

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



July 9, 2021

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

**SUBJECT:****The 2020 Pacific Gas & Electric Company Risk Spending Accountability Report Review**

Dear Mr. Kenney:

The California Public Utilities Commission (CPUC) received the 2020 Risk Spending Accountability Report (RSAR) which Pacific Gas and Electric Company (PG&E, The Utility) filed on March 31, 2021. Energy Division completed a review of this report and provides PG&E with recommendations for its 2021 report. The attachments provide background and details of staff's analysis on spending accountability and spending variances.

**CONCLUSIONS**

ED reviewed PG&E's report and determined the report complies with the guidance outlined in the CPUC's Safety Model Assessment Proceeding (S-MAP) Decision, Decision (D.) 19-04-020. The Utility presented imputed adopted, actual spending, and units for its reportable general rate case (GRC) programs related to safety, reliability and maintenance.

PG&E correctly applied the selection criteria for its GRC programs found in the S-MAP Decision. The Utility provided work unit information for programs in which the forecasted cost was derived from unit costs.<sup>1</sup> PG&E applied the selection criteria for its GRC programs according to D.19-04-020 and included the information required for programs selected for an explanation. PG&E provided reference and regulatory account information affecting authorized spending.

Overall, PG&E's 2020 RSAR showed a 20 percent overspend for Capital expenditures and a 44 percent overspend for O&M. However, these values understate significant overspending (132 percent) in Electric Distribution O&M. Significant underspending in Corporate Services (-84 percent) and Human Resources (-29 percent) offset a similarly significant Capital overspending in Electric Distribution (38 percent) and Shared Services (24 percent).

The Capital spending variance in 2020 is similar to the capital overspending presented in the 2019 report. Most of the overspend were due to wildfire-related vegetation management, overhead wire maintenance, and patrols. The most recent PG&E GRC Decision (D.)20-12-005 largely adopts a settlement and allows PG&E to recover up to 20 percent overage on vegetation management and 15 percent overage on Wildfire Mitigation Balancing Account spending via a tier 2 advice letter, which

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<sup>1</sup> See Requirements and Staff Analysis Sections in Attachment A for program definitions.

PG&E filed as Advice Letter 4392-G/6100-E and that was approved by Energy Division. Overages above pre-approved thresholds shall be reviewed via future application.

Energy Division concludes that PG&E generally met the requirements for this filing. The Utility complied with the reporting notice requirements in D.19-04-020, as it was served on the ED Tariff Unit (edtariffunit@cpuc.ca.gov), CPUC's Safety Policy Division, Safety and Enforcement Division, and the Public Advocates Office. PG&E reported spending for their programs related to safety, reliability and maintenance to conform with D.19-04-020 reporting guidelines.

ED staff found that, in general, PG&E complied with requirements to provide variance explanations, authorized work units, and program descriptions. ED staff found that PG&E provided authorized and actual work units, when programs had units from the GRC, but did not provide an explanation when programs did not contain units<sup>2</sup>. The RSAR did not identify canceled, deferred, or expanded projects from the General Rate Case 2020 Test Year (TY). PG&E collaborated with ED staff during staff review and should continue to do so in developing the 2021 RSAR to improve the reporting.

D.19-04-020 provides for a method for parties to comment on the report. No party to that proceeding (A.15-05-002) or any of the other proceedings to which PG&E filed the RSAR commented on the report.

ED staff finds improvements should be made (see Recommendations section below).

## RECOMMENDATIONS

PG&E provided explanations and descriptions for the programs or projects<sup>3</sup> in the report in the report but should improve on their efforts to include authorized work units and/or lists of activities when work units are not available. More detailed explanations and descriptions would facilitate a better understanding of the reported variances.

Staff recommend that variance explanations:

1. identify all mandates
2. enumerate assumptions used to develop forecasts
3. provide enough information to allow verification of programs with no incurred costs
4. favor more specific variance explanations (e.g., social distancing versus COVID-19)
5. detail costs shifted between programs and note the source (regulations or other projects)
6. compare shifted costs to original allocated budget
7. provide detailed explanations for why each project does not have units<sup>4</sup>
8. provide details in explanations sufficient to verify completeness of work within the program
9. explicitly detail how each program addresses safety, reliability or maintenance issues

PG&E should refer to the reporting framework in D.19-04-020, Ordering Paragraph 10 in preparing and submitting future RSARs, including the next RSAR for GRC TY 2020 due on March 31, 2022.

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<sup>2</sup> D.19-04-020, p39 "The IOUs must consult with ED staff and, as needed, the TWG, on the specific manner to report types of and work units authorized versus types of and work units performed. Where information on risk mitigation program work units authorized and performed is not available, the IOUs must work with ED staff and, as needed, the TWG to appropriately identify these programs and must include in the RSAR general explanations for the lack of inclusion of work unit information for such programs."

<sup>3</sup> PG&E calls programs and projects Maintenance Activity Types (MAT) and Major Work Categories (MWC); see Requirements and Staff Analysis Sections in Attachment A below, p 1 of the RSAR and p34 of D.19-04-020.

<sup>4</sup> See footnote 2.

PG&E should note if the list of programs presented in the GRC TY 2020 changed with any updates to the utility's risks per the previous year's RSAR review recommendations. PG&E should also follow recommendations and decision related to the RSAR that come from the Order Instituting Rulemaking to Further Develop a Risk-Based Decision-Making Framework for Electric and Gas Utilities R.20-07-013 (S-MAP 2). RSAR stakeholders are encouraged to participate in track 3 of the S-MAP 2 proceedings which was specifically created to provide my clarity to the RSAR.

PG&E should file and serve their 2021 RSAR in the most recent the proceeding in which costs are imputed, (A.18-12-009), and the 2020 Risk Assessment and Mitigation Phase (RAMP, A.20-06-012) with copies provided to the CPUC's Safety Policy Division, Safety and Enforcement Division, and the Public Advocates Office. Likewise, the report should include information on how parties can file comments in the most recent open GRC/RAMP proceeding, with copies of the comments emailed to ED Tariff Unit. The report should request parties identify the submissions upon which they are commenting. All comments must follow the prioritization outlined in the RSAR Filing and Review Schedule. PG&E should also provide the 2021 RSAR to the ED Tariff Unit by emailing the report to [edtariffunit@cpuc.ca.gov](mailto:edtariffunit@cpuc.ca.gov)<sup>5</sup>.

If you have any questions or comments, please contact Kevin Flaherty at (415) 703-3842 or [kevin.flaherty@cpuc.ca.gov](mailto:kevin.flaherty@cpuc.ca.gov) on natural gas issues or Jordan Smith at (916) 894-5717 or [jordan.smith@cpuc.ca.gov](mailto:jordan.smith@cpuc.ca.gov) for electric issues.

Sincerely,



FOR

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

Enclosure: ATTACHMENT A - Staff Risk Spending Accountability Review  
ATTACHMENT B - Summary of Major Work Category Costs

cc: Mary Gandesbery, Pacific Gas and Electric Company  
Lauren Hudson, Pacific Gas and Electric Company  
Dorothy Duda, Branch Manager Market Structure, Costs and Natural Gas Branch  
Franz Cheng, Supervisor Electric Costs Section  
Elizabeth La Cour, Supervisor Gas Costs and Rates Section  
Service Lists for A.15-09-001, A.18-12-009, and A.20-06-012

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<sup>5</sup> see D.19-04-020 page 47

# ATTACHMENT A:

## Staff Risk Spending Accountability Review

The California Public Utilities Commission’s (CPUC) Energy Division (ED) reviewed the 2020 Risk Spending Accountability Report (RSAR) of Pacific Gas and Electric Company (PG&E, The Utility), which PG&E filed in their Test Year (TY) 2020 General Rate Case (GRC) Application (A.)18-12-009 and A.20-06-012 on April 1, 2021.<sup>6</sup>

ED conducted a review to provide the CPUC and parties to the GRC with information that may be useful in the GRC and other proceedings and “alert the Commission and other parties about a utility’s risk mitigation activities and spending.”<sup>7</sup>

### BACKGROUND

In December 2014, the CPUC issued D.14-12-025, which directed the investor-owned utilities under its jurisdiction to prepare annual reports comparing authorized and actual spending on risk mitigation projects and explain any discrepancies. Upon submission, ED Staff would review the reports and identify any spending patterns of concern with respect to the provision of safe and reliable gas and electric service.

