APPLICATION FOR APPROVAL OF THE FORECASTED REVENUE REQUIREMENT ASSOCIATED WITH CERTAIN PIPELINE SAFETY ENHANCEMENT PLAN PROJECTS, ASSOCIATED RATE RECOVERY AND AUTHORITY TO MODIFY AND CREATE CERTAIN BALANCING ACCOUNTS

(A.17-03-021) (DATA REQUEST TURN-SCGC-01)

Date Requested: October 11, 2017 Date Responded: October 25, 2017

QUESTION 1.1:

For each of the capital projects listed in Table 3 on page 11 of Mr. Gonzalez's testimony (Chapter 2), please provide in Excel format the detailed output of the Stage 3 project cost estimating tool that is discussed on page 5 of Mr. Gonzalez's testimony.

RESPONSE 1.1:

See attachments in response to TURN/SCGC DR-01 Question 1.6.

APPLICATION FOR APPROVAL OF THE FORECASTED REVENUE REQUIREMENT ASSOCIATED WITH CERTAIN PIPELINE SAFETY ENHANCEMENT PLAN PROJECTS, ASSOCIATED RATE RECOVERY AND AUTHORITY TO MODIFY AND CREATE CERTAIN BALANCING ACCOUNTS

(A.17-03-021) (DATA REQUEST TURN-SCGC-01)

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QUESTION 1.2:

For each of the pressure testing projects listed in Table 6 on page 16 of Mr. Gonzalez's testimony, please provide in Excel format the detailed output of the Stage 3 project cost estimating tool that is discussed on page 5 of Mr. Gonzalez's testimony.

RESPONSE 1.2:

See attachments in response to TURN/SCGC DR-01 Question 1.6.

APPLICATION FOR APPROVAL OF THE FORECASTED REVENUE REQUIREMENT ASSOCIATED WITH CERTAIN PIPELINE SAFETY ENHANCEMENT PLAN PROJECTS, ASSOCIATED RATE RECOVERY AND AUTHORITY TO MODIFY AND CREATE CERTAIN BALANCING ACCOUNTS

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QUESTION 1.3:

Have the individual inputs for the model have changed from 2013 to the present?

RESPONSE 1.3:

Yes.

APPLICATION FOR APPROVAL OF THE FORECASTED REVENUE REQUIREMENT ASSOCIATED WITH CERTAIN PIPELINE SAFETY ENHANCEMENT PLAN PROJECTS, ASSOCIATED RATE RECOVERY AND AUTHORITY TO MODIFY AND CREATE CERTAIN BALANCING ACCOUNTS

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QUESTION 1.3.1:

If the answer to Q.1.3 is "yes," please explain whether the number and type of inputs has changed during that period.

RESPONSE 1.3.1:

The number and types of inputs have both evolved since 2013.

QUESTION 1.3.2:

Please state whether the number of inputs has changed and, if so, whether they have increased or decreased.

RESPONSE 1.3.2:

Yes, the number of inputs has increased.

QUESTION 1.3.3:

Has the level of individual inputs changed to reflect information from the recorded costs of executed PSEP projects?

RESPONSE 1.3.3:

Yes.

APPLICATION FOR APPROVAL OF THE FORECASTED REVENUE REQUIREMENT ASSOCIATED WITH CERTAIN PIPELINE SAFETY ENHANCEMENT PLAN PROJECTS, ASSOCIATED RATE RECOVERY AND AUTHORITY TO MODIFY AND CREATE CERTAIN BALANCING ACCOUNTS

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QUESTION 1.3.4:

If the answer to the previous question is "yes," please explain in specific terms how the information from recorded costs of executed PSEP projects has been used, for example, has the information been averaged with other information already used for predictive purposes.

RESPONSE 1.3.4

As PSEP has evolved, SoCalGas and SDG&E have gathered detailed project cost information for each project. This detailed project cost information has helped identify areas within the estimating tool where additional, more granular inputs would enhance the tool's ability to forecast actual project costs. Over time, PSEP has transitioned from a percentage-based approach to a "bottom-up" cost estimating methodology that incorporates actual cost data and inputs from many contributing departments (i.e., internal stakeholder groups).

As explained in Direct Testimony Chapter 2 (Gonzalez), SoCalGas and SDG&E collaborate with internal stakeholder groups to gather estimates and additional actual cost detail to support estimates for specific activities. The estimates include the cost of materials, contract labor, and projected labor costs, and are based on construction durations developed to support the bottom-up methodology. By incorporating updated input for specific activities from respective stakeholders, SoCalGas and SDG&E utilize dynamic and continually updated information in PSEP cost estimates.

