

**TURN/SCGC DATA REQUEST-012**  
**SDG&E-SOCALGAS 2019 GRC – A.17-11-007/8**  
**SDG&E\_SOCALGAS RESPONSE**  
**DATE RECEIVED: APRIL 23, 2018**  
**DATE DUE: MAY 07, 2018**

**Data Requests: Regarding SCG-15**

**Question 1a-b:** In A.16-09-005, the workpapers of Rick Phillips present recorded PSEP cost data in a table denoted “Table 4” for each of the following PSEP projects, Line 41-30-A (p. WP-III-A330), Line 49-14 (p. WP-III-A378), and Line 45-49-32 (p. WP-III-A411). For each of these Table 4s presenting cost data listed previously, please provide the following information:

- a. Break down the company labor cost into the following categories:
  - i. Project management
  - ii. Project Field Management
  - iii. Project Engineers
  - iv. Construction Management/Inspectors
  - v. Environmental
  - vi. Other Departments
- b. Provide the associated hours work for each category identified in the previous question.

**SoCalGas Response to Q1a and 1b:**

SoCalGas does not track labor costs or hours in the categories requested. The total actual company labor costs and hours are detailed in the table below.

| <b>A.16-09-005</b>            | <b>(a)</b>                        | <b>(b)</b>   |
|-------------------------------|-----------------------------------|--------------|
| <b>COMPANY LABOR:</b>         | <b>Actual Company Labor Costs</b> | <b>Hours</b> |
| Line 41-30-A (p. WP-III-A330) | \$33,456                          | 707          |
| Line 49-14 (p. WP-III-A378)   | \$175,771                         | 3,657        |
| Line 49-32 (p. WP-III-A411)   | \$551,540                         | 11,028       |

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**Question 1c:** In A.16-09-005, the workpapers of Rick Phillips present recorded PSEP cost data in a table denoted “Table 4” for each of the following PSEP projects, Line 41-30-A (p. WP-III-A330), Line 49-14 (p. WP-III-A378), and Line 45-49-32 (p. WP-III-A411). For each of these Table 4s presenting cost data listed previously, please provide the following information:

- c. Break down the contract cost and other directs into the following categories:
  - i. Engineering/Design Services
  - ii. PM/Project Services
  - iii. Construction Management
  - iv. Surveying/As-builts
  - v. Environmental

**SoCalGas Response to Q1c:**

Because SoCalGas and SDG&E track as-built costs as engineering costs, categories “i. and iv.” have been combined in the table below.

| <b>A.16-09-005</b>                           | <b>i.<br/>Engineering/<br/>Design Services<br/>and iv.<br/>Surveying/ As-<br/>Builts</b> | <b>ii.<br/>PM/Project<br/>Services</b> | <b>iii.<br/>Construction<br/>Management</b> | <b>v.<br/>Environmental</b> |
|--|--|--|---|-----------------------------|
| <b>CONTRACT &amp; OTHER<br/>DIRECT COSTS</b> |  |  |   |                             |
| Line 41-30-A<br>(p. WP-III-A330)             | \$47,949   | \$14,535                               | \$91,950                                    | \$10,744                    |
| Line 49-14<br>(p. WP-III-A378)               | \$810,358  | \$318,943                              | \$457,773                                   | \$57,463                    |
| Line 49-32<br>(p. WP-III-A411)               | \$1,056,023  | \$387,189                              | \$603,428                                   | \$130,460                   |

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**Data Requests: Regarding SCG-15**

**Question 1d:** In A.16-09-005, the workpapers of Rick Phillips present recorded PSEP cost data in a table denoted “Table 4” for each of the following PSEP projects, Line 41-30-A (p. WP-III-A330), Line 49-14 (p. WP-III-A378), and Line 45-49-32 (p. WP-III-A411). For each of these Table 4s presenting cost data listed previously, please provide the following information:

- d. Provide the associated hours work for each category identified in the previous question.

**SoCalGas Response to Q1d:**

SoCalGas and SDG&E cannot provide a breakout of contract labor hours because some PSEP contracts were invoiced on a time and materials basis while others were bid and invoiced for a discrete scope of work. Because some contractor invoices bill for time, it would be overly burdensome to review the thousands of invoices to estimate the portion of those costs that might be attributed solely to the categories listed in question 1c above. Moreover, the results would be an estimate that cannot be readily validated as accurate. To the extent this request calls for such an overly burdensome review, SoCalGas objects under Rule 10.1 of the Commission’s Rules of Practice and Procedure.

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**Data Requests: Regarding Applicants Response to TURN/SCGC-SEU-001**

**Question 2:** For each of the Excel workbooks that were provided in response to TURN/SCGC-SEU-001, Q.2.c and Q.3.c. and noting that each of these workbooks have a tab labeled “Risk Summary”, please answer the following questions:

- a. Please confirm that each “Risk Summary” sheet reports simulation results.
- b. Using a portion of the risk summary table from L-235 West Section 1 project as an example:

| <b>L-235 West Section 1</b>        |                |                    |            |
|------------------------------------|----------------|--------------------|------------|
| <i>USD</i>                         |                |                    |            |
| <b>Simulation Results</b>          |                |                    |            |
|                                    |                | <b>Accuracy</b>    | <b>Pro</b> |
|                                    |                | <b>% from Mean</b> | <b>W</b>   |
| <b>Unadjusted Cost</b>             | \$ 40,667,372  |                    |            |
| <b>Minimum Cost</b>                | \$ 31,000,571  | -42.21%            | \$ 3       |
| <b>P10 Cost</b>                    | \$ 42,402,139  | -20.95%            | \$ 4       |
| <b>Mean – Adjusted Cost</b>        | \$ 53,640,717  |                    | \$ 5       |
| <b>Probability of Mean</b>         | 56.08%         |                    |            |
| <b>P90 Cost</b>                    | \$ 66,616,048  | 24.19%             | \$ 6       |
| <b>Maximum Cost</b>                | \$ 135,302,454 | 152.24%            | \$ 13      |
| <b>Unallocated Provision</b>       | \$ 12,973,345  |                    |            |
| <b>Unallocated Provision – %UC</b> | 31.90%         |                    |            |
| <b>Number of Iterations</b>        | 10,000         |                    |            |

please confirm that the same table has been calculated for each of the projects and presented on the risk summary worksheet incorporated into each of the project workbooks.

