

PACIFIC GAS AND ELECTRIC COMPANY
PG&E Ref. DRU14491-Case-EUP-SB 884
Data Request CPUC Safety Policy Division
Requester DR No. PG&E SAP Cost and DOT (SPD-PGE-SB884-013)

Requester: Schmitt, Edwin; Hanes, Fred
Request Date: October 08, 2024
Response Date: October 29, 2024

Definitions:

Indicate: provide a name for the information.

Information: that can include, but is not limited to, a document, project data, cost data, dates, locations, names, etc.

“Summary description”: this should include the information’s name, any PG&E internal reference number for the information, the source of information, the information type, the format of the information and the description of that information.

Question No. 001:

For each step taken in the scoping phase of an undergrounding project described in SPD-PGE-SB884-010 Question 1, including, but not limited to, the steps:

- Order Creation,
- High-Level Feasibility,
- Advanced Authorization,
- Field Scoping Desktop Meeting,
- Segmentation,
- Preliminary Key-Sketch and
- Work Description, Final Scope Approval,

respond to the following:

- a. Indicate the information contained within the Distribution Operations Tool (DOT) for order numbers 35299631, 35329009, 35329010, and 35329011.
- b. Create a summary description for the information indicated in PG&E’s response to Question 1a.
- c. Provide financial information for order numbers 35299631, 35329009, 35329010, and 35329011 using the Analyses for Office (AO) report PROJ002-PS Monthly Detail.
- d. Provide any additional financial information for order numbers 35299631, 35329009, 35329010, and 35329011 that is not captured in PG&E’s response to Question 1c.
- e. Provide an aggregate of the financial information for order numbers 35299631, 35329009, 35329010, and 35329011 for the entire scoping phase.

Response to Question No. 001 Response No. 001:

- a. PG&E is providing sample data from DOT to summarize and provide visibility into the type of information it contains. The DOT consists of over 500 fields of order-level data. Key fields are provided in attachment “*EUP_DR_SPD_013_Q001Atch01CONF.xlsx*” in the following worksheets:

- **DOT Sample** – select data from DOT for each of the four orders
- **Report Sections** – a summary of the major sections provided in the DOT Sample worksheet

Note the following regarding the DOT data provided in this attachment:

- The fields included in this DOT sample are only a subset of the entire database intended to provide focus and to minimize excess columns and sections that are still in progress.
- The DOT is both a data aggregator of various systems (SAP, P6, Salesforce, GIS, etc.) and a work management tool where certain data can only be found in the DOT.
- The DOT is a dynamic database with older data points no longer being captured for newer projects and new data points not captured for older projects. The retirement of older data points and creation of newer data points is driven by internal and external requirement updates, and by the general evolution of work processes.
- The refresh cycle is not the same for all data points in the DOT. Therefore, some data points could be up to a month old or more.

- b. See response to question 1a.

- c. See attachment “*EUP_DR_SPD_013_Q001Atch02CONF.xlsx*” for financial information from AO report PROJ002-PS for each order. The file contains the following worksheets:

- **CE Grouping Definitions** – a grouping of the cost elements used in each of the orders
- **Monthly Detail** – each order’s costs broken down by cost element by month
- **Project Phase Allocation** – summary of each order’s costs broken down by project phases
- **35299631 Workstream Cost** – project costs broken down and summarized by workstream and project phase
- **35329009 Workstream Cost** – project costs broken down and summarized by workstream and project phase
- **35329010 Workstream Cost** – project costs broken down and summarized by workstream and project phase
- **35329011 Workstream Cost** – project costs broken down and summarized by workstream and project phase

Note, there is not a direct correlation between all Workstream costs and Project Phases. The relationship between Workstream costs and Project Phases is described in the table below:

Workstream	Project Phase	Note
Basemaps/Scoping	Basemaps/Scoping	Project Phase costs include distribution of PMO and Overheads costs
Design/Estimating	Design/Estimating	Project Phase costs include distribution of PMO and Overheads costs
Dependency	Dependency	Project Phase costs include distribution of PMO and Overheads costs
Civil Construction	Civil Construction	Project Phase costs include distribution of PMO, Overheads, and Hybrid Construction costs
Electric Construction	Electric Construction	Project Phase costs include distribution of PMO, Overheads, and Hybrid Construction costs
Hybrid Construction	--	Distributed into Civil Construction and Electric Construction Project Phase costs
Project Close-Out	Project Close-Out	Project Phase costs include distribution of PMO and Overheads costs
Materials	Materials	Same in Workstream and Project Phase costs
Overheads	--	Distributed across all Project Phase costs except Materials
PMO	--	Distributed across all Project Phase costs except Materials

