

PACIFIC GAS AND ELECTRIC COMPANY
Safety Model Assessment Proceeding (S-MAP)
Application 15-05-003 [15-05-002/15-05-004/15-05-005]
Data Response

PG&E Data Request No.:	ED 001-Q01-04		
PG&E File Name:	SafetyModelAssessmentProceedingS-MAP_DR_ED_001-Q01-04		
Request Date:	March 22, 2021	Requester DR No.:	001
Date Sent:	April 7, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Kevin Flaherty

QUESTION 01

Please provide the Major Work Category, variance explanation, actual cost, authorized cost and variance (absolute and percent) for each line item in the whole 2020 Report in an Excel format.

Major Work Category	2020 Authorized	2020 Actual	Variance (\$)	Variance (%)	Program Description	Explanation of Variance
Customer Accounts	\$663,678	\$545,108	(\$118,570)	-17.87%	Cust...	
Meters	\$763,678	\$532,091	(\$231,587)	-30.33%description.	Equipment did not...
Assistance	\$1,531,678	\$606,639	(\$925,039)	-60.39%	Assist...	New phone system requirments....
Accounts	\$677,836	\$763,678	\$85,842	12.66%	Acc..	
Customers	\$551,616	\$506,057	(\$45,559)	-8.26%	Cust..	
Instruction	\$505,408	\$615,078	\$109,670	21.70%	Inst..	New requirements....
Service	\$456,948	\$598,200	\$141,252	30.91%	Service	Ticket system prevented...
Records	\$647,636	\$525,582	(\$122,054)	-18.85%	Records	
Collections	\$578,678	\$519,074	(\$59,604)	-10.30%	Collect...	
Supervisors	\$667,878	\$538,599	(\$129,279)	-19.36%	Super....	
Misc. Service	\$2,581,137	\$623,516	(\$1,957,621)	-75.84%	Misc..	Road Repairs caused...

Image 1. For illustrative purposes.

ANSWER 01

See attachments.

QUESTION 02

Please provide summary tables for item the whole 2020 Report categorized by general lines of business and separated into expensed and capital programs (see example and D.19-04-020, Attachment 2, page 9, Item VIII). The tables should include actual costs, authorized cost and variance (absolute and percent) for each summary item in an Excel format.

- a. Gas Gas Distribution.
- b. Electric Distribution.
- c. Nuclear Generation.
- d. Power Generation.

e. Other.

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

Image 2: For illustrative purposes only (see 11/6/2019 letter to Robert Kenney).

ANSWER 02

The 2020 RSAR only covers the year 2020, thus the only data provided is for the year 2020. See attachments.

QUESTION 03

Please provide summary tables for PG&E by spending type and industry (gas or electric)—do not include the Other category from Item 2 above.

Program Groups	Recorded	Imputed	Variance	Variance %
O&M Spend - Electric	217,961	212,315	5,645	3%
O&M Spend - Gas	43,495	50,690	(7,195)	-14%
Capital Spend - Electric	440,039	647,297	(207,258)	-32%
Capital Spend - Gas	115,408	175,069	(59,661)	-34%
Total	816,903	1,085,371	(268,468)	-25%

Image 3: This table came from the corresponding review for Sempra's utilities (see 8/12/20 Letter to Dan Scope).

ANSWER 03

See the Introduction table Excel attachment entitled "01.RSAR_MasterTables-Section1_Intro_ED_001.xlsx"

QUESTION 04

Please provide summary tables all Major Work Categories covered in the report.

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

Image 4: This request is only for the years covered in the 2020 RSAR (see 11/6/2019 letter to Robert Kenney).

ANSWER 04

The 2020 RSAR only covers the year 2020, thus the only data provided is for the year 2020. See attached Excel tables – the “total” tabs. The first 2 tabs in each LOB Excel file are summary tables at the MWC for that LOB for both expense and capital.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q01		
PG&E File Name:	2020_RSAR_DR_ED_002-Q01		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 14, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: GENERAL CATEGORIES OF REQUEST

QUESTION 01

Where does PG&E disclose cancelled, deferred or expanded programs (D.19-04-020, OP 11).

ANSWER 01

OP 11, Part A of D.19-04-020 states "A. Provide a detailed explanation of the causes of the difference including whether any projects or other units of work were canceled, deferred or expanded that may have led to the difference". PG&E interprets this requirement to mean that within the variance explanations for each program, PG&E should identify whether a program is cancelled, deferred, or expanded. Thus, PG&E met this requirement in its variance explanations.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q02		
PG&E File Name:	2020_RSAR_DR_ED_002-Q02		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 14, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: GENERAL CATEGORIES OF REQUEST

QUESTION 02

Please provide a list all line items in the report with zero imputed or zero actual costs and explain how those items were not cancelled or deferred.

ANSWER 02

See 2020_RSAR_DR_ED_002-Q02Atch01 for explanations for all programs with a zero imputed or zero actual costs. Explanations are provided at the program level (total MAT Code level for Gas and Electric and MWC level for Energy Supply and Customer Care).

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q03		
PG&E File Name:	2020_RSAR_DR_ED_002-Q03		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 17, 2021	Requesting Party:	Energy Division
PG&E Witness:	Various	Requester:	Jordan Smith

SUBJECT: GENERAL CATEGORIES OF REQUEST

QUESTION 03

Many line items use “emergent activity” in the variance explanation. Please explain whether these activities constitute expanded programming (D.19-04-020, OP 11)

ANSWER 03

Depending on the context, PG&E uses the term “emergent” to refer to (1) to additional work in a given MWC/MAT that materialized in excess of the forecast units or (2) it can refer to a new work type not forecast in the 2020 GRC that materialized and required to be performed.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q04		
PG&E File Name:	2020_RSAR_DR_ED_002-Q04		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 20, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: ELECTRIC EXPENSE

QUESTION 04

EP&R Expense (AB#-1)

- Cost increase of \$33M or 189%. Explanation included 1) an increase in the cost of outside services, 2) cost forecasted in AB6 recorded are in AB#, and 3) negative cost forecast not tracked or recorded MWCAB.
 - a. Explain outside service increase and justify why cost tracking was re-classified.
 - b. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 04

- a. Increased use of outside services was to support wildfire and other risk-related work by the Asset Risk Assessments, Asset Strategy, System Inspections, and Data Analytics support teams. Some costs were forecast in MAT AB6 but recorded in MAT AB#, which is the MAT used when activities have not been tagged to a specific MAT. A comparison of the totals of Table 3-3, Lines 1 & 6, shows the movement. In addition, please note that the aggregate total of MATs AB# and AB6 is under the dollar and percentage change thresholds requiring a variance explanation. Costs were not reclassified.

Line	MV	MWC Name	M/	MAT Name	RAMP Risk Nar	RAMP Mitigation Name	2020 GRC Testimony Referen	2020 Imputed Adopted Costs (A)	2020 Actual Costs (B)	2020 Cost Difference (B-A)	2020 Cost Percent Change (%) (B-A)/A
1	AB	Support and EP&R	#	Not assigned	SRM Total	SRM Total	4-18	\$ 17,717.0	\$ 51,279.6	\$ 33,562.7	189.4%
6	AB	Support and EP&R	AB6	EP&R Expense	SRM Total	SRM Total	4-3	\$ 48,759.9	\$ 7,580.7	\$ (41,179.1)	-84.5%
Totals								\$ 66,476.8	\$ 58,860.3	\$ (7,616.5)	-11.5%

b. The testimony and workpapers associated with MAT AB# can be found in Exhibit (PG&E-4), Chapters 3 & 18 and associated workpapers. Testimony & workpapers from PG&E's 2020 GRC are available through PG&E's regulatory website. Below are instructions on how to search for the 2020 GRC documents.

- 1) Go to: <https://pgera.azurewebsites.net/Regulation/search>
- 2) Select "GRC 2020 Ph I [A.18-12-009]" from the dropdown menu
- 3) Select "PGE" from the dropdown menu
- 4) Select "Testimony" under Document Type for both Testimony and Workpaper documents.
- 5) Click Search

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q05		
PG&E File Name:	2020_RSAR_DR_ED_002-Q05		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 20, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: ELECTRIC EXPENSE

QUESTION 05

OH Poles Inspected (BFB-24)

- Increase of 608% in cost and 39% increase in units.
 - a. Provide justification for the program expansion and significant expense increase
 - b. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 05

- a. The forecast of overhead inspection units developed for the 2020 GRC was based on GO165 requirements to conduct distribution asset inspections every 5 years. In 2020 PG&E utilized risk-informed inspection cycles that exceeded GO165 requirements in High Fire Threat District (HFTD) areas:
- HFTD Tier 3: 100 percent annually
 - HFTD Tier 2: 33 percent annually
 - Non-HFTD: 20 percent annually (GO165 requirement)

PG&E implemented the risk-informed inspection cadence to mitigate wildfire ignition risk more effectively in HFTD areas. This resulted in the total number of inspection units increasing.

At the same time, PG&E incorporated an enhanced detailed inspection approach across its overhead inspection program. This approach includes enhanced detailed inspection checklist for distribution inspections (14 unique components across 55 questions/246 possible answers) as well as expanded documentation requirements, capturing digital records and photos to reflect the current status of all equipment conditions observed in the field, whereas previously photos were only taken when an issue was identified and an Electric Correction (EC) notification was created.

This approach increases the time it takes to complete an inspection therefore increasing the unit cost and overall cost of the program.

Finally, in 2020, MAT code BFB also includes Field Safety Reviews (FSRs). FSRs are in-person field safety checks of EC notifications that have been previously identified but will not be addressed before their due date. Based on a significant increase in volume of the EC notifications identified from the 2019 Wildfire Safety Inspection Program (WSIP), which proactively inspected poles and pole associated equipment in HFTD areas on an accelerated and enhanced basis to mitigate the risk of initiating fires, some number of open notifications will not be resolved prior to their assigned due date. For these open EC notifications, PG&E will continue to monitor by conducting FSRs on notifications that have potential safety impacts. Incremental to the 679,096 overhead inspections performed in 2020, PG&E conducted 80,388 FSRs.