In April 2019, the CPUC issued D.19-04-020, Phase Two Decision Adopting Risk Spending Accountability Report Requirements and Safety Performance Metrics for Investor-Owned Utilities and Adopting a Safety Model Approach for Small and Multi-Jurisdictional Utilities (Phase Two Decision) and provided the utilities with specific direction in complying with the reporting requirements of the new risk-based decision-making framework.

This 2020 RSAR report is PG&E’s first filing to meet the reporting requirements of D.14-12-025 and D.19-04-020. The CPUC required The Utility to file annual reports for 2017, 2018, and 2019 in its Decision on PG&E’s TY 2017 GRC, D.17-05-013. PG&E applied the requirements of the new framework in its current report to comply with guidance provided by ED.

### REPORTING REQUIREMENTS

D.19-04-020 directed utilities to provide descriptions and an explanation of any variance based upon set criteria.<sup>8</sup> This included identifying all risk mitigation and maintenance<sup>9</sup> programs, providing a “comparison of authorized versus actual spending above an appropriate Commission-determined dollar cut-off and a utility narrative explanation of any significant differences between the two.” Finally, the utilities are required to “group programs along general business lines” or categories.<sup>10</sup>

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<sup>6</sup> PG&E served the report on March 31st, 2021 to parties in A.18-12-009, A.20-06-012 and A.15-09-001

<sup>7</sup> D.19-04-020 p47

<sup>8</sup> D.19-04-020 p. 43, Variance Criteria

<sup>9</sup> In compliance with redirected spending requirements P.U. Code §591 D.19-04-020 (p37).

<sup>10</sup> D.19-04-020 pp 34-37; O.P. 10 and Attachment 2 for the full requirements. See also D.14-12-025 p44.

## REPORT NOTICING AND PARTY COMMENTS

PG&E submitted the RSAR report to the service list for the PG&E's most recent GRC A.18-12-009, PG&E's 2020 Risk Assessment and Mitigation Phase Report (RAMP) A.20-06-012, and PG&E's previous GRC A.15-09-001. The PG&E RSAR is available on the Energy Division RSAR webpage.<sup>11</sup> The review schedule for RSARs was served on the latest PG&E General Rate Case A.18-12-009 and the Rulemaking to Further Develop a Risk-Based Decision-Making Framework for Electric and Gas Utilities (SMAP 2) R.20-07-013 on April 8, 2021. The Schedule requested comments by May 10, 2021. No party served comments on the PG&E RSAR report.

## STAFF ANALYSIS

PG&E imputed authorized costs based on the GRC Settlement Agreement and Post Test Year Mechanism<sup>12</sup> for reportable programs.<sup>13</sup> The Utility categorized GRC spending programs by Maintenance Activity Types (MAT) and at the higher level Major Work Categories (MWC) for those lines of business where MATs are not used.<sup>14</sup> PG&E then broke out RAMP activities according to the MAT to which they belonged based on forecasts, which PG&E weighted against the total allocated for that MWC, MAT or Line of Business.

PG&E likewise followed requirements to separate programs into “risk mitigation programs identified in the RAMP and GRC spending programs related to safety, reliability or maintenance.”<sup>15</sup> PG&E organized the RSAR by “RAMP Risk, RAMP mitigation, and non-RAMP spending on safety, reliability and maintenance programs” based upon the 2020 GRC and analysis from the 2017 RAMP.<sup>16</sup> All reported items were safety, reliability or maintenance related.

To meet RAMP reporting guidelines, PG&E imputed regulatory values by Risk Mitigation based on forecasts, which they weighted against the total allocation for each MWC, MAT or Line of Business. Many RAMP related items did not fit perfectly into a MAT and thus needed to be called out separately from the total for the MAT. PG&E had to split out the MAT into safety, reliability and maintenance groups for disclosure purposes. As a result, the sum of the individual programs did not equal the total for those MATs.

When a MAT contained multiple RAMP activities, PG&E listed them all but only provided comparisons of authorized to actual and variance explanations at the MAT level (or MWC if MATs were not used) since that is the minimum requirement. This lack of information occasionally made the report difficult to follow.

PG&E complied with D.19-04-020, Ordering Paragraph 10, which requires utilities to describe how each project relates to safety, reliability or maintenance.<sup>17</sup> The descriptions did not always provide

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<sup>11</sup> <https://www.cpuc.ca.gov/General.aspx?id=6442461400>

<sup>12</sup> See the RSAR Appendix A for imputation methodology, which PG&E based upon the Settlement Agreement.

<sup>13</sup> D.19-04-020, p. 35 and 37; Program Definitions; section 5.1.1.

<sup>14</sup> RSAR p1; see also D.19-04-020 p34 and Attachment 2

<sup>15</sup> D.19-04-020 requirements on p 36 (see also attachment 2 p 1)

<sup>16</sup> See report p 1-2

<sup>17</sup> D.19-04-020, pp. 36-37

activities, but usually contained enough background to verify that it was necessary for PG&E to report the projects.<sup>18</sup> Staff requested more information (testimony or references), as needed.

### Lines of Business

Tables A-1 through A-3 present total spending using the categories defined in D.19-04-020.<sup>19</sup> Company-wide, PG&E overspent by \$2.2 billion, or 30.6 percent of the total imputed adopted costs allocated to safety, reliability or maintenance. PG&E's largest variances, in Electric Distribution, were \$1.3 billion (132 percent) for O&M variance and \$0.7 billion (31.9 percent) for capital. PG&E's non-core lines of business also contained significant percentage variances in capital expenditures: Corporate Services (-84.1 percent), Shared Services/IT (34.6 percent) and Human Resources (-28.6 percent).

**Table A-1. 2020 Imputed and Actual O&M Expenses  
by Line of Business**

Line of Business	2020 Imputed Adopted Costs (\$000) A	2020 Actual Costs (\$000) B	2020 Cost Difference (\$000) B-A	2020 Cost Percent Change % (B-A)/A
Gas Distribution	369.1	420.2	51.2	13.9%
Electric Distribution	966.9	2,244.3	1,277.4	132.1%
Energy Supply	595.9	581.3	(14.5)	-2.4%
Customer Care	277.5	272.5	(5.0)	-1.8%
Shared Services/IT	544.7	536.7	(8.0)	-1.5%
Corporate Services	168.0	196.3	28.3	16.8%
Human Resources	78.2	80.7	2.6	3.3%
<b>TOTAL</b>	<b>3,000.2</b>	<b>4,332.1</b>	<b>1,331.9</b>	<b>44.4%</b>

<sup>18</sup> RSAR p 1-2

<sup>19</sup> See 2020 RSAR DR ED 001 Qs 01-04

**Table A-2. 2020 Imputed and Actual Capital  
by Line of Business**

Line of Business	2020 Imputed Adopted Costs  (\$000) <b>A</b>	2020 Actual Costs  (\$000) <b>B</b>	2020 Cost Difference  (\$000) <b>B-A</b>	2020 Cost Percent Change  % <b>(B-A)/A</b>
Gas Distribution	1,013.5	996.7	(16.8)	-1.7%
Electric Distribution	2,217.7	2,924.0	706.4	31.9%
Energy Supply	275.0	280.5	5.5	2.0%
Customer Care	138.7	135.3	(3.4)	-2.4%
Shared Services/IT	435.0	585.6	150.6	34.6%
Corporate Services	8.3	1.3	(7.0)	-84.1%
Human Resources	2.4	1.7	(0.7)	-28.6%
<b>TOTAL</b>	<b>4,090.6</b>	<b>4,925.2</b>	<b>834.6</b>	<b>20.4%</b>