- d. The financial information provided in response to subpart c includes all available data for these orders.
- e. Please Reference the “Basemaps/Scoping” line item on the ‘Project Phase Allocation’ worksheet of attachment “EUP_DR_SPD_013_Q001Atch02CONF.xlsx”.

Question No. 002:

For each step taken in the design phase of an undergrounding project described in SPD-PGE-SB884-010 Question 2, including, but not limited to, the steps:

- Project Design,
- Collecting Land Rights Information,
- Producing Drawings,
- Estimating Project Costs

respond to the following:

- a. Indicate the information contained within the Distribution Operations Tool (DOT) for order numbers 35299631, 35329009, 35329010, and 35329011.
- b. Create a summary description for the information indicated in PG&E’s response to Question 1a.
- c. Provide financial information for order numbers 35299631, 35329009, 35329010, and 35329011 using the Analyses for Office (AO)report PROJ002-PS Monthly Detail.
- d. Provide any additional financial information for order numbers 35299631, 35329009, 35329010, and 35329011 that is not captured in PG&E’s response to Question 1c.
- e. Provide an aggregate of the financial information for order numbers 35299631, 35329009, 35329010, and 35329011 for the entire design phase.

Response to Question No. 002 Response No. 001:

- a. See response to question 1a.
- b. See response to question 1a.
- c. See response to question 1c.

- d. See response to question 1d.
- e. Reference the “Design/Estimating” line item on the ‘Project Phase Allocation’ worksheet of attachment “*EUP_DR_SPD_013_Q001Atch02CONF.xlsx*”.

Question No. 003:

For each step taken in the permitting phase of an undergrounding project described in SPD-PGE-SB884-010 Question 3, including, but not limited to, the steps:

- Obtaining an Encroachment Permit,
- Obtaining a Building Permit,
- Obtaining a Grading Permit,
- Obtaining an Environmental Permit,
- Obtaining a Caltrans Permit,
- Obtaining a Railroad Permit,
- Obtaining Easements from Private Landowners,
- Obtaining Easements from Public Landowners, and
- Reviewing Land Rights for the Projects

respond to the following:

- a. Indicate the information contained within the Distribution Operations Tool (DOT) for order numbers 35299631, 35329009, 35329010, and 35329011.
- b. Create a summary description for the information indicated in PG&E’s response to Question 1a.
- c. Provide financial information for order numbers 35299631, 35329009, 35329010, and 35329011 using the Analyses for Office (AO)report PROJ002-PS Monthly Detail.
- d. Provide any additional financial information for order numbers 35299631, 35329009, 35329010, and 35329011 that is not captured in PG&E’s response to Question 1c.
- e. Provide an aggregate of the financial information for order numbers 35299631, 35329009, 35329010, and 35329011 for the entire permitting phase.

Response to Question No. 003 Response No. 001:

- a. See response to question 1a.
- b. See response to question 1a.
- c. See response to question 1c.
- d. See response to question 1d.
- e. Reference the “Dependency” line item on the ‘Project Phase Allocation’ worksheet of attachment “*EUP_DR_SPD_013_Q001Atch02CONF.xlsx*”.

Question No. 004:

For each step taken in the civil construction phase of an undergrounding project described in SPD-PGE-SB884-010 Question 4 including, but not limited to, the steps:

- Mobilization and Yard Setup,
- Soil Sampling
- Layout, Potholing and Saw Cutting
- Trenching
- Installation of the Conduit System and Boxes
- Setting of All Substructures and Pads for Electrical Equipment

- Backfilling of Trench Lines and Temporary Restoration and,
 - Paving and Final Restoration of All Areas Affected by PG&E’s Work,
- respond to the following:

- a. Indicate the information contained within the Distribution Operations Tool (DOT) for order numbers 35299631, 35329009, 35329010, and 35329011.
- b. Create a summary description for the information indicated in PG&E’s response to Question 1a.
- c. Provide financial information for order numbers 35299631, 35329009, 35329010, and 35329011 using the Analyses for Office (AO)report PROJ002-PS Monthly Detail.
- d. Provide any additional financial information for order numbers 35299631, 35329009, 35329010, and 35329011 that is not captured in PG&E’s response to Question 1c.
- e. Provide an aggregate of the financial information for order numbers 35299631, 35329009, 35329010, and 35329011 for the entire civil construction phase.

