulators, circuit
18 reclosers, capacitor banks and line switches, as well as equipment repair
19 activities at the Emeryville repair facility. This program relates to safety and
20 reliability because it involves overhauling, repairing, and testing distribution line
21 equipment to mitigate outages and maintain equipment in safe operating
22 conditions. Units that cannot be safely restored are taken out of service and
23 disposed of properly.

24 **MWC DD – Customer Field Service Work** – Involves Electric Distribution’s
25 portion of customer-generated field service activities, specifically start/stop
26 service requests and other customer-generated electric field service requests.
27 Since 2018, this work includes activities for electric turn-ons and shut-offs
28 initiated by customers, which are mainly performed by Field Metering resources
29 at commercial and agricultural customer premises. EO Dispatch performs the
30 work to ensure that qualified personnel are timely dispatched to respond to all
31 EPSS outages to determine if an ignition has occurred due to fault activity during
32 elevated wildfire activity. This program relates to safety, reliability, or
33 maintenance because it supports the proper functioning of PG&E’s metering
34 infrastructure.

1 **MWC EV – New Customer Connection Service Inquiry Activities –**

2 Involves processing customer requests related to new business or increased
3 connection capacity (added load) on existing services. PG&E is required by its
4 approved electric tariff and franchise agreements to perform this work. This
5 program does not relate to safety, reliability, or maintenance.

6 **MWC EW – EO Work Requested by Others (WRO) –** Involves work

7 required by tariff, third-party requests and franchise agreements, including:
8 non-plant related relocations of electric facilities, temporary electric services
9 provided to customers during construction projects, and Land Department
10 right-of-way record research requested by third parties that cannot be charged to
11 a specific project. MWC EW also includes third-party Electric Grid
12 Interconnection (EGI) activities for all generation projects interconnected at
13 PG&E’s distribution service. EGI projects may include retail tariff programs,
14 compliance with Electric Rule 21, and interconnection applications for Federal
15 Energy Regulatory Commission jurisdictional projects under the Wholesale
16 Distribution Tariff seeking Power Purchase Agreements. This program does not
17 relate to safety, reliability, or maintenance .

18 **MWC EY – Change/Maintenance Used Electric Meter –** Involves the

19 meter activities associated with electric meter preventive maintenance, electric
20 meter Corrective Maintenance, meter programming, meter network
21 maintenance, electric meter accuracy testing, and the associated staff support
22 necessary to effectively perform these activities. This program relates to safety,
23 reliability, or maintenance because it supports the proper functioning of PG&E’s
24 metering infrastructure necessary to reliably deliver timely and accurate
25 customer billing.

26 **MWC FZ – Electric Distribution Engineering and Planning –** Supports

27 many programs that require engineering and planning services, including the
28 Electric Distribution Capacity, Electric Distribution Reliability, EPSS, and UG
29 Asset Management programs. MWC FZ also includes performing diagnostics
30 on data from automated field equipment to support the DCCs; investigating
31 secondary voltage complaints that Trouble-men cannot resolve on the first visit;
32 and operational field work that electric planning personnel initiate, such as phase
33 balancing and replacing fuses that are projected to be overloaded. This
34 program relates to safety, reliability, or maintenance because it includes the

1 electrical engineering and planning services work necessary for a variety of
2 asset management activities.

3 **MWC GA – Poles – Intrusive Inspection/Test and Treat Program –**

4 Involves activities to assess the condition of the lower section of wood poles and
5 preserve the poles' wood strength through the application of chemicals and
6 restoration of poles as warranted. This program also includes coordinating the
7 billing of joint owners and tenants for their share of costs for work performed on
8 jointly owned or leased facilities. In addition, this program includes analyzing
9 poles for overload conditions and ensuring poles meet the strength and loading
10 requirements of GO 95. This program relates to safety, reliability, or
11 maintenance because the work determines whether poles are in good condition
12 to prevent premature failure.

13 **MWC GC – Electric Distribution Substations Operate and Maintain**

14 **Assets** – Involves preventive maintenance, corrective maintenance (CM) and
15 substation support activities for electric distribution substation assets.
16 Preventive Maintenance includes time or condition-based facility and equipment
17 inspections. CM includes the restoration and repair of failed equipment, mobile
18 substation and mobile transformer installation costs, and relocation of
19 emergency and surplus equipment. Substation support activities include
20 activities associated with engineering and maintenance support, major
21 emergency corrective maintenance, substation vegetation management and
22 building maintenance. This program relates to safety and reliability because it
23 supports personnel, tools, and equipment to maintain day-to-day operations.
24 This program relates to maintenance through the proactive identification and
25 resolution of equipment abnormalities.

26 **MWC GE – Electric Distribution Mapping** – Involves providing timely and

27 accurate data, spatial information, and data-derived insights for PG&E's electric
28 system that supports construction, engineering, estimating, operational,
29 restoration, inspection, and maintenance activities. This program includes data
30 management activities covering the full lifecycle of data: ingestion, storage,
31 access, controls, governance, quality, meta-data, usage, security, retention, and
32 disposal of data. This program relates to safety, reliability, or maintenance
33 because it enables the accurate collection and effective management of records
34 related to field assets. It also enables access and use of the data to inform risk

1 management decisions. These records are crucial to determine that field assets
2 are safely, and reliably operated and necessary maintenance is performed
3 promptly.

4 **MWC HG – Electric Distribution Operations Technology** – Involves
5 technical support for Electric Distribution Operations, including but not limited to
6 licenses, tools, and operational and development support for various control
7 center applications, including the Advanced Distribution Management System
8 (ADMS). This program relates to safety, reliability, or maintenance due to its
9 association with Supervisory Control and Data Acquisition (SCADA) control over
10 field equipment, outage management applications, operator awareness of real
11 time circuit conditions, enhanced cybersecurity, and integration of distributed
12 energy resources.

13 **MWC HN – Vegetation Management** – Involves costs necessary to support
14 and execute regulatory compliance work that includes the annual inspection and
15 maintenance of tree clearances along PG&E’s OH high voltage and secondary
16 electric distribution lines. The program covers annual tree trimming or removal,
17 vegetation control, work verification, contractor quality control, environmental
18 compliance, public education, and fire risk reduction work. This program relates
19 to safety, reliability, or maintenance by managing the vegetation adjacent to
20 powerlines to reduce the risk of vegetation contact with the electric distribution
21 equipment; and serves as a risk control, related to the vegetation risk driver, to
22 reduce the frequency or consequence of risk of wildfire and risk of failure of
23 electric distribution overhead assets.

24 **MWC HX – System Automation and Protection Support** – Involves
25 engineering and technical support for PG&E’s automation and protection
26 equipment. In addition, it includes the service and software costs associated
27 with distribution automation (DA) equipment. The engineering support consists
28 of three key components: (1) Automation Engineering support; (2) Protection
29 Engineering support; and (3) Automation Specialist support, which includes the
30 wildfire risk mitigation including PSPS and EPSS. This program relates to
31 safety, reliability, or maintenance because it includes engineering support for the
32 maintenance and operation of automation and protection equipment.

33 **MWC HY – Perform Gas Meter Maintenance** – Involves the costs of meter
34 activities associated with gas meter/AMI SmartMeter™ module maintenance

1 that does not result in meter/module exchanges, meter/module communication
2 trouble-shooting, programming, and repairs. This program relates to safety,
3 reliability, or maintenance because it supports the proper functioning of PG&E's
4 metering infrastructure necessary to reliably deliver timely and accurate
5 customer billing.

6 **MWC IF – Electric Distribution Major Emergency** – Involves response
7 work to significant OH or UG outages and/or imminent hazard to PG&E's electric
8 distribution facilities that requires a division Operations Emergency Center
9 (OEC) activation and is consistent with PG&E's Major Emergency Balancing
10 Account (MEBA) Criteria Guidance Document. Beginning in 2014, these costs
11 are included in the two-way MEBA authorized by D.14-08-032. This program
12 relates to safety, reliability, or maintenance because it allows for the timely
13 restoration of power to customers following an outage.

14 **MWC IG – Various Balancing and Memorandum Account Expense:**

15 Includes expense work for a variety of balancing and memorandum
16 accounts:

- 17 • Vegetation Management Balancing Account (VMBA) – records costs for IGI
18 (Second Patrol formerly known as Tree Mortality) and IGJ (Enhanced
19 Vegetation Management (EVM)). IGI (Second Patrol) includes costs
20 incurred to reduce risk associated with dead and dying trees. IGJ (EVM)
21 includes targeted wildfire mitigation programs in high fire-threat areas.
- 22 • Fire Risk Mitigation Memorandum Account (FRMMA) – Includes incremental
23 costs incurred for wildfire risk mitigation work that is not otherwise recovered
24 in PG&E's adopted revenue requirements. PG&E will determine the
25 incrementality of these amounts to the Company's revenue requirement
26 when it applies for cost recovery;
- 27 • Wildfire Mitigation Plan Memorandum Account (WMPMA) – Includes
28 incremental costs incurred to implement PG&E's approved Wildfire
29 Mitigation Plan that are not otherwise recovered in PG&E's adopted revenue
30 requirement. PG&E will determine the incrementality of these amounts to
31 the Company's revenue requirement when it applies for cost recovery;
- 32 • Rule 20A Balancing Account Expense – Includes costs associated with the
33 Rule 20A Audit and Rule 20 Guidebook ordered by D.1803022, and
34 expense amounts for cancelled projects; and

- 1 • Wildfire Mitigation Balancing Account (WMBA) - Includes PSPS event
2 activities and costs, and PSPS non-event preparation and programs geared
3 toward mitigating wildfire ignition risk. This account also includes costs
4 associated with the administration and implementation of EPSS program to
5 mitigate wildfire risks, and other wildfire mitigation expense activities.

6 With the exception of Rule 20A, these programs relate to safety, reliability,
7 or maintenance because the balancing and memorandum accounts track work
8 to implement safety prevention measures, system reliability risk reductions, and
9 improvements to address wildfire risk.

10 **MWC IS – Streetlight Support** – Involves work in support of streetlight
11 inventory and LS-2 Streetlight Audit Services, and the Light Emitting Diode
12 (LED) and other streetlight programs. This program relates to safety, reliability,
13 or maintenance for the successful inventory of streetlights necessary for ongoing
14 maintenance and safe operations.

15 **MWC IU – Collect Revenue** – Involves meter activities that are focused on
16 the detection, investigation, and resolution of customer energy theft. This
17 includes the costs of field employees, systems and staff support necessary to
18 effectively perform these theft-prevention activities. This program relates to
19 safety, reliability, or maintenance because it supports the proper functioning of
20 PG&E’s metering infrastructure and seeks to identify and address potential
21 safety issues created by PG&E’s customers.

22 **MWC JV – Maintain Information Technology (IT) Applications and**
23 **Infrastructure** – Includes costs for ongoing maintenance, operations, and repair
24 for PG&E’s IT applications, systems, and infrastructure. This program relates to
25 safety, reliability, or maintenance by allowing for the development and
26 enhancement of the IT solutions that provide PG&E’s field and office employees
27 with the tools that support them in performing their job in a safe and efficient
28 manner. These tools are intended to provide up-to-date, complete, and accurate
29 information to enable coordination of work and asset data across all work
30 streams to enhance grid safety and operational efficiency. The areas covered
31 by this MWC include asset design, asset management, and work management.

32 **MWC KA – Preventive Maintenance and Equipment Repair, OH** –
33 Involves repair of OH facilities; repair of OH Critical Operating Equipment (COE);
34 repair of streetlights and group streetlight replacements; repair of OH facilities to

1 address migratory bird requirements; investigation and response to Radio and
2 Television Interference (RTVI) inquiries; washing insulators; investigation of idle
3 facilities; wood pole bridge bonding; and other OH maintenance work. This
4 MWC also includes preventative and reactive maintenance for PG&E Remote
5 Grid systems. This program relates to safety, reliability, or maintenance
6 because it addresses non-conforming equipment identified by preventative
7 maintenance programs such as inspections and patrols, as well as internal
8 operational processes (e.g., equipment testing), and because it addresses
9 maintenance of PG&E Remote Grid systems.

10 **MWC KB – Preventive Maintenance and Equipment Repair, UG –**

11 Involves repair of UG facilities; repair of UG COE; grounding WYE (three-phase
12 star configuration) transformers; and other UG line maintenance work. This
13 program relates to safety, reliability, or maintenance because it addresses
14 non-conforming equipment identified by preventative maintenance programs
15 such as inspections and patrols, as well as internal operational processes
16 (e.g., equipment testing).

17 **MWC KC – Preventive Maintenance and Equipment Repair, Network –**

18 Involves repair of network facilities, repair of network equipment, repair of
19 network SCADA equipment, testing and overhaul of Network Protectors (NP),
20 transformer oil sampling, and other miscellaneous network maintenance work.
21 This program relates to safety, reliability, or maintenance because it addresses
22 the maintenance and repair of the equipment identified by preventative
23 maintenance programs such as inspections and patrols, as well as internal
24 operational processes.

25 **MWC OM – Operational Management –** Includes labor- and

26 employee-related costs to provide supervision and management support.
27 MWC OM also includes costs incurred by the administrative staff working for the
28 Supervisors/Managers. This program is not directly related to safety, reliability,
29 or maintenance.

30 **MWC OS – Operational Support –** Includes labor and employee-related

31 costs that provide services and support that are unrelated to supervision and
32 management. This MWC relates to safety, reliability, or maintenance because it
33 is included as a maintenance activity in accordance with D.19-04-020. Electric
34 Distribution does not consider MWC OM as safety, reliability, maintenance work.

1 **MWC WF – Wildfire Mitigation** – Involves activities that support the
2 weather station and wildfire camera projects, a satellite fire detection and
3 alerting system, and the development, operations and maintenance of advanced
4 machine learning outage and fire potential index models that are used to
5 mitigate the risk of catastrophic wildfire through mitigations such as EPSS and
6 PSPS. This program relates to safety, reliability, or maintenance because it
7 supports programs that mitigate the risk of catastrophic wildfires.

8 **E. MWC Descriptions – Capital**

9 **MWC 05 – Tools and Equipment** – Includes the costs of miscellaneous
10 tools and equipment, Applied Technology Serviced (ATS) tools, and of
11 overdrawn materials. ATS tools include the cost of laboratory and test
12 equipment used for field work or in ATS laboratories. This MWC also includes
13 tools and equipment necessary to perform all field metering, meter maintenance,
14 meter repair, and accuracy testing activities. This program relates to safety,
15 reliability, or maintenance because it includes funds for the purchase of
16 necessary tools to be used in the safe execution of work by field personnel.

17 **MWC 06 – Electric Distribution Line and Equipment Capacity** – Involves
18 capacity expansion work outside a substation necessary to correct specific
19 capacity deficiencies or overload conditions on electric distribution lines and
20 equipment. This work includes replacing/upgrading conductors and devices
21 along with installing capacitors, switches, or other equipment; establishing new
22 circuit outlets; converting circuit line sections to a higher operating voltage; and
23 reconfiguring primary electric distribution circuits to redistribute loading. This
24 program relates to safety, reliability, or maintenance because it corrects
25 overloads on distribution equipment, mitigating the risk of equipment failure due
26 to overloads.

27 **MWC 07 – Electric Distribution Install/Replace OH Poles** – Involves the
28 replacement of poles to support safety and reliability of the electric distribution
29 system. This program relates to safety, reliability, or maintenance because it
30 actively works to determine whether poles are in good condition to prevent
31 premature failure. This program enhances overall system safety by replacing
32 poles identified as overloaded or nearing the end of in-service life, prior to
33 premature failure.

1 **MWC 08 – Electric Distribution OH Asset Replacement** – Involves
2 rebuilding and reframing OH electric distribution lines (including the installation
3 of covered wire and non-wood electric distribution poles, and conversion of OH
4 to UG); and performing other reliability and system hardening improvement work
5 such as replacing annealed OH conductors and obsolete switches. This
6 program relates to safety, reliability, or maintenance because it directly funds
7 projects designed to replace OH equipment and rebuild electric distribution lines
8 in high fire threat districts (HFTD) as part of PG&E’s CWSP.

9 **MWC 09 – Electric DA and Protection** – Covers investments in substation
10 automation and protection devices including installing or replacing substation
11 Remote Terminal Units (RTU) and Human Machine Interfaces (HMI); installing
12 or replacing SCADA peripherals; replacing obsolete protection equipment,
13 primarily relays, in electric distribution substations; replacing automation or
14 protection equipment due to unanticipated failure; and continuing the Fire Risk
15 Management initiative that allows remote operation of reclose relays on certain
16 circuit breakers and line reclosers to reduce the likelihood of wildland and urban
17 fires. This program relates to safety, reliability, or maintenance because it
18 directly funds projects which support the automation of substation equipment
19 and electric distribution protective devices.

20 **MWC 10 – Electric Distribution WRO General** – Involves relocating
21 electric distribution facilities at the request of a governmental agency or other
22 third parties (e.g., customers and developers), Electric Generation
23 Interconnection under Tariff Rule 21 and the Wholesale Distribution Tariff, and
24 conversion of OH electric facilities to UG under Tariff Rule 20B and Rule 20C.
25 This work is mandated by PG&E’s electric tariff and franchise agreements. This
26 program does not relate to safety, reliability, or maintenance.

27 **MWC 16 – Electric Distribution Customer Connections** – Involves
28 installing the electric infrastructure required to connect new customers to
29 PG&E’s distribution system or to accommodate increased load from existing
30 customers. Work activities include building new UG and OH primary electric
31 distribution systems, and the associated secondary systems and services to
32 both residential and nonresidential customers. This work category also includes
33 all distribution transformer, secondary and service upgrade work to serve
34 increased loads related to PEVs. PG&E is required by its approved electric tariff

1 and franchise agreements to perform this work. Additionally, included within this
2 MWC are all purchases for distribution transformers for use in all types of capital
3 work. This program does not relate to safety, reliability, or maintenance.

4 **MWC 17 – Electric Distribution Routine Emergency** – Involves activities
5 related to the replacement of capital-related Electric Distribution infrastructure, in
6 response to (1) a customer outage or an unsafe condition requiring immediate
7 response and standby, and (2) trouble man assessment activities and switching
8 of the system’s configuration in response to OH and UG outages occurring
9 during normal Level 1 conditions. This program relates to safety, reliability, or
10 maintenance because it concerns the timely restoration of power following an
11 outage and putting an imminent hazard in a safe condition.

12 **MWC 21 – Miscellaneous Capital and EP&R** – Includes costs to build
13 critical infrastructure required for response to catastrophic emergencies and fire
14 related situational awareness tools and resources. This includes costs for
15 Emergency Operating Centers (EOCs), facility upgrades, communications and
16 data infrastructure improvements, and natural disaster models. This also
17 includes costs for IT enhancements related to PG&E Remote Grid mapping,
18 monitoring, control, and outage management. This MWC may include an offset
19 for capital related productivity improvements and work execution risk. This
20 program relates to safety, reliability, or maintenance because work in this MWC
21 is critical to effective emergency response and supporting the CWSP
22 Management Office. MWC 21 also includes miscellaneous capital expenses
23 such as ATS lab safety and reliability upgrades and the capital portion of support
24 contracts, as applicable.

25 **MWC 25 – Install New Electric Meters** – Includes labor necessary to
26 perform electric meter installations, exchanges, removals, and retirements. This
27 MWC relates to safety, reliability, or maintenance because it supports the proper
28 functioning of PG&E’s metering infrastructure necessary to reliably deliver timely
29 and accurate customer billing.

30 **MWC 2A – Electric Distribution Preventive Maintenance (EDPM), OH** –
31 Involves replacing deteriorated OH facilities on a planned basis where it is not
32 cost effective to repair those facilities. This work is like the work performed in
33 MWC KA, but includes replacing equipment, rather than repair and
34 maintenance. Typical equipment replacements include corroded transformers,

1 deteriorated cross-arms, inoperative line switches, and other OH electric
2 distribution facilities. This equipment is replaced in kind in most cases; however,
3 upgrades may be required where necessary to meet current operating
4 conditions, technology, and safety standards. Work also includes replacing
5 PG&E-owned, non-decorative High Pressure Sodium Vapor streetlights with
6 LED streetlights and non-exempt surge arrester replacements. This program
7 relates to safety, reliability, or maintenance because it addresses
8 non-conforming equipment identified by preventative maintenance programs
9 such as inspections and patrols, and internal operational processes
10 (e.g., equipment testing) and mitigates the risk of failure of electric distribution
11 overhead assets and/or wildfire risk. In addition, the streetlight replacements
12 address certain assets (i.e., San Francisco Regulated Output (RO) Streetlights)
13 that will improve illumination, increasing safety.

14 **MWC 2B – EDPM, UG** – Involves replacing deteriorated UG facilities on a
15 planned basis where it is not cost effective to repair those facilities. This work is
16 like the work performed in MWC KB, but includes replacing equipment, rather
17 than repair and maintenance. Typical equipment replacements include corroded
18 transformers, inoperative switches, damaged UG enclosures and other UG
19 electric distribution facilities. Equipment is replaced in kind in most cases;
20 however, upgrades are required where necessary to meet current operating
21 conditions, technology, and safety standards. This program relates to safety,
22 reliability, or maintenance because it addresses non-conforming equipment
23 identified by preventative maintenance programs such as inspections and
24 patrols, as well as internal operational processes (e.g., equipment testing) and
25 mitigates the risk of failure of electric distribution underground assets.

26 **MWC 2C – EDPM, Network** – Involves replacing aging or deteriorated
27 network facilities on a planned basis where it is not cost effective to repair those
28 facilities. This work is similar to the work performed in MWC KC, but includes
29 replacing equipment, rather than repair and maintenance. Typical equipment
30 replacements include corroded transformers, inoperative switches, and other
31 network distribution facilities. Equipment is replaced in kind in most cases;
32 however, upgrades are required where the equipment must meet current
33 operating conditions, technology, and safety standards. Additional work
34 includes safety improvement programs such as High-Rise Building Transformer

1 Replacements, new monitoring system installation and the Manhole Cover
2 Replacement Program. This program relates to safety, reliability, or
3 maintenance because it addresses the replacement of aging or faulty network
4 equipment identified by the preventative maintenance program in addition to the
5 planned new equipment upgrades, which is fundamental to maintaining a safe
6 and reliable distribution network system.

7 **MWC 2F – Build IT Applications and Infrastructure** – Includes the costs
8 to design, develop and enhance applications, systems, and infrastructure
9 technology solutions. This program relates to safety, including grid safety,
10 reliability, or maintenance by developing, enhancing, and deploying IT solutions
11 that provide PG&E’s field and office employees with the tools that support them
12 in performing their jobs in a safe and efficient manner. These tools are intended
13 to provide up-to-date, complete, and accurate information to enable coordination
14 of work and asset data across all work streams to support mitigation of wildfire
15 risk, enhance grid safety and operational efficiency. The areas covered by this
16 MWC include asset design, asset management and work management.

17 **MWC 30 – Electric Distribution WRO – Rule 20A** – Involves conversion of
18 existing OH electric distribution facilities to UG facilities. To qualify under the
19 Rule 20A Tariff, a project must meet certain criteria including being in the public
20 interest and having sufficient work credits to convert the facilities. Since 2017,
21 these costs are included in the one-way Rule 20A balancing account authorized
22 by D.17-05-013. This program does not relate to safety, reliability, or
23 maintenance.

24 **MWC 3U – Install/Replace Wildfire Mitigation Equipment** – This MWC
25 records costs for wildfire mitigation work, including undergrounding of existing
26 OH electric distribution lines. This program relates directly to safety, reliability,
27 or maintenance because it addresses priority work in HFTDs based on wildfire
28 risk modeling and serves as a mitigation to reduce the consequence or
29 frequency of risk of failure of electric distribution overhead assets and of risk of
30 wildfire. Work may also be associated with (1) rebuild of fire impacted areas, (2)
31 PSPS mitigation, or (3) Public Safety Specialist (PSS) identified areas; and is
32 completed in compliance with PG&E’s Fire Rebuild Design Guidance for System
33 Hardening.

1 **MWC 46 – Electric Distribution Substation Capacity** – Involves capacity
2 expansion work within substations necessary to correct capacity deficiencies.
3 This work includes new substations, increased capacity at existing substations,
4 and work on feeders/breakers within a substation. This program relates to
5 safety, reliability, or maintenance because it corrects overloads on substation
6 equipment, mitigating the risk of equipment failure due to overloads.

7 **MWC 48 – Electric Distribution Substation Replace Other Equipment** –
8 Involves all major and minor substation equipment replacements not included in
9 MWC 54 (Transformer Program). Specific sub-programs include:
10 (1) Switchgear Replacement; (2) Circuit Breaker Replacement; (3) Animal
11 Abatement; (4) Battery Replacement; (5) Distribution Line Work Support; and
12 (6) Other Equipment Replacement Work. This program relates to safety,
13 reliability, or maintenance because it targets proactive substation equipment
14 replacement and measures to mitigate outages caused by animal contact or by
15 equipment failures.

16 **MWC 49 – Electric Distribution Circuit/Zone Reliability Program** –
17 Involves various circuit reliability improvement work to address repeat outages
18 and customer service-level complaints. This program also includes the
19 purchase of line reclosers (revolving stock), the installation of Fault Location,
20 Isolation, and Service Restoration (FLISR) systems, and the targeted circuit
21 initiative which addresses the least reliable circuits and typically involves a
22 mixture of installing new fuses, reclosers, fault indicators and animal and bird
23 guards, reframing poles to increase phase separation, and repairing or replacing
24 existing equipment. This work also supports the EPSS program through the
25 installation of Fuse Savers to reduce the impact of EPSS outages, Fault
26 Indicators to isolate outage patrol areas, and installation of Down Conductor
27 Detection technology to capture high impedance fault conditions that could
28 generate a wildfire ignition. This program relates to safety, reliability, or
29 maintenance because it directly supports the implementation of targeted capital
30 projects designed to improve electric service reliability and address customer
31 outage complaints.

32 **MWC 54 – Electric Distribution Substation Transformer**
33 **Replacements** – Involves maintaining or improving substation reliability by
34 replacing transformers that have the highest risk of failure. This MWC also

1 includes maintaining an adequate supply of emergency transformer stock and
2 mobile transformers for emergency response. This program relates to safety,
3 reliability, or maintenance because it is the proactive planned replacement of
4 substation transformers to improve them and prevent transformer failures.

5 **MWC 56 – Electric Distribution UG Asset Replacements** – Includes
6 reliability related replacement of primary electric distribution cables (includes
7 tie-cables), primary and secondary Network Cables, non-emergency related
8 failed primary electric distribution cables, Transfer Ground Rocker Arm Main
9 (TGRAM)/Transfer Ground Rocker Arm Line (TGRAL) switches, Load Break Oil
10 Rotary (LBOR) switches, and replacement of failed primary electric distribution
11 cables. This program also includes performing cable rejuvenation (injection)
12 and testing and the installation of temperature monitors on targeted oil-filled
13 subsurface equipment. This program relates to safety, reliability, or
14 maintenance because it addresses assets that have deteriorated and/or are
15 experiencing failures, some of which may pose safety risk to employees and
16 public if they fail.

17 **MWC 58 – Electric Distribution Substation Safety and Security** –
18 Involves fire protection and suppression, seismic, and security work. This
19 program relates to safety, reliability, or maintenance because it targets work that
20 prevents potential hazards within the substation through the installation or
21 upgrade fire suppression systems, seismic retrofit of control buildings, and the
22 installation of security cameras and card readers.

23 **MWC 59 – Electric Distribution Substation Emergency Replacements** –
24 Involves substation emergency equipment replacements that fall into two
25 categories: (1) replacement of equipment that has failed in service; and
26 (2) replacement of equipment intentionally removed from service (or “forced
27 out”) because PG&E has determined that imminent failure is likely to occur. This
28 program relates to safety, reliability, or maintenance because it provides
29 emergency response to restore service and a return from abnormal
30 configuration.

31 **MWC 63 – EO Control Center Facility and Operational Technology** –
32 Covers ongoing capital improvements to operational technology used in DCCs
33 including applications such as ADMS and Distributed Energy Resource
34 Management System. Work activities include designing, building, testing, and

1 deploying enhancements to Operational Technology. This program relates to
2 safety, reliability, or maintenance due to its association with SCADA control over
3 field equipment, outage management applications, operator awareness of real
4 time circuit conditions, enhanced cybersecurity, and integration of distributed
5 energy resources.

6 **MWC 95 – Electric Distribution Major Emergency** – Involves response to
7 significant OH or UG outages and/or imminent hazard to PG&E’s electric
8 distribution facilities that requires division Emergency Operating Center (EOC)
9 activation and is consistent with PG&E’s Major Emergency Balancing Account
10 (MEBA) Criteria Guidance Document. Since 2014, these costs are included in
11 the two-way MEBA authorized by D.14-08-032. This program relates to safety,
12 reliability, or maintenance because the costs incurred are for timely response
13 and restoration following power outages.

14 **F. MAT Code Descriptions – Expense**

15 **MAT AB6 – EP&R** – EP&R expense cost. This program relates to safety,
16 reliability, or maintenance because this work drives the company emergency
17 response plan for customer safety, and timely outage restoration. The program
18 also includes the PSPS events and non-events activities, EPSS, and Safety
19 Infrastructure Protection Team (SIPT). This MAT code also includes the costs
20 for wildfire situational awareness related program forecast in the 2023 GRC
21 including the Wildfire Safety Operations Center, SIPT, Meteorology-related
22 projects (including Advanced Fire Modeling), and wildfire cameras.

23 Some activities forecasted in AB6 were recorded to a new MWC WF
24 including, PSPS event and non-event costs, EPSS costs, SIPT costs and
25 Situational Awareness and Forecasting costs.

26 **MAT AB# – Miscellaneous expense, other** – Other costs related to:
27 support, PSPS event activities and nonevent preparation; wildfire situational
28 awareness related programs; PMO work related expenses for CWSP, System
29 Hardening and PG&E Remote Grids programs. See MWC AB for how this MAT
30 relates to safety, and/or reliability, and/or maintenance.

31 **MAT AT# – Emerging Technology, other** – Involves support for other
32 costs related to external partnerships and initiatives supporting emerging
33 technology solutions that may eventually be implemented to improve PG&E’s

1 grid. See MWC AT for how this MAT relates to safety, and/or reliability, and/or
2 maintenance.

3 **MAT BAF – General Operations** – Involves Distribution Operation’s
4 management and control the electric distribution system. Activities include
5 monitoring the distribution system; performing system configuration changes,
6 such as switching and circuit reconfiguration; and processing switching
7 applications for work that enables construction to maintain and improve electric
8 distribution system infrastructure, including EPSS related work. This program
9 relates to safety, reliability, maintenance because the activities allow for timely
10 response and restoration during emergencies and power outages.

11 **MAT BAH – Power Quality and Distribution Operations Engineers**
12 **Support** – Involves responding to customer voltage complaints, assessing, and
13 identifying potential overloading, and providing guidance to Distribution System
14 Operators regarding load transfers and circuit reconfigurations. This program
15 relates to safety, reliability, or maintenance because it enables the timely
16 response and restoration during emergencies and power outages.

17 **MAT BA# Electric Distribution Operation Activities Other** – Includes
18 miscellaneous electric control center and field operations costs. This MAT also
19 includes costs incurred by distribution operators and engineers performing work.
20 See MWC BA for how this MAT relates to safety, and/or reliability, and/or
21 maintenance.

22 **MAT BF1 – Distribution Aerial Inspections** – Involves inspection of OH
23 electric distribution facilities to examine and record abnormal conditions that will
24 adversely impact safety or reliability. Inspected facilities include PG&E
25 solely- and jointly-owned distribution poles, including all equipment and facilities
26 on the pole; primary and secondary risers and services; primary and secondary
27 conductor; transmission poles with electric distribution under build; electric
28 distribution towers and lattices; streetlights on PG&E solely owned or
29 jointly-owned distribution poles. This program relates to safety, reliability, or
30 maintenance because it examines and records abnormal conditions of assets
31 that will adversely impact safety, reliability, or asset life, needing repair or
32 replacement.

33 **MAT BF3 – UG Bay Area Rapid Transit (BART) Cable**
34 **Testing/Inspections** – Involves annual UG inspections/testing of 34.5 kilovolts

1 (kV) BART Cable for compliance with Utility Standard TD-2302S. This program
2 relates to safety, reliability, or maintenance because it serves as a risk control to
3 reduce the frequency or consequence of risk of underground asset failure by
4 proactively identifying abnormal conditions that will adversely impact safety,
5 reliability, or asset life, needing repair or replacement.

6 **MAT BF4 – UG Auto Transfer Switch Testing/Inspections** – Involves
7 annual UG inspections/testing of individual electronic-component style and
8 microprocessor style Auto-Transfer Switches (ATS) for compliance with Utility
9 Standard TD-2302S. This program relates to safety, reliability, or maintenance
10 because it serves as a risk control to reduce the frequency or consequence of
11 risk of underground asset failure by proactively identifying abnormal conditions
12 needing repair or replacement.

13 **MAT BFA – OH Poles Patrolled** – Involves visual patrol of OH electric
14 distribution facilities to identify obvious structural problems or hazards for
15 compliance with GO 165 and the Electric Distribution Preventative Maintenance
16 (EDPM) Manual. Patrolled facilities include primary, secondary, and service,
17 and other associated electric distribution facilities from the substation, including
18 poles within the substation fence, to the end of the line. Towers supporting only
19 electric distribution facilities are included in the OH patrol. Patrols can be
20 performed from a vehicle, on foot, or by helicopter. This program relates to
21 safety, reliability, or maintenance because it serves as a risk control to reduce
22 the frequency or consequence of risk of failure of electric distribution overhead
23 assets and risk of wildfire by proactively identifying abnormal conditions or
24 hazards needing repair or replacement.

25 **MAT BFB – OH Poles Inspected** – Involves detailed inspections of OH
26 electric distribution facilities to examine and record abnormal conditions that will
27 adversely impact safety or reliability for compliance with GO 165 and the EDPM
28 Manual. Inspected facilities include PG&E solely and jointly-owned distribution
29 poles, including all equipment and facilities on the pole; primary and secondary
30 risers and services; primary and secondary conductor; transmission poles with
31 electric distribution under build; electric distribution towers and lattices;
32 streetlights on PG&E solely owned or joint pole distribution poles. This program
33 relates to safety, reliability, or maintenance because it serves as a risk control to
34 reduce the frequency or consequence of risk of failure of electric distribution

1 overhead assets and risk of wildfire by proactively identifying abnormal
2 conditions needing repair or replacement.

3 **MAT BFC – OH Infrared Inspections** – Involves infrared inspection of OH
4 electric distribution facilities to identify pending failure of equipment. Work
5 includes contractor-performed reliability work and internally performed ad hoc
6 requests. This program relates to safety, reliability, or maintenance because it
7 serves as a risk control to reduce the frequency or consequence of risk of failure
8 of electric distribution overhead assets and risk of wildfire by proactively
9 identifying areas of deterioration and degradation needing repair or replacement.

10 **MAT BFD – UG Enclosures Patrolled** – Involves visual patrol of UG
11 electric distribution facilities to identify obvious structural problems or hazards for
12 compliance with GO 165 and the EDPM Manual. Patrolled facilities include
13 pad-mounted equipment, primary enclosures, and visible secondary enclosures
14 outside the substation fence to the end of the line. An UG patrol may be
15 performed by walking or driving. This program relates to safety, reliability, or
16 maintenance because it serves as a risk control to reduce the frequency or
17 consequence of risk of underground asset failure by proactively identifying
18 structural problems or hazards needing repair or replacement.

19 **MAT BFE – UG Infrared Inspections** – Involves detailed visual and
20 infrared inspection of UG electric distribution facilities to examine and record
21 abnormal conditions that will adversely impact safety or reliability for compliance
22 with GO 165 and the EDPM Manual. Inspected facilities include pad-mounted
23 facilities; all UG equipment, conductors, splices, and elbows within primary
24 enclosures; primary metering that includes all visible, primary cable up to
25 termination point plus the primary metering facilities. An infrared inspection
26 must be performed in conjunction with UG inspections. This program relates to
27 safety, reliability, or maintenance because it serves as a risk control to reduce
28 the frequency or consequence of risk of underground asset failure by proactively
29 identifying areas of deterioration and degradation needing repair or replacement.

30 **MAT BFF – UG Line Equipment Inspected and Tested** – Involves annual
31 inspections of UG electric distribution line equipment for compliance with Utility
32 Standard TD-2302S. Facility inspections only include manholes with special
33 equipment (i.e., oil-filled equipment). 34.5 kV BART Cable Inspections and
34 Auto-Transfer Switch (ATS) Inspections are performed and tracked in MATs BF3

1 and BF4, respectively. This program relates to safety, reliability, or maintenance
2 because it proactively identifies abnormal conditions, that could negatively
3 impact safety, reliability, or asset life, needing repair or replacement.

4 **MAT BFG – OH Line Equipment Inspected and Tested – Annual**
5 inspections/testing of OH, pad-mounted, and UG electric distribution line
6 equipment for compliance with Utility Standard TD-2302S. Facilities include
7 capacitors, regulators, reclosers, and SCADA operated switches, interrupters,
8 and sectionalizers. This program relates to safety, reliability, or maintenance
9 because it serves to proactively identify abnormal conditions, that could
10 negatively impact safety, reliability, or asset life, needing repair or replacement.

11 **MAT BFH – Inspection Projects** – This MAT includes miscellaneous
12 special projects as requested by Asset Strategy. Projects include inspections or
13 patrols of equipment determined to present safety related conditions. Some
14 projects are multi-year while others are single year. Other projects are related to
15 re-inspections or re-patrol as needed because of work verifications and are
16 required by GO 165. Other funding in this MAT is related to UG inspection
17 sticker costs required as part of the UG inspections. This program relates to
18 safety, reliability, or maintenance because it enables the inspections programs
19 to meet its overall objectives of a safe and reliable electric distribution system.
20 The program’s support activities serve as a risk control to reduce the frequency
21 or consequence of risk of failure of electric distribution overhead assets and risk
22 of wildfire.

23 **MAT BFJ – OH Patrol Outage Review Team (ORT) Post Outage** – For
24 requested post-outage patrols as an action from an ORT meeting. Work scope
25 (including the area to be patrolled and the volume of poles and enclosures) must
26 be identified during the ORT meeting. This includes UG Infrared requests. This
27 program relates to safety, reliability, or maintenance because it serves as a
28 mitigation to reduce the frequency or consequence of risk of wildfire.

29 **MAT BF# Electric Distribution Patrols and Inspections, other** – Other
30 costs related to patrols and inspections of OH and UG electric distribution
31 facilities. See MWC BF for how this MAT relates to safety, and/or reliability,
32 and/or maintenance.

33 **MAT BKA – Line Equipment Overhauls (Emeryville)** – For Emeryville’s
34 use only of scheduled transformer repair. This program relates to safety,

1 reliability, or maintenance because it involves the overhaul, repair, and testing of
2 all distribution line equipment at the Emeryville Repair facility.

3 **MAT BKJ – Line Equipment Overhauls (Division Up/Down Labor)**
4 **(Emeryville)** – For Emeryville’s use only of scheduled equipment overhauls of
5 electrical distribution equipment: regulators, auto boosters, and reclosers. This
6 program relates to safety, reliability, or maintenance because it involves the
7 overhaul, repair, and testing of all distribution line equipment at the Emeryville
8 Repair facility.

9 **MAT BKK – Equipment Warranty Repair (Emeryville)** – For Emeryville’s
10 use only of scheduled equipment warranty repairs. This program relates to
11 safety, reliability, or maintenance because the equipment is repaired or replaced
12 under the manufacturer’s warranty period, at the Emeryville Repair facility.

13 **MAT DDC – Electric Start/Stop** – Includes activities for electric service
14 turn-ons and shut-offs initiated by customers, which are mainly performed by
15 Field Metering resources at commercial, industrial and agricultural customer
16 premises. This program relates to safety, reliability, or maintenance because it
17 safely establishes or terminates electric service at the request of customers.

18 **MAT DDH – Electric Trouble Customer Equipment** – Involves addressing
19 part outages (which occur when a customer is only receiving energy to a portion
20 of their home or business for various reasons, including burnt out fuses,
21 customer wiring, service connection at the weather-head, etc.) or complete
22 outages related to customer equipment. This program relates to safety,
23 reliability, or maintenance because it serves to restore customer service to a
24 safe and reliable operating condition.

25 **MAT DDJ – Swing Service, Disconnects/Reconnects** – Involves activities
26 required to: (1) provide swing service, which is the transfer of service from an
27 old location to a new location using the existing wire; (2) provide service
28 upgrades; (3) temporarily disconnect service, such as a temporary disconnects
29 at a customer’s request to enable tree trimming, weather-head or panel work;
30 and (4) reconnect service due to disconnects for items such as tree trimming,
31 panel or weather-head work by customer, etc. This program relates to safety,
32 reliability, or maintenance because it serves to reconnect, temporarily
33 disconnect, or upgrade service and ensure safe operating conditions.

1 **MAT DD# Provide Field Service, other** – Includes other costs related to
2 customer generated requests for service that require a site visit by a field
3 technician. See MWC DD for how this MAT relates to safety, and/or reliability,
4 and/or maintenance.

5 **MAT FZA – General Engineering** – Work primarily covers electric
6 distribution engineering and planning services labor, which includes wires down
7 investigations. This includes costs associated with new OH fault indicators or
8 distribution line monitoring systems and/or line sensors to improve reliability.
9 This also includes costs associated with EPSS to mitigate wildfire ignition risk.
10 This program relates to safety, reliability, or maintenance because it serves as a
11 risk control to reduce the frequency or consequence of risk of failure of electric
12 distribution overhead assets and risk of wildfire by providing the electrical
13 engineering labor for reliability and EPSS related programs.

14 **MAT FZB – Voltage Complaints Investigations** – Used for investigating
15 secondary voltage complaints that PG&E Troublemakers cannot resolve on the first
16 visit, and the setting of recording volt meters for these voltage complaints. This
17 program relates to safety, reliability, or maintenance because it addresses
18 voltage issues on distribution circuits to support safe and reliable operation of
19 customer equipment.

20 **MAT FZC – Transformer Reports Manage** – Used for investigating
21 overloaded and idle transformers. This program relates to safety, reliability, or
22 maintenance because it addresses overloaded transformers and mitigate risks
23 of equipment failure caused by overloads.

24 **MAT FZD – Field Work Plan** – Used for supporting operational field work
25 that engineering personnel initiate, such as phase balancing and replacing fuses
26 projected to be overloaded. This program relates to safety, reliability, or
27 maintenance because it supports the field work necessary to solve overload and
28 imbalance issues, thereby mitigating equipment failure caused by overloads and
29 outages caused by load imbalance.

30 **MAT FZE – Trouble-men Field Work** – Field Personnel performing
31 seasonal, permanent, and emergency load transfer field switching, change
32 settings related to seasonal capacitors, or perform special load/voltage
33 readings/setting changes when specifically requested by the Electric Distribution
34 Engineers and directed by the DCC Operator. This includes costs associated

1 with EPSS to mitigate wildfire ignition risk. This program relates to safety,
2 reliability, or maintenance because it supports the field work necessary to
3 resolve voltage issues and provide proper device protection for reliability.

4 **MAT GAA – Intrusive Inspection Program** – Intrusive testing and
5 treatment of wood poles. Compliance inspection program for GO 95 and
6 GO 165. This program relates to safety, reliability, or maintenance because it
7 actively works to determine that poles are in good condition to prevent
8 premature failure, and serves as a risk control to reduce the frequency or
9 consequence of risk of failure of electric distribution overhead assets and risk of
10 wildfire. In addition, this program satisfies the safety and maintenance
11 requirements of GO 95 and 165.

12 **MAT GAB – Pole Joint Utilities Maintenance Reimbursement** – Engineer
13 review of pole attachment requests submitted by third-party utilities. This
14 program relates to safety, reliability, or maintenance because it actively works to
15 determine that poles are in good condition to prevent premature failure. In
16 addition, this program satisfies the safety requirements by ensuring poles meet
17 the strength and loading requirements of GO 95.

18 **MAT GAC – Pole Analyze Loading** – Engineer review and analysis of
19 distribution wood pole loading for an overload condition. If the pole is
20 determined to not be overloaded, then assessment and analysis remains in
21 MAT GAC. However, if the pole is determined to be overloaded, then the MAT
22 changes to 07O to replace the pole. This program relates to safety, reliability, or
23 maintenance because it actively works to determine that poles are in good
24 condition to prevent premature failure and serves as a risk control to reduce the
25 frequency or consequence of risk of wildfire. In addition, this program satisfies
26 the safety requirements by ensuring poles meet the strength and loading
27 requirements of GO 95.

28 **MAT GAD – Pole Restoration Program** – Involves reinforcing deteriorated,
29 decayed, or damaged poles with steel trusses. This program typically follows
30 one year behind Pole Test and Treat program and restores poles to original
31 design strength. This program relates to safety, reliability, or maintenance
32 because it actively works to prevent premature failure of wood poles, and serves
33 as a risk control to reduce the frequency or consequence of risk of failure of

1 electric distribution overhead assets and risk of wildfire. In addition, this
2 program satisfies the safety and maintenance requirements of GOs 95 and 165.

3 **MAT GAF – Joint Utilities Telecom Engineer Review Non-reimbursed –**

4 Telecommunications engineer pole attachment request review for jointly owned
5 wood poles. This program relates to safety, reliability, or maintenance because
6 it actively works to determine that poles are in good condition to prevent
7 premature failure, and serves as a risk control to reduce the frequency or
8 consequence of risk of failure of electric distribution overhead assets.. In
9 addition, this program satisfies the safety requirements by ensuring poles meet
10 the strength and loading requirements of GO 95.

11 **MAT GAH – Joint Utilities Maintenance Non-reimbursed –** Includes

12 PG&E’s membership share of the operating costs and participation in the
13 Northern California Joint Pole Association and the Joint Pole Database
14 maintenance costs for continued operation. This program relates to safety,
15 reliability, or maintenance because the costs are incurred to prevent premature
16 failure, and serves as a risk control to reduce the frequency or consequence of
17 risk of failure of electric distribution overhead assets. In addition, this program
18 enables communication with other utilities, to determine that poles meet the
19 safety, strength and loading requirements of GO 95.

20 **MAT GA# – Poles – Intrusive Inspection/Test and Treat Program, other**

21 – Includes other costs related to assessing conditions of poles and costs related
22 to billing for work performed on jointly owned poles in MATs GAA and GAD.
23 See MWC GA for how this MAT relates to safety, and/or reliability, and/or
24 maintenance.

25 **MAT GC1 – Electric Distribution Substation: Engineering Maintenance**

26 **Support** – Includes distribution substation costs in engineering and other
27 maintenance support. This program relates to safety, reliability, or maintenance
28 because it includes substation engineering support necessary for operation of
29 substation equipment and serves as a risk control to reduce the frequency or
30 consequence of risk of failure of electric distribution substation assets and of risk
31 of wildfire.

32 **MAT GC2 – Electric Distribution Substation: Major Emergency**

33 **Corrective Maintenance** – This includes major emergencies and emergent
34 work supporting unforeseen emergencies/major repairs and emergent work with

1 high reliability impact or system-wide risk, such as: anticipated major substation
2 emergencies, mobile equipment maintenance and spare transformers testing for
3 emergency readiness, large transformer oil leak repairs, animal abatement
4 repairs, deteriorated foundation repairs, corrosion repairs, locate and mark
5 distribution line assets within substation facilities. This also includes work
6 associated with EPSS to mitigate wildfire ignition risk. This program relates to
7 safety, reliability, or maintenance because it addresses emergencies and
8 emergent maintenance work to prevent imminent failures, and serves as a
9 mitigation to reduce the frequency or consequence of risk of wildfire.

10 **MAT GC5 – Electric Distribution Substation: Distribution Substation**
11 **Supplemental Inspections** – Includes supplemental inspections to address
12 ignition threats at substations. This program relates to safety, reliability, or
13 maintenance because it identifies and addresses ignition threats at substations.

14 **MAT GCA – Electric Distribution Substation: Transformer Preventive**
15 **Maintenance** – Includes distribution substation costs for transformers,
16 regulators, and Load Tap Changer (LTC) Oil Tests. This program relates to
17 safety, reliability, or maintenance because it monitors Transformer and LTC
18 condition and identifies any abnormalities that may lead to a potential
19 mis-operation of the transformer and serves as a risk control to reduce the
20 frequency or consequence of risk of failure of electric distribution substation
21 assets.

22 **MAT GCB – Electric Distribution Substation: Circuit Breaker**
23 **Preventive Maintenance** – Includes distribution substation costs for breaker
24 exercises. This program relates to safety, reliability, or maintenance because it
25 confirms functional operation of the circuit breaker and serves as a risk control to
26 reduce the frequency or consequence of risk of failure of electric distribution
27 substation assets.

28 **MAT GCC – Electric Distribution Substation: Relay Preventive**
29 **Maintenance** – Includes distribution substation costs for relay functional tests.
30 This program relates to safety, reliability, or maintenance because it inspects the
31 relay schemes and tests the condition of the relay to prevent mis-operation and
32 serves as a risk control to reduce the frequency or consequence of risk of failure
33 of electric distribution substation assets and risk of wildfire.

1 **MAT GCD – Electric Distribution Substation: Inspections** – Includes
2 distribution substation costs for cyclical station inspection of equipment. This
3 program relates to safety, reliability, or maintenance because inspections such
4 as Equipment Inspection, Security Check, Environmental Check, and Load Data
5 Collection are performed to identify non-conforming equipment or operations to
6 address within the substation and serves as a risk control to reduce the
7 frequency or consequence of risk of failure of electric distribution substation
8 assets.

9 **MAT GCE – Electric Distribution Substation: General Station**
10 **Preventive Maintenance** – This program includes distribution substation costs
11 for preventive maintenance tasks on variety of other types of substation
12 equipment. This program relates to safety, reliability, or maintenance because
13 tests are performed on minor substation equipment (e.g., hot washes, mobile
14 exercises, fire system tests, etc.) not specifically captured under other specified
15 maintenance programs to inspect and identify any abnormalities, and the
16 program serves as a risk control to reduce the frequency or consequence of risk
17 of failure of electric distribution substation assets.

18 **MAT GCF – Electric Distribution Substation: Battery Preventive**
19 **Maintenance** – This program includes distribution substation work related to
20 battery testing. This program relates to safety, reliability, or maintenance
21 because inspections, tests (e.g., resistance and discharge tests) are performed
22 on batteries to identify any abnormalities and determine the batteries can
23 perform as designed, and the program serves as a risk control to reduce the
24 frequency or consequence of risk of failure of electric distribution substation
25 assets.

26 **MAT GCG – Electric Distribution Substation: Vegetation Management**
27 **(VM)** – This program includes distribution substation work related to mitigating
28 vegetation growth, creating Defensible Space, and addressing other issues in
29 and around the substation parcel; including, routine vegetation control, rodent
30 control, transient encampment clean-up, mowing, and other fuel reduction type
31 work for compliance with local laws and administration of the program. This
32 program relates to safety, reliability, or maintenance because it involves
33 vegetation management activity that serves as a risk control to reduce the

1 frequency or consequence of risk of failure of electric distribution substation
2 assets and risk of wildfire.

3 **MAT GCH – Electric Distribution Substation: Building Maintenance –**

4 This program includes distribution substation work related to substation
5 facility/building and yard work such as repair to breaches in station fences, roof
6 leaks, plumbing repairs, station security such as lighting and card readers, etc.
7 This program relates to safety, reliability, or maintenance because it involves
8 maintaining substation facilities and buildings that serve as a risk control to
9 reduce the frequency or consequence of risk of failure of electric distribution
10 substation assets.

11 **MAT GCI – Electric Distribution Substation: Switch Preventive**

12 **Maintenance** – This program includes distribution substation work related to
13 switch diagnostic/performance tests. This program relates to safety, reliability,
14 or maintenance because diagnostic testing and infrared inspections performed
15 on switches serves as a risk control to reduce the frequency or consequence of
16 risk of failure of electric distribution substation assets.

17 **MAT GCJ – Electric Distribution Substation: Corrective (T80) –**

18 This program includes distribution substation work related to repair work initiated from
19 corrective notifications for issues identified by field personnel. This program
20 relates to safety, reliability, or maintenance because it involves repairs beyond
21 planned/scheduled maintenance.

22 **MAT GCM – Electric Distribution Substation: Circuit Breaker**

23 **Mechanism Services** – This program includes distribution substation work
24 related to breaker mechanism services, including required breaker oil and gas
25 analysis. This program relates to safety, reliability, or maintenance because it
26 involves the mechanism service of the circuit breaker to determine whether it is
27 operating properly that serves as a risk control to reduce the frequency or
28 consequence of risk of failure of electric distribution substation assets.

29 **MAT GCO – Electric Distribution Substation: Transformer Overhaul**

30 **Inspections** – This program includes distribution substation work related to
31 transformer/regulator LTC overhaul inspections. This program relates to safety,
32 reliability, or maintenance because it involves the overhaul inspection of
33 transformer and regulator LTC to detect deterioration or abnormal conditions.