**Table A-3. 2020 Imputed and Actual O&M Expenses  
by Line of Business**

Line of Business	2020 Imputed Adopted Costs  (\$000) <b>A</b>	2020 Actual Costs  (\$000) <b>B</b>	2020 Cost Difference  (\$000) <b>B-A</b>	2020 Cost Percent Change  % <b>(B-A)/A</b>
Gas Distribution	1,382.6	1,416.9	34.4	2.5%
Electric Distribution	3,184.6	5,168.3	1,983.8	62.3%
Energy Supply	870.9	861.8	(9.0)	-1.0%
<b>Core Line Sub-Total</b>	<b>5,438.1</b>	<b>7,447.0</b>	<b>2,009.2</b>	<b>36.9%</b>
Customer Care	416.2	407.8	(8.4)	-2.0%
Shared Services/IT	979.7	1,122.3	142.6	14.6%
Corporate Services	176.3	197.6	21.3	12.1%
Human Resources	80.6	82.4	1.9	2.4%
<b>TOTAL</b>	<b>7,090.9</b>	<b>9,257.1</b>	<b>2,166.6</b>	<b>30.6%</b>

### Major Work Categories

Attachment B in this review lists PG&E's Major Work Categories along with the expense and capital spending variances for the 2020 period. It details significant variances in PG&E's Electric and Shared Services lines of business particularly regarding Electric O&M expenditures which were 132 percent above imputed authorized. While no line of business registered any significant negative variance, there were many variances at the Major Work Category level warranting further review.

Table A-4 shows the activities addressed in RSAR by line of work. In total, 470 activities were addressed with the largest number in in Electrical Expense and Electrical Capital. ED submitted 47 data requests to address questions in the RSAR, with six general questions and 41 activity specific questions. PG&E should provide more information on how the number of units imputed for each program represent progress in meeting the company’s safety, reliability or maintenance goals.

**Table A-4. Number of Activities and Variances in RSAR**

	<b>Total Activities</b>	<b>Cost Variances</b> a	<b>Unit Variances</b> b	<b>Total Variances</b>	<b>Percent Variance</b>	<b>Data Requests</b>	<b>Percent of Data Request</b>
Customer Care Capital	4	1	0	1	25%	1	25%
Customer Care Expense	9	3	0	3	33%	0	0%
Electric Capital	133	20	39	50	38%	8	6%
Electric Expense	128	33	25	42	33%	13	10%
Gas Capital	61	20	29	30	49%	10	16%
Gas Expense	87	5	25	29	33%	5	6%
Nuclear Capital	2	0	0	0	0%	0	0%
Nuclear Expense	7	1	0	1	14%	0	0%
Power Generation Capital	18	2	0	0	0%	0	0%
Power Generation Expense	17	4	0	4	24%	2	12%
SS-IT Capital	2	2	0	2	100%	2	100%
SS-IT Expense	2	0	0	0	0%	0	0%
<b>TOTAL</b>	<b>470</b>	<b>91</b>	<b>118</b>	<b>162</b>	<b>34%</b>	<b>41</b>	<b>9%</b>

- a. Criteria for Cost Variance between allocated and spent that triggers an explanation for  
Expense Variance > \$10 million or \$5 million and 20 percent  
Capital Variance > \$20 million or .\$.10 million and 20 percent
- b. Unit Variance between adopted units and actual units that triggers an explanation > 20 percent

Major Work Categories from multiple lines of business had significant spending variances, with the most notable being in the Electric Distribution line of business. In the area of Electric Distribution O&M, Patrols and Inspections was overspent by \$127 million (383 percent variance), Overhead Maintenance and Repair by \$81 million (251 percent) and Operational Support by \$33 million (149 percent). For Electric Capital, Pole Replacement was overspent by \$138 million (128 percent), Preventive Maintenance by \$122 million (63 percent) and Circuit Reliability by \$76 million (214 percent).

While there were fewer variances in the gas line of business, there were still several MWC in that line of business with variances warranting further review. In the area of Gas Expense, Corrective



Maintenance had a variance of \$22 million (37 percent) and Locate and Mark<sup>20</sup> was underspent by \$12 million (-27.7 percent). For Gas Capital, Meter Protection was underspent by \$20 million (-91.6 percent), Leak Survey was overspent by \$11 million (44 percent) and Customer Connects was overspent by \$46 million (53 percent).

## Balancing Accounts

ED staff found the Report met requirements<sup>21</sup> for cost recovery of actual expenditures for balancing or memorandum account related expenditures.<sup>22</sup> The 2020 actuals for the balancing or memorandum accounts totaled \$2.3 billion with Vegetation Management Balancing Account representing the largest portion of spending at \$1.3 billion. PG&E may only recover costs above those authorized in A.18-12-009 at a future date via annual gas true-up advice letters, future GRC's, or a separate application. This review evaluates balancing account (BA) spending in the context of directly authorized spending.<sup>23</sup>

## Canceled, Deferred, or Expanded Programs

### Canceled or Deferred Programs

PG&E complied with requirements to provide information on canceled, deferred, or expanded programs either via their variance explanations or in footnotes to specific line items.<sup>24</sup> In addition to variance explanations, PG&E is required to explain “whether any projects or other units of work were canceled, deferred or expanded.”<sup>25</sup> However, the report did not reference canceled, deferred or expanded programming requirements. Importantly, the RSAR did not provide a lot of evidence of deferred work or the upcoming GRC showing – particularly regarding COVID-19 related delays. This left ED staff uncertain as to whether the report contained any of the deferred work which PG&E is required to report in the upcoming GRC filing.<sup>26</sup> PG&E will have to disclose whether any delays cited in the variance explanations would be found in the deferred work showing called for in GRC orders

Many line items appeared to be canceled or deferred because they had an imputed authorized amount but zero actual spending (a negative 100 percent variance). In response to staff requests for information, PG&E explained that line items with an authorized amount but no actual costs had not been canceled or deferred and provided explanations for each instance of this type of variance. In most cases the variance was due to incorrect forecasts, dependencies (like inspections), or delays due to permitting.<sup>27</sup> The report mentions delays in five Electric Distribution programs: Line and Equipment Capacity (Transformer Replacement), Substation Replacements (Animal Abatement), and three different Asset Replacements programs.<sup>28</sup>

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<sup>20</sup> I.18-12-007

<sup>21</sup> See Report, Section 7

<sup>22</sup> D.19-04-020 p 37 and OP 10 p 66

<sup>23</sup> e.g., MWCs 50 and HN; See Analysis of Selected Programs section

<sup>24</sup> D.19-02-040 O.P. 11(a)

<sup>25</sup> D.19-04-020 O.P. 11.

<sup>26</sup> D.20-12-005 p325.

<sup>27</sup> 2020 RSAR DR ED 002 Q 01-03

<sup>28</sup> See list in 2020 RSAR DR ED 002 Q 02

PG&E should add introductory paragraphs explaining how the report meets O.P. 11(a) and each section of the report should have additional yes/no and explanation columns for reporting “Canceled or Deferred” programming. Explanations should refer to some of the more common canceled or deferred issues including deferred work requirements found in the GRC decision or state or federal regulations (e.g. COVID-19 related emergency orders) contributing to delays should both be cited. Likewise, PG&E should explain why cases with authorized revenue but no actual spending are not considered canceled or deferred.