- b. The testimony and workpapers associated with MAT BFB can be found in Exhibit (PG&E-4), Chapter 6, p. 6-32, line 1 to p. 6-33, line 11 and associated workpapers. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q06		
PG&E File Name:	2020_RSAR_DR_ED_002-Q06		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 20, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: ELECTRIC EXPENSE

QUESTION 06

UG Line Equipment Insp/Test (BFF-28)

- Increase spending of 9% but a reduction of 47% from imputed units.
 - a. Provide reason why inspections were below imputed value and why costs are not reflected in the reduced inspections.
 - b. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 06

- a. Annual units fluctuate yearly based on maintenance plans. Annual average unit cost changes due variation in the time and effort required to do inspection and testing in individual units. Due to the small size of annual unit population, these variations in fewer units impacts the average unit cost.
- b. The testimony and workpapers associated with MAT BFF can be found in Exhibit (PG&E-4), Chapter 6 and associated workpapers. See WP 6-19. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q07		
PG&E File Name:	2020_RSAR_DR_ED_002-Q07		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 14, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: ELECTRIC EXPENSE

QUESTION 07

Change/Maintenance Used Electric Meter (42 EY)

- Spending is \$6M over despite program being moved to Customer care.
 - a. Explain why new cost code is not used to capture expense yet resulted in a variance of \$6M.
 - b. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 07

- a. The variance explanation for MWC EY notes that program expenses exceeded imputed regulatory values due to transfer of this program from Customer Care to Electric Distribution. As the program was presented in the Customer Care exhibit in the 2020 GRC, the imputed adopted amounts for MWC EY are shown in the Customer Care portion of the RSAR. Recorded amounts now are shown in Electric Distribution. PG&E does not generally change cost codes when work moves to different organizations. The imputed value is \$8,799.8 thousand (Table 5-3, Line 4 of PG&E's 2020 RSAR).
- b. The testimony and workpapers associated with MWC EY can be found in Exhibit (PG&E-6), Chapter 6, Chapter 6, p. 6-18 line 24 to p. 6-19 line 2 and associated workpapers. See response to ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q08		
PG&E File Name:	2020_RSAR_DR_ED_002-Q08		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 14, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: ELECTRIC EXPENSE

QUESTION 08

Poles – Intrusive Inspection/Test and Treat Program (51 GC2)

- Spending is \$5M over (40%) due to process changes to “Locate &Mark” poles prior to soil disturbance.
 - a. Explain impetus for process change.
 - b. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 08

- a. PG&E’s response is based on MAT GAA since that description is noted in the question, even though MAT GC2 is noted in the opening statement. In 2018, PG&E made a decision to require an Underground Service Alert and engage the Locate and Mark process whenever an intrusive inspection requires excavation. Intrusive inspections are managed by PG&E’s Pole Test & Treat (PTT) team and are performed on all wood distribution poles approximately every 10 years. As part of the intrusive inspection process, when appropriate, poles are excavated to an approximate depth of 20 inches below the ground line to assess the ground line condition of the pole.

As stated above, PG&E made a decision to engage the Locate and Mark process when excavating around a pole. For this process, the PTT team submits the poles that will be intrusively inspected to the Mark and Locate team, who then surveys the facilities around the pole, providing results of any underground facilities to the PTT team prior to excavation.

- b. The testimony and workpapers associated with MAT GAA can be found in Exhibit (PG&E-4), Chapter 8 and associated workpapers. See p. 8-14 for MAT GAA. See response to ED_002-Q04 for instructions on where to find PG&E’s 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q09		
PG&E File Name:	2020_RSAR_DR_ED_002-Q09		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 14, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: ELECTRIC EXPENSE

QUESTION 09

Poles – Intrusive Inspection/Test and Treat Program (58 GC2)

- Wind loading calculations added to pole loading program, with 0 imputed costs.
 - a. Explain impetus for new program .
 - b. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 09

- a. PG&E’s response is based on MAT GAC since that description is noted in the question, even though MAT GC2 is noted in the opening statement. As part of the 2017 GRC Settlement, PG&E agreed to develop a program to identify overloaded poles. In 2019, PG&E started developing enhanced wind loading software (pre-commercial), for use in pole loading analysis. The enhanced software measures the risk of structure failure under various wind conditions (e.g. speed, direction) and other factors affecting structure reliability (e.g. snow loading, temperature, construction grade, asset condition). Existing commercial software only allows modeling a single structure at a time. The emerging technology software allows for modeling up to several hundred connected structures at once. The new technology will be used in PG&E’s pole loading program to enhance the system analysis.

PG&E plans to use this technology to perform wind-loading segmentation to identify the wind-loading impact of each asset on a pole, as well as groups of poles representing a line segment. Resulting data will be integrated into PG&E’s systems, including SAP’s work management application, the Electric Distribution Geographic Information System (EDGIS), a new pole loading database and the 2021 Wildfire Distribution Risk Model.

- b. MAT GAC is a new MAT created since the 2020 GRC was filed. The testimony and workpapers associated with MWC GA can be found in Exhibit (PG&E-4), Chapter 8 and associated workpapers. See response to ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q10		
PG&E File Name:	2020_RSAR_DR_ED_002-Q10		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 20, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: ELECTRIC EXPENSE

QUESTION 10

Operate and Maintain Substations (56 GC2)

- Increase cost of \$7M (154%) increase due to increased inspections with enhanced process resulting repairs. No units included.
 - a. Explain the impetus for enhanced process and why inspections could not be included as units.
 - b. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 10

- a. In 2019, PG&E began a Wildfire Safety Inspection Program (WSIP) to expedite and expand the routine detailed inspections performed in Tier 2 and Tier 3 High Fire Threat District (HFTD) areas. Building on WSIP 2019, PG&E developed an ongoing program for performing supplemental inspections on selected facilities, based on risk assessment, to further minimize the risk of substation equipment failure causing a public or employee safety or system reliability concern (e.g. spreading a fire outside of the substation). The Supplemental (Enhanced) Inspection group was created to realize any ongoing work post-2019 WSIP. The momentum from 2019 WSIP was used to establish cyclical inspection plans for select facilities based on risk assessment. The enhanced process leveraged the Failure Modes Event Analysis (FMEA), inspection criteria as well as integrated processes and control measures to perform inspections and repairs. This MAT was not presented as unitized in PG&E's 2020 General Rate Case (GRC), thus for consistency MAT was not presented as unitized in 2020 RSAR.
- b. The testimony and workpapers associated with MAT GC2 can be found in Exhibit (PG&E-4), Chapter 12 and associated workpapers. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q11		
PG&E File Name:	2020_RSAR_DR_ED_002-Q11		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 20, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: ELECTRIC EXPENSE

QUESTION 11

Electric Distribution Operational Technology (76 HG#)

- Variance states expenses were “higher” than imputed costs because costs were tracked in HGSC and HGD.
 - a. Confirm variance explanation should say “lower”.
 - b. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 11

- a. Cost Variance Explanation for MAT HG# is correct as stated: “Program expenses were lower than imputed regulatory values because work was recorded in new MAT codes HGC and HGD. Additionally, costs for wildfire risk mitigation M15 were recorded in MWC IG.” Imputed Adopted Cost noted as \$10,947.8K. Actual Cost noted as \$9K. Thus, program expenses (actual costs) were lower than imputed regulatory values (imputed adopted cost).
- b. The testimony and workpapers associated with MATs HG#, HGC, and HGD can be found in Exhibit (PG&E-4), Chapters 5 & 19 and associated workpapers. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E’s 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q12		
PG&E File Name:	2020_RSAR_DR_ED_002-Q12		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 21, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: ELECTRIC EXPENSE

QUESTION 12

Vegetation Management Balancing Account (80 HN)

- Cost exceedance of \$188M due to SB 247, but work was also included imputed amounts for MWC IG and IGI which have another \$242M and \$88M cost exceedance, suggesting a total exceedance of over \$500M.
 - a. A variance of over \$500M justifies additional explanation beyond compliance with SB247 and “higher cost for tree workers”. Provide a description of work done and specific reference to regulatory requirement.
 - b. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 12

- a. On December 3, 2020, the CPUC approved D.20-12-005 in PG&E's 2020 GRC authorizes PG&E to recover VMBA expenses up to 120% of the adopted values through a Tier 2 advice letter and requires that recorded amounts greater than 120% of the adopted values be recovered through a separate application. Our response below reflects the preliminary research to understand these costs. PG&E is currently preparing its 2021 WMCE reasonableness review application and further detail on the incremental VMBA expenses occurring in 2020 will be provided in the WMCE testimony planned for submittal late summer 2021.

Table 1 shows PG&E's 2020 imputed and adopted values compared to its 2020 actual adjusted costs and resulting variance.

Table 1

Program	MAT	2020 Imputed	2020 RSAR Update	2020 Actual Adjusted	Variance 2020 Imputed and Adjusted
Routine VM	HN	\$ 319	\$ 736	\$ 693	\$ 374
Enhanced VM	IGJ	\$ 229	\$ 455	\$ 451	\$ 222
Tree Mortality (CEMA)	IGI	\$ -	\$ 88	\$ 92	\$ 92

There were three primary factors driving the cost exceedance. First, Vegetation Management (VM) Program expenses exceeded imputed regulatory values in large part due to increases in the labor cost per hour per SB 247 after filing our 2020 GRC forecast.¹ Second, additional resources and headcount were required for both Routine and Enhanced VM (EVM) Programs. Increased labor cost combined with increased staffing increases contributed to the expenses in 2020. Third, increased contractor headcount was required to handle and maintain the volume of work necessary for these programs, which also included carry-over from work identified in 2019. These three factors are estimated to account for 75%, or approximately \$450 million of the combined exceedance for the Routine and Enhanced VM Programs.^{2 3}

Tree Mortality Program expenses recorded to MAT IGI in 2020 were \$92 million.⁴ Since no forecast for Tree Mortality work was included in the 2020 GRC's adopted imputed amount, 100% of these actual costs is incremental.

A significant increase in Routine program costs over imputed adopted amounts resulted from a change in accounting from a cash to accrual basis in 2020. This

¹ The Legislature amended California Public Utilities Code Section 8386.3(d) through Senate Bill 247 in October 2019 to establish qualifications for line clearance tree trimmers and a prevailing wage requirement for those workers.

² Adjustments to the 2020 actual costs for the Routine VM program, or MWC HN were made after the filing of the 2020 RSAR. Those adjustments include: \$28.3 million reduction for an accrual adjustment associated with Defined Scope methodology; and, \$14.8 million reduction due to Tree Mortality/Routine reclassification.

³ An adjustment to reduce 2020 actual costs for the Enhanced VM program, or MAT IGJ, of \$3.3 million were made after the filing of the 2020 RSAR. This adjustment reflects expenses for the WF Oil system remedy program, or vegetation management oversight pilot.

⁴ Adjustments to the 2020 actual costs for the Tree Mortality program, or MAT IGI were made after the filing of the 2020 RSAR. Those adjustments include: \$14.8 increase due to Tree Mortality/Routine reclassification; \$10.9 million reduction of expenses that should have been recorded to CEMA and \$.2 million increase for Helicopter Daily Reservation fees.

change accounted for an estimated \$71 million of increased costs observed in MWC HN.

As a result of increased demands on PG&E by landowners, agencies and counties for more wood management, expenses for both Tree Mortality and EVM wood management exceeded 2020 forecasts by an estimated \$60 million. These increased expenses in 2020 are reflected in both MAT IGI and MAT IGJ actual costs.

Vegetation Control activities are estimated to have been \$14 million more than forecasted for the Routine VM program due to program scope change. Vegetation Control worked through more customer challenges and refusals due to stricter compliance enforcement of clearing required per California Public Resources Code Section 4292. PG&E worked aggressively to address non-conformance on fire break requirements where owners had previously accepted responsibility for fire-safe maintenance or the location(s).

Finally, after the preparation of the 2020 GRC, the EVM program continued to evolve with scope changes to work proposed and approved in PG&E's 2020 Wildfire Mitigation Plan (WMP). Feedback from the Wildfire Safety Division on EVM prompted refinement of the program. In addition, probation guidance from the United States District Court mandated the hiring of full time PG&E employees to perform vegetation pre-inspection in order to increase workforce stability and quality control. The resulting expenses to the EVM program contributed to the variance observed in MAT IGJ over the adopted imputed amounts.⁵

Table 2: Summary of Adjustments

Program	MAT	2020 Actuals - Adjusted	Included in 2020 CEMA Filing	CEMA TM/Routine Reclass	Post Close Adj	Reason for Adjustment	Total Adj
Routine VM	HN	\$ 693	\$ -	\$ (15)	\$ (28)	Accrual assoc. w/ new Defined Scope contracts	\$ (43)
Enhanced VM	IGJ	\$ 451	\$ -	\$ -	\$ (3)	Reversal of WF OII (VM Oversight Pilot)	\$ (3)
Tree Mortality (CEMA)	IGI	\$ 92	\$ (11)	\$ 15	\$ 0	Helicopter Daily Reservation fees	\$ 4

- b. The testimony and workpapers associated with MWC HN can be found in Exhibit (PG&E-4), Chapter 7 and associated workpapers. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.