1 This program serves as a risk control to reduce the frequency or consequence of
2 risk of failure of electric distribution substation assets

3 **MAT GCS – Electric Distribution Substation: Circuit Switcher &**
4 **Motor-Operated Air Switch (MOAS) Mechanism Services** – This program
5 includes distribution substation work related to circuit switcher and MOAS
6 mechanism services. This program relates to safety, reliability, or maintenance
7 because it involves mechanism service related specifically to the performance of
8 circuit switches and MOAS (e.g., performing open and closing operations
9 manually and/or under remote test conditions). This program serves as a risk
10 control to reduce the frequency or consequence of risk of failure of electric
11 distribution substation assets.

12 **MAT GCV – Electric Distribution Substation: Circuit Breaker**
13 **Overhauls** – This program includes distribution substation work related to circuit
14 breaker overhauls. This program relates to safety, reliability, or maintenance
15 because it involves the circuit breaker overhaul which includes a detailed list of
16 maintenance tasks to determine the circuit breaker is operating as designed.
17 This program serves as a risk control to reduce the frequency or consequence of
18 risk of failure of electric distribution substation assets.

19 **MAT GCW – Electric Distribution Substation: Station Washes** – This
20 program includes distribution substation work for station insulator washing. This
21 program relates to safety, reliability, or maintenance because it involves washing
22 insulators to prevent contamination accumulation that may result in a flashover.
23 This program serves as a risk control to reduce the frequency or consequence of
24 risk of failure of electric distribution substation assets.

25 **MAT HGC – ADMS Development** – This program includes expense
26 associated to the multi-year grid modernization effort to consolidate distribution
27 operational technology platforms into a single platform (ADMS). This program
28 relates to safety, reliability, or maintenance because it enables outage
29 management applications that include instantaneous fault location, automated
30 switching recommendations and promotes operator awareness of Real Time
31 (RT) circuit conditions. This project directly supports DCC operations.

32 **MAT HGD – Distribution Operational Technology** – This program relates
33 to DCC Systems installation and replacement. Used to track expense
34 improvements and enhancements at the DCCs. This program relates to safety,

1 reliability, and maintenance by supporting the development and daily operation
2 of RT applications/tools used to safely operate and maintain distribution system
3 reliability.

4 **MAT IGI – Dead and Dying Trees** – This program reduces risk associated
5 with increased tree mortality due to extended drought and bark beetle infestation
6 within PG&E’s service territory by the targeted removal of dead and dying trees
7 and certain species pose an increased risk of falling into power lines. Work
8 activities include vegetation inspection and mitigation in designated areas, the
9 resulting tree work and wood management as determined necessary, and fire
10 safe council fuel reduction program activity to help prevent wildfires and protect
11 communities. This program relates to safety, reliability, or maintenance because
12 it serves as a risk control, related to the vegetation risk driver, to reduce the
13 frequency or consequence of risk of wildfire and risk of failure of electric
14 distribution overhead assets.

15 **MAT IGJ – Enhanced Vegetation Management (EVM)** – EVM program
16 work is intended to reduce wildfire risk in high fire threat areas. EVM meets
17 standards requiring creating clearances of 12 feet or more at time of trim to
18 ensure compliance until the next inspection. The program covers
19 pre-inspections, tree trims and removals, work validation through QA and quality
20 control, targeted species work, and fuel reduction. Additionally, starting in 2023,
21 other programs recorded in this MAT include OneVM, Focused Tree
22 Inspections, Vegetation Management for Operational Mitigation, Tree Removal
23 Inventory, Wood Management, and Utility Defensible Space. This program
24 relates to safety, reliability, or maintenance because it serves as a mitigation,
25 related to the vegetation risk driver, to reduce the frequency or consequence of
26 risk of wildfire and risk of failure of electric distribution overhead assets .

27 **MAT IG# Manage Var Bal Acct Processes, other** – Includes other costs
28 related to various balancing and memorandum account activity. See MWC IG
29 for how this MAT relates to safety, and/or reliability, and/or maintenance.

30 **MAT KAA – OH General CM Tag** – This program involves repairing OH
31 facilities or replace individual components that are not an imminent hazard and
32 have not caused an outage. Facilities include connectors, insulators, low
33 conductors, leaning poles, slack guys, etc. Work also includes the repair,
34 replacement, or installation of grounds, moldings, leaking bushings, and related

1 work on all OH transformers and equipment associated with transformers. This
2 program relates to safety, reliability, or maintenance because it addresses
3 non-conforming equipment and serves as a risk control to reduce the frequency
4 or consequence of risk of failure of electric distribution overhead assets and of
5 risk of wildfire.

6 **MAT KAC – Bird Safe Retrofit** – This program involves repairing, replacing,
7 or installing bird-guard materials such as insulated jumpers, bushing covers, line
8 covers, or perching platforms on incident and/or adjacent poles for bird safety,
9 per United States Fish and Wildlife Service (USFWS) requirements and Utility
10 Operating Standard TD-2321S. This program relates to safety and reliability by
11 mitigating outages due to bird incidents and serves as a risk control to reduce
12 the frequency or consequence of risk of failure of electric distribution overhead
13 assets and of risk of wildfire.

14 **MAT KAD – Bird Safe Retrofit Annual** – This program installs bird-guard
15 materials such as jumper covers, bushing covers, perch guards, or perching
16 platforms on poles identified in the Annual Pole Retrofit Program for bird safety,
17 per USFWS requirements and Utility Operating Standard TD-2321S. This
18 program relates to safety, reliability, or maintenance because it serves as a risk
19 control to reduce the frequency or consequence of risk of wildfire.

20 **MAT KAF – OH COE Corrective Maintenance** – This program activity
21 includes the corrective maintenance of COE; certain defined equipment
22 including Protective Devices (Reclosers, Cutouts, Sectionalizers), Voltage
23 Devices (Regulators, Boosters), Switches (Switches, Disconnects), Capacitors,
24 and Conductors. Maintenance on COE plays an important role in preventing
25 customer interruptions or minimizing the impacts from an outage. The program
26 also includes ordering batteries for work in MAT BFG. This program relates to
27 safety, reliability, or maintenance because it addresses non-conforming
28 equipment and serves as a risk control to reduce the frequency or consequence
29 of risk of wildfire.

30 **MAT KAH – Streetlight Replace Burnouts** – This program includes
31 activities to repair or replace lamps, photocells, and related items associated
32 with nonoperating streetlights. If the street light head needs replacement, the
33 time and material to replace the head is charged to 2AA. If the burnout is
34 caused by a secondary UG failure, the time and material to make the repair is

1 charged to 2BA. This program relates to safety, reliability, or maintenance
2 because it addresses non-conforming equipment and serves as a risk control to
3 reduce the frequency or consequence of risk of failure of electric distribution
4 overhead assets.

5 **MAT KAK – RTVI Investigations/Repairs** – This program involves the
6 investigation of RTVI where cause is linked to Company equipment. This
7 program relates to safety, wildfire mitigation, reliability, or maintenance because
8 it addresses potential non-conformances identified by customers.

9 **MAT KAM – Insulator Washing** – This program includes washing
10 pole-mounted insulators. This program relates to safety, reliability, or
11 maintenance because it prevents pole top ignitions.

12 **MAT KAO – Idle Facilities Investigations Service Planning** – This
13 program involves investigations by Service Planning to assess whether identified
14 idle facilities have a foreseeable future use. This program relates to safety,
15 reliability, or maintenance because it identifies idle facilities for removal and
16 serves as a risk control to reduce the frequency or consequence of risk of failure
17 of electric distribution overhead assets. If an idle facility is confirmed, the
18 removal work will fall under MAT codes 2AF and 2BF.

19 **MAT KAP – OH Expense Projects** – This program includes the
20 replacement of OH electric facilities that are not an imminent hazard and have
21 not caused an outage. The program also includes pre-planned projects such as
22 actuator board replacements. This program relates to safety, wildfire mitigation,
23 reliability or maintenance because it mitigates the risk of equipment failure from
24 identified Material Problem Reporting (i.e., material and/or equipment found as
25 defective, failed, or not meeting PG&E requirements) and serves as a risk
26 control to reduce the frequency or consequence of risk of failure of electric
27 distribution overhead assets.

28 **MAT KAQ – Wood Pole Bridge Bonding** – This program conducts wood
29 pole bonding, a maintenance activity where an existing wood pole supporting
30 both electric transmission and distribution line facilities is retrofitted with
31 grounding protection to prevent fires that can occur at the location on the pole
32 where the electric distribution cross arm is bolted to the pole. This program
33 relates to safety, reliability, or maintenance because it serves to prevent ignitions

1 by ensuring grounding protection and serves as a risk control to reduce the
2 frequency or consequence of risk of wildfire.

3 **MAT KAS – FAS OH Expense** – FAS OH expense is work that is identified
4 during a field job and completed by a single Trouble-man. This program relates
5 to safety, reliability, or maintenance because it addresses non-conforming
6 conditions identified by preventative maintenance programs such as
7 Trouble-men patrols, and serves as a risk control to reduce the frequency or
8 consequence of risk of failure of electric distribution substation assets.

9 **MAT KAT – Remote Grid Maintenance** – This MAT code is for routine and
10 ad hoc maintenance on Remote Grids conducted by PG&E and its qualified
11 contractors. Many of these costs are service fees under a Remote Grid
12 maintenance agreement with a qualified contractor; remaining costs are related
13 to internal maintenance services and contract management. Remote Grids
14 provide utility service using Standalone Power Systems (SPS) and utility
15 infrastructure for continuous, permanent energy delivery to remote locations in
16 HFTDs. The primary purpose of a Remote Grid is to reduce wildfire ignition risk
17 by eliminating OH distribution lines that serve a small number of customers in
18 HFTD at the outskirts of the distribution system. This program relates to safety,
19 reliability, or maintenance because PG&E Remote Grid systems mitigate wildfire
20 risk.

21 **MAT KA# Preventive Maintenance and Equipment Repair, OH Other** –
22 Other costs related to preventative maintenance and repair of nonconforming
23 OH equipment. See MWC KA for how this MAT relates to safety, and/or
24 reliability, and/or maintenance.

25 **MAT KBA –UG General CM Notifications** – This program includes the
26 repair UG facilities (including UG infrared tags) or replacement of individual
27 components that are not an imminent hazard and have not caused an outage.
28 Includes cleaning enclosures, re-securing equipment, resurfacing lids, and
29 tagging; repairing, replacing, or installing grounds, moldings, leaking bushings;
30 and completing related work on all UG transformers and equipment associated
31 with transformers. This program relates to safety, reliability, or maintenance
32 because it addresses non-conforming equipment and serves as a risk control to
33 reduce the frequency or consequence of risk of failure of electric distribution
34 underground assets..

1 **MAT KBC – UG COE CM Notifications** – This program includes the repair
2 of UG COE. This program relates to safety, wildfire mitigation, reliability, or
3 maintenance because it identifies certain asset life replacements (e.g., UG
4 Cable Testing) and serves as a risk control to reduce the frequency or
5 consequence of risk of failure of electric distribution underground assets.

6 **MAT KBD – Nitrogen Cylinders CM** – This program includes the
7 replacement of Nitrogen Cylinders (San Francisco and East Bay division only
8 annual nitrogen-cylinder replacements). This program relates to safety,
9 reliability, and maintenance because it maintains sufficient nitrogen levels in
10 cables where leaking naturally occurs and serves as a risk control to reduce the
11 frequency or consequence of risk of failure of electric distribution underground
12 assets.

13 **MAT KBE – BART Cable Repair** – This program includes the repair of 34.5
14 kV BART Cable issues identified during annual inspections/testing performed
15 under MAT BF3. This program relates to safety, wildfire mitigation, reliability,
16 and maintenance because it checks whether cables are in proper operating
17 condition, remediating problems caused by leaks, corrosion, movement of
18 support tracks, gas pressure, etc. and serves as a risk control to reduce the
19 frequency or consequence of risk of failure of electric distribution underground
20 assets.

21 **MAT KBP – UG Expense Projects** – This program includes the projects for
22 the replacement of UG electric facilities that are not an imminent hazard and
23 have not caused an outage. This program relates to safety, wildfire mitigation,
24 reliability, or maintenance because it addresses WYE (three-phase star
25 configuration) transformer grounding configurations and serves as a risk control
26 to reduce the frequency or consequence of risk of failure of electric distribution
27 underground assets.

28 **MAT KB# Preventive Maintenance and Equipment Repair, UG Other** –
29 Includes other costs related to preventative maintenance and repair of
30 nonconforming UG equipment. See MWC KB for how this MAT relates to
31 safety, and/or reliability, and/or maintenance.

32 **MAT KCA – Network Equipment CM Notifications** – This program
33 includes the repairs related to network transformers and NPs, excluding oil
34 replacement work. This program relates to safety, reliability, or maintenance

1 because it addresses problems found on the network equipment and serves as
2 a risk control to reduce the frequency or consequence of risk of failure of electric
3 distribution network assets.

4 **MAT KCB – Network Transformer Oil Replacement and 60-Day**
5 **Follow Up Notifications** – This program includes the replacement of oil in
6 network primary termination chambers or network ground switches and the
7 resample of network transformer oil. The replacement of the oil at the network
8 transformer chamber is needed to maintain safe operation. This program relates
9 to safety, reliability, or maintenance because it addresses issues identified in
10 sample oil during laboratory testing and serves as a risk control to reduce the
11 frequency or consequence of risk of failure of electric distribution network
12 assets.

13 **MAT KCC – Network Vault CM Notifications** – This program work involves
14 vault environmental cleanup, excluding work associated with network
15 transformers and NPs. This program addresses hazardous conditions identified
16 in the vaults. The cleanup is for the safety and health of personnel working
17 inside the vault. This program relates to safety, reliability, or maintenance
18 because it serves as a risk control to reduce the frequency or consequence of
19 risk of failure of electric distribution network assets.

20 **MAT KCD – Network Transformer Preventive Maintenance/Restore**
21 **Notifications** – This program involves annual maintenance on network
22 transformers and associated oil-filled chambers. Includes oil sampling on all
23 chambers and pressure testing of units. This program relates to safety,
24 reliability, or maintenance because it addresses the maintenance of network
25 transformers for safe and reliable operation and serves as a risk control to
26 reduce the frequency or consequence of risk of failure of electric distribution
27 network assets.

28 **MAT KCE – Network Protectors (NP) Preventive Maintenance**
29 **Notifications** – This program relates to routine maintenance of NPs conducted
30 once every three years (triennial), excluding repairs costing more than \$500 or
31 requiring greater than one hour that are covered by MAT code KCA. This
32 program relates to safety, reliability, or maintenance because it addresses the
33 maintenance of NPs for safe and reliable operation and serves as a risk control

1 to reduce the frequency or consequence of risk of failure of electric distribution
2 network assets.

3 **MAT KCF – Fiber Optic/SCADA Communications Repair Notifications –**

4 This program includes repair of existing network SCADA and fiber optics
5 systems, including communication. This program relates to safety, reliability, or
6 maintenance because it addresses the problems found on the existing network
7 SCADA and fiber optics systems as needed for safe and reliable operation and
8 serves as a risk control to reduce the frequency or consequence of risk of failure
9 of electric distribution underground assets.

10 **MAT KC# Preventive Maintenance and Equipment Repair, Network**

11 **other** – Other costs related to preventative maintenance and repair of
12 nonconforming network equipment. See MWC KC for how this MAT relates to
13 safety, and/or reliability, and/or maintenance.

14 **MAT WFC – Cameras** – This program supports sponsorship, operations

15 and maintenance of pan-tilt-zoom cameras that are a part of the
16 ALERTCalifornia Network. Based at the University of California San Diego,
17 ALERTCalifornia is a public safety program working to understand wildfires and
18 other natural hazards. This program manages a network of more than 1,000
19 monitoring cameras and sensor arrays from multiple partners, such as PG&E,
20 and collects data that provides actionable, real-time information to inform public
21 safety. This program relates to safety, reliability, or maintenance because it
22 serves as a mitigation to reduce the frequency or consequence of risk of wildfire.

23 **MAT WFM – Other Wildfire Support Expenses** – This program supports

24 Advance Fire Modeling initiatives such as fire spread simulations using
25 advanced technologies, satellite fire detection, high resolution numerical weather
26 prediction and storm outage prediction. The high-resolution weather model is
27 comprised of an 8-member ensemble run at 2 km resolution out 129 hours and
28 is updated 2x per day. The high-resolution weather data is a foundational
29 dataset that is fed into dead and live fuel moisture models, our Fire Potential
30 Index and storm outage prediction models. These models are used to assess
31 the risk of outages year-round, and the concurrent risk of outages, ignition and
32 fire potential to inform wildfire mitigation efforts, specifically PSPS and EPSS
33 operations. This program relates to safety, reliability, or maintenance because it
34 supports PG&E's emergency preparedness and response and serves as a risk

1 control to reduce the consequence of various risk events and as a mitigation to
2 reduce the frequency or consequence of risk of wildfire.

3 **MAT WFN – PSPS Non-Event Expense** – This PSPS Program category
4 includes activities that support the PSPS Program but are not associated with a
5 specific PSPS event, such as PSPS PMO team cost, exclusive use (EU)
6 helicopter contracts and preflight, and Field Operations Labor. This program
7 relates to safety, reliability, or maintenance because it supports PG&E’s
8 emergency preparedness and response and serves as a risk control to reduce
9 the consequence of various risk events and as a mitigation to reduce the
10 frequency or consequence of risk of wildfire.

11 **MAT WFP – PSPS Event Expense** – This PSPS Events category includes
12 activities directly associated with: (1) proactively de-energizing our electric
13 transmission or distribution lines following a determination of weather-related
14 imminent threats (i.e., high winds combined with dry conditions) to power line
15 assets and increased risk of catastrophic wildfire, and (2) re-energizing those
16 lines following an “all-clear” determination. This includes a sequence of
17 activities beginning with activation of the EOC and ending with line
18 re-energization. This program relates to safety, reliability, or maintenance
19 because it serves as a mitigation to reduce the frequency or consequence of risk
20 of wildfire.

21 **MAT WFS – SIPT** – As a result of SB 901, PG&E established in house fire
22 protection services, referred to as Safety and Infrastructure Protection Teams
23 (SIPT) to support PG&E crews performing work in high fire risk areas, to prevent
24 ignitions and provide for the safety of PG&E crews and the public. Each SIPT
25 crew consists of two employees, who are trained and certified in wildland
26 firefighting, medical care, and utility safety. SIPT crews conduct pretreatment of
27 PG&E assets that are threatened during wildfires. Additionally, SIPT crews
28 perform high priority fire mitigation work and gather critical data to help prepare
29 for and manage wildfire risk. SIPT has crews strategically located throughout
30 the PG&E service territory in high fire threat areas. SIPT teams provide direct
31 defense of utility infrastructure, conducting safety, prevention, mitigation, and
32 maintenance activities on company properties or rights of way in connection with
33 wildfires. This program relates to safety, reliability, or maintenance because it
34 serves as a mitigation to reduce the frequency or consequence of risk of wildfire.

1 **MAT WFW – Weather Station Maintenance** – This program supports the
2 installation, operations, and maintenance of PG&E’s weather station network.
3 There are over 1,500 PG&E weather stations installed that collect valuable
4 information on fire weather parameters such as wind speed, wind gusts,
5 temperature, and humidity every 10 minutes. These data are used to confirm
6 conditions for PSPS execution, confirm when it is safe to start the restoration
7 process after a PSPS event and validate forecast data. Historical data collected
8 are being used to calculate historical percentiles and build weather station
9 specific machine learning forecast models. This program relates to safety,
10 reliability, or maintenance because it supports PSPS execution and serves as a
11 mitigation to reduce the frequency or consequence of risk of wildfire.

12 **G. MAT Code Descriptions – Capital**

13 **MAT 05# – Tools and Equipment, other** – Includes other costs for
14 miscellaneous tools and equipment. See MWC 05 for how this program relates
15 to safety, and/or reliability, and/or maintenance.

16 **MAT 06# – Line Voltage Regulator Revolving Stock** – This program
17 includes purchase of Line Voltage Regulator Revolving Stock. This program
18 relates to safety, reliability, or maintenance because it corrects voltage issues on
19 distribution circuits to support safe and reliable operation of customer
20 equipment.

21 **MAT 06A – Feeder Projects Associated with Substation Capacity** – This
22 program includes installation and replacement of UG cable and OH conductor
23 associated with a new substation transformer and feeder. This program relates
24 to safety, reliability, or maintenance because it prevents overloads on substation
25 equipment, mitigating the risk of equipment failure due to overloads.

26 **MAT 06B – Transformer Replace Overloaded** – This program includes
27 replacement of transformers identified through overload reports using
28 SmartMeter data, recorded high oil temperature indicators, or multiple thermal
29 protective device operations during peak load periods. This does not include
30 replacement of transformers identified via the new business, WRO or any other
31 process. This program relates to safety, reliability, or maintenance and serves
32 as a risk control to reduce the frequency or consequence of risk of failure of
33 electric distribution overhead assets by replacing transformers identified as
34 overloaded, thereby mitigating the risk of transformer failure due to overloads.

1 **MAT 06D – Circuits Reinforce – Distribution Planning (DP) Managed –**

2 This program includes installation of new OH and UG facilities or reconductoring
3 of existing facilities with larger wire to meet capacity needs or voltage support.
4 These upgrades are performed to address one of the following possible
5 scenarios: (1) Line Capacity Overload; (2) Under or Over-Voltage Conditions;
6 (3) Operational or Emergency Capacity; and (4) Future UG Facilities in Joint
7 Trench Projects. This MAT covers circuit reinforcement projects managed by
8 DP. This program relates to safety, reliability, or maintenance by replacing
9 distribution equipment that is either presently overloaded or forecast to be
10 overloaded, mitigating the risk of equipment failure due to overloads.

11 **MAT 06E – Circuits Reinforce – Project Services (PS) Managed –** This

12 program includes installation of new OH and UG facilities or reconductoring of
13 existing facilities with larger wire to meet capacity needs or voltage support.
14 These upgrades are performed to address one of the following possible
15 scenarios: (1) Line Capacity Overload; (2) Under or Over-Voltage Conditions;
16 (3) Operational or Emergency Capacity; and (4) Future UG Facilities in Joint
17 Trench Projects. This MAT covers circuit reinforcement projects managed by
18 PS. This program relates to safety, reliability, or maintenance by correcting
19 overloads on distribution equipment caused by load growth, mitigating the risk of
20 equipment failure due to overloads.

21 **MAT 06G – Voltage Correct Secondary –** This program includes adding or

22 upgrading: (1) existing transformers; (2) secondary distribution conductors;
23 and/or (3) secondary service wires to comply with the voltage requirements of
24 Electric Rule 2. This program relates to safety, reliability, or maintenance by
25 correcting secondary voltage issues to support safe and reliable operation of
26 customer equipment.

27 **MAT 06H – Electric Distribution Line New Business Performance –** This

28 program includes projects identified to address capacity deficiencies related to
29 specific New Business customer's demand increase. This program relates to
30 safety, reliability, or maintenance because it corrects overloads on distribution
31 equipment caused by addition of new customer loads, mitigating the risk of
32 equipment failure due to overloads.

33 **MAT 06I – Electric Distribution Line Operational Capacity Projects –**

34 This program includes OH or UG new facilities or reconductoring of existing

1 facilities with large wire to improve reliability and increase emergency and
2 operational capability of the system. This program relates to safety, reliability, or
3 maintenance because it improves the ability to reconfigure the distribution
4 system, reducing the number of customers impacted by outages and reducing
5 outage restoration times.

6 **MAT 06K – Power Factor Management** – This program includes installing
7 SCADA controls on strategically located electric distribution capacitor banks to
8 allow control setting changes remotely for better power factor management, as
9 well as increased voltage and reactive power support of the system. This
10 program relates to safety, reliability, or maintenance by enabling SCADA control
11 over power factor correction equipment and for solving voltage issues to support
12 safe and reliable operation of customer equipment.

13 **MAT 06P – Enable Distributed Generation Electric Distribution Line** –
14 This program includes installing SCADA controls on strategically located electric
15 distribution regulator banks to allow control setting changes remotely for better
16 control of two-way power flow. This program relates to safety, reliability, or
17 maintenance by enabling RT control over voltage correction equipment, and RT
18 solving of voltage issues to support safe and reliable operation of customer
19 equipment.

20 **MAT 07A – Tree Connect VM Assessments** – This program assesses tree
21 connections in the system. Tree conditions are defined as a dead, dying, or
22 living tree used as a utility power pole. Remediation of tree connections
23 includes installation of a new clearance pole and transfer of PG&E facilities from
24 the tree to the new clearance pole. Remediation is performed in MAT 07C. This
25 program relates to safety, reliability, or maintenance because it actively works to
26 identify trees being used as utility power poles that could fail.

27 **MAT 07C – Special Criteria Pole Replacement** – Replace all tree
28 connections in the system. Tree connections are defined as a dead, dying, or
29 living tree that is being used as a utility power pole. This program identifies
30 trees being used as utility power poles and enhances overall system safety by
31 replacing the trees with poles, prior to failure. This program relates to safety,
32 reliability, or maintenance because it serves as a mitigation to reduce the
33 frequency or consequence of risk of wildfire.

1 **MAT 07D – Pole Replacement** – This program replaces poles identified as
2 deteriorated/damaged and requiring replacement. This program enhances
3 overall system safety by replacing poles identified to be deteriorated, damaged
4 or nearing the end of their service life, prior to premature failure. This program
5 relates to safety, reliability, or maintenance because it serves as a risk control to
6 reduce the frequency or consequence of risk of failure of electric distribution
7 overhead assets and as a mitigation to reduce the frequency or consequence of
8 risk of wildfire.

9 **MAT 07G – Pole Joint Utility Telecommunications Reimbursement** –
10 This program supports Pole/Anchor replacement due to an overloaded condition
11 caused by an owner's tenant. This can be driven by a PG&E tenant or another
12 joint owner's tenant. This work is 100 percent reimbursed and managed by the
13 local telecommunications cable attachment project manager. Project Manager
14 must obtain tenant approval prior to creation of an 07G order. The program
15 satisfies the safety requirements by determining poles meet the strength and
16 loading requirements of GO 95. This program relates to safety, reliability, or
17 maintenance because it enhances overall system safety by replacing poles
18 identified as overloaded, prior to premature failure.

19 **MAT 07L – Steel Lattice Structures** – This program includes the
20 replacement or repair of steel lattice structures that carry electric distribution
21 conductor across the Delta to meet various local and state agencies' (San
22 Joaquin, Contra Costa, Alameda, Solano, and Yolo Counties) Navigable
23 Waterway height clearance requirements. This program relates to safety,
24 reliability, or maintenance because it enhances overall system safety by
25 replacing structures identified to be nearing the end of their service life, prior to
26 premature failure.

27 **MAT 07O – Overloaded Pole Replacements** – This program involves
28 replacing poles identified as overloaded (additional load applied to the pole
29 beyond what it is designed to hold). The program satisfies safety requirements
30 by ensuring poles meet the strength and loading requirements of GO 95. This
31 program relates to safety, reliability, or maintenance because it enhances overall
32 system safety by replacing poles identified as overloaded, prior to premature
33 failure and serves as a risk control to reduce the frequency or consequence of

1 risk of failure of electric distribution overhead assets and as a mitigation to
2 reduce the frequency or consequence of risk of wildfire.

3 **MAT 07# Electric Distribution Install/Replace OH Poles, other** – Includes
4 other costs related to the installation or replacement of OH poles prior to
5 premature failure. See MWC 07 for how this program relates to safety, and/or
6 reliability, and/or maintenance.

7 **MAT 08J– Replace Deteriorated OH Conductor** – This program includes
8 targeted replacement of primary OH conductor in non-HFTDs deemed
9 deteriorated through processes: (1) post wire-down investigation, (2) outage
10 review/safety team recommendation, or (3) to proactively address elevated rates
11 of wires down to improve safety, reliability, and integrity. MAT 08J also includes
12 PG&E’s Wires-Down Program, which addresses conductors that fail and result
13 in a contact with the ground, or other object. This program relates to safety,
14 reliability, or maintenance because it mitigates the risk of failure resulting in a
15 potential wire-down event, by replacing deteriorated primary OH conductors and
16 serves as a risk control to reduce the frequency or consequence of risk of failure
17 of electric distribution overhead assets.

18 **MAT 08S – Replace Obsolete OH Switches** – This program involves
19 replacing “grasshopper” OH switches, installed between 1950 and 1970,
20 minimizing potential safety issues and improve reliability during routine and
21 emergency switching operations. This program relates to safety, reliability, or
22 maintenance because it serves as a mitigation to reduce the frequency or
23 consequence of risk of failure of electric distribution overhead assets by
24 replacing obsolete switches that have limited load-break capabilities.

25 **MAT 08W–System Hardening Wildfire Resiliency Projects** – This
26 program includes performing targeted HFTDs/HFRAs site specific primary
27 conductor replacement, conversion of OH to UG, replacement of non-exempt
28 equipment, replacement of OH electric distribution line transformers,
29 replacement of existing wood poles with more resilient poles, upgrades to
30 electrical protective devices and systems through equipment replacements and
31 device programming. This work can be initiated based on: (1) wildfire risk
32 modeling, (2) rebuild of fire impacted areas, (3) PSPS mitigation, or (4) PSS
33 identified areas; and is completed in compliance with PG&E’s Fire Rebuild
34 Design Guidance for System Hardening. Undergrounding specific work is

1 recorded in MAT 3UG. This program relates directly to safety, reliability, and
2 maintenance because it serves as a risk control to reduce the frequency or
3 consequence of risk of failure of electric distribution overhead assets and as a
4 mitigation to reduce the frequency or consequence of risk of wildfire.

5 **MAT 08# – Electric Distribution OH Asset Replacement, other** – Includes
6 other costs related to OH asset replacement work. See MWC 08 for how this
7 program relates to safety, and/or reliability, and/or maintenance.

8 **MAT 09A – Electric Distribution Line SCADA Install/Replace** – This
9 includes the DA Initiative, installing new RTUs to improve visibility, reliability, and
10 operations, and continuing to upgrade and replace obsolete, deficient, and failed
11 automation and protection equipment on distribution lines. Starting in 2021, this
12 work was moved to MAT 49A. This program relates to safety, reliability, or
13 maintenance because it supports the installation of electric distribution line
14 equipment to remotely isolate electric lines and quickly de-energize facilities to
15 address urgent safety issues such as wire down events.

16 **MAT 09B – Electric Distribution Substation SCADA/RTU Replace** – This
17 program replaces obsolete SCADA/RTUs and HMIs in electric distribution
18 substations to provide visibility and remote controllability to Operations and may
19 also be replaced to ensure compatibility with new automation systems. This
20 program work targets proactive replacements of SCADA systems in distribution
21 substations that possess obsolete SCADA and protective relay assets, which, if
22 failed, would jeopardize PG&E's ability to operate the electric facility remotely
23 and properly gather data for system operators. This program relates to safety,
24 reliability, or maintenance because it serves as a risk control to reduce the
25 frequency or consequence of risk of failure of electric distribution overhead
26 assets and as a mitigation to reduce the frequency or consequence of risk of
27 wildfire.

28 **MAT 09D – Electric Distribution Substation SCADA/RTU Install** – This
29 program installs additional SCADA/RTU and HMIs in electric distribution
30 substations to provide visibility and remote controllability to Operations. SCADA
31 technology allows remote Distribution Operations to operate relays and quickly
32 deenergize downed lines and equipment to support wildfire risk management. In
33 addition, operational improvements are gained through remotely switching
34 substation equipment, obtaining Real Time information about the condition of the

1 system, and providing historical data to examine line loading trends, forecast
2 future loading, and perform outage investigations. This program relates to
3 safety, reliability, or maintenance because it serves as a risk control to reduce
4 the frequency or consequence of risk of failure of electric distribution overhead
5 assets.

6 **MAT 09E – Electric Distribution Substation Protective Relay**

7 **Install/Replace** – This program installs and replace protective relays in electric
8 distribution substations to maintain optimal system protection and reliability. This
9 program relates to safety, reliability, or maintenance because it covers the
10 proactive replacement of aging substation protective relays. These relays trip
11 substation circuit breakers when faults are detected, such as in cases of wires
12 down resulting in over-current events, protecting power equipment from
13 catastrophic failure, and increasing public safety. This program relates to safety,
14 reliability, or maintenance because it serves as a risk control to reduce the
15 frequency or consequence of risk of failure of electric distribution overhead
16 assets.

17 **MAT 09F – Electric Distribution Substation SCADA Emergency**

18 **Replace** – This program includes miscellaneous and emergency replacement
19 projects initiated and funded by System Automation & Protection program. This
20 program involves replacing inoperable automation and protection equipment
21 (RTUs, peripheral boards, and protective relays) on an emergency basis. The
22 forecast covers in-service failures as well as emergency replacements of
23 equipment whose risk of failure is imminent. This program addresses in-service
24 failures of substation SCADA equipment and protective relays, as well as
25 emergency replacements of equipment whose risk of failure is imminent, which,
26 if failed, would jeopardize PG&E’s ability to remotely operate the electric facility
27 safely. This program relates to safety, reliability, or maintenance because it
28 serves as a risk control to reduce the frequency or consequence of risk of failure
29 of electric distribution overhead assets.

30 **MAT 2AA – OH General Replacement** – This program replaces
31 deteriorated OH facilities that are not an imminent hazard and have not caused
32 an outage. Facilities include crossarms, leaking transformers, and conductor.
33 This program addresses non-conformance identified by preventative
34 maintenance programs and internal operational processes. This program

1 relates to safety, reliability, or maintenance because it and serves as a risk
2 control to reduce the frequency or consequence of risk of failure of electric
3 distribution overhead assets and risk of wildfire.

4 **MAT 2AB – Bird Safe Install/Replacement** – This program involves capital
5 modification work and retrofits to distribution poles and/or adjacent poles to
6 address bird-safety incidents, per USFWS requirements and Utility Operating
7 Standard TD-2321S. This program relates to safety and reliability by mitigating
8 outages due to bird incidents and serves as a risk control to reduce the
9 frequency or consequence of risk of failure of electric distribution overhead
10 assets and risk of wildfire.

11 **MAT 2AC – Bird Safe Install/Replacement Annual** – This program
12 involves capital modification work made to distribution poles as part of the
13 annual pole retrofit program to address bird-safety issues, per USFWS
14 requirements and Utility Operating Standard TD-2321S. This program relates to
15 safety, reliability, or maintenance because it serves as a risk control to reduce
16 the frequency or consequence of risk of wildfire.

17 **MAT 2AE – OH COE Replacement** – This program replaces OH equipment
18 classified as COE; certain defined equipment including Protective Devices
19 (Reclosers, Cutouts, Sectionalizers), Voltage Devices (Regulators, Boosters),
20 Switches (Switches, Disconnects), Capacitors, and Conductors. This program
21 addresses non-conforming critical operating equipment identified by preventative
22 maintenance programs such as equipment testing, as well as internal
23 operational processes. This program relates to safety, reliability, or
24 maintenance because it serves as a risk control to reduce the frequency or
25 consequence of risk of failure of electric distribution overhead assets.

26 **MAT 2AF – OH Idle Facility Remove** – This program involves removal of
27 OH Idle Facilities that have no likely foreseeable future use. This program
28 removes equipment no longer in use and therefore removes the risk of
29 malfunction or fault, that can cause an ignition. This program relates to safety,
30 reliability, or maintenance because it serves as a risk control to reduce the
31 frequency or consequence of risk of failure of electric distribution overhead
32 assets and risk of wildfire.

33 **MAT 2AG – San Francisco Series Streetlights** – This program involves
34 replacement of the RO streetlights, also referred to as constant-current

1 streetlight systems, owned and operated by PG&E in San Francisco. This
2 project will replace the existing RO loops with the type of streetlight circuits used
3 elsewhere is PG&E's system. This program relates to safety, reliability, or
4 maintenance because it provides illumination for safe pedestrian and vehicular
5 traffic and serves as a risk control to reduce the frequency or consequence of
6 risk of failure of electric distribution overhead assets.

7 **MAT 2AH – LED Streetlights** – This program involves replacement of
8 PG&E-owned and maintained decorative streetlights (LS-1) with more efficient,
9 longer-life LED fixtures and new photo controllers. This program relates to
10 safety, reliability, or maintenance because it provides longer-life streetlights and
11 better illumination for safe pedestrian and vehicular traffic and serves as a risk
12 control to reduce the frequency or consequence of risk of failure of electric
13 distribution overhead assets.

14 **MAT 2AI – San Francisco Historical Streetlights** – This program involves
15 replacement or refurbishment of cast-iron decorative streetlights in the
16 Golden Triangle/Union Square area of San Francisco that have been found to
17 have corroded steel support poles. This program relates to safety, reliability, or
18 maintenance because it provides illumination for safe pedestrian and vehicular
19 traffic and serves as a risk control to reduce the frequency or consequence of
20 risk of failure of electric distribution overhead assets.

21 **MAT 2AJ – Non-Exempt Fuse Replacement** – This program involves
22 replacing non-exempt fuses with exempt fuses to reduce fire risk from electric
23 distribution operations. Non-exempt fuses can expel hot or molten material
24 upon normal operation, leading to an increased risk of wildfire. Units measured:
25 Number of replacements. This program relates to safety, reliability, or
26 maintenance because it involves replacing equipment to mitigate wildfire risk.
27 Starting in 2022, costs for non-exempt fuses were moved from MAT 2AP to
28 MAT 2AJ.

29 **MAT 2AP – OH Capital Projects** – Major OH projects are defined as jobs
30 costing more than \$10,000 per location. This program relates to safety and
31 maintenance because it includes replacement of non-exempt fuses with exempt
32 fuses for wildfire mitigation in HFTD areas. Since 2022, costs for non-exempt
33 fuses were moved to MAT 2AJ.

1 **MAT 2AQ – Ceramic Post Insulators** – This program includes replacement
2 of ceramic post insulators that were manufactured in or prior to 1972 and are
3 currently installed on PG&E poles. This program relates to safety, reliability, and
4 maintenance because it replaces ceramic post insulators prior to failure and
5 serves as a risk control to reduce the frequency or consequence of risk of failure
6 of electric distribution overhead assets.

7 **MAT 2AR – Surge Arrester Replacement** – This program involves
8 replacement of current (non-exempt) surge arresters with exempt surge
9 arresters to reduce fire risk from electric distribution operations. Non-exempt
10 surge arresters are OH electric distribution equipment that have the potential to
11 expel hot or molten material upon normal operation, leading to an increased risk
12 of wildfire. This program includes replacing equipment to mitigate wildfire risk
13 and correcting common grounding issues that pose a safety risk. This program
14 relates to safety, reliability, or maintenance because it serves as a risk control to
15 reduce the frequency or consequence of risk of failure of electric distribution
16 overhead assets and of risk of wildfire.

17 **MAT 2AS – FAS OH Capital** – This program involves work that is identified
18 during a field job and completed by a single PG&E Troublemans. The work could
19 involve either replacing or installing OH facilities: Electric distribution
20 conductors, components, structures, and associated equipment constructed
21 above ground level. This program addresses non-conforming conductors,
22 components, structures, and associated equipment identified by PG&E
23 Troublemans. This program relates to safety, reliability, or maintenance because
24 it serves as a risk control to reduce the frequency or consequence of risk of
25 failure of electric distribution overhead assets.

26 **MAT 2BA – UG General Replacement** – This program replaces
27 deteriorated UG facilities that are not an imminent hazard and have not caused
28 an outage. Facilities include deteriorated transformers, conduits, enclosures,
29 pads, and idle equipment. This program addresses non-conforming facilities
30 identified by preventative maintenance programs such as inspections and
31 patrols, as well as internal operational processes. This program relates to
32 safety, reliability, or maintenance because it serves as a risk control to reduce
33 the frequency or consequence of risk of failure of electric distribution
34 underground assets.

1 **MAT 2BB – Fault Indicator Replacements** – This program replaces
2 deteriorated fault indicators that are not an imminent hazard and have not
3 caused an outage. In the event of an outage, this program helps sectionalize
4 the outage area. This program relates to safety, reliability, or maintenance
5 because it serves as a risk control to reduce the frequency or consequence of
6 risk of failure of electric distribution underground assets.

7 **MAT 2BD – UG COE Replacement** – This program replaces UG equipment
8 determined COE by the division operators, Maintenance and Construction, and
9 restoration, and validated by Distribution Engineers. This program relates to
10 safety, reliability, or maintenance because it identifies certain assets needing
11 replacements and serves as a risk control to reduce the frequency or
12 consequence of risk of failure of electric distribution underground assets.

13 **MAT 2BF – UG Idle Facility Remove** – This program involves removal of
14 UG Idle Facilities that do not to have a likely use in the foreseeable future. This
15 program relates to safety, reliability, or maintenance because it removes
16 equipment no longer in use and serves as a risk control to reduce the frequency
17 or consequence of risk of failure of electric distribution underground assets.

18 **MAT 2BP – UG Capital Projects** – This program involves major UG
19 projects, defined as jobs costing more than \$100,000 per location. This program
20 addresses non-conforming equipment identified by preventative maintenance
21 programs such as inspections and patrols, as well as internal operational
22 processes. This program relates to safety, reliability, or maintenance because it
23 serves as a risk control to reduce the frequency or consequence of risk of failure
24 of electric distribution underground assets.

25 **MAT 2B# – EDPM, UG, other** – Includes other costs related to replacing
26 aging or deteriorated UG facilities. See MWC 2B for how this program relates to
27 safety, and/or reliability, and/or maintenance.

28 **MAT 2CA – NP Relay Replacement** – This program involves replacement
29 of an NP relay as part of planned replacement program. This program relates to
30 safety, reliability, or maintenance because it addresses the replacement of any
31 inoperable NP relays to maintain a safe and reliable distribution network system
32 serves as a risk control to reduce the frequency or consequence of risk of failure
33 of electric distribution network assets.

1 **MAT 2CB – Fiber/SCADA Communication Replace** – This program
2 involves installation of new network monitoring systems for the distribution
3 networks, including sensor installation, communications, fiber optic replacement
4 and programming activities. This includes any upgrade/replacement work to the
5 existing network SCADA systems for reliable operations until new SCADA
6 systems are installed (not part of the new monitoring system as part of
7 MAT 2CE). This program relates to safety, reliability, or maintenance because it
8 addresses the replacement of any inoperable existing SCADA system and
9 related components, including fiber optics, to maintain a safe and reliable
10 distribution network system.

11 **MAT 2CC – Network Transformer and Protector Replace** – This program
12 involves planned replacement of electric distribution network transformers,
13 including those with deteriorated oil condition or high-rise locations. This
14 program relates to safety, reliability, or maintenance because it addresses the
15 replacement of both network transformer and network protector (NP) including
16 high rise location to maintain a safe and reliable distribution network system
17 serves as a risk control and mitigation to reduce the frequency or consequence
18 of risk of failure of electric distribution network assets.

19 **MAT 2CD – Venting Manhole Covers Replacement** – This program
20 includes replacement of existing manhole covers on the electric distribution
21 network and distribution radial systems with venting manhole covers. This
22 program relates to safety, reliability, or maintenance because it addresses public
23 safety in the event of an electrical failure in an UG vault and the possible
24 ejection of the manhole cover and serves as mitigation to reduce the frequency
25 or consequence of risk of failure of electric distribution network assets.

26 **MAT 2CE – Network SCADA Communications Upgrade** – This program
27 includes installation of new network SCADA monitoring systems for the electric
28 distribution networks, including sensor installation, communications, fiber optic
29 replacement and programming activities. This program relates to safety,
30 reliability, or maintenance because the new safety monitoring system provides
31 information to help prevent in-service failure of the monitored equipment in the
32 distribution network system and serves as a mitigation to reduce the frequency
33 or consequence of risk of failure of electric distribution network assets.

1 **MAT 2C# – EDPM, Network, other** – Includes other costs related to
2 replacing aging or deteriorated network facilities. See MWC 2C for how this
3 program relates to safety, and/or reliability, and/or maintenance.

4 **MAT 3UG – Install/Replace Wildfire Mitigation Equipment** – Includes
5 costs for the undergrounding of existing OH electric distribution lines. This
6 program addresses priority work in HFTDs based on wildfire risk modeling and
7 relates directly to safety, reliability, or maintenance because it and serves as a
8 mitigation to reduce the consequence or frequency of risk of failure of electric
9 distribution overhead assets and of risk of wildfire. Work may also be
10 associated with (1) rebuild of fire impacted areas, (2) PSPS mitigation, or
11 (3) Public Safety Specialist (PSS) identified areas; and is completed in
12 compliance with PG&E’s Fire Rebuild Design Guidance for System Hardening.

13 **MAT 46A – Electric Distribution Substation General Install/Replace** –
14 This program includes projects to support general electric distribution substation
15 capacity increases for banks, bus, feeders, or other substation components that
16 do not fall into one of the other MWC 46 MATs. This program relates to safety,
17 reliability, or maintenance because it creates additional substation capacity to
18 prevent overloads on substation equipment, mitigating the risk of equipment
19 failure due to overloads.

20 **MAT 46F – Electric Distribution Substation Emergency and Operational**
21 **Capacity** – This program involves projects identified in this MAT increase
22 electric distribution capacity by upgrading banks, bus, feeders, or other
23 substation components to improve reliability by providing emergency capacity
24 and/or operational flexibility at the bank and feeder level. This program relates
25 to safety, reliability, or maintenance because it improves the ability to
26 reconfigure the distribution system, reducing the number of customers impacted
27 by outages and reducing outage restoration times.

28 **MAT 46H – Electric Distribution Substation New Business-Related**
29 **Capacity** – This program involves projects like other projects under MWC 46;
30 however, these projects have been identified to address capacity deficiencies for
31 specific New Business customers’ demand increase. This program relates to
32 safety, reliability, or maintenance because it creates additional substation
33 capacity to serve new customer loads, mitigating the risk of equipment failure
34 due to overloads.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34

MAT 46N – Electric Distribution Substation Land Purchase New Substation – This program includes projects to increase area electric distribution substation capacity by siting, permitting, and constructing new substations. This program relates to safety, reliability, or maintenance because it works towards siting a new substation that adds additional substation capacity to prevent overloads on substation equipment, mitigating the risk of equipment failure due to overloads.

MAT 48A – Replace Electric Distribution Substation Other Equipment – This program replaces other electric distribution substation equipment, such as ancillary equipment, ground grids, etc. Includes replacement projects with complex or wide-ranging scope of work that include various equipment types. This program involves the replacement of various substation equipment (e.g., ancillary equipment, ground grid upgrade, etc.) not specifically captured under other specified programs under MWC 48 to maintain reliability. This program relates to safety, reliability, or maintenance because it serves as a risk control to reduce the frequency or consequence of risk of failure of electric distribution substation assets.

MAT 48B – Replace Electric Distribution Substation Regulators – This program replaces regulators that are electric distribution substation assets, mainly electric distribution class (less than 50 kV), single-phase or three-phase. This program relates to safety, reliability, or maintenance because it involves the proactive planned replacement of substation regulators aimed to prevent regulator failures and to maintain reliability.

MAT 48C – Replace Electric Distribution Substation Batteries – This program replaces battery systems at electric distribution substations. This program relates to safety, reliability, or maintenance because it targets the replacement of substation batteries to minimize reliability risk due to battery failures and serves as a risk control to reduce the frequency or consequence of risk of failure of electric distribution substation assets and of risk of wildfire.

MAT 48D – Replace Electric Distribution Substation Breakers – This program replaces electric distribution substation circuit breakers. This program relates to safety, reliability, or maintenance because it involves the proactive planned replacement of circuit breakers aimed to prevent failures and maintain reliability and serves as a risk control to reduce the frequency or consequence of

1 risk of failure of electric distribution substation assets and of risk of wildfire. This
2 program also supports EPSS and serves as a mitigation to reduce the frequency
3 or consequence of risk of wildfire.

4 **MAT 48E – Replace Electric Distribution Substation Switches** – This
5 program replaces electric distribution substation disconnect switches. This
6 program relates to safety, reliability, or maintenance because it targets the
7 replacement of switches to maintain reliability and serves as a risk control to
8 reduce the frequency or consequence of risk of failure of electric distribution
9 substation assets and of risk of wildfire.

10 **MAT 48F – Replace Electric Distribution Substation Switchgear** – This
11 program replaces electric distribution substation switchgear equipment. This
12 program relates to safety, reliability, or maintenance because it targets the
13 replacement of switchgear to improve reliability and serves as a risk control to
14 reduce the frequency or consequence of risk of failure of electric distribution
15 substation assets and of risk of wildfire.

16 **MAT 48H – Replace Electric Distribution Substation Civil Structures** –
17 This program identifies substation support structures at risk of failure and
18 replaces deteriorated structures to prevent interruption of service and to mitigate
19 safety hazard to personnel. In addition, the program replaces wood structures
20 supporting electrical buses, switches and other auxiliary equipment that
21 connects to major assets. This program relates to safety, reliability, or
22 maintenance because its activities serve as either a risk control or mitigation to
23 reduce the frequency or consequence of risk of failure of electric distribution
24 substation assets.

25 **MAT 48L – Electric Distribution Line Work Support Substation** – This
26 program includes work required on electric distribution lines associated with
27 substation equipment asset health replacement work. This program
28 reconfigures, relocates, and/or rebuilds distribution lines and associated
29 equipment work in conjunction with distribution work (e.g., cutovers – 4 kV to
30 12 kV, switchgear, and transformer replacement, etc.). This program relates to
31 safety, reliability, or maintenance because it serves as a risk control to reduce
32 the frequency or consequence of risk of failure of electric distribution substation
33 assets and of risk of wildfire.

1 **MAT 48N – Electric Distribution Substation Insulators** – This program
2 involves replacement of electric distribution insulators that have reached
3 end-of-life to maintain system operations. This program relates to safety,
4 reliability, or maintenance because it serves as a risk control to reduce the
5 frequency or consequence of risk of failure of electric distribution substation
6 assets and of risk of wildfire.

7 **MAT 48X – Electric Distribution Substation Animal Abatement** – This
8 program implements mitigation measures at distribution substations to prevent
9 animal contact that can lead to substation outages and equipment damage.
10 This program relates to safety, reliability, or maintenance because it serves as a
11 risk control to reduce the frequency or consequence of risk of failure of electric
12 distribution substation assets.

13 **MAT 49# – Line Reclosers Revolving Stock** – This program purchases
14 Line Reclosers Revolving Stock. This program relates to safety, reliability, or
15 maintenance because it serves as a mitigation to reduce the frequency or
16 consequence of risk of wildfire by providing a centralized inventory of equipment
17 to support various safety and reliability programs such as PG&E’s PSPS
18 Program, targeted electric reliability improvements, and distribution line
19 automation.

20 **MAT 49A – Distribution Line Automation** – This program replaces
21 Automation/SCADA equipment including reclosers, OH, pad-mounted, or
22 subsurface switches, and may include deficient communication equipment. This
23 program supports the installation of electric distribution line equipment to
24 remotely isolate electric lines and quickly de-energize facilities to address urgent
25 safety issues such as wire down events. This program relates to safety, wildfire
26 mitigation, reliability, or maintenance because it serves as a mitigation to reduce
27 the frequency or consequence of risk of failure of electric distribution overhead
28 assets and of risk of wildfire.

29 **MAT 49B – Recloser Asset Replacement** – This program involves
30 strategic upgrade of reclosers (units in-service, not deteriorated or
31 damaged), may include recloser replacement, minor communication, or other
32 minor upgrades to expand or improve SCADA coverage and improve reliability.
33 This program relates to safety, reliability, or maintenance because it provides
34 replacement electronic recloser controls or recloser to improve the functionality

1 of distribution line protective devices and serves as a mitigation to reduce the
2 frequency or consequence of risk of failure of electric distribution overhead
3 assets.

4 **MAT 49C – OH Fuses Install/Replace** – This program involves installing
5 new OH fuses to improve reliability. This program supports the installation of
6 devices to quickly de-energize faulted lines and improve electric reliability to
7 customers. This program relates to safety, reliability, or maintenance because it
8 serves as a risk control to reduce the frequency or consequence of risk of failure
9 of electric distribution overhead assets.

10 **MAT 49D – Recloser/Switch/Disconnect Install/Replace** – This program
11 installs new reclosers, OH switches or solid blade disconnects to improve
12 reliability. This program relates to safety, reliability, or maintenance because it
13 directly funds the installation of electrical equipment designed to isolate faulted
14 lines and serves as a risk control to reduce the frequency or consequence of risk
15 of failure of electric distribution overhead assets.

16 **MAT 49E – General Installations/Replace Circuits/Zone** – This program
17 involves line work that typically includes reliability work, such as protective
18 devices, reframing lines, installing tree wire, Targeted Circuit Program, as well
19 as system or city/community programs to improve reliability. This program funds
20 the installation of various electrical equipment designed to isolate faulted lines,
21 prevent electrical outages, and improve electric service reliability to customers.
22 This program relates to safety, reliability, or maintenance because it serves as a
23 mitigation to reduce the frequency or consequence of risk of wildfire.