Response to Question No. 004 Response No. 001:

- a. See response to question 1a.
- b. See response to question 1a.
- c. See response to question 1c.
- d. See response to question 1d.
- e. Reference the “Civil Construction” line item on the ‘Project Phase Allocation’ worksheet of attachment “*EUP_DR_SPD_013_Q001Atch02CONF.xlsx*”.

Question No. 005:

For each step taken in the electric construction phase of an undergrounding project described in SPD-PGE-SB884-010 Question 4 including, but not limited to, the steps:

- Pull the Electric Cable through the Conduit,
- Splice Segments Together,
- Re-Connect the Customers to the New Underground System,
- Mobilization and Yard Setup,
- Pole Hole Excavation and Pole Setting
- Installation of Equipment
- Obtain Clearances to Energize New System and De-Energize Existing System and,
- Wreck Out of Replaced Facilities,

respond to the following:

- a. Indicate the information contained within the Distribution Operations Tool (DOT) for order numbers 35299631, 35329009, 35329010, and 35329011.
- b. Create a summary description for the information indicated in PG&E’s response to Question 1a.
- c. Provide financial information for order numbers 35299631, 35329009, 35329010, and 35329011 using the Analyses for Office (AO)report PROJ002-PS Monthly Detail.
- d. Provide any additional financial information for order numbers 35299631, 35329009, 35329010, and 35329011 that is not captured in PG&E’s response to Question 1c.
- e. Provide an aggregate of the financial information for order numbers 35299631, 35329009, 35329010, and 35329011 for the entire electric construction phase.

Response to Question No. 005 Response No. 001:

- a. See response to question 1a.
- b. See response to question 1a.
- c. See response to question 1c.
- d. See response to question 1d.
- e. Reference the “Electric Construction” line item on the ‘Project Phase Allocation’ worksheet of attachment “*EUP_DR_SPD_013_Q001Atch02CONF.xlsx*”.

Question No. 006:

For each step taken in the project management tasks of the construction phase of an undergrounding project described in SPD-PGE-SB884-010 Question 4 including, but not limited to, the steps:

- Safety Management,
- Stakeholder Management and Customer Communication,
- Cost Management,
- Schedule Management,
- Procurement Management and,
- Quality Management,

respond to the following:

- a. Indicate the information contained within the Distribution Operations Tool (DOT) for order numbers 35299631, 35329009, 35329010, and 35329011.
- b. Create a summary description for the information indicated in PG&E’s response to Question 1a.
- c. Provide financial information for order numbers 35299631, 35329009, 35329010, and 35329011 using the Analyses for Office (AO)report PROJ002-PS Monthly Detail.
- d. Provide any additional financial information for order numbers 35299631, 35329009, 35329010, and 35329011 that is not captured in PG&E’s response to Question 1c.
- e. Provide an aggregate of the financial information for order numbers 35299631, 35329009, 35329010, and 35329011 for the entire project management tasks of the construction phase.

Response to Question No. 006 Response No. 001:

- a. See response to question 1a.
- b. See response to question 1a.
- c. See response to question 1c.
- d. See response to question 1d.
- e. Because project management responsibilities are required throughout the duration of the project, the project management costs are distributed amongst the other project phases.

Question No. 007:

For each step taken in post-construction phase of an undergrounding project described in SPD-PGE-SB884-010 Question 5 including, but not limited to, the steps:

- Pre-mapping,
- As-built package mapping and,
- Financial order closure,

respond to the following:

- a. Indicate the information contained within the Distribution Operations Tool (DOT) for order numbers 35299631, 35329009, 35329010, and 35329011.
- b. Create a summary description for the information indicated in PG&E’s response to Question 1a.
- c. Provide financial information for order numbers 35299631, 35329009, 35329010, and 35329011 using the Analyses for Office (AO)report PROJ002-PS Monthly Detail.
- d. Provide any additional financial information for order numbers 35299631, 35329009, 35329010, and 35329011 that is not captured in PG&E’s response to Question 1c.
- e. Provide an aggregate of the financial information for order numbers 35299631, 35329009, 35329010, and 35329011 for the entire post-construction phase.