⁵ Resolution WSD-003 Wildfire Safety Division, June 11, 2020: Resolution Ratifying Action of the Wildfire Safety Division on Pacific Gas and Electric Company's 2020 Wildfire Mitigation Plan Pursuant to Public Utilities Code Section 8386

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q13		
PG&E File Name:	2020_RSAR_DR_ED_002-Q13		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 20, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: ELECTRIC EXPENSE

QUESTION 13

Various Balancing and Memorandum Accounts (85 IG)

- Work was forecast in AB6 (-\$41M) and AB#(\$33M), but program has a \$241M positive exceedance while costs variance in AB6 and AB# result in a net variance of -\$8M.
 - a. Identify work performed for the \$241M exceedance and reference specific regulatory requirement.
 - b. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 13

- a. The majority of the work performed as part of the \$241 million was for wildfire mitigations described in the 2020 GRC. Lines 86-96 list the specific mitigation number and name in the “RAMP Mitigation Name” column. Imputed amounts for these mitigations are shown in lines 1-25. Line 97 costs are for additional wildfire mitigation work that was not included in PG&E’s 2020 GRC, and include work described and approved in PG&E’s 2020 Wildfire Mitigation Plan such as Sensor IQ and Remote Grid, and incremental cost for leadership and management oversight for wildfire risk mitigation work. Spending for RAMP Risk Mitigation items was authorized in the 2020 GRC decision.
- b. See Exhibit (PG&E-4), Chapter 2A for a description of PG&E’s wildfire mitigations included in the 2020 GRC. Table 2A-3 in that chapter provides the location of which chapters contain specific forecasts for the mitigations. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E’s 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
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Data Response**

PG&E Data Request No.:	ED_002-Q14		
PG&E File Name:	2020_RSAR_DR_ED_002-Q14		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 14, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: ELECTRIC EXPENSE

QUESTION 14

OH General CM Tag Accounts (105 KAA)

- Cost Exceedance of 405% (\$31M) with a unit increase of 28%. Increase based on increased units, higher unit cost, and 2019 carry over.
 - a. Provide explanation of increased unit and reason for 2019 carry over.
 - b. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 14

- a. The 2020 increase in unit completions is due to higher volumes of Electric Corrective (EC) tags generated. EC volumes have increased as inspection processes have changed since the Wildfire Safety Inspection Program completed in 2019.
- b. The testimony and workpapers associated with MAT KAA can be found in Exhibit (PG&E-4), Chapter 6 and associated workpapers. See response to ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
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Data Response**

PG&E Data Request No.:	ED_002-Q15		
PG&E File Name:	2020_RSAR_DR_ED_002-Q15		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 20, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: ELECTRIC EXPENSE

QUESTION 15

Bird Safe Retrofit (106 KAC)

- Small cost Exceedance (2%) coupled with a 50% reduction in units.
 - a. Provide explanation of increased unit cost
 - b. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 15

- a. Increased unit cost is greater than forecast due to increase in contract spend. Contract resources were used to support completion of work.
- b. The testimony and workpapers associated with MAT KAC can be found in Exhibit (PG&E-4), Chapter 6 and associated workpapers. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q16		
PG&E File Name:	2020_RSAR_DR_ED_002-Q16		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 14, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: GAS CAPITAL

QUESTION 16

Gas Pipeline Replacement Program (14D)

- This program \$62m underspent (-19%) with 24% of the imputed units left to be completed partially due to strategy development and emergent activities.
 - a. Please clarify your whether the shift to “emergent Copper Services work” found in your explanation was within the same MAT or the same MWC. If not clarify whether funds were redirected from other codes or if these activities (feet of main installed) replaced units in another MWC or MAT.
 - b. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 16

- a. The shift to "emergent Copper Services work" found in the explanation was within the same MWC, MWC 14, MAT 14B.
- b. The testimony and workpapers associated with MAT 14D can be found in Exhibit (PG&E-3), Chapter 4. See response to ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q17		
PG&E File Name:	2020_RSAR_DR_ED_002-Q17		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 14, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: GAS CAPITAL

QUESTION 17

Gas Distribution Reliability (50G/3PB)

- The report says that the spending for this program was \$24m compared to an imputed cost of \$14m, a negative 42% variance and a negative 38% unit variance because PG&E had underestimated service replacements.
 - a. Please clarify whether the emergent replacements cited in the variance explanation are the service replacements cited in the unit variance explanation which may not be replaced until the leak is identified.
 - b. Please explain whether the 3P repairs found in the program description and footnote are part of the “emergent” replacement activities cited in the variance explanation?
 - c. Why were the 3P leak repairs in the footnote included in this MAT?
 - d. Did GRC testimony say that 3P leak repairs would be placed in 3PB?
 - e. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 17

- a. Yes, MAT 50G emergent replacements are leaking service replacements. When the crew arrives, they determine the exact source of the leak. If the leak is on a service that meets the service replacement criteria¹ and field conditions allow, the crew replaces the entire service at that time. In some cases, scheduled leaks are planned for replacement in advance of the crew, however, the actual source of the leak determines if the replacement can be made.
- b. See response to subpart (a) above. This also applies to grade three leaks in MAT 3PB.

¹ Service Replacement criteria outlined in utility standard TD-4801S.

- c. In the 2020 GRC, PG&E requested to continue the NERBA distribution sub-account (MWCs LW, 3P) to track below ground grade 3 leak repairs. The 2020 GRC Decision (D.20-12-005) adopted PG&E's forecast to perform a limited number of below ground 3 leak repairs and authorized the continuation of NERBA to record costs for below ground grade 3 leak repairs.
- d. The testimony and workpapers associated with MAT 50G/3PB can be found in Exhibit (PG&E-3), Chapter 8. Chapter 8 testimony did not specify that below ground grade 3 leak repairs would be recorded in 3PB, however, the workpapers mention MAT 3PB is a MAT that was established to track Leak Abatement Balancing Account costs. See response to ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.
- e. See response to subpart (d) above.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q18		
PG&E File Name:	2020_RSAR_DR_ED_002-Q18		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 14, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: GAS CAPITAL

QUESTION 18

Gas Distribution Reliability (50J)

- The report says that the spending for this program was \$19m compared to an imputed cost of \$7m, a variance negative of 64% and a negative 58% unit variance because PG&E had underestimated the number of encroachments.
 - a. Were the costs for encroachment identification found in the same MAT.
 - b. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 18

- a. No, the cost for encroachment identification is generally recorded in Leak Survey expense MAT DEA. MAT 50J is the capital remediation program to relocate or rearrange gas main and/or complete gas service replacement to clear the encroachment conflict. Identification can also occur through continual surveillance during routine maintenance or patrol of the distribution system as well.
- b. The testimony and workpapers associated with MAT 50J can be found in Exhibit (PG&E-3), Chapter 4. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q19		
PG&E File Name:	2020_RSAR_DR_ED_002-Q19		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 17, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: GAS CAPITAL

QUESTION 19

Gas Meter Protection (27A)

- The report says that the spending for this program was around \$2m compared to an imputed cost of \$22m, a negative 92% variance and a negative 91% unit variance due to a lower conversion rate linked to MAT EXB, which itself has a positive 40% variance of \$3m and a positive 80% unit variance of 7,000 units.
 - a. Please explain why these two processes are accounted for in separate MATs and how this make the process more efficient.
 - b. In one MAT they did a lot of inspections but produced relatively few tickets and as a result the other MAT didn't do a lot of work.
 - c. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 19

- a. There is one MAT for Meter Protection expense work and another MAT for capital work. MAT EXB is only for installing meter protection posts and according to PG&E's our field accounting guidelines that work is considered expense. In situations where we are unable to install meter protection adequately due to access or other issues, we relocate the entire gas service and customer houseline to a location that is not in danger of vehicle damage. This work is capital work that is recorded under MAT 27A. This MAT can also be used for inaccessible service valves that require the entire service to be relocated to make the valve accessible.
- b. The forecast was based on an estimate that a percentage of expense locations would result in service relocations due to situations where we would be unable to install a meter protection post. However, as the expense work ramped up the actual conversions to capital work were far less than expected.
- c. The testimony and workpapers associated with MAT 27A can be found in Exhibit (PG&E-3), Chapter 4. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q20		
PG&E File Name:	2020_RSAR_DR_ED_002-Q20		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 18, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: GAS CAPITAL

QUESTION 20

Gas Distribution Control Operations Assets (4AL & 4AM)

- The report says that the spending for MAT 4AL was negative \$6k compared to an imputed cost of \$15m, a more than 100% negative variance
- The report says that the spending for MAT 4AM was \$26m compared to an imputed cost of \$917k, a more than 2700% variance.
 - a. Please explain the term “order clean up” (see variance explanation for 4AL).
 - b. Please provide the number of RTUs installed (actual units completed) for 4AL.
 - c. Please provide the forecasted number of RTUs to be installed (imputed units) for 4AL.
 - d. Are 4AL and 4AM referring to the same RTU installations or are the MATs referring to different installations (MAT 4AM units: 122 Adopted; 95 Actual)?
 - e. Please cite, quote and explain what commission order or decision prompted PG&E to disaggregate the MAT presented in its TY 2020 GRC, MAT 4AM, into ten separate MATs (4AA, 4AB, 4AC, 4AE, 4AH, 4AI, 4AJ, 4AK, 4AL, and 4AM) for the RSAR.
 - f. Please explain what prompted PG&E to disaggregate these MAT codes if there was no commission order or decision.
 - g. Please provide a copy of the testimony for these ten MATs (4AA, 4AB, 4AC, 4AE, 4AH, 4AI, 4AJ, 4AK, 4AL, and 4AM) as listed in the RSAR (or any other needed documents) and references for any and all explanations. Please also provide any internal documentation explaining why 4AM was disaggregated in the RSAR.

ANSWER 20

Please see PG&E’s answers to 2020_RSAR_DR_ED_002-Q20 below.

- a. PG&E's contracts are recorded through an estimated accrual process when services are rendered, per accounting guidelines. When the estimated labor or services performed differ from the actual labor or services, the difference is recorded in the following month. The negative spend in 2020 was caused by true-ups occurring to settle active orders.
- b. All RTU units installed were presented under MAT 4AM. In 2020, PG&E completed the installation of 95 remote terminal units (RTUs). As discussed in PG&E's response to subpart (f) below, PG&E did not individually record units performed to ten separate MATs (4AA, 4AB, 4AC, 4AE, 4AH, 4AI, 4AJ, 4AK, 4AL, and 4AM).
- c. As a result of D.20-12-005, PG&E's imputed units for the RTU program are 366 (122 per year) and are forecast under MAT 4AM. No imputed units were calculated for MAT 4AL due to the aggregation of the 10 separate MATs as part of the 2020 General Rate Case (GRC).
- d. MAT 4AL and 4AM are referring to the same type of RTU installations in this example. See PG&E's response to subpart (f) below for an explanation on how PG&E reports recorded costs and units performed for the RTU program.
- e. No commission order or decision prompted PG&E to disaggregate MATs 4AA, 4AB, 4AC, 4AE, 4AH, 4AI, 4AJ, 4AK, 4AL, and 4AM into separate MATs. As part of order closeouts, MATs 4AA, 4AB, 4AC, 4AI, 4AJ, 4AK, 4AL, and 4AM incurred charges in 2020 and were shown individually.
- f. In the 2020 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. All of these MATs relate to installing RTU pressure monitoring devices. PG&E's Supervisory Control and Data Acquisition (SCADA) team determined that it was more efficient to manage the RTU deployment program under a single consolidated MAT. Historically, initial scoping of RTU projects may have dictated a particular MAT be selected based on specific types of RTU installations forecast. Upon project engineering analysis and site visits of the desired installation location, PG&E encountered instances where the initial specifications for installation were not feasible to be constructed as desired, changing the final MAT to a different category per accounting guidelines. As a result, PG&E chose to aggregate the ten RTU MATs into a single MAT (4AM).
- g. The testimony and workpapers associated with MATs 4AL & 4AM can be found in Exhibit (PG&E-3), Chapter 9. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.