24 **MAT 49G – UG Recloser/Sectionalizers/Switch Install/Replace** – This
25 program installs or replaces UG interrupters to improve reliability. This program
26 relates to safety, reliability, or maintenance because it directly funds the
27 installation of various electrical UG equipment designed to isolate faulted lines,
28 limit the scope of electrical outages, and improve electric service reliability to
29 customers.

30 **MAT 49H – PSPS Sectionalizer Device Install/Replace** – This program
31 installs or replaces distribution PSPS sectionalizing devices. This program
32 funds the installation of automated electrical equipment designed to isolate
33 faulted lines, limit line reclosing, and facilitate the remote opening and closing of
34 switches necessary to efficiently implement PSPS. This program relates to

1 safety and reliability because it serves as a mitigation to reduce the frequency or
2 consequence of risk of wildfire.

3 **MAT 49I – OH Fault Indicators/Line Sensors Install/Replace** – This
4 program installs new OH fault indicators or distribution line monitoring systems
5 and/or line sensors to improve reliability. This program provides funding to
6 support the installation of devices which assist with quickly identifying faulted
7 lines. leading to improved electric reliability to customers. This program relates
8 to safety, reliability, or maintenance because it serves as a mitigation to reduce
9 the frequency or consequence of risk of wildfire.

10 **MAT 49M – Resilience Zones** – This program involves building resilience
11 zones around Pre-Installed Interconnection Hubs (PIH)—permanent, “plug and
12 play” infrastructure enabling temporary generation to connect to the electric
13 distribution grid at pre-determined locations. Generally, PIHs will consist of a
14 transformer and associated interconnection equipment, ground grid, and grid
15 isolation and protection devices. This program limits the number of customers
16 impacted by PSPS outage events and reduces the unplanned outage frequency
17 and duration. This program relates to safety, reliability, or maintenance because
18 it serves as a mitigation to reduce the frequency or consequence of risk of
19 wildfire.

20 **MAT 49R – Grid Modernization Technology** – This includes projects and
21 programs that install new and advancing technologies on the distribution system.
22 These technologies are designed to enhance standard protection and controls
23 and identify problems that traditional systems did not detect. This program
24 relates to safety, reliability, or maintenance because it serves as a mitigation to
25 reduce the frequency or consequence of risk of wildfire. Initial projects will install
26 Rapid Earth Fault Current Limiter on circuits within the Tier 2 and 3 HFTD areas
27 to reduce the risk of ignition from a wire down conditions.

28 **MAT 49S – Electric Reliability Install FLISR Systems** – This program
29 involves the Fault Location, Isolation, and Service Restoration (FLISR)
30 automation system reduces the effect of outages to customers by quickly
31 opening and closing automated switches. This program relates to safety,
32 reliability, or maintenance because it directly funds the installation of various
33 electrical equipment designed to isolate faulted lines, limit the scope of electrical
34 outages, and improves electric service reliability.

1 **MAT 49T – Single Phase Line Recloser** – This program installs single unit
2 (per phase) recloser. This program funds the installation of electrical OH
3 equipment designed to isolate faulted lines, limit the scope of electrical outages,
4 improve electric service reliability, and gang tripping or remote functionality to
5 increase public safety. This program relates to safety, reliability, or maintenance
6 because it serves as a risk control to reduce the frequency or consequence of
7 risk of failure of electric distribution overhead assets, and as a mitigation to
8 reduce the frequency or consequence of risk of wildfire.

9 **MAT 49X – Emerging Electric Distribution Reliability Improvements** –
10 This program involves emergent reliability projects focused on addressing
11 localized reliability issues not covered by broad, system-wide reliability
12 programs, including projects to support EPSS. This program funds the
13 installation of various electrical equipment designed to isolate faulted lines, limit
14 the scope of electrical outages, and improve electric service reliability. This
15 program relates to safety, reliability, or maintenance because it serves as a risk
16 control to reduce the frequency or consequence of risk of failure of electric
17 distribution overhead assets, and as a mitigation to reduce the frequency or
18 consequence of risk of wildfire.

19 **MAT 54A – Electric Distribution Substation – Replace Transformer** –
20 This program includes the targeted replacement of transformers as well as the
21 procurement of emergency support equipment to improve substation reliability
22 and prevent in-service transformer failures. This program relates to safety,
23 reliability, and maintenance because it serves as a risk control and mitigation to
24 reduce the frequency or consequence of risk of failure of electric distribution
25 substation assets, and as a risk control to reduce the frequency or consequence
26 of risk of wildfire.

27 **MAT 54L – Electric Distribution Substation – Transformer Life**
28 **Extension** – This program involves Transformer Life Extension (TLE) work that
29 reconditions older substation transformers to extend their life expectancy by
30 replacing a specific combination of components. TLE work provides a
31 cost-effective means to extend the useful service life of the equipment and
32 maintain system reliability. This program relates to safety, reliability, and
33 maintenance because it extends the life of the transformer and serves as a risk

1 control to reduce the frequency or consequence of risk of failure of electric
2 distribution overhead assets.

3 **MAT 56A – Reliability Related Cable Replacement** – This program
4 involves capital work associated with UG primary cable systems, including
5 replacement of UG cables and associated components. The program replaces
6 UG cables in areas that have experienced two or more cable failures within five
7 years. Many of these cables are unjacketed High Molecular Weight Polyethylene
8 (HMWPE) or Cross-Linked Polyethylene (XLPE) cables that have been
9 evaluated through cable testing or cable rejuvenation (MAT 56B program) and
10 showed signs of insulation and/or concentric neutral deterioration, some of
11 which had complete neutral breaks. This program relates to safety, reliability, or
12 maintenance because it serves as a risk control to reduce the frequency or
13 consequence of risk of failure of electric distribution underground assets.

14 **MAT 56B – Cable Rejuvenation and Testing** – This program involves
15 rejuvenation (injection) of primary UG cables to restore insulation integrity with
16 goal of extending operating life. Testing involves applying voltage signals to
17 cable to evaluate its operating condition, typically using partial discharge. Both
18 rejuvenation and testing involve performing neutral assessment of the cables.
19 Sections not injectable or do not pass testing are targeted for cable replacement
20 under MAT 56A. This program evaluates the condition (concentric neutral and
21 insulation deterioration) of some of HMWPE and XLPE UG cables, in areas that
22 have experienced two or more failures within five years, which are then
23 prioritized for replacement under MAT 56A. This program relates to safety,
24 reliability, or maintenance because it serves as a risk control to reduce the
25 frequency or consequence of risk of failure of electric distribution underground
26 assets.

27 **MAT 56C – COE Cable Replacement** – This program involves replacement
28 of failed primary UG loop cable sections noted on the COE list. This program
29 relates to reliability or maintenance because it serves as a risk control to reduce
30 the frequency or consequence of risk of failure of electric distribution
31 underground assets.

32 **MAT 56D – Transfer Ground Rocker Arm Main/Transfer Ground Rocker**
33 **Arm Line (TGRAM/TGRAL) Switch Replacement** – This program involves
34 replacement of UG TGRAM/TGRAL switches. This program relates to safety,

1 reliability, or maintenance because it replaces switches that have been in
2 service since the 1950s and 1960s, and for which the insulating oil to make or
3 break load cannot be properly tested.

4 **MAT 56N – Network Cable Replacement** – This program involves
5 systematic replacement of network cable assets in San Francisco and Oakland.
6 The work involves replacing primary and secondary cables and installing new
7 equipment. This program relates to safety, reliability, or maintenance because
8 the network cable system is in urban areas where the public potentially could be
9 near energized equipment. This necessitates a safety driver to minimize
10 in-service failure; a reliability driver to minimize service outages impacting
11 customers; and a maintenance driver to execute a consistent
12 asset-management strategy for the safety and operating performance of the
13 system to balance risk, performance, and cost. This program also relates to
14 safety, reliability, or maintenance because it serves as a risk control to reduce
15 the frequency or consequence of risk of failure of electric distribution
16 underground assets.

17 **MAT 56S –Load Break Oil Rotary (LBOR) Switch Replacements** – This
18 program involves the proactive replacement of UG oil-filled switches whose
19 condition warrants replacement to avoid potential failures. This program focuses
20 on the replacement of subsurface switches that have been in service for more
21 than 45 years, and for which the quantity of the insulating oil poses risk. This
22 program relates to safety, reliability, or maintenance because it serves as a risk
23 control to reduce the frequency or consequence of risk of failure of electric
24 distribution underground assets.

25 **MAT 56T – Temperature Alarm Devices** – This program installs
26 Distribution Temperature Monitor, otherwise known as Temperature Alarm
27 Devices, for Subsurface Distribution Assets (Subsurface Transformers, LBOR
28 Switches and 600-amp Switches). This program installs temperature indicators
29 to safely and proactively replace UG assets that are continuously running above
30 allowable temperature or exhibiting thermal runaway conditions (very quick
31 temperature rises). This program relates to safety, reliability, or maintenance
32 because it serves as a risk control to reduce the frequency or consequence of
33 risk of failure of electric distribution underground assets.

1 **MAT 56# – Electric Distribution UG Asset Replacements, Other –**
2 Includes other costs related to replacement of primary electric distribution
3 cables, primary and secondary Network Cables, and other UG assets. See
4 MWC 56 for how this program relates to safety, and/or reliability, and/or
5 maintenance.

6 **MAT 58A – Electric Distribution Substation - Fire Protection and**
7 **Suppression** – This program replaces or installs fire protection in electric
8 distribution substation assets. This program involves the installation and/or
9 upgrades of fire suppression systems which minimizes the probability of fire
10 occurrences that could lead to interruption of service and/or property loss. This
11 program relates to safety, reliability, or maintenance because it serves as a risk
12 control to reduce the frequency or consequence of risk of failure of electric
13 distribution substation assets and of risk of wildfire.

14 **MAT 58C – Replace Distribution Substation Miscellaneous**
15 **Equipment** – This program involves distribution substation miscellaneous
16 equipment replacements. This program relates to safety, reliability, or
17 maintenance because it mitigates equipment failures and ensures safety within
18 the substation.

19 **MAT 58S – Electric Distribution Substation Security Upgrades** – This
20 program replaces, upgrades or installs security systems (physical or technology)
21 to provide safety to employees and prevent vandalism. This program relates to
22 safety, reliability, or maintenance because it serves as a risk control to reduce
23 the frequency or consequence of risk of failure of electric distribution substation
24 assets and of risk of wildfire.

25 **MAT 63C – ADMS Development** – This program funds the ADMS and
26 tracks capital associated to the multi-year grid modernization effort to
27 consolidate distribution operational technology platforms into a single platform.
28 This program relates to safety, wildfire mitigation, reliability, or maintenance
29 because it enables outage management applications that include instantaneous
30 fault location, automated switching recommendations and promotes operator
31 awareness of RT circuit conditions. This project directly supports DCC
32 operations.

33 **MAT 63D – Distribution Operational Technology** – This program involves
34 DCC systems, equipment/hardware installations and replacement. It is used to

1 track capital improvements and enhancements at the DCC. This program
2 relates to safety, wildfire mitigation, reliability, and maintenance by supporting
3 the development and daily operation of RT applications/tools that are used to
4 safely operate and maintain distribution reliability.

5 **MAT 63# – EO Control Center Facility and Operational Technology,**
6 **other** – Includes other costs related to capital improvements to operational
7 technology used in DCCs. See MWC 63 for how this program relates to safety,
8 and/or reliability, and/or maintenance.

1 H. Comparison by MAT Code for Non-Safety, Reliability, and Maintenance Work Tables

**TABLE 3-5
2023 RSAR
2023 GRC CYCLE ELECTRIC DISTRIBUTION EXPENSE COMPARISON BY MWC/MAT CODE FOR NON SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll-up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)
1	Expense	Electric Distribution	EV	Manage Service Inquiries	EVA	Service Inquiry	Non-SRM	Non-SRM	Ex 4, Ch 18	No	On-going	Annual	5,004.2	4,047.5	(956.6)	-19.1%
2	Expense	Electric Distribution	EV	Manage Service Inquiries	EVB	OK to Serve	Non-SRM	Non-SRM	Ex 4, Ch 18	No	On-going	Annual	8,913.2	8,286.2	(627.0)	-7.0%
3	Expense	Electric Distribution	EV	Manage Service Inquiries	#	Not assigned	Non-SRM	Non-SRM	Ex 4, Ch 18	No	On-going	Annual	-	112.6	112.6	100.0%
4	Expense	Electric Distribution	EW	E TD WRO	N/A	Not assigned	Non-SRM	Non-SRM	Ex 4, Ch 18	No	On-going	Annual	11,537.9	8,414.4	(3,123.6)	-27.1%
5	Expense	Electric Distribution	OS	Operational Support	N/A	Not assigned	Non-SRM	Non-SRM	Ex 4, Ch 22	No	On-going	Annual	62,153.6	2,903.9	(59,249.7)	-95.3%

**TABLE 3-6
2023 RSAR
2023 GRC CYCLE ELECTRIC DISTRIBUTION CAPITAL COMPARISON BY MWC/MAT CODE FOR NON SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 MAT	C4 MAT Name	C5 RAMP Risk Name	C6 RAMP Mitigation and/or Control Name	C7 2023 GRC Testimony Reference	D RAMP Roll-up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)
1	Capital	Electric Distribution	10	E Dist WRO General	N/A	Not assigned	Non-SRM Total	Non-SRM Total	Ex 4, Ch 18	No	On-going	Annual	138,483.9	242,275.6	103,791.7	74.9%
2	Capital	Electric Distribution	16	E Dist Customer Connects	N/A	Not assigned	Non-SRM Total	Non-SRM Total	Ex 4, Ch 18	No	On-going	Annual	653,710.2	1,069,650.2	415,940.0	63.6%
3	Capital	Electric Distribution	30	E Dist WRO Rule 20A	N/A	Not assigned	Non-SRM Total	Non-SRM Total	Ex 4, Ch 19	No	On-going	Annual	30,456.7	23,890.4	(6,566.3)	-21.6%

1 **I. Electric Distribution Supplemental Reporting**

2 In compliance with D.19-04-020, which superseded and replaced the
3 Spending Accountability Report required by D.17-05-013,³ and with the
4 completion of the 2020 GRC cycle, PG&E is no longer producing the
5 supplemental reporting tables required by D.17-05-013 listed below in the
6 RSAR.

7 1) Electric Distribution Unit Report

- 8 • Wood poles replaced through the Pole Replacement and other company
9 programs;
- 10 • Stand-alone circuit breakers replaced or installed across all company
11 programs;
- 12 • Miles of paper-insulated lead sheath cable (PILC) replaced across all
13 company programs;
- 14 • Miles of HMWPE cable, respectively, replaced across all company
15 programs;
- 16 • Miles of HMWPE cable, respectively, rejuvenated across all company
17 programs;
- 18 • Miles of OH conductor replaced across all company programs;
- 19 • Grasshopper switches replaced across all company programs;
- 20 • FLISR installations in the Reliability program;
- 21 • OH fuse installations across all company programs.

22 2) Electric Distribution Surge Arrester Progress Report

- 23 • Capital MAT 2AR Total Program Spend;
- 24 • Units Completed;
- 25 • Locations in PG&E's survey identified as not requiring work; and

26 3) Electric Distribution Wood Pole Count by Age.

27

³ D.19-04-020, Phase Two Decision Adopting Risk Spending Accountability Report Requirements and Safety Performance Metrics for Investor-Owned Utilities and Adopting a Safety Model Approach for Small and Multi-Jurisdictional Utilities Ordering Paragraph 12.

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 4
ENERGY SUPPLY
IMPUTED ADOPTED VS. RECORDED COMPARISON

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 4
ENERGY SUPPLY
IMPUTED ADOPTED VS. RECORDED COMPARISON

TABLE OF CONTENTS

A. Introduction.....	4-1
B. Energy Policy and Procurement Comparison Summary Tables	4-1
C. Energy Policy and Procurement Comparison Tables by MWC for Non-Safety, Reliability, and Maintenance Work Tables.....	4-3
D. Energy Policy and Procurement MWC Descriptions – Expense.....	4-4
E. Energy Policy and Procurement MWC Descriptions – Capital	4-4
F. Nuclear Generation Comparison Summary Tables	4-5
G. Nuclear Generation Comparison Tables by MWC for Safety, Reliability, and Maintenance Work Tables	4-6
H. Nuclear Generation Comparison Tables by MWC for Non-Safety, Reliability, and Maintenance Work Tables.....	4-7
I. Nuclear Generation MWC Descriptions – Expense	4-9
J. Nuclear Generation MWC Descriptions – Capital.....	4-11
K. Power Generation Comparison Summary Tables	4-12
L. Power Generation Comparison by MWC for Safety, Reliability, and Maintenance Work Tables.....	4-13
M. Power Generation Comparison by MWC for Non-Safety, Reliability, and Maintenance Work Tables.....	4-16
N. Power Generation MWC Descriptions – Expense	4-17
O. Power Generation MWC Descriptions – Capital.....	4-20

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 4
ENERGY SUPPLY
IMPUTED ADOPTED VS. RECORDED COMPARISON

A. Introduction

This section includes the following information for the Energy Policy and Procurement, Nuclear Generation, and Power Generation portions of the Energy Supply functional area: a comparison of the total 2023 imputed adopted spend vs. the actual spend and for those programs that are related to safety, reliability, or maintenance (SRM), the Major Work Category (MWC) descriptions, imputed adopted vs. actuals comparison details and variance explanations. In addition, per Decision 22-10-002, the MWC descriptions include an explanation of how each program/project relates to safety, reliability, or maintenance.

B. Energy Policy and Procurement Comparison Summary Tables

TABLE 4-1
2023 RSAR
2023 GRC CYCLE ENERGY POLICY AND PROCUREMENT EXPENSE COMPARISON
SUMMARY
(THOUSANDS OF DOLLARS)

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 Spending Category - MWC	C2 MWC	D 2023 Imputed Adopted Costs	E 2023 Actual Costs	F Difference for 2023 (\$) (E3-D3)	G Percent Variance for 2023 (%) ((E3-D3)/D3)
1	O&M Expense	Energy Policy and Procurement	Misc Expense	AB	816.3	281.1	(535.3)	-65.6%
2	O&M Expense	Energy Policy and Procurement	Acq & Manage Elect Supply	CT	30,346.9	31,594.1	1,247.2	4.1%
3	O&M Expense	Energy Policy and Procurement	Acq & Manage Gas Supply	CV	2,456.4	2,481.6	25.2	1.0%
4	O&M Expense	Energy Policy and Procurement	Manage Electric Grid Ops	CY	10,533.7	13,693.3	3,159.6	30.0%
5	O&M Expense	Energy Policy and Procurement	Maintain IT Apps & Infra	JV	1,538.7	282.3	(1,256.4)	-81.7%
6	O&M Expense	Energy Policy and Procurement	TOTAL		45,692.0	48,332.4	2,640.4	5.8%

**TABLE 4-2
2023 RSAR
2023 GRC CYCLE ENERGY POLICY AND PROCUREMENT CAPITAL COMPARISON SUMMARY
(THOUSANDS OF DOLLARS)**

	A	B	C1	C2	D	E	F	G
Line No	Type (O&M Expense or Capital)	Functional Area	Spending Category - MWC	MWC	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (E3-D3)	Percent Variance for 2023 (%) ((E3-D3)/D3)
1	Capital	Energy Policy and Procurement	Build IT Apps & Infra	2F	11,464.9	6,762.3	(4,702.7)	-41.0%
2	Capital	Energy Policy and Procurement	Total		11,464.9	6,762.3	(4,702.7)	-41.0%

1 **C. Energy Policy and Procurement Comparison Tables by MWC for Non-Safety, Reliability, and Maintenance**
 2 **Work Tables**

TABLE 4-3
2023 RSAR
2023 GRC CYCLE ENERGY POLICY AND PROCUREMENT EXPENSE COMPARISON BY MWC FOR NON-SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 RAMP Risk Name	C4 RAMP Mitigation and/or Control Name	C5 2023 GRC Testimony Reference	D RAMP Roll- up (Yes/No)	E Program/ Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)
1	O&M Expense	Energy Policy and Procurement	AB	Misc Expense Acq & Manage Elect Supply	Non-SRM Total	Non-SRM Total	Ex 5, Ch 6	No	On-going	annual	816.3	281.1	(535.3)	-65.6%
2	O&M Expense	Energy Policy and Procurement	CT	Acq & Manage Gas Supply	Non-SRM Total	Non-SRM Total	Ex 5, Ch 6	No	On-going	annual	30,346.9	31,594.1	1,247.2	4.1%
3	O&M Expense	Energy Policy and Procurement	CV	Manage Electric Grid Ops	Non-SRM Total	Non-SRM Total	Ex 5, Ch 6	No	On-going	annual	2,456.4	2,481.6	25.2	1.0%
4	O&M Expense	Energy Policy and Procurement	CY	Maintain IT Apps & Infra	Non-SRM Total	Non-SRM Total	Ex 5, Ch 6	No	On-going	annual	10,533.7	13,693.3	3,159.6	30.0%
5	O&M Expense	Energy Policy and Procurement	JV		Non-SRM Total	Non-SRM Total	Ex 5, Ch 7	No	On-going	annual	1,538.7	282.3	(1,256.4)	-81.7%

TABLE 4-4
2023 RSAR
2023 GRC CYCLE ENERGY POLICY AND PROCUREMENT CAPITAL COMPARISON BY MWC FOR NON-SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 RAMP Risk Name	C4 RAMP Mitigation and/or Control Name	C5 2023 GRC Testimony Reference	D RAMP Roll- up (Yes/No)	E Program/ Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)
1	Capital	Energy Policy and Procurement	2F	Build Applications and Infrastructure	Non-SRM Total	Non-SRM Total	Ex 5, Ch 7	No	On-going	annual	11,464.9	6,762.3	(4,702.7)	-41.0%

1 **D. Energy Policy and Procurement MWC Descriptions – Expense**

2 **MWC AB – Administration** – Includes costs for the overall administration
3 costs for the VP of EPP. This MWC is not related to safety, reliability, and/or
4 maintenance.

5 **MWC CT – Acquire and Manage Electric Supply** – Includes costs to
6 acquire and manage electric supply. This MWC is not related to safety,
7 reliability, and/or maintenance.

8 **MWC CV – Acquire and Manage Gas Supply** – Includes costs to acquire
9 and manage gas supply. This MWC is not related to safety, reliability, and/or
10 maintenance.

11 **MWC CY – Manage Electric Grid Ops** – Includes costs to manage electric
12 grid operations. This MWC is not related to safety, reliability, and/or
13 maintenance.

14 **MWC JV – Maintain Applications and Infrastructure** – Includes costs for
15 ongoing maintenance, operations and repair for PG&E's Information Technology
16 (IT) applications, systems and infrastructure. This MWC is not related to safety,
17 reliability, and/or maintenance.

18 **E. Energy Policy and Procurement MWC Descriptions – Capital**

19 **MWC 2F – Build Applications and Infrastructure** – Includes the costs to
20 design, develop and enhance applications, systems and infrastructure
21 technology solutions. This MWC is not related to safety, reliability, and/or
22 maintenance.

1 F. Nuclear Generation Comparison Summary Tables

**TABLE 4-5
2023 RSAR
2023 GRC CYCLE NUCLEAR GENERATION EXPENSE COMPARISON SUMMARY
(THOUSANDS OF DOLLARS)**

Line No	A	B	C1	C2	D	E	F	G
	Type (O&M Expense or Capital)	Functional Area	Spending Category - MWC	MWC	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (E-D)	Percent Variance for 2023 (%) ((E-D)/D)
1	O&M Expense	Nuclear Generation	Misc Expense	AB	0.0	340.0	340.0	100.0%
2	O&M Expense	Nuclear Generation	Manage Environmental Oper	AK	2,263.3	2,077.6	(185.7)	-8.2%
3	O&M Expense	Nuclear Generation	Manage DCPD Business	BP	13,681.3	12,752.2	(929.1)	-6.8%
4	O&M Expense	Nuclear Generation	DCPD Support Services	BQ	42,009.1	42,675.3	666.2	1.6%
5	O&M Expense	Nuclear Generation	Operate DCPD Plant	BR	76,609.2	78,631.3	2,022.1	2.6%
6	O&M Expense	Nuclear Generation	Maintain DCPD Plant Assets	BS	91,686.3	97,104.1	5,417.7	5.9%
7	O&M Expense	Nuclear Generation	Nuclear Generation Fees	BT	16,800.6	17,298.0	497.5	3.0%
8	O&M Expense	Nuclear Generation	Procure DCPD Materials & Svcs	BU	0.0	(118.5)	(118.5)	100.0%
9	O&M Expense	Nuclear Generation	Maintain DCPD Plant Configurtn	BV	34,728.7	38,316.9	3,588.1	10.3%
10	O&M Expense	Nuclear Generation	Provide Nuclear Support	EO	10.4	(54.3)	(64.7)	-624.1%
11	O&M Expense	Nuclear Generation	Manage Var Bal Acct Processes	IG	2,716.7	2,776.1	59.4	2.2%
12	O&M Expense	Nuclear Generation	Maintain IT Apps & Infra	JV	796.5	449.1	(347.4)	-43.6%
13	O&M Expense	Nuclear Generation	Operational Management	OM	7,454.3	6,156.4	(1,297.9)	-17.4%
14	O&M Expense	Nuclear Generation	Operational Support	OS	23,816.2	24,078.6	262.4	1.1%
15	O&M Expense	Nuclear Generation	TOTAL		312,572.5	322,482.7	9,910.2	3.2%

**TABLE 4-6
2023 RSAR
2023 GRC CYCLE NUCLEAR GENERATION CAPITAL COMPARISON SUMMARY
(THOUSANDS OF DOLLARS)**

Line No	A	B	C1	C2	D	E	F	G
	Type (O&M Expense or Capital)	Functional Area	Spending Category - MWC	MWC	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (E-D)	Percent Variance for 2023 (%) ((E-D)/D)
1	Capital	Nuclear Generation	Tools & Equipment	05	747.5	2,246.3	1,498.8	200.5%
2	Capital	Nuclear Generation	DCPD Capital	20	10,243.8	8,768.1	(1,475.7)	-14.4%
3	Capital	Nuclear Generation	Build IT Apps & Infra	2F	1,322.8	1,431.4	108.6	8.2%
4	Capital	Nuclear Generation	TOTAL		12,314.0	12,445.8	131.8	1.1%

1 G. Nuclear Generation Comparison Tables by MWC for Safety, Reliability, and Maintenance Work Tables

**TABLE 4-7
2023 RSAR
2023 GRC CYCLE NUCLEAR GENERATION EXPENSE COMPARISON BY MWC FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 RAMP Risk Name	C4 RAMP Mitigation and/or Control Name	C5 2023 GRC Testimony Reference	D RAMP Roll- up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K1 Spending Variance Explanation Required (Y/N)	K2 Percentage Variance Explanation Required (Y/N)	L 2023 Cost Variance Explanation	Forecast			N Status	O Completion Status Statement
																		M1 Scope (U, O, or T)	M2 Schedule (U, O, or T)	M3 Budget (U, O, or T)		
1	O&M Expense	Nuclear Generation	AB	Misc Expense	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 3	No	On-going	Annual	0.0	340.0	340.0	100.0%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
2	O&M Expense	Nuclear Generation	BP	Manage DCPD Business	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 3	No	On-going	Annual	13,681.3	12,752.2	(929.1)	-6.8%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
3	O&M Expense	Nuclear Generation	BQ	DCPP Loss Prevention	SRM Total	SRM Total	Ex 5, Ch 3	No	On-going	Annual	42,009.1	42,675.3	666.2	1.6%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
4	O&M Expense	Nuclear Generation	BQ	DCPP Loss Prevention	Core Damaging Event	NCORE-C4 - Security from External and Internal Threats, and Emergency Response	Ex 5, Ch 3	Yes	On-going	Annual	37,808.2	38,407.8	599.6	1.6%	N/A	N/A	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
5	O&M Expense	Nuclear Generation	BQ	DCPP Loss Prevention	Extended Shutdown	NSHUT-C4 - Security from External and Internal Threats, and Emergency Response	Ex 5, Ch 3	Yes	On-going	Annual	4,200.9	4,267.5	66.6	1.6%	N/A	N/A	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
6	O&M Expense	Nuclear Generation	BR	Operate DCPD Plant	SRM Total	SRM Total	Ex 5, Ch 3	No	On-going	Annual	76,609.2	78,631.3	2,022.1	2.6%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
7	O&M Expense	Nuclear Generation	BR	Operate DCPD Plant	Core Damaging Event	NCORE-C2 - Operating the Facility Within Requirements	Ex 5, Ch 3	Yes	On-going	Annual	51,127.5	46,887.8	(4,239.7)	-8.3%	N/A	N/A	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
8	O&M Expense	Nuclear Generation	BR	Operate DCPD Plant	Extended Shutdown	NSHUT-C2 - Operating the Facility Within Requirements	Ex 5, Ch 3	Yes	On-going	Annual	5,680.8	5,209.8	(471.1)	-8.3%	N/A	N/A	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
9	O&M Expense	Nuclear Generation	BR	Operate DCPD Plant	SRM (Non-RAMP)	SRM (Non-RAMP)	Ex 5, Ch 3	Yes	On-going	Annual	19,800.9	26,533.8	6,732.9	34.0%	N/A	N/A	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
10	O&M Expense	Nuclear Generation	BS	Maintain DCPD Plant Assets	SRM Total	SRM Total	Ex 5, Ch 3	No	On-going	Annual	91,686.3	97,104.1	5,417.7	5.9%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
11	O&M Expense	Nuclear Generation	BS	Maintain DCPD Plant Assets	Core Damaging Event	NCORE-C1 - Maintaining the Systems	Ex 5, Ch 3	Yes	On-going	Annual	74,928.7	78,745.8	3,817.1	5.1%	N/A	N/A	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
12	O&M Expense	Nuclear Generation	BS	Maintain DCPD Plant Assets	Extended Shutdown	NSHUT-C1 - Maintaining the Systems	Ex 5, Ch 3	Yes	On-going	Annual	8,325.4	8,749.5	424.1	5.1%	N/A	N/A	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
13	O&M Expense	Nuclear Generation	BS	Maintain DCPD Plant Assets	SRM (Non-RAMP)	SRM (Non-RAMP)	Ex 5, Ch 3	Yes	On-going	Annual	8,432.2	9,608.8	1,176.5	14.0%	N/A	N/A	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
14	O&M Expense	Nuclear Generation	BV	Maintain DCPD Plant Configurtn	SRM Total	SRM Total	Ex 5, Ch 3	No	On-going	Annual	34,728.7	38,316.9	3,588.1	10.3%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
15	O&M Expense	Nuclear Generation	BV	Maintain DCPD Plant Configurtn	Core Damaging Event	NCORE-C3 - Plant and System Configuration Control	Ex 5, Ch 3	Yes	On-going	Annual	23,881.6	31,615.7	7,734.1	32.4%	N/A	N/A	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
16	O&M Expense	Nuclear Generation	BV	Maintain DCPD Plant Configurtn	Extended Shutdown	NSHUT-C3 - Plant and System Configuration Control	Ex 5, Ch 3	Yes	On-going	Annual	2,653.5	3,512.9	859.3	32.4%	N/A	N/A	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
17	O&M Expense	Nuclear Generation	BV	Maintain DCPD Plant Configurtn	SRM (Non-RAMP)	SRM (Non-RAMP)	Ex 5, Ch 3	Yes	On-going	Annual	8,193.6	3,188.4	(5,005.3)	-61.1%	N/A	N/A	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
18	O&M Expense	Nuclear Generation	IG	Manage Var Bal Acct Processes	SRM Total	SRM Total (Non-RAMP)	Ex 5, Ch 3	No	On-going	Annual	2,716.7	2,776.1	59.4	2.2%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A

**TABLE 4-8
2023 RSAR
2020 GRC CYCLE NUCLEAR GENERATION CAPITAL COMPARISON BY MWC FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 RAMP Risk Name	C4 RAMP Mitigation and/or Control Name	C5 2023 GRC Testimony Reference	D RAMP Roll- up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K1 Spending Variance Explanation Required (Y/N)	K2 Percentage Variance Explanation Required (Y/N)	L 2023 Cost Variance Explanation	Forecast			N Status	O Completion Status Statement
																		M1 Scope (U, O, or T)	M2 Schedule (U, O, or T)	M3 Budget (U, O, or T)		
1	Capital	Nuclear Generation	20	DCPP Capital	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 3	No	On-going	annual	10,243.8	8,768.1	(1,475.7)	-14.4%	NO	NO	Below variance threshold.	Target	Target	Target	Proceeding as Planned	N/A

1 H. Nuclear Generation Comparison Tables by MWC for Non-Safety, Reliability, and Maintenance Work Tables

**TABLE 4-9
2023 RSAR
2023 GRC CYCLE NUCLEAR GENERATION EXPENSE COMPARISON BY MWC FOR NON-SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 RAMP Risk Name	C4 RAMP Mitigation and/or Control Name	C5 2023 GRC Testimony Reference	D RAMP Roll-up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)
1	O&M Expense	Nuclear Generation	AK	Manage Environmental Operations	Non-RAMP	Non-RAMP	Ex 5, Ch 3	No	Ongoing	Annual	2,263.3	2,077.6	(185.7)	-8.2%
2	O&M Expense	Nuclear Generation	BT	Nuclear Generation Fees	Non-SRM Total	Non-SRM Total	Ex 5, Ch 3	No	Ongoing	Annual	16,800.6	17,298.0	497.5	3.0%
3	O&M Expense	Nuclear Generation	BT	Nuclear Generation Fees	Core Damaging Event	NCORE-C5 - Independent Oversight and Training, NCORE-C6 - Regulatory Required Improvements, Ongoing Seismic Evaluations	Ex 5, Ch 3	Yes	Ongoing	Annual	12,658.0	12,811.1	153.1	1.2%
4	O&M Expense	Nuclear Generation	BT	Nuclear Generation Fees	Extended Shutdown	NSHUT-C5 - Independent Oversight and Training, NSHUT-C6 - Regulatory Required Improvements, Ongoing Seismic Evaluations	Ex 5, Ch 3	Yes	Ongoing	Annual	1,406.4	1,423.5	17.0	1.2%
5	O&M Expense	Nuclear Generation	BT	Nuclear Generation Fees	Non-RAMP	Non-RAMP	Ex 5, Ch 3	Yes	Ongoing	Annual	2,736.2	3,063.5	327.4	12.0%
6	O&M Expense	Nuclear Generation	BU	Procure DCPM Materials & Svcs	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 5, Ch 3	No	Ongoing	Annual	0.0	(118.5)	(118.5)	100.0%
7	O&M Expense	Nuclear Generation	EO	Provide Nuclear Support	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 5, Ch 3	No	Ongoing	Annual	10.4	(54.3)	(64.7)	-622.1%
8	O&M Expense	Nuclear Generation	JV	Maintain Applications and Infrastructure	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 5, Ch 7	No	Ongoing	Annual	796.5	449.1	(347.4)	-43.6%
9	O&M Expense	Nuclear Generation	OM	Operational Management	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 5, Ch 3	No	Ongoing	Annual	7,454.3	6,156.4	(1,297.9)	-17.4%
10	O&M Expense	Nuclear Generation	OS	Operational Support	Non-SRM Total	Non-SRM Total	Ex 5, Ch 3	No	Ongoing	Annual	23,816.2	24,078.6	262.4	1.1%
11	O&M Expense	Nuclear Generation	OS	Operational Support	Core Damaging Event	NCORE-C5 - Independent Oversight and Training, NCORE-C6 - Regulatory Required Improvements, Ongoing Seismic Evaluations	Ex 5, Ch 3	Yes	Ongoing	Annual	14,966.8	16,171.7	1,204.9	8.1%
12	O&M Expense	Nuclear Generation	OS	Operational Support	Extended Shutdown	NSHUT-C5 - Independent Oversight and Training, NSHUT-C6 - Regulatory Required Improvements, Ongoing Seismic Evaluations	Ex 5, Ch 3	Yes	Ongoing	Annual	1,663.0	1,796.9	133.9	8.1%
13	O&M Expense	Nuclear Generation	OS	Operational Support	Non-SRM	Non-SRM (Non-RAMP)	Ex 5, Ch 3	Yes	Ongoing	Annual	7,186.4	6,110.0	(1,076.4)	-15.0%

TABLE 4-10
2023 RSAR
2020 GRC CYCLE NUCLEAR GENERATION CAPITAL COMPARISON BY MWC FOR NON-SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)

	A	B	C1	C2	C3	C4	C5	D	E	F	G	H	I	J
Line No	Type (O&M Expense or Capital)	Functional Area	MWC	MWC Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (H-G)	Spending Percent Variance for 2023 (%) ((H-G)/G*100)
1	Capital	Nuclear Generation	05	Tools and Equipment	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 5, Ch 3	No	Ongoing	Annual	747.0	2,246.0	1,499.0	200.7%
2	Capital	Nuclear Generation	2F	Build IT Apps and Infrastructure	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 5, Ch 7	No	Ongoing	Annual	1,323.0	1,431.0	108.0	8.2%

1 **I. Nuclear Generation MWC Descriptions – Expense**

2 **MWC AB – Miscellaneous Expense** – Includes miscellaneous support cost
3 from both within and outside of Nuclear Generation. Also, used for General
4 Rate Case imputed adopted for levelizing the cost of nuclear refueling outages
5 when two outages are forecast to occur in a single year. Refueling outage
6 recorded costs are recorded in other MWCs as appropriate. This MWC relates
7 to safety, reliability, or maintenance because the costs are associated with
8 levelizing the cost of nuclear refueling outages when two outages are forecast to
9 occur in a single year, consistent with keeping the generation facilities reliable.

10 **MWC AK – Manage Environmental Operations** – Includes managing the
11 environmental protection programs mandated by federal, state, and local
12 regulations. This MWC is not related to safety, reliability, and/or maintenance.

13 **MWC BP – Manage Diablo Canyon Power Plant (DCPP) Business** –
14 Includes: (1) all activities associated with representing Pacific Gas and Electric
15 Company (PG&E) and providing technical input to committees, owners groups,
16 industry, professional and trade associations that support electric utilities;
17 (2) dues to the Institute of Nuclear Power Operators, Nuclear Energy Institute,
18 Strategic Teaming and Resource Sharing, and Diablo Canyon Independent
19 Safety Committee; (3) land management activities; and (4) planned emergent
20 work funding for the entire Nuclear Generation organization. This MWC relates
21 to safety, reliability, or maintenance because the costs are associated with the
22 above programs, consistent with keeping the generation facility safe and
23 reliable.

24 **MWC BQ – DCPD Support Services** – Includes support for the
25 management and implementation of the Security, Industrial Safety and Health,
26 Emergency Preparedness and Fire Protection programs. This MWC relates to
27 safety, reliability, or maintenance because the costs are associated with
28 Security, Industrial Safety and Health, Emergency Preparedness and Fire
29 Protection programs, consistent with keeping the generation facility safe.

30 **MWC BR – Operate DCPD Plant** – Includes all activities to operate the
31 plant, radiation control, monitoring of plant chemistry, managing radioactive
32 waste and hazardous waste generation, nuclear fuel movement, and reactor
33 physics testing. This MWC relates to safety, reliability, or maintenance because

1 the costs are associated with the above programs, consistent with keeping the
2 generation facility safe and reliable.

3 **MWC BS – Maintain DCPD Plant Assets** – Includes all preventative and
4 corrective maintenance activities for systems, structures, and components at the
5 plant. This MWC relates to safety, reliability, or maintenance because the costs
6 are associated with maintaining generation equipment.

7 **MWC BT – Nuclear Generation Fees** – Includes Nuclear Regulatory
8 Commission (NRC) license fees and supporting contracts to conduct training
9 programs for license and non-license operator, maintenance, engineering, and
10 all general employee training development and delivery. This MWC is not
11 related to safety, reliability, and/or maintenance.

12 **MWC BU – Procure DCPD Materials & Services** – Includes cost for
13 under/over clearing of material burden. This MWC is not related to safety,
14 reliability, and/or maintenance.

15 **MWC BV – Maintain DCPD Plant Configuration** – Includes design
16 engineering, system engineering, component engineering, reactor engineering,
17 in service testing and inspection, reliability engineering, and fire protection
18 engineering. This MWC relates to safety, reliability, or maintenance because the
19 costs are associated with the above programs, consistent with keeping the
20 generation facility safe and reliable.

21 **MWC EO – Provide Nuclear Support** – Includes cost for plant support
22 provided by PG&E's Corporate Support organizations such as security and
23 communications. This MWC is not related to safety, reliability, and/or
24 maintenance.

25 **MWC IG – Manage Balancing Account Processes** – Includes costs
26 subject to the 2-way balancing account established for Nuclear Safety and
27 Security regulatory mandated projects. This MWC relates to safety, reliability, or
28 maintenance because the costs are associated with nuclear safety and security,
29 consistent with keeping the generation facility safe.

30 **MWC JV – Maintain Applications and Infrastructure** – Includes costs for
31 ongoing maintenance, operations and repair for PG&E's Information Technology
32 (IT) applications, systems and infrastructure. This MWC is not related to safety,
33 reliability, and/or maintenance.

1 **MWC OM – Operational Management** – Includes labor and
2 employee-related costs to provide supervision and management support.
3 MWC OM also includes costs incurred by the administrative staff working for the
4 supervisors/managers. This MWC is not related to safety, reliability, and/or
5 maintenance.

6 **MWC OS – Operational Support** – Includes labor and employee-related
7 costs to provide services and support that are unrelated to supervision and
8 management. Examples include Business Finance and Sourcing that support
9 the LOBs. This MWC is not related to safety, reliability, and/or maintenance.

10 **J. Nuclear Generation MWC Descriptions – Capital**

11 **MWC 05 – Tools and Equipment** – Includes replacement of tools and shop
12 equipment. This MWC is not related to safety, reliability, and/or maintenance.

13 **MWC 20 – DCPD Capital Projects** – Includes replacement of capital
14 structures, systems and components that no longer can be maintained to safely
15 and reliably operate and protect the plant. There are three major drivers to
16 these replacements: (1) reliability has degraded to cause replacement to be
17 needed; (2) obsolete replacement material, not allowing proper maintenance to
18 continue; and (3) regulatory driven NRC requirements. This MWC relates to
19 safety, reliability, or maintenance because the costs are associated with the
20 replacement of capital structures, systems and components that no longer can
21 be maintained to safely and reliably operate and protect the plant.

22 **MWC 2F – Build Applications and Infrastructure** – Includes the costs to
23 design, develop and enhance applications, systems and infrastructure
24 technology solutions. This MWC is not related to safety, reliability, and/or
25 maintenance.

1 K. Power Generation Comparison Summary Tables

**TABLE 4-11
2023 RSAR
2023 GRC CYCLE POWER GENERATION EXPENSE COMPARISON SUMMARY
(THOUSANDS OF DOLLARS)**

Line No	A	B	C1	C2	D	E	F	G
	Type (O&M Expense or Capital)	Functional Area	Spending Category - MWC	MWC	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (E-D)	Percent Variance for 2023 (%) ((E-D)/D)
1	O&M Expense	Power Generation	Misc Expense	AB	8,046.3	3,595.2	(4,451.2)	-55.3%
2	O&M Expense	Power Generation	Manage Environmental Oper	AK	4,185.3	2,968.3	(1,217.1)	-29.1%
3	O&M Expense	Power Generation	Maint Resv,Dams&Waterways	AX	30,569.0	31,022.5	453.5	1.5%
4	O&M Expense	Power Generation	Habitat and Species Protection	AY	274.0	144.9	(129.1)	-47.1%
5	O&M Expense	Power Generation	Perf Reimburs Wk for Oth	BC	67.1	353.3	286.2	426.3%
6	O&M Expense	Power Generation	Manage Property & Bldgs	EP	1,274.1	1,939.5	665.4	52.2%
7	O&M Expense	Power Generation	Manage Var Bal Acct Processes	IG	26,737.0	25,495.2	(1,241.9)	-4.6%
8	O&M Expense	Power Generation	Maintain IT Apps & Infra	JV	539.9	317.3	(222.6)	-41.2%
9	O&M Expense	Power Generation	Operate Hydro Generation	KG	38,215.8	38,083.9	(131.9)	-0.3%
10	O&M Expense	Power Generation	Maint Hydro Generating Equip	KH	24,467.7	24,223.6	(244.2)	-1.0%
11	O&M Expense	Power Generation	Maint Hydro Bldg,Grnd,Infrast	KI	15,363.2	13,579.1	(1,784.1)	-11.6%
12	O&M Expense	Power Generation	License Compliance Hydro Gen	KJ	25,712.8	24,591.5	(1,121.3)	-4.4%
13	O&M Expense	Power Generation	Operate Fossil Generation	KK	14,949.8	15,712.8	763.0	5.1%
14	O&M Expense	Power Generation	Maint Fossil Generating Equip	KL	31,949.3	20,725.8	(11,223.5)	-35.1%
15	O&M Expense	Power Generation	Maint Fossil Bldg,Grnd,Infrast	KM	3,318.6	2,934.2	(384.4)	-11.6%
16	O&M Expense	Power Generation	Operate Alternative Gen	KQ	484.3	3,406.7	2,922.4	603.4%
17	O&M Expense	Power Generation	Maint AltGen Generating Equip	KR	1,351.6	3,905.8	2,554.1	189.0%
18	O&M Expense	Power Generation	Maint AltGen Bldg,Grnd,Infrast	KS	566.8	911.3	344.5	60.8%
19	O&M Expense	Power Generation	Operational Management	OM	3,496.0	2,339.4	(1,156.5)	-33.1%
20	O&M Expense	Power Generation	Operational Support	OS	4,123.3	13,074.1	8,950.8	217.1%
21	O&M Expense	Power Generation	Corporate Items	ZC	1,575.3	1,459.7	(115.5)	-7.3%
22	O&M Expense	Power Generation	TOTAL		237,267.3	230,783.9	(6,483.4)	-2.7%

**TABLE 4-12
2023 RSAR
2023 GRC CYCLE POWER GENERATION CAPITAL COMPARISON SUMMARY
(THOUSANDS OF DOLLARS)**

Line No	A	B	C1	C2	D	E	F	G
	Type (O&M Expense or Capital)	Functional Area	Spending Category - MWC	MWC	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (E-D)	Percent Variance for 2023 (%) ((E-D)/D)
1	Capital	Power Generation	Tools & Equipment	05	1,062.0	7,426.9	6,364.9	599.3%
2	Capital	Power Generation	Relicensing Hydro Gen	11	4,685.1	917.7	(3,767.5)	-80.4%
3	Capital	Power Generation	Implement Environment Projects	12	425.8	33.8	(392.0)	-92.1%
4	Capital	Power Generation	Build IT Apps & Infra	2F	2,755.9	4,951.3	2,195.4	79.7%
5	Capital	Power Generation	Instl/Rpl for Hydro Safety&Reg	2L	63,080.2	25,395.9	(37,684.2)	-59.7%
6	Capital	Power Generation	Instal/Repl Hydro Gneratng Eqp	2M	84,621.6	115,907.7	31,286.1	37.0%
7	Capital	Power Generation	Instal/Repl Resv,Dams&Waterway	2N	42,763.8	46,960.5	4,196.7	9.8%
8	Capital	Power Generation	Instl/Repl Hydr BldgGrndInfrst	2P	26,624.7	41,827.2	15,202.5	57.1%
9	Capital	Power Generation	Instal/Repl Fossil Gneratng Eqp	2S	3,487.4	14,734.9	11,247.5	322.5%
10	Capital	Power Generation	Instl/Repl Fossil BldgGrndInfrst	2T	1,588.3	1,149.2	(439.0)	-27.6%
11	Capital	Power Generation	Instl/Rpl for AltGen Safty&Reg	3A	6.5	0.0	(6.5)	-100.0%
12	Capital	Power Generation	Instal/Repl AltGen GneratngEqp	3B	718.6	2,064.7	1,346.0	187.3%
13	Capital	Power Generation	Hydroelec Lic & Lic Conditions	3H	145,223.8	35,346.7	(109,877.1)	-75.7%
14	Capital	Power Generation	Total		377,043.7	296,716.5	(80,327.2)	-21.3%

1 L. Power Generation Comparison by MWC for Safety, Reliability, and Maintenance Work Tables

**TABLE 4-13
2023 RSAR
2023 GRC CYCLE POWER GENERATION EXPENSE COMPARISON BY MWC FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 RAMP Risk Name	C4 RAMP Mitigation and/or Control Name	C5 2023 GRC Testimony Reference	D RAMP Roll- up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%)	K1 Spending Variance Explanation Required	K2 Percentage Variance Explanation Required	L 2023 Cost Variance Explanation	Forecast			N Status	O Completion Status Statement
																		M1 Scope (U, O, or T)	M2 Schedule (U, O, or T)	M3 Budget (U, O, or T)		
1	O&M Expense	Power Generation	AX	Maint Resv,Dams&Waterways	SRM Total	SRM Total	Ex 5, Ch 4	No	On-going	annual	30,569.0	31,022.5	453.5	1.5%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
2	O&M Expense	Power Generation	AX	Maint Resv,Dams&Waterways	Large Uncontrolled Water Release	C1 - Dam Safety Program	Ex 5, Ch 2	Yes	N/A	N/A	341.0	1,918.3	1,577.3	462.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3	O&M Expense	Power Generation	AX	Maint Resv,Dams&Waterways	Large Uncontrolled Water Release	M1 - Internal Erosion Mitigation	Ex 5, Ch 2	Yes	N/A	N/A	0.0	580.9	580.9	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4	O&M Expense	Power Generation	AX	Maint Resv,Dams&Waterways	Large Uncontrolled Water Release	M2 - Spillway Remediation	Ex 5, Ch 2	Yes	N/A	N/A	0.0	150.3	150.3	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5	O&M Expense	Power Generation	AX	Maint Resv,Dams&Waterways	Large Uncontrolled Water Release	M4 - LLO Refurbishment	Ex 5, Ch 2	No	N/A	N/A	8,754.3	0.0	(8,754.3)	-100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	O&M Expense	Power Generation	AX	Maint Resv,Dams&Waterways	SRM Total (Non- RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 4	Yes	N/A	N/A	21,473.7	28,373.1	6,899.4	32.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7	O&M Expense	Power Generation	BC	Perf Reimburs Wk for Oth Manage Var Bal Acct Processes	SRM Total (Non- RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 4	No	On-going	annual	67.1	353.3	286.2	426.3%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
8	O&M Expense	Power Generation	IG	Manage Var Bal Acct Processes	SRM Total	SRM Total	Ex 5, Ch 4	No	On-going	annual	26,737.0	25,495.2	(1,241.9)	-4.6%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
9	O&M Expense	Power Generation	IG	Manage Var Bal Acct Processes	Large Uncontrolled Water Release	C1 - Dam Safety Program	Ex 5, Ch 2	Yes	N/A	N/A	497.7	49.4	(448.4)	-90.1%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10	O&M Expense	Power Generation	IG	Manage Var Bal Acct Processes	Large Uncontrolled Water Release	M2 - Spillway Remediation	Ex 5, Ch 2	Yes	N/A	N/A	485.9	1,396.1	910.2	187.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11	O&M Expense	Power Generation	IG	Manage Var Bal Acct Processes	SRM Total (Non- RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 4	Yes	N/A	N/A	25,753.4	24,049.7	(1,703.7)	-6.6%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12	O&M Expense	Power Generation	KG	Operate Hydro Generation	SRM Total	SRM Total	Ex 5, Ch 4	No	On-going	annual	38,215.8	38,083.9	(131.9)	-0.3%	NO	NO	Below threshold variance.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
13	O&M Expense	Power Generation	KG	Operate Hydro Generation	Large Uncontrolled Water Release	M3 - Seismic Retrofit	Ex 5, Ch 2	Yes	N/A	N/A	0.0	213.4	213.4	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14	O&M Expense	Power Generation	KG	Operate Hydro Generation	SRM Total (Non- RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 4	Yes	N/A	N/A	38,215.8	37,870.4	(345.3)	-0.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
15	O&M Expense	Power Generation	KH	Maint Hydro Generating Equip	SRM Total (Non- RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 4	No	On-going	annual	24,467.7	24,223.6	(244.2)	-1.0%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
16	O&M Expense	Power Generation	KI	Maint Hydro Bldg,Grrnd,Infrast	SRM Total (Non- RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 4	No	On-going	annual	15,363.2	13,579.1	(1,784.1)	-11.6%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
17	O&M Expense	Power Generation	KJ	License Compliance Hydro Gen	SRM Total	SRM Total	Ex 5, Ch 4	No	On-going	annual	25,712.8	24,591.5	(1,121.3)	-4.4%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
18	O&M Expense	Power Generation	KJ	License Compliance Hydro Gen	Large Uncontrolled Water Release	C1 - Dam Safety Program	Ex 5, Ch 2	Yes	N/A	N/A	9,069.0	9,598.3	529.3	5.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	O&M Expense	Power Generation	KJ	License Compliance Hydro Gen	SRM Total (Non- RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 4	Yes	N/A	N/A	16,643.8	14,993.1	(1,650.6)	-9.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
20	O&M Expense	Power Generation	KK	Operate Fossil Generation	SRM Total (Non- RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 5	No	On-going	annual	14,949.8	15,712.8	763.0	5.1%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A