- c. Are these simulations based on a Monte Carlo analysis?
- d. Please describe in detail what data is used in the simulation analysis.
- e. Please state the source of the data used in the simulation analysis.
- f. Is any of the data used in the simulation analysis data extracted from the Applicants’ PSEP projects?
- g. If the answer to the previous question is “yes,” please state which projects are incorporated into the data used for the simulation.
- h. Is the data normalized in any way?
- i. How is the unadjusted cost figure determined?
- j. How is the minimum cost figure determined?
- k. How is the P10 cost figure determined?
- l. How is the mean—adjusted cost figure determined?
- m. How is the maximum cost figure determined?

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**SoCalGas Response 2:**

- a. Confirmed.
- b. Confirmed.
- c. Yes.
- d. The data used in the simulation analysis starts with the capitalized Unadjusted Cost (\$40,667,372). The figures that make up this number can be found on the Estimate worksheet by summing the figures in column S and column T. Column L provides a description for the figures shown in column S and T. The Monte Carlo simulation uses this resultant figure, plus the modifications to costs that were described in the response to TURN-SCGC DR10 question 4a.
- e. See the response to question 2d above.
- f. No.
- g. Not applicable.
- h. No.
- i. Unadjusted costs are costs in the “Estimate” tab which is the sum of column S and column T.
- j. The Monte Carlo simulation utilizes the Lognormal Distribution Curve to set data points that are established during the risk assessment meeting for each project. The minimum cost figure is the .01 percentile.
- k. The P10 cost figure is the 10th percentile cost that is found along Lognormal Distribution Curve utilized in the Monte Carlo simulation base on the cost data input in the Monte Carlo Simulator.
- l. The Mean-Adjusted Cost is the average cost that is the output from the Lognormal Distribution Curve utilized in the Monte Carlo simulation base on the cost data input in the Monte Carlo Simulator.
- m. The P100 or Maximum Cost figure is the 100th percentile cost that is the output in the Lognormal Distribution Curve utilized in the Monte Carlo simulation base on the cost data input and the scope, pricing, productivity and/or duration variables.

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**Question 3:** For each of the Excel workbooks that were provided in response to TURN/SCGC-SEU-001, Q.2.c and Q.3.c. and noting that each of these workbooks have a tab labeled “Estimate”, please answer the following questions:

- a. Please confirm that each of the estimate sheets has a column J that denotes a “Project Summary & WBS” identifier.
- b. Please confirm that each of the estimate sheets has a column U that denotes a “Risk Assessment %”.
- c. Please confirm that for each of the estimate sheets a value of 6D in column J is associated with Engineering Services.
- d. Please confirm that for each of the estimate sheets a value of 6PD in column J is associated with Project Management Services.
- e. Please confirm that for each of the estimate sheets a value of 6CM in column J is associated with Construction Management Services.
- f. Please confirm that for each of the estimate sheets a value of 6E in column J is associated with Environmental Services.
- g. Please confirm that for each of the estimate sheets for the projects 235 West Sections 1 & 2 hydrotests a value of 6D in column J corresponds to a value of 37.6 in column U.
- h. Please confirm that for each of the estimate sheets for the projects 235 West Sections 1 & 2 hydrotests a value of 6P in column J corresponds to a value of 71.3 in column U.
- i. Please confirm that for each of the estimate sheets for the projects 235 West Sections 1 & 2 hydrotests a value of 6CM in column J corresponds to a value of 42.2 in column U.
- j. Please confirm that for each of the estimate sheets for the projects 235 West Sections 1 & 2 hydrotests a value of 6E in column J corresponds to a value of 54.7 in column U.

**SoCalGas Response 3:**

- a. Confirmed.
- b. Confirmed.
- c. Confirmed.
- d. Confirmed.
- e. Confirmed.
- f. Confirmed.
- g. Confirmed, with the understanding that the unit of measure is a percentage (i.e. 37.6%) and not a numeric value.
- h. Confirmed, with the understanding that the unit of measure is a percentage (i.e. 71.3%) and not a numeric value.
- i. Confirmed, with the understanding that the unit of measure is a percentage (i.e. 42.2%) and not a numeric value.
- j. Confirmed, with the understanding that the unit of measure is a percentage (i.e. 54.7%) and not a numeric value.

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**Question 4:** Please print out a copy of each Excel workbook provided to TURN and SCGC in response to TURN-SCGC-SEU-001, Q.2c and TURN-SCGC-SEU-001, Q.3c and provide the printed workbooks organized and bound in a manner similar to Exhibit SCG-15-WP-S-C that was submitted by the Applicants in A.17-03-021.

**SoCalGas Response 4:**

SoCalGas objects to this request on the grounds it (a) is unduly burdensome, (b) seeks duplicative discovery (the identical information was provided in response to TURN-SCGC DR-01), and (c) seeks labor rather than information of a factual nature in contravention of Rule 10.1 of the California Public Utilities Commission's Rules of Practice and Procedure.