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PG&E Data Request No.:	ED_002-Q21		
PG&E File Name:	2020_RSAR_DR_ED_002-Q21		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 20, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: GAS CAPITAL

QUESTION 21

Gas Distribution Replace/Convert Customer HPRs (2KA, 2KB, 2KC and 2K#)

- The report says that the spending for MAT 2KA was \$23m with no imputed cost. The report also indicated that 85 units were completed with no imputed units a 100% unit variance.
- The report says that the spending for MAT 2KB was \$1m with no imputed cost. The report also indicated that 5 units were completed with no imputed units a 100% unit variance.
- The report says that the spending for MAT 2KC was \$23m with no imputed cost. The report also indicated that 138 units were completed with no imputed units a 100% unit variance.
- The report says that 2K# incurred no costs compared to an imputed cost of \$59m. The report also indicated that only 228 out of 336 units were completed a negative 32% unit variance.
 - a. Please explain how 2K# incurred no costs but managed to replace 228 HPR stations.
 - b. Please explain the relationship between the total cost variance of \$47m for the MWC is related to the cost variance for the 2K# (negative 100%).
 - c. Please explain why the actual "SRM Total" costs for 2KA, 2KB and 2KC add up to the total for 2K (as found in the variance explanation for 2K#) but have no imputed costs.
 - d. Please explain why the actual "SRM Total" units for 2KA, 2KB and 2KC add up to the total for 2K but have no imputed costs.
 - e. Were any of the programs in MWC 2K (2KA, 2KB, 2KC or 2K#) cancelled, deferred or expanded (see D.19-04-020).
 - f. Please provide a copy of the testimony for these MATs as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 21

- a. PG&E’s High Pressure Regulator (HPR) program addresses two assets with spring-operated regulators – HPR type regulator stations and Farm Taps. These regulators must be mitigated by rebuild, replacement or conversion to address gas leaks and equipment condition. The purpose of these various MATs (2KA, 2KB, 2KC) is solely for tracking whether the assets are HPR type regulator stations or Farm Taps and how they were mitigated (rebuild, replace, or conversion) when the projects were executed. PG&E will not be able to forecast until a project goes through engineering or planning phase, how an HPR type regulator station or a Farm Tap will be mitigated. For these reasons, PG&E does not forecast HPR units at the MAT level for rate case or for planning purposes. Since there was no MAT level forecast in the 2020 GRC, no imputed units or dollars were assigned to MATs under this MWC. When the imputed dollars were derived after the 2020 GRC Decision, the MWC level imputed dollars and units were kept under 2K# for purposes of tracking at the MWC level. The table below shows how the 2020 actual units and dollars were tracked against the 2020 imputed units and dollars for the HPR program at the MWC level.

MWC 2K (Includes MATs 2KA, 2KB, 2KC,2K#)	2020 Actuals	2020 Imputed	Imputed Vs Actuals Difference
Units	228	336	(108)
Total Cost (\$000)	\$47,049	\$58,998	(\$11,949)

- b. Please see response to subpart (a).
- c. Please see response to subpart (a).
- d. Please see response to subpart (a).
- e. As shown in the response to subpart (a) at the MWC level, the 2020 actual units were 108 units less than the imputed units due to Covid-19 related construction and work readiness delays. PG&E plans to catch up some of these units in the 2020 GRC period. For the units that are unable to be completed in the 2020 GRC period, PG&E will provide an explanation as part of the deferred work showing in the 2023 GRC.
- f. The testimony and workpapers associated with MWC 2K can be found in Exhibit (PG&E-3), Chapter 5. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E’s 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
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PG&E Data Request No.:	ED_002-Q22		
PG&E File Name:	2020_RSAR_DR_ED_002-Q22		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 21, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: GAS CAPITAL

QUESTION 22

Gas Distribution Reliability (50C)

- The report says that the spending for this program was \$55m compared to an imputed cost of \$41m, a \$14m variance but a negative 33% unit variance.
 - a. Please provide specific examples of COVID and Wildfire cost overruns.
 - b. Please explain “..shoring and other rental costs..” (see variance explanation).
 - c. What was the adopted imputed unit cost?
 - d. What was the five year historical average regulator station unit cost?
 - e. What was the average unit cost for a regulator station for the reporting period.
 - f. How many regulator stations were “deactivated?”
 - g. What was the average estimated cost for deactivated stations?
 - h. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 22

- a. Several regulator station rebuild projects were in flight and under construction at the beginning of the COVID-19 pandemic as cities and counties began their stay at home orders and social distancing requirements. The rebuild work at stations requires personnel/crew to be in close proximity of each other and it was not possible to maintain the recommended social distancing; because of this, the decision was made to put a hold on all non-critical projects for several months. The incremental costs for the projects are due to the following reasons:
 - *Shoring and rental costs from delayed projects:* For the projects undergoing construction that were put on hold, many had excavations. To keep those excavations secure, the crew had to keep shoring in place for safety reasons.

Shoring is a rental item along with the plates that cover those excavations. For the months during which the project was on hold, weekly costs were incurred on such rentals. Several jobs have abnormally high rental costs due to rental equipment that was unused but was a necessity for public and crew safety reasons.

- *COVID-19 impacts:* Social distancing and limitations on crew proximity on activities such as welding resulted in activities taking longer to complete which resulted in increased costs. Social distancing also resulted in inability to use cost saving measures like carpooling to locations, sharing hotel rooms by the crew, etc.
- *Wildfire impacts:* In addition to ongoing pandemic, California experienced several wildfires in 2020. Construction crew and resources were pulled from projects to help with the wildfire response and containment efforts. Wildfire had a similar impact with rentals on projects that were either put on the same type hold while the crew was deployed to fire response, or else the project schedule was delayed/condensed because of lack of crew availability after fire response, resulting in increased overtime to keep target completion dates.

b. Please see response to subpart (a).

c. The 2020 imputed unit cost is \$1.25 million (\$1,251 in thousands).

d. Please table below for the five-year historical average unit costs.

MAT 50C	2016	2017	2018	2019	2020
Total Cost (\$000s)	\$18,671	\$28,774	\$46,556	\$47,068	\$54,506
Units	8	30	28	26	22
Unit Cost (\$000s)	\$2,334	\$959	\$1,663	\$1,810	\$2,478

Notes:

(a) 2016-2017 reflect recorded data from PG&E's 2020 GRC Testimony and Workpapers, Exhibit (PG&E-3), Chapter 5.

(b) 2018-2020 reflect SAP data as of March 5, 2021.

e. As shown in the response to subpart (d) above, the average unit cost for 2020 is \$2.478 million.

f. For 2020, four regulator stations were included in the plan for deactivation as part of the overall gas system and integrated planning process.

g. The deactivation of the four stations from 2020 has not been completed yet to provide the average cost.

h. The testimony and workpapers associated with MAT 50C can be found in Exhibit (PG&E-3), Chapter 5. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
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PG&E Data Request No.:	ED_002-Q23		
PG&E File Name:	2020_RSAR_DR_ED_002-Q23		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 14, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: GAS CAPITAL

QUESTION 23

Gas Distribution Reliability (50A CAP)

- The report says that the spending for this program was \$67m compared to an imputed cost of \$46m, a 45% variance and a 30% unit variance.
 - a. Please explain what “emergent projects” means (see unit variance).
 - b. If these projects are a result of new regulations, inspections found in another MAT please cite the source (PU Codes, PHMSA or MAT codes).
 - c. Please provide the adopted imputed and the actual unit cost for the reporting period.
 - d. Please provide examples of how projects in densely populated areas increase unit costs.
 - e. Why does project planning not include forecasts for densely populated areas?
 - f. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 23

- a. Emergent work is work determined as necessary to be initiated or completed in the current year.
- b. These projects are not the result of new regulations. These projects are due to fusion failures that are found through inspections during leak repairs, typically occurring in MAT FIG and MAT FIP.
- c. The adopted imputed unit cost for MAT 50A for 2020 is \$591.5 per foot main installed. The actual unit cost incurred for MAT 50A for 2020 was \$659.8 per foot main installed. These unit costs are derived by dividing the total cost by the total units.

- d. Projects in densely populated areas can be more complex due to increased traffic requiring traffic control; permitting restrictions with limited working times; and increased number of services requiring replacement.
- e. The 2020 GRC unit cost forecast was based on recorded cost from 2017 that included projects that were completed in densely and non-densely populated areas, and then escalated to 2020. The mix of projects located in densely populated areas can change from year to year, and in 2020, there were more projects in higher unit cost locations than in 2017.
- f. The testimony and workpapers associated with MAT 50A can be found in Exhibit (PG&E-3), Chapter 4. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q24		
PG&E File Name:	2020_RSAR_DR_ED_002-Q24		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 21, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: GAS CAPITAL

QUESTION 24

Gas Distribution Reliability (50P)

- The report says that the spending for this program was \$19m compared to an imputed cost of \$9m, a 120% variance. The report also says the program only completed 75 out of 115 imputed units negative 35% unit variance.
 - a. What was the adopted imputed unit cost?
 - b. What was the actual unit cost for the reporting period?
 - c. Please provide forecasted and actual labor cost per unit or by percent of project
 - d. Did PG&E choose to convert this workstream to contractors due to internal rules or a commission decision? If so what were they?
 - e. What caused production for certain units (see unit variance explanation) to be halted?
 - f. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 24

- a. The 2020 adopted imputed unit cost for gas distribution groundbed installations (MAT 50P) was \$76,037.46.
- b. The 2020 actual unit cost for groundbeds was \$254,892.84.
- c. PG&E does not have the requested forecast or actual labor costs per unit. The forecast cost for groundbed installations presented in the 2020 GRC was based on 2017 recorded costs¹ and did not itemize labor costs. PG&E transitioned groundbed installations to contractors in 2019 based on competitive bids for this work stream. The bid package (and subsequent

¹ See Exhibit (PG&E-3), Chapter 2A Workpapers p. WP 2A-187 and WP 2A-188.

contractor pricing / invoices) utilized per foot costs for groundbed installations and did not itemize labor costs.