Response to Question No. 007 Response No. 001:

- a. See response to question 1a.
- b. See response to question 1a.
- c. See response to question 1c.
- d. See response to question 1d.
- e. Reference the “Project Close-Out” line item on the ‘Project Phase Allocation’ worksheet of attachment “*EUP_DR_SPD_013_Q001Atch02CONF.xlsx*”.

Question No. 008:

Produce a process map that explains how decisions are made within each of the steps listed in each phase described in SPD-PGE-SB884-010 Questions 1-5.¹ Indicate the key documents listed in SPD-PGE-SB884-005 DRU14086_Q01_Atch01_SB884_CONF.xlsx that inform the decisions within the process map and include them in a compressed zip file. Use the following folder hierarchy to organize the zip file:

- a. Order number (35299631, 35329009, 35329010, and 3532901)
- b. Source (SAP and EDRS)
- c. Document Type (i.e., SAP-Estimate Package and EDRS-Business Case)

Response to Question No. 008 Response No. 001:

See attachment “*EUP_DR_SPD_013_Q008Atch01.pdf*” for the System Hardening Process Map. The process map includes control points that are correlated to the phases in Table 1 below. Table 3 is an inventory of the documents provided for each order. Note that this process map is a living document that will be iterated on and updated.

Table 1 below also indicates the key documents related to each project phase. These documents are included in attachment “*EUP_DR_SPD_013_Q008Atch02CONF.zip*” using the folder structure requested. Table 2 provides a description of each of the document types.

¹ The details and purpose of the process map were discussed with SPD during a follow-up meeting to discuss this data request on October 14, 2024.

Table 1: System Hardening Project Phase Key Documents

Phase	Key Document(s)	Process Map Control Point
Scoping	<ul style="list-style-type: none"> Advanced Authorization Design Basis Memorandum 	C1 C2
Estimating	<ul style="list-style-type: none"> Construction Package 	C4
Permitting/Dependency	<ul style="list-style-type: none"> Business Case Construction Package 	C3 C4
Civil/Electric Construction	<ul style="list-style-type: none"> As-Built Package 	C5
Post-Construction	<ul style="list-style-type: none"> Fire Risk Safety Audit Standards Audit 	C6 C7

Table 2: Key Document Descriptions

Document	Description
Advanced Authorization (AA)	Describes high level scope of work and approves initial funding for planning/pre-construction activities (Scoping, Estimating/Design, Dependencies)
Design Basis Memorandum (DBM)	Contains detail scope documents including basemap
Construction Package	Aggregated set of final pre-construction documents: <ul style="list-style-type: none"> Circuit Map Change Sheet (CMCS) Construction Drawings Crew Instructions Estimate of Labor and Materials Signed Land/Environmental/Permit documents approving the work Any other relevant project documents
Business Case	Formal request for project costs through completion including key milestone dates on the project schedule.
As-Built Package	Redline of Construction Package including field changes to design including signature of construction foreman.
Fire Risk Safety Audit	Program-specific audit to inspect completed and energized projects for all fire risk safety items. Project must pass this audit for miles to count in the program. Re-work may be required to pass audit.
Standards Audit	General audit for standard adherence and workmanship, and document completion. Re-work may be required to pass audit.

Table 3: Document Inventory

Order	Design Basis Memorandum (DBM)	Advanced Authorization (AA)	Construction Package	Business Case	As Built Package*	Fire Safety Audit	Standards Audit
35299631	X	X	X	X	Not Yet Complete	X	X
35329009	Included in 35299631	Included in 35299631	X	X	Not Yet Complete	X	X
35329010	Included in 35299631	Included in 35299631	X	X	Not Yet Complete	X	X
35329011	Included in 35299631	Included in 35299631	X	X	Not Yet Complete	X	X

*As-Built Package are recorded after an order's construction is completed; the orders in this table are in construction as of the date of the response