### Expanded Programs

In contrast with canceled or deferred projects, which result in underspending (negative variance), utilities are also required to report expanded programming, which often has results in overspending (positive variance). Moreover, if no costs are imputed for the project, it will have a variance of 100 percent. This type of programming, often called “emergent” activity, is not always well-defined. When the emergent work is the result of a low forecast – new, in-scope, authorized work – or new state or federal mandates, citing the cause or mandate is usually enough.

However, in cases where the expanded programming means The Utility shifted or “redirected” costs from another MAT or MWCs, staff will usually ask for the name of the project and the cause for the shifted costs.<sup>29</sup> In response to staff inquiries over multiple cost shifting between MATs, PG&E indicated that GRC forecasts often must be made at the MWC rather than MAT level. In one instance (2K), the report presented imputed amounts, actual costs and actual units in different places for the same spending. In another example, actual costs for the Locate and Mark (DFA) program included erroneous costs because the GRC decision had required they be recorded in that account. Staff will work with PG&E to identify ways to reduce these types of variances.

### Pandemic Impacts

Staff found that COVID-19 related explanations generally conformed to canceled or deferred programming requirements as well as state and federal guidance.<sup>30</sup> Variance explanations included higher costs due to equipment rentals or permitting, and generally linked COVID-19 precautions to construction delays, or expired contracts or permits. Conversely, these higher unit costs also sometimes led to positive cost variances but negative unit variances.

Staff found 18 MATs in 8 MWCs had variance explanations relating to the COVID-19 pandemic: Gas Field Service (5), Cathodic Protection (2), Gas Pipeline Replacement Program (2), Gas Regulator Replacements, Gas Control Operations, Gas Reliability (2), Electric Operations, Electric Transformer Replacements, Electric Overhead Replacements and Electric Underground (2). While ED staff found pandemic-related explanations were sufficient to meet RSAR canceled or deferred programming requirements, details on how the pandemic impacted the program would provide a better understanding of the cost variance. Responses to staff requests for information indicated most project delays could be traced to pandemic social distancing guidelines for activities in constrained environments (i.e., welding), lodging and transportation.<sup>31</sup>

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<sup>29</sup> See discussion of Public Utilities Code in D.19-04-020 Attachment 2 p 6.

<sup>30</sup> Federal COVID guidance may be found at <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html> and State guidance may be found at <https://www.dir.ca.gov/dosh/coronavirus/>

<sup>31</sup> 2020 RSAR DR ED 002 Qs 16, 20-22 and 24

## Emergent Programs

The report alluded to “emergent” programming in 13 MATs: Preventive Maintenance (2), Integrity Management, Pipeline Replacements (2), Main Replacement (2), Leak Management (2), Distribution Reliability (2), Substation Maintenance and Overhead Maintenance. Two MWCs mentioned emergent programming: Diablo Canyon Administration, Hydropower Operations. The report also alluded to expanded programming in five MATs – Pole Replacement and four different Emergency Preparedness & Response programs.

In response to staff requests for information, PG&E confirmed that the term “emergent activities” in their variance explanations referred both to activities in excess of TY 2020 GRC unit forecasts, as well as new work types not included in GRC forecasts which had to be performed.<sup>32</sup> They also listed programs with variance explanations, differentiated according to whether the “emergent activities” were within the program description’s scope (in excess of the forecast units) or outside of the program description’s scope (a new work type not forecast in the GRC). Of the nine MATs where the term “emergent” appeared, four were out of scope to the forecast and five were in-scope.

The report should also have “yes/no” and explanation columns for expanded programming, which can often be indistinguishable from a positive variance. While variances representing in-scope activities are not considered expanded programming, activities external to the program scope are. Explanations should identify the original MAT or MWC for the costs<sup>33</sup> and, if the costs were not shifted from another account, the report should explain what mandate required the spending.

## Program Work Units

PG&E complied with requirements to provide variance explanations, authorized work units and program descriptions. However, staff found it difficult to gauge the work completeness of every program in the report because only 155 items listed in the report had work units. PG&E explanations should use workpaper activities to explain why projects did not have units.<sup>34</sup> As intervenors in the S-MAP proceeding have indicated, context is necessary to understand spending. PG&E should also provide an explanation of how much work was accomplished and whether the amount of work done was sufficient to accomplish the company’s safety, reliability or maintenance goals.

## Safety, Reliability and Maintenance

PG&E should more explicitly explain how each program addresses safety or reliability risks or are related to maintenance. The previous review recommended including all companywide programs presented in the TY 2020 GRC that address safety or reliability risks or are related to maintenance. Energy Division staff found that PG&E’s work in this area largely met requirements but needs improvement.

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<sup>32</sup> 2020 RSAR DR ED 002 Q03 and DR ED 003 Q02

<sup>33</sup> See discussion of Public Utilities Code in D.19-04-020 Attachment 2 p 6.

<sup>34</sup> D.19-04-020 p39

## **ANALYSIS OF SELECTED PROGRAMS**

ED requests for information covered Maintenance Activity Types (MAT) pertaining to pipelines and other things. Requests generally focused on clarifying variance explanations. While the COVID-19 Pandemic and unit forecasts were typical subjects for discussion, many questions were meant to clarify language or the structure of each categorization. Notably, PG&E provided greater detail for programming related to risk mitigation programs, but the costs were generally rounded up to the MAT.

ED staff made recommendations, such as listing government mandates and explaining the degree to which individual activities contributed to the variances for safety, reliability, or maintenance activities. The results of these inquiries may be found in the sections below. Please note that the MWC and MAT abbreviations below were often the only annotation differentiating some line items.

### **Electric Expense**

#### **OH Poles Inspected (BFB-24)**

Spending for OH Poles Inspected (BFB-24) had an increase of 608 percent in cost and 39 percent increase in units. PG&E made detailed inspections at intervals which exceeded General Order 165 inspection requirements for distribution assets. In the case High Threat Districts in Tier 3 inspections were increased from every 5 years to every year. The volume of inspection increased as a result on the 2019 Wildfire Safety Inspection Program and PG&E adopted an enhanced detail of inspection.

The increased frequency may be justified to reduce risk or required as function of regulatory mandates. The variance explanation should include the associated mandate driving the expansion of the project.

#### **Poles - Intrusive Inspection/Test and Treat Program (51 GAA)**

Spending for Poles - Intrusive Inspection/Test and Treat Program (51 GAA) is \$5 million over (40 percent) due pole inspection process changes that included the requirement to Locate and Mark each pole prior to soil disturbance during the intrusive inspections, as well as costs for unexpected inspections of unique pole projects (e.g. streetlight only poles, poles within substation boundaries).

The use of Locate and Mark explains the increased costs, but the impetus to engage in Locate and Mark is not explained in the data request or the associated testimony. It is not clear if the 20 inch excavation below ground surface is a Safety and Health risk.

### **Electric Capital**

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

Spending on “key” transformer replacement projects resulted in a cost variance of \$26 million (477 percent). PG&E explained the new projects were not in 2020 GRC and were pursued when PG&E learned the just-in-time replacement was not sufficient. The new projects explain the increased cost, but no data on unit costs is provided or data to justify the accelerated project.

## Gas Expense

### Leak Survey (MAT DEF)

Spending for this program was \$13 million compared to an imputed cost of \$6 million, a 117 percent variance. The program also reported a 65 percent unit variance. PG&E explained that the variances were due to low forecasts, incomplete work from 2019 and unrealized efficiencies. They also provided added detail upon request like a breakdown by activity and a description of problems the program experienced (e.g., personnel changes and governance).<sup>35</sup>

However, ED Staff were unclear on how much of the work anticipated for 2020 was completed. PG&E should have explained the costs associated with the 433k leak surveys from 2019 carried over to 2020 to help assess if the 2020 anticipated work was completed.

### Locate and Mark (MAT DFA)

ED Staff had trouble verifying the variance explanation for this program because PG&E had omitted an unspecified amount of shareholder costs from the report.