**TABLE 4-13
2023 RSAR
2023 GRC CYCLE POWER GENERATION EXPENSE COMPARISON BY MWC FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 RAMP Risk Name	C4 RAMP Mitigation and/or Control Name	C5 2023 GRC Testimony Reference	D RAMP Roll-up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%)	K1 Spending Variance Explanation Required	K2 Percentage Variance Explanation Required	L 2023 Cost Variance Explanation	M1	M2 Forecast		M3	N Status	O Completion Status Statement
																		Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)			
21	O&M Expense	Power Generation	KL	Maint Fossil Generating Equip	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 5	No	On-going	annual	31,949.3	20,725.8	(11,223.5)	-35.1%	YES	YES	Program expenses were below imputed adopted values due to the Long-Term Service Agreement costs, which are levelized in the imputed adopted value; however, the outage work associated with these costs only occurs on a periodic basis once every 4 to 5 years depending on operating profile. No major outage tied to the Long-Term Service Agreement occurred in 2023 at either Gateway Generation Station or Colusa Generation Station. Thus, no actual costs tied to the Agreement were recorded in 2023.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to support costs to maintain fossil power generating station equipment.	
22	O&M Expense	Power Generation	KM	Maint Fossil Bldg,Grnd,Infrast	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 5	No	On-going	annual	3,318.6	2,934.2	(384.4)	-11.6%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
23	O&M Expense	Power Generation	KQ	Operate Alternative Gen	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 5	No	On-going	annual	484.3	3,406.7	2,922.4	603.4%	NO	NO	Below variance threshold.	Over	Over	Over	Emergent	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to support costs to operate alternative generation sites. In 2022, PG&E transferred O&M responsibilities for the Elkhorn Battery Energy Storage Station from Electric Distribution (Exhibit 4, MWC AB) to Power Generation (Exhibit 5, MWs KQ and KR). Since the transfer occurred after the 2023 GRC was filed, the imputed adopted amounts for MWC KQ do not reflect Power Generation's ongoing O&M costs for the facility. Starting in the 2027 GRC, the Elkhorn Battery Energy Storage Station O&M costs will be forecast in the Energy Supply Exhibit.	
24	O&M Expense	Power Generation	KR	Maint AltGen Generating Equip	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 5	No	On-going	annual	1,351.6	3,905.8	2,554.1	189.0%	NO	NO	Below variance threshold.	Over	Over	Over	Emergent	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to support costs to maintain alternative generation sites. In 2022, PG&E transferred O&M responsibilities for the Elkhorn Battery Energy Storage Station from Electric Distribution (Exhibit 4, MWC AB) to Power Generation (Exhibit 5, MWs KQ and KR). Since the transfer occurred after the 2023 GRC was filed, the imputed adopted amounts for MWC KR do not reflect Power Generation's ongoing O&M costs for the facility. Starting in the 2027 GRC, the Elkhorn Battery Energy Storage Station O&M costs will be forecast in the Energy Supply Exhibit.	
25	O&M Expense	Power Generation	KS	Maint AltGen Bldg,Grnd,Infrast	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 5	No	On-going	annual	566.8	911.3	344.5	60.8%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	

**TABLE 4-14
2023 RSAR
2023 GRC CYCLE POWER GENERATION CAPITAL COMPARISON BY MWC FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 RAMP Risk Name	C4 RAMP Mitigation and/or Control Name	C5 2023 GRC Testimony Reference	D RAMP Roll- up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K1 Spending Variance Explanation Required (Y/N)	K2 Percentage Variance Explanation Required (Y/N)	L 2023 Cost Variance Explanation	Forecast			N Status	O Completion Status Statement	
																		M1 Scope (U, O, or T)	M2 Schedule (U, O, or T)	M3 Budget (U, O, or T)			
1	Capital	Power Generation	2L	Instl/Rpl for Hydro Safety&Reg	SRM Total	SRM Total	Ex 5, Ch 4	No	On-going	annual	63,080.2	25,395.9	(37,684.2)	-59.7%	YES	YES	Program expenses were below imputed adopted values due to rescheduled work from 2023 into the 2024-2026 period, including the following work: Fordyce Dam Leakage Reduction, Pit 6 Radial Gate 1 Replace Arms & Trunnions, and Lower Bucks Dam Resurface Downstream Face.	On-Target	On-Target	On-Target	Proceeding as planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to support capital costs primarily related to employee or public safety and regulatory requirements that are not connected with relicensing for hydroelectric generation.	
2	Capital	Power Generation	2L	Instl/Rpl for Hydro Safety&Reg	Large Uncontrolled Water Release	M1 - Internal Erosion Mitigation	Ex 5, Ch 2, p. 2-13; p. WP 2-2	Yes	N/A	N/A	25,100.9	6,464.6	(18,636.3)	-74.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3	Capital	Power Generation	2L	Instl/Rpl for Hydro Safety&Reg	Large Uncontrolled Water Release	M2 - Spillway Remediation	Ex 5, Ch 2, p. 2-13; p. WP 2-2	Yes	N/A	N/A	4,225.4	577.8	(3,647.5)	-86.3%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4	Capital	Power Generation	2L	Instl/Rpl for Hydro Safety&Reg	Large Uncontrolled Water Release	M3 - Seismic Retrofit	Ex 5, Ch 2, p. 2-13; p. WP 2-2	Yes	N/A	N/A	26,938.4	333.6	(26,604.8)	-98.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5	Capital	Power Generation	2L	Instl/Rpl for Hydro Safety&Reg	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 4, p. 4-78	Yes	N/A	N/A	6,814.5	18,019.9	11,205.4	164.4%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	Capital	Power Generation	2M	Instal/Repl Hydro Generating Eqp	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 4	No	On-going	annual	84,621.6	115,907.7	31,286.1	37.0%	YES	YES	Program expenses were above imputed adopted values due to: 1) work rescheduled from 2021 and 2022 into 2023, and 2) emergent work exceeding the forecast at the time of the 2023 GRC. Rescheduled work included Caribou 2-5 Generator Rewind, Pit 7 Replace Transformer Bank 1, and Haas Unit 1 Rotor Pole Refurbishment. Emergent work included Bucks Creek Unit 2 Replace Rotor, Cresta Replace Unit 2 Seal Rings, Pit 1 Unit 1 Refurbish Lower Guide Bearing, and Belden Replace Thrust Bearing.	On-Target	On-Target	On-Target	Proceeding as planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to support capital costs to install/replace generating equipment or components to support hydroelectric generation activities.	
7	Capital	Power Generation	2N	Instal/Repl Resv,Dams&Waterway	SRM Total	SRM Total	Ex 5, Ch 4	No	On-going	annual	42,763.8	46,960.5	4,196.7	9.8%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as planned	N/A	
8	Capital	Power Generation	2N	Instal/Repl Resv,Dams&Waterway	Large Uncontrolled Water Release	C1 - Dam Safety Program	Ex 5, Ch 4, p. 4-78	Yes	N/A	N/A	0.0	1,034.6	1,034.6	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
9	Capital	Power Generation	2N	Instal/Repl Resv,Dams&Waterway	Large Uncontrolled Water Release	M1 - Internal Erosion Mitigation	Ex 5, Ch 2, p. 2-13; p. WP 2-2	Yes	N/A	N/A	416.4	3,433.5	3,017.1	724.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10	Capital	Power Generation	2N	Instal/Repl Resv,Dams&Waterway	Large Uncontrolled Water Release	M2 - Spillway Remediation	Ex 5, Ch 2, p. 2-13; p. WP 2-2	Yes	N/A	N/A	173.5	4,727.4	4,553.9	2624.8%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
11	Capital	Power Generation	2N	Instal/Repl Resv,Dams&Waterway	Large Uncontrolled Water Release	M3 - Seismic Retrofit	Ex 5, Ch 2, p. 2-13; p. WP 2-2	Yes	N/A	N/A	0.0	51.4	51.4	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
12	Capital	Power Generation	2N	Instal/Repl Resv,Dams&Waterway	Large Uncontrolled Water Release	M4 - LLO Refurbishments	Ex 5, Ch 2, p. 2-13; p. WP 2-2	Yes	N/A	N/A	8,825.6	8,428.1	(397.5)	-4.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
13	Capital	Power Generation	2N	Instal/Repl Resv,Dams&Waterway	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 4, p. 4-78	Yes	N/A	N/A	33,348.1	29,285.5	(4,062.6)	-12.2%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
14	Capital	Power Generation	2P	Instl/Repl Hydr BldgGrndInfrst	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 4	No	On-going	annual	26,624.7	41,827.2	15,202.5	57.1%	YES	YES	Program expenses exceeded imputed adopted values due to: 1) rescheduled work, and 2) emergent work. The rescheduled work includes Helms McKinley Grove Road Improvements, which was accelerated from 2025-2026 into 2023, and Rock Creek Valvehouse Replace Roof, which was rescheduled from 2022 into 2023. The emergent road work was at Caribou Powerhouse.	On-Target	On-Target	On-Target	Proceeding as planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to support capital costs to install/replace buildings, grounds and infrastructure to support hydroelectric generation activities, including roads and bridges.	
15	Capital	Power Generation	2S	Instal/Repl Fossil Generating Eqp	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 5	No	On-going	annual	3,487.4	14,734.9	11,247.5	322.5%	YES	YES	Program expenses exceeded imputed adopted values due to emergent work at Gateway, Colusa, and Humboldt. The Gateway facility work includes the main steam shop control valve body replacement and alternative design steam attemperator. The Colusa facility work includes the Heat Recovery Steam Generator (HRSG) 1 bypass valve replacement, the HRSG1 blowdown tank replacement, and the flex seal replacement unit 1 and 2. The Humboldt facility work includes the annual critical spares replacement program and the Unified Controls (UNIC) software Upgrade for 2023-2024.	On-Target	On-Target	On-Target	Proceeding as planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to support capital costs to install new or replace existing generating equipment or components to support fossil generation activities. As the fossil generating facilities age, the capital replacement costs accelerate.	
16	Capital	Power Generation	2T	Instl/Repl Fossil BldgGrndInfrst	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 5	No	On-going	annual	1,588.3	1,149.2	(439.0)	-27.6%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as planned	N/A	
17	Capital	Power Generation	3A	Instl/Rpl for AltGen Safety&Reg	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 5	No	On-going	annual	6.5	0.0	(6.5)	-100.0%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as planned	N/A	
18	Capital	Power Generation	3B	Instal/Repl AltGen GeneratingEqp	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 5	No	On-going	annual	718.6	2,064.7	1,346.0	187.3%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as planned	N/A	
19	Capital	Power Generation	3H	Hydroelec Lic & Lic Conditions	SRM Total	SRM Total	Ex 5, Ch 4	No	On-going	annual	145,223.8	35,356.7	(109,867.1)	-75.7%	YES	YES	Program expenses were below imputed adopted due to two key drivers: (1) a delay in the regulatory process related to FERC operating license renewals for the Drum-Spaulding license, McCloud-Pit license and the Upper North Fork Feather River license. Delays in license renewals create delays in the forecasted start date of the capital work required as part of the new operating license; and (2) rescheduled capital projects originating from the spillway assessment recommendations resulting from the 2017 Oroville spillway incident. The rescheduled projects include McCloud Spillway improvement, Tiger Creek Regulator Spillway Improvement, and Butt Valley Spillway Improvement.	On-Target	On-Target	On-Target	Proceeding as planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is a continuing effort to support capital costs assigned to the HLBA. This MWC includes: costs for relicensing existing FERC licenses; obtaining major license amendments; surrendering licenses for facilities that are no longer economic; complying with the conditions required by existing and newly issued FERC licenses and major license amendments; and anticipated to be required by pending new FERC licenses for licenses. This includes costs for all pending licenses as of January 1, 2014, and new licenses applied for after January 1, 2014. This MWC also includes the costs associated with work required because of the 2017 Oroville spillway incident.	
20	Capital	Power Generation	3H	Hydroelec Lic & Lic Conditions	Large Uncontrolled Water Release	M2 - Spillway Remediation	Ex 5, Ch 2, p. 2-13; p. WP 2-2	Yes	N/A	N/A	73,892.8	18,869.2	(55,023.6)	-74.5%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
21	Capital	Power Generation	3H	Hydroelec Lic & Lic Conditions	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 5, Ch 4, p. 4-78	Yes	N/A	N/A	71,329.6	16,477.5	(54,852.1)	-76.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

1 M. Power Generation Comparison by MWC for Non-Safety, Reliability, and Maintenance Work Tables

TABLE 4-15
2023 RSAR
2023 GRC CYCLE POWER GENERATION CAPITAL COMPARISON BY MWC FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)

	A	B	C1	C2	C3	C4	C5	D	E	F	G	H	I	J
Line No	Type (O&M Expense or Capital)	Functional Area	MWC	MWC Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (H-G)	Spending Percent Variance for 2023 (%) ((H-G)/G*100)
1	O&M Expense	Power Generation	AB	Business / Miscellaneous Expense	Non-SRM Total	Non-SRM Total	Ex 5, Ch 4	No	On-going	annual	8,046.3	3,595.2	(4,451.2)	-55.3%
2	O&M Expense	Power Generation	AK	Manage Environmental Operations	Non-SRM Total	Non-SRM Total	Ex 5, Ch 4	No	On-going	annual	4,185.3	2,968.3	(1,217.1)	-29.1%
3	O&M Expense	Power Generation	AY	Habitat and Species Protection	Non-SRM Total	Non-SRM Total	Ex 5, Ch 4	No	On-going	annual	274.0	144.9	(129.1)	-47.1%
4	O&M Expense	Power Generation	EP	Manage Property & Buildings	Non-SRM Total	Non-SRM Total	Ex 5, Ch 4	No	On-going	annual	1,274.1	1,939.5	665.4	52.2%
5	O&M Expense	Power Generation	JV	Maintain Applications and Infrastructure	Non-SRM Total	Non-SRM Total	Ex 5, Ch 7	No	On-going	annual	539.9	317.3	(222.6)	-41.2%
6	O&M Expense	Power Generation	OM	Operational Management	Non-SRM Total	Non-SRM Total	Ex 5, Ch 4 & Ch 5	No	On-going	annual	3,496.0	2,339.4	(1,156.5)	-33.1%
7	O&M Expense	Power Generation	OS	Operational Support	Non-SRM Total	Non-SRM Total	Ex 5, Ch 4 & Ch 5	No	On-going	annual	4,123.3	13,074.1	8,950.8	217.1%
8	O&M Expense	Power Generation	ZC	Corporate Items	Non-SRM Total	Non-SRM Total	Ex 5, Ch 4	No	On-going	annual	1,575.3	1,459.7	(115.5)	-7.3%

TABLE 4-16
2023 RSAR
2023 GRC CYCLE POWER GENERATION CAPITAL COMPARISON BY MWC FOR NON-SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)

	A	B	C1	C2	C3	C4	C5	D	E	F	G	H	I	J
Line No	Type (O&M Expense or Capital)	Functional Area	MWC	MWC Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (H-G)	Spending Percent Variance for 2023 (%) ((H-G)/G*100)
1	Capital	Power Generation	05	Tools & Equipment	Non-SRM Total	Non-SRM Total	Ex 5, Ch 4	No	On-going	annual	1,062.0	7,426.9	6,364.9	599.3%
2	Capital	Power Generation	11	Relicensing and License Compliance Hydro Electric Generation	Non-SRM Total	Non-SRM Total	Ex 5, Ch 4	No	On-going	annual	4,685.1	917.7	(3,767.5)	-80.4%
3	Capital	Power Generation	12	Implement Environmental Projects	Non-SRM Total	Non-SRM Total	Ex 5, Ch 4	No	On-going	annual	425.8	33.8	(392.0)	-92.1%
4	Capital	Power Generation	2F	Build Applications and Infrastructure	Non-SRM Total	Non-SRM Total	Ex 5, Ch 7	No	On-going	annual	2,755.9	4,951.3	2,195.4	79.7%

1 **N. Power Generation MWC Descriptions – Expense**

2 **MWC AB – Business/Miscellaneous Expense** – Includes costs associated
3 with efficiency savings, Land Conservation Commitment, Contracts and
4 Consulting Services, and miscellaneous support costs. This MWC is not related
5 to safety, reliability, and/or maintenance.

6 **MWC AK – Manage Environmental Operations** – Includes costs
7 associated with managing environmental operations. This MWC is not related to
8 safety, reliability, and/or maintenance.

9 **MWC AX – Maintain Hydro Reservoirs, Dams & Waterways** – Includes
10 costs associated with maintenance of hydroelectric reservoirs, dams, and water
11 conveyance systems. These maintenance activities also ensure safety through
12 routine and preventive maintenance. This MWC relates to safety, reliability, or
13 maintenance because the costs are associated with maintaining the hydro dams
14 and water conveyance systems.

15 **MWC AY – Habitat and Species Protection** – Includes compliance with
16 regulations to protect endangered species and sensitive habitats as part of
17 PG&E’s broader Environmental Stewardship Program. This MWC is not related
18 to safety, reliability, and/or maintenance.

19 **MWC BC – Perform Reimbursable Work for Others** – Includes costs
20 associated with managing the irrigation district contracts and the reimbursable
21 expenses incurred to perform maintenance on behalf of the irrigation districts.
22 Also includes reimbursable work for other third parties. This MWC relates to
23 safety, reliability, or maintenance because the costs are associated with
24 performing maintenance work for third parties.

25 **MWC EP – Manage Property & Buildings** – Includes costs associated with
26 managing land rights and property leases in support of the operation of hydro
27 power plants. This MWC is not related to safety, reliability, and/or maintenance.

28 **MWC ES – Implement Environmental Projects** – Includes costs
29 associated with the implementing environmental projects and programs. This
30 MWC is not related to safety, reliability, and/or maintenance.

31 **MWC IG – Balancing Account** – Regulatory Compliance Hydro Electric
32 Generation – includes costs assigned to the Hydro Licensing Balancing Account
33 (HLBA). This MWC includes: (1) costs to maintain Federal Energy Regulatory
34 Commission (FERC) license compliance to support hydroelectric generation

1 activities for licenses received after January 1, 2014; (2) regulatory fees;
2 (3) costs associated with implementation of the Crane Valley Recreation
3 Settlement Agreement; and (4) costs associated with work required because of
4 the 2017 Oroville spillway incident. This MWC relates to safety, reliability, or
5 maintenance because the costs are associated with regulatory compliance that
6 often includes safety and/or reliability related expenditures. Please see
7 Section 10, Cost Recovery Balancing and Memorandum Accounts.

8 **MWC IG – Wildfire Mitigation Plan Memorandum Account (WMPMA) –**

9 Includes costs for which PG&E is seeking recovery through WMPMA. This
10 MWC relates to safety, reliability, or maintenance because the costs are
11 associated with clearing a defensible space around the generation facilities.

12 **MWC JV – Maintain Applications and Infrastructure –** Includes costs for

13 ongoing maintenance, operations and repair for PG&E’s IT applications,
14 systems and infrastructure. This MWC is not related to safety, reliability, and/or
15 maintenance.

16 **MWC KG – Operate Hydro Electric Generation –** Includes costs to

17 operate hydroelectric power generating stations and associated facilities. This
18 MWC relates to safety, reliability, or maintenance because the costs are
19 associated with operating the hydro facilities safely and reliably.

20 **MWC KH – Maintain Hydro Electric Generating Equipment –** Includes

21 costs to maintain generating equipment or components to support hydroelectric
22 generation activities. This MWC relates to safety, reliability, or maintenance
23 because the costs are associated with maintaining generation equipment.

24 **MWC KI – Maintain Hydro Electric Generation Buildings, Grounds &**

25 **Infrastructure –** Includes costs to maintain buildings, grounds and infrastructure
26 to support hydroelectric generation activities, including roads and bridges. This
27 MWC relates to safety, reliability, or maintenance because the costs are
28 associated with maintaining buildings, grounds and infrastructure.

29 **MWC KJ – Regulatory Compliance Hydro Electric Generation –** Includes

30 costs to maintain FERC license compliance to support hydroelectric generation
31 activities for licenses received prior to January 1, 2014. This MWC relates to
32 safety, reliability, or maintenance because the costs are associated with
33 regulatory compliance that often includes safety and/or reliability related
34 expenditures.

1 **MWC KK – Operate Fossil Generation** – Includes costs to operate fossil
2 power generating stations. This MWC relates to safety, reliability, or
3 maintenance because the costs are associated with operating the fossil facilities
4 safely and reliably.

5 **MWC KL – Maintain Fossil Generating Equipment** – Includes costs to
6 maintain fossil power generating station equipment. This MWC relates to safety,
7 reliability, or maintenance because the costs are associated with maintaining
8 generation equipment.

9 **MWC KM – Maintain Fossil Generation Buildings, Grounds &**
10 **Infrastructure** – Includes costs to maintain buildings, grounds and infrastructure
11 on the plant site to support fossil generation activities, including buildings and
12 facilities, roadways, landscaping, retaining walls, fencing, and yard lighting
13 systems. This MWC relates to safety, reliability, or maintenance because the
14 costs are associated with maintaining buildings, grounds and infrastructure.

15 **MWC KQ – Operate Alternative Generation** – Includes costs to operate
16 alternative generation sites. This MWC relates to safety, reliability, or
17 maintenance because the costs are associated with safely and reliably operating
18 the other generation facilities.

19 **MWC KR – Maintain Alternative Generation Generating Equipment** –
20 Includes costs to maintain alternative power generating station equipment. This
21 MWC relates to safety, reliability, or maintenance because the costs are
22 associated with maintaining generation equipment.

23 **MWC KS – Maintain Alternative Generation Building, Ground,**
24 **Infrastructure** – Includes costs to maintain photovoltaic and fuel cell generation
25 common facilities. This MWC relates to safety, reliability, or maintenance
26 because the costs are associated with maintaining buildings, grounds and
27 infrastructure.

28 **MWC OM – Operational Management** – Includes labor and employee
29 related costs to provide supervision and management support. MWC OM also
30 includes costs incurred by the administrative staff working for the
31 supervisors/managers. This MWC is not related to safety, reliability, and/or
32 maintenance.

33 **MWC OS – Operational Support** – Includes labor and employee related
34 costs to provide services and support that are unrelated to supervision and

1 management. Examples include Business Finance and Sourcing that support
2 the LOBs. This MWC is not related to safety, reliability, and/or maintenance.

3 **MWC ZC – Corporate Items** – Includes enterprise-level expenses and
4 revenues that are planned and managed separately from Business Unit budgets.
5 Examples include environmental liabilities, insurance, workers’ compensation.
6 This MWC is not related to safety, reliability, and/or maintenance.

7 **O. Power Generation MWC Descriptions – Capital**

8 **MWC 01 – IT Computing Equipment** – Includes capital costs to replace
9 computing equipment. This MWC is not related to safety, reliability, and/or
10 maintenance.

11 **MWC 03 – Office Furniture & Equipment** – Includes capital costs to
12 replace office furniture and equipment. This MWC is not related to safety,
13 reliability, and/or maintenance.

14 **MWC 05 – Tools & Equipment** – Includes purchase of tools and equipment
15 required to perform various functions to maintain the safety and reliability of
16 fossil and hydro electric generation operations. This MWC is not related to
17 safety, reliability, and/or maintenance.

18 **MWC 11 – Relicensing and License Compliance Hydro Electric**
19 **Generation** – Includes costs for complying with the conditions required by
20 FERC licenses received prior to January 1, 2014, and other compliance work
21 generally related to facility safety. This MWC is not related to safety, reliability,
22 and/or maintenance.

23 **MWC 12 – Implement Environmental Projects** – Includes costs for capital
24 projects to comply with water and air quality regulations and various oil spill
25 prevention projects. This MWC is not related to safety, reliability, and/or
26 maintenance.

27 **MWC 2F – Build Applications and Infrastructure** – Includes the costs to
28 design, develop and enhance applications, systems and infrastructure
29 technology solutions. This MWC is not related to safety, reliability, and/or
30 maintenance.

31 **MWC 2L – Install/Replace for Hydro Electric Generation Safety &**
32 **Regulatory Requirements** – Includes capital costs primarily related to
33 employee or public safety and regulatory requirements that are not connected

1 with relicensing for hydroelectric generation. This MWC relates to safety,
2 reliability, or maintenance because the costs are associated with hydro safety.

3 **MWC 2M – Install/Replace Hydro Electric Generating Equipment –**

4 Includes capital costs to install/replace generating equipment or components to
5 support hydroelectric generation activities. This MWC relates to safety,
6 reliability, or maintenance because the costs are associated with
7 installing/replacing generating equipment that is consistent with keeping the
8 generation facilities reliable.

9 **MWC 2N – Install/Replace Reservoirs, Dams & Waterways –** Includes

10 capital costs to support the operation of reservoirs, dams and waterways. This
11 MWC relates to safety, reliability, or maintenance because the costs are
12 associated with installing/replacing equipment related to dams and water
13 conveyance systems for safe and reliable operations.

14 **MWC 2P – Install/Replace Hydro Electric Generation Buildings,**

15 **Grounds & Infrastructure –** Includes capital costs to install/replace buildings,
16 grounds and infrastructure to support hydroelectric generation activities,
17 including roads and bridges. This MWC relates to safety, reliability, or
18 maintenance because the costs are associated with installing/replacing hydro
19 buildings, grounds, and infrastructure to operate the generation facilities in a
20 safe and reliable manner.

21 **MWC 2R – Install/Replace Fossil Generating Safety & Regulatory**

22 **Requirements –** Includes capital costs primarily related to employee safety or
23 regulatory requirements for fossil generation. This MWC relates to safety,
24 reliability, or maintenance because the costs are associated with fossil safety.

25 **MWC 2S – Install/Replace Fossil Generating Equipment –** Includes

26 capital costs to install new or replace existing generating equipment or
27 components to support fossil generation activities. This MWC relates to safety,
28 reliability, or maintenance because the costs are associated with
29 installing/replacing generating equipment that is consistent with keeping the
30 generation facilities reliable.

31 **MWC 2T – Install/Replace Fossil Generation Buildings, Grounds &**

32 **Infrastructure –** Includes capital costs to install or replace new buildings,
33 grounds and infrastructure on the plant site to support fossil generation activities.
34 This MWC relates to safety, reliability, or maintenance because the costs are

1 associated with installing/replacing fossil buildings, grounds, and infrastructure
2 to operate the generation facilities in a safe and reliable manner.

3 **MWC 3A – Install/Replace Alternative Fossil Generation Safety and**
4 **Regulation** – Includes capital costs associated with the installation and/or
5 replacement of safety equipment for alternative generation. This MWC relates
6 to safety, reliability, or maintenance because the costs are associated with
7 alternative generation safety.

8 **MWC 3B – Install/Replace Alternative Generation Equipment** – Includes
9 capital costs associated with the installation of solar photovoltaic generation
10 equipment. This MWC relates to safety, reliability, or maintenance because the
11 costs are associated with installing/replacing generating equipment that is
12 consistent with keeping the generation facilities reliable.

13 **MWC 3H – Balancing Account – Relicensing Hydro Electric**
14 **Generation** – Includes costs assigned to the HLBA. This MWC includes:
15 (1) costs for relicensing existing FERC licenses; obtaining major license
16 amendments; surrendering licenses for facilities that are no longer economic;
17 complying with the conditions required by existing and newly issued FERC
18 licenses and major license amendments; and anticipated to be required by
19 pending new FERC licenses for licenses. This includes costs for all pending
20 licenses as of January 1, 2014, and new licenses applied for after
21 January 1, 2014. This MWC also includes the costs associated with work
22 required because of the 2017 Oroville spillway incident. This MWC relates to
23 safety, reliability, and/or maintenance because some costs are associated with
24 spillway work that will be required because of the Oroville spillway incident.
25 Please see Section 10, Cost Recovery Balancing and Memorandum Accounts.

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 5
CUSTOMER AND COMMUNICATIONS
IMPUTED ADOPTED VS. RECORDED COMPARISON

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 5
CUSTOMER AND COMMUNICATIONS
IMPUTED ADOPTED VS. RECORDED COMPARISON

TABLE OF CONTENTS

A. Introduction.....	5-1
B. Comparison Summary Tables	5-1
C. Comparison by MWC for Safety, Reliability, and Maintenance Work	5-3
D. MWC Descriptions – Expense	5-5
E. MWC Descriptions – Capital.....	5-8
F. Comparison by MWC for Non-Safety, Reliability, and Maintenance Work	5-10

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 5
CUSTOMER AND COMMUNICATIONS
IMPUTED ADOPTED VS. RECORDED COMPARISON

A. Introduction

This section includes a comparison of the 2023 (2023 General Rate Case (GRC) Cycle) imputed adopted spend versus 2023 recorded for Pacific Gas and Electric Company's (PG&E or the Company) Customer and Communications functional area. It also provides Major Work Category (MWC) descriptions and cost-variance explanations for those programs that are related to safety, reliability, or maintenance. The MWC descriptions include how each program relates to safety, reliability, or maintenance, pursuant to Decision 19-04-020.

B. Comparison Summary Tables

TABLE 5-1
2023 RSAR
2023 GRC CYCLE CUSTOMER AND COMMUNICATIONS
EXPENSE COMPARISON SUMMARY
(THOUSANDS OF DOLLARS)

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 Spending Category - MWC	C2 MWC	D 2023 Imputed Adopted Costs	E 2023 Actual Costs	F Difference for 2023 (\$) (E-D)	G Percent Variance for 2023 (%) ((E-D)/D)
1	O&M Expense	Customer and Communications	Misc Expense	AB	0.0	0.6	0.6	100.0%
2	O&M Expense	Customer and Communications	Read & Investigate Meters	AR	(176.0)	(1,060.8)	(884.8)	-502.8%
3	O&M Expense	Customer and Communications	Manage Customer Inquiries	DK	62,628.7	64,535.2	1,906.5	3.0%
4	O&M Expense	Customer and Communications	Develop New Revenue	EL	41,051.8	39,477.0	(1,574.9)	-3.8%
5	O&M Expense	Customer and Communications	Change/Maint Used Elec Meter	EY	896.7	679.9	(216.8)	-24.2%
6	O&M Expense	Customer and Communications	Manage Var Cust Care Processes	EZ	48,080.1	60,885.6	12,805.5	26.6%
7	O&M Expense	Customer and Communications	Spc A&G/Oth Csts-Bud Dept	FA	0.0	85.7	85.7	100.0%
8	O&M Expense	Customer and Communications	Retain & Grow Customers	FK	736.9	317.4	(419.4)	-56.9%
9	O&M Expense	Customer and Communications	Manage Energy Efficiency-NonBA	GM	11,230.9	8,527.5	(2,703.4)	-24.1%
10	O&M Expense	Customer and Communications	Change/Maint Used Gas Meters	HY	6,690.7	4,685.5	(2,005.2)	-30.0%
11	O&M Expense	Customer and Communications	Manage Var Bal Acct Processes	IG	35,501.4	35,491.9	(9.6)	0.0%
12	O&M Expense	Customer and Communications	Bill Customers	IS	49,274.1	61,574.2	12,300.1	25.0%
13	O&M Expense	Customer and Communications	Manage Credit	IT	14,834.1	22,518.9	7,684.8	51.8%
14	O&M Expense	Customer and Communications	Collect Revenue	IU	12,739.4	7,776.5	(4,962.9)	-39.0%
15	O&M Expense	Customer and Communications	Provide Account Services	IV	17,757.8	15,260.3	(2,497.5)	-14.1%
16	O&M Expense	Customer and Communications	Maintain IT Apps & Infra	JV	19,323.2	10,527.5	(8,795.7)	-45.5%
17	O&M Expense	Customer and Communications	Prov Advertising Svcs	LB	0.0	4,070.1	4,070.1	100.0%
18	O&M Expense	Customer and Communications	Prov Corporate Communication	LI	0.0	2,233.0	2,233.0	100.0%
19	O&M Expense	Customer and Communications	Prov Corp Affairs Svcs	LJ	14,283.2	5,362.6	(8,920.6)	-62.5%
20	O&M Expense	Customer and Communications	Operational Management	OM	11,489.8	4,773.2	(6,716.6)	-58.5%
21	O&M Expense	Customer and Communications	Operational Support	OS	0.0	221.4	221.4	100.0%
22	O&M Expense	Customer and Communications	TOTAL		346,342.9	347,943.2	1,600.3	0.5%

**TABLE 5-2
2023 RSAR
2023 GRC CYCLE CUSTOMER AND COMMUNICATIONS
CAPITAL COMPARISON SUMMARY
(THOUSANDS OF DOLLARS)**

Line No	A	B	C1	C2	D	E	F	G
	Type (O&M Expense or Capital)	Functional Area	Spending Category - MWC	MWC	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (E-D)	Percent Variance for 2023 (%) ((E-D)/D)
1	Capital	Customer and Communications	IT - Desktop Computers	01	0.0	98.5	98.5	100.0%
2	Capital	Customer and Communications	Tools & Equipment	05	110.2	71.7	(38.6)	-35.0%
3	Capital	Customer and Communications	Misc Capital	21	110.2	8,542.6	8,432.4	7649.2%
4	Capital	Customer and Communications	Install New Electric Meters	25	28,992.1	29,176.1	184.0	0.6%
5	Capital	Customer and Communications	EV - Station Infrastructure	28	0.0	14,866.0	14,866.0	100.0%
6	Capital	Customer and Communications	Build IT Apps & Infra	2F	30,095.0	58,163.0	28,068.0	93.3%
7	Capital	Customer and Communications	Install/Repl Var Bal Acct	3M	0.0	5,462.7	5,462.7	100.0%
8	Capital	Customer and Communications	Install New Gas Meters	74	82,311.2	68,078.4	(14,232.8)	-17.3%
9	Capital	Customer and Communications	TOTAL		141,618.8	184,458.9	42,840.2	30.3%

1 C. Comparison by MWC for Safety, Reliability, and Maintenance Work

**TABLE 5-3
2023 RSAR
2023 GRC CYCLE CUSTOMER AND COMMUNICATIONS
EXPENSE COMPARISON BY MWC FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 RAMP Risk Name	C4 RAMP Mitigation and/or Control Name	C5 2023 GRC Testimony Reference	D RAMP Roll- up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$ (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K1 Spending Variance Explanation Required (Y/N)	K2 Percentage Variance Explanation Required (Y/N)	L 2023 Cost Variance Explanation	Forecast			N Status	O Completion Status Statement
																		M1 Scope (U, O, or T)	M2 Schedule (U, O, or T)	M3 Budget (U, O, or T)		
1	O&M Expense	Customer and Communications	EY	Change/Maint Used Elec Meter	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 6, Ch 7	No	On-going	Annual	896.7	679.9	(216.8)	-24.2%	NO	NO	Below variance threshold.	On-Target	On-Target	Under	Proceeding as planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to engage in preventive and corrective maintenance for electric meters, meter programming, meter network maintenance, and electric meter accuracy testing.
2	O&M Expense	Customer and Communications	GM	Manage Energy Efficiency-NonBA	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 6, Ch 3	No	On-going	Annual	11,230.9	8,527.5	(2,703.4)	-24.1%	NO	NO	Below variance threshold.	On-Target	On-Target	Under	Proceeding as planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to perform required safety and compliance work associated with Low Income Energy Efficiency direct installation measures, including Natural Gas Appliance Testing, and to support Cooling Centers.
3	O&M Expense	Customer and Communications	HY	Change/Maint Used Gas Meters	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 6, Ch 7	No	On-going	Annual	6,690.7	4,685.5	(2,005.2)	-30.0%	NO	NO	Below variance threshold.	On-Target	On-Target	Under	Proceeding as planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to perform gas meter maintenance activities that do not result in new meter exchanges, including meter tests, minimal regulator maintenance, meter/module communication trouble shooting, and meter/module repairs.
4	O&M Expense	Customer and Communications	IG	Manage Var Bal Acct Processes	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 6, Ch 2 & 11	No	On-going	Annual	35,501.4	35,491.9	(9.6)	0.0%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to perform wildfire risk mitigation work that is not otherwise recovered in PG&E's adopted revenue requirements.
5	O&M Expense	Customer and Communications	LB	Prov Advertising Svcs	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 6, Ch 11	No	On-going	Annual	0.0	4,070.1	4,070.1	100.0%	NO	NO	Below variance threshold.	On-Target	On-Target	Over	Proceeding as planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to provide above-the-line (ATL) advertising campaigns to educate and inform the public on important safety issues; BTL costs are excluded from this report.

**TABLE 5-4
2023 RSAR
2023 GRC CYCLE CUSTOMER AND COMMUNICATIONS
CAPITAL COMPARISON BY MWC FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 RAMP Risk Name	C4 RAMP Mitigation and/or Control Name	C5 2023 GRC Testimony Reference	D RAMP Roll- up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K1 Spending Variance Explanation Required (Y/N)	K2 Percentage Variance Explanation Required (Y/N)	L 2023 Cost Variance Explanation	Forecast			N Status	O Completion Status Statement
																		M1	M2	M3		
																		Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)		
1	Capital	Customer and Communications	05	Tools & Equipment	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 6, Ch 7	No	On-going	Annual	110.2	71.7	(38.6)	-35.0%	NO	NO	Below threshold variance.	On-Target	On-Target	Under	Proceeding as planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to provide tools and equipment used by field technicians and meter repair facilities to perform field metering and meter repair activities.
2	Capital	Customer and Communications	25	Install New Electric Meters	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 6, Ch 7	No	On-going	Annual	28,992.1	29,176.1	184.0	0.6%	NO	NO	Below threshold variance.	On-Target	On-Target	On-Target	Proceeding as planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to provide new electric meter purchases for new customer growth, replacement of failed units, and the associated installation labor necessary to perform electric meter installations, exchanges, removals, and retirements.
3	Capital	Customer and Communications	3M	Install/Repl Var Bal Acct	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	NA - Emergent work, not included in 2023 GRC forecast	No	On-going	Annual	0.0	5,462.7	5,462.7	100.0%	NO	NO	Below threshold variance.	On-Target	On-Target	Over	Emergent	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to perform wildfire risk mitigation work that is not otherwise recovered in PG&E's adopted revenue requirements.
4	Capital	Customer and Communications	74	Install New Gas Meters	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 6, Ch 7	No	On-going	Annual	82,311.2	68,078.4	(14,232.8)	-17.3%	NO	NO	Below threshold variance.	On-Target	On-Target	Under	Proceeding as planned	This program's work is ongoing and will continue in PG&E's 2023 GRC period. The purpose of this program is to provide new gas meter purchases for new customer growth, replacement of failed units, and the associated installation labor necessary to perform gas meter installations, exchanges, removals and retirements.

1 **D. MWC Descriptions – Expense**

2 **MWC AB – Miscellaneous Expense** – Includes administrative and general
3 work costs (i.e., benefiting the entire corporation and not just one functional
4 area). This MWC does not relate to safety, reliability, or maintenance.

5 **MWC AR – Read and Investigate Meters** – Includes costs for dedicated
6 meter readers, field resources performing manual meter reading activities, as
7 well as the systems, administration and clerical support necessary to effectively
8 perform these activities. This MWC does not relate to safety, reliability, or
9 maintenance.

10 **MWC DK – Manage Customer Inquiries** – Includes costs incurred in
11 operating the Company’s four Contact Centers, which handle over 15 million
12 calls per year, with approximately five million of these handled by a customer
13 service representative. MWC DK also includes costs for PG&E’s Escalated
14 Complaints Management team which responds to concerns and complaints that
15 customers submit to the California Public Utilities Commission or escalate to
16 PG&E’s Executive Offices, the media, or other channels. This MWC does not
17 relate to safety, reliability, or maintenance.

18 **MWC EL – Develop New Revenue** – Includes costs for PG&E to provide
19 Non-Tariffed Products and Services (NTP&S) offered to customers for a fee; the
20 revenue generated offsets costs and net revenue in excess of expenses is
21 credited back to customers resulting in a reduction to PG&E’s revenue
22 requirement. NTP&S includes completing streetlight light emitting diode turnkey
23 work, securing agreements to place wireless telecommunications and fiber
24 optics attachments on PG&E assets, and providing various other services based
25 on secondary use of PG&E assets. This MWC does not relate to safety,
26 reliability, or maintenance.

27 **MWC EY – Change/Maintenance Used Electric Meter** – Includes costs for
28 preventive and corrective maintenance for electric meters, meter programming,
29 meter network maintenance, electric meter accuracy testing, and the associated
30 staff support necessary to effectively perform these activities. This MWC relates
31 to safety, reliability, or maintenance because it supports the proper functioning of
32 PG&E’s electric metering infrastructure.

33 **MWC EZ – Manage Var Cust Care Processes** – Includes costs for
34 customer satisfaction surveys, customer service, customer experience, program

1 implementation and outreach, rate education and outreach, rate tools,
2 correspondence management and literature fulfillment, customer-facing check
3 and letter generation and delivery, as well as tariff, risk, compliance, and privacy
4 support. MWC EZ also includes activities primarily associated with
5 SmartMeter™ Opt-Out Program oversight and supplemental utility meter
6 engineering support. This MWC does not relate to safety, reliability, or
7 maintenance.

8 **MWC FA – Special Administrative & General/Other Costs-Budget**

9 **Department** – Includes costs to provide above-the-line (ATL) advertising
10 support for activities such as legally required bill inserts and to raise customer
11 awareness on public purpose programs, pricing, products, service options, and
12 other customer programs; below-the-line (BTL) costs are excluded from this
13 report. This MWC does not relate to safety, reliability, or maintenance.

14 **MWC FK – Retain and Grow Customers** – Includes ATL work responding
15 to economic development inquiries, providing detailed analyses of service
16 options sought by customers, and providing detailed explanations of special rate
17 components. MWC FK also includes BTL activities related to public power and
18 Community Choice Aggregation issues; BTL costs are excluded from this report.
19 This MWC does not relate to safety, reliability, or maintenance.

20 **MWC GM – Manage Energy Efficiency-NonBA** – Includes required safety
21 and compliance work associated with Low Income Energy Efficiency direct
22 installation measures, including Natural Gas Appliance Testing. This MWC also
23 includes support required for Cooling Centers, electric vehicles (EV) policy
24 guidance, new services benefiting EV customers, and minimal EV market
25 readiness activities. This MWC relates to safety, reliability, or maintenance
26 because it involves in-home appliance safety checks and support for Cooling
27 Centers to support customer safety during hot summer days.

28 **MWC HY – Change/Maint Used Gas Meters** – Includes gas meter
29 maintenance activities that do not result in new meter exchanges, including
30 meter tests, minimal regulator maintenance, meter/module communication
31 trouble-shooting, and meter/module repairs. This MWC relates to safety,
32 reliability, or maintenance because it supports the proper functioning of PG&E's
33 gas metering infrastructure.

1 **MWC IG – Manage Var Bal Acct Processes** – This MWC relates to safety,
2 reliability, or maintenance because it includes incremental costs recorded to the
3 Wildfire Mitigation Plan Memorandum Account (WMPMA) and the Wildfire
4 Mitigation Balancing Account (WMBA) for wildfire risk mitigation work that is not
5 otherwise recovered in PG&E’s adopted revenue requirements.

6 **MWC IS – Bill Customers** – Includes expenses incurred to print, insert, and
7 mail over 52 million customer bills annually; provide electronic bills to customers,
8 bill complex commercial and industrial accounts (including a growing number of
9 Net Energy Metering accounts); calculate and remit franchise fees and taxes;
10 perform user acceptance testing of the customer billing system to ensure billing
11 accuracy; and verify and/or resolve billing issues. MWC IS also covers
12 streetlight inventory work and discontinuing service/investigations involving
13 situations of metered commodity usage with no customer service agreement
14 (e.g., broken lock). This MWC does not relate to safety, reliability, or
15 maintenance.

16 **MWC IT – Manage Credit** – Includes expenses incurred to perform credit
17 risk management for retail customers; delinquent account follow-ups and post
18 account closure collections; open account collections on high dollar accounts;
19 balance transfers for closed accounts, fraud verification; and costs related to
20 notifying customers of past due amounts, as well as discontinuing and
21 reconnecting service for non-payment. MWC IT also includes external collection
22 agency costs. This MWC does not relate to safety, reliability, or maintenance.

23 **MWC IU – Collect Revenue** – Includes expenses incurred to process
24 energy payments received through the United States mail and vendor
25 transaction fees for online energy payments. MWC IU also includes expenses
26 to manage customer payment inquiries and cash refunds. This MWC does not
27 relate to safety, reliability, or maintenance.

28 **MWC IV – Provide Account Services** – Includes expenses for responding
29 to customer inquiries (primarily for non-residential customers) regarding
30 contracts, credit, billing and accounting, collections, and complaints; providing
31 outage information; providing retail interconnection information; and responding
32 to inquiries from customers served by third-party Energy Service Providers and
33 Core Transport Agents. This MWC does not relate to safety, reliability, or
34 maintenance.

1 **MWC JV – Maintain Information Technology (IT) Apps and Infra –**
2 Includes costs for ongoing maintenance, operations, and repair for PG&E’s IT
3 applications, systems, and infrastructure. This MWC does not relate to safety,
4 reliability, or maintenance.

5 **MWC LB – Provide Advertising Services –** Includes contract costs for
6 ATL safety-related advertising campaigns such as educating the public on how
7 to prepare for emergencies, how to stay safe during emergencies and around
8 downed power lines and calling 811 before digging to avoid hitting utility lines;
9 BTL costs are excluded from this report. This MWC relates to safety, reliability,
10 or maintenance because it supports advertising campaigns to educate and
11 inform the public on important safety issues.

12 **MWC LI – Provide Corporate Communication –** Includes costs to keep
13 active and retired PG&E employees informed of policies and programs that
14 impact PG&E’s customers. Various communication channels such as e-mail,
15 print publications, intranet sites, virtual meetings, and a mobile application are
16 used to ensure that employees remain up to date on Company goals, leadership
17 and organization updates, emerging issues, and customer programs and
18 services. This MWC does not relate to safety, reliability, or maintenance.

19 **MWC LJ – Provide Corporate Affairs Services –** Includes costs to provide
20 relevant and timely outreach to and respond to media inquiries on many aspects
21 of PG&E’s services, programs, and projects. This MWC does not relate to
22 safety, reliability, or maintenance.

23 **MWC OM – Operational Management –** Includes labor and employee
24 related costs to provide supervision and management support. MWC OM also
25 includes costs incurred by the administrative staff working for the supervisors
26 and managers. This MWC does not relate to safety, reliability, or maintenance.

27 **MWC OS – Operational Support –** Includes labor and employee related
28 costs to provide services and support unrelated to supervision and
29 management. This MWC does not relate to safety, reliability, or maintenance.

30 **E. MWC Descriptions – Capital**

31 **MWC 01 – IT - Desktop Computers –** Includes costs to replace computing
32 equipment. This MWC does not relate to safety, reliability, or maintenance.

33 **MWC 05 – Tools and Equipment –** Includes tools and equipment used by
34 field technicians and meter repair facilities to perform field metering and meter

1 repair activities. This MWC relates to safety, reliability, or maintenance because
2 it supports the proper functioning of PG&E's electric metering infrastructure.

3 **MWC 21 – Miscellaneous Capital** – Includes costs to replace equipment
4 used to insert and mail customer bills and notices. Also includes costs for
5 Interactive Voice Response system and equipment. This MWC does not relate
6 to safety, reliability, or maintenance.

7 **MWC 25 – Install New Electric Meters** – Includes new electric meter
8 purchases for new customer growth, replacement of failed units, and the
9 associated installation labor necessary to perform electric meter installations,
10 exchanges, removals, and retirements. This MWC relates to safety, reliability, or
11 maintenance because it supports the proper functioning of PG&E's electric
12 metering infrastructure.

13 **MWC 28 – EV – Station Infrastructure** – Includes costs to provide EV
14 charging infrastructure for PG&E-owned vehicles. This MWC does not relate to
15 safety, reliability, or maintenance.

16 **MWC 2F – Build IT Apps & Infra** – Includes costs to design, develop, and
17 enhance applications, systems, and IT solutions. This MWC does not relate to
18 safety, reliability, or maintenance.

19 **MWC 3M – Install/Repl Var Bal Acct** – This MWC relates to safety,
20 reliability, or maintenance because it includes incremental costs recorded to the
21 WMBA for wildfire risk mitigation work that is not otherwise recovered in PG&E's
22 adopted revenue requirements.

23 **MWC 74 – Install New Gas Meters** – Includes new gas meter purchases
24 for new customer growth, replacement of failed units, and the associated
25 installation labor necessary to perform gas meter installations, exchanges,
26 removals, and retirements. This MWC relates to safety, reliability, or
27 maintenance because it supports the proper functioning of PG&E's gas metering
28 infrastructure.

1 F. Comparison by MWC for Non-Safety, Reliability, and Maintenance Work

**TABLE 5-5
2023 RSAR
2023 GRC CYCLE CUSTOMER AND COMMUNICATIONS
EXPENSE COMPARISON BY MWC FOR NON-SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 RAMP Risk Name	C4 RAMP Mitigation and/or Control Name	C5 2023 GRC Testimony Reference	D RAMP Roll- up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)
1	O&M Expense	Customer and Communications	AB	Misc Expense	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 6, Ch 8	No	On-Going	Annual	0.0	0.6	0.6	100.0%
2	O&M Expense	Customer and Communications	AR	Read & Investigate Meters	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 6, Ch 6	No	On-Going	Annual	(176.0)	(1,060.8)	(884.8)	-502.8%
3	O&M Expense	Customer and Communications	DK	Manage Customer Inquiries	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 6, Ch 2, 4 & 5	No	On-Going	Annual	62,628.7	64,535.2	1,906.5	3.0%
4	O&M Expense	Customer and Communications	EL	Develop New Revenue	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 6, Ch 2	No	On-Going	Annual	41,051.8	39,477.0	(1,574.9)	-3.8%
5	O&M Expense	Customer and Communications	EZ	Manage Var Cust Care Processes	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 6, Ch 2, 3, 4, 5, 6, 7, 8 & 9	No	On-Going	Annual	48,080.1	60,885.6	12,805.5	26.6%
6	O&M Expense	Customer and Communications	FA	Spc A&G/Oth Csts-Bud Dept	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 6, Ch 11	No	On-Going	Annual	0.0	85.7	85.7	100.0%
7	O&M Expense	Customer and Communications	FK	Retain & Grow Customers	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 6, Ch 2	No	On-Going	Annual	736.9	317.4	(419.4)	-56.9%
8	O&M Expense	Customer and Communications	IS	Bill Customers	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 6, Ch 6	No	On-Going	Annual	49,274.1	61,574.2	12,300.1	25.0%
9	O&M Expense	Customer and Communications	IT	Manage Credit	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 6, Ch 6	No	On-Going	Annual	14,834.1	22,518.9	7,684.8	51.8%
10	O&M Expense	Customer and Communications	IU	Collect Revenue	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 6, Ch 5 & 6	No	On-Going	Annual	12,739.4	7,776.5	(4,962.9)	-39.0%
11	O&M Expense	Customer and Communications	IV	Provide Account Services	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 6, Ch 2	No	On-Going	Annual	17,757.8	15,260.3	(2,497.5)	-14.1%
12	O&M Expense	Customer and Communications	JV	Maintain IT Apps & Infra	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 6, Ch 10	No	On-Going	Annual	19,323.2	10,527.5	(8,795.7)	-45.5%
13	O&M Expense	Customer and Communications	LI	Prov Corporate Communication	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 6, Ch 11	No	On-Going	Annual	0.0	2,233.0	2,233.0	100.0%
14	O&M Expense	Customer and Communications	LJ	Prov Corp Affairs Svcs	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 6, Ch 11	No	On-Going	Annual	14,283.2	5,362.6	(8,920.6)	-62.5%
15	O&M Expense	Customer and Communications	OM	Operational Management	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 6, Ch 1A & 8	No	On-Going	Annual	11,489.8	4,773.2	(6,716.6)	-58.5%
16	O&M Expense	Customer and Communications	OS	Operational Support	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 6, Ch 8	No	On-Going	Annual	0.0	221.4	221.4	100.0%

TABLE 5-6
2023 RSAR
2023 GRC CYCLE CUSTOMER AND COMMUNICATIONS
CAPITAL COMPARISON BY MWC FOR NON-SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)

	A	B	C1	C2	C3	C4	C5	D	E	F	G	H	I	J
Line No	Type (O&M Expense or Capital)	Functional Area	MWC	MWC Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (H-G)	Spending Percent Variance for 2023 (%) ((H-G)/G*100)
1	Capital	Customer and Communications	01	IT - Desktop Computers	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 6, Ch 11	No	On-Going	Annual	0.0	98.5	98.5	100.0%
2	Capital	Customer and Communications	21	Misc Capital	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 6, Ch 5 & 6	No	On-Going	Annual	110.2	8,542.6	8,432.4	7649.2%
3	Capital	Customer and Communications	28	EV - Station Infrastructure	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 6, Ch 2	No	On-Going	Annual	0.0	14,866.0	14,866.0	100.0%
4	Capital	Customer and Communications	2F	Build IT Apps & Infra	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 6, Ch 10	No	On-Going	Annual	30,095.0	58,163.0	28,068.0	93.3%

PACIFIC GAS AND ELECTRIC COMPANY

SECTION 6

SHARED SERVICES/INFORMATION TECHNOLOGY IMPUTED

ADOPTED VS. RECORDED COMPARISON

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 6
SHARED SERVICES/INFORMATION TECHNOLOGY IMPUTED ADOPTED VS.
RECORDED COMPARISON

TABLE OF CONTENTS

A. Introduction.....	6-1
B. Comparison Summary Tables	6-2
C. Comparison by MWC for Safety, Reliability, and Maintenance Work Tables.....	6-4
D. MWC Descriptions – Expense	6-7
E. MWC Descriptions – Capital.....	6-11
F. Comparison by MWC for Non-Safety, Reliability, and Maintenance Work Tables.....	6-13

1 **PACIFIC GAS AND ELECTRIC COMPANY**
2 **SECTION 6**
3 **SHARED SERVICES/INFORMATION TECHNOLOGY IMPUTED**
4 **ADOPTED VS. RECORDED COMPARISON**

5 **A. Introduction**

6 This section includes the following information for the Shared Services and
7 Information Technology (IT) functional area: a comparison of the total 2023
8 imputed adopted spend to the actual spend as well as the required data points
9 per program as defined and required in Decision (D.) 22-10-002.¹ This section
10 also includes, for programs that are related to safety, reliability, or maintenance,
11 the Major Work Category (MWC)/Maintenance Activity Type (MAT) Code
12 descriptions, imputed adopted vs. actual cost comparison details and variance
13 explanations. As required by D.19-04-020,² the MWC/MAT Code descriptions
14 include a discussion of how each program/project relates to safety, reliability, or
15 maintenance.