- d. PG&E made the decision internally to convert to contractors, it was not a result of a CPUC decision. Prior to 2019, the installation of distribution groundbeds was primarily performed by PG&E drill crews working under the supervision of a PG&E employee that held a C-57 California Water Well Drilling Contractor license. Upon notification that two key employees within the drilling group, (including the license holder) planned to retire, PG&E decided to convert this work stream to contractor only. This decision was based on the following factors:
 - The combined loss of 40-plus years of drilling experience due to the retirement of two key members of the drill crew;
 - No remaining drill crew employees met minimum requirements to qualify for a C-57 license; and
 - No remaining drill crew employees expressed a willingness to obtain a C-57 license (upon meeting minimum qualifications).
- e. Due to COVID-19, all 2020 planned work was subject to additional review to determine whether the planned work was required to be completed in 2020. Nine distribution groundbeds (MAT 50P) were identified for possible delay, as installation was not required in 2020 to maintain compliance as such, construction was halted on nine projects.
- f. The testimony and workpapers associated with MAT 50P can be found in Exhibit (PG&E-3), Chapter 7. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q25		
PG&E File Name:	2020_RSAR_DR_ED_002-Q25		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 14, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: GAS CAPITAL

QUESTION 25

Gas Pipeline Replacement Program (14B)

- The report says that the spending for MAT 2KC was \$23m with no imputed cost. The report says that the spending for this program was \$39m compared with no imputed cost. The report also indicated that 1,183 units were completed with no imputed units a 100% unit variance.
 - a. What other programs had to be reprioritized to fund this work?
 - b. If the Copper Services Program was part of another GRC please provide the MAT number, Authorized, actual costs, percent variance and a copy of testimony describing it. Please provide the estimated unit cost from that GRC.
 - c. Please provide the unit cost and any added overhead for the reporting period.
 - d. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 25

PG&E interprets this question as referring to Copper Service Replacement Program (MAT 14B).

- a. The MAT 14A-Gas Pipeline Replacement Program (MAT 14A), Plastic Replacement Program (MAT 14D), and Reliability Main Replacement Program (MAT 50A) were reprioritized to fund this work.
- b. The Copper Service Replacement work in MAT 14B completed in 2020 was not part of any prior GRC. The work was identified through a records review that began in 2018 and concluded in 2019.
- c. The actual unit cost for this work in 2020 was \$32,802.7 per service replaced. PG&E did not treat this work differently than prior copper service

replacements executed in MAT 14B in prior years; therefore, any overhead cost would be in accordance with program execution in prior years.

- d. The testimony and workpapers associated with MAT 14B can be found in Exhibit (PG&E-3), Chapter 4. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q26		
PG&E File Name:	2020_RSAR_DR_ED_002-Q26		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 21, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: GAS O&M

QUESTION 26

Locate and Mark (DFA)

- The report says that says that spending for this program was \$29m compared to an imputed cost of \$41m, a 30% negative variance and a negative 18% unit variance. However, the variance explanation indicated “expenses exceeded imputed regulatory values.”
 - a. Please clarify the apparent contradiction between the variance and the variance explanation.
 - b. Please provide documents from the Locate and Mark OII which refer to a mandated increase in staffing levels and PG&E testimony describing how it will meet the mandates.
 - c. Please explain how PG&E estimated unit cost (USA ticket).
 - d. How are labor costs included in the forecast (as overhead or included)?
 - e. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 26

- a. The variance explanation in the report was based on the overall distribution spend in the Locate and Mark Program which took into consideration the amount spent on the increase in staffing levels (for locators and Qualified Electric Workers) mandated by the Locate and Mark OII . The amount shown in the table excludes the OII portion of the total spend in MAT DFA, which was shareholder funded as required by the Presiding Officer’s Decision adopting the OII settlement with modifications (D.20-02-036). The variance explanation for the decrease in the non-OII related spend in MAT DFA was due to lower USA tickets performed in 2020 as compared to 2020 imputed units, because of lower demand.
- b. The testimony and Presiding Officer’s Decision adopting the settlement with modifications in Appendix A from the Locate and Mark OII are available

through PG&E's regulatory website. Below are instructions on how to search for the documents. As part of the settlement, item four under the system enhancement initiatives states that PG&E will maintain an additional 63 L&M personnel (contractors and employees) over its January 2017 baseline for L&M staffing levels through at least December 31, 2022.

Go to: <https://pgera.azurewebsites.net/Regulation/search>

Select "Locate and Mark OII [I.18-12-007]" from the dropdown menu

Select "PGE" from the dropdown menu

Click Search

- c. The 2020 unit cost forecast was based on 2017 recorded spend, with adjustments and efficiencies. See Exhibit PG&E-3 Chapter 2A Workpapers, p. WP 2A-106 and WP 2A-107. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.
- d. The 2020 GRC forecast was based on an estimate of USA tickets and applied the unit cost forecast described in subpart (c) above. The 2017 recorded costs used as part of the unit cost forecast included labor costs and overheads.
- e. The testimony and workpapers associated with MAT DFA can be found in Exhibit (PG&E-3), Chapter 6. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q27		
PG&E File Name:	2020_RSAR_DR_ED_002-Q27		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 14, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: GAS O&M

QUESTION 27

Gas Corrective Maintenance (FIG/LWG)

- The report says that the spending for this program was \$26m compared to an imputed cost of \$20m, a 32% variance due to a higher than anticipated unit cost.
 - a. Please explain what “spoils overhead” means (see cost variance).
 - b. What was the adopted imputed unit cost?
 - c. What was the actual unit cost for the reporting period?
 - d. Were labor, paving, permitting, and traffic control costs part of the forecast unit costs?
 - e. Please provide forecasted and actual labor cost per unit or by percent of project.
 - f. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 27

- a. Spoils overheads is a form of cost allocation applied to MATs that excavate and produce large volumes of soil, sand, dirt and rubble which is then transported to PG&E disposal facilities. PG&E follows an internal standard for the allocation of these costs.
- b. The 2020 imputed unit cost was \$6,458.
- c. The 2020 actual unit cost was \$8,104. This was calculated by dividing the total recorded costs by the total number of units as provided in the 2020 RSAR.
- d. Yes, labor, paving, permitting, and traffic control costs were part of the unit cost forecast. The forecast was based on historical unit cost actuals which are inclusive of paving, permitting, and traffic control costs.

- e. PG&E did not forecast at the internal labor level per unit. The unit cost was forecast at a programmatic level and was based on 2017 recorded costs. The actual internal labor unit cost for 2020 was \$4,143. This is based on SAP data as of May 5, 2021.
- f. The testimony and workpapers associated with MAT FIG/LWG can be found in Exhibit (PG&E-3), Chapter 8. See response to ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q28		
PG&E File Name:	2020_RSAR_DR_ED_002-Q28		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 21, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: GAS O&M

QUESTION 28

Provide Field Service (DDG)

- The report says that the spending for this program was \$29m compared to an imputed cost of \$18m, a 67% variance.
 - a. Did PG&E institute the accounting change which record immediate response standby time to this MAT alone due to internal rules or a commission decision? If so what were they?
 - b. Please share the imputed cost, actual cost, variances and name(s) for the MWCs or MATs to which PG&E originally allocated “immediate response standby” overheads.
 - c. Please describe “immediate response standby” activity and provide any available testimony reference containing a description.
 - d. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 28

- a. In 2019, PG&E made an internal decision to better capture and provide visibility into the time that PG&E works on shifts to respond to Gas Leak and Emergency Calls. The FERC accounting rules explicitly require that labor costs incurred for “standby time of emergency crews” be charged to expense.¹ Due to increased visibility for standby time charges by employees, PG&E started recording these standby costs to expense in accordance with FERC accounting rules. Such overhead pool costs were previously allocated to capital or expense, in accordance with PG&E’s internal allocation procedures and time-studies.

¹ FERC Code of Federal Regulations Chart of Accounts for Gas Plant (Part 201), definitions for Account 856 Mains expense and Account 874 Mains and Services expenses.

- b. The cost of Field Services immediate response was accounted for in the general PG&E Indirect Labor overhead at the time of filing the 2020 GRC. Indirect Labor is a PG&E overhead that can include trainings, meetings, yard maintenance, and other general non-billable time associated with internal groups. See Exhibit (PG&E-12) Chapter 3 for additional information on overheads. Prior to the accounting decision described in subpart a above, the indirect labor allocation included Field Services standby time. Given this prior accounting structure, all indirect labor from Field Services would have been aggregated in the previous filing under the overhead pool without isolating standby from other indirect labor overheads.
- c. See response to subpart a for immediate response standby activity. This change was made after the 2020 GRC Testimony was filed.
- d. The testimony and workpapers associated with MAT DDG can be found in Exhibit (PG&E-3), Chapter 6. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q29		
PG&E File Name:	2020_RSAR_DR_ED_002-Q29		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 14, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: GAS O&M

QUESTION 29

Gas Corrective Maintenance (FIP/LWH)

- The report says that the spending for this program was \$22m compared to an imputed cost of \$14m, a 63% variance.
 - a. What was the adopted imputed unit cost?
 - b. What was the actual unit cost for the reporting period?
 - c. Why were there more units than anticipated?
 - d. Describe the elements of the forecast and how PG&E made the forecast.
 - e. The description provides a description of what types of work are included and what the unit of work consists of.
 - f. Looking at the footnote I am not certain if the “more units completed” includes the three leaks form MWC LW.
 - g. Please provide a breakdown of the MAT by activity (the type 1 above ground or type two riser replacement; see program description).
 - h. Were the below ground 3 leak repairs reported as a type 1 or type two activity (see footnote)?
 - i. Why were the below ground 3 leak repairs originally listed in MWC LW?
 - j. What was the unit cost of the below ground 3 leak repairs?
 - k. Why does PG&E need to correct FIP/LWH? Did PG&E mistakenly record the below ground 3 leak FIP/LWH?
 - l. Please identify the 14 units from LW and explain how they will be realigned to FI (see footnote). Were these 14 units recorded under FIP/LWH in this RSAR or some other MAT?
 - m. Please explain what “spoils overhead” means (see cost variance).
 - n. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 29

- a. The 2020 imputed unit cost was \$2,572.
- b. The 2020 actual unit cost was \$3,731. This was calculated by dividing the total recorded costs by the total number of units as provided in the 2020 RSAR.
- c. There were more service repair units due to increased leak survey. In 2020, over 1.6 million services were leak surveyed (this is approximately 300 thousand more than originally planned due to 2019 units carrying over to 2020). The 2020 imputed unit total for MATs DEA and DEF leak survey is over 1.2 million services.
- d. The 2020 unit cost forecast was based on 2017 recorded costs plus applied adjustments and efficiencies. See Exhibit (PG&E-3), Chapter 2A Workpapers on pages WP 2A-218 and WP 2A-219. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.
- e. The statement is correct. There is no question to answer.
- f. The units completed are inclusive of MAT LWH units.
- g. See attachment 2020_RSAR_DR_ED_002-Q29Atch01 for a breakdown of the 2020 repair types recorded within MAT FIP.
- h. See attachment 2020_RSAR_DR_ED_002-Q29Atch01 for a breakdown of repair activities in MAT FIP that were a Grade 3.
- i. In the 2020 GRC, PG&E requested to continue the NERBA distribution sub-account (MWCs LW, 3P) to track below ground grade 3 leak repairs. The 2020 GRC Final Decision (D.20-12-005) adopted PG&E's forecast to perform a limited number of below ground 3 leak repairs and authorized the continuation of NERBA to record costs for below ground grade 3 leak repairs.
- j. The 2020 actual unit cost for below ground grade 3 repairs was \$3,133. This is based on SAP data as of May 12, 2021.
- k. Below ground 3 repairs found via super emitter survey were mistakenly recorded under the NERBA MWCs; these units and costs were identified and have been adjusted and moved out of NERBA in 2021.
- l. As explained in subpart (k) above, these 14 units were tagged as 2020 below ground 3 repairs that were found via super emitter survey. The units and costs were realigned as follows: 10 units in FIG and 4 units in FIP.
- m. Spoils overheads is a form of cost allocation applied to MATs that excavate and produce large volumes of soil, sand, dirt and rubble which is then transported to PG&E disposal facilities. PG&E follows an internal standard for the allocation of these costs.
- n. The testimony and workpapers associated with MAT FIP/LWH can be found in Exhibit (PG&E-3), Chapter 8. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E's 2020 GRC documents.