SoCalGas and SDG&E also incorporate updated detailed labor estimates based on actual labor costs incurred through project closeout, whereas prior estimates did not account for post-construction activities required to closeout projects.

Additionally, SoCalGas and SDG&E enhanced the estimating process to include a more detailed and comprehensive risk review for each project, which enables a Monte Carlo analysis of risk. This produces a more custom and relevant risk assessment by risk ranging individual areas separately, as well as accounting for dependencies among tasks on the project.

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QUESTION 1.3.5:

If the information from recorded costs of executed PSEP projects has been used for forecasting purposes, explain how the Applicants have controlled for the transition that is being made between Phase 1A (Class 3 & 4 and Class 1 & 2 HCA) projects and Phase 2A (Class 1 & 2 not HCA) projects.

RESPONSE 1.3.5:

Each PSEP project is individual and unique. As the number of projects executed increases, the data from which SoCalGas and SDG&E can draw from to plan, estimate, execute, and closeout projects increases. This enables SoCalGas and SDG&E to transition away from greater reliance on general industry averages to greater reliance on actual recent experience in developing project cost estimates.

Since each project is unique, the transition from Phase 1A (Class 3 & 4 and Class 1 & 2 HCA) to Phase 2A (Class 1 & 2 not HCA) projects does not directly affect the estimated cost. Rather, because SoCalGas and SDG&E employ an activity-based estimating methodology, the project's scope and anticipated conditions determine the estimated project costs. Average costs are not typically utilized to develop cost estimates; the PSEP estimators utilize similar projects and consider the following factors, among others: size, region, scope, and project type.

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QUESTION 1.4:

In preparing their forecast have the Applicants considered any of the recorded costs associated with the completed PSEP projects pursue by the other gas utilities in California? Please explain the reason(s) for the answer.

RESPONSE 1.4:

No, the only other California utility with potentially relevant PSEP costs is Pacific Gas & Electric Company (PG&E). SoCalGas and SDG&E do not have access to PG&E's actual PSEP cost data with sufficient granularity to provide meaningful data for the SoCalGas/SDG&E PSEP estimating tool.

APPLICATION FOR APPROVAL OF THE FORECASTED REVENUE REQUIREMENT ASSOCIATED WITH CERTAIN PIPELINE SAFETY ENHANCEMENT PLAN PROJECTS, ASSOCIATED RATE RECOVERY AND AUTHORITY TO MODIFY AND CREATE CERTAIN BALANCING ACCOUNTS

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QUESTION 1.5:

Using the AACE Cost Estimation Guidelines, please provide the Class Level and expected accuracy range that the Applicants believe is associated with their forecasted cost estimates.

RESPONSE 1.5:

All Estimates are classified as AACE Recommended Practice 56R-08 Class 3, which yields an anticipated Accuracy Range of +20%/-15%.

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QUESTION 1.6:

Please provide in working Excel format complete with all data, formulas, and links, any Excel model (workbook) that was used in the preparation of testimony, tables, or workpapers supporting this application and has not already been requested by a different question in this data request.

RESPONSE 1.6:

SoCalGas and SDG&E object to this request on the grounds that the phrase "used in the preparation of testimony, tables, or workpapers" is vague and ambiguous. Subject to and without waiving for the foregoing objection, SoCalGas and SDG&E respond as follows:

SoCalGas and SDG&E interpret the request for Excel files "used in the preparation of testimony, tables, or workpapers" to include Excel files used to create the tables presented in testimony and workpapers and the workpapers themselves. The attached supporting documents include Confidential and Protected Materials Pursuant to PUC Section 583, GO 66-C, and D.16-08-024. See attached files.

APPLICATION FOR APPROVAL OF THE FORECASTED REVENUE REQUIREMENT ASSOCIATED WITH CERTAIN PIPELINE SAFETY ENHANCEMENT PLAN PROJECTS, ASSOCIATED RATE RECOVERY AND AUTHORITY TO MODIFY AND CREATE CERTAIN BALANCING ACCOUNTS

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QUESTION 1.7:

Regarding Mr. Pech's testimony at page 6, why are the GMA costs assumed to be approximately 10 percent of the direct and indirect costs for the project?

RESPONSE 1.7:

As stated in Mr. Pech's testimony on page 6, GMA forecast costs mirror SoCalGas and SDG&E's actual experience with PSEP phase 1A project implementation. To clarify, Mr. Pech's statement on page 6 in testimony that GMA costs are assumed to be approximately 10% of the total project costs, is referring to <u>direct</u> project costs; the Table 2 display of the GMA totals in Mr. Pech's testimony is also derived based on total direct project costs.