PACIFIC GAS AND ELECTRIC COMPANY
2020 General Rate Case Phase I
Application 18-12-009
Data Response

FILED
10/07/19
04:59 PM

PG&E Data Request No.:	TURN_031-Q04		
PG&E File Name:	GRC-2020-PhI_DR_TURN_031-Q04		
Request Date:	June 4, 2019	Requester DR No.:	031
Date Sent:	June 18, 2019	Requesting Party:	The Utility Reform Network
PG&E Witness:	Andrew Abranches Mike Kerans	Requester:	Thomas Long

SUBJECT: PG&E-3, CHAPTER 4 (DISTRIBUTION MAINS AND SERVICES)

QUESTION 04

Regarding PG&E's testimony at page 2-39 of PG&E-3 where PG&E states: "Investment Planning allocated an additional $21.8 million to this program to complete the highest priority cross bore inspections in San Francisco. PG&E did not transfer a greater amount of funding to complete all imputed cross bore inspections because the planned cross bore inspections in San Francisco are difficult to conduct and are more expensive than inspections in other locations. While PG&E recognized that it was important to give additional funding to the Cross Bore Inspection Program so that it could complete as many of the highest priority inspections as possible, it also recognized that there is a limit to the number of inspections that can be completed during the period because of the execution constraints. The amount of additional funding was limited to that which the Cross Bore Inspection Program could use most efficiently."

a) If PG&E had decided to allocate more than "an additional $21.8 million" to this program as necessary to complete the authorized work, could PG&E physically have completed all imputed cross bore inspections?

b) If the answer to a) above is anything other than an unqualified yes, please describe and provide documentation that substantiates each non-financial operational constraint (e.g., unavailability of needed workers) that would have prevented physical completion of the authorized work.

c) Please describe and provide documentation that substantiates each "execution constraint" referenced in the quote above.

d) Please describe and document how the limit to "the amount of additional funding" that "the Cross Bore Inspection Program could use most efficiently" was set at $21.8 million.

e) Please explain and provide quantitative documentation showing why it would be less efficient to spend more or less than the referenced amount of $21.8 million.

ANSWER 04

a) PG&E's original proposal to perform less than the imputed number of cross bore inspections in the 2017-2019 period was not due to the physical inability to perform all imputed regulatory units. The reason PG&E expected to perform less units than imputed was due to the plan to perform 10,000 higher priority UTA inspections in San Francisco in 2019 instead of lower priority non-UTA cross bore inspections elsewhere. However, UTA inspections are more complex and costly than non-UTA inspections. PG&E's proposed funding allocation above imputed funding ($21.8 million) for the 2017-2019 timeframe represented PG&E's best judgment of a reasonable execution plan to address these 10,000 UTA inspections in San Francisco at the time of development of the forecast.[1] This judgment was made as part of the budget planning process described in Exhibit (PG&E-3), Chapter 2, Section H.1 "Balancing Gas Distribution's Portfolio of Work."

Performing the originally-planned 10,000 UTA cross bore inspections in 2019 has proved to be challenging. To complete UTA cross bores necessitates PG&E's engagement with and support from other parties which has been slower than anticipated. Recognizing that these challenges can take time to resolve, and to continue with the program's pace and objective of reducing cross bore risks, PG&E has re-evaluated its 2019 work plan. This plan moves the focus away from UTA cross bores in 2019, and instead targets completing the highest volume of inspections to meet regulatory imputed units while still performing inspections in high-priority areas thereby planning to eliminate deferred work in this program.

b) See response to subpart (a) above.

c) See response to subpart (a) above.

d) See response to subpart (a) above.

e) See response to subpart (a) above.

[1] Forecast developed as of August 2018.

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Date Sent:	June 18, 2019 (Original) (Supplemental 01)	Requesting Party:	The Utility Reform Network
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ANSWER 04

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b) See response to subpart (a) above.

c) See response to subpart (a) above.

d) See response to subpart (a) above.

e) See response to subpart (a) above.

04 SUPPLEMENTAL 01

a) The challenges in performing UTA cross bores that have caused PG&E to revise its 2019 work plan are expected to continue into the 2020 GRC period. PG&E does not know how long these challenges will persist, but it is probable that PG&E will not be able to perform all of the 11,000 UTA cross bores forecast in 2020 and 2021.[2] While PG&E will make reasonable efforts to access the UTA sites and perform the forecast cross bore inspections, it is possible that PG&E will complete very few, if any, of the 11,000 UTAs forecast for 2020 through 2021.