1 D.22-01-002, Appendix A and B.

2 Attachment 2, p. 9.

1 B. Comparison Summary Tables

**TABLE 6-1
2023 RSAR
2023 GRC CYCLE SHARED SERVICES/IT EXPENSE COMPARISON SUMMARY
(THOUSANDS OF DOLLARS)**

Line No	A	B	C1	C2	D	E	F	G
	Type (O&M Expense or Capital)	Functional Area	Spending Category - MWC	MWC	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (E-D)	Percent Variance for 2023 (%) ((E-D)/D)
1	O&M Expense	Shared Services	Misc Expense ^(a)	AB	314,977.3	320,580.5	5,603.2	1.8%
2	O&M Expense	Shared Services	Manage Environmental Oper	AK	10,106.0	5,667.9	(4,438.1)	-43.9%
3	O&M Expense	Shared Services	Habitat and Species Protection	AY	343.5	480.3	136.8	39.8%
4	O&M Expense	Shared Services	Maint Buildings	BI	6,005.6	690.6	(5,315.1)	-88.5%
5	O&M Expense	Shared Services	Manage DCPD Business	BP	1,324.9	464.7	(860.2)	-64.9%
6	O&M Expense	Shared Services	Mnge Waste Disp & Transp	CR	2,368.0	2,507.1	139.1	5.9%
7	O&M Expense	Shared Services	Manage Property & Bldgs ^(b)	EP	97,560.1	198,810.3	101,250.2	103.8%
8	O&M Expense	Shared Services	Implement Environment Projects	ES	705.7	623.3	(82.4)	-11.7%
9	O&M Expense	Shared Services	Safety Engineering & OSHA Cmpl	FL	18,980.1	4,614.2	(14,365.9)	-75.7%
10	O&M Expense	Shared Services	Manage Var Bal Acct Processes	IG	1,214.3	2,486.5	1,272.2	104.8%
11	O&M Expense	Shared Services	Manage Land Services	JE	4,504.3	3,708.8	(795.5)	-17.7%
12	O&M Expense	Shared Services	Implement RealEstate Strategy	JH	6,780.8	8,411.7	1,630.9	24.1%
13	O&M Expense	Shared Services	Manage Environ Remed (Earning)	JK	6,087.6	3,919.0	(2,168.6)	-35.6%
14	O&M Expense	Shared Services	Procure Materials & Services ^(c)	JL	17,735.2	28,750.1	11,014.9	62.1%
15	O&M Expense	Shared Services	Maintain IT Apps & Infra	JV	37,881.4	33,331.6	(4,549.9)	-12.0%
16	O&M Expense	Shared Services	Prov Human Resource Svcs	KX	7,614.0	8,394.0	779.9	10.2%
17	O&M Expense	Shared Services	Prov Regulation Svcs	KY	1,496.8	1,396.9	(99.9)	-6.7%
18	O&M Expense	Shared Services	Prov Risk/Security Svcs	KZ	32,865.8	33,191.8	326.0	1.0%
19	O&M Expense	Shared Services	Corp A&G Allocation - ATL	LO	0.0	283.5	283.5	100.0%
20	O&M Expense	Shared Services	Operational Management	OM	541.1	1,050.7	509.7	94.2%
21	O&M Expense	Shared Services	Operational Support	OS	11,771.1	30,938.7	19,167.6	162.8%
22	O&M Expense	Shared Services	Shared Services Sub-Total		580,863.7	690,302.2	109,438.5	18.8%
23	O&M Expense	Shared Services	Fleet Capitalization	ZC	(162,516.4)	(178,673.9)	(16,157.5)	9.9%
24	O&M Expense	Shared Services	Building Services Capitalization	ZC	(63,714.0)	(67,971.2)	(4,257.2)	6.7%
25	O&M Expense	Shared Services	Shared Services Total		354,633.3	443,657.1	89,023.8	25.1%
26	O&M Expense	IT	Misc Expense	AB	0.0	121.0	121.0	100.0%
27	O&M Expense	IT	Maintain IT Apps & Infra	JV	386,709.8	336,615.1	(50,094.6)	-13.0%
28	O&M Expense	IT	Operational Management	OM	1,435.7	528.7	(907.0)	-63.2%
29	O&M Expense	IT	Operational Support	OS	0.0	4,383.2	4,383.2	100.0%
30	O&M Expense	IT	Information Technology Sub-Total		388,145.4	341,648.0	(46,497.4)	-12.0%
31	O&M Expense	IT	End User Services Capitalization	ZC	(37,434.2)	(100,143.4)	(62,709.1)	167.5%
32	O&M Expense	IT	Information Technology Total		350,711.2	241,504.6	(109,206.5)	-31.1%
33	O&M Expense	Shared Services/IT	Shared Services/Information Technology Total		705,344.5	685,161.8	(20,182.8)	-2.9%

(a) MWC AB includes recorded costs from the Transportation and Aviation Services organization for wildfire heavy-lift helicopter support recorded in the WMBA.

(b) MWC EP includes recorded costs from the Corporate Real Estate Support Services organization for facilities efforts related to the sale of PG&E's San Francisco General Office recorded in the General Office Sale Memorandum Account (GOSMA).

(c) MWC JL includes recorded costs from the Sourcing department for wildfire contract support recorded in both the WMPMA and the WMBA.

**TABLE 6-2
2023 RSAR
2023 GRC CYCLE SHARED SERVICES/IT CAPITAL COMPARISON SUMMARY
(THOUSANDS OF DOLLARS)**

Line No	A	B	C1	C2	D	E	F	G
	Type (O&M Expense or Capital)	Functional Area	Spending Category - MWC	MWC	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (E-D)	Percent Variance for 2023 (%) ((E-D)/D)
1	Capital	Shared Services	Fleet / Auto Equip	04	113,116.4	102,820.1	(10,296.3)	-9.1%
2	Capital	Shared Services	Tools & Equipment	05	2,495.5	4,931.8	2,436.3	97.6%
3	Capital	Shared Services	Implement Environment Projects	12	8,066.1	11,598.0	3,531.9	43.8%
4	Capital	Shared Services	Misc Capital	21	654.2	5,613.2	4,958.9	758.0%
5	Capital	Shared Services	Maintain Buildings ^(a)	22	41,008.6	59,406.9	18,398.3	44.9%
6	Capital	Shared Services	Implement RealEstate Strategy ^{(a), (b)}	23	99,788.3	68,462.1	(31,326.1)	-31.4%
7	Capital	Shared Services	Build IT Apps & Infra	2F	37,684.9	37,211.9	(473.0)	-1.3%
8	Capital	Shared Services	Security Install/Replace	3N	14,690.3	14,767.0	76.7	0.5%
9	Capital	Shared Services	Shared Services Total		317,504.4	304,811.0	(12,693.3)	-4.0%
10	Capital	IT	Build IT Apps & Infra	2F	286,508.8	299,058.5	12,549.7	4.4%
11	Capital	IT	Information Technology Total		286,508.8	299,058.5	12,549.7	4.4%
12	Capital	Shared Services/IT	Shared Services/Information Technology Total		604,013.2	603,869.5	(143.6)	-0.02%

(a) MWC 22 and MWC 23 include recorded costs from the Corporate Real Estate Support Services organization for facilities efforts related to the sale of PG&E's San Francisco General Office recorded in the GOSMA.

(b) MWC 23 includes recorded costs from the Corporate Real Estate Support Services organization for the Emergency Generation Enhancement wildfire program recorded in the WMPMA.

1 C. Comparison by MWC for Safety, Reliability, and Maintenance Work Tables

**TABLE 6-3
2023 RSAR
2023 GRC CYCLE SHARED SERVICES/IT EXPENSE COMPARISON BY MWC FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC #	C2 MWC Name	C3 RAMP Risk Name	C4 RAMP Mitigation and/or Control Name	C5 2023 GRC Testimony Reference	D RAMP Roll- up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$ (H-G))	J Spending Percent Variance for 2023 (%) (H-G)/G*100	K1 Spending Variance Explanation Required (Y/N)	K2 Percentage Variance Explanation Required (Y/N)	L 2023 Cost Variance Explanation	M1 M2 M3 Forecast			N Status	O Completion Status Statement
																		Scope (U, O, or T)	Schedule (U, O, or T)	Budget (U, O, or T)		
1	O&M Expense	Shared Services	AB	Misc Expense	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 7, Ch 1 Ex 7, Ch 2 Ex 7, Ch 7	No	On-going	Annual	17,179.9	17,249.7	69.8	0.4%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
2	O&M Expense	Shared Services	AB	Misc Expense	Employee Safety Incident (EMPSI)	Corrective Action Program (EMPSI-PRGB)	Ex 7, Ch 1	Yes	On-going	Annual	0.0	3,553.6	3,553.6	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3	O&M Expense	Shared Services	AB	Misc Expense	Employee Safety Incident (EMPSI)	Employee Health & Safety Guidance, Training & Oversight (EMPSI-PRGA)	Ex 7, Ch 1	Yes	On-going	Annual	0.0	4,110.0	4,110.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4	O&M Expense	Shared Services	AB	Misc Expense	Employee Safety Incident (EMPSI)	Enterprise Safety Management System (EMPSI-M01B)	Ex 7, Ch 1	Yes	On-going	Annual	0.0	678.0	678.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5	O&M Expense	Shared Services	AB	Misc Expense	Employee Safety Incident (EMPSI)	PC&E Safety Excellence Management System Implementation (EMPSI- PRGF)	Ex 7, Ch 1	Yes	On-going	Annual	0.0	662.0	662.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	O&M Expense	Shared Services	AB	Misc Expense	Motor Vehicle Safety Incident	Transportation Safety (PRGA)	Ex 7, Ch 1	Yes	On-going	Annual	0.0	3,150.0	3,150.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7	O&M Expense	Shared Services	AB	Misc Expense	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 7, Ch 1 Ex 7, Ch 2 Ex 7, Ch 7	Yes	On-going	Annual	0.0	5,096.1	5,096.1	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8	O&M Expense	Shared Services	AK	Manage Environmental Oper	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 7, Ch 6	No	On-going	Annual	0.0	519.6	519.6	100.0%	NO	NO	Below threshold variance.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
9	O&M Expense	Shared Services	BI	Maint Buildings	SRM Total	SRM Total	Ex 7, Ch 5	No	On-going	Annual	6,005.6	690.6	(5,315.1)	-88.5%	NO	YES	Program expenses were below imputed regulatory values due to the work being partially forecast and adopted in MWC BI but primarily executed in MWC EP. The decision to fund and execute most of the work in MWC EP was made after the GRC was filed. The net overrun to imputed is discussed in MWC EP.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC. The purpose of this program is to address both proactive and reactive repairs and maintenance of facilities to optimize the life of facilities, address safety issues, and improve operations and reliability of facility assets and related equipment.
10	O&M Expense	Shared Services	BI	Maint Buildings	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 7, Ch 5	Yes	On-going	Annual	0.0	(214.5)	(214.5)	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11	O&M Expense	Shared Services	BI	Maint Buildings	Real Estate and Facilities Failure (REFFL)	Service Center Optimization (REFFL-C002)	Ex 7, Ch 5	Yes	On-going	Annual	0.0	413.8	413.8	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12	O&M Expense	Shared Services	BI	Maint Buildings	Real Estate and Facilities Failure (REFFL)	Facilities Mgmt and Prevent Maint Prgm (REFFL-C004)	Ex 7, Ch 5	Yes	On-going	Annual	0.0	167.6	167.6	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
13	O&M Expense	Shared Services	BI	Maint Buildings	Real Estate and Facilities Failure (REFFL)	Renovate / Relocate Facilities Other than SFGO (REFFL-M006)	Ex 7, Ch 5	Yes	On-going	Annual	0.0	323.6	323.6	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14	O&M Expense	Shared Services	CR	Mnrg Waste Disp & Transp	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 7, Ch 6	No	On-going	Annual	2,368.0	2,472.6	104.7	4.4%	NO	NO	Below threshold variance.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
15	O&M Expense	Shared Services	EP	Manage Property & Bldgs	SRM Total	SRM Total	Ex 7, Ch 5	No	On-going	Annual	97,560.1	120,592.8	23,032.6	23.6%	YES	YES	Program expenses exceeded imputed regulatory values due to required facilities maintenance work; unplanned increases in facilities rent; and increases in planned headcount to decrease the reliance on OT/DT and better align resources with critical work.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC. The purpose of this program is to address operations and maintenance of facilities and shared conference centers to optimize the life of facilities, address safety issues, and improve operations and reliability of facility assets and related equipment.
16	O&M Expense	Shared Services	EP	Manage Property & Bldgs	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 7, Ch 5	Yes	On-going	Annual	0.0	119,954.7	119,954.7	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17	O&M Expense	Shared Services	EP	Manage Property & Bldgs	Real Estate and Facilities Failure (REFFL)	Renovate / Relocate Facilities Other than SFGO (REFFL-M006)	Ex 7, Ch 5	Yes	On-going	Annual	0.0	638.1	638.1	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
18	O&M Expense	Shared Services	FL	Safety Engineering & OSHA Cmpl	SRM Total	SRM Total	Ex 7, Ch 1	No	On-going	Annual	18,980.1	4,614.2	(14,365.9)	-75.7%	YES	YES	Program expense were below imputed regulatory values due to the work being forecast and adopted in MWC FL as a part of the 2023 GRC Final Decision, but executed in MWC OS. The decision to execute the forecast work in a different MWC was made after the 2023 GRC was submitted. This program primarily represents the development and deployment of the Regional Safety Program and is in alignment with the safety commitments made following the Plan of Reorganization.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC. The purpose of this program is to provide various safety initiatives that address both employees and contractors. The initiatives support mitigations for Employee Safety Incident, Contractor Safety Incident, and Motor Vehicle Safety Incident risks.
19	O&M Expense	Shared Services	FL	Safety Engineering & OSHA Cmpl	Contractor Safety Incident (CNTSI)	Contractor Safety Oversight and Compliance (PRGB)	Ex 7, Ch 1	Yes	On-going	Annual	0.0	1,200.0	1,200.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
20	O&M Expense	Shared Services	FL	Safety Engineering & OSHA Cmpl	Contractor Safety Incident (CNTSI)	Contractor Pre-Qualification Program (PRGA)	Ex 7, Ch 1	Yes	On-going	Annual	0.0	125.0	125.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
21	O&M Expense	Shared Services	FL	Safety Engineering & OSHA Cmpl	Employee Safety Incident (EMPSI)	Employee Health & Safety Guidance, Training & Oversight (EMPSI-PRGA)	Ex 7, Ch 1	Yes	On-going	Annual	0.0	419.8	419.8	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
22	O&M Expense	Shared Services	FL	Safety Engineering & OSHA Cmpl	Employee Safety Incident (EMPSI)	SIF Prevention Program and Field Oversight (PRGC)	Ex 7, Ch 1	Yes	On-going	Annual	0.0	2,304.4	2,304.4	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
23	O&M Expense	Shared Services	FL	Safety Engineering & OSHA Cmpl	Motor Vehicle Safety Incident (MVIS)	Transportation Safety (PRGA)	Ex 7, Ch 1	Yes	On-going	Annual	0.0	565.0	565.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
24	O&M Expense	Shared Services	IG	Manage Var Bal Acct Processes	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 7, Ch 5	No	On-going	Annual	0.0	1,256.0	1,256.0	100.0%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A
25	O&M Expense	Shared Services	JH	Implement RealEstate Strategy	SRM Total	SRM Total	Ex 7, Ch 5	No	On-going	Annual	6,780.8	8,411.7	1,630.9	24.1%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A

**TABLE 6-3
2023 RSAR
2023 GRC CYCLE SHARED SERVICES/IT EXPENSE COMPARISON BY MWC FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC (a)	C2 MWC Name	C3 RAMP Risk Name	C4 RAMP Mitigation and/or Control Name	C5 2023 GRC Testimony Reference	D RAMP Roll up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) (H-G)/G*100	K1 Spending Variance Explanation Required (Y/N)	K2 Percentage Variance Explanation Required (Y/N)	L 2023 Cost Variance Explanation	M1, M2, M3 Forecast			N Status	O Completion Status Statement	
																		M1 Scope (U, O, or T)	M2 Schedule (U, O, or T)	M3 Budget (U, O, or T)			
26	O&M Expense	Shared Services	JH	Implement RealEstate Strategy	Real Estate and Facilities Failure (REFFL)	Facilities Mgmt and Prevent Maint Prgm (REFFL-C004)	Ex 7, Ch 5	Yes	Ongoing	Annual	0.0	1,566.7	1,566.7	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
27	O&M Expense	Shared Services	JH	Implement RealEstate Strategy	Real Estate and Facilities Failure (REFFL)	Renovate / Relocate Facilities Other than SFGO (REFFL-M006)	Ex 7, Ch 5	Yes	Ongoing	Annual	0.0	791.6	791.6	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
28	O&M Expense	Shared Services	JH	Implement RealEstate Strategy	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 7, Ch 5	Yes	Ongoing	Annual	0.0	6,053.4	6,053.4	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
29	O&M Expense	Shared Services	JL	Procure Materials & Services	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 7, Ch 4	No	Ongoing	Annual	0.0	3,930.5	3,930.5	100.0%	NO	NO	Below threshold variance.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
30	O&M Expense	Shared Services	JV	Maintain IT Apps & Infra	SRM Total	SRM Total	Ex 7, Ch 9	No	Ongoing	Annual	32,806.3	32,417.8	(388.5)	-1.2%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
31	O&M Expense	Shared Services	JV	Maintain IT Apps & Infra	Cyber Security Incident (CYBER)	Security Intelligence and Operations Center (CYBER-C001)	Ex 7, Ch 9	Yes	Ongoing	Annual	0.0	5,261.4	5,261.4	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
32	O&M Expense	Shared Services	JV	Maintain IT Apps & Infra	Cyber Security Incident (CYBER)	Cybersecurity Risk and Strategy (CYBER-C002)	Ex 7, Ch 9	Yes	Ongoing	Annual	0.0	9,228.7	9,228.7	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
33	O&M Expense	Shared Services	JV	Maintain IT Apps & Infra	Cyber Security Incident (CYBER)	Cybersecurity Services (CYBER-C003)	Ex 7, Ch 9	Yes	Ongoing	Annual	0.0	13,325.5	13,325.5	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
34	O&M Expense	Shared Services	JV	Maintain IT Apps & Infra	Cyber Security Incident (CYBER)	Communications (CYBER-C004)	Ex 7, Ch 9	Yes	Ongoing	Annual	0.0	(28.0)	(28.0)	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
35	O&M Expense	Shared Services	JV	Maintain IT Apps & Infra	Cyber Security Incident (CYBER)	Identify (CYBER-M001)	Ex 7, Ch 9	Yes	Ongoing	Annual	0.0	153.6	153.6	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
36	O&M Expense	Shared Services	JV	Maintain IT Apps & Infra	Cyber Security Incident (CYBER)	Protect (CYBER-M002)	Ex 7, Ch 9	Yes	Ongoing	Annual	0.0	3,628.0	3,628.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
37	O&M Expense	Shared Services	JV	Maintain IT Apps & Infra	Cyber Security Incident (CYBER)	Respond (CYBER-M004)	Ex 7, Ch 9	Yes	Ongoing	Annual	0.0	32.2	32.2	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
38	O&M Expense	Shared Services	JV	Maintain IT Apps & Infra	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 7, Ch 9	No	Ongoing	Annual	0.0	816.4	816.4	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
39	O&M Expense	Shared Services	KX	Prov Human Resource Svcs	SRM Total	SRM Total	Ex 7, Ch 1	No	Ongoing	Annual	7,608.9	8,375.6	766.7	10.1%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
40	O&M Expense	Shared Services	KX	Prov Human Resource Svcs	Employee Safety Incident (EMPSI)	Employee Health & Wellness Programs (EMPSI-PRGD)	Ex 7, Ch 1	No	Ongoing	Annual	0.0	8,375.6	8,375.6	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
41	O&M Expense	Shared Services	KZ	Prov Risk/Security Svcs	SRM Total	SRM Total	Ex 7, Ch 9	No	Ongoing	Annual	24,715.4	23,453.5	(1,261.9)	-5.1%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
42	O&M Expense	Shared Services	KZ	Prov Risk/Security Svcs	Physical Attack (PHYSA)	Physical Security (PHYSA-C001)	Ex 7, Ch 9	Yes	Ongoing	Annual	0.0	17,461.3	17,461.3	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
43	O&M Expense	Shared Services	KZ	Prov Risk/Security Svcs	Physical Attack (PHYSA)	Security Asset and Technology (PHYSA-C002)	Ex 7, Ch 9	Yes	Ongoing	Annual	0.0	1,336.3	1,336.3	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
44	O&M Expense	Shared Services	KZ	Prov Risk/Security Svcs	Physical Attack (PHYSA)	Corporate Security Control Center (PHYSA-C003)	Ex 7, Ch 9	Yes	Ongoing	Annual	0.0	1,395.0	1,395.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
45	O&M Expense	Shared Services	KZ	Prov Risk/Security Svcs	Physical Attack (PHYSA)	Investigation and Insider Threats (PHYSA-C004)	Ex 7, Ch 9	Yes	Ongoing	Annual	0.0	1,657.2	1,657.2	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
46	O&M Expense	Shared Services	KZ	Prov Risk/Security Svcs	Physical Attack (PHYSA)	Prevent (PHYSA-M001)	Ex 7, Ch 9	Yes	Ongoing	Annual	0.0	1,442.2	1,442.2	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
47	O&M Expense	Shared Services	KZ	Prov Risk/Security Svcs	Physical Attack (PHYSA)	Detect (PHYSA-M002)	Ex 7, Ch 9	Yes	Ongoing	Annual	0.0	161.6	161.6	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
48	O&M Expense	Shared Services	OS	Operations Support	SRM Total	SRM Total	Ex 7, Ch 1	No	Ongoing	Annual	0.0	12,485.6	12,485.6	100.0%	YES	YES	Program expenses exceeded imputed regulatory values due to the work being forecast and adopted in MWC FL as a part of the 2023 GRC Final Decision, but executed in MWC OS. The decision to execute the forecast work as a different MWC was made after the 2023 GRC was submitted. This program primarily represents the development and deployment of the Regional Safety Program and is in alignment with the safety commitments made following the Plan of Reorganization.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC. The purpose of this program is to provide various safety initiatives that address both employees and contractors. The initiatives support mitigations for Employees Safety Incident, Contractor Safety Incident, and Motor Vehicle Safety Incident risks.	
49	O&M Expense	Shared Services	OS	Operations Support	Employee Safety Incident (EMPSI)	SIF Prevention Program and Field Oversight (PRGC) includes contract partner workforce field safety observations and compliance	Ex 7, Ch 1	No	Ongoing	Annual	0.0	12,485.6	12,485.6	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
50	O&M Expense	Shared Services	ZC	Corporate Items	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 7, Ch 5	No	Ongoing	Annual	(63,714.0)	(67,971.2)	(4,257.2)	6.7%	NO	NO	Below variance threshold.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
51	O&M Expense	IT	JV	Maintain IT Apps & Infra	SRM Total	SRM Total	Ex 7, Ch 8	No	Ongoing	Annual	0.0	38,841.5	38,841.5	100.0%	YES	YES	Program expenses exceeded imputed regulatory values due to emergent plan and analyze costs for the Proprietary program which will upgrade, advance and optimize PG&E's SAP system and related processes; various technology solutions in support of mitigating Network core assets; and incremental operations and maintenance costs in support of increased public cloud usage.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC. The purpose of this program is to address the ongoing operations and maintenance of software and hardware technology assets and supporting systems, a modest percentage of the program will focus spend on supporting capital mitigation investments to improve the IT Asset Failure risk.	
52	O&M Expense	IT	JV	Maintain IT Apps & Infra	IT Asset Failure (ITAFI)	Lifecycle Obsolete and Low Health #Assets (ITAFI-M004)	Ex 7, Ch 8	Yes	Ongoing	Annual	0.0	2,262.5	2,262.5	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
53	O&M Expense	IT	JV	Maintain IT Apps & Infra	IT Asset Failure (ITAFI)	Multi-Faceted Mitigations (ITAFI-M005)	Ex 7, Ch 8	Yes	Ongoing	Annual	0.0	2,950.8	2,950.8	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
54	O&M Expense	IT	JV	Maintain IT Apps & Infra	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 7, Ch 8	Yes	Ongoing	Annual	0.0	33,628.2	33,628.2	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

(a) The following MWCs have both SRM and non-SRM spend: AB, AK, CR, EP, IG, JL, JV, KX, KZ, OS, ZC.

**TABLE 6-4
2023 RSAR
2023 GRC CYCLE SHARED SERVICES/IT CAPITAL COMPARISON BY MWC FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (OSM Expense or Capital)	B Functional Area	C1 MWC ^(a)	C2 MWC Name	C3 RAMP Risk Name	C4 RAMP Mitigation and/or Control Name	C5 2023 GRC Testimony Reference	D RAMP Roll- up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K1 Spending Variance Explanation Required (Y/N)	K2 Percentage Variance Explanation Required (Y/N)	L 2023 Cost Variance Explanation	Forecast			N Status	O Completion Status Statement	
																		M1 Scope (U, O, or T)	M2 Schedule (U, O, or T)	M3 Budget (U, O, or T)			
1	Capital	Shared Services	22	Maintain Buildings	SRM Total	SRM Total	Ex 7, Ch 5	No	On-going	Annual	41,008.6	59,406.9	18,398.3	44.9%	NO	YES	Program expenditures exceeded imputed regulatory values due to work forecast and adopted across both MWC 22 and MWC 23 but executed in MWC 22 more than in MWC 23. This included executing new priority projects and catching-up on projects that were delayed from 2022 as a result of reauthorization. These projects were specifically focused on facility optimization and required maintenance and renovation. Examples of such projects are facility asset lifecycle replacements in the Stockton Material Center, Lakeport Service Center, Monterey Service Center, Vacaville Service Center and Richmond Service Center as well as real estate optimization in Oakland General Office for the Boiler Replacement and Modesto Yard Relocation.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC. The purpose of this program is to focus on the construction and optimization of facilities, addressing facility deficiencies, and replacing facility components. The majority of these investments are in support of reducing the Real Estate and Facilities Failure risk.	
2	Capital	Shared Services	22	Maintain Buildings	Real Estate and Facilities Failure (REFFL)	Regional Optimization (REFFL-C001)	Ex 7, Ch 5	Yes	On-going	Annual	0.0	2,730.3	2,730.3	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3	Capital	Shared Services	22	Maintain Buildings	Real Estate and Facilities Failure (REFFL)	Facilities Mgmt and Prevent Maint Prgm (REFFL-C004)	Ex 7, Ch 5	Yes	On-going	Annual	0.0	41,175.8	41,175.8	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4	Capital	Shared Services	22	Maintain Buildings	Real Estate and Facilities Failure (REFFL)	Renovate / Relocate Facilities Other than SFGO (REFFL-M006)	Ex 7, Ch 5	Yes	On-going	Annual	0.0	6,258.4	6,258.4	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5	Capital	Shared Services	22	Maintain Buildings	Real Estate and Facilities Failure (REFFL)	Service Center Optimization (REFFL-C002)	Ex 7, Ch 5	Yes	On-going	Annual	0.0	8,746.9	8,746.9	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6	Capital	Shared Services	22	Maintain Buildings	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 7, Ch 5	Yes	On-going	Annual	0.0	495.5	495.5	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7	Capital	Shared Services	23	Implement RealEstate Strategy	SRM Total	SRM Total	Ex 7, Ch 5	No	On-going	Annual	99,788.3	68,462.1	(31,326.1)	-31.4%	YES	YES	Program expenditures were below imputed regulatory values due to work forecast and adopted across both MWC 22 and MWC 23 but executed in MWC 22 more than in MWC 23. Other drivers include a credit received in the General Office Sale Memorandum Account (GOSMA) for re-scheduled capital work which was partially offset by ongoing efforts to support the completion of the Emergency Generation Enhancement Wildfire mitigation program.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC. The purpose of this program is to focus on the purchase and acquisition of facilities, associated land, and required infrastructure to operationalize new facilities. In addition, this program develops and deploys the strategy to optimize the real estate portfolio at the company level. The majority of these investments are in support of reducing the Real Estate and Facilities Failure risk.	
8	Capital	Shared Services	23	Implement RealEstate Strategy	Real Estate and Facilities Failure (REFFL)	Regional Optimization (REFFL-C001)	Ex 7, Ch 5	Yes	On-going	Annual	0.0	62,494.5	62,494.5	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9	Capital	Shared Services	23	Implement RealEstate Strategy	Real Estate and Facilities Failure (REFFL)	Facilities Mgmt and Prevent Maint Prgm (REFFL-C004)	Ex 7, Ch 5	Yes	On-going	Annual	0.0	2,185.2	2,185.2	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10	Capital	Shared Services	23	Implement RealEstate Strategy	Real Estate and Facilities Failure (REFFL)	Renovate / Relocate Facilities Other than SFGO (REFFL-M006)	Ex 7, Ch 5	Yes	On-going	Annual	0.0	10,174.9	10,174.9	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11	Capital	Shared Services	23	Implement RealEstate Strategy	Real Estate and Facilities Failure (REFFL)	Service Center Optimization (REFFL-C002)	Ex 7, Ch 5	Yes	On-going	Annual	0.0	17,050.0	17,050.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12	Capital	Shared Services	23	Implement RealEstate Strategy	Real Estate and Facilities Failure (REFFL)	Security System Hardening (REFFL-C008)	Ex 7, Ch 5	Yes	On-going	Annual	0.0	6,123.0	6,123.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
13	Capital	Shared Services	23	Implement RealEstate Strategy	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 7, Ch 5	Yes	On-going	Annual	0.0	(29,565.6)	(29,565.6)	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14	Capital	Shared Services	2F	Build IT Apps & Infra	SRM Total	SRM Total	Ex 7, Ch 9	No	On-going	Annual	36,141.6	36,316.2	174.6	0.5%	NO	NO	Below threshold variance.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
15	Capital	Shared Services	2F	Build IT Apps & Infra	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 7, Ch 1 Ex 7, Ch 7	No	On-going	Annual	0.0	4,891.2	4,891.2	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
16	Capital	Shared Services	2F	Build IT Apps & Infra	Cyber Security Incident (CYBER)	Identify (CYBER-M001)	Ex 7, Ch 9	Yes	On-going	Annual	0.0	1,509.8	1,509.8	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17	Capital	Shared Services	2F	Build IT Apps & Infra	Cyber Security Incident (CYBER)	Protect (CYBER-M002)	Ex 7, Ch 9	Yes	On-going	Annual	0.0	24,702.8	24,702.8	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
18	Capital	Shared Services	2F	Build IT Apps & Infra	Cyber Security Incident (CYBER)	Detect (CYBER-M003)	Ex 7, Ch 9	Yes	On-going	Annual	0.0	1,534.0	1,534.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
19	Capital	Shared Services	2F	Build IT Apps & Infra	Cyber Security Incident (CYBER)	Respond (CYBER-M004)	Ex 7, Ch 9	Yes	On-going	Annual	0.0	3,678.4	3,678.4	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
20	Capital	Shared Services	3N	Security Install/Replace	SRM Total	SRM Total	Ex 7, Ch 9	No	On-going	Annual	14,690.3	11,809.0	(2,881.4)	-19.6%	NO	NO	Below threshold variance.	On-Target	On-Target	On-Target	Proceeding as Planned	N/A	
21	Capital	Shared Services	3N	Security Install/Replace	Physical Attack (PHYSA)	Prevent (PHYSA-M001)	Ex 7, Ch 9	Yes	On-going	Annual	0.0	8,313.6	8,313.6	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
22	Capital	Shared Services	3N	Security Install/Replace	Physical Attack (PHYSA)	Detect (PHYSA-M002)	Ex 7, Ch 9	Yes	On-going	Annual	0.0	3,495.3	3,495.3	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
23	Capital	IT	2F	Build IT Apps & Infra	SRM Total	SRM Total	Ex 7, Ch 8	No	On-going	Annual	286,508.8	245,521.0	(40,987.8)	-14.3%	YES	NO	Program expenditures were below imputed regulatory values due to the fact that the imputed value for this program encompasses both SRM and non-SRM investments. The majority of the program shows spend on mitigation investments for the IT Asset Failure risk. An additional 10% represents Energy System Engineering & Work Management and Energy System Planning & Asset Management technology solutions that enable our field workers with better tools to collect/analyze data, provide insights, and support our customers.	On-Target	On-Target	On-Target	Proceeding as Planned	This program's work is ongoing and will continue in PG&E's 2023 GRC. The purpose of this program is to address the ongoing development and deployment of software and hardware technology solutions, the majority of the program will focus spend on mitigation investments to improve the IT Asset Failure risk.	
24	Capital	IT	2F	Build IT Apps & Infra	IT Asset Failure (ITAF)	Lifecycle Obsolete and Low Health #Assets (ITAF-LM004)	Ex 7, Ch 8	Yes	On-going	Annual	0.0	86,042.0	86,042.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
25	Capital	IT	2F	Build IT Apps & Infra	IT Asset Failure (ITAF)	Multi-Faceted Mitigations (ITAF-LM005)	Ex 7, Ch 8	Yes	On-going	Annual	0.0	61,471.0	61,471.0	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
26	Capital	IT	2F	Build IT Apps & Infra	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 7, Ch 8	Yes	On-going	Annual	0.0	98,007.7	98,007.7	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

(a) The following MWCs have both SRM and non-SRM spend: 2F, 3N.

1 **D. MWC Descriptions – Expense**

2 **MWC AB – Support** – Includes costs associated with climate protection and
3 other environmental leadership initiatives as well as Fleet Fuel and Rental costs
4 in Transportation Services. MWC AB also includes standard cost variances for
5 Shared Services departments that charge out their costs to other organizations
6 and miscellaneous support costs. A portion of the MWC also addresses
7 mitigation programs that relate to the Employee Safety Incident risk as well. In
8 addition, this MWC addresses costs related to Pacific Gas and Electric
9 Company’s (PG&E or the Company) heavy-lift helicopters that provide both
10 service restoration and California Department of Forestry and Fire Protection
11 use for emergency response during fire season. This program relates to safety,
12 reliability, and maintenance as it supports wildfire mitigations by improving
13 wildfire response capabilities and potentially reducing wildfire consequences to
14 PG&E and public infrastructure; and it includes costs for the Enterprise
15 Corrective Action program that supports controls for the Employee Safety
16 Incident risk.

17 **MWC AK – Manage Environmental Operations** – Includes costs for
18 environmental compliance support, permits and day-to-day costs that are part of
19 facility environmental operations. MWC AK also includes routine environmental
20 work, including the labor costs of environmental professionals and facility
21 personnel who perform environmental compliance tasks (e.g., inspections,
22 compliance assessments, corrective actions, and hazardous waste
23 management). This program does relate to safety, reliability, and maintenance
24 because it addresses procedures for managing hazardous waste.

25 **MWC AY – Habitat and Species Protection** – Includes compliance with
26 regulations to protect endangered species and sensitive habitats as part of
27 PG&E’s broader Environmental Stewardship Program. The Environmental
28 Stewardship Program covers initiatives to support habitat and species
29 protection, Safe Harbor Agreement, avian protection, land stewardship and
30 conservation partnerships. MWC AY includes labor and expense associated
31 with administration of the different programs. This program does not relate to
32 safety, reliability, or maintenance.

33 **MWC BI – Maintain Buildings** – Includes costs to repair and maintain base
34 buildings to extend the life of building components, correct building component

1 deficiencies, improve equipment operating efficiencies, and increase the
2 operating reliability of buildings and yards. This program relates to safety,
3 reliability, or maintenance because the facilities are required to support PG&E's
4 safe and reliable delivery of energy and the funding is for maintenance of the
5 buildings and related seismic safety.

6 **MWC BP – Manage DCP Business** – Includes costs of aircraft services
7 that have been moved from the Nuclear Generation lines of business (LOB).
8 This program does not relate to safety, reliability, or maintenance because these
9 aviation services are for non-Wildfire maintenance activities.

10 **MWC CR – Manage Waste Disposal & Transportation** – Includes costs of
11 transportation and disposal of hazardous and other regulated wastes in
12 accordance with federal and state laws and regulations. This program does
13 relate to safety, reliability, or maintenance as it builds procedures to support the
14 management, transport and disposal of hazardous waste.

15 **MWC EP – Manage Property and Buildings** – Includes costs to operate,
16 maintain, and repair PG&E's facilities and shared conference center space. The
17 program also captures costs for the General Office Memorandum Account such
18 as moving activities, repairs/maintenance, and rent. This program relates to
19 safety, reliability, or maintenance because the facilities are required to support
20 PG&E's safe and reliable delivery of energy and the funding is for maintenance
21 of the buildings and related seismic safety.

22 **MWC ES – Implement Environment Projects** – Includes costs associated
23 with repairing, replacing, or upgrading equipment to comply with environmental
24 regulations. This program does not relate to safety, reliability, or maintenance.

25 **MWC FL – Safety Engineering & Occupational Safety and Health**
26 **Administration Compliance** – Includes costs of the Safety Engineering &
27 Health Services department which provides overall direction and implementation
28 of the Company's occupational safety and health
29 programs for employees. MWC FL also includes costs for the development and
30 integration of safety and health solutions supporting the goal of eliminating
31 employee injuries. This program is for employee safety.

32 **MWC IG – Manage Various Balancing Account Processes** – Includes
33 expense costs for various balancing and memorandum accounts:

- 1 • Fire Risk Mitigation Memorandum Account – Includes costs incurred for
2 wildfire risk mitigation which were not included in PG&E’s 2020 Wildfire
3 Mitigation Plan (WMP) and not associated with wildfire mitigations described
4 in PG&E’s 2020 General Rate Case (GRC) that are recorded in the Wildfire
5 Mitigation Balancing Account (WMBA). PG&E will determine the
6 incrementality of these amounts to the Company’s revenue requirement
7 when it applies for cost recovery;
- 8 • WMP Memorandum Account – Includes costs incurred to implement
9 PG&E’s approved WMP that are not associated with wildfire mitigations
10 described in PG&E’s 2020 GRC that are recorded in the WMBA. PG&E will
11 determine the incrementality of these amounts to the Company’s revenue
12 requirement when it applies for cost recovery; and
- 13 • WMBA – Includes ongoing wildfire mitigation program support costs forecast
14 and described in the 2023 GRC.

15 This program relates to safety, reliability, or maintenance because the
16 memorandum and balancing accounts track work to address mitigating wildfire
17 risk. In Shared Services, specific investments include Corporate Real Estate
18 Strategy and Services’ ongoing efforts on the Emergency Generation
19 Enhancement Project; and Land and Environmental Management’s work with
20 the Water Board in compliance with Senate Bill 901 to develop and implement a
21 statewide permit program for wildfire mitigation work activities located in and
22 adjacent to waters of the state.

23 **MWC JE – Manage Land Services** – Includes costs to establish policies
24 and provide support for the management and protection of the Company’s land
25 and land rights in support of PG&E’s utility operations. MWC JE also includes
26 costs to manage the Company’s timberlands to achieve optimal revenues while
27 maintaining and/or enhancing timberland values. This program does not relate
28 to safety, reliability, or maintenance.

29 **MWC JH – Real Estate Strategy and Transactions** – Includes costs for
30 long-term real estate strategy development, space demand forecasting and
31 planning and lease administration and transaction management. This program
32 relates to safety, reliability, or maintenance because it supports seismic safety
33 as it relates to Customer Service Office (CSO) relocations.

1 **MWC JK – Manage Environmental Remediation-Earnings** – Includes
2 costs for the clean-up of contaminated sites which are **not** recovered through
3 other proceedings, such as the Hazardous Substance Mechanism, or
4 decommissioning accounts. These activities include internal labor and
5 expenses associated with management and support of the site remediation as
6 well as contractor and legal fees. This program does not relate to safety,
7 reliability, or maintenance.

8 **MWC JL – Procure Materials & Services** – Includes costs to procure
9 goods and services, including implementing programs to improve organizational
10 effectiveness, developing supplier alliances, and maintaining and promoting a
11 diverse supplier base. This program relates to safety and reliability because it
12 supports establishing contracts for Wildfire System Hardening, the Wildfire
13 Program Management Office and unit pricing other contract support services for
14 Wildfire hardening efforts.

15 **MWC JV – Maintain Applications and Infrastructure** – Includes costs for
16 ongoing maintenance, operations and repair for PG&E's IT applications,
17 systems, and infrastructure. In addition, cybersecurity ongoing maintenance and
18 operations as well as project costs are addressed. This program relates to
19 safety, reliability, or maintenance because it contains both controls and
20 mitigations for the Cybersecurity Risk event and mitigations for the IT Asset
21 Failure Cross-Cutter Factor.

22 **MWC KX – Provide Human Resource Services** – Represents costs for the
23 Integrated Disability Management program and support as well as services
24 provided by Human Resources. This program does not relate to safety,
25 reliability, or maintenance.

26 **MWC KY – Provide Regulations Services** – Includes costs for regulatory
27 services and support. This program does not relate to safety, reliability, or
28 maintenance.

29 **MWC KZ – Provide Risk and Security Services** – Includes support for
30 corporate security, enterprise operations risk management, internal audit, and
31 insurance functions. In Shared Services, this work is Corporate Security and
32 ERM expense costs. Corporate Security includes guard services, investigations
33 and investigators, executive protection, access control, physical security testing,
34 video monitoring security facilities, and maintenance of security equipment. This

1 program relates to safety, reliability, or maintenance because it contains
2 mitigations and controls for the Physical Attack Cross-Cutter Factor.

3 **MWC OM – Operational Management** –Includes labor and employee
4 related costs to provide supervision and management support. MWC OM also
5 includes costs incurred by the administrative staff working for the
6 supervisors/managers. This program does not relate to safety, reliability, or
7 maintenance.

8 **MWC OS – Operational Support** –Includes labor and employee related
9 costs to provide services and support that are unrelated to supervision and
10 management. Examples include Business Finance and Sourcing that support
11 the LOB. This program does relate to safety, reliability and maintenance
12 because it also includes costs for the Regional Safety program.

13 E. MWC Descriptions – Capital

14 **MWC 04 – Fleet/Automotive Equipment** – Includes acquisition of vehicles,
15 power-operated and off-road equipment, and trailers needed to respond to
16 customer service requests and the myriad of maintenance and construction
17 needs of the Company. This program does not relate to safety, reliability, or
18 maintenance.

19 **MWC 05 – Tools & Equipment** – Includes purchase of tools and equipment
20 required to perform various functions, including fleet repairs, warehouse
21 operations, etc. This program does not relate to safety, reliability, or
22 maintenance.

23 **MWC 12 – Implement Environment Projects** – Includes costs associated
24 with repairing, replacing, or upgrading equipment and facilities to comply with
25 environmental regulations. This program does not relate to safety, reliability, or
26 maintenance.

27 **MWC 21 – Purchase/Install – Other Capital** – Includes costs related to the
28 miscellaneous purchase of capital and/or the disposition and sale of PG&E's
29 surplus, obsolete or damaged assets. In addition, this MWC addresses costs
30 related to PG&E's drones. This program does not relate to safety, reliability, or
31 maintenance.

32 **MWC 22 – Maintain Buildings** – Includes the costs to replace and
33 construct base buildings, to extend the life of building components, correct
34 building component deficiencies, improve equipment operating efficiencies,

1 replace failed or functionally obsolete building components, and increase the
2 operating reliability of buildings and yards. This includes furniture, office
3 equipment, and IT Infrastructure for buildings. This program relates to safety,
4 reliability, or maintenance because the facilities are required to support PG&E's
5 safe and reliable delivery of energy and the funding is for maintenance of the
6 buildings and related seismic safety.

7 **MWC 23 – Implement Real Estate Strategy** – Includes the costs for new
8 buildings and yards, including the purchase of land and the purchase and
9 installation of furniture, office equipment, and IT Infrastructure, as well as the
10 costs to improve building environmental sustainability, to implement workplace
11 strategy, and to optimize the real estate portfolio. This program relates to safety,
12 reliability, or maintenance because it supports seismic safety as it relates to
13 CSO relocations and wildfire mitigations.

14 **MWC 2F – Build Applications and Infrastructure** – Includes the costs to
15 design, develop and enhance applications, systems, and infrastructure
16 technology solutions. In addition, costs for Cybersecurity projects are
17 addressed. This program relates to safety, reliability, or maintenance because it
18 contains mitigations for the for the Cyber Attack Risk Assessment and Mitigation
19 Phase risk and mitigations for the IT Asset Failure Cross-Cutter Factor.

20 **MWC 3N – Install/Replace Security Assets** – Includes the costs to design,
21 build, install, and replace Corporate Security assets. This program relates to
22 safety, reliability, or maintenance because it contains mitigations for the Physical
23 Attack Cross-Cutter Factor.

1 F. Comparison by MWC for Non-Safety, Reliability, and Maintenance Work Tables

TABLE 6-5
2023 RSAR
2023 GRC CYCLE SHARED SERVICES/IT EXPENSE COMPARISON BY MAT FOR NON SAFETY, RELIABILITY AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)

Line No	A	B	C1	C2	C3	C4	C5	D	E	F	G	H	I	J
	Type (O&M Expense or Capital)	Functional Area	MWC	MWC Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (H-G)	Spending Percent Variance for 2023 (%) ((H-G)/G*100)
1	O&M Expense	Shared Services	AY	Habitat and Species Protection	Non-SRM Total	Non-SRM Total	Ex 7, Ch 6	No	On-Going	Annual	343.5	480.3	136.8	39.8%
2	O&M Expense	Shared Services	BP	Manage DCP Business	Non-SRM Total	Non-SRM Total	Ex 7, Ch 2	No	On-Going	Annual	1,324.9	464.7	(860.2)	-64.9%
3	O&M Expense	Shared Services	ES	Implement Environment Projects	Non-SRM Total	Non-SRM Total	Ex 7, Ch 6	No	On-Going	Annual	705.7	623.3	(82.4)	-11.7%
4	O&M Expense	Shared Services	JE	Manage Land Services	Non-SRM Total	Non-SRM Total	Ex 7, Ch 6	No	On-Going	Annual	4,504.3	3,708.8	(795.5)	-17.7%
5	O&M Expense	Shared Services	JK	Manage Environmental Remediation - Earnings	Non-SRM Total	Non-SRM Total	Ex 7, Ch 6	No	On-Going	Annual	6,087.6	3,919.0	(2,168.6)	-35.6%
6	O&M Expense	Shared Services	KY	Provide Regulation Services	Non-SRM Total	Non-SRM Total	Ex 7, Ch 6	No	On-Going	Annual	1,496.8	1,396.9	(99.9)	-6.7%
7	O&M Expense	Shared Services	LO	Corp A&G Allocation - ATL	Non-SRM Total	Non-SRM Total	Ex 7, Ch 5	No	On-Going	Annual	0.0	283.5	283.5	100.0%
8	O&M Expense	Shared Services	OM	Operational Management	Non-SRM Total	Non-SRM Total	Ex 7, Ch 6	No	On-Going	Annual	541.1	1,050.7	509.7	94.2%
9	O&M Expense/IT		OM	Operational Management	Non-SRM Total	Non-SRM Total	Ex 7, Ch 8	No	On-Going	Annual	1,435.7	528.7	(907.0)	-63.2%

**TABLE 6-6
2023 RSAR
2023 GRC CYCLE CORPORATE REAL ESTATE CAPITAL COMPARISON BY MAT FOR NON SAFETY, RELIABILITY AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 RAMP Risk Name	C4 RAMP Mitigation and/or Control Name	C5 2023 GRC Testimony Reference	D RAMP Roll- up (Yes/No)	E Program / Project Life (Years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$ (H-G)	J Spending Percent Variance for 2023 (% ((H-G)/G*100)
1	Capital	Shared Services	04	Fleet/Automotive Equipment	Non-SRIM Total	Non-SRIM Total	Ex 7, Ch 2	No	On-Going	Annual	113,116.4	102,820.1	(10,296.3)	-9.1%
2	Capital	Shared Services	05	Tools & Equipment Implement Environment Projects	Non-SRIM Total	Non-SRIM Total	Ex 7, Ch 2 Ex 7, Ch 3 Ex 7, Ch 6	No	On-Going	Annual	2,495.5	4,931.8	2,436.3	97.6%
3	Capital	Shared Services	12	Purchase/Install - Other Capital	Non-SRIM Total	Non-SRIM Total	Ex 7, Ch 6	No	On-Going	Annual	8,066.1	11,598.0	3,531.9	43.8%
4	Capital	Shared Services	21		Non-SRIM Total	Non-SRIM Total	Ex 7, Ch 2 Ex 7, Ch 3 Ex 7, Ch 6	No	On-Going	Annual	654.2	5,613.2	4,958.9	758.0%

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 7
HUMAN RESOURCES
IMPUTED ADOPTED VERSUS RECORDED COMPARISON

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 7
HUMAN RESOURCES
IMPUTED ADOPTED VERSUS RECORDED COMPARISON

TABLE OF CONTENTS

A. Introduction..... 7-1

B. Comparison Summary Tables 7-1

C. HR Comparison for Safety, Reliability, and Maintenance Work Tables 7-3

D. HR MWC Descriptions for Safety and Reliability Work – Capital..... 7-4

E. Comparison for Non-Safety, Reliability, and Maintenance Work Tables 7-5

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 7
HUMAN RESOURCES
IMPUTED ADOPTED VERSUS RECORDED COMPARISON

A. Introduction

This section includes the following information for the Human Resources (HR) functional area: a comparison of the total 2023 imputed adopted spend to the actual spend as well as the required data points per program as defined and required in Decision (D.) 22-10-002.¹ This section also includes, for programs that are related to safety, reliability, or maintenance, the Major Work Category (MWC)/Maintenance Activity Type (MAT) Code descriptions, imputed adopted versus actual cost comparison details and variance explanations.² As required by D.19-04-020,³ the MWC/MAT Code descriptions include a discussion of how each program/project relates to safety, reliability, or maintenance.

B. Comparison Summary Tables

TABLE 7-1
2023 RSAR 2023 GRC CYCLE HR EXPENSE COMPARISON SUMMARY
(THOUSANDS OF DOLLARS)

Line No	A	B	C1	C2	D	E	F	G
	Type (O&M Expense or Capital)	Functional Area	Spending Category - MWC	MWC	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (E-D)	Percent Variance for 2023 (%) ((E-D)/D)
1	O&M Expense	Human Resources	Human Resources ^(a)	N/A	87,921.5	105,205.7	17,284.2	19.7%
2	O&M Expense	Human Resources	TOTAL		87,921.5	105,205.7	17,284.2	19.7%

(a) Human Resources expenses are reported at the department level.

¹ D.22-01-002, Appendices A and B.

² The Human Resources Organization expenses are not tracked by MWC or MAT, the expenses are tracked by department. The HR organization capital expenditures are tracked by MWC.

³ Attachment 2, p. 9.