Staff initially identified an inconsistency between the spending variance and the variance explanation for this program. The report said that spending was \$29 million compared to an imputed cost of \$41 million (-30 percent variance; -18 percent unit variance) but the variance explanation indicated “expenses exceeded imputed regulatory values.”

In response to staff requests for information regarding the inconsistency, PG&E explained that while the reported costs reflected a drop in spending the total spending, the program also included a mandated staffing increase originating from the L&M OII,<sup>36</sup> which was not included in the actual costs for the program (\$29 million).

PG&E should always explicitly state where all imputed and authorized costs come from when costs are shifted between programs. Likewise, PG&E should always provide language, page numbers, and highlighted PDFs or screenshots for these types of requirements.

## Gas Capital

### Gas Pipeline Replacement Program (MWC 14)

This program is \$62 million underspent (-19 percent) with 24 percent of the imputed units left to be completed, partially due to strategy development and emergent activities. PG&E explained that activity within MWC 14 shifted from 14D to gas line replacements (14B).

Staff recommend that PG&E should be more explicit when moving activity around from one MAT to another within an MWC

### Gas Distribution Reliability (MWC 50)

Spending for 50G was \$14 million compared to an imputed cost of \$24 million, a negative 42 percent variance along with a negative 38 percent unit variance because PG&E had underestimated service replacements. The Utility explained that a small amount of the emergent replacements were

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<sup>35</sup> see DR-002 Q30

<sup>36</sup> Settlement agreement between pacific gas and electric company, the coalition of California Utility Employees, and the Safety and Enforcement Division of the California Public Utilities Commission resolving Order Instituting Investigation I.18-12-007 <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M324/K865/324865004.PDF>

from another MAT because the GRC decision had directed them to track a limited number of New Environmental Regulation Balancing Account (NERBA) related repairs.

Cost shifting between accounts can be reasonably expected but requires identification and explanation in the RSAR to minimize data requests.

Spending for 50J was \$7 million compared to an imputed cost of \$19 million, a negative variance of 64 percent and a negative 58 percent unit variance because PG&E had underestimated the number of encroachments. In response to staff requests for information, PG&E explained that encroachment identification costs were a Leak Survey expense (DEA). Since interdependencies between programs, like inspection programs which drive replacement activities, will impact variances, staff recommend PG&E be more explicit and identify impacted activities.

#### Gas Meter Protection (MAT 27A)

A lower conversion rate caused spending for this program to be 92 percent below authorized with a negative 91 percent unit variance, which was linked to Meter Protection Program Protection-EXB (positive 40 percent variance of \$3 million and a positive 80 percent unit variance of 7,000 units). PG&E explained that EXB is only for meter protection expenses and capital relocations is 27A, but there is no certainty about number of replacements until replacements are requested.

As the report's explanations for this program suffered from a lack of clarity, staff recommend that differences between cost categories and interdependencies, such as those caused by inspection tickets, be made more explicit.

#### Gas Distribution Control Operations Assets (MWC 4A)

Spending for MAT 4AL had over 100 percent negative variance. On the other hand, MAT 4AM had over 2700 percent positive variance. The variances were the result of an "order clean up" due to accounting differences PG&E's SCADA team decided to manage a consolidated program because material changes to the forecast put the program in a different category per accounting guidelines.

Staff recommend PG&E's variance explanations be particularly detailed when the GRC decision authorizes changes which materially conflict with testimony and cause a variance.

#### Gas Distribution Replace/Convert Customer HPRs (MWC 2K)

MATs 2KA, 2KB and 2KC each had no imputed costs (or units) but incurred costs of \$23 million (85), \$1 million (5) and \$23 million (138) resulting in a 100 percent unit variance in each MAT. Meanwhile 2K# incurred no costs on an imputed cost of \$59 million. The report also indicated that only 228 out of 336 units were completed which amounted to a negative 32 percent unit variance. In response to staff inquiries PG&E explained that they do not forecast HPR units at the MAT level and therefore the report contains no imputed units or dollars for 2KA, 2KB or 2KC. The 2020 GRC Decision placed imputed dollars and units in 2K# for MWC tracking purposes. The variance for 2K alone is \$12 million and 108 units.

The way PG&E reported these MATs obscures the fact that forecasts could only be made at the MWC while costs are recorded at the MAT level, causing a variance and complicated unit verification. Staff recommends providing the necessary detail to understand the total variance in cases like this.

# ATTACHMENT B

## Summary of Major Work Category Costs

**Table B-1. Gas Expense**

MWC Description	MWC	Imputed Adopted	Actual	Cost Difference	% Difference
Gas Corrective Maintenance	FI/LW	60,251.4	82,305.1	22,053.7	36.6%
Leak Survey	DE	24,328.6	35,141.6	10,813.0	44.4%
Gas Preventive Maintenance	FH	22,475.4	31,790.4	9,315.0	41.4%
Operational Support	OS	18,442.2	26,631.2	8,189.0	44.4%
Provide Field Service	DD	43,572.3	50,202.6	6,630.3	15.2%
Cathodic Protection	DG	20,170.6	23,954.3	3,783.7	18.8%
Meter Protection Program	EX	8,221.8	11,485.2	3,263.4	39.7%
Support	AB	17,277.6	20,255.2	2,977.6	17.2%
Gas Distribution Integrity Management Program	JQ	41,542.9	44,092.2	2,549.3	6.1%
Gas Distribution Planning & Operations Engineering	GG	6,264.5	7,846.3	1,581.8	25.2%
Gas Expense Work at the Request of Others (WRO)	LK	5,946.3	7,393.8	1,447.5	24.3%
Gas Meter Maintenance	HY	1,828.4	2,181.9	353.4	19.3%
Natural Gas Fueling Facilities O&M	GM	3,774.2	3,997.2	222.9	5.9%
Gas Research and Development (R&D)	GZ	3,403.1	3,289.6	(113.4)	-3.3%
Operate Gas Distribution System	FG	8,987.4	8,767.4	(220.0)	-2.4%
Gas Mapping	GF	4,268.9	3,393.9	(874.9)	-20.5%
Information Technology	JV	12,553.3	10,503.7	(2,049.6)	-16.3%
Operational Management	OM	17,023.5	14,363.0	(2,660.6)	-15.6%
Develop & Provide Training	DN	4,795.6	883.2	(3,912.4)	-81.6%
Locate and Mark	DF	43,952.5	31,765.4	(12,187.1)	-27.7%
<b>TOTAL</b>		<b>369,080.5</b>	<b>420,243.2</b>	<b>51,162.6</b>	<b>13.9%</b>

**Table B-2. Gas Capital**

<b>MWC Description</b>	<b>MWC</b>	<b>Imputed Adopted</b>	<b>Actual</b>	<b>Cost Difference</b>	<b>% Difference</b>
Gas Distribution Customer Connects	29	86,156.3	132,015.0	45,858.7	53.2%
Miscellaneous Capital	21	-	15,917.6	15,917.6	NA
Gas Distribution Reliability	50/3P	228,487.4	230,193.4	1,706.0	0.7%
Tools and Equipment	5	3,335.1	4,530.6	1,195.4	35.8%
Gas Distribution Emergency Response	52	880.7	1,599.2	718.5	81.6%
NGV - Station Infrastructure	31	4,064.7	4,698.2	633.5	15.6%
Install New Gas Meters	74	1,940.6	2,268.5	327.9	16.9%
Manage Buildings	78	-	0.4	0.4	NA
Build IT Applications & Infrastructure	2F	11,636.1	10,078.7	(1,557.3)	-13.4%
Gas Distribution Control Operations Assets	4A	29,703.7	27,814.7	(1,889.1)	-6.4%
Gas Distribution Capacity	47	38,894.4	35,393.5	(3,500.9)	-9.0%
Gas Capital WRO	51	74,418.6	62,898.5	(11,520.1)	-15.5%
Gas Distribution Replace/Convert Customer HPRs	2K	58,998.1	47,049.5	(11,948.6)	-20.3%
Gas Meter Protection	27	21,603.0	1,818.5	(19,784.5)	-91.6%
Gas Pipeline Replacement Program	14	453,378.1	420,459.8	(32,918.2)	-7.3%
<b>TOTAL</b>		<b>1,013,496.8</b>	<b>996,736.1</b>	<b>(16,760.7)</b>	<b>-1.7%</b>