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[1] Forecast developed as of August 2018.

[2] Exhibit (PG&E-3), Chapter 4, p. 4-23.

However, PG&E is not changing its 2020 request for funding of the cross bore program (MAT JQK). Throughout the 2020 GRC period, PG&E intends to target the highest volume of inspections reasonably possible with the adopted funding. To the extent that PG&E performs less than the forecast inspections of UTAs, PG&E will perform additional non-UTA inspections instead. Since non-UTA inspections are less expensive to perform, PG&E expects to perform additional UTA inspections for each unit of forecast UTA inspections that it is unable to perform. Thus, the units PG&E performs under MAT JQK will likely exceed the forecasted cross bore inspections for 2020. The current forecast for 2020 cross bore units is 23,887[3] units which included 10,000 UTAs. If PG&E does not perform these UTAs, PG&E could perform up to 45,000 non-UTA inspections in 2020.

[3] Exhibit (PG&E-3), p. WP 4-15, Line 7.

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PG&E File Name:	GRC-2020-PhI_DR_TURN_087-Q01Rev01		
Request Date:	September 10, 2019	Requester DR No.:	087
Date Sent:	September 16, 2019 (Original) September 19, 2019 (Revised)	Requesting Party:	The Utility Reform Network
PG&E Witness:	Mike Kerans Andrew Abranches	Requester:	Thomas Long

SUBJECT: PG&E-16, DEFERRED WORK

QUESTION 01REV01

Regarding Answer 16 on p. 2-8 which states that PG&E's 2019 forecast included inspection of 10,000 unable to access (UTA) units and Answer 17 on pp. 2-8 to 2-9 which states that PG&E "re-evaluated its work plan and decided to shift the focus away from UTA cross bores in 2019,"

a) How many UTA units does PG&E now plan to inspect in 2019?

b) Please provide the following work plans for cross bore inspections:

   i) The work plan on which PG&E based the forecast for 2019 that was described

   in PG&E's 2020 GRC direct testimony and workpapers;

   ii) The most up-to-date work plan for cross bore inspections;

   iii) Any work plans that were developed in between the work plans provided in response to i) and ii) above.

c) Please provide any and all documents in PG&E's possession that discuss changing the work plan for 2019 cross bore inspections from the work plan on which the 2019 forecast in the 2020 GRC filing was based. For clarity, the documents requested include any documents that include information that is different from or inconsistent with PG&E's rebuttal testimony, not just documents on which PG&E may have based its rebuttal testimony.

ANSWER 01 REVISION 01

Pursuant to the discussion with TURN on September 18, PG&E is updating the attachment to this response. See attachment GRC-2020-PhI_DR_TURN_087-Q01Rev01Atch01Redacted which includes updated redactions, and an additional slide.

a) PG&E's 2019 current work plan does not include completing any UTA inspections. As noted in attachment GRC-2020-PhI_DR_TURN_087-Q01Atch01Redacted,

under the financial summary, completion of San Francisco UTAs is pending the outcome of negotiations with the city of San Francisco. PG&E redacted portions of the attachment pertaining to the ongoing negotiations between PG&E and the city of San Francisco regarding amendments to the cross bore program agreement, which PG&E considers confidential.

b) PG&E interprets this question as referring to the counts of units planned for inspection in 2019.

   i) PG&E's 2019 unit forecast which is described in PG&E's 2020 GRC direct testimony and workpapers, broken down by type of inspection (UTA vs non-UTA), is presented in Exhibit (PG&E-3) Workpapers, p. WP 4-14. This work plan was finalized in August 2018.

   ii) PG&E's most up-to-date 2019 work plan includes a total of 42,200 inspections, which will meet the total authorized imputed units of 123,307 cross bore inspections for the 2017-2019 GRC period.

   iii) PG&E revised in February 2019 the original 2019 work plan, as developed and presented in PG&E's 2020 GRC filing, to the work plan described in subpart b(ii) above.

c) See attachment GRC-2020-PhI_DR_TURN_087-Q01Atch01Redacted for a copy of the work plan approved as of February 2019, which shows PG&E's revised Cross Bore Plan. PG&E has only included the slide with material relevant to the cross bore 2019 work plan.