TABLE 7-2
2023 RSAR 2023 GRC CYCLE HR CAPITAL COMPARISON SUMMARY
(THOUSANDS OF DOLLARS)

Line No	A	B	C1	C2	D	E	F	G
	Type (O&M Expense or Capital)	Functional Area	Spending Category - MWC	MWC	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (E-D)	Percent Variance for 2023 (%) ((E-D)/D)
1	Capital	Human Resources	PG&E Academy	05	30.6	21.6	(9.1)	-29.6%
2	Capital	Human Resources	PG&E Academy	22	1,071.8	517.5	(554.3)	-51.7%
3	Capital	Human Resources	TOTAL		1,102.4	539.1	(563.3)	-51.1%

1 C. HR Comparison for Safety, Reliability, and Maintenance Work Tables

**TABLE 7-3
2023 RSAR
2023 GRC CYCLE HR EXPENSE COMPARISON
FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name ^(a)	C3 RAMP Risk Name	C4 RAMP Mitigation and/or Control Name	C5 2023 GRC Testimony Reference	D RAMP Roll-up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K1 Spending Variance Explanation Required (Y/N)	K2 Percentage Variance Explanation Required (Y/N)	L 2023 Cost Variance Explanation	Forecast			N Status	O Completion Status Statement
																		M1 Scope (U, O, or T)	M2 Schedule (U, O, or T)	M3 Budget (U, O, or T)		
1	O&M Expense	Human Resources	N/A	PG&E Academy	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 8, Ch 6	No	On-going	Annual	40,427.0	32,021.1	(8,406.0)	-20.8%	NO	YES	Expenses were below imputed regulatory values due to a reduction contractor spend in Electric and Gas to support curriculum development.	Target	Target	Target	Proceeding as Planned	This work is ongoing and will continue in PG&E's 2023 GRC period. PG&E Academy provides ongoing training to PG&E coworkers.

(a) In the 2023 GRC, PG&E Academy is a department within the Human Resources organization and is not a MWC.

**TABLE 7-4
2023 RSAR
2023 GRC CYCLE HR CAPITAL COMPARISON
FOR SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

Line No	A Type (O&M Expense or Capital)	B Functional Area	C1 MWC	C2 MWC Name	C3 RAMP Risk Name	C4 RAMP Mitigation and/or Control Name	C5 2023 GRC Testimony Reference	D RAMP Roll-up (Yes/No)	E Program / Project Life (years)	F Program / Project Year	G 2023 Imputed Adopted Costs	H 2023 Actual Costs	I Difference for 2023 (\$) (H-G)	J Spending Percent Variance for 2023 (%) ((H-G)/G*100)	K1 Spending Variance Explanation Required (Y/N)	K2 Percentage Variance Explanation Required (Y/N)	L 2023 Cost Variance Explanation	Forecast			N Status	O Completion Status Statement
																		M1 Scope (U, O, or T)	M2 Schedule (U, O, or T)	M3 Budget (U, O, or T)		
1	Capital	Human Resources	5	PG&E Academy	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 8, Ch 6	No	On-going	Annual	30.6	21.6	(9.1)	-29.6%	NO	NO	Below variance threshold.	Target	Target	Target	Proceeding as Planned	N/A
2	Capital	Human Resources	22	PG&E Academy	SRM Total (Non-RAMP)	SRM Total (Non-RAMP)	Ex 8, Ch 6	No	On-going	Annual	1,071.8	517.5	(554.3)	-51.7%	NO	NO	Below variance threshold.	Target	Target	Target	Proceeding as Planned	N/A

1 **D. HR MWC Descriptions for Safety and Reliability Work – Capital**

2 **MWC 05 – Tools and Equipment** – Includes the costs of tools and
3 equipment purchased by PG&E for training facilities. The purchase of
4 equipment is part of PG&E’s training program because it allows students to learn
5 using the same tools and equipment they will use on the job.

6 This MWC relates to safety, reliability, or maintenance as it includes tools
7 and equipment purchased by PG&E for training facilities.

8 **MWC 22 – Maintain Buildings** – Includes the costs to maintain buildings, to
9 extend the life of building components, correct building component deficiencies,
10 improve equipment operating efficiencies, replace failed or functionally obsolete
11 building components, and increase the operating reliability of buildings and
12 yards. This includes furniture, office equipment, and IT Infrastructure for
13 buildings.

14 This MWC relates to safety, reliability, or maintenance as it includes
15 upgrades and maintenance to training facilities in order provide students with
16 realistic simulations of the actual conditions they face in the workplace.

1 E. Comparison for Non-Safety, Reliability, and Maintenance Work Tables

**TABLE 7-5
2023 RSAR
2023 GRC CYCLE HR EXPENSE COMPARISON
FOR NON-SAFETY, RELIABILITY, AND MAINTENANCE WORK
(THOUSANDS OF DOLLARS)**

	A	B	C1	C2	C3	C4	C5	D	E	F	G	H	I	J
Line No	Type (O&M Expense or Capital)	Functional Area	MWC	MWC Name	RAMP Risk Name	RAMP Mitigation and/or Control Name	2023 GRC Testimony Reference	RAMP Roll-up (Yes/No)	Program / Project Life (years)	Program / Project Year	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (H-G)	Spending Percent Variance for 2023 (%) ((H-G)/G*100)
1	O&M Expense	Human Resources	N/A	Human Resources (excluding PG&E Academy)	Non-SRM Total (Non-RAMP)	Non-SRM Total (Non-RAMP)	Ex 8, Ch 2-5	No	On-going	Annual	47,494.4	73,184.6	25,690.2	54.1%

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 8
CORPORATE SERVICES (ADMINISTRATIVE AND GENERAL)
IMPUTED ADOPTED VS. RECORDED COMPARISON

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 8
CORPORATE SERVICES (ADMINISTRATIVE AND GENERAL)
IMPUTED ADOPTED VS. RECORDED COMPARISON

TABLE OF CONTENTS

A. Introduction..... 8-1
B. Comparison Summary Tables 8-1

1 **PACIFIC GAS AND ELECTRIC COMPANY**
2 **SECTION 8**
3 **CORPORATE SERVICES (ADMINISTRATIVE AND GENERAL)**
4 **IMPUTED ADOPTED VS. RECORDED COMPARISON**

5 **A. Introduction**

6 This section presents imputed adopted versus actual cost comparison
7 details for the Administrative and General (A&G) items presented in Pacific Gas
8 and Electric Company’s (PG&E) 2023 General Rate Case (GRC). The
9 Corporate Services A&G department costs presented here support services
10 necessary for day-to-day operations.¹

11 **B. Comparison Summary Tables**

¹ A.21-06-021, PG&E 2023 GRC, Exhibit (PG&E-9), p. 1-1.

TABLE 8-1
2023 GRC CYCLE ADMINISTRATIVE & GENERAL
CORPORATE SERVICE EXPENSE
(THOUSANDS OF DOLLARS)

A	B	C	D	E	F	
Line No.	Type (O&M Expense or Capital)	Organization	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (D-C)	Percent Variance for 2023 (%) ((D-C)/D*100)
1	O&M Expense - A&G	Finance	55,624.4	61,896.6	6,272.1	11.3%
2	O&M Expense - A&G	Risk and Audit	13,190.3	12,731.6	(458.8)	-3.5%
3	O&M Expense - A&G	Compliance and Ethics	8,641.2	12,578.9	3,937.7	45.6%
4	O&M Expense - A&G	Regulatory Affairs	17,792.9	15,531.3	(2,261.5)	-12.7%
5	O&M Expense - A&G	Law	47,713.2	68,082.2	20,369.0	42.7%
6	O&M Expense - A&G	PG&E Corp Secretary and Executive Offices	5,125.7	7,951.6	2,825.9	55.1%
7	O&M Expense - A&G	Corporate Affairs	8,956.9	7,266.1	(1,690.8)	-18.9%
8	Total Administrative and General		157,044.6	186,038.3	28,993.7	18.5%

TABLE 8-2
2023 GRC CYCLE ADMINISTRATIVE & GENERAL
CORPORATE SERVICE CAPITAL
(THOUSANDS OF DOLLARS)

	A	B	C	D	E	F
Line No.	Type (O&M Expense or Capital)	Organization	2023 Imputed Adopted Costs	2023 Actual Costs	Difference for 2023 (\$) (D-C)	Percent Variance for 2023 (%) ((D-C)/D*100)
1	Capital - A&G	Finance	0.0	753.1	753.1	100.0%
2	Capital - A&G	Risk and Audit	551.2	0.0	(551.2)	-100.0%
3	Capital - A&G	Compliance and Ethics	551.2	1,243.6	692.4	125.6%
4	Capital - A&G	Regulatory Affairs	1,653.6	0.0	(1,653.6)	-100.0%
5	Total Administrative and General		2,756.0	1,996.7	(759.2)	-27.5%

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 9
COMPANYWIDE ITEMS
IMPUTED ADOPTED VERSUS RECORDED COMPARISON

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 9
COMPANYWIDE ITEMS
IMPUTED ADOPTED VERSUS RECORDED COMPARISON

TABLE OF CONTENTS

A. Introduction.....	9-1
B. Comparison Summary Tables	9-1

1
2
3
4
5
6
7
8
9
10
11

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 9
COMPANYWIDE ITEMS
IMPUTED ADOPTED VERSUS RECORDED COMPARISON

A. Introduction

This section presents imputed adopted versus actual cost comparison details for the Companywide items presented in Pacific Gas and Electric Company’s (PG&E) 2023 General Rate Case (GRC). The Companywide costs presented here include insurance premiums, settlement, and judgements, healthcare benefits, fees, and other similar costs.¹

B. Comparison Summary Tables

¹ A.21-06-021, PG&E 2023 GRC, Exhibit (PG&E-9), p. 1-1.

**TABLE 9-1
2023 RSAR
2023 GRC CYCLE COMPANYWIDE EXPENSE
(THOUSANDS OF DOLLARS)**

Line No.	A Type (O&M Expense or Capital)	B Functional Area	C Companywide Expense ^(a)	D 2023 Imputed Adopted Costs ^(a)	E 2023 Actual Costs ^{(a)(b)}	F Difference for 2023 (\$) (E-D)	G Percent Variance for 2023 (%) ((E-D)/D*100)
Shared Services / IT							
1	Companywide Expense	Enterprise Health & Safety	DOT Drug Testing	901.5	956.9	55.4	6.1%
2	Companywide Expense	Enterprise Health & Safety	Employee Assistance Program	2,766.2	1,830.7	(935.5)	-33.8%
3	Companywide Expense	Enterprise Health & Safety	STD / LTD	32,950.5	63,004.9	30,054.4	91.2%
4	Companywide Expense	Enterprise Health & Safety	Wellness	23,328.0	28,450.2	5,122.2	22.0%
5	Companywide Expense	Enterprise Health & Safety	Worker's Compensation	53,030.5	44,480.7	(8,549.8)	-16.1%
6			Total Share Services / IT	112,976.7	138,723.5	25,746.8	22.8%
Human Resources							
7	Companywide Expense	Human Resources	Active Employee Benefits	394,926.0	532,885.9	137,959.9	34.9%
8	Companywide Expense	Human Resources	Other Benefits	10,549.5	12,349.7	1,800.3	17.1%
9	Companywide Expense	Human Resources	Post-Retirement Benefits	147,792.4	167,163.6	19,371.2	13.1%
10	Companywide Expense	Human Resources	STIP	87,219.3	383,029.8	295,810.6	339.2%
11	Companywide Expense	Human Resources	Workforce Transition	6,640.3	3,224.3	(3,416.0)	-51.4%
12	Companywide Expense	Human Resources	Rewards & Recognition Program ^(c)	(19,149.6)	0.0	19,149.6	-100.0%
13	Companywide Expense	Human Resources	Officer Compensation Non-SEC 3b-7 ^(d)	0.0	21,790.4	21,790.4	100.0%
14			Total Human Resources	627,977.9	1,120,443.7	492,465.9	78.4%
Administrative & General							
15	Companywide Expense	Finance	Bank Fees	9,523.2	8,057.1	(1,466.1)	-15.4%
16	Companywide Expense	Corp Secretary & Exec. Offices	Director Fees	1,883.9	2,462.8	578.9	30.7%
17	Companywide Expense	Law	Litigation	18,959.0	36,244.9	17,285.8	91.2%
18	Companywide Expense	Risk, Audit, & Insurance	Other General & Non-Wildfire Liability Insurance	199,297.3	218,337.2	19,039.9	9.6%
19	Companywide Expense	Law	Third Party Claims	14,941.0	27,213.2	12,272.3	82.1%
20	Companywide Expense	Administrative & General	Meals & Sports Adjustment	(318.2)	0.0	318.2	-100.0%
21			Total Administrative and General w/o Wildfire Liability Self-Insurance	244,286.2	292,315.3	48,029.0	19.7%
22							
23			Grand Total Companywide Expense w/o Wildfire Liability Self-Insurance	985,240.8	1,551,482.5	566,241.7	57.5%
24							
25	Companywide Expense	Risk, Audit, & Insurance	Wildfire Liability Self-Insurance ^(e)	400,011.9	344,842.7	(55,169.2)	-13.8%
26							
27			Grand Total Companywide Expense	1,385,252.7	1,896,325.2	511,072.5	36.9%
(a)	Both Imputed and Actual Holding Company Companywide Expense are shown at 99%, which represents the Corporation work performed for and charged to the Utility. In the 2023 GRC Final Decision, the CPUC approved recovery of the 99%.						
(b)	Actual costs have been adjusted to exclude amounts that are not recovered from customers. For example, reserves associated with claims, settlements, and worker's compensation have been removed from recorded amounts.						
(c)	The 2023 GRC Final Decision disallowed cost recovery of the Rewards & Recognition (R&R) program; the (\$19 million) represents the total company reduction. Actual R&R spend is not a companywide expense and is included in each of the Functional Areas.						
(d)	In 2023 compensation labor for SEC 3b-7 and Non-SEC 3b-7 Officers was recorded as a Companywide expense, pending the 2023 GRC Final Decision, which was issued in November 2023.						
(e)	Wildfire Liability Self-Insurance was approved in D.23-01-005. Actuals value reflects accrued claims plus any recorded costs for that year. For 2023 the year-end balance in PG&E's Wildfire Self-Insurance Fund was \$350 million (\$344 million collected plus \$6 million interest). Per D.23-01-005, PG&E's Wildfire Self-Insurance Fund shall hold up to \$1.0 billion annually and the balance is to be carried over year after year during the 2023 GRC period. See Advice Letter 4710-E, filed on April 1, 2024, for additional details regarding how PG&E's Wildfire Self-Insurance Fund functions.						

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 10
COST RECOVERY:
BALANCING AND MEMORANDUM ACCOUNTS

PACIFIC GAS AND ELECTRIC COMPANY
SECTION 10
COST RECOVERY:
BALANCING AND MEMORANDUM ACCOUNTS

TABLE OF CONTENTS

A. Introduction.....	10-1
B. Gas Distribution.....	10-2
C. Gas Transmission and Storage	10-3
D. Electric Distribution.....	10-6
E. Energy Supply: Nuclear Generation	10-12
F. Energy Supply: Power Generation	10-13
G. Customer and Communications	10-15
H. Shared Services and IT	10-16
I. Administrative and General	10-18

1 **PACIFIC GAS AND ELECTRIC COMPANY**
2 **SECTION 10**
3 **COST RECOVERY:**
4 **BALANCING AND MEMORANDUM ACCOUNTS**

5 **A. Introduction**

6 This section includes the balancing and memorandum accounts associated
7 with actual expenditures for all General Rate Case (GRC) programs in Pacific
8 Gas and Electric Company's (PG&E) 2023 Risk Spending Accountability Report
9 (RSAR), "where any portion of the program was tracked in a balancing account
10 or memorandum account."¹ The tables below identify which of these programs
11 had expenditures that were recorded to a balancing or memorandum account by
12 Major Work Category (MWC), the name of the account, the purpose of that
13 account from the Preliminary Statement, and the year-end balance.^{2,3}

1 D.19-04-020, p. 37; as updated in D.22-10-002, Appendix A, p. A3 (Requirement 25).

2 As noted in the Introduction Section 1, Information Technology (IT) and Corporate Real Estate (CRE) costs attributable to the Line of Business (LOB) at issue in this report are presented in a decentralized fashion, meaning LOB-specific IT and CRE program costs are included within the LOBs that initiated the programs.

3 Data is as of January 18, 2024.

1 B. Gas Distribution

TABLE 10-1
BALANCING AND MEMORANDUM ACCOUNTS INCLUDED IN 2023 RSAR FOR GAS DISTRIBUTION
(THOUSANDS OF DOLLARS)

Line No.	MWC	MWC Name	Balancing/Memorandum Account Name	Disposition of Cost Recovery Request	Preliminary Statement Name & Purpose	2023 Actuals
1	Expense: MWC LW	Gas Leak Abatement Program	New Environmental Regulations Balancing Account (NERBA) Distribution Sub-Account	Decision (D.) 23-11-069	<u>DZ:</u> The purpose of the NERBA is to record and track actual expenses and capital revenue requirements compared to the adopted budget for incremental best practice activities related to Grade 3 leak repairs in accordance with California Public Utilities Commission (CPUC or Commission) Resolution (Res.) G-3538. The NERBA is a two-way balancing account. The "Distribution Subaccount" records and tracks actual gas distribution expenses and capital revenue requirements compared to the adopted gas distribution revenue requirements for incremental best practice activities related to minimizing methane emissions.	\$9,526
2	Expense: MWC AB	Alternative Energy Balancing Account	Alternative Energy Program Balancing Account (AEPBA)	D.23-11-069	<u>GB:</u> The purpose of the AEPBA is to track and record actual expenses and capital revenue requirements based on actual capital expenditures over the 2023 GRC cycle (2023-2026), up to the total adopted revenue requirements for the Alternative Energy Program (AEP). To the extent a Tier 1 Advice Letter (AL) is submitted to transfer additional avoided expenses or capital expenditures from other programs to the AEP, PG&E will include in the balancing account actual expenses or the capital revenue requirement associated with actual capital expenditures incurred during the rate case period up to the adopted values per the Tier 1 AL. The AEPBA is a one-way balancing account.	\$1,097
3	Capital: MWC 3P	Gas Leak Abatement Program	NERBA Distribution Sub-Account	D.23-11-069	<u>DZ:</u> The purpose of the NERBA is to record and track actual expenses and capital revenue requirements compared to the adopted budget for incremental best practice activities related to Grade 3 leak repairs in accordance with Commission Res.G-3538. The NERBA is a two-way balancing account. The "Distribution Subaccount" records and tracks actual gas distribution expenses and capital revenue requirements compared to the adopted gas distribution revenue requirements for incremental best practice activities related to minimizing methane emissions.	\$3,569

Note The 2023 recorded balance for Gas Distribution New Balancing Account (GDNBBA) is \$80.1 million dollars. At the time the data was pulled for the 2023 RSAR, actual costs in MWC 29 had not been transferred to the GDNBBA.

1 C. Gas Transmission and Storage

TABLE 10-2
BALANCING AND MEMORANDUM ACCOUNTS INCLUDED IN 2023 RSAR FOR GT&S
(THOUSANDS OF DOLLARS)

Line No.	MWC	MWC Name	Balancing/Memorandum Account Name	Disposition of Cost Recovery Request	Preliminary Statement Name & Purpose	2023 Actuals
1	Expense: MWC HP	Transmission Integrity Management Program (TIMP)	Transmission Integrity Management Program Balancing Account (TIMPBA)	D.23-11-069	<u>CL:</u> The purpose of the TIMPBA is to track the difference between adopted expenses related to PG&E's TIMP and actual expenses incurred. The TIMPBA is a one-way balancing account. This account is comprised of a Main Account, which tracks amounts related to backbone transmission and/or storage activity that is recovered from all customers and a Local Transmission (LT) Subaccount, which tracks amounts related to LT activity that is recovered from all customers except Backbone Service-Level end-use customers who do not fund LT activities.	\$240,182
2	Expense: MWC HP	TIMP	Transmission Integrity Management Program Memorandum (TIMPMA)	D.23-11-069	<u>DP:</u> The purpose of the TIMPMA is to record and track costs associated with any new transmission integrity management statutes or rules, or new or changed interpretation by a regulatory body of transmission integrity management statutes or rules, effective after January 1, 2015. This account is comprised of a main account, which records backbone transmission and/or storage costs for future recovery from all customers and a Local Transmission Subaccount, which records local transmission costs for future recovery from all customers except Backbone Service-Level end-use customers who do not fund local transmission activities.	\$337
3	Expense: MWC AH	Maintain Gas Storage Facilities	Gas Storage Balancing Account (GSBA)	D.23-11-069	<u>EJ:</u> The purpose of the Gas Storage Balancing Account (GSBA) is to track and record actual expenses and capital revenue requirements based on actual capital expenditures, compared to the revenue requirements based on the adopted capital expenditures for PG&E's natural gas storage facilities, excluding Gill Ranch. The GSBA is a two-way balancing account. The account is subject to a reasonableness review.	\$9,015

**TABLE 10-2
BALANCING AND MEMORANDUM ACCOUNTS INCLUDED IN 2023 RSAR FOR GT&S
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No.	MWC	MWC Name	Balancing/Memorandum Account Name	Disposition of Cost Recovery Request	Preliminary Statement Name & Purpose	2023 Actuals
4	Expense: MWC JT	GT Reliability & General Maintenance	Gas Statutes Regulations and Rules Memorandum Account (GRRMA)	D.23-11-069	<p><u>EL:</u> The purpose of the GRRMA is to track and record incremental costs to comply with any new federal or state statutes, regulations and rules, or new or changed interpretation by a regulatory body of statutes, regulations and rules, which are issued between GT&S funding cycles for which PG&E has not been able to incorporate a forecast of costs into a rate case and which are not already addressed and recorded in another account. This account is comprised of a Main Account, which records backbone transmission and/or storage costs for future recovery from all customers and a LT Subaccount, which records LT costs for future recovery from all customers except Backbone Service-Level end-use customers who do not fund LT activities.</p>	\$855
5	Expense: MWC AB	Misc Expense				\$474
6	Expense: MWC GF	Gas Trans & Dist Sys Mapping				\$9
7	Expense: MWC JP	Gas Trans & Dist Sys Mapping				\$8
8	Capital: MWC 75	GT Pipeline Reliability				\$33
9	Capital: MWC 3L	Gas Transmission Storage Wells	GSBA	D.23-11-069	<p><u>EJ:</u> The purpose of the GSBA is to track and record actual expenses and capital revenue requirements based on actual capital expenditures, compared to the revenue requirements based on the adopted capital expenditures for PG&E's natural gas storage facilities, excluding Gill Ranch. The GSBA is a two-way balancing account. The account is subject to a reasonableness review.</p>	\$115,636
10	Capital: MWC 3K	Gas Trans Remediate Corrosion	Internal Corrosion Balancing Account (ICBA)	D.23-11-069	<p><u>ER:</u> The purpose of the ICBA is to track the difference between the capital revenue requirements associated with adopted capital expenditures for the Internal Corrosion Program and the revenue requirement associated with actual capital expenditures over the 2023-2026 rate case cycle. The ICBA is a one-way balancing account. This account is comprised of a Main Account, which tracks amounts related to backbone transmission and/or storage activity that is recovered from all customers and a LT Subaccount, which tracks amounts related to LT activity that is recovered from all customers except Backbone Service-Level end-use customers who do not fund LT activities.</p>	\$2,623

**TABLE 10-2
BALANCING AND MEMORANDUM ACCOUNTS INCLUDED IN 2023 RSAR FOR GT&S
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No.	MWC	MWC Name	Balancing/Memorandum Account Name	Disposition of Cost Recovery Request	Preliminary Statement Name & Purpose	2023 Actuals
11	Capital: MWC 98	GT Integrity Management	In-Line Inspection Balancing Account (ILIBA)	D.23-11-069	<u>EA</u> : The purpose of the In-Line Inspection Balancing Account (ILIBA) is to record the difference between capital revenue requirements associated with adopted capital expenditures for the Traditional In-Line Inspection (LI) Upgrade program and the revenue requirement associated with actual capital expenditures for the adopted 16 Traditional LI projects (4-projects per) on an aggregate basis over the 2023-2026 rate case cycle. The ILIBA is a one-way balancing account.	\$145,155
12	Capital: MWC 73	GT Pipeline Capacity	Line 407 Memorandum Account (L407MA)	D.23-11-069	<u>DN</u> : The purpose of the Line 407 Memorandum Account (L407MA) is to record the revenue requirement associated with the actual capital expenditures incurred for the construction of the Line 407 project, above \$180.8 million as authorized by the Commission in D.19-09-025, PG&E's 2019 GT&S Rate Case. The costs above \$180.8 million are subject to a reasonableness review in PG&E's next rate case. L407 is a LT asset and therefore only LT costs are recorded to this account.	\$48
13	Capital: MWC 26	GT Customer Connects	Gas Transmission New Business Balancing Account (GTNBBA)	D.23-11-069	<u>GD</u> : The purpose of the Gas Transmission (GT) New Business Balancing Account (GTNBBA) is to track and record the difference between capital revenue requirements associated with adopted capital expenditures for interconnection projects and PG&E's Large Gas Solutions Program, i.e., Capital Maintenance Activity Type (MAT) 26A, and the revenue requirements associated with actual capital expenditures over the 2023 GRC cycle (2023-2026). Only costs associated with GT New Business projects that meet the July 1, 2023 deadline established in D.22-09-026, including Large Gas Solutions Projects that have project agreements with PG&E prior to July 1, 2023, will be recorded in this account. The GTNBBA is a one-way account.	\$1,049
<p>Note The 2023 GRC Final Decision closed the following GT&S accounts: In-Line Inspection Memorandum Account, Internal Corrosion Direct Assessments Memorandum Account, Hydrostatic Testing Balancing Account, Root Cause Analysis Memorandum Account, Engineering Critical Assessment Balancing Account, Critical Documents Program Memorandum Account, M&C Station Rebuilds Balancing Account, Physical Security Balancing Account, M&C Station Over Pressure Protection Memorandum Account, Routine Compression & Processing Memorandum Account, Below-Ground Storage Decommissioning Balancing Account, Locate and Mark Memorandum Account, Atmospheric Corrosion Balancing Account, Alternating Current Interference Balancing Account, and the Casings Program Balancing Account.</p>						

1 D. Electric Distribution

TABLE 10-3
BALANCING AND MEMORANDUM ACCOUNTS INCLUDED IN 2023 RSAR FOR ELECTRIC DISTRIBUTION
(THOUSANDS OF DOLLARS)

Line No.	MWC	MWC Name	Balancing/Memorandum Account Name	Disposition of Cost Recovery Request	Preliminary Statement Name & Purpose	2023 Actuals
1	Expense:					
2	HN	Electric Distribution Tree Trimming	Vegetation Management Balancing Account (VMBA)	D.23-11-069	<u>BU</u> : The purpose of the VMBA is to record actual expenses related to Routine Vegetation Management, Enhanced Vegetation Management, Tree Mortality and Fire Risk Reduction work up to adopted amounts for the entire GRC funding cycle. PG&E may amend the VMBA to include additional vegetation management programs. The VMBA is a one-way balancing account.	\$859,187
3	IG	Information Governance: Manage Var Bal Acct Processes			Disposition of the balance in this account will be at the end of the funding cycle. Any overcollections at the end of the rate case cycle will be returned to customers through a regularly scheduled Annual Electric True-up (AET) AL or other rate change AL, or as otherwise authorized by the Commission through the Distribution Revenue Adjustment Mechanism.	\$297,590
4	Expense: IF	Electric Distribution Major Emergency	Major Emergency Balancing Account (MEBA)	D.20-12-005	<u>GJ</u> : The purpose of the MEBA is to recover actual expenses and capital revenue requirements resulting from responding to major emergencies and catastrophic events not eligible for recovery through the Catastrophic Event Memorandum Account (CEMA). In some cases, costs relating to major emergencies that are found by the Commission not to be eligible for recovery through the CEMA process may be recoverable through the MEBA. The MEBA is a two-way balancing account in which PG&E records the difference between actual and adopted expenses and capital revenue requirements.	\$38,357
5	Capital: 95	Electric Distribution Major Emergency				\$49,287

**TABLE 10-3
BALANCING AND MEMORANDUM ACCOUNTS INCLUDED IN 2023 RSAR FOR ELECTRIC DISTRIBUTION
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No.	MWC	MWC Name	Balancing/Memorandum Account Name	Disposition of Cost Recovery Request	Preliminary Statement Name & Purpose	2023 Actuals			
6	Expense:		Wildfire Mitigation Balancing Account (WMBA)	D.23-11-069	<p>IO: The purpose of the Wildfire Mitigation Balancing Account – Electric (WMBA-E) is to track actual expenses and capital expenditures against adopted amounts and to record associated expenses and capital revenue requirements for fire risk mitigation work, allocated to the electric distribution and generation functions, up to the aggregate expense and capital revenue requirements adopted for the 2023 GRC cycle (2023-2026). These costs include, but are not limited to, expenses and the revenue requirements associated with capital expenditures for:</p> <p>(1) Situational Awareness and Forecasting; (2) PSPS Operations and associated Customer Communications; (3) System Hardening, Enhanced Automation, and PSPS Impact Mitigations; (4) CWSP PMO; (5) IT for Wildfire Mitigation; and (6) Enhanced Powerline Safety Settings. Costs recorded to the WMBA-E do not include costs recovered through the CEMA, the Fire Risk Mitigation Memorandum Account (FRMMA) or the Wildfire Mitigation Plan Memorandum Account (WMPMA).</p> <p>The WMBA-E is a one-way balancing account that records actual expenses and capital revenue requirements up to the total adopted expense and capital expenditures for the entire GRC funding cycle (2023-2026).</p> <p>Upon issuance of securitized debt to fund capital expenditures in the WMBA, capital revenue requirements related to these capital expenditures will be modified to exclude depreciation expense, the return on investment, and taxes, with the exception of property taxes.</p>	\$31,503			
7	AB	Support and Emergency Preparedness and Response (EP&R)							\$1,140
8	BA	Electric Distribution Operate System							\$51
9	BF	Electric T&D Patrol/Inspection							\$10,277
10	BH	Electric Distribution Routine Emergency							\$258
11	DD	Provide Field Service							\$7,543
12	FZ	Electric Distribution Engineering and Planning							\$211
13	GC	Electric Distribution Substations Operate and Maintain Assets							\$83
14	HG	Distribution Operational Tech							\$73
15	HX	Distribution Automation & Protection							

**TABLE 10-3
BALANCING AND MEMORANDUM ACCOUNTS INCLUDED IN 2023 RSAR FOR ELECTRIC DISTRIBUTION
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No.	MWC	MWC Name	Balancing/Memorandum Account Name	Disposition of Cost Recovery Request	Preliminary Statement Name & Purpose	2023 Actuals
16	IG	Information Governance: Manage Var Bal Acct Processes	Wildfire Mitigation Balancing Account (WMBA) - Continued	D.23-11-069		\$107,556
17	KA	Electric Distribution Maintenance OH General				\$126
18	WF	Wildfire Mitigation				\$62,820
19	Capital:					\$90
20	05	Tools & Equipment				
21	07	Electric Distribution Install / Replace OH Poles				\$15,717
22	08	Electric Distribution Overhead (OH) Asset Replacement				\$1,008,684
23	09	Electric Distribution Automation and Protection				\$13,887
24	21	Miscellaneous Capital and EP&R				\$22,325
25	2A	Electric Distribution Preventive Maintenance Overhead				\$18,271
26	2F	Build IT Applications and Infrastructure	\$49,294			

**TABLE 10-3
BALANCING AND MEMORANDUM ACCOUNTS INCLUDED IN 2023 RSAR FOR ELECTRIC DISTRIBUTION
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No.	MWC	MWC Name	Balancing/Memorandum Account Name	Disposition of Cost Recovery Request	Preliminary Statement Name & Purpose	2023 Actuals
27	3U	Install/Replace Wildfire Mitigation Equipment	Wildfire Mitigation Balancing Account (WMBA) – Continued	D.23-11-069		\$82,404
28	48	Electric Distribution Substation Replace Other Equipment				\$4,530
29	49	Electric Distribution Reliability Circuit/Zone				\$45,083
30	Expense:		Fire Risk Mitigation Memorandum Account (FRMMA)	Disposition Letter Dated March 12, 2019	<p><u>HQ:</u> The purpose of the FRMMA is to record, pursuant to Public Utilities Code (Pub. Util. Code) Section 8386 (j), incremental costs of fire risk mitigation work that is not otherwise recovered in PG&E's adopted revenue requirements. Such costs shall include, but are not limited to, expense and capital expenditures for: advanced system hardening and resiliency; expanded automation and protection; improved wildfire detection; enhanced event response capacity, and VM activities. Costs recorded to the FRMMA will not include costs approved for recovery in PG&E GRCs or recovered through PG&E's CEMA, Fire Hazard Prevention Memorandum Account (FHPMA) or other cost recovery mechanisms including the memorandum account approved as part of PG&E's WMP (Pub. Util. Code Section 8386 (e)).</p>	\$15
31	AB	Support and EP&R				
32	Capital:					
33	08	Electric Distribution Replace OH Asset				\$508
35	48	Electric Distribution Substation Replace Other Equipment				\$10

**TABLE 10-3
BALANCING AND MEMORANDUM ACCOUNTS INCLUDED IN 2023 RSAR FOR ELECTRIC DISTRIBUTION
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No.	MWC	MWC Name	Balancing/Memorandum Account Name	Disposition of Cost Recovery Request	Preliminary Statement Name & Purpose	2023 Actuals
36	Expense:					
37	AB	Support and EP&R	Wildfire Mitigation Plan Memorandum Account (WMPMA) Disposition Letter Dated March 12, 2019		<u>HX:</u> The purpose of the WMPMA is to record, pursuant to SB 901 (Pub. Util. Code Section 8386.4 (a)) and the WMP (also known as the Wildfire Safety Plan) approved by the Commission, incremental costs incurred to implement an approved WMP that are not otherwise recovered in PG&E's adopted revenue requirements. Such costs may include expense and capital expenditures for activities including, but not limited to, operational practices, inspection programs, system hardening, EVM, enhanced situational awareness, PSPS, and alternative technologies. Costs recorded to the WMPMA will not include costs approved for recovery in PG&E GRCs or recovered through PG&E's CEMA, FHPMA, FRMMA, or other cost recovery mechanisms.	\$10
38	IG	Information Governance: Manage Var Bal Acct Processes				\$18,404
39	WF	Wildfire Mitigation				\$101
40	Capital:					
41	2F	Build IT Apps & Infra				\$4,258
42	Expense:					
43	KA	Electric Distribution Maintenance OH General	Overhead and Underground Maintenance Balancing Account (OUMBA)	D.23-11-069	<u>JZ:</u> The purpose of the OUMBA is to record and track the difference between the adopted expenses and capital revenue requirements and actual expenses and capital revenue requirements based on actual capital additions for the electric distribution Overhead and Underground Maintenance Program beginning January 1, 2023. The OUMBA is a two-way balancing account. Costs recorded to this account do not include costs recovered through the Wildfire Mitigation Balancing Account (WMBA) or Wildfire Mitigation Plan Memorandum Account (WMPMA).	\$89,050
44	KB	Electric Distribution Maintenance UG				\$16,071

**TABLE 10-3
BALANCING AND MEMORANDUM ACCOUNTS INCLUDED IN 2023 RSAR FOR ELECTRIC DISTRIBUTION
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No.	MWC	MWC Name	Balancing/Memorandum Account Name	Disposition of Cost Recovery Request	Preliminary Statement Name & Purpose	2023 Actuals
45	Capital:		Overhead and Underground Maintenance Balancing Account (OUMBA) - Continued	D.23-11-069		\$378,852
46	2A	Electric Distribution Preventive Maintenance Overhead				
47	2B	Electric Distribution Preventive Maintenance Underground				\$86,589
48	Expense: IG	Information Governance: Manage Var Bal Acct Processes	Rule 20 Balancing Account (RBA) including Rule 20A, Rule 20B and Rule 20C subaccounts	D.21-06-013	HC: The purpose of the RBA is to record the difference between the Rule 20 program revenue requirement adopted in PG&E's GRC proceeding and PG&E's actual expenses and capital revenue requirements required to complete overhead to underground conversion projects consistent with the Rule 20 program. The RBA will also record the expense costs associated with the Rule 20 audit ordered in Ordering Paragraph 9 of D.17-05-013. The RBA is a one-way balancing account.	\$148
49	Capital: 30	Electric Distribution Work at the Request of Others Rule 20A				\$23,890
50	Capital:10	Electric Distribution Work at the Request of Others General		D.23-11-069	Pursuant to D.23-11-069, the Commission adopted D.21-06-13 and Advice Letter 6246-E, Rule 20B and 20C were established as new subaccounts for tracking adopted RROs compared to actual spending for Rule 20B and 20C programs adopted in the 2023 GRC effective January 1, 2023.	Footnote (a)
51	Capital:		Critical Operating Equipment Cable Replacement Balancing Account (COECRBA)	D.23-11-069	KA: The purpose of the COECRBA is to record and track the difference between the adopted capital revenue requirements and capital revenue requirements based on actual capital additions for the Critical Operating Equipment Cable Replacement Program beginning January 1, 2023. The Critical Operating Equipment Cable Replacement Program is for replacing failed sections of underground distribution cable. The COECRBA is a two-way balancing account.	
52	56	Electric Distribution Preventive Maintenance Overhead				\$7,944

(a) The 2023 recorded balance of Rule 20B and Rule 20C is approximately \$52 million dollars. At the time the data was pulled for the 2023 RSAR, costs to be recorded in the Rule 20B and 20C accounts had not been transferred.

1 E. Energy Supply: Nuclear Generation

**TABLE 10-4
BALANCING AND MEMORANDUM ACCOUNTS INCLUDED IN 2023 RSAR FOR NUCLEAR GENERATION
(THOUSANDS OF DOLLARS)**

Line No.	MWC	MWC Name	Balancing/Memorandum Account Name	Disposition of Cost Recovery Request	Preliminary Statement	2023 Actuals
1	Expense: MWC IG	Manage Var Bal Acct Processes	Nuclear Regulatory Commission Rulemaking Balancing Account (NRCRBA)	D.14-08-032	GM: The purpose of the NRCRBA is to recover actual expenses for complying with existing, emerging or evolving Nuclear Regulatory Commission regulations, rulemakings, orders, bulletins and/or generic letters, and the Code of Federal Regulations (CFR) 10-50-54F – Conditions of Licenses at Diablo Canyon. Specifically, the NRCRBA tracks and adjusts for the difference in expenses based on actual versus adopted costs.	\$2,744
2	Expense: MWC IG	Manage Var Bal Acct Processes	Department of Energy Litigation BA (DOELBA)	D.14-08-032	The purpose of the DOELBA is to recover actual expenses for litigation costs related to the spent fuel storage from the Department of Energy	\$32

1 F. Energy Supply: Power Generation

TABLE 10-5
BALANCING AND MEMORANDUM ACCOUNTS INCLUDED IN 2023 RSAR FOR POWER GENERATION
(THOUSANDS OF DOLLARS)

Line No.	MWC	MWC Name	Balancing/Memorandum Account Name	Disposition of Cost Recovery Request	Preliminary Statement	2023 Actuals
1	Expense: MWC IG	Manage Var Bal Acct Processes	Hydro Licensing Balancing Account (HLBA)	D.20-12-005	<p><u>GL</u>: The purpose of the HLBA is to recover actual expenses and capital revenue requirements based on actual capital expenditures related to Federal Energy Regulatory Commission (FERC) hydro licensing activities, which include, but are not limited to, renewing, amending, surrendering, decommissioning, compliance requirements, FERC and California Division of Safety of Dams (DSOD) regulatory fees, costs associated with implementation of the Crane Valley Recreation Settlement Agreement (SA), and costs associated with work required as a result of the 2017 Oroville Dam incident. Specifically, the HLBA tracks and adjusts for the difference in actual and adopted expenses and capital revenue requirements associated with relicensing and amending/modifying licenses issued on or after January 1, 2012, including costs associated with implementing and complying with new license conditions or requirements resulting from renewed, modified, or amended licenses.</p>	\$20,652
2	Expense: MWC IG	Manage Var Bal Acct Processes	FRMMA	Disposition Letter Dated March 12, 2019	<p><u>HQ</u>: The purpose of the FRMMA is to record, pursuant to Pub. Util. Code Section 8386 (j) incremental cost of fire risk mitigation work that is not otherwise recovered in PG&E's adopted revenue requirements. Such costs shall include, but are not limited to, expense and capital expenditures for: advanced system hardening and resiliency; expanded automation and protection; improved wildfire detection; enhanced event response capacity, and VM activities. Costs recorded to the FRMMA will not include costs approved for recovery in PG&E GRCs or recovered through PG&E's CEMA, FHPMA or other cost recovery mechanisms including the memorandum account approved as part of PG&E's annual WMP, as set forth in Pub. Util. Code Section 8386 (e).</p>	\$491
3	Expense: MWC IG	Manage Var Bal Acct Processes	WMPMA	Disposition Letter Dated March 12, 2019	<p><u>HX</u>: The purpose of the WMPMA is to record, pursuant to Pub. Util. Code Section 8386.4 (a) and the WMP approved by the Commission, incremental costs incurred to implement an approved WMP that are not otherwise recovered in PG&E's adopted revenue requirements. Such costs may include expense and capital expenditures for activities including but not limited to: operational practices, inspection programs, system hardening, EVM, enhanced situational awareness, PSPS, and alternative technologies. Costs recorded to the WMPMA will not include costs approved for recovery in PG&E GRCs or recovered through PG&E's CEMA, FHPMA, FRMMA, or other cost recovery mechanisms.</p>	\$4,354

**TABLE 10-5
BALANCING AND MEMORANDUM ACCOUNTS INCLUDED IN 2023 RSAR FOR POWER GENERATION
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No.	MWC	MWC Name	Balancing/Memorandum Account Name	Disposition of Cost Recovery Request	Preliminary Statement	2023 Actuals
4	Capital: MWC 3H	Hydroelectric License and Conditions	HLBA	D.20-12-005	<u>GL</u> : The purpose of the HLBA is to recover actual expenses and capital revenue requirements based on actual capital expenditures related to FERC hydro licensing activities, which include, but are not limited to, renewing, amending, surrendering, decommissioning, compliance requirements, FERC and California DSOD regulatory fees, costs associated with implementation of the Crane Valley Recreation SA, and costs associated with work required as a result of the 2017 Oroville Dam incident. Specifically, the HLBA tracks and adjusts for the difference in actual and adopted expenses and capital revenue requirements associated with relicensing and amending/modifying licenses issued on or after January 1, 2012, including costs associated with implementing and complying with new license conditions or requirements resulting from renewed, modified, or amended licenses.	\$35,347
5	Capital: MWC 2L	Instl/Rpl for Hydro Safety and Reg	FRMMA	Disposition Letter Dated March 12, 2019	<u>HQ</u> : The purpose of the FRMMA is to record, pursuant to Pub. Util. Code Section 8386 (j) incremental cost of fire risk mitigation work that is not otherwise recovered in PG&E's adopted revenue requirements. Such costs shall include, but are not limited to, expense and capital expenditures for: advanced system hardening and resiliency; expanded automation and protection; improved wildfire detection; enhanced event response capacity, and VM activities. Costs recorded to the FRMMA will not include costs approved for recovery in PG&E GRCs or recovered through PG&E's CEMA, FHPMA or other cost recovery mechanisms including the memorandum account approved as part of PG&E's annual WMP, as set forth in Pub. Util. Code Section 8386 (e).	\$82
6	Capital: MWC 2L	Instl/Rpl for Hydro Safety and Reg	WMPMA	Disposition Letter Dated March 12, 2019	<u>HX</u> : The purpose of the WMPMA is to record, pursuant to Pub. Util. Code Section 8386.4 (a) and the WMP approved by the Commission, incremental costs incurred to implement an approved WMP that are not otherwise recovered in PG&E's adopted revenue requirements. Such costs may include expense and capital expenditures for activities including but not limited to: operational practices, inspection programs, system hardening, EVM, enhanced situational awareness, PSPS, and alternative technologies. Costs recorded to the WMPMA will not include costs approved for recovery in PG&E GRCs or recovered through PG&E's CEMA, FHPMA, FRMMA, or other cost recovery mechanisms.	\$786

1 G. Customer and Communications

**TABLE 10-6
BALANCING AND MEMORANDUM ACCOUNTS INCLUDED IN 2023 RSAR FOR CUSTOMER AND COMMUNICATIONS
(THOUSANDS OF DOLLARS)**

Line No.	MWC	MWC Name	Balancing/Memorandum Account Name	Disposition of Cost Recovery Request	Preliminary Statement	2023 Actuals
1	Expense: MWC IG	Manage Var Bal Acct Processes	WMPMA	Disposition Letter Dated March 12, 2019	HX: The purpose of the WMPMA is to record, pursuant to SB 901 (Pub. Util. Code Section 8386.4 (a)) and the WMP (also known as the Wildfire Safety Plan) approved by the Commission, incremental costs incurred to implement an approved WMP that are not otherwise recovered in PG&E's adopted revenue requirements. Such costs may include expense and capital expenditures for activities including but not limited to: operational practices, inspection programs, system hardening, EVM, enhanced situational awareness, PSPS, and alternative technologies. Costs recorded to the WMPMA will not include costs approved for recovery in PG&E GRCs or recovered through PG&E's CEMA, FHPMA, FRMMA, or other cost recovery mechanisms.	\$1,494
2	Capital: MWC 3M	Install/Repl Var Bal Acct	WMPMA	Disposition Letter Dated March 12, 2019	HX: The purpose of the WMPMA is to record, pursuant to SB 901 (Pub. Util. Code Section 8386.4 (a)) and the WMP (also known as the Wildfire Safety Plan) approved by the Commission, incremental costs incurred to implement an approved WMP that are not otherwise recovered in PG&E's adopted revenue requirements. Such costs may include expense and capital expenditures for activities including but not limited to: operational practices, inspection programs, system hardening, EVM, enhanced situational awareness, PSPS, and alternative technologies. Costs recorded to the WMPMA will not include costs approved for recovery in PG&E GRCs or recovered through PG&E's CEMA, FHPMA, FRMMA, or other cost recovery mechanisms.	\$5,463
3	Expense: MWC IG	Manage Var Bal Acct Processes	WMBA	D.20-12-005	IO: The purpose of the WMBA-E is to track actual expenses and capital expenditures against adopted amounts and to record associated expenses and capital revenue requirements for fire risk mitigation work, allocated to the electric distribution and generation functions. These costs include, but are not limited to, expenses and the revenue requirements associated with capital expenditures for: advanced system hardening and resiliency; expanded automation and protection; improved wildfire detection; and enhanced operational practices including work related to PSPS events. Costs recorded to the WMBA-E do not include costs recovered through the CEMA, the FRMMA or the WMPMA.	\$33,998

1 H. Shared Services and IT

**TABLE 10-7
BALANCING AND MEMORANDUM ACCOUNTS INCLUDED IN 2023 RSAR FOR SHARED SERVICES AND IT
(THOUSANDS OF DOLLARS)**

Line No.	MWC	MWC Name	Balancing/Memorandum Account Name	Disposition of Cost Recovery Request	Preliminary Statement	2023 Actuals
1	Expense: MWC IG	Manage Var Bal Acct Processes	FRMMA/WMPMA	Disposition Letter Dated March 12, 2019	<u>HQ:</u> The purpose of the FRMMA is to record, pursuant to Pub. Util. Code Section 8386 (j), incremental costs of fire risk mitigation work that is not otherwise recovered in PG&E's adopted revenue requirements. Such costs shall include, but are not limited to, expense and capital expenditures for: advanced system hardening and resiliency; expanded automation and protection; improved wildfire detection; enhanced event response capacity, and VM activities. Costs recorded to the FRMMA will not include costs approved for recovery in PG&E GRCs or recovered through PG&E's CEMA, FHPMA or other cost recovery mechanisms including the memorandum account approved as part of PG&E's WMP (Pub. Util. Code Section 8386 (e)).	(FRMMA) \$1,231 (WMPMA) \$1,256
2	Expense: MWC JL	Procure Materials and Services	WMPMA			WMPMA \$1,460
3	Capital: MWC 23	Implement Real Estate Strategy	WMPMA		<u>HX:</u> The purpose of the WMPMA is to record, pursuant to SB 901 (Pub. Util. Code Section 8386.4 (a)) and the WMP (also known as the Wildfire Safety Plan) approved by the Commission, incremental costs incurred to implement an approved WMP that are not otherwise recovered in PG&E's adopted revenue requirements. Such costs may include expense and capital expenditures for activities including but not limited to: operational practices, inspection programs, system hardening, EVM, enhanced situational awareness, PSPS, and alternative technologies. Costs recorded to the WMPMA will not include costs approved for recovery in PG&E GRCs or recovered through PG&E's CEMA, FHPMA, FRMMA, or other cost recovery mechanisms.	\$8,498

**TABLE 10-7
BALANCING AND MEMORANDUM ACCOUNTS INCLUDED IN 2023 RSAR FOR SHARED SERVICES
(THOUSANDS OF DOLLARS)
(CONTINUED)**

Line No.	MWC	MWC Name	Balancing/Memorandum Account Name	Disposition of Cost Recovery Request	Preliminary Statement	2023 Actuals
4	Expense: MWC AB	Miscellaneous Expense	WMBA	D.23-11-069	<p><u>IQ:</u> PURPOSE: The purpose of the WMBA-E is to track actual expenses and capital expenditures against adopted amounts and to record associated expenses and capital revenue requirements for fire risk mitigation work, allocated to the electric distribution and generation functions. These costs include, but are not limited to, expenses and the revenue requirements associated with capital expenditures for: advanced system hardening and resiliency; expanded automation and protection; improved wildfire detection; and enhanced operational practices including work related to PSPS events. Costs recorded to the WMBA-E do not include costs recovered through the CEMA, the FRMMA or the WMPMA.</p> <p>The WMBA is a two-way balancing account, with a reasonableness review requirement for spending above 115 percent of expense and capital expenditure adopted amounts (reasonableness threshold). Any such amounts are tracked separately for subsequent review and approval by the Commission.</p>	Shared Services (Aviation): \$4,702
5	Expense: MWC JL	Procure Materials and Services				\$2,471
6	Expense: MWC EP	Manage Property and Buildings	General Office Sale MA (GOSMA)	D.23-11-069	<p><u>FQ:</u> PURPOSE: The purpose of the GOSMA is to record the expenses associated with the leasing of the SFGO and the Oakland facility during the transition between the facilities, the expenses associated with moving to the Oakland facility, the capital revenue requirement associated with actual capital expenditures associated with the exercise of the option to purchase the Oakland facility, and a return on the deposits made toward the purchase of the Oakland facility at the authorized cost of capital, pending transfer of these items to functional revenue requirement accounts through the Annual Gas True-Up filings.</p>	\$77,990
7	Capital: MWC 22 MWC 23	Maintain Buildings Implement Real Estate Strategy				(\$34,159)
8	Capital: MWC JV	Maintain Applications and Infrastructure	Gas Statutes Regulations and Rules Memorandum Account (GSRRMA)	D.23-11-069	<p><u>EL:</u> The purpose of the GSRRMA is to track and record incremental costs to comply with any new federal or state statutes, regulations and rules, or new or changed interpretation by a regulatory body of statutes, regulations and rules, which are issued between GT&S funding cycles for which PG&E has not been able to incorporate a forecast of costs into a rate case and which are not already addressed and recorded in another account. This account is comprised of a Main Account, which records backbone transmission and/or storage costs for future recovery from all customers and a LT Subaccount, which records LT costs for future recovery from all customers except Backbone Service-Level end-use customers who do not fund LT activities.</p>	\$2,066
9	Capital: MWC 2F	Build Applications and Infrastructure				\$3,950

1 I. Administrative and General

**TABLE 10-8
BALANCING AND MEMORANDUM ACCOUNTS INCLUDED IN 2023 RSAR FOR ADMINISTRATIVE & GENERAL
(THOUSANDS OF DOLLARS)**

Line No.	MWC	MWC Name	Balancing/Memorandum Account Name	Disposition of Cost Recovery Request	Preliminary Statement	2023 Actuals
1	Corporate Item – (1) Other General & Non-Wildfire Liability Insurance and (2) Wildfire Liability Self-Insurance	N/A	Risk Transfer Balancing Account (RTBA)	D.23-01-005 & D.23-11-069	<p><u>IN</u>: The RTBA is a two-way balancing account and is applicable to electric and gas customers. The purpose of the RTBA – Electric is to track and record actual expenses compared to the adopted expenses for financial risk transfer costs (inclusive of all financial risk transfer mechanisms: insurance, reinsurance, Catastrophe (CAT) bonds, captives and related costs such as broker fees and excise taxes) allocated to the electric distribution and generation functions. PG&E is authorized to recover costs associated with the purchase of up to \$1.4 billion of financial risk transfer coverage for commercial policies purchased prior to 2023 in total (“reasonableness threshold”). Amounts in excess of this limit are tracked separately in the Additional Coverage Subaccount for subsequent review and approval by the Commission. The purpose of this account is to also track and record expenses compared to adopted funding for PG&E’s self-insurance program as described in the Wildfire Self-Insurance Subaccount.</p> <p><u>FK</u>: The purpose of the RTBA – Gas is to track and record actual expenses compared to the adopted expenses for PG&E’s financial risk transfer costs (inclusive of all financial risk transfer mechanisms: insurance, reinsurance, CAT bonds, captives and related costs such as broker fees and excise taxes) allocated to the gas distribution, transmission, and storage functions. Effective January 1, 2023, PG&E is authorized to recover up to \$156 million annually for non-wildfire liability commercial insurance policies, plus associated financial risk transfer expenses, with coverage up to a \$700 million coverage target. Amounts in excess of this limit are tracked separately in the Additional Non-Wildfire Expenses Subaccount for subsequent review and approval by the Commission.</p>	<p>Other General & Non-Wildfire: \$218.3</p> <p>Wildfire Self-Insurance: \$344.8</p>

PACIFIC GAS AND ELECTRIC COMPANY

APPENDIX A

2023 GRC IMPUTED REGULATORY VALUES METHODOLOGY

PACIFIC GAS AND ELECTRIC COMPANY
APPENDIX A
2023 GRC IMPUTED REGULATORY VALUES METHODOLOGY

TABLE OF CONTENTS

A. Introduction.....	1
1. 2023 Test Year	1
2. 2024 to 2026 Post-Test Years	2
3. Imputation Methodology by Maintenance Activity Type for Gas Distribution, Transmission and Storage, and Electric Distribution	3
4. Units of Work Imputation for Gas Distribution, Transmission and Storage and Electric Distribution	3
5. Gas Distribution, Transmission and Storage Exceptions	3
6. Electric Distribution Exceptions	4
7. Risk Assessment and Mitigation Phase Regulatory Values Imputation	4
8. 2023 Test Year	7
9. 2024 to 2026 Post-Test Years	8
10. Imputation Methodology by Maintenance Activity Type for Gas Distribution, Transmission and Storage, and Electric Distribution	9
11. Units of Work Imputation for Gas Distribution, Transmission and Storage and Electric Distribution	9
12. Gas Distribution, Transmission and Storage Exceptions	10
13. Risk Assessment and Mitigation Phase Regulatory Values Imputation	10

1 **PACIFIC GAS AND ELECTRIC COMPANY**
2 **APPENDIX A**
3 **2023 GRC IMPUTED REGULATORY VALUES METHODOLOGY**

4 **A. Introduction**

5 On November 16, 2023, the California Public Utilities Commission (CPUC or
6 the Commission) issued Decision (D.) 23-11-069 (or the Decision) in PG&E’s
7 2023 General Rate Case (GRC). The Decision adopted base revenue
8 requirements for the 2023-2026 GRC period.