Count of Leak #	Repair Type																											
Leak Grade	Replace Riser	Aldyl A Overcap - Plastic	Deactivate Partial Service	Direct Deposition Weld - Weld	Fill Weld - Weld	Full Circle Clamp - Clamp	Greased - Other	Mechanical Repair Fitting - Fitting	Other ^(b)	Other - Expense ^(b)	Patch Weld - Weld	Remove/Replace Completion Plug - Fitting	Replace Curb Valve UNDER 2 in.	Replace Dist Main UNDER 100 ft.	Replace Partial Service	Replace Plastic Tee Cap - Plastic	Replace Service Valve UNDER 2 in.	Replace Steel Tee Cap - Steele	Skinner Clamp - Clamp	Skinner Pipe Joint Clamp - Clamp	Soap and/or Tape - Other	SS Clamp w/Anode - Clamp	Tee Fused Over Defect - Plastic	Tighten Cap/Bolt - Fitting	Welded Sleeve/Can - Weld	#N/A	Grand Total ^(c)	
FIP	660	724	39	3	15	390	62	83	152	347	1	76	77	5	1574	918	79	66	187	5	5	140	7	411	5	53	6084	
1	594	355	33	1	6	265	26	52	101	255	1	32	39	4	1263	540	71	24	116	2	5	85	4	179	2		4055	
2	29	346	6	2	9	121	30	29	50	85		40	35	1	282	362	6	39	69	3			52	3	222	3		1824
3	37	23				4	6	2	1	7		4	3		29	16	2	3	2				3		10			152
#N/A ^(a)																										53	53	
Grand Total	660	724	39	3	15	390	62	83	152	347	1	76	77	5	1574	918	79	66	187	5	5	140	7	411	5	53	6084	

(a) There are 53 leaks (“#N/A”) that changed status: This could be caused by a shift to another MATs, cancellation due to conversion to a capital project, a confirmed duplicate notifications, or a customer house line leak past the meter.

(b) “Other” and “Other-Expense” is selected by the Crew foreman documenting the repair and is often used when perhaps there is not an option in SAP that aligns with the repair made out in the field such as trident seal repair.

(c) The total units shown in the table is 6,084 which is slightly different that the 6,092 total units reported due to SAP timing and unit true ups which can occur.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_002-Q30		
PG&E File Name:	2020_RSAR_DR_ED_002-Q30		
Request Date:	April 30, 2021	Requester DR No.:	002
Date Sent:	May 17, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Jordan Smith

SUBJECT: GAS O&M

QUESTION 30

Leak Survey (DEF)

- The report says that the spending for this program was \$13m compared to an imputed cost of \$6m, a 117% variance. The program also reported a 65% unit variance. The unit variance explanation is insufficient.
 - a. Please explain why PG&E chose to perform 433k more leak surveys than anticipated.
 - b. PG&E perform more leak surveys than anticipated due to due to internal rules or a commission decision? If so what were they?
 - c. Please provide a breakdown of the number of surveys reports by activity found in the program description (Picarro Surveyor, LISA foot survey, Gap Survey and Field of View Survey).
 - d. Please describe the “anticipated efficiencies” included in the 2020 GRC that did not materialize and cite the source.
 - e. Please share how many more units were completed via Picarro technology
 - f. What is the compliance leak survey plan?
 - g. How did the compliance leak survey plan relate to the increase in units competed via Picarro technology?
 - h. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 30

- a. Due to reprioritization, PG&E carried over a portion of the 2019 planned leak surveys to 2020. All the carried over leak surveys were completed by their 2020 compliance dates. This decision was made internally.
- b. See response to subpart a above.
- c. The number of leak surveys reported for 2020 broken down by activity found in the program description is provided in Table 1 below.

Table 1: MAT DEF Activity Breakdown

Activity Type	Unit Count
Drive ^a	705,041
Gap	218,057
LISA	173,471
Total DEF	1,096,569

a) Drive is equal to the total services driven for both Picarro Survey and Field of View (FOV).

- d. The “anticipated efficiencies” included in the 2020 GRC that did not materialize reduced the forecast unit cost by \$2.87 per unit. They were related to contract optimization, governance, overtime reduction, and productivity bundling opportunities. See Exhibit (PG&E-3), Chapter 2A Workpapers on page WP 2A-202 and WP 2A-203. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E’s 2020 GRC documents.
- e. The leak survey compliance plan is built with a goal of completing 75% of plan using Picarro technology. In 2020, 82.1% of plan was completed via Picarro or 94,806 units were completed above the 75% goal.
- f. The compliance leak survey plan is the annual plan for that year that includes the 3-year leak survey units as well as annual leak survey units to be completed via Traditional foot survey and Picarro foot survey. “3-year” leak survey units include services that are on a 3-year survey frequency cycle per Gas Pipeline Safety OIR Decision 19-08-010. “Annual” leak survey units include services that are required to be surveyed annually per 49 CFR 192.723 Subpart M – Maintenance – Distribution Systems: Leakage surveys such as business districts and public assemblies.
- g. The compliance plan survey for 2020 did not originally include the units carried over from 2019 at the time of development. At the beginning of 2020, the compliance plan was adjusted to include the carried over units, thus increasing the overall services requiring leak survey inspection to be completed in 2020 via Traditional Foot survey and Picarro survey.
- h. The testimony and workpapers associated with MAT DEF can be found in Exhibit (PG&E-3), Chapter 8. See response to 2020_RSAR_DR_ED_002-Q04 for instructions on where to find PG&E’s 2020 GRC documents.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_003-Q01		
PG&E File Name:	2020_RSAR_DR_ED_003-Q01		
Request Date:	May 24, 2021	Requester DR No.:	003
Date Sent:	June 8, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Kevin Flaherty

SUBJECT: GENERAL

QUESTION 01

Please explain why some gas or electric projects are “not assigned” an MAT.

ANSWER 01

“#” MAT Codes are used to hold costs that cannot be directly attributed to any other singular MAT within the MWC. “Not assigned” is the SAP nomenclature for this scenario of costs that cannot be readily assigned to a particular MAT. An example of these costs is Standard Cost Variance (SCV), which can be traced to costs hitting several MATs.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_003-Q02		
PG&E File Name:	2020_RSAR_DR_ED_003-Q02		
Request Date:	May 24, 2021	Requester DR No.:	003
Date Sent:	June 8, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Kevin Flaherty

SUBJECT: GENERAL

QUESTION 02

Regarding ED 002-Q03: Please send a list of line items in the 2020 PG&E RSAR which use the term “emergent” and explain whether the emergent activities are: (1) additional work in a given MWC/MAT that materialized in excess of the forecast units; or (2) a new work type not forecast in the 2020 GRC that materialized and required to be performed.

ANSWER 02

See 2020_RSAR_DR_ED_003-Q02Atch01.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_003-Q03		
PG&E File Name:	2020_RSAR_DR_ED_003-Q03		
Request Date:	May 24, 2021	Requester DR No.:	003
Date Sent:	June 8, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Kevin Flaherty

SUBJECT: GENERAL

QUESTION 03

The 2019 ED RSAR recommended that PG&E provide a list of programs in the GC with updates to the utility's risk. Provide a list of programs in the most recent GRC and an updates to the utility's risk.

ANSWER 03

Per a clarifying conversation, PG&E understands this question to be asking if PG&E's 2020 GRC Decision (D.20-12-005) changed or updated any of the RAMP risks applicable to the year 2020. No RAMP risks were changed as a result of D.20-12-005. For clarification, PG&E's 2020 GRC was put together based on its 2017 RAMP (filed in November 2017). The 2018 SMAP settlement agreement (approved in December 2018, D.18-12-014) updated the RAMP risk modeling requirements. These updates were reflected in PG&E's 2020 RAMP, which is applicable to years 2023 through 2026. The updated RAMP risks will appear in PG&E's 2023 RSAR, scheduled to be filed March 31, 2024.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_003-Q04		
PG&E File Name:	2020_RSAR_DR_ED_003-Q04		
Request Date:	May 24, 2021	Requester DR No.:	003
Date Sent:	June 8, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Kevin Flaherty

SUBJECT: ELECTRIC CAPITAL

QUESTION 04

Electric Distribution and Equipment Capacity – Transformer Replacement Overloaded (06B-3)

- Unit variance of negative 66 percent justified by deferred work due to COVID and focus on wildfire mitigation, but when coupled with a 29 percent cost overage this equates to over a 300 percent increase in unit cost.
 - a. Explain resulting increase in unit costs.
 - b. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 04

- a. PG&E's 2020 GRC forecast for MAT 06B was based on historical average costs to replace overloaded distribution line transformers. Higher than usual unit costs in 2020 are the result of four transformer replacement projects in San Francisco totaling \$556,650. These projects were more complex than historical jobs, and modified existing parallel transformer configurations. This required the installation of multiple new transformers, the replacement of multiple poles, the installation of new primary and secondary conductor, and the re-mapping of existing meters to new coordinates.
- b. The testimony and workpapers associated with MAT 06B can be found in Exhibit (PG&E-4), Chapter 13 and associated workpapers. Those documents have been previously provided in response to 2020_RSAR_DR_ED_002-Q04.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_003-Q05		
PG&E File Name:	2020_RSAR_DR_ED_003-Q05		
Request Date:	May 24, 2021	Requester DR No.:	003
Date Sent:	June 8, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Kevin Flaherty

SUBJECT: ELECTRIC CAPITAL

QUESTION 05

Electric Distribution Install – Pole Replacement (07D-13)

- Unit variance of increase of 29 percent and a cost variance increase of 121 percent equates to a unit cost increase of over 80 percent. Expanded program justifies the unit increase, but the resulting unit cost increase of over 80 percent is not justified.
 - a. Explain resulting increase in unit costs.
 - b. Per variance description of 07O Pole Replacement Overloaded) the costs were originally in 07D adding and cost variance to this program. Explain how these costs were reallocated.
 - c. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 05

- a. In recent years, PG&E has prioritized performing pole replacements in High Fire Threat District (HFTD) Tier 2 and 3 areas. Many of these poles are located in rural areas, not accessible with bucket trucks, so the replacement has required a helicopter, large crane or other heavy equipment. Usage of this heavy equipment adds significant cost to the pole replacements. In addition, PG&E has seen a significant increase in disposal costs of removed poles. The poles are treated wood and are considered hazardous material, which needs to be specially handled at the disposal sites. Pole replacement costs, both installation and disposal, have also increased due to stricter safety precautions, stricter permitting requirements, environmental requirements and extraordinary traffic control. Lastly, PG&E has had to hire additional contractors from outside the Company to execute the growing volume of pole replacements, which increases overall program costs.
- b. Costs relating to replacement of overloaded poles were tracked via the individual work orders and associated with MAT 07O, which is new since the 2020 GRC

filing. The funding for MAT 07O was part of the forecast for the overall pole replacement portfolio, MWC 07, and included in the MAT 07D forecast in the 2020 GRC.