**Table B-3. Electric Expense**

<b>MWC Description</b>	<b>MWC</b>	<b>Imputed Adopted</b>	<b>Actual</b>	<b>Cost Difference</b>	<b>% Difference</b>
Various Balancing and Memorandum Accounts	IG	-	783,961.0	783,961.0	NA
Vegetation Management Balancing Account	HN	548,012.6	736,320.0	188,307.4	34.4%
Electric Distribution Patrols and Inspections	BF	33,084.3	159,713.3	126,629.0	382.7%
Preventive Maintenance and Repair (OH)	KA	32,448.7	113,900.8	81,452.2	251.0%
Operational Support	OS	22,304.7	55,554.7	33,250.1	149.1%
Operate and Maintain Substations	GC	29,124.6	49,608.4	20,483.8	70.3%
Poles – Intrusive Inspection/Test and Treat Program	GA	13,584.5	32,126.4	18,541.9	136.5%
Read & Investigate Meters	AR	-	10,095.5	10,095.5	NA
Electric Distribution Routine Emergency	BH	57,276.1	67,075.2	9,799.1	17.1%
Electric Distribution Operation Activities	BA	21,343.7	30,016.6	8,672.9	40.6%
Change/Maintenance Used Electric Meter	EY	-	6,808.5	6,808.5	NA
Electric Operations Work Requested by Others (WRO)	EW	8,858.9	15,521.5	6,662.6	75.2%
Customer Field Service Work	DD	20,381.1	23,605.5	3,224.5	15.8%
Electric Distribution Mapping	GE	5,899.0	8,845.1	2,946.1	49.9%
Perform Gas Meter Maintenance	HY	-	1,552.4	1,552.4	NA
Collect Revenue	IU	-	1,499.2	1,499.2	NA
Preventive Maintenance and Repair (Network)	KC	4,025.3	4,890.8	865.5	21.5%
Preventive Maintenance and Repair (UG)	KB	12,537.2	13,147.3	610.2	4.9%
Manage Service Inquiries	EV	12,624.9	12,985.8	360.8	2.9%
Distribution Automation & Protection Support	HX	2,048.3	2,344.2	295.9	14.4%
Maintenance of Other Equip	BK	1,662.5	1,851.5	189.0	11.4%
Develop & Provide Training	DN	-	168.0	168.0	NA
Electric Distribution Engineering and Planning	FZ	16,973.6	16,644.8	(328.8)	-1.9%
Streetlight Support	IS	1,087.5	708.5	(379.0)	-34.9%
Maintain IT Applications & Infrastructure	JV	5,246.0	2,489.5	(2,756.5)	-52.5%
Electric Distribution Major Emergency	IF	33,743.5	30,973.4	(2,770.1)	-8.2%
Electric Distribution Operational Technology	HG	10,947.8	7,228.3	(3,719.5)	-34.0%
Support Emergency Preparedness Response (EP&R)	AB	66,476.8	58,860.3	(7,616.5)	-11.5%
Operational Management	OM	7,217.3	(4,204.1)	(11,421.4)	158.2%
<b>TOTAL</b>		<b>966,908.7</b>	<b>2,244,292.3</b>	<b>1,277,383.6</b>	<b>132.1%</b>

**Table B-4. Electric Capital**

<b>MWC Description</b>	<b>MWC</b>	<b>Imputed Adopted</b>	<b>Actual</b>	<b>Cost Difference</b>	<b>% Difference</b>
Electric Distribution Install/Replace Overhead Poles	7	108,278.6	246,582.5	138,303.9	127.7%
Electric Distribution Preventive Maintenance Overhead	2A	192,504.0	314,608.5	122,104.5	63.4%
Electric Distribution Customer Connects	16	450,570.2	536,186.4	85,616.2	19.0%
Electric Distribution Reliability Circuit/Zone	49	35,603.4	111,792.0	76,188.7	214.0%
Electric Distribution Routine Emergency	17	183,518.1	247,499.6	63,981.5	34.9%
Electric Distribution Substation Emergency Replacement	59	62,612.4	119,133.5	56,521.0	90.3%
Misc. Capital and Emergency Preparedness & Response	21	(24,928.7)	18,469.3	43,397.9	174.1%
Electric Distribution Substation Replace Other Equipment	48	49,406.9	77,617.7	28,210.8	57.1%
Electric Dist. Substation Transformer Replacements	54	5,513.0	31,817.9	26,304.9	477.1%
Build IT Applications & Infrastructure	2F	17,570.2	42,151.9	24,581.7	139.9%
Install New Electric Meters	25	-	24,204.9	24,204.9	NA
Electric Dist Work Requested (WRO) General	10	121,507.1	145,660.1	24,152.9	19.9%
Install New Gas Meters	74	-	18,218.1	18,218.1	NA
Electric Distribution Line and Equipment Capacity	6	90,793.5	107,255.3	16,461.8	18.1%
Electric Distribution Major Emergency	95	55,086.2	64,256.8	9,170.6	16.6%
Electric Ops Control Center and Technology	63	36,915.1	45,490.7	8,575.6	23.2%
Electric Distribution WRO Rule 20A	30	33,420.2	38,272.6	4,852.4	14.5%
Electric Distribution Automation & Protection	9	33,844.5	37,503.9	3,659.4	10.8%
Electric Distribution Preventive Maintenance Network	2C	19,260.8	22,565.9	3,305.1	17.2%
Electric Distribution Substation Capacity	46	33,678.1	35,574.1	1,896.0	5.6%
Energy Storage Capital	3R	-	205.6	205.6	NA
Tools & Equipment	5	7,397.5	6,711.0	(686.5)	-9.3%
Electric Distribution Substation Safety and Security	58	4,609.9	3,369.0	(1,240.9)	-26.9%
Electric Distribution Preventive Maintenance Underground	2B	57,228.8	47,590.1	(9,638.7)	-16.8%
Electric Dist. Underground (UG) Replacements	56	98,750.8	79,923.7	(18,827.2)	-19.1%
Electric Distribution Overhead Asset Replacement	8	544,535.2	501,370.6	(43,164.6)	-7.9%
<b>TOTAL</b>		<b>2,217,675.9</b>	<b>2,924,031.5</b>	<b>706,355.6</b>	<b>31.9%</b>

**Table B-5. Nuclear Expense**

<b>MWC Description</b>	<b>MWC</b>	<b>Imputed Adopted</b>	<b>Actual</b>	<b>Cost Difference</b>	<b>% Difference</b>
Operational Support	OS	18,334.0	26,229.5	7,895.5	43.1%
Maintain DCPD Plant Assets	BS	103,526.0	109,165.0	5,639.0	5.4%
DCPD Support Services	BQ	47,828.1	48,876.9	1,048.9	2.2%
Nuclear Generation Fees	BT	15,286.3	15,899.0	612.6	4.0%
Operational Management	OM	7,939.6	8,084.2	144.6	1.8%
Manage Environmental Oper	AK	1,945.5	1,996.0	50.4	2.6%
Mnge Waste Disp & Transp	CR	-	-	-	NA
Maintain IT Apps & Infra	JV	666.0	622.7	(43.3)	-6.5%
Provide Nuclear Support	EO	61.0	(23.3)	(84.3)	-138.2%
Manage DCPD Business	BP	14,064.1	13,246.7	(817.4)	-5.8%
Procure DCPD Materials & Svcs	BU	-	(1,110.7)	(1,110.7)	NA
Manage Var Bal Acct Processes	IG	5,555.2	2,942.8	(2,612.5)	-47.0%
Maintain DCPD Plant Configurtn	BV	42,503.0	38,727.6	(3,775.5)	-8.9%
Operate DCPD Plant	BR	85,587.5	78,522.8	(7,064.7)	-8.3%
Misc Expense	AB	14,700.0	(37.8)	(14,737.8)	-100.3%
<b>TOTAL</b>		<b>357,996.4</b>	<b>343,141.3</b>	<b>(14,855.2)</b>	<b>-4.1%</b>