9 The section below describes the methodology used by PG&E to develop
10 expense and capital regulatory values (i.e., imputed adopted amounts).

11 **1. 2023 Test Year**

12 The Decision adopted 2023 test year (TY) Operations and Maintenance
13 (O&M) expenses and capital expenditures at the Major Work Category
14 (MWC) level, and Administrative and General (A&G) expenses by
15 organization and/or by cost type.

16 The Decision had reductions for certain A&G costs, including for 2023, a
17 reduction of \$141 million for Dental and Medical plans and a reduction of
18 \$145 million Short Term Incentive Plan.¹ Certain A&G costs are capitalized
19 as specified in the Decision. The capitalized portion associated with all A&G
20 reductions is \$132.8 million. The \$132.8 million reduction was then applied
21 to capital expenditures proportionately to derive the 2023 TY imputed
22 adopted capital expenditures based on the Commission’s Results of
23 Operations (RO) Decision Model. The capitalized A&G reduction was not
24 applied to specific programs discussed in the Decision, such as System
25 Hardening in Electric Distribution² and New Business Connect in Gas
26 Distribution.³

27 The Decision also adopted 50 percent of the increase in Standard &
28 Poor’s, Inc. (S&P) IHS Markit escalation rates presented in PG&E’s
29 September 6, 2022 update filing in which PG&E used to impute the final

1 D.23-11-069, Section 8.3.1, p. 605.

2 D.23-11-069, Section 4.3.13, p. 297.

3 D.23-11-069, Section 3.13.2, p. 230.

1 2023 TY O&M expenses and capital expenditures at the MWC level, and
2 A&G expenses by organization and/or by cost type.

3 **2. 2024 to 2026 Post-Test Years**

4 The Decision adopted 2024, 2025 and 2026 revenue requirements
5 based on applying 50 percent of the increase in S&P's IHS Markit escalation
6 rates presented in PG&E's September 6, 2022 update filing.⁴ The Decision
7 RO Model also provides specific MWC/MAT values for adopted bottom-up
8 forecast programs in O&M and capital expenditures. See Table 1 at the end
9 of this document.

10 To develop imputed regulatory values for 2024 to 2026 that conform to
11 the Decision revenue requirement increase, PG&E used a 2-step process:

12 Step 1: To develop the adopted values for capital expenditures, PG&E
13 identified bottom-up and non bottom-up capital programs as specified in the
14 Decision RO Model. The Decision RO Model provides adopted values for
15 bottom-up forecast programs at the MWC/MAT level for 2023-2026.

16 For the non bottom-up forecast capital expenditure programs for
17 2024-2026, the Decision RO Model applied the adopted escalation rates to
18 escalate the 2023 imputed adopted capital expenditure amounts to
19 2024-2026.

20 Step 2: To develop the expense imputed adopted values for 2024-2026,
21 PG&E applied adopted escalation rates in the Decision RO Model to
22 escalate the 2023 imputed adopted amounts to 2024-2026 by MWC for
23 O&M expenses, or by corporate services department and/or cost type for
24 A&G expenses, with the exception of specific bottom-up forecast adopted in
25 the Decision. Specifically, the adopted labor escalation rates provided in
26 Exhibit (PG&E-8)⁵ and the adopted non-labor escalation rates described in
27 D.23-11-069, Section 13.1, p. 740, are included in the Decision RO Model
28 for the calculation of O&M and A&G expenses, net of capitalization values.
29 The 2024-2026 net capitalization values for A&G expenses are grossed up
30 based on 2023 adopted net to gross ratio to align with the GRC cost

4 D.23-11-069, Section 13.1, p. 740.

5 See 2023 GRC D.23-11-069 of PG&E, HR Section 8.3.3.

1 presentation view by PG&E GRC Exhibits 7, 8, 9, and 10 and by cost type
2 level.

3 **3. Imputation Methodology by Maintenance Activity Type for Gas**
4 **Distribution, Transmission and Storage, and Electric Distribution**

5 To impute regulatory values at the Maintenance Activity Type (MAT)
6 code level, PG&E applied program-specific MAT code adjustments to
7 PG&E's forecast⁶ for the TY, as appropriate, based on the specification
8 described in the Decision. For any Decision adjustments that were not
9 specifically identified at the MAT code level, PG&E prorated the MWC
10 adjustments to the MAT codes, as applicable, using the MAT code to MWC
11 ratios from PG&E's GRC Application forecast.

12 **4. Units of Work Imputation for Gas Distribution, Transmission and**
13 **Storage and Electric Distribution**

14 To impute the adopted MAT code units of work for 2023, PG&E divided
15 the 2023 imputed MAT code values by the specific unit cost forecast
16 included in the GRC opening testimony or updated in the Joint Comparison
17 Exhibit, as applicable.

18 To impute the adopted units of work for 2024 to 2026, PG&E escalated
19 the 2023 unit cost to 2024, 2025 then to 2026 based on the adopted
20 escalation rates in the Decision RO Model. The imputed 2024, 2025 and
21 2026 units of work were then calculated as the imputed adopted MAT code
22 values divided by the escalated unit cost for a specific year.

23 **5. Gas Distribution, Transmission and Storage Exceptions**

24 The exceptions to the above-described units of work imputation
25 methodology are applicable for the capital MATs listed in Tables 1 and 2
26 below. The Decision adopted specific bottom-up forecasts for these
27 programs.

28 Other exceptions include when the Decision adopted a lower unit cost
29 than was included in PG&E's GRC opening testimony. In these cases, if a
30 specific number of units of work was adopted, the unit cost was calculated
31 by dividing the imputed adopted MAT code values by the adopted units of

6 2023 GRC PG&E Reply Brief.

1 work. If a specific unit cost was adopted which was lower than the unit cost
2 included in PG&E’s GRC opening testimony, the units of work were
3 calculated by dividing the imputed adopted MAT code values by the adopted
4 unit cost for a specific year.

5 **6. Electric Distribution Exceptions**

6 One exception for Electric Distribution to the above-described units of
7 work imputation is MAT Code 08W related to PG&E’s Wildfire System
8 Hardening program. The Decision adopted specific bottom-up forecast for
9 System Hardening.

10 Other exceptions are for MATs where the Decision reduced PG&E’s
11 forecast by adopting a lower unit cost listed in Table 3. In these cases, the
12 imputed adopted units are equal to the forecast units for 2023 and follow the
13 methodology above for 2024 through 2026.

14 **7. Risk Assessment and Mitigation Phase Regulatory Values Imputation**

15 The imputed regulatory values by Risk Mitigation or Control were
16 developed in alignment with PG&E’s forecast. For 2023, PG&E applied any
17 specific Risk Mitigation or Control Decision adjustments to PG&E’s forecast,
18 as appropriate. For any Decision adjustments that were not specifically
19 identified, PG&E applied the reductions at the MWC/MAT proportionally to
20 all Risk Mitigations or Controls based on the weighting of the Risk
21 Assessment and Mitigation Phase (RAMP) forecast against the total
22 MWC/MAT or Department forecast.

23 The imputed regulatory values for 2024-2026 were developed using the
24 same methods described in the “2024 to 2026 Post-Test Years” section for
25 consistency to the overall GRC imputation.

26 For Electric Distribution and Gas Distribution, Transmission and
27 Storage, Risk Mitigations or Controls typically corresponded to 100 percent
28 of specific MAT codes. The imputed regulatory values at MAT level were
29 directly applied to the specific Risk Mitigations or Controls. In certain
30 instances where the MAT codes are split across multiple risk mitigations
31 and/or controls, the imputed amounts were developed proportionately based
32 on the forecast weighting of the specific programs. See Table 3 at the end
33 of this document.

1 The imputed units for Risk Mitigations or Controls were developed using
 2 the same methodology described under “Units of Work Imputation for Gas
 3 Distribution, Transmission and Storage and Electric Distribution.”

TABLE 1
2023 GRC ADOPTED BOTTOM-UP FORECAST PROGRAMS FOR 2024-2026

Line No.	Expense/ Capital	Program	MWC/MAT Codes
1	Expense	Diablo Canyon Power Plant	MWCs: AB, AK, BP, BQ, BR, BS, BT, BU, BV, EO, IG, OM, OS,
2	Expense	Non-Tariffed Products and Services	MWC EL
3	Capital	StanPac Capital	MAT 44A
4	Capital	Los Medanos Compressor Replacement	MAT 76X
5	Capital	WELL Drilling	MAT 3L1
6	Capital	WELL Reworks and Retrofits	MAT 3L3
7	Capital	Controls and Monitoring	MAT 3L5
8	Capital	Gas Distribution New Business	MWC 29
9	Capital	Wildfire System Hardening	MAT 08W
10	Capital	Natural Gas & Solar Capital Expenditures	MWCs: 2S, 2T, 3A, 3B, 05
11	Capital	Nuclear Operations Capital Expenditures	MWCs: 05, 20
12	Capital	Hydroelectric Costs	MWCs: 05, 11, 12, 2L, 2M, 2N, 2P,3H
13	Capital	Corporate Real Estate	MWCs: 22, 23

**TABLE 2
GAS DISTRIBUTION, TRANSMISSION AND STORAGE IMPUTED ADOPTED UNIT EXCEPTIONS**

Line No.	Expense/ Capital	Program	Methodology	MAT Codes
1	Capital	WELL – Drilling	The adopted units were spread over 3 years to reflect what was achievable in each year.	3L1
2	Capital	WELL – Reworks	The Decision adopts \$3.03 million unit cost in 2020 dollars. The unit cost was escalated to impute 2023-2026 unit costs in nominal dollars. The imputed dollar forecast is divided by escalated unit costs to impute units.	3L3
3	Capital	GT Elect Upgrade – Hinkley & Topock	One unit is adopted for the entire 2023-2026 period and is reflected at the end of rate case cycle (i.e., when it is projected to be completed).	76P
4	Capital	Compressor Replacements	One unit is adopted for the entire 2023-2026 period and is reflected at the end of rate case cycle (i.e., when it is projected to be completed).	76X

**TABLE 3
ELECTRIC DISTRIBUTION IMPUTED ADOPTED UNIT EXCEPTIONS**

Line No.	Expense/ Capital	Program	Methodology	MAT Codes
1	Expense	OH General CM Tag	The Decision adopts TURN's unit cost. Adopted inflation escalation adjusted unit cost is \$914. The imputed 2024-2026 unit costs are calculated based on adopted post-TY escalation.	KA
2	Capital	OH General Replacements	The Decision adopts Cal Advocates' unit cost. Adopted inflation escalation adjusted unit cost is \$7,100. The imputed 2024-2026 unit costs are calculated based on adopted post-TY escalation.	2AA
3	Capital	Expulsion Fuse Replacement	The Decision adopts Cal Advocates' unit cost. Adopted inflation escalation adjusted unit cost is \$14,026. The imputed 2024-2026 unit costs are calculated based on adopted post-TY escalation.	2AP
4	Capital	Pole Replacements	The Decision adopts Cal Advocates' unit cost. Adopted inflation escalation adjusted unit cost is \$22,050. The imputed 2024-2026 unit costs are calculated based on adopted post-TY escalation.	07D
5	Capital	Overloaded Pole Replacements	The Decision adopts Cal Advocates' unit cost. Adopted inflation escalation adjusted unit cost is \$28,596. The imputed 2024-2026 unit costs are calculated based on adopted post-TY escalation.	07O
6	Capital	Pole Replacements of Tree Attachments	The Decision adopts Cal Advocates' unit cost. Adopted inflation escalation adjusted unit cost is \$11,682. The imputed 2024-2026 unit costs are calculated based on adopted post-TY escalation.	07C
7	Capital	Temperature Alarm Devices	The Decision adopts Cal Advocates' unit cost. Adopted inflation escalation adjusted unit cost is \$3,852. The imputed 2024-2026 unit costs are calculated based on adopted post-TY escalation.	56T

1 On November 16, 2023, the CPUC issued Decision D.23-11-069 (or the
2 Decision) in PG&E's 2023 GRC. The Decision adopted base revenue
3 requirements for the 2023-2026 GRC period.

4 The section below describes the methodology used by PG&E to develop
5 expense and capital regulatory values (i.e., imputed adopted amounts).

6 **8. 2023 Test Year**

7 The Decision adopted 2023 TY O&M expenses and capital expenditures
8 at the MWC level, and A&G expenses by organization and/or by cost type.

9 The Decision had reductions for certain A&G costs, including for 2023, a
10 reduction of \$141 million for Dental and Medical plans and a reduction of

1 \$145 million Short Term Incentive Plan.⁷ Certain A&G costs are capitalized
2 as specified in the Decision. The capitalized portion associated with all A&G
3 reductions is \$132.8 million. The \$132.8 million reduction was then applied
4 to capital expenditures proportionately to derive the 2023 TY imputed
5 adopted capital expenditures based on the Commission’s RO Decision
6 Model. The capitalized A&G reduction was not applied to specific programs
7 discussed in the Decision, such as System Hardening in Electric
8 Distribution⁸ and New Business Connect in Gas Distribution.⁹

9 The Decision also adopted 50 percent of the increase in S&P’s IHS
10 Markit escalation rates presented in PG&E’s September 6, 2022 update
11 filing in which PG&E used to impute the final 2023 TY O&M expenses and
12 capital expenditures at the MWC level, and A&G expenses by organization
13 and/or by cost type.

14 **9. 2024 to 2026 Post-Test Years**

15 The Decision adopted 2024, 2025 and 2026 revenue requirements
16 based on applying 50 percent of the increase in S&P’s IHS Markit escalation
17 rates presented in PG&E’s September 6, 2022 update filing.¹⁰ The
18 Decision RO Model also provides specific MWC/MAT values for adopted
19 bottom-up forecast programs in O&M and capital expenditures. See Table 1
20 at the end of this document.

21 To develop imputed regulatory values for 2024 to 2026 that conform to
22 the Decision revenue requirement increase, PG&E used a 2-step process:

23 Step 1: To develop the adopted values for capital expenditures, PG&E
24 identified bottom-up and non bottom-up capital programs as specified in the
25 Decision RO Model. The Decision RO Model provides adopted values for
26 bottom-up forecast programs at the MWC/MAT level for 2023-2026.

27 For the non bottom-up forecast capital expenditure programs for
28 2024-2026, the Decision RO Model applied the adopted escalation rates to

7 D.23-11-069, Section 8.3.1, p. 605.

8 D.23-11-069, Section 4.3.13, p. 297.

9 D.23-11-069, Section 3.13.2, p. 230.

10 D.23-11-069, Section 13.1, p. 740.

1 escalate the 2023 imputed adopted capital expenditure amounts to
2 2024-2026.

3 Step 2: To develop the expense imputed adopted values for 2024-2026,
4 PG&E applied adopted escalation rates in the Decision RO Model to
5 escalate the 2023 imputed adopted amounts to 2024-2026 by MWC for
6 O&M expenses, or by corporate services department and/or cost type for
7 A&G expenses, with the exception of specific bottom-up forecast adopted in
8 the Decision. Specifically, the adopted labor escalation rates provided in
9 Exhibit (PG&E-8)¹¹ and the adopted non-labor escalation rates described in
10 D.23-11-069, Section 13.1, p. 740, are included in the Decision RO Model
11 for the calculation of O&M and A&G expenses, net of capitalization values.
12 The 2024-2026 net capitalization values for A&G expenses are grossed up
13 based on 2023 adopted net to gross ratio to align with the GRC cost
14 presentation view by PG&E GRC Exhibits 7, 8, 9, and 10 and by cost type
15 level.

16 **10. Imputation Methodology by Maintenance Activity Type for Gas**
17 **Distribution, Transmission and Storage, and Electric Distribution**

18 To impute regulatory values at the MAT code level, PG&E applied
19 program-specific MAT code adjustments to PG&E's forecast¹² for the TY,
20 as appropriate, based on the specification described in the Decision. For
21 any Decision adjustments that were not specifically identified at the MAT
22 code level, PG&E prorated the MWC adjustments to the MAT codes, as
23 applicable, using the MAT code to MWC ratios from PG&E's GRC
24 Application forecast.

25 **11. Units of Work Imputation for Gas Distribution, Transmission and**
26 **Storage and Electric Distribution**

27 To impute the adopted MAT code units of work for 2023, PG&E divided
28 the 2023 imputed MAT code values by the specific unit cost forecast
29 included in the GRC opening testimony or updated in the Joint Comparison
30 Exhibit, as applicable.

¹¹ See 2023 GRC D.23-11-069 of PG&E, HR Section 8.3.3.

¹² 2023 GRC PG&E Reply Brief.

1 To impute the adopted units of work for 2024 to 2026, PG&E escalated
2 the 2023 unit cost to 2024, 2025 then to 2026 based on the adopted
3 escalation rates in the Decision RO Model. The imputed 2024, 2025 and
4 2026 units of work were then calculated as the imputed adopted MAT code
5 values divided by the escalated unit cost for a specific year.

6 **12. Gas Distribution, Transmission and Storage Exceptions**

7 The exceptions to the above-described units of work imputation
8 methodology are applicable for the capital MATs listed in Tables 1 and 2
9 below. The Decision adopted specific bottom-up forecasts for these
10 programs.

11 Other exceptions include when the Decision adopted a lower unit cost
12 than was included in PG&E's GRC opening testimony. In these cases, if a
13 specific number of units of work was adopted, the unit cost was calculated
14 by dividing the imputed adopted MAT code values by the adopted units of
15 work. If a specific unit cost was adopted which was lower than the unit cost
16 included in PG&E's GRC opening testimony, the units of work were
17 calculated by dividing the imputed adopted MAT code values by the adopted
18 unit cost for a specific year.

19 **Electric Distribution Exceptions:** One exception for Electric
20 Distribution to the above-described units of work imputation is MAT Code
21 08W related to PG&E's Wildfire System Hardening program. The Decision
22 adopted specific bottom-up forecast for System Hardening.

23 Other exceptions are for MATs where the Decision reduced PG&E's
24 forecast by adopting a lower unit cost listed in Table 3. In these cases, the
25 imputed adopted units are equal to the forecast units for 2023 and follow the
26 methodology above for 2024 through 2026.

27 **13. Risk Assessment and Mitigation Phase Regulatory Values Imputation**

28 The imputed regulatory values by Risk Mitigation or Control were
29 developed in alignment with PG&E's forecast. For 2023, PG&E applied any
30 specific Risk Mitigation or Control Decision adjustments to PG&E's forecast,
31 as appropriate. For any Decision adjustments that were not specifically
32 identified, PG&E applied the reductions at the MWC/MAT proportionally to

1 all Risk Mitigations or Controls based on the weighting of the RAMP forecast
2 against the total MWC/MAT or Department forecast.

3 The imputed regulatory values for 2024-2026 were developed using the
4 same methods described in the “2024 to 2026 Post-Test Years” section for
5 consistency to the overall GRC imputation.

6 For Electric Distribution and Gas Distribution, Transmission and
7 Storage, Risk Mitigations or Controls typically corresponded to 100 percent
8 of specific MAT codes. The imputed regulatory values at MAT level were
9 directly applied to the specific Risk Mitigations or Controls. In instances
10 where the MAT codes are split across multiple risk mitigations and/or
11 controls, the imputed amounts were developed proportionately based on the
12 forecast weighting of the specific programs. See Table 3 at the end of this
13 document.

14 The imputed units for Risk Mitigations or Controls were developed using
15 the same methodology described under “Units of Work Imputation for Gas
16 Distribution, Transmission and Storage and Electric Distribution.”

**TABLE 4
2023 GRC ADOPTED BOTTOM-UP FORECAST PROGRAMS FOR 2024-2026**

Line No.	Expense/ Capital	Program	MWC/MAT Codes
1	Expense	Diablo Canyon Power Plant	MWCs: AB, AK, BP, BQ, BR, BS, BT, BU, BV, EO, IG, OM, OS,
2	Expense	Non-Tariffed Products and Services	MWC EL
3	Capital	StanPac Capital	MAT 44A
4	Capital	Los Medanos Compressor Replacement	MAT 76X
5	Capital	WELL Drilling	MAT 3L1
6	Capital	WELL Reworks and Retrofits	MAT 3L3
7	Capital	Controls and Monitoring	MAT 3L5
8	Capital	Gas Distribution New Business	MWC 29
9	Capital	Wildfire System Hardening	MAT 08W
10	Capital	Natural Gas & Solar Capital Expenditures	MWCs: 2S, 2T, 3A, 3B, 05
11	Capital	Nuclear Operations Capital Expenditures	MWCs: 05, 20
12	Capital	Hydroelectric Costs	MWCs: 05, 11, 12, 2L, 2M, 2N, 2P, 3H
13	Capital	Corporate Real Estate	MWCs: 22, 23

**TABLE 5
GAS DISTRIBUTION, TRANSMISSION AND STORAGE IMPUTED ADOPTED UNIT
EXCEPTIONS**

Line No.	Expense/ Capital	Program	Methodology	MAT Codes
1	Capital	WELL – Drilling	The adopted units were spread over 3 years to reflect what was achievable in each year.	3L1
2	Capital	WELL – Reworks	The Decision adopts \$3.03 million unit cost in 2020 dollars. The unit cost was escalated to impute 2023-2026 unit costs in nominal dollars. The imputed dollar forecast is divided by escalated unit costs to impute units.	3L3
3	Capital	GT Elect Upgrade – Hinkley & Topock	One unit is adopted for the entire 2023-2026 period and is reflected at the end of rate case cycle (i.e., when it is projected to be completed).	76P
4	Capital	Compressor Replacements	One unit is adopted for the entire 2023-2026 period and is reflected at the end of rate case cycle (i.e., when it is projected to be completed).	76X

**TABLE 6
ELECTRIC DISTRIBUTION IMPUTED ADOPTED UNIT EXCEPTIONS**

Line No.	Expense/ Capital	Program	Methodology	MAT Codes
1	Expense	OH General CM Tag	The Decision adopts TURN's unit cost. Adopted inflation escalation adjusted unit cost is \$914. The imputed 2024-2026 unit costs are calculated based on adopted post TY escalation.	KA
2	Capital	OH General Replacements	The Decision adopts Cal Advocates' unit cost. Adopted inflation escalation adjusted unit cost is \$7,100. The imputed 2024-2026 unit costs are calculated based on adopted post-TY escalation.	2AA
3	Capital	Expulsion Fuse Replacement	The Decision adopts Cal Advocates' unit cost. Adopted inflation escalation adjusted unit cost is \$14,026 The imputed 2024-2026 unit costs are calculated based on adopted post-TY escalation.	2AP
4	Capital	Pole Replacements	The Decision adopts Cal Advocates' unit cost. Adopted inflation escalation adjusted unit cost is \$22,050. The imputed 2024-2026 unit costs are calculated based on adopted post-TY escalation.	07D
5	Capital	Overloaded Pole Replacements	The Decision adopts Cal Advocates' unit cost. Adopted inflation escalation adjusted unit cost is \$28,596. The imputed 2024-2026 unit costs are calculated based on adopted post-TY escalation.	07O
6	Capital	Pole Replacements of Tree Attachments	The Decision adopts Cal Advocates' unit cost. Adopted inflation escalation adjusted unit cost is \$11,682. The imputed 2024-2026 unit costs are calculated based on adopted post-TY escalation.	07C
7	Capital	Temperature Alarm Devices	The Decision adopts Cal Advocates' unit cost. Adopted inflation escalation adjusted unit cost is \$3,852. The imputed 2024-2026 unit costs are calculated based on adopted post-TY escalation.	56T

**TABLE 7
RAMP MATS WITH MULTIPLE MITIGATION/CONTROL SPLITS**

Line No.	Functional Area	Expense/ Capital	MAT Codes
1	Gas Distribution, Transmission and Storage	Expense	MATs: DFB, FIO, FIQ, JQD, JQL
2	Gas Distribution, Transmission and Storage	Capital	MAT 27A
3	Electric Distribution	Expense	MATs: AB#, AB6, BAF, BHE, FZA, GC1, GC2, IG#
4	Electric Distribution	Capital	MATs: 21A, 49I, 49T, 2CC, 56N, 48H, 54A
5	Gas Distribution, Transmission and Storage	Expense	MATs: DFB, FIO, FIQ, JQD, JQL
6	Gas Distribution, Transmission and Storage	Capital	MAT 27A
7	Electric Distribution	Expense	MATs: AB#, AB6, BAF, BHE, FZA, GC1, GC2, IG#
8	Electric Distribution	Capital	MATs: 21A, 49I, 49T, 2CC, 56N, 48H, 54A

PACIFIC GAS AND ELECTRIC COMPANY
APPENDIX B
2023-2026 IMPUTED REGULATORY VALUES BY
FUNCTIONAL AREA

1
2
3
4

PACIFIC GAS AND ELECTRIC COMPANY
APPENDIX B
2023-2026 IMPUTED REGULATORY VALUES BY
FUNCTIONAL AREA

2023 GRC EXPENSE IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)

Line No.	Exhibit	MWC	MAT	MAT Description	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
Gas Distribution (Exhibit 3)								
1	3	AB	AB#	Not assigned	45,967	46,208	46,972	47,865
2	3	AB	AB7	Safety, Qual, & Contract Mgmt	531	534	543	553
3	3	DD	DDD	Pilot Relight	12,170	12,585	13,020	13,471
4	3	DD	DDE	Appliance Adjs	1,153	1,192	1,234	1,276
5	3	DD	DDF	Gas Fumigation Activity	3,595	3,718	3,846	3,979
6	3	DD	DDG	Gas Leaks & Emergencies	31,401	32,472	33,594	34,758
7	3	DD	DDK	Gas Start	5,142	5,318	5,501	5,692
8	3	DD	DDL	Gas Stop	4,595	4,751	4,916	5,086
9	3	DE	DEC	Downgrade No Repair	3,522	3,577	3,661	3,751
10	3	DE	DE#	Not assigned	3,037	3,084	3,156	3,235
11	3	DE	DEA	Leak Survey	10,307	10,467	10,712	10,978
12	3	DE	DEB	Special Leak Survey	2,810	2,854	2,921	2,993
13	3	DE	DED	Rechecks	2,562	2,602	2,663	2,729
14	3	DE	DEE	Customer Calls	789	801	820	840
15	3	DE	DEF	Advanced Mobile Technology	12,396	12,589	12,884	13,203
16	3	DE	DEH	GD Capacity Uprates	2,435	2,475	2,534	2,598
17	3	DF	DF#	Not assigned	2,191	2,256	2,327	2,402
18	3	DF	DFA	Locate and Mark	75,272	77,496	79,930	82,497
19	3	DF	DFB	Locate and Mark - Standby	448	461	476	491
20	3	DG	DGA	Cath Protect - Monitoring	4,189	4,266	4,372	4,487
21	3	DG	DGB	Cath Protect-Troubleshoot	5,017	5,109	5,236	5,374
22	3	DG	DGC	Cath Protect - Rectifier Maint	633	645	661	678
23	3	DG	DGD	Cath Protect - Resurvey	3,796	3,865	3,962	4,065
24	3	DG	DGE	G:Isolated Steel Svc Evaluatn	6,548	6,667	6,834	7,014
25	3	DG	DGG	Install casing test stations	3,250	3,309	3,392	3,481
26	3	DG	DGH	Casing mitigate < than 100ft	4,263	4,341	4,450	4,566
27	3	DN	DN2	Gas Qualifications	2,726	2,742	2,788	2,842
28	3	EX	EXB	MPP Protections	12,709	13,133	13,582	14,047
29	3	FG	FGA	Gas Distribution Control Centr	8,862	9,126	9,418	9,723
30	3	FG	FGB	Op Distr-G Mns/Svcs	968	997	1,029	1,062
31	3	FG	FGC	Op Distr-G Reg Genl	180	186	192	198
32	3	FH	FH#	Not assigned	1,212	1,236	1,269	1,303
33	3	FH	FHA	Maint-Prev-G Mains	2,855	2,912	2,988	3,069
34	3	FH	FHB	Maint-Prev-G Reg Sta	5,162	5,264	5,401	5,548
35	3	FH	FHC	Maint-Prev-G Farm Tap	422	431	442	454
36	3	FH	FHE	Maint-Prev-G Svcs	4,808	4,904	5,032	5,168
37	3	FH	FHG	Maint-Prev-G Main Vlv	2,504	2,553	2,620	2,691
38	3	FH	FHI	Maint-Corr G Svc Valves	8,267	8,432	8,651	8,886
39	3	FH	FHJ	Gas Non-Recurring Projects	3,884	3,961	4,064	4,175
40	3	FH	FHK	GD Corrosion AC Inspections	145	149	154	158
41	3	FH	FHL	Atmospheric Corsn Main Rep	3,243	3,330	3,430	3,535
42	3	FH	FHM	Atmospheric Corsn Serv Rep	12,499	12,832	13,218	13,624
43	3	FH	FHN	Atmospheric Corsn Reg Stn Rprs	1,051	1,079	1,111	1,145
44	3	FH	FHO	PM SCADA	1,501	1,531	1,571	1,614
45	3	FH	FHP	CM SCADA	777	792	813	835

**2023 GRC EXPENSE IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)**

Line No.	Exhibit	MWC	MAT	MAT Description	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
Gas Distribution (Exhibit 3)								
46	3	FH	FHR	Not assigned	1,853	1,889	1,939	1,991
47	3	FI	FI#	Not assigned	4,149	4,218	4,320	4,429
48	3	FI	FIB	Maint-Corr-G Reg Genl	2,301	2,369	2,444	2,522
49	3	FI	FIC	Maint-Corr-G Farm Tap	995	1,024	1,057	1,091
50	3	FI	FIF	Maint-Corr-G Main Vlv	395	407	420	433
51	3	FI	FIG	Maint-Corr-G Main Lk	35,096	35,680	36,540	37,467
52	3	FI	FIH	Maint-Corr_G_Svc Leak_AG	4,098	4,166	4,266	4,374
53	3	FI	FII	Maint-Corr-G Cath Prot	6,233	6,341	6,497	6,664
54	3	FI	FIJ	Maint-Corr G Main Dig-in	996	1,012	1,037	1,063
55	3	FI	FIK	Maint-Corr G Svc Dig-in	1,596	1,623	1,662	1,704
56	3	FI	FIM	Major Event-Distribution Gas	490	498	510	523
57	3	FI	FIO	Gas Overbuild - G	854	868	889	912
58	3	FI	FIP	Maint-Corr_G_Svc Leak_BG	31,649	32,176	32,952	33,787
59	3	FI	FIQ	Atmospheric Corrosion Monitorg	1,356	1,379	1,412	1,448
60	3	FI	FIR	Tee-Cap Replacement Program	2,209	2,246	2,300	2,358
61	3	FI	FIS	Leak Survey Meter Repair	9,658	9,819	10,056	10,311
62	3	GF	GFO	Mapping Support-Distribution	4,307	4,415	4,541	4,676
63	3	GG	GG#	Not assigned	2,523	2,610	2,701	2,795
64	3	GG	GGA	Gas System Planning_GSO	6,924	7,162	7,411	7,669
65	3	GM	GMC	GD LNG/CNG Station	4,593	4,671	4,785	4,907
66	3	GZ	GZA	Gas R&D and Deployment	4,000	4,040	4,117	4,206
67	3	HY	HYI	G Meter Atmospheric Corrosion	920	952	985	1,020
68	3	JQ	JQA	DIMP Leak Survey	861	886	914	943
69	3	JQ	JQC	Mark and Locate Program	3,582	3,673	3,782	3,895
70	3	JQ	JQD	DIMP Emergent Work	4,162	4,285	4,421	4,563
71	3	JQ	JQE	Plastic Program	331	341	351	363
72	3	JQ	JQG	Fitting Mitigation Program	2,432	2,503	2,583	2,666
73	3	JQ	JQK	Cross Bored Sewer Project	13,295	13,686	14,122	14,577
74	3	JQ	JQL	DIMP Program Management	4,868	5,012	5,171	5,337
75	3	JV	JV#	Not assigned	1,286	1,291	1,312	1,337
76	3	JV	JVA	ISvcs: Wrkplce End User SW Ste	12,201	12,256	12,455	12,686
77	3	LK	LK#	Not assigned	187	190	195	201
78	3	LK	LK7	WRO Main Relocations - G	1,829	1,859	1,909	1,964
79	3	LK	LK8	WRO Relocation Partial Svc - G	1,135	1,154	1,185	1,219
80	3	LK	LK9	WRO Raise Frame & Covers - G	560	569	584	601
81	3	LK	LKL	WRO Svc Cutoff @ Prop Line - G	325	330	339	349
82	3	LK	LKN	WRO Rule 13 G Temp Pwr < 1yr G	0	0	0	0
83	3	LK	LKO	WRO Pothole 3rd Pty Conflict-G	1,203	1,223	1,257	1,293
84	3	LK	LKQ	WRO Gas Sup & Wk Around SF - G	1,950	1,982	2,036	2,094
85	3	OM	OM#	Not assigned	13,394	13,773	14,199	14,648
86	3	OS	OS#	Not assigned	27,380	28,169	29,050	29,976
87	Sub-total Gas Distribution				539,971	551,981	567,092	583,204

**2023 GRC EXPENSE IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)**

Line No.	Exhibit	MWC	MAT	MAT Description	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
Gas Transmission (Exhibit 3)								
1	3	34	34A	Stan-Pac Expense	2,738	2,738	2,770	2,814
2	3	AB	AB#	Not assigned	19,267	19,368	19,689	20,063
3	3	AB	AB7	Safety, Qual, & Contract Mgmt	795	799	813	828
4	3	AH	AH#	Not assigned	2,266	2,276	2,309	2,351
5	3	AH	AH1	WELL - Integrity Assessments	9,807	9,851	9,995	10,174
6	3	AH	AH2	WELL - Reworks	3,428	3,443	3,493	3,556
7	3	AH	AH3	WELL - Other	2,832	2,845	2,887	2,938
8	3	AH	AH4	Gill Ranch Operations & Maint	3,189	3,202	3,248	3,305
9	3	AK	AKA	Haz Waste Mgmt	3,157	3,196	3,261	3,336
10	3	CM	CMA	GT&S Operations	15,573	16,032	16,536	17,069
11	3	CM	CMB	ElecPwr CompFuel & Oth Elec Eq	27,881	28,702	29,606	30,560
12	3	CR	CRA	Hazard Waste Disp & Transp	716	716	724	736
13	3	CX	CX#	Not assigned	(0)	(0)	(0)	(0)
14	3	CX	CXA	GT&S Marketing/Sales/Stratgy	5,787	5,975	6,175	6,383
15	3	DF	DFA	Locate and Mark	1,346	1,386	1,430	1,476
16	3	DF	DFB	Locate and Mark - Standby	5,421	5,581	5,756	5,941
17	3	DN	DN2	Gas Qualifications	1,932	1,943	1,975	2,013
18	3	GF	GFP	Mapping Support-Transmission	5,563	5,702	5,864	6,039
19	3	GJ	GJA	Electrical Interference - AC	1,539	1,553	1,581	1,614
20	3	GJ	GJB	Atmospheric Corrosion	3,842	3,876	3,945	4,028
21	3	GJ	GJC	Cathodic Protection Expense	414	418	426	434
22	3	GJ	GJD	Test Stations	247	249	254	259
23	3	GJ	GJE	Close Interval Survey (CIS)	4,142	4,178	4,253	4,342
24	3	GJ	GJF	Electrical Interference - DC	802	809	823	841
25	3	GJ	GJH	Internal Corrosion	6,066	6,120	6,228	6,360
26	3	GJ	GJJ	Low Read Investigations	291	294	299	305
27	3	GJ	GJK	Corrosion Support	2,865	2,890	2,942	3,004
28	3	GJ	GJM	Casings	4,277	4,314	4,391	4,484
29	3	GM	GMD	LNG / CNG	2,651	2,699	2,764	2,836
30	3	GZ	GZA	Gas R&D and Deployment	3,861	3,899	3,974	4,060
31	3	HP	HPA	TIMP - Other	9,804	9,881	10,050	10,256
32	3	HP	HPB	Traditional ILI Runs	33,562	33,823	34,402	35,108
33	3	HP	HPC	ECDA Indirect Inspections	7,383	7,440	7,567	7,723
34	3	HP	HPE	Integrity Manage Leak Survey	276	278	283	289
35	3	HP	HPF	Hydrostatic Testing - IM	21,326	21,492	21,859	22,308
36	3	HP	HPI	ILI Direct Exam and Repair	48,186	48,561	49,392	50,406
37	3	HP	HPJ	ICDA Indirect Inspections	718	724	736	752
38	3	HP	HPK	SCCDA Indirect Inspections	1,745	1,759	1,789	1,826
39	3	HP	HPM	Repairs / Replace < '50ft	4,446	4,481	4,558	4,651
40	3	HP	HPN	ECDA Direct Examinations	36,825	37,112	37,747	38,522
41	3	HP	HPO	ICDA Direct Examinations	12,666	12,764	12,983	13,249
42	3	HP	HPP	SCCDA Direct Examinations	17,035	17,168	17,462	17,820
43	3	HP	HPR	Non-Traditional ILI Runs	14,393	14,505	14,753	15,056
44	3	HP	HPS	Geo-Hazard Studies	3,014	3,038	3,090	3,153
45	3	HP	HPT	Root Cause Analysis	2,871	2,893	2,943	3,003
46	3	HP	HPU	TIMP Direct Examinations	25,660	25,860	26,302	26,842
47	3	JO	JO1	PM Scada Maintenance	349	356	366	376
48	3	JO	JO2	CM Scada Maintenance	251	257	264	271
49	3	JO	JOA	Cath Prot Rectifier Maintenanc	118	121	124	127
50	3	JO	JOB	Cath Prot Monitoring	1,290	1,317	1,352	1,389

**2023 GRC EXPENSE IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)**

Line No.	Exhibit	MWC	MAT	MAT Description	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
Gas Transmission (Exhibit 3)								
51	3	JO	JOC	Cath Prot Troubleshoot	813	830	852	875
52	3	JO	JOE	Ground Leak Survey	990	1,011	1,037	1,066
53	3	JO	JOF	Requird Ground Pipeline Patrol	1,037	1,059	1,087	1,117
54	3	JO	JOG	PM G Regulator General	3,957	4,042	4,147	4,263
55	3	JO	JOH	PM Gas Pipeline Valve Manual	1,495	1,527	1,567	1,611
56	3	JO	JOI	PM Gas Pipeline Valve Automate	40	40	41	43
57	3	JO	JOJ	Gas Holders Maintenance	127	129	133	136
58	3	JO	JOK	Oper Transmission Pipelines	731	747	766	787
59	3	JO	JOL	Oper Transmission Regl Station	461	471	484	497
60	3	JO	JOM	CM G Regl Genl	1,117	1,141	1,171	1,204
61	3	JO	JON	CM Gas Pipeline Valve Manual	950	970	996	1,024
62	3	JO	JOO	CM Gas Pipeline Valve Automate	222	227	233	239
63	3	JO	JOP	CM G Main Lk	11,169	11,408	11,707	12,035
64	3	JO	JOQ	Cath Protection Corr Maintnc	358	366	375	386
65	3	JO	JOR	Leak Rechecks	264	270	277	285
66	3	JO	JOS	Pipeline Marker Maintenance	1,762	1,800	1,847	1,898
67	3	JO	JOT	Vegetation Management	1,522	1,554	1,595	1,639
68	3	JO	JOV	Requird Aerial Pipeline Patrol	4,823	4,926	5,055	5,196
69	3	JO	JOW	Aerial Leak Survey	2,494	2,547	2,614	2,687
70	3	JO	JOX	PM Meter Maintenance	1,949	1,990	2,042	2,099
71	3	JO	JOY	CM Meter Maintenance	289	295	303	311
72	3	JO	JOZ	Atmospheric Corrosion Inspect	500	511	524	539
73	3	JP	JPA	PM StorCompStat Piping Assets	981	1,001	1,026	1,055
74	3	JP	JPB	CM StorCompStat Piping Assets	473	483	495	509
75	3	JP	JPC	PM StorCompStat GasProcess	1,920	1,959	2,009	2,065
76	3	JP	JPD	PM StorCompStat GasCompressor	1,810	1,847	1,895	1,947
77	3	JP	JPE	PM StorCompStat Support	2,280	2,327	2,387	2,452
78	3	JP	JPG	CM StorCompStat GasProcess	984	1,004	1,030	1,058
79	3	JP	JPH	CM StorCompStat GasCompress	2,071	2,114	2,168	2,228
80	3	JP	JPI	CM StorCompStat Support	1,525	1,557	1,597	1,641
81	3	JP	JPK	PM Power Units	139	142	146	150
82	3	JP	JPL	CM Power Units	277	283	290	298
83	3	JP	JPN	Station Operations	6,027	6,151	6,308	6,482
84	3	JP	JPO	PM Storage Wells	570	582	597	613
85	3	JP	JPP	CM Storage Wells	81	83	85	87
86	3	JP	JPQ	CARB Leak Survey	3,270	3,338	3,423	3,517
87	3	JP	JPR	CARB Leak Repairs	2,545	2,597	2,664	2,737
88	3	JT	JT0	Public Awareness	3,437	3,474	3,540	3,619
89	3	JT	JT1	Engineering Support	2,572	2,600	2,650	2,709
90	3	JT	JT2	Water and Levee Crossings	1,387	1,402	1,428	1,460
91	3	JT	JT3	Fault Crossings	1,076	1,088	1,109	1,133
92	3	JT	JT4	Shallow and Exposed Pipe	2,751	2,781	2,834	2,897
93	3	JT	JT6	Pipe Replacements - (<50Ft)	11,284	11,406	11,624	11,882
94	3	JT	JT8	Gas Quality Assessment - Exp	2,124	2,146	2,187	2,235
95	3	JT	JT9	Hydrostatic Tstng - Class Lctn	899	909	927	947
96	3	JT	JTA	Pipeline WRO Expense	635	657	697	745
97	3	JT	JTB	Pipeline Repair	6,835	6,908	7,041	7,197
98	3	JT	JTD	Pipeline Other	18,985	19,190	19,557	19,991
99	3	JT	JTH	Permits & Fees Projects	7,906	7,992	8,145	8,325
100	3	JT	JTK	Vegetation Manage Project	16,877	17,059	17,386	17,772

**2023 GRC EXPENSE IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)**

Line No.	Exhibit	MWC	MAT	MAT Description	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
Gas Transmission (Exhibit 3)								
101	3	JT	JTL	FIMP Risk Management	2,791	2,820	2,873	2,936
102	3	JT	JTM	Uprates	998	1,009	1,028	1,051
103	3	JT	JTO	Encroachments Structures & ROW	1,265	1,278	1,303	1,332
104	3	JT	JTQ	Class Location Studies	2,185	2,209	2,251	2,301
105	3	JT	JTR	Valve Program	1,371	1,386	1,412	1,443
106	3	JT	JTT	Geo-Hazard Mitigations	127	129	131	134
107	3	JT	JTV	Station Strength Test Exp C&P	2,279	2,303	2,346	2,398
108	3	JT	JTW	Routine Spend M&C - Expense	4,676	4,725	4,814	4,920
109	3	JT	JTY	Routine Spend C&P Expense	8,777	8,868	9,035	9,233
110	3	JV	JV#	Not assigned	857	861	875	891
111	3	JV	JVA	ISvcs: Wrkplce End User SW Ste	2,346	2,357	2,395	2,440
112	3	LV	LV2	Engineering Crtcl Assmnt 2	5,474	5,547	5,662	5,796
113	3	MC	MC1	Hydrostatic Tstng - BA	(0)	(0)	(0)	(0)
114	3	OM	OM#	Not assigned	8,664	8,909	9,184	9,474
115	3	OS	OS#	Not assigned	10,400	10,700	11,035	11,387
116	Sub-total Gas Transmission				575,614	582,924	594,872	608,702

**2023 GRC EXPENSE IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)**

Line No.	Exhibit	MWC	MAT	MAT Description	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
Electric Distribution (Exhibit 4)								
1	4	AB	AB#	Not assigned	21,505	21,903	22,349	22,865
2	4	AB	AB6	EPR Expense	165,138	168,196	171,619	175,584
3	4	BA	BAF	Genl Operate	1,822	1,857	1,896	1,942
4	4	BA	BAH	FLISR Maintenance	490	499	510	522
5	4	BH	BHE	FAS Emergency Resp - OH Elect	117,184	119,437	121,967	124,924
6	4	GC	GC2	El DSub-Major Emerg_Corr Maint	868	885	903	925
7	4	FZ	FZA	Genl Engineer	5,630	5,776	5,933	6,104
8	4	IG	IG#	Not assigned	73,630	74,450	75,485	76,876
9	4	KA	KAT	Remote Grid SPS Maintenance	1,039	1,041	1,047	1,059
10	4	AB	AB6	EPR Expense	27,970	28,300	28,701	29,212
11	4	BH	BH#	Not assigned	244	250	256	263
12	4	BH	BHB	CM-E OH	22,012	22,532	23,098	23,732
13	4	BH	BHC	CM-E UG	24,855	25,442	26,081	26,797
14	4	BH	BHD	BHD: Damage Claims Expense	1,630	1,669	1,711	1,758
15	4	BH	BHE	FAS Emergency Resp - OH Elect	22,666	23,201	23,784	24,437
16	4	BH	BHG	FAS Sys Rel Maint	4,509	4,616	4,732	4,862
17	4	BH	BHH	Public Support Event New	57	58	60	61
18	4	IF	IFA	E Major Emgcy OH	36,440	36,864	37,393	38,095
19	4	IF	IFB	E Major Emgcy UG	8,941	9,044	9,174	9,347
20	4	BA	BAF	Genl Operate	25,993	26,811	27,667	28,571
21	4	BA	BAH	FLISR Maintenance	3,763	3,882	4,006	4,137
22	4	DD	DD#	Not assigned	6,608	6,835	7,070	7,314
23	4	DD	DDH	Electric Trouble Cust Equipt	6,092	6,301	6,517	6,743
24	4	DD	DDJ	Electric - Other	11,132	11,513	11,909	12,321
25	4	HG	HGD	Distribution Operational Tech	5,978	5,954	5,954	5,996
26	4	AR	ARC	Change Party & Special Purpose	1,669	1,723	1,778	1,835
27	4	AR	ARD	Regular reads	8,769	9,051	9,342	9,644
28	4	DD	DDC	Electric Start/Stop	482	498	515	533
29	4	EY	EYA	Elect Meters: Other	3,035	3,042	3,061	3,099
30	4	EY	EYI	Electric Meter Module Mntce	67	67	67	68
31	4	EY	EYJ	R-Tests	418	419	421	427
32	4	EY	EYK	Preventative Maintenance	144	144	145	147
33	4	EY	EYT	CM: No Meter Exchg 3 phase	1,719	1,723	1,734	1,756
34	4	EY	EYU	CM: No Meter Exchg 1 phase	1,538	1,542	1,551	1,571
35	4	EY	EYV	CM: No Mtr Exchg Transfmrs CIA	836	838	844	854
36	4	EY	EYW	ECI Electric Meter Tests_System	722	724	729	738
37	4	HY	HY8	Gas Meter Module Mntce	687	710	735	760
38	4	IU	IUG	Revenue Assurance	1,590	1,660	1,733	1,809
39	4	HN	HN#	Not assigned	972,013	965,868	963,767	968,867
40	4	IG	IGI	Dead and Dying Trees	77,991	77,469	77,273	77,659
41	4	IG	IGJ	Enhanced Vegetation Management	131,816	130,933	130,601	131,254
42	4	BF	BF3	UG BART Cable Test/Insp	59	59	59	60
43	4	BF	BF4	UG Auto Xfer Swch Test/Insp	145	145	146	148
44	4	BF	BFA	OH Patrol	5,056	5,064	5,089	5,146
45	4	BF	BFB	OH Insp	53,674	53,751	54,022	54,629
46	4	BF	BFC	OH Insp Infrared	2,834	2,838	2,852	2,884
47	4	BF	BFD	UG Patrol	2,681	2,685	2,698	2,729
48	4	BF	BFE	UG Insp Infrared	14,545	14,566	14,640	14,804
49	4	BF	BFF	UG Manhole Insp Annual	507	507	510	516
50	4	BF	BFG	OH Equip Test	2,654	2,658	2,671	2,701

**2023 GRC EXPENSE IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)**

Line No.	Exhibit	MWC	MAT	MAT Description	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
Electric Distribution (Exhibit 4)								
51	4	BF	BFH	Inspection Projects	4,832	4,839	4,864	4,919
52	4	BF	BFJ	OH Patrol ORT Post Outage	166	166	167	169
53	4	BK	BKA	Transformer Repr Emeryville	1,975	2,020	2,068	2,123
54	4	KA	KA#	Not assigned	888	890	895	906
55	4	KA	CAA	OH Genl CM Tag	22,086	22,135	22,263	22,527
56	4	KA	KAC	Bird Safe Retrofit	1,231	1,234	1,241	1,256
57	4	KA	KAD	Bird Safe Retrofit Annual	1,436	1,439	1,448	1,465
58	4	KA	KAF	OH COE CM Tag	7,213	7,229	7,271	7,357
59	4	KA	KAH	Streetlights Repl Burnouts	2,172	2,177	2,189	2,215
60	4	KA	KAK	RTVI Invest/Repr	126	127	127	129
61	4	KA	KAM	Insulators Wash	246	247	248	251
62	4	KA	KAO	Idle Fac Invest - Svc Plng	215	215	216	219
63	4	KA	KAP	OH EXP Projects	1,793	1,797	1,807	1,828
64	4	KA	KAQ	Wood Pole Bridge Bonding	1	1	1	1
65	4	KA	KAS	FAS Overhead Expense	1,797	1,801	1,811	1,833
66	4	KB	KB#	Not assigned	758	764	772	784
67	4	KB	KBA	UG Genl CM Tag	17,135	17,270	17,460	17,740
68	4	KB	KBC	UG COE CM Tag	1,548	1,560	1,577	1,602
69	4	KB	KBD	Nitrogen Cylinders CM	25	25	25	26
70	4	KB	KBE	BART Cable Repr	71	71	72	73
71	4	KB	KBP	UG EXP Projects	789	795	804	817
72	4	GA	GA#	Not assigned	(5,288)	(5,260)	(5,256)	(5,293)
73	4	GA	GAA	Pole Test & Treat	21,670	21,556	21,539	21,691
74	4	GA	GAB	Pole Joint Util Maint Reimb	-	-	-	-
75	4	GA	GAC	Pole Analyze Loading	22,710	22,591	22,573	22,732
76	4	GA	GAD	Pole Reinforce	4,404	4,381	4,377	4,408
77	4	GA	GAF	Telco Engr Revw Non-Reimbursed	176	175	175	176
78	4	GA	GAH	Pole Joint Util Maint Non-Reim	476	473	473	476
79	4	KC	KCA	Ntwk Equip Correct Maint NWTX	450	461	473	486
80	4	KC	KCB	Ntwk Oil Repl & 60Day F/U NWTX	34	35	36	37
81	4	KC	KCC	Ntwk Vault Correct Maint NWTX	135	138	141	145
82	4	KC	KCD	Ntwk Xfmr PrevMaint/Retst NWTX	2,809	2,878	2,953	3,035
83	4	KC	KCE	Ntwk Protector Prev Maint NWTX	719	737	756	777
84	4	KC	KCF	Fiber/SCADA Comm Repr NWTX	1,012	1,036	1,063	1,093
85	4	GC	GC1	El DSub-Engrg_Maint Support	5,701	5,776	5,868	5,985
86	4	GC	GC2	El DSub-Major Emerg_Corr Maint	14,882	15,080	15,320	15,626
87	4	GC	GCA	Dsbn: TXfmr - prev maint.	1,147	1,162	1,180	1,204
88	4	GC	GCB	Dsbn: Breaker - prevent maint.	834	845	858	875
89	4	GC	GCC	Dist Sub: Substation Test Dpt	1,599	1,621	1,646	1,679
90	4	GC	GCD	Dsbn: Station Read_prev maint.	3,311	3,355	3,408	3,476
91	4	GC	GCE	Dsbn: Gnrl station_prev maint.	539	547	555	566
92	4	GC	GCF	Dsbn: Batteries - prev maint.	529	536	544	555
93	4	GC	GCG	Vegetation Management	10,477	10,616	10,784	11,000
94	4	GC	GCH	Building Maintenance	1,101	1,116	1,134	1,156
95	4	GC	GCI	Dsbn: Switches_prevent maint.	107	108	110	112
96	4	GC	G CJ	Dist Sub: Corrective (T80)	10,081	10,215	10,377	10,585
97	4	GC	GCM	Breaker Mechanism Services	1,589	1,610	1,636	1,668
98	4	GC	GCO	Transformer Overhauls	1,292	1,309	1,330	1,356
99	4	GC	GCS	CKSW MOAS Mechanism Services	215	218	221	225
100	4	GC	GCV	Breaker Overhauls	21	21	22	22