- c. The testimony and workpapers associated with overloaded poles now recorded in MAT 07O can be found in Exhibit (PG&E-4), Chapter 8 and associated workpapers. Those documents have been previously provided in response to 2020_RSAR_DR_ED_002-Q04.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_003-Q06		
PG&E File Name:	2020_RSAR_DR_ED_003-Q06		
Request Date:	May 24, 2021	Requester DR No.:	003
Date Sent:	June 8, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Kevin Flaherty

SUBJECT: ELECTRIC CAPITAL

QUESTION 06

Electric Distribution Routine Emergency - Not assigned (17-30)

- Cost variance increase of 35 percent (\$63M) due to emergency events.
 - a. There is no unit estimate for number of emergency events recorded. Explain the difference from forecasted events and those recorded.
 - b. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 06

- a. Routine Emergency does not use a unit estimate for the number of emergency events. Rather the reference made on “forecasted volume of events” referred to the costs. Routine Emergency forecasts the volume of spend based on a 3-year historical average, and costs in 2020 were higher than historical averages due to higher estimating and contract spend, \$13M and \$10M respectively. (See Exhibit (PG&E-4), WP 4-17)
- b. The testimony and workpapers associated with MWC 17 can be found in Exhibit (PG&E-4), Chapter 4 and associated workpapers. Those documents have been previously provided in response to 2020_RSAR_DR_ED_002-Q04.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_003-Q07		
PG&E File Name:	2020_RSAR_DR_ED_003-Q07		
Request Date:	May 24, 2021	Requester DR No.:	003
Date Sent:	June 8, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Kevin Flaherty

SUBJECT: ELECTRIC CAPITAL

QUESTION 07

Miscellaneous Capital and EP&R- Not assigned (21A)

- Cost variance of 1315 percent (\$15M) explained because wildfire mitigations were forecast in MAT 21# and recorded here. MAT21# recorded costs of \$1.7M with an imputed cost of negative \$26M.
 - a. Provide additional detail on the cost and related wildfire mitigations or other work that explain the 1315 percent cost exceedance.
 - b. The programs in Table 3-4 do not appear to sum for Miscellaneous Capital and Emergency Preparedness & Response presented in Table 3-2. Explain how these two items correlate.
 - c. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 07

- a. The wildfire mitigations that roll up into the \$16.8 million recorded costs in MAT 21# are listed in rows 37 to 43 of the RSAR report; also see table snippet below. Capital costs for the Wildfire mitigation programs include Expanded Weather Station Deployment, Advanced Fire Modeling, Wildfire Infrastructure Protection Team equipment, PSPS program related capital projects, and Post 2020 GRC Mitigations which mainly represents the Wind Loading project.

Line N	MV	MWC Name	M	MAT Name	RAMP Risk Name	RAMP Mitigation Name	2020 GRC Testimony Referen	2020 Imputed Adopted Costs (A)	2020 Actual Costs (B)
37	21	Miscellaneous Capital and EP&R	21A	EP&R Capital	RAMP Risk: WF Mitigation	M13 - Public Safety Power Shutoff	4-3	\$ -	\$ 2,396.9
38	21	Miscellaneous Capital and EP&R	21A	EP&R Capital	RAMP Risk: WF Mitigation	M18 - Wildfire Safety Operations Center	4-3	\$ -	\$ (34.1)
39	21	Miscellaneous Capital and EP&R	21A	EP&R Capital	RAMP Risk: WF Mitigation	M19 - Expanded Weather Station Deployment	4-3	\$ -	\$ 8,334.3
40	21	Miscellaneous Capital and EP&R	21A	EP&R Capital	RAMP Risk: WF Mitigation	M21 - Advanced Fire Modeling	4-3	\$ -	\$ 898.8
41	21	Miscellaneous Capital and EP&R	21A	EP&R Capital	RAMP Risk: WF Mitigation	M24 - Enhanced Wire Down Detection	4-3	\$ -	\$ 809.5
42	21	Miscellaneous Capital and EP&R	21A	EP&R Capital	RAMP Risk: WF Mitigation	M25 - Wildfire and Infrastructure Protection Teams	4-3	\$ -	\$ 1,253.9
43	21	Miscellaneous Capital and EP&R	21A	EP&R Capital	RAMP Risk: WF Mitigation	Post 2020 GRC Mitigations	N/A	\$ -	\$ 2,626.2

b. The following lines/subtotals in table 3-4 adds to the \$18.5 million in table 3-2:

Line N	MV	MWC Name	M	MAT Name	RAMP Risk Name	RAMP Mitigation Name	2020 GRC Testimony Referen	2020 Imputed Adopted Costs (A)	2020 Actual Costs (B)
31	21	Miscellaneous Capital and Emergency Preparedness & Response	#	Not assigned	SRM Total	SRM Total	4-18	\$ (26,116.0)	\$ 1,685.2
36	21	Miscellaneous Capital and EP&R	21A	EP&R Capital	SRM Total	SRM Total	4-3	\$ 1,187.3	\$ 16,803.4
44	21	Miscellaneous Capital and EP&R	21B	Capital projects for other LOB	SRM Total	SRM Total	4-3	\$ -	\$ (19.4)
total								\$	18,469.3

c. The testimony and workpapers associated with MAT 21A can be found in Exhibit (PG&E-4), Chapters 3 and 18 and associated workpapers. Those documents have been previously provided in response to 2020_RSAR_DR_ED_002-Q04.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_003-Q08		
PG&E File Name:	2020_RSAR_DR_ED_003-Q08		
Request Date:	May 24, 2021	Requester DR No.:	003
Date Sent:	June 8, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Kevin Flaherty

SUBJECT: ELECTRIC CAPITAL

QUESTION 08

Electric Distribution Substation Replace Other Equipment- Replace ED Substation Switchgear (48F-88)

- Cost variance increase of 122 percent (\$25M) explained due to program expansion into next phase.
 - a. Is expansion into the next phase an accelerated program with forecasted cost or a new phase without imputed cost?
 - b. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 08

- a. The “next phase” of switchgear projects is not a program acceleration or new phase without imputed costs. Substation capital projects are typically multi-year. The “next phase” of switchgear projects is indicative of the continuation of multi-year project work moving further into an engineering, construction, or close-out status. The Larkin switchgear is the primary driver of \$12M in costs imputed due to unforeseen needs to store material, required changes from the preliminary design, and vendor delays. Additional costs associated with SF M, SF F, and Oakland D were incurred due to engineering process and design challenges as well as material and vendor delays. These issues also required operative date extensions from the 2020 GRC.
- b. The testimony and workpapers associated with MAT 48F can be found in Exhibit (PG&E-4), Chapter 12 and associated workpapers. Those documents have been previously provided in response to 2020_RSAR_DR_ED_002-Q04.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_003-Q09		
PG&E File Name:	2020_RSAR_DR_ED_003-Q09		
Request Date:	May 24, 2021	Requester DR No.:	003
Date Sent:	June 8, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Kevin Flaherty

SUBJECT: ELECTRIC CAPITAL

QUESTION 09

Electric Distribution Substation Transformer Replacements- ED Substation Replace Transformer (54A-115)

- Cost variance increase of 477 percent (\$26M) explained due to continuation of key planned replacement projects.
 - a. Why were the “key” replacement projects cited for the cost variance not part of the imputed cost?
 - b. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 09

- a. The imputed cost for MWC 54 does not reflect the costs cited for the cost variance. The “key” transformer replacement projects cited for the cost variance are reflective of the additional in-flight projects pursued after the 2020 GRC filing once PG&E realized the just-in-time reductions to the program were too severe.
- b. The testimony and workpapers associated with MAT 54A can be found in Exhibit (PG&E-4), Chapter 12 and associated workpapers. Those documents have been previously provided in response to 2020_RSAR_DR_ED_002-Q04.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_003-Q10		
PG&E File Name:	2020_RSAR_DR_ED_003-Q10		
Request Date:	May 24, 2021	Requester DR No.:	003
Date Sent:	June 8, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Kevin Flaherty

SUBJECT: ELECTRIC CAPITAL

QUESTION 10

Bird Safe Install/Replace Annual (2AC-49)

- Units variance explained by prioritization. When Cost exceedance is combined with reduced units, the unit cost is 300 percent of the imputed unit cost.
 - a. Provide explanation for the significant cost increase of the unit costs.
 - b. Discuss if and when differed units will be addressed.
 - c. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 10

- a. As noted, actual units were lower than imputed units due to resource scheduling on higher priority WSIP tags and PSPS events. Significantly higher costs were incurred due to work in geographical locations with difficult site access, particularly the North Valley region. In combination, this translated into higher unit costs.
- b. Work will be prioritized as per company work loading order and rescheduled.
- c. The testimony and workpapers associated with MAT 2AC can be found in Exhibit (PG&E-4), Chapter 6 and associated workpapers. Those documents have been previously provided in response to 2020_RSAR_DR_ED_002-Q04.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_003-Q11		
PG&E File Name:	2020_RSAR_DR_ED_003-Q11		
Request Date:	May 24, 2021	Requester DR No.:	003
Date Sent:	June 8, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Kevin Flaherty

SUBJECT: ELECTRIC CAPITAL

QUESTION 11

Electric Distribution Substation Emergency Replacement (59 – MAT unassigned)

- This program had a cost increase of \$57M (90%) because of an increase in replacements
 - a. Please provide a breakdown of the number of transformer and breaker replacements (see the cost variance explanation in the report).
 - b. Please explain why this MAT has no units attributed to it.
 - c. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 11

- a. In 2020, PG&E completed the replacement of 14 transformers and 30 circuit breaker replacements.
- b. MWC 59 captures emergency replacements and other emergency work as it occurs. The MWC is comprised of several MATs that categorize types of equipment replacement once work is complete. Units are not attributed to emergency work because they cannot be anticipated.
- c. The testimony and workpapers associated with MAT 59 can be found in Exhibit (PG&E-4), Chapter 12 and associated workpapers. Those documents have been previously provided in response to 2020_RSAR_DR_ED_002-Q04.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_003-Q12		
PG&E File Name:	2020_RSAR_DR_ED_003-Q12		
Request Date:	May 24, 2021	Requester DR No.:	003
Date Sent:	June 8, 2021	Requesting Party:	Energy Division
PG&E Witness:	N/A	Requester:	Kevin Flaherty

SUBJECT: ELECTRIC EXPENSE

QUESTION 12

Support and EP&R (EP&R Expense AB6)

- PG&E spent \$41M below authorized for this program (84% less) due to wildfire mitigation activities being recorded in MWC IG instead of MWC AB.
 - a. Please list wildfire mitigation activities recorded in MWC IG and provide a breakdown or description of how much work was completed for each activity.
 - b. Please list EP&R base activities and provide a breakdown or a description of how much work was completed by activity.
 - c. Please explain why this MWC has no units attributed to it.
 - d. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 12

- a. Table 3-3 lines 86 through 96 list eleven wildfire mitigations (M12, M13, M15, M18, M19, M20, M21, M22, M24, M25, and M28) and line 97 lists the “Post 2020 GRC Mitigations” that inform MWC IG (line 85) and provides the actual costs for each mitigation.
- b. Base activities include (1) EP&R S&E Contract-Consulting \$627, (2) PCC-15209-EP&R PCC Cost \$2781, (3) Staging Sites and Operations – Exp \$125, (4) EP&R S&E Response \$1023, (5) EP&R S&E Training \$2570, (6) EP&R Core Projects \$430, and (7) Enhanced wire down detection \$4.
- c. Work is not quantified in units as it represents efforts to support the reduction of wildfires directly or indirectly. Unitized work is only reported for HD Cameras and Weather Stations.
- d. The testimony and workpapers associated with MAT AB can be found in Exhibit (PG&E-4), Chapter 3 and associated workpapers. Those documents have been previously provided in response to 2020_RSAR_DR_ED_002-Q04.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_003-Q13		
PG&E File Name:	2020_RSAR_DR_ED_003-Q13		
Request Date:	May 24, 2021	Requester DR No.:	003
Date Sent:	June 8, 2021	Requesting Party:	Energy Division
PG&E Witness:	Eric Van Deuren	Requester:	Kevin Flaherty

SUBJECT: TABLE POWER EXPENSE

QUESTION 13

License Compliance Hydro Gen (KJ)

- PG&E spent \$15m below authorized for this program (40% below authorized) because PG&E reassigned more than \$11M in costs to MWC IG.
 - a. Please explain why this MWC has no units attributed to it.
 - b. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 13

- a. As described in the RSAR cost variance explanation, program expenses in MWC KJ were below imputed adopted values due to approval of the expansion of the two-way hydro licensing balancing account (HLBA) in the GRC 2020 decision (D.20-12-005) which now permits the Federal Energy Regulatory Commission (FERC) and Division of Safety of Dams (DSOD) fees to be recovered through the hydro licensing balancing account. The costs of FERC fees and DSOD fees, cumulatively exceeding \$11M in 2020, have been removed from MWC KJ and assigned to MWC IG.