Work Plan Change - February 1, 2019

Topic 2: Cross Bore Update

Process: Cross Bore

Owner: S. Fischer; AFO: R. Thierry; IP: S. Ranganathan; Finance: K. Derby

(Decision) Work Plan Change

- Seek Committee approval of the 2019 work plan, which achieves the GRC 123,307 imputed unit target based on current negotiations with SF [redacted].
- Approval of the updated work plan eliminates the $80M Cross Bore SF UTA risk in 2019 and will impact 2020 GRC Testimony

Justification/Background

- Team has focused on the five levers (see slide 2) to mitigate the known Cross Bore UTA risk in SF: $80M for 2019 = ~$8000/unit for 10K UTAs plus additional risk in future years.
- [redacted] negotiations with San Francisco, [redacted]
- Preliminary negotiations [redacted]
- [redacted] PG&E responsibility. [redacted]
- Locations [redacted] will be investigated as discovered.

Original S2 Plan / 2020 GRC

Unit Type	2019	2020	2021	2022	20-22 Total
SF UTA[1]	10,000	10,000	1,008	0	11,008
Non-UTA	13,887	13,887	43,430	45,000	116,204
Total $M	$29.0M	$30M	$31.5M	$31.4M	$92.7M

1. At the time of the GRC filing, UTA unit cost was estimated at $10K but funded at $2K, carrying a significant risk to the portfolio.

Financial Summary

Scenario	S2 Plan (WFR 10/8/18)	Revised Plan Expected Case	Revised Plan Worst Case	Risk
Pending 2018 Units	N/A	5,200	2,600	
SF Attempts		16,000	16,000	
SF Units Completed (Includes SF resolved UTAs)		8,000	4,000	
SF UTAs (Digs)	10,000	pending negotiations		
Non-UTAs [1]	13,887	29,000	36,000	
Total Units	23,887	42,200	42,600	
SF Unit Cost	N/A	$1,234	$2225	
SF UTAs Unit Cost	$2,016	Bullets 4,5 in Justification/Background		
Non-UTAs [1]	$635	$643	$625	
1. S2 Plan Non-UTA units did not differentiate between SF/Non-SF inspections; unit cost reflects weighted avg.				
SF Total Cost	N/A	$9.9M	$8.9M	$1.0M
SF UTAs Total Cost	$20.2M	N/A	N/A	N/A
Non-UTAs Total Cost	$8.8M	$18.7M	$22.5M	($3.8M)
Total	$29.0M	$28.6M	$31.4M	($2.4M)

- Both Expected/Worst case scenarios reflect achieving the 2017 GRC Imputed target below
- *BPR target:* is set to 37,000 (SF: 8,000; Non-SF: 29,000); and excludes 2018 pending units.
- *Risk*: Revised work plan is contingent on final negotiations with SF. Expected case scenario reflects 50% inspection success rate in SF, however, if the rate is lower, additional non-SF inspections will be needed to achieve the remaining 42,131 inspections signaling a $2.4M potential risk.
- *Updated unit costs:* reflect cost of unsuccessful inspection attempts and volume changes.

2017 GRC Imputed Units

2017 Actuals	2018 Actuals	2019 Expected Forecast	2017-2019 Forecast Total	Imputed Total
35,131	46,045	42,200	123,376 (+69)	123,307

Legacy Cross Bore UTA Challenge Update

Lever:	Description
Lever 1 **Record Review** **Status: Complete** **Savings: None**	**Overview**: Used Exponent to complete a review of Legacy Cross Bore Data with the goal of eliminating rework **Result**: Found data was not sufficient to mitigate re-inspecting locations. Did gain confidence in data set and a clearer understanding of remaining work to be performed • Additional Risk: The exponent review did identify a subset of locations that failed video QC after PG&E retroactively shifted to 100% video QC. This were previously counted as completed inspections and need to be resolved.
Lever 2 **Proximity Clearance** **Status: Complete** **Savings: see #3**	**Overview:** Review Legacy Cross Bore Proximity Clearance Procedure based on improved understanding of sewer systems and how cross bores are created; any savings would go to Lever 3 **Result:** Procedure was modified to allow for an engineering review of locations where a traditional sewer camera inspection is not possible. Engineering review will require alternative process for providing a schematic of where sewers run in relation to gas lines **Savings:** Any savings will be tied to new technology
Lever 3 **New Technology** **Status: Ongoing** **Savings: None**	**Overview:** Find an alternative means for locating sewer that is not impacted by current UTA conditions **Result:** Been meeting regularly with New Technology team. Reached out to industry, no solutions available, much interest in a solution. Currently looking into several possible technologies
Lever 4 **Negotiations with San Francisco** **Status: Ongoing** **Savings: None**	**Overview:** Most recent negotiations the City [redacted] The current strategy [redacted] **Additional challenges**: • SF does not own the sewer laterals. [redacted] • Any agreement made with the city will need to pass the board of supervisors for ratification. • [redacted] • [redacted]
Lever 5 **Improved Performance** **Status: Complete** **Savings: TBD**	**Overview**: Better understanding of Sewer Camera inspections and more experienced contractors may result in fewer UTAs **Result**: Vendors might complete a higher percentage of inspections now that we are going back to San Francisco due to improved vendor management as well as more experienced sewer camera operators now supporting Legacy compared to when the program first started. Any positive variance from the expected 16,000 UTAs would be tracked here • Savings: TBD – this will be reflected in the variation from the forecasted number of UTAs