**Table B-6. Nuclear Capital**

<b>MWC Description</b>	<b>MWC</b>	<b>Imputed Adopted</b>	<b>Actual</b>	<b>Cost Difference</b>	<b>% Difference</b>
Nuclear Safety and Security	3I	-	5,944.7	5,944.7	
DCPD Capital	20	38,362.5	43,282.8	4,920.3	12.8%
Build IT Apps & Infra	2F	4,861.9	7,826.0	2,964.1	61.0%
Fleet / Auto Equip	4	-	-	-	NA
Office Furniture & Equipment	3	96.4	-	(96.4)	-100.0%
Tools & Equipment	5	618.9	421.8	(197.1)	-31.8%
<b>TOTAL</b>		<b>43,939.7</b>	<b>57,475.3</b>	<b>13,535.6</b>	<b>30.8%</b>

**Table B-6. Power Expense**

<b>MWC Description</b>	<b>MWC</b>	<b>Imputed Adopted</b>	<b>Actual</b>	<b>Cost Difference</b>	<b>% Difference</b>
Various Balancing and Memorandum Accounts	IG	-	783,961.0	783,961.0	NA
Vegetation Management Balancing Account	HN	548,012.6	736,320.0	188,307.4	34.4%
Electric Distribution Patrols and Inspections	BF	33,084.3	159,713.3	126,629.0	382.7%
Preventive Maintenance and Repair (OH)	KA	32,448.7	113,900.8	81,452.2	251.0%
Operational Support	OS	22,304.7	55,554.7	33,250.1	149.1%
Operate and Maintain Substations	GC	29,124.6	49,608.4	20,483.8	70.3%
Poles – Intrusive Inspection/Test and Treat Program	GA	13,584.5	32,126.4	18,541.9	136.5%
Read & Investigate Meters	AR	-	10,095.5	10,095.5	NA
Electric Distribution Routine Emergency	BH	57,276.1	67,075.2	9,799.1	17.1%
Electric Distribution Operation Activities	BA	21,343.7	30,016.6	8,672.9	40.6%
Change/Maintenance Used Electric Meter	EY	-	6,808.5	6,808.5	NA
Electric Operations Work Requested by Others (WRO)	EW	8,858.9	15,521.5	6,662.6	75.2%
Customer Field Service Work	DD	20,381.1	23,605.5	3,224.5	15.8%
Electric Distribution Mapping	GE	5,899.0	8,845.1	2,946.1	49.9%
Perform Gas Meter Maintenance	HY	-	1,552.4	1,552.4	NA
Collect Revenue	IU	-	1,499.2	1,499.2	NA
Preventive Maintenance and Repair (Network)	KC	4,025.3	4,890.8	865.5	21.5%
Preventive Maintenance and Repair (UG)	KB	12,537.2	13,147.3	610.2	4.9%
Manage Service Inquiries	EV	12,624.9	12,985.8	360.8	2.9%
Distribution Automation & Protection Support	HX	2,048.3	2,344.2	295.9	14.4%
Maintenance of Other Equip	BK	1,662.5	1,851.5	189.0	11.4%
Develop & Provide Training	DN	-	168.0	168.0	NA
Electric Distribution Engineering and Planning	FZ	16,973.6	16,644.8	(328.8)	-1.9%
Streetlight Support	IS	1,087.5	708.5	(379.0)	-34.9%
Maintain IT Applications & Infrastructure	JV	5,246.0	2,489.5	(2,756.5)	-52.5%
Electric Distribution Major Emergency	IF	33,743.5	30,973.4	(2,770.1)	-8.2%
Electric Distribution Operational Technology	HG	10,947.8	7,228.3	(3,719.5)	-34.0%
Support Emergency Preparedness Response (EP&R)	AB	66,476.8	58,860.3	(7,616.5)	-11.5%
Operational Management	OM	7,217.3	(4,204.1)	(11,421.4)	158.2%
<b>TOTAL</b>		<b>966,908.7</b>	<b>2,244,292.3</b>	<b>1,277,383.6</b>	<b>132.1%</b>

**Table B-7. Power Capital**

<b>MWC Description</b>	<b>MWC</b>	<b>Imputed Adopted</b>	<b>Actual</b>	<b>Cost Difference</b>	<b>% Difference</b>
Instal/Repl Fosil Gneratng Eqp	2S	6,215.6	12,480.2	6,264.6	100.8%
Instl/Rpl for Hydro Safety&Reg	2L	23,485.2	29,569.5	6,084.3	25.9%
Instl/Repl Hydr BldgGrndInfrst	2P	5,138.3	8,015.4	2,877.1	56.0%
Instl/Repl Fosil BldgGrndInfrst	2T	195.1	2,330.9	2,135.9	1094.8%
Tools & Equipment	5	1,036.0	2,050.4	1,014.3	97.9%
Instl/Rpl for Fosil Safety&Reg	2R	-	454.5	454.5	NA
Relicensing Hydro Gen	11	427.2	567.1	139.9	32.8%
IT - Desktop Computers	1	-	7.2	7.2	NA
Office Furniture & Equipment	3	15.4	-	(15.4)	-100.0%
Instl/Rpl for AltGen Saftey&Reg	3A	23.8	-	(23.8)	-100.0%
Instal/Repl AltGen GneratngEqp	3B	775.4	556.7	(218.8)	-28.2%
Implement Environment Projects	12	487.7	83.6	(404.1)	-82.9%
Hydroelec Lic & Lic Conditions	3H	18,918.1	17,708.5	(1,209.6)	-6.4%
Build IT Apps & Infra	2F	7,450.8	681.9	(6,768.9)	-90.8%
Instal/Repl Resv,Dams&Waterway	2N	52,597.2	45,193.1	(7,404.0)	-14.1%
Instal/Repl Hydro Gneratng Eqp	2M	105,015.3	94,880.0	(10,135.3)	-9.7%
Instal/Repl Fosil Gneratng Eqp	2S	6,215.6	12,480.2	6,264.6	100.8%
<b>TOTAL</b>		<b>221,781.0</b>	<b>214,579.0</b>	<b>(7,202.0)</b>	<b>-3.2%</b>

**Table B-8. Customer Care Expense**

<b>MWC Description</b>	<b>MWC</b>	<b>Imputed Adopted</b>	<b>Actual</b>	<b>Cost Difference</b>	<b>% Difference</b>
Manage Var Bal Acct Processes	IG	-	18,421.8	18,421.8	NA
Develop New Revenue	EL	24,620.7	41,003.1	16,382.3	66.5%
Maintain IT Apps & Infra	JV	3,746.4	11,852.0	8,105.6	216.4%
Manage Customer Inquiries	DK	60,492.7	61,242.2	749.5	1.2%
Change/Maint Used Gas Meters	HY	6,637.2	7,255.0	617.7	9.3%
Misc Expense	AB	-	(0.2)	(0.2)	NA
Retain & Grow Customers	FK	877.9	356.0	(522.0)	-59.5%
Provide Field Service	DD	686.8	-	(686.8)	-100.0%
Operational Support	OS	307.8	(489.4)	(797.3)	-259.0%
Manage Energy Efficiency-NonBA	GM	8,633.3	7,468.1	(1,165.3)	-13.5%
Operational Management	OM	4,132.3	2,798.3	(1,334.0)	-32.3%
Provide Account Services	IV	17,160.7	15,573.5	(1,587.2)	-9.2%
Manage Var Cust Care Processes	EZ	39,425.1	36,398.8	(3,026.2)	-7.7%
Collect Revenue	IU	21,086.0	14,549.8	(6,536.2)	-31.0%
Manage Credit	IT	15,238.2	8,255.3	(6,982.9)	-45.8%
Bill Customers	IS	54,901.8	47,361.0	(7,540.8)	-13.7%
Change/Maint Used Elec Meter	EY	8,799.8	795.6	(8,004.2)	-91.0%
Read & Investigate Meters	AR	10,742.0	(361.9)	(11,103.9)	-103.4%
<b>TOTAL</b>		<b>277,488.9</b>	<b>272,479.0</b>	<b>(5,010.2)</b>	<b>-1.8%</b>