This MWC includes the following costs and activities related to compliance with regulatory licenses:

- The cost of managing license compliance.
- The cost to monitor survey and study environmental conditions that are required to stay compliant with hydro licenses.
- Fees required for license compliance. Examples include fees for fish stocking and regulatory fees paid to U.S. Geological Survey.
- Expense projects required for license compliance.
- The cost to manage public recreational facilities to meet regulatory requirements.

The type of work in MWC KJ described above does not have units associated with it. For example, there are no units associated with managing public recreational facilities to meet regulatory requirements or fees paid required for license compliance.

Attachment 2020_RSAR_DR_ED_003-Q13Atch01 includes PG&E's 2020 GRC testimony for Exhibit 5, Chapter 8, Energy Supply Ratemaking. Pages 8-13 to 8-16 discusses PG&E proposal to include regulatory fees paid to FERC and the DSOD in the HLBA beginning in 2020.

PG&E's proposal was adopted in the GRC 2020 decision (D.20-12-005), Section 8.1.5.

- b. Attachment 2020_RSAR_DR_ED_003-Q13Atch02 includes PG&E's 2020 GRC testimony for Exhibit 5, Chapter 4, Hydro Operations Costs. Pages 4-90 discusses MWC KJ.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_003-Q14		
PG&E File Name:	2020_RSAR_DR_ED_003-Q14		
Request Date:	May 24, 2021	Requester DR No.:	003
Date Sent:	June 8, 2021	Requesting Party:	Energy Division
PG&E Witness:	Eric Van Deuren	Requester:	Kevin Flaherty

SUBJECT: TABLE POWER EXPENSE

QUESTION 14

Operate Hydro Generation (KG)

- PG&E spent \$13m above authorized for this program (41% above authorized) due to emergent costs for compliance activities and risk mitigations.
 - a. Please explain how PG&E's Compliance with the Maturity Model relates to Commission orders and cite the mandate.
 - b. Please explain how the powerhouse safety mitigation program relates to Commission orders and cite the mandate.
 - c. Please explain whether the "emergent" activities cited in the variance explanation were an expansion of the program's scope of work.
 - d. Please explain why this MWC has no units attributed to it.
 - e. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 14

- a. As described in the RSAR cost variance explanation, program expenses in MWC KG were above imputed adopted values due to several key drivers, including (1) emergent costs related to achieving full compliance for all risks at Level 3 per PG&E's Compliance Maturity Model; (2) an emergent hydro system-wide powerhouse safety mitigation program to mitigate safety risks resulting from dropped objects from heights (e.g. tools from scaffolding); (3) costs related to accelerating guidance document completion to meet Level 3 compliance deadline; and (4) emergent physical security and cybersecurity costs at our FERC-regulated facilities to meet new regulations from FERC.

PG&E considers items 1, 2, and 4 as emergent items that were not forecast in PG&E's 2020 GRC. Item 3 is an acceleration of an existing program.

This MWC includes the following costs and activities related to the operation of hydro power generating stations and associated facilities:

- The cost to operate and monitor hydro power generating stations and switching centers;
- The cost to operate and control the flow of canals and waterways to support the operation of hydro power generating stations;
- The cost to provide hydro meteorological data and forecasts in order to optimally schedule water releases for hydro power generating stations;
- The cost for hazardous waste disposal and transportation in support of the operation of hydro power generating stations;
- The cost for routine inspections in support of the operation of hydro power generating stations; and
- The cost for safety program in support of the operation of hydro power generating stations.

The type of work in MWC KG described above does not have units associated with it. For example, there are no units associated with operating and monitoring hydro power generating stations and switching centers.

PG&E prioritized its 2020 work based on a bottoms up risk-informed process incorporating the general and risk-related forecast assumptions used in PG&E's then-pending 2020 GRC. PG&E considers its Compliance with the Maturity Model a high priority as PG&E strives to consistently meet all compliance obligations set forth by the agencies that regulate PG&E such as FERC, DSOD, and the CPUC. The powerhouse safety mitigation program to mitigate the safety risks resulting from dropped objects from heights was an emergent effort based on a recent incident that could have resulted in an employee injury. PG&E funded this effort as employee and public safety is PG&E's top priority.

- b. Attachment 2020_RSAR_DR_ED_003-Q13Atch02 provided in PG&E's response to Question 13 of this data request includes PG&E's 2020 GRC testimony for Exhibit 5, Chapter 4, Hydro Operations Costs. Pages 4-87 to 4-88 discusses MWC KG.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_003-Q15		
PG&E File Name:	2020_RSAR_DR_ED_003-Q15		
Request Date:	May 24, 2021	Requester DR No.:	003
Date Sent:	June 8, 2021	Requesting Party:	Energy Division
PG&E Witness:	Tom Crowley	Requester:	Kevin Flaherty

SUBJECT: TABLE SS-IT CAPITAL

QUESTION 15

Maintain Buildings (22)

- PG&E spent \$70m below authorized for this program (89% below authorized) due to program consolidation.
 - a. Please explain how consolidation of the Facility Asset Upkeep Program into MWC 23 relates to Commission orders and cite the mandate.
 - b. Please explain why this MWC has no units attributed to it.
 - c. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 15

- a. The continued execution of the Facility Asset Upkeep (FAU) Program between spend in both MWC 22 and MWC 23 is consistent with the CPUC guidance to prudently balance preventive maintenance work against customer affordability. The FAU establishes annual facility maintenance plans that minimize business operations interruptions while not compromising the safety and reliability of PG&E facilities. By consolidating the FAU into MWC 23 – Implement Real Estate Strategy, PG&E better aligns facility maintenance with the longer-term facility investment plan.
- b. PG&E does not plan, forecast or execute work within this MWC at the unit level because the work therein cannot be broken into measurable units. For example, building maintenance includes third party facility and site inspections as well as electrical facility upgrades and fencing replacements.
- c. A copy of the testimony was provided in response to 2020_RSAR_DR_ED_002-Q04.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_003-Q16		
PG&E File Name:	2020_RSAR_DR_ED_003-Q16		
Request Date:	May 24, 2021	Requester DR No.:	003
Date Sent:	June 8, 2021	Requesting Party:	Energy Division
PG&E Witness:	Tom Crowley	Requester:	Kevin Flaherty

SUBJECT: TABLE SS-IT CAPITAL

QUESTION 16

Implement Real Estate Strategy (23)

- PG&E spent \$104m above authorized for this program (113%above authorized) due to wildfire risk mitigation support.
 - a. Please explain whether the Emergency Generation Enhancement Project is an "emergent" activity.
 - b. Does the Emergency Generation Enhancement Project constitute an expansion of the program's scope of work.
 - c. Please explain how the Emergency Generation Enhancement Project relates to Commission orders and cite the mandate.
 - d. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 16

- a. The Emergency Generation Enhancement Project is not defined as an "emergent" activity.
- b. No, the Emergency Generation Enhancement Project does not constitute an expansion of the program's scope of work. It was principally designed and will be deployed in direct response to the recent PSPS events. The standard configuration for emergency generation backup at PG&E facilities is not sufficient to cover PSPS events and requires a large investment to close the noted gaps.
- c. Because the Emergency Generation Enhancement Project was initiated in direct response to gaps identified during PSPS events, it relates to the CPUC guidance regarding the importance of prioritizing and deploying Wildfire Risk Mitigations.
- d. A copy of the testimony was provided in response to 2020_RSAR_DR_ED_002-Q04.

**PACIFIC GAS AND ELECTRIC COMPANY
Risk Spending Accountability Report (RSAR)
Data Response**

PG&E Data Request No.:	ED_003-Q17		
PG&E File Name:	2020_RSAR_DR_ED_003-Q17		
Request Date:	May 24, 2021	Requester DR No.:	003
Date Sent:	June 8, 2021	Requesting Party:	Energy Division
PG&E Witness:	Earle Davis, Craig Kurtz	Requester:	Kevin Flaherty

SUBJECT: TABLE CC CAPITAL

QUESTION 17

Install New Electric Meters (25)

- PG&E spent \$23m below authorized for this program (42% below authorized) due to operational transfers.
 - a. The report says costs were below imputed adopted because PG&E transferred FMO to EO and GO. However the transfer appears to have happened previous to the test year. How does a transfer which happened previous to the test year affect the imputed authorized for the MWC?
 - b. Please provide a breakdown of the number of electric meter installations, exchanges, removals, and retirements performed in 2020 (see the cost variance explanation in the report).
 - c. Please explain why this MWC has no units attributed to it.
 - d. Please provide a copy of the testimony for this MAT as listed in the RSAR (or any other needed documents) and references for any and all explanations.

ANSWER 17

- a. As described in Exhibit (PG&E-1), Chapter 2, PG&E froze the inputs to its forecast for the period 2018 through 2022 as of May 2018.¹ Since the transfer of the Field Metering Operations team to Electric Operations and Gas Operations occurred in August 2018, PG&E's imputed authorized costs for these activities reside in Customer Care.

¹ Exhibit (PG&E-1), Chapter 2, p. 2-14.

- b. See table below for the requested information for electric meter installations, exchanges removals, and retirements performed in 2020:

Installations	80,887
Exchanges	71,603
Removals	5,575
Retirements	78,391

- c. MWC 25 does not have units attributed to it because PG&E's 2020 GRC forecast was not unitized (i.e. PG&E forecasted costs but not units in its testimony and workpapers).
- d. See Attachment 2020_RSAR_DR_ED_003-Q17Atch01 and 2020_RSAR_DR_ED_003-Q17Atch02 for a copy of relevant testimony and workpapers supporting the forecast for these activities MWC 25.²

² Specifically, see WP 6-10 in 2020_RSAR_DR_ED_003-Q17Atch02 for more detail on PG&E's forecast for activities in MWC 25.