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Date Sent:	September 16, 2019	Requesting Party:	The Utility Reform Network
PG&E Witness:	Mike Kerans Andrew Abranches	Requester:	Thomas Long

SUBJECT: PG&E-16, DEFERRED WORK

QUESTION 05

Regarding Answer 17 on pp. 2-8 to 2-9 which states: "Performing the originally planned 10,000 UTA cross bore inspections in 2019 has proved to be challenging. To complete UTA cross bores necessitates PG&E's engagement with and support from other parties which has been slower than anticipated. Recognizing that these challenges can take time to resolve, and to continue with the program's pace and objective of reducing cross bore risk, PG&E re-evaluated its 2019 work plan and decided to shift the focus away from UTA cross bores in 2019 . . ." IMPORTANT NOTE: The following subparts are intentionally broken down to seek separate and specific answers regarding the factual elements on which the above-quoted highly general testimony is based. Accordingly, please provide a separate answer to each subpart that specifically addresses the question in the subpart.

a) Please identify and describe each and every "challenge" to performing UTA cross bore inspections to which the response refers;

b) Please identify and describe each and every "other party" to which the response refers;

c) Please identify and describe each and every needed action by PG&E that the quoted testimony is referring to when it references "PG&E's engagement with" third parties and please explain why these actions have been slower than anticipated;

d) Please identify and describe each and every needed action from a third party that the quoted testimony is referring to when it references "support from other parties" and please explain why these actions have been slower than anticipated;

e) Please provide documents reflecting communications with third parties that show that support from other parties has been slower than anticipated.

ANSWER 05

a) For a list of challenges involved in performing UTA inspections, please see Exhibit (PG&E-3), p. 4-23, lines 7-18.

b) The other parties referred to in the response include agencies of the city of San Francisco (including public transit authorities, sewer operators, and the Department of Public Works); residential, commercial, and industrial sewer customers; and the California Department of Transportation (CalTrans).

c) We have to engage with the city of San Francisco and other third parties on many levels. For example, PG&E has been working with the city of San Francisco to gain access to customer sewer laterals, including launching a pilot program with the Department of Building Inspection (DBI) to enforce building codes to have the upper sewer laterals made accessible for performing cross bore inspections. PG&E is working with SF Water Power Sewer (SFWPS) to gain access to capped manholes through submitting UTA forms.

   However, the main activity that has taken longer than anticipated is finalizing an amended agreement with the city of San Francisco (San Francisco Public Utilities Commission) on the resolution of UTA locations.

   Beyond the city of San Francisco, PG&E needs to engage with numerous other third parties to perform the actions described in subpart (d) below.

d) These specific actions include performing sewer lateral repairs, gaining customer access, obtaining permits, obtaining physical sewer access (e.g. removing physical obstacles such as paving), clearing sewers of debris and liquids, coordinating flow control of sewer systems, and performing repairs in certain instances of sewer mains.

   PG&E coordinates with several parties simultaneously for the numerous types of activities involved in enabling inspections, which extends the time of completing inspections. In addition, these assets are not PG&E's assets and PG&E is required to obtain the permission of third parties.

e) The negotiations between PG&E and the city of San Francisco regarding amendments to the cross bore program agreement, referenced above, are ongoing and confidential. PG&E will make the amended cross bore agreement available once it has been finalized.