**Table B-9. Customer Care Capital**

<b>MWC Description</b>	<b>MWC</b>	<b>Imputed Adopted</b>	<b>Actual</b>	<b>Cost Difference</b>	<b>% Difference</b>
Install New Gas Meters	74	73,647.2	84,617.9	10,970.7	14.9%
Build IT Apps & Infra	2F	6,725.7	14,850.1	8,124.5	120.8%
EV - Station Infrastructure	28	-	2,927.5	2,927.5	NA
Tools & Equipment	5	244.0	105.5	(138.5)	-56.8%
Misc Capital	21	3,512.0	1,320.8	(2,191.2)	-62.4%
Install New Electric Meters	25	54,568.6	31,482.9	(23,085.7)	-42.3%
<b>TOTAL</b>		<b>138,697.5</b>	<b>135,304.8</b>	<b>(3,392.7)</b>	<b>-2.4%</b>

**Table B-10. Shared Services and IT Expenses**

<b>MWC Description</b>	<b>MWC</b>	<b>Imputed Adopted</b>	<b>Actual</b>	<b>Cost Difference</b>	<b>% Difference</b>
SS-Misc Expense	AB	205,345.0	240,440.3	35,095.4	17.1%
SS-Manage Property & Bldgs	EP	106,997.0	112,802.7	5,805.7	5.4%
SS-Manage Environ Remed (Earning)	JK	1,974.0	5,868.3	3,894.3	197.3%
SS-Manage Var Bal Acct Processes	IG	-	3,084.8	3,084.8	NA
SS-Prov Human Resource Svcs	KX	5,806.4	8,607.1	2,800.7	48.2%
SS-Building Services Capitalization	EP	(65,890.2)	(63,557.2)	2,333.0	-3.5%
SS-Prov Risk/Security Svcs	KZ	15,054.7	15,851.8	797.1	5.3%
SS-Operational Support	OS	7,115.4	7,588.1	472.7	6.6%
SS-Manage Environmental Oper	AK	8,287.0	8,496.4	209.5	2.5%
SS-Corp A&G Allocation - ATL	LO	-	202.0	202.0	NA
SS-Spc A&G/Oth Csts-Bud Dept	FA	-	166.3	166.3	NA
SS-Implement Environment Projects	ES	699.0	796.6	97.5	14.0%
SS-Operational Management	OM	200.7	210.2	9.5	4.7%
SS-Corporate Items	ZC	-	-	-	NA
SS-Habitat and Species Protection	AY	147.5	127.6	(19.9)	-13.5%
SS-Implement RealEstate Strategy	JH	8,182.9	8,152.5	(30.3)	-0.4%
SS-Mnge Waste Disp & Transp	CR	2,204.9	2,124.2	(80.7)	-3.7%
SS-Prov Regulation Svcs	KY	1,465.2	1,197.5	(267.7)	-18.3%
SS-Manage Land Services	JE	3,460.0	3,053.1	(406.9)	-11.8%
SS-Maintain IT Apps & Infra	JV	4,326.1	3,333.9	(992.2)	-22.9%
SS-Manage DCPD Business	BP	5,358.9	2,498.9	(2,859.9)	-53.4%
SS-Maint Buildings	BI	4,004.3	767.4	(3,237.0)	-80.8%
SS-Safety Engineering & OSHA Cmpl	FL	17,427.0	12,661.8	(4,765.2)	-27.3%
SS-Procure Materials & Services	JL	16,572.8	10,222.7	(6,350.1)	-38.3%
SS-Fleet Capitalization	AB	(90,714.7)	(156,577.5)	(65,862.8)	72.6%
Sub Total Shared Services, positive imputed costs		414,628.8	448,254.5	33,625.7	8.1%
Sub Total Shared Services, negative imputed costs		(156,604.9)	220,134.7)	(63,529.8)	40.6%
<b>Total - Shared Services</b>		<b>258,023.9</b>	<b>228,119.8</b>	<b>(29,904.1)</b>	<b>-11.6%</b>
IT-Maintain IT Apps & Infra	JV	318,988.4	336,919.4	17,931.0	5.6%
IT-Operational Support	OS	612.0	6,549.4	5,937.4	970.2%
IT-Operational Management	OM	1,989.7	1,313.5	(676.2)	-34.0%
IT-Corp A&G Allocation - ATL	LO	-	169.6	169.6	NA
IT-Misc Expense	AB	-	107.5	107.5	NA
IT-Manage Var Bal Acct Processes	IG	-	-	-	NA
IT-Prov Risk/Security Svcs	KZ	-	-	-	NA
IT-Charges from Affiliates	LL	-	-	-	NA
End User Services Capitalization	AB	(34,884.5)	(36,448.3)	(1,563.8)	4.5%
Sub Total - IT, positive imputed costs		321,590.1	345,059.4	23,469.3	7.3%
<b>Total - Shared Services</b>		<b>286,705.6</b>	<b>308,611.0</b>	<b>21,905.4</b>	<b>7.6%</b>
<b>TOTAL</b>		<b>544,729.5</b>	<b>536,730.8</b>	<b>(7,998.7)</b>	<b>-1.5%</b>

**Table B-11. Shared Services and IT Capital**

<b>MWC Description</b>	<b>MWC</b>	<b>Imputed Adopted</b>	<b>Actual</b>	<b>Cost Difference</b>	<b>% Difference</b>
SS-Implement RealEstate Strategy	23	92,091.2	196,030.5	103,939.3	112.9%
SS-Fleet / Auto Equip	4	27,450.8	110,006.5	82,555.7	300.7%
SS-Implement Environment Projects	12	5,979.0	12,695.9	6,716.9	112.3%
SS-Misc Capital	21	562.3	2,817.8	2,255.5	401.1%
SS-Build IT Apps & Infra	2F	2,497.2	3,595.8	1,098.6	44.0%
SS-Tools & Equipment	5	1,817.1	1,997.7	180.6	9.9%
SS-Manage Buildings	78	-	7.9	7.9	NA
SS-EV - Station Infrastructure	28	3,449.6	-	(3,449.6)	-100.0%
SS-Security Install/Replace	3N	16,640.4	7,877.1	(8,763.3)	-52.7%
SS-Maintain Buildings	22	78,096.8	8,593.7	(69,503.1)	-89.0%
<b>Total - Shared Services</b>		<b>228,584.4</b>	<b>343,622.9</b>	<b>115,038.5</b>	<b>50.3%</b>
IT-Build IT Apps & Infra	2F	206,412.4	241,979.5	35,567.1	17.2%
IT-Security Install/Replace	3N	-	-	-	NA
<b>Total - Shared Services</b>		<b>228,584.4</b>	<b>343,622.9</b>	<b>115,038.5</b>	<b>50.3%</b>
<b>TOTAL</b>		<b>766,644.6</b>	<b>954,115.2</b>	<b>187,470.6</b>	<b>24.5%</b>