**2023 GRC EXPENSE IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)**

Line No.	Exhibit	MWC	MAT	MAT Description	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
Electric Distribution (Exhibit 4)								
101	4	GC	GCW	Dist Sub: Station Washes	463	469	477	486
102	4	HX	HXA	Genl Auto & Protect	3,118	3,184	3,257	3,340
103	4	FZ	FZA	Genl Engineer	16,914	17,422	17,958	18,528
104	4	FZ	FZB	Voltage Complaints Invest	653	673	694	716
105	4	FZ	FZC	Transformer Reports Manage	237	244	252	260
106	4	FZ	FZD	Field Work Plan	859	885	912	941
107	4	FZ	FZE	Troublemens Field Work	1,539	1,585	1,634	1,686
108	4	EV	EV#	Not assigned	-	-	-	-
109	4	EV	EVA	Service Inquiry	5,004	5,192	5,387	5,587
110	4	EV	EVB	OK to Serve	8,913	9,248	9,594	9,952
111	4	EW	EW#	Not assigned	11,538	11,971	12,472	13,081
112	4	GE	GE#	Not assigned	19,272	19,285	19,368	19,574
113	4	JV	JV#	Not assigned	756	760	768	779
114	4	JV	JVA	ISvcs: Wrkplce End User SW Ste	4,097	4,122	4,161	4,223
115	4	AB	AB#	Not assigned	15,524	15,725	15,970	16,286
116	4	AT	AT#	Not assigned	2,185	2,210	2,242	2,284
117	4	HG	HGC	Advanced Dist Mgmt System Dev	17,229	17,160	17,159	17,281
118	4	IG	IG#	Not assigned	3,157	3,216	3,282	3,360
119	4	JV	JVA	ISvcs: Wrkplce End User SW Ste	3,567	3,589	3,623	3,677
120	4	AB	AB#	Not assigned	26,273	26,072	25,996	26,141
121	4	IS	IS#	Not assigned	1,831	1,819	1,815	1,825
122	4	OM	OM#	Not assigned	19,950	20,477	21,041	21,657
123	4	OS	OS#	Not assigned	62,154	63,852	65,661	67,623
124	Sub-total Electric Distribution				2,276,312	2,285,297	2,302,152	2,332,471

**2023 GRC EXPENSE IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)**

Line No.	Exhibit	MWC	MWC Description	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
Energy Supply (Exhibit 5)							
1	5	AB	Misc Expense	-	-	-	-
2	5	AK	Manage Environmental Oper	2,263	2,277	1,534	0
3	5	BP	Manage DCPD Business	13,681	13,985	8,289	0
4	5	BQ	DCPD Support Services	42,009	45,540	30,990	0
5	5	BR	Operate DCPD Plant	76,609	80,902	43,602	0
6	5	BS	Maintain DCPD Plant Assets	91,686	91,457	40,519	0
7	5	BT	Nuclear Generation Fees	16,801	16,291	6,573	0
8	5	BU	Procure DCPD Materials & Svcs	-	-	-	-
9	5	BV	Maintain DCPD Plant Configurtn	34,729	35,078	16,636	0
10	5	EO	Provide Nuclear Support	10	10	7	0
11	5	IG	Manage Var Bal Acct Processes	2,717	2,744	1,871	0
12	5	OM	Operational Management	7,454	7,945	5,065	0
13	5	OS	Operational Support	23,816	23,950	13,396	0
14	5		Sub-total Nuclear Generation	311,776	320,181	168,483	0
15	5	AB	Misc Expense	8,046	8,094	8,177	8,306
16	5	AG	#N/A	-	-	-	-
17	5	AK	Manage Environmental Oper	1,200	1,229	1,260	1,296
18	5	AX	Maint Resv,Dams&Waterways	30,569	30,953	31,446	32,088
19	5	AY	Habitat and Species Protection	274	281	289	297
20	5	BC	Perf Reimburs Wk for Oth	67	73	82	98
21	5	EP	Manage Property & Bldgs	1,274	1,311	1,350	1,392
22	5	IG	Manage Var Bal Acct Processes	26,737	26,781	26,951	27,296
23	5	KG	Operate Hydro Generation	38,216	39,100	40,080	41,181
24	5	KH	Maint Hydro Generating Equip	24,468	24,989	25,576	26,248
25	5	KI	Maint Hydro Bldg,Grnd,Infrast	15,363	15,586	15,862	16,206
26	5	KJ	License Compliance Hydro Gen	25,713	25,988	26,361	26,865
27	5	LX	Catastrophic Events	0	0	0	0
28	5	OM	Operational Management	3,201	3,305	3,414	3,529
29	5	OS	Operational Support	4,123	4,237	4,359	4,491
30	5	ZC	Corporate Items	1,575	1,600	1,629	1,666
31	5		Sub-total Hydro Generation	180,826	183,525	186,836	190,958
32	5	AK	Manage Environmental Oper	2,986	3,022	3,068	3,128
33	5	KK	Operate Fossil Generation	14,950	15,230	15,553	15,929
34	5	KL	Maint Fossil Generating Equip	31,949	32,145	32,470	32,965
35	5	KM	Maint Fossil Bldg,Grnd,Infrast	3,319	3,330	3,355	3,400
36	5	KQ	Operate Alternative Gen	484	495	506	519
37	5	KR	Maint AltGen Generating Equip	1,352	1,367	1,387	1,414
38	5	KS	Maint AltGen Bldg,Grnd,Infrast	567	569	574	582
39	5	OM	Operational Management	295	304	314	325
40	5	OS	Operational Support	-	-	-	-
41	5		Sub-total Natural Gas and Solar Generation	55,901	56,462	57,229	58,261
42	5	AB	Misc Expense	816	827	841	858
43	5	CT	Acq & Manage Elect Supply	30,347	31,384	32,463	33,584
44	5	CV	Acq & Manage Gas Supply	2,456	2,538	2,624	2,714
45	5	CY	Manage Electric Grid Ops	10,534	10,779	11,046	11,345
46	5		Sub-total Energy Procurement and Administration	44,153	45,529	46,974	48,501
47	5	JV	Maintain IT Apps & Infra	2,875	2,572	2,604	2,184
48	5		Sub-total Energy Technology Programs	2,875	2,572	2,604	2,184
49			Sub-total Energy Supply	595,532	608,268	462,126	299,904

**2023 GRC EXPENSE IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)**

Line No.	Exhibit	MWC	MWC Description	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
50			Customer and Communications (Exhibit 6)				
51	6	AR	Read & Investigate Meters	(176)	(80)	20	124
52	6	CG	CAT Balancing Accounts	-	-	-	-
53	6	DK	Manage Customer Inquiries	62,629	64,632	66,702	68,842
54	6	EL	Develop New Revenue	41,052	40,869	-	-
55	6	EY	Change/Maint Used Elec Meter	897	924	951	980
56	6	EZ	Manage Var Cust Care Processes	48,080	49,265	50,505	51,788
57	6	FK	Retain & Grow Customers	737	761	785	810
58	6	GM	Manage Energy Efficiency-NonBA	11,231	11,456	11,694	11,940
59	6	HY	Change/Maint Used Gas Meters	6,691	6,901	7,118	7,342
60	6	IG	Manage Var Bal Acct Processes	35,501	36,006	36,595	37,308
61	6	IS	Bill Customers	49,274	50,763	52,317	53,924
62	6	IT	Manage Credit	14,834	15,221	15,625	16,043
63	6	IU	Collect Revenue	12,739	13,079	13,432	13,798
64	6	IV	Provide Account Services	17,758	18,271	18,803	19,354
65	6	JV	Maintain IT Apps & Infra	19,323	19,702	20,104	20,520
66	6	LI	Prov Corporate Communication	-	-	-	-
67	6	LJ	Prov Corp Affairs Svcs	14,283	14,615	14,964	15,325
68	6	OM	Operational Management	11,490	11,840	12,202	12,576
69	6	OS	Operational Support	-	-	-	-
70			Sub-total Customer and Communications	346,343	354,223	321,817	330,675
71			Shared Services and Information Technology (Exhibit 7)				
72	7	AB	Misc Expense	11,288	11,630	11,984	12,350
73	7	FA	Spc A&G/Oth Csts-Bud Dept	-	-	-	-
74	7	FL	Safety Engineering & OSHA Cmpl	18,980	19,555	20,151	20,766
75	7	IG	Manage Var Bal Acct Processes	-	-	-	-
76	7	JV	Maintain IT Apps & Infra	557	573	591	609
77	7	KX	Prov Human Resource Svcs	7,609	7,839	8,078	8,325
78	7		Sub-total Enterprise Health and Safety	38,434	39,598	40,804	42,050
79	7	AB	Misc Expense	283,589	284,512	287,553	291,881
80	7	BP	Manage DCP Business	1,325	1,366	1,409	1,455
81	7	JV	Maintain IT Apps & Infra	789	802	817	832
82	7	ZC	Corporate Items	(162,516)	(162,871)	(164,395)	(166,713)
83	7		Sub-total Transportation and Aviation Services	123,187	123,809	125,384	127,455
84	7	AB	Misc Expense	1,721	1,768	1,817	1,868
85	7	JL	Procure Materials & Services	-	-	-	-
86	7	JV	Maintain IT Apps & Infra	-	-	-	-
87	7		Sub-total Materials	1,721	1,768	1,817	1,868
88	7	JL	Procure Materials & Services	17,735	18,223	18,732	19,259
89	7	JV	Maintain IT Apps & Infra	36	37	38	39
90	7	OS	Operational Support	8,840	9,127	9,427	9,738
91	7		Sub-total Sourcing	26,611	27,388	28,197	29,036

**2023 GRC EXPENSE IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)**

Line No.	Exhibit	MWC	MWC Description	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
92	7	AB	Misc Expense	-	-	-	-
93	7	BI	Maint Buildings	6,006	6,122	6,246	6,374
94	7	EP	Manage Property & Bldgs	97,560	99,454	101,463	103,547
95	7	IG	Manage Var Bal Acct Processes	1,214	1,211	1,213	1,223
96	7	JH	Implement RealEstate Strategy	6,781	6,912	7,052	7,197
97	7	JV	Maintain IT Apps & Infra	16	17	17	17
98	7	ZC	Corporate Items	(63,714)	(64,980)	(66,320)	(67,710)
99	7		Sub-total Real Estate	47,863	48,737	49,671	50,648
100	7	AB	Misc Expense	1,437	1,466	1,497	1,528
101	7	AK	Manage Environmental Oper	10,106	10,192	10,308	10,472
102	7	AY	Habitat and Species Protection	343	343	344	348
103	7	CR	Mnge Waste Disp & Transp	2,368	2,351	2,344	2,355
104	7	ES	Implement Environment Projects	706	703	703	708
105	7	IG	Manage Var Bal Acct Processes	-	-	-	-
106	7	JE	Manage Land Services	4,504	4,549	4,609	4,687
107	7	JK	Manage Environ Remed (Earning)	6,088	6,222	6,370	6,528
108	7	JV	Maintain IT Apps & Infra	66	68	70	73
109	7	KX	Prov Human Resource Svcs	5	5	5	5
110	7	KY	Prov Regulation Svcs	1,497	1,527	1,559	1,592
111	7	OM	Operational Management	541	556	573	591
112	7	OS	Operational Support	2,931	3,029	3,131	3,237
113	7		Sub-total Land and Environmental Management	30,593	31,012	31,513	32,125
114	7	AB	Misc Expense	16,942	17,410	17,897	18,401
115	7	JV	Maintain IT Apps & Infra	3,611	3,697	3,787	3,880
116	7		Sub-total ERIM and Enterprise Data Management	20,552	21,107	21,684	22,281
117	7	AB	Misc Expense	-	-	-	-
118	7	JV	Maintain IT Apps & Infra	386,710	395,006	403,804	412,932
119	7	LL	Charges from Affiliates	-	-	-	-
120	7	OM	Operational Management	1,436	1,467	1,500	1,534
121	7	OS	Operational Support	-	-	-	-
122	7	ZC	Corporate Items	(37,434)	(38,263)	(39,134)	(40,037)
123	7		Sub-total Information Technology	350,711	358,210	366,169	374,429
124	7	JV	Maintain IT Apps & Infra	32,806	33,606	34,445	35,314
125	7	KZ	Prov Risk/Security Svcs	24,715	25,140	25,649	26,197
126	7		Sub-total Cyber and Corporate Security	57,522	58,747	60,094	61,511
127	7	KW	Prov Financial Svcs	0	0	0	0
128	7	KZ	Prov Risk/Security Svcs	8,150	8,341	8,541	8,747
129	7		Sub-total Enterprise Risk Management	8,150	8,341	8,541	8,747
130			Sub-total Shared Service and Information Technology	705,345	718,716	733,873	750,150

2023 GRC EXPENSE IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)

Line No.	Exhibit	Companywide Expense	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
1	7	Utility Wellness	23,325	23,733	24,168	24,620
2	7	CORP Wellness / EAP	3	3	3	3
3	7	Utility Employee Assistance Program	2,766	2,815	2,866	2,920
4	7	DOT Drug Testing	902	917	934	952
5	7	Workers Compensation	53,030	53,214	53,405	53,601
6	7	Utility PFL & STD	2,052	2,052	2,052	2,052
7	7	CORP LTD & STD Insurance Premium	29	30	30	31
8	7	Utility Long Term Disability Contribution	30,869	30,869	30,869	30,869
9	8	Severance & Redeployment	6,640	6,857	7,081	7,312
10	8	Tuition Refund Program	4,007	4,077	4,152	4,229
11	8	CORP Non Qualified Retirement Plans	2,116	2,153	2,193	2,234
12	8	CORP STIP Non Officer (ATL)	42	43	44	45
13	8	CORP STIP Officer (ATL)	212	215	219	223
14	8	Utility Non Qualified Retirement Plans	1,520	1,520	1,520	1,520
15	8	Utility STIP Non Officer (ATL)	84,267	86,798	89,645	92,585
16	8	Utility STIP Officer (ATL)	2,699	2,780	2,871	2,965
17	8	Utility - Medical Plans	401,600	420,118	439,490	459,756
18	8	CORP - Medical Plans	148	151	154	157
19	8	Utility - Dental Plans	30,466	30,466	30,466	30,466
20	8	CORP - Dental Plans	10	11	11	11
21	8	Utility - Vision Plans	3,485	3,485	3,485	3,485
22	8	CORP - Vision Plans	1	1	1	1
23	8	Utility Employee Health Care Contributions	(41,363)	(43,270)	(45,266)	(47,353)
24	8	CORP Employee Health Care Contributions	(11)	(12)	(12)	(12)
25	8	Utility Group Life Insurance Plan	587	607	627	647
26	8	CORP Group Life Insurance Plan	2	2	2	2
27	8	Utility Employee Relocation Program	6,383	6,495	6,614	6,738
28	8	CORP Employee Relocation Program	-	-	-	-
29	8	Service Awards	-	-	-	-
30	8	Adoption Reimbursement	18	18	18	19
31	8	Commute Transit Program	108	110	112	114
32	8	Utility Retirement Savings Plan	140,072	144,666	149,411	154,312
33	8	CORP Retirement Savings Plan	99	101	103	105
34	8	Post Retirement Pension (Pay-As-You-Go)	157	160	163	166
35	8	CORP Postretirement Trust Contributions	2	2	2	2
36	8	Post Retirement Medical (Pay-As-You-Go)	435	442	450	459
37	8	Post Retirement Life (Pay-As-You-Go)	3,389	3,448	3,511	3,577
38	8	Postretirement Trust Contributions	-	-	-	-
39	8	Family Support Program	33	34	35	35
40	8	CORP PBOP Contributions/Pay-As-You-Go	2	2	2	2
41	9	Bank Fees	9,523	9,690	9,867	10,052
42	9	CORP Liability Insurance	82	83	85	86
43	9	CORP Property Insurance	15	15	15	15
44	9	CORP Wildfire Liability Insurance	-	-	-	-
45	9	CORP Director & Officers Liability Insur	2,368	2,410	2,454	2,500
46	9	Director & Officers Liability Insurance	6,441	6,441	6,441	6,441
47	9	Nuclear Liability Insurance	1,753	1,753	1,753	-
48	9	Nuclear Property Insurance	110	110	110	-
49	9	Utility Liability Insurance	160,007	160,007	160,007	160,007
50	9	Utility Property Insurance	28,522	28,522	28,522	28,522
51	9	Wildfire Liability Insurance	-	-	-	-
52	9	Litigation Settlements & Judgements	18,959	18,959	18,959	18,959
53	9	Third Party Claims	14,941	12,388	12,388	12,388
54	9	CORP Director Fees	1,884	1,917	1,952	1,988
55	10	Meals & Sports Adjustment	(318)	(324)	(330)	(336)
56		Sub-total Companywide Expense	1,004,390	1,027,084	1,053,655	1,079,472
57	10	Rewards and Recognition Program	(19,150)	(19,484)	(19,841)	(20,213)
58		Total Companywide Expense (excl Self-Insurance)	985,241	1,007,600	1,033,813	1,059,260
59	9	Self-Insurance	400,012	400,000	200,000	-
60		Total Companywide Expense (incl Self-Insurance)	1,385,253	1,407,600	1,233,813	1,059,260

**2023 GRC CAPITAL IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)**

Line No.	Exhibit	MWC	MWC Description	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
Gas Distribution (Exhibit 3)							
1	3	05	Tools & Equipment	6,763	7,034	7,254	7,478
2	3	14	G Dist Pipeline Repl Program	510,133	516,273	521,937	527,321
3	3	27	Gas Meter Protection-Capital	5,476	5,542	5,602	5,660
4	3	29	G Dist Customer Connects	72,000	72,000	72,000	72,000
5	3	31	NGV - Station Infrastructure	4,889	4,948	5,003	5,054
6	3	47	G Dist Capacity	41,831	42,334	42,799	43,240
7	3	50	G Dist Reliability General	209,328	211,848	214,172	216,381
8	3	51	G Dist WRO	74,842	75,743	76,574	77,364
9	3	52	G Dist Leak Repl/Emergency	1,640	1,660	1,678	1,696
10	3	74	Install New Gas Meters	2,257	2,285	2,310	2,333
11	3	2F	Build IT Apps & Infra	12,365	12,862	13,263	13,672
12	3	4A	G Dist Ctrl Operations Assets	531	537	543	548
13			Sub-total Gas Distribution	942,055	953,065	963,134	972,748
Gas Transmission & Storage (Exhibit 3)							
14	3	05	Tools & Equipment	3,502	3,643	3,756	3,872
15	3	26	GT Customer Connects	8,858	8,573	8,586	8,729
16	3	44	Gas Capital:GasTrans-Sub	3,243	3,061	15,760	16,016
17	3	73	GT Pipeline Capacity	12,231	11,838	11,855	12,053
18	3	75	GT Pipeline Reliability	373,015	361,020	361,549	367,592
19	3	76	GT Station Reliability	193,485	188,430	193,827	196,473
20	3	83	GT WRO	17,881	17,306	17,331	17,621
21	3	84	GT Gas Gathering System Manage	12,291	11,895	11,913	12,112
22	3	98	GT Integrity Management	61,142	59,175	59,262	60,253
23	3	2F	Build IT Apps & Infra	12,988	13,510	13,931	14,361
24	3	3L	Gas Trans Storage Wells	87,630	113,959	40,222	6,855
25	3	3K	Gas Trans Remediate Corrosion	44,733	43,347	43,419	44,135
26			Sub-total Gas Transmission & Storage	830,998	835,757	781,411	760,073
Electric Distribution (Exhibit 4)							
27	4	05	Tools & Equipment	7,608	7,913	8,160	8,412
28	4	06	E Dist Line Capacity	143,580	149,954	154,219	156,675
29	4	07	E Dist Inst/Repl OH Poles	362,645	378,743	389,516	395,718
30	4	08	E Dist Replace OH Asset	813,396	1,059,200	1,290,713	1,750,277
31	4	09	E Dist Automation & Protection	29,595	30,796	31,747	32,679
32	4	10	E Dist WRO General	138,484	144,631	148,745	151,114
33	4	16	E Dist Customer Connects	653,710	682,728	702,148	713,328
34	4	17	E Dist Routine Emergency	249,483	260,558	267,969	272,236
35	4	21	Misc Capital	28,275	29,476	30,350	31,038
36	4	25	Install New Electric Meters	31,396	32,790	33,722	34,259
37	4	30	E Dist WRO Rule 20A	30,457	31,809	32,713	33,234
38	4	46	E Dist Subst Capacity	60,582	63,272	65,071	66,107
39	4	48	E Dist Subst Repl Other Equip	100,521	104,983	107,970	109,689
40	4	49	E Dist Reliability Ckt/Zone	88,300	92,219	94,842	96,353
41	4	54	E Dist Subst Repl Transformer	22,157	23,141	23,799	24,178
42	4	56	E Dist Replace UG Asset-Gen	126,794	132,423	136,189	138,358
43	4	58	E Dist Repl Substation Safety	8,587	8,968	9,223	9,370
44	4	59	E Dist Subst Emergency Repl	85,867	89,678	92,229	93,698
45	4	63	E T&D Control System/ Facility	118,519	123,760	127,294	129,397
46	4	95	E Dist Major Emergency	66,360	69,305	71,277	72,412
47	4	2A	E Dist Inst/Repl OH General	232,654	242,982	249,893	253,872
48	4	2B	E Dist Inst/Repl UG	66,474	69,425	71,400	72,537
49	4	2C	E Dist Inst/Repl Network	14,135	14,763	15,183	15,424
50	4	2F	Build IT Apps & Infra	70,173	72,990	75,265	77,590
51			Sub-total Electric Distribution	3,549,754	3,916,506	4,229,638	4,737,955

**2023 GRC CAPITAL IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)**

Line No.	Exhibit	MWC	MWC Description	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
Energy Supply (Exhibit 5)							
52	5	05	Tools & Equipment	747	-	-	-
53	5	20	DCPP Capital	10,244	5,914	986	-
54	5	2F	Build IT Apps & Infra	1,323	1,376	1,419	1,463
55	5		Sub-total Nuclear Generation	12,314	7,290	2,405	1,463
56	5	05	Tools & Equipment	625	712	774	858
57	5	11	Relicensing Hydro Gen	4,685	4,413	548	-
58	5	12	Implement Environment Projects	426	981	488	988
59	5	2F	Build IT Apps & Infra	2,756	2,867	2,956	3,047
60	5	2L	Instl/Rpl for Hydro Safety&Reg	63,080	47,170	25,426	18,433
61	5	2M	Instal/Repl Hydro Gneratng Eqp	84,622	92,061	131,171	116,742
62	5	2N	Instal/Repl Resv,Dams&Waterway	42,764	30,167	24,708	24,502
63	5	2P	Instl/Repl Hydr BldgGrndInfrst	26,625	14,275	12,640	9,539
64	5	3H	Hydroelec Lic & Lic Conditions	145,224	154,204	85,571	75,076
65			Sub-total Hydro Generation	370,806	346,849	284,282	249,186
66	5	05	Tools & Equipment	437	447	454	460
67	5	2S	Instal/Repl Fossil Gneratng Eqp	3,487	5,524	5,661	1,741
68	5	2T	Instl/Repl Fosl BldgGrndInfrst	1,588	109	-	-
69	5	3A	Instl/Rpl for AltGen Safty&Reg	7	7	7	7
70	5	3B	Instal/Repl AltGen GneratngEqp	719	722	738	763
71			Sub-total Fossil Generation	6,238	6,809	6,859	2,972
72			Sub-total Power Generation	377,044	353,658	291,141	252,158
73	5	2F	Build IT Apps & Infra	11,465	11,925	12,297	12,676
74			Sub-total Energy Policy and Procurement	11,465	11,925	12,297	12,676
75			Sub-total Energy Supply	400,823	372,873	305,842	266,297
Customer Care (Exhibit 6)							
76	6	05	Tools & Equipment	110	115	118	122
77	6	21	Misc Capital	110	115	118	122
78	6	25	Install New Electric Meters	28,992	30,279	31,140	31,636
79	6	74	Install New Gas Meters	82,311	83,789	85,073	86,334
80	6	2F	Build IT Apps & Infra	30,095	31,303	32,279	33,276
81			Sub-total Customer Care	141,619	145,601	148,729	151,489
Shared Services & IT (Exhibit 7)							
82	7	2F	Build IT Apps & Infra	1,102	1,147	1,182	1,219
83			Sub-total Safety	1,102	1,147	1,182	1,219
84	7	04	Fleet / Auto Equip	113,116	117,656	121,324	125,071
85	7	05	Tools & Equipment	1,496	1,556	1,605	1,654
86	7	2F	Build IT Apps & Infra	1,543	1,605	1,655	1,706
87			Sub-total Transportation	116,156	120,818	124,584	128,432
88	7	05	Tools & Equipment	669	695	717	739
89	7	21	Misc Capital	654	680	702	723
90			Sub-total Materials	1,323	1,376	1,419	1,463
91	7	22	Maintain Buildings	41,009	46,002	46,034	32,672
92	7	23	Implement RealEstate Strategy	99,788	155,878	152,351	141,578
93			Sub-total Real Estate	140,797	201,880	198,385	174,250
94	7	05	Tools & Equipment	331	344	355	366
95	7	12	Implement Environment Projects	8,066	8,390	8,651	8,919
96			Sub-total Land and Environmental	8,397	8,734	9,006	9,284
97	7	2F	Build IT Apps & Infra	2,205	2,293	2,365	2,438
98			Sub-total ERIM	2,205	2,293	2,365	2,438
99			Sub-total Shared Services	269,980	336,247	336,941	317,085
100	7	2F	Build IT Apps & Infra	286,509	298,007	307,297	316,789
101			Sub-total Information Technology	286,509	298,007	307,297	316,789
102	7	2F	Build IT Apps & Infra	32,834	34,152	35,217	36,305
103	7	3N	Security Install/Replace	14,690	15,280	15,756	16,243
104			Sub-total Cyber and Corporate Security	47,525	49,432	50,973	52,547
105			Sub-total Information Technology and Security	334,034	347,439	358,270	369,336
106			Sub-total Shared Services & IT	604,013	683,686	695,211	686,421

**2023 GRC CAPITAL IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)**

Line No.	Exhibit	MWC	MWC Description	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
Human Resources (Exhibit 8)							
107	8	05	Tools & Equipment	31	32	33	34
108	8	22	Maintain Buildings	1,072	1,115	1,150	1,185
109			Sub-total Human Resources	1,102	1,147	1,182	1,219
Administrative and General (Exhibit 9)							
110	9	2F	Build IT Apps & Infra	551	573	591	609
111	9		Sub-total Risk, Audit and Insurance	551	573	591	609
112	9	2F	Build IT Apps & Infra	551	573	591	609
113	9		Sub-total Compliance & Ethics	551	573	591	609
114	9	2F	Build IT Apps & Infra	1,654	1,720	1,774	1,828
115	9		Sub-total Regulatory Affairs	1,654	1,720	1,774	1,828
116			Sub-total Administrative and General	2,756	2,867	2,956	3,047

**2023 GRC CAPITAL IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)**

Line NO.	Exhibit	MWC	MAT	MAT Description	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
Gas Distribution (Exhibit 3)								
1	3	05	05A	Tools	6,763	7,034	7,254	7,478
2	3	14	14A	Pipeline Repl Pgm-Mains & Svcs	102,468	103,701	104,839	105,920
3	3	14	14D	Plastic Pipe Replace_Main/Svc	407,665	412,572	417,099	421,401
4	3	27	27A	Meter Protection-Capital	5,476	5,542	5,602	5,660
5	3	29	29#	Not assigned	5,018	5,018	5,018	5,018
6	3	29	29C	NB-G-Res Svc R16 Only	9,465	9,465	9,465	9,465
7	3	29	29D	NB-G-CIA R15 and/or R16 MLX	15,665	15,665	15,665	15,665
8	3	29	29H	29H-G-Res R15/R16 MLX 1-4 Lots	4,184	4,184	4,184	4,184
9	3	29	29I	NB-G-Res R15/16 MLX - Apts	4,213	4,213	4,213	4,213
10	3	29	29J	NB-G-Res R15/16 MLX >=5 lots	23,257	23,257	23,257	23,257
11	3	29	29M	Prod Subdiv Res Svc Comp - G	10,199	10,199	10,199	10,199
12	3	31	31A	31A-LNG/CNG Stations	4,889	4,948	5,003	5,054
13	3	47	47B	Cons/Acq New Fac-G-Cap-Mains	35,761	36,191	36,588	36,966
14	3	47	47C	Cons/Acq New Fac-G-Cap-RegSta	5,882	5,953	6,018	6,080
15	3	47	47D	Cons/Acq New Fac-G-Cap-ReplReg	129	130	132	133
16	3	47	47F	Cons/Acquire New Fac G-Cap-Oth	59	60	60	61
17	3	50	50A	Impr Rel/ Dep - Gas Mains	52,051	52,678	53,256	53,805
18	3	50	50B	Impr Rel/Dep - Gas Services	12,095	12,241	12,375	12,502
19	3	50	50C	Impr Rel/Dep Gas Regulation	49,887	50,488	51,042	51,568
20	3	50	50D	Impr Rel/Dep Gas CP Systems	1,383	1,400	1,415	1,430
21	3	50	50E	Impr Rel/Dep Gas Valves	5,776	5,845	5,909	5,970
22	3	50	50F	Impr Rel/Dep Gas Other Equip	488	494	499	504
23	3	50	50G	Impr Rel/Dep-Gas Svc Repl Leak	14,809	14,988	15,152	15,308
24	3	50	50H	Impr Rel/Dep-CutOff Idle G Svc	3,161	3,199	3,234	3,267
25	3	50	50I	Impr Rel/Dep-Deac Only-M/R/V	8,924	9,032	9,131	9,225
26	3	50	50J	Gas Overbuild - G	16,738	16,940	17,126	17,302
27	3	50	50K	Emergent Leaking Main Replace	5,757	5,827	5,891	5,951
28	3	50	50L	Impr Rel Dep Gas Reg Component	10,669	10,798	10,916	11,029
29	3	50	50M	Complex-Gas Svc Repl Leak	1,125	1,139	1,151	1,163
30	3	50	50P	ImprRelb/SysDepd-G-DpWellAnode	17,989	18,206	18,405	18,595
31	3	50	50Q	Casings	2,698	2,731	2,761	2,789
32	3	50	50R	Rep/Inst EmerShtdwn&SafeOpsVal	5,776	5,845	5,909	5,970
33	3	51	51#	Not assigned	(742)	(751)	(760)	(767)
34	3	51	51E	WRO Relocate Mn & Svcs - G	40,335	40,820	41,268	41,694
35	3	51	51F	WRO Svc Only Alteration - G	11,174	11,308	11,432	11,550
36	3	51	51G	WRO Gas Svc Cutoff at Main - G	15,942	16,133	16,311	16,479
37	3	51	51I	WRO Remove Idle Main >100' - G	2,163	2,190	2,214	2,236
38	3	51	51J	WRO Relocate CP Area/Reg Sta-G	831	841	851	859
39	3	51	51K	WRO G CAP Proj>\$50K	4,863	4,922	4,976	5,027
40	3	51	51L	3rd Party WRO Pd.on Actuals	277	280	283	286
41	3	52	52B	Emerg Resp-G-Dig-Ins-Svcs	1,344	1,360	1,375	1,389
42	3	52	52C	Emerg Resp-G-Dig-Ins-Main	297	300	303	307
43	3	74	74A	Install Regulators	2,257	2,285	2,310	2,333
44	3	2F	2FA	ASvcs: Development	12,365	12,862	13,263	13,672
45	3	4A	4AF	ERX Pressure Monitoring-6	531	537	543	548
46	Sub-total Gas Distribution				942,055	953,065	963,134	972,748

**2023 GRC CAPITAL IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)**

Line No.	Exhibit	MWC	MAT	MAT Description	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
Gas Transmission (Exhibit 3)								
1	3	05	05A	Tools	3,502	3,643	3,756	3,872
2	3	26	26A	New Business	8,858	8,573	8,586	8,729
3	3	44	44A	Stan-Pac Capital	3,243	3,061	15,760	16,016
4	3	73	73A	Capacity for Load Growth	6,757	6,540	6,550	6,659
5	3	73	73B	Capacity Betterment	984	953	954	970
6	3	73	73D	LNG / CNG	4,490	4,345	4,352	4,424
7	3	75	75C	Routine Spend M&C - Capital	18,443	17,850	17,876	18,175
8	3	75	75D	Valve Program	45,830	44,356	44,421	45,164
9	3	75	75E	Vintage Pipe Replacement	4,146	4,013	4,019	4,086
10	3	75	75H	Pipe Replacement Class Loctn	8,587	8,311	8,323	8,463
11	3	75	75I	Valve Automation	23,608	22,849	22,882	23,265
12	3	75	75J	Geo-Hazard Mitigations	8,486	8,213	8,225	8,363
13	3	75	75K	Water and Levee Crossings	2,550	2,468	2,471	2,513
14	3	75	75L	Fault Crossings	13,542	13,107	13,126	13,345
15	3	75	75M	Shallow Pipe	10,178	9,851	9,866	10,030
16	3	75	75N	Hydrostatic Testing	44,062	42,645	42,707	43,421
17	3	75	75O	Pipe Rplcmnt - Oth PL Sfty Inv	33,831	32,744	32,792	33,340
18	3	75	75P	ILI Capital Repair (Non-BA)	14,431	13,967	13,987	14,221
19	3	75	75Q	Pipe Replacement (IM)	20,045	19,400	19,428	19,753
20	3	75	75R	Pipe Rplcmnt In-Lieu of Hydro	41,135	39,812	39,870	40,537
21	3	75	75S	Direct Assessment	1,774	1,717	1,720	1,748
22	3	75	75T	Exposed Pipe	10,178	9,851	9,866	10,030
23	3	75	75U	Non-TIMP Strength Testing	69,859	67,613	67,712	68,844
24	3	75	75V	TIMP Direct Exam-Capital Recoat	2,328	2,253	2,257	2,294
25	3	76	762	Gill Ranch Capital	999	967	968	985
26	3	76	763	Perform Simple Station Rblds	7,394	7,156	7,167	7,287
27	3	76	764	Perform Complex Station Rblds	47,094	45,580	45,647	46,409
28	3	76	765	Perform Transm Terminal Upgrd	10,772	10,426	10,441	10,615
29	3	76	76M	GT SCADA Visibility	3,106	3,006	3,011	3,061
30	3	76	76N	Routine Spend C&P Capital	58,989	57,710	57,892	58,744
31	3	76	76P	GT Elect Upgrd-Hinkley&Topock	6,304	6,101	6,110	6,212
32	3	76	76S	Engineering Critical Assmnt 2	9,849	9,532	9,546	9,705
33	3	76	76T	Compressor Control Upgrades	12,090	11,839	11,878	12,051
34	3	76	76V	Station Strength Tst - Capital	16,745	16,207	16,231	16,502
35	3	76	76X	Compressor Replacements	10,488	10,562	15,579	15,388
36	3	76	76Z	Physical Security - Capital	9,655	9,344	9,358	9,514
37	3	83	83A	Work Requested by Others	17,881	17,306	17,331	17,621
38	3	84	84D	Gas Gathering	12,291	11,895	11,913	12,112
39	3	98	98C	ILI Upgrades	61,142	59,175	59,262	60,253
40	3	2F	2FA	ASvcs: Development	12,988	13,510	13,931	14,361
41	3	3K	3K1	Drip Replacement	14,161	13,754	13,781	14,003
42	3	3K	3K4	AC Interf Mitigation	3,277	3,171	3,176	3,229
43	3	3K	3K5	Casing Mitigation	14,766	14,294	14,316	14,554
44	3	3K	3K6	Cathodic Protection-New	1,644	1,592	1,594	1,620
45	3	3K	3K7	Cathodic Protection-Replacemen	4,175	4,041	4,048	4,115
46	3	3K	3K8	Test Station Installation	130	126	126	128
47	3	3K	3K9	Electrical Interference - DC	6,254	6,053	6,062	6,163
48	3	3K	3KA	Atmospheric Corrosion	326	316	316	322
49	3	3L	3L1	WELL - Drilling	19,867	47,373	33,416	-
50	3	3L	3L3	WELL - Reworks	66,326	58,803	6,807	6,855
51	3	3L	3L5	WELL - Cntrls & Conts Monitrng	1,437	7,783	-	-
52	Sub-total Gas Transmission				830,998	835,757	781,411	760,073

**2023 GRC CAPITAL IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)**

Line No.	Exhibit	MWC	MAT	MAT Description	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
Electric Distribution (Exhibit 4)								
1	4	05	05A	Tools	7,608	7,913	8,160	8,412
2	4	06	06#	Not assigned	7,438	7,768	7,989	8,117
3	4	06	06A	Fdr Prj Assoc w/Subst Capacity	10,499	10,965	11,277	11,456
4	4	06	06B	Transformer Repl Overloaded	8,524	8,902	9,155	9,301
5	4	06	06D	Circuits Reinforce-DP Managed	4,674	4,882	5,021	5,101
6	4	06	06E	Circuits Reinforce-PS Managed	25,026	26,137	26,880	27,308
7	4	06	06G	Voltage Correct Secondary	2,870	2,997	3,082	3,131
8	4	06	06H	Dist Line New Business Perf	74,966	78,294	80,521	81,803
9	4	06	06I	Operational Capacity Proj	7,015	7,326	7,534	7,654
10	4	06	06K	Power Factor Management	1,167	1,219	1,254	1,274
11	4	06	06P	06P_Enable DG Dist Line	1,401	1,464	1,505	1,529
12	4	07	07C	Special Criteria Pole Repl	3,150	3,290	3,384	3,438
13	4	07	07D	Pole Repl	352,006	367,632	378,088	384,109
14	4	07	07O	Overloaded Pole Replacements	7,489	7,821	8,044	8,172
15	4	08	08J	Repl Deteriorated OH Conductor	44,888	46,881	48,214	48,982
16	4	08	08S	Replace Obsolete OH Switches	315	329	338	344
17	4	08	08W	Wildfire Resiliency projects	768,193	1,011,990	1,242,161	1,700,951
18	4	09	09B	ED Sub SCADA/RTU Replace	20,074	20,880	21,531	22,196
19	4	09	09D	ED Sub SCADA/RTU Install	518	538	555	572
20	4	09	09E	ED Sub Protect Relay Inst/Repl	3,033	3,167	3,258	3,309
21	4	09	09F	ED Sub SCADA Emergency Repl	5,971	6,210	6,404	6,602
22	4	10	10#	Not assigned	3,472	3,626	3,729	3,788
23	4	10	10C	High-Speed Rail Relocation	3,247	3,392	3,488	3,544
24	4	10	10J	WRO OH Relocation - E	131,765	137,614	141,528	143,782
25	4	16	16#	Not assigned	5,264	5,498	5,654	5,744
26	4	16	160	Purchase Transformers	174,614	182,365	187,552	190,538
27	4	16	16C	NB-E-Res OH Svc R16 only	198,819	207,645	213,551	216,951
28	4	16	16H	NB-E-Cl UG R15 and/or R16 MLX	201,088	210,014	215,988	219,427
29	4	16	16R	NB-E-Res UG R15/16 MLX>=5 lots	53,053	55,408	56,984	57,891
30	4	16	16S	Prod Subdiv Res Svc Compl - E	20,873	21,799	22,419	22,776
31	4	17	17#	Not assigned	2,688	2,807	2,887	2,933
32	4	17	17B	Repl Plnt Corr-E-OH	137,273	143,367	147,445	149,792
33	4	17	17C	Repl Plnt Corr-E-UG	51,442	53,726	55,254	56,134
34	4	17	17D	17D: Damage Claims Capital	40,636	42,440	43,647	44,342
35	4	17	17P	ED Emgcy>25K excl Major Events	17,444	18,218	18,737	19,035
36	4	21	21#	Not assigned	5,910	6,154	6,342	6,512
37	4	21	21A	EPR Capital	22,365	23,322	24,009	24,526
38	4	25	25D	Remove - CFS	1,548	1,617	1,663	1,689
39	4	25	25H	Installs: New Business	7,137	7,454	7,666	7,788
40	4	25	25K	Installs: Existing premises	22,711	23,719	24,394	24,783
41	4	30	30A	WRO-Rule 20A	30,457	31,809	32,713	33,234
42	4	46	46A	DSub Nor Capacity	16,420	17,149	17,637	17,918
43	4	46	46F	DSub Em and Op Capacity	1,019	1,064	1,095	1,112
44	4	46	46H	DSub New Bus Related Capacity	43,143	45,058	46,340	47,077
45	4	48	48A	Repl Dsub Other Equipment	4,402	4,597	4,728	4,803
46	4	48	48C	Repl DSub Batteries	3,389	3,540	3,641	3,699
47	4	48	48D	Repl DSub Breakers	29,794	31,116	32,002	32,511
48	4	48	48E	Repl DSub Switches	2,304	2,406	2,475	2,514
49	4	48	48F	Repl DSub Switchgear	33,829	35,331	36,336	36,914
50	4	48	48H	Repl DSub Civil Structures	5,649	5,900	6,068	6,164

**2023 GRC CAPITAL IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)**

Line No.	Exhibit	MWC	MAT	MAT Description	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
Electric Distribution (Exhibit 4)								
51	4	48	48L	Dist Line Work Support Substat	9,497	9,918	10,200	10,363
52	4	48	48N	DSub Insulators	5,649	5,900	6,068	6,164
53	4	48	48X	DSub Animal Abatement	6,008	6,275	6,453	6,556
54	4	49	49#	Not assigned	13,026	13,604	13,991	14,214
55	4	49	49A	Distribution Line Automation	1,921	2,006	2,063	2,096
56	4	49	49B	Recl Ctrl's Inst/Repl	4,587	4,791	4,927	5,005
57	4	49	49C	OH Fuses Inst/Repl	1,627	1,699	1,748	1,775
58	4	49	49H	PSPS Sect Device Inst/Repl	12,602	13,162	13,536	13,752
59	4	49	49I	49I OH FitInd/LnSnsr Inst/Repl	23,925	24,987	25,698	26,107
60	4	49	49R	Grid Mod Tech	18,304	19,117	19,660	19,973
61	4	49	49S	Elect Reliability Inst FLISR	3,882	4,054	4,169	4,236
62	4	49	49T	D-Single Phase Recloser	4,558	4,760	4,896	4,973
63	4	49	49X	Emerging Dist Rel Improvements	3,868	4,040	4,155	4,221
64	4	54	54A	E Dist Subst-Repl Transfm	18,767	19,601	20,158	20,479
65	4	54	54L	E Dist Subst-Life Ext Transfm	3,389	3,540	3,641	3,699
66	4	56	56A	UG Cable Other Repl	38,567	40,279	41,425	42,084
67	4	56	56B	UG Cable Inject	1,165	1,216	1,251	1,271
68	4	56	56C	UG Cable COE Repl	37,551	39,218	40,333	40,976
69	4	56	56N	Network Cable Replacement	32,200	33,629	34,586	35,137
70	4	56	56S	Replace Obsolete UG Switches	8,474	8,850	9,102	9,247
71	4	56	56T	Install Temperature Indicator	8,838	9,230	9,492	9,644
72	4	58	58A	DSub Safety&Envir&Fire Protect	3,389	3,540	3,641	3,699
73	4	58	58S	DSub Security Upgrades	5,197	5,428	5,582	5,671
74	4	59	59A	E Dist Subst Emergency Repl	85,867	89,678	92,229	93,698
75	4	63	63C	Advanced Dist Mgmt System Dev	113,743	118,792	122,171	124,116
76	4	63	63D	Distribution Operational Tech	4,776	4,968	5,123	5,281
77	4	95	95A	E Major Emgcy OH	62,755	65,541	67,405	68,479
78	4	95	95B	E Major Emgcy UG	3,604	3,764	3,871	3,933
79	4	2A	2AA	OH Genl Repl	138,780	144,940	149,063	151,436
80	4	2A	2AB	Bird Safe Inst/Repl	3,623	3,784	3,892	3,954
81	4	2A	2AC	Bird Safe Inst/Repl Annual	3,770	3,938	4,050	4,114
82	4	2A	2AE	OH COE Repl	29,330	30,632	31,503	32,005
83	4	2A	2AF	OH Idle Facility Remove	2,844	2,970	3,054	3,103
84	4	2A	2AG	SF Series Streetlights	2,595	2,710	2,787	2,832
85	4	2A	2AH	LED Streetlights	7,380	7,707	7,927	8,053
86	4	2A	2AI	SF Historical Streetlights	1,038	1,084	1,115	1,133
87	4	2A	2AP	OH CAP Projects	17,835	18,627	19,157	19,462
88	4	2A	2AQ	Ceramic Post Insulators	6,071	6,341	6,521	6,625
89	4	2A	2AR	Surge Arrester Replacement	18,523	19,345	19,895	20,212
90	4	2A	2AS	FAS Overhead Capital	865	904	929	944
91	4	2B	2BA	UG Genl Repl	49,864	52,078	53,559	54,412
92	4	2B	2BB	Fault Indicator Replacements	900	940	966	982
93	4	2B	2BD	UG COE Repl	7,224	7,545	7,759	7,883
94	4	2B	2BF	UG Idle Facility Remove	30	31	32	32
95	4	2B	2BP	UG CAP Projects	8,457	8,832	9,083	9,228
96	4	2C	2CA	Network Misc	339	354	364	370
97	4	2C	2CC	Transformer & Protector Repl	4,057	4,238	4,358	4,428
98	4	2C	2CE	SCADA Communications Upgrd	9,739	10,171	10,460	10,627
99	4	2F	2F#	Not assigned	37,763	39,279	40,504	41,755
100	4	2F	2FA	ASvcs: Development	32,410	33,711	34,762	35,835
101	Sub-total Electric Distribution				3,549,754	3,916,506	4,229,638	4,737,955

2023 GRC CAPITAL IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)

Line No.	Exhibit	MWC	MWC Description	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
Energy Supply (Exhibit 5)							
1	5	05	Tools & Equipment	747	-	-	-
2	5	20	DCPP Capital	10,244	5,914	986	-
3	5	2F	Build IT Apps & Infra	1,323	1,376	1,419	1,463
4	5		Sub-total Nuclear Generation	12,314	7,290	2,405	1,463
5	5	05	Tools & Equipment	625	712	774	858
6	5	11	Relicensing Hydro Gen	4,685	4,413	548	-
7	5	12	Implement Environment Projects	426	981	488	988
8	5	2F	Build IT Apps & Infra	2,756	2,867	2,956	3,047
9	5	2L	Instl/Rpl for Hydro Safety&Reg	63,080	47,170	25,426	18,433
10	5	2M	Instal/Repl Hydro Gneratng Eqp	84,622	92,061	131,171	116,742
11	5	2N	Instal/Repl Resv,Dams&Waterway	42,764	30,167	24,708	24,502
12	5	2P	Instl/Repl Hydr BldgGrndInfrst	26,625	14,275	12,640	9,539
13	5	3H	Hydroelec Lic & Lic Conditions	145,224	154,204	85,571	75,076
14			Sub-total Hydro Generation	370,806	346,849	284,282	249,186
15	5	05	Tools & Equipment	437	447	454	460
16	5	2S	Instal/Repl Fossil Gneratng Eqp	3,487	5,524	5,661	1,741
17	5	2T	Instl/Repl Fosl BldgGrndInfrst	1,588	109	-	-
18	5	3A	Instl/Rpl for AltGen Safty&Reg	7	7	7	7
19	5	3B	Instal/Repl AltGen GneratngEqp	719	722	738	763
20			Sub-total Natural Gas and Solar Generation	6,238	6,809	6,859	2,972
21			Sub-total Power Generation	377,044	353,658	291,141	252,158
22	5	2F	Build IT Apps & Infra	11,465	11,925	12,297	12,676
23			Sub-total Energy Policy and Procurement	11,465	11,925	12,297	12,676
24			Sub-total Energy Supply	400,823	372,873	305,842	266,297
Customer Care (Exhibit 6)							
25	6	05	Tools & Equipment	110	115	118	122
26	6	21	Misc Capital	110	115	118	122
27	6	25	Install New Electric Meters	28,992	30,279	31,140	31,636
28	6	74	Install New Gas Meters	82,311	83,789	85,073	86,334
29	6	2F	Build IT Apps & Infra	30,095	31,303	32,279	33,276
30			Sub-total Customer and Communications	141,619	145,601	148,729	151,489
Shared Services & IT (Exhibit 7)							
31	7	2F	Build IT Apps & Infra	1,102	1,147	1,182	1,219
32			Sub-total Enterprise Health and Safety	1,102	1,147	1,182	1,219
33	7	04	Fleet / Auto Equip	113,116	117,656	121,324	125,071
34	7	05	Tools & Equipment	1,496	1,556	1,605	1,654
35	7	2F	Build IT Apps & Infra	1,543	1,605	1,655	1,706
36			Sub-total Transportation and Aviation Services	116,156	120,818	124,584	128,432
37	7	05	Tools & Equipment	669	695	717	739
38	7	21	Misc Capital	654	680	702	723
39			Sub-total Materials	1,323	1,376	1,419	1,463
40	7	22	Maintain Buildings	41,009	46,002	46,034	32,672
41	7	23	Implement RealEstate Strategy	99,788	155,878	152,351	141,578
42			Sub-total Real Estate	140,797	201,880	198,385	174,250
43	7	05	Tools & Equipment	331	344	355	366
44	7	12	Implement Environment Projects	8,066	8,390	8,651	8,919
45			Sub-total Land and Environmental	8,397	8,734	9,006	9,284
46	7	2F	Build IT Apps & Infra	2,205	2,293	2,365	2,438
47			Sub-total ERIM	2,205	2,293	2,365	2,438
48			Sub-total Shared Services	269,980	336,247	336,941	317,085
49	7	2F	Build IT Apps & Infra	286,509	298,007	307,297	316,789
50			Sub-total Information Technology	286,509	298,007	307,297	316,789
51	7	2F	Build IT Apps & Infra	32,834	34,152	35,217	36,305
52	7	3N	Security Install/Replace	14,690	15,280	15,756	16,243
53			Sub-total Cyber and Corporate Security	47,525	49,432	50,973	52,547
54			Sub-total Information Technology and Security	334,034	347,439	358,270	369,336
55			Sub-total Shared Services & IT	604,013	683,686	695,211	686,421

**2023 GRC CAPITAL IMPUTED ADOPTED REGULATORY VALUES
(THOUSANDS OF NOMINAL DOLLARS)
(CONTINUED)**

Line No.	Exhibit	MWC	MWC Description	2023 Imputed Adopted	2024 Imputed Adopted	2025 Imputed Adopted	2026 Imputed Adopted
Human Resources (Exhibit 8)							
56	8	05	Tools & Equipment	31	32	33	34
57	8	22	Maintain Buildings	1,072	1,115	1,150	1,185
58			Sub-total Human Resources	1,102	1,147	1,182	1,219
Administrative and General (Exhibit 9)							
59	9	2F	Build IT Apps & Infra	551	573	591	609
60	9		Sub-total Risk, Audit and Insurance	551	573	591	609
61	9	2F	Build IT Apps & Infra	551	573	591	609
62	9		Sub-total Compliance & Ethics	551	573	591	609
63	9	2F	Build IT Apps & Infra	1,654	1,720	1,774	1,828
64	9		Sub-total Regulatory Affairs	1,654	1,720	1,774	1,828
65			Sub-total Administrative and General	2,756	2,867	2,956	3,047