INDICATED SHIPPER DATA REQUEST
IS-SCG-008
SOCALGAS 2019 GRC – A.17-10-008
SOCALGAS RESPONSE
DATE RECEIVED: APRIL 5, 2018
DATE RESPONDED: APRIL 25, 2018

8-1. In response to IS-SCG 1-6, SoCalGas provided the excel versions of many of the workpapers supporting its filing. Referring specifically to SCG-36-WP-R Revised Excel-based WPs.xlsx and SCG-44-WP-R_JMalik_ PTY_ Workpaper.xlsx, please provide versions of these workpapers with all formulas and links intact.

SoCalGas Responses 8-1:

Please see attachment "SCG-36-WP-R Revised Excel-based WPs.xlsx".

SoCalGas assumes that the question, that was asked before the April 6, 2018 Revised Testimony was served, would prefer the latest Revised Workpapers rather than the "SCG-44-WP-R" as suggested. With that assumption, SoCalGas is attaching workpapers "SCG-44-WP-2R_JMalik_ PTY.xlsx".

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8-2. Please provide fully functional workpapers that allow for the measurement of the 2019 GRC revenue requirement for all capital expenditures by functional category as included in the 2019 GRC Rate Base. Additionally, please provide fully functional workpapers that develop revenue requirements by functional area for all capital expenditures and expenses projected for the four year 2019 GRC cycle.

SoCalGas Responses 8-2:

Fully functional workpapers that allow for the measurement of the 2019 GRC revenue requirement for capital expenditures by functional category do not exist. The Results of Operations (RO) Model calculates the capital-related revenue requirement (depreciation, taxes, and return) at a company level. The RO Model is ***Confidential and Protected Materials Pursuant to PUC Section 583, GO 66-D, and D.17-09-023***, which is provided in response to Question 8-6 pursuant to Indicated Shippers' signed non-disclosure certificates under the Protective Order.

SoCalGas objects to the portion of this question requesting forecasts beyond Test Year 2019 under Rule 10.1 of the Commission's Rules of Practice and Procedure to the extent it seeks the production of information that does not exist, as it is outside the scope of this GRC proceeding. Subject to and without waiving the foregoing objection, SoCalGas responds as follows:
SoCalGas' filed application follows the Rate Case Plan, which identifies forecasts for a Test Year of 2019 [Rate Case Plan D.07-07-004, July 12th, 2007 at A-34]. SoCalGas has not forecasted for any period beyond 2019, which is addressed by the attrition mechanism.

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8 Please refer to the Capital Workpaper of Elizabeth Musich at page 118, regarding the Blythe Compressor Project Phase 1. Please provide the detailed workpaper/cost model, in a fully functional format, utilized to develop the $48 million cost of this project for 2017-2019.

SoCalGas Response 8-3:

The following table provides a summary of the preliminary cost estimate for the scope comprising Phase 1 and Phase 2 of the Blythe Compressor Replacement project. The cost estimate supporting this summary was developed in consultation with an engineering services company engaged for the purpose of scoping and estimating the replacement of select assets at the Blythe Compressor Station. The cost estimate represents what was known at the time the forecasts were developed. Project costs are provided in 2016 direct dollars.

	Blythe Compressor Replacement Project						
		Cost					Total Cost
	Project Scope	2017	2018	2019	2020	2021	
	PHASE 1 - Roll Up Totals	24000	20000	4000			48000
PHASE 1	Generators	12000	3000	3000			12000
	Cooling towers	8000	8500	500			17500
	underground/above ground piping	4000	8500	500			13500
	PHASE 2 - Roll Up Totals	10000	64000	100000			174000
PHASE 2	New Plant 4 - Turbines (2)	1500	16000	5000			22500
	Plant 2 Clark Compressor Overhauls	500	3000	19000			22500
	Buildings- Plant 4, E/I Building	500	5000	6000			11500
	I/C equipment	1000	15000	22000			38000
	Electrical Instrumentation	500	7000	15000			22500
	Bulk	2000	6000	19000			27000
	Auxilary Equipment	4000	12000	9000			25000
	Commisioning/Startup			5000			5000

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8-4. Please refer to the Capital Workpaper of Elizabeth Musich at page 119, regarding the Blythe Compressor Project Phase 2. Please provide a detailed workpaper/cost model, in a fully functional format, utilized to develop the $174 million cost of this project for 2017-2019.

SoCalGas Response 8-4:

See Response 8-3 above.

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8-5. Please provide all workpapers in complete electronic format, with all formulas and links intact, which support the testimony of Khai Nguyen, SCG-43-R.

SoCalGas Responses 8-5:

Ryan Hom adopted the Summary of Earnings revised direct testimony of Khai Nguyen (Exhibit SCG-43-R) and further revised it in the second revised testimony (Exhibit SCG-43-2R) served on April 6, 2018, which included the impact of the recently enacted Tax Jobs and Cuts Act (TJCA). All electronic workpapers supporting Exhibit SCG-43-2R can be found in the Results of Operations Model.

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8-6. Please provide a fully functional copy of SoCalGas's Results of Operations Model.

SoCalGas Responses 8-6:

A fully functional copy of the SoCalGas Results of Operations Model is separately provided as ***Confidential and Protected Materials Pursuant to PUC Section 583, GO 66-D, and D.17-09-023***, pursuant to Indicated Shippers' signed non-disclosure certificates under the Protective Order.

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DATE RECEIVED: APRIL 5, 2018
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8-7. Please refer to SoCalGas's responses Indicated Shipper's requests 3.1, 3.3, 3.4, and 4.4, regarding four RAMP related projects sponsored by the testimony of Maria Martinez, specifically at parts c. and d. of these responses.

a. Please explain at what level of detail SoCalGas forecasts its labor and non-labor expenses.

b. Please provide a step-by-step detailed explanation of the "several processes and components" that were utilized to determine the costs estimates presented.

SoCalGas Responses 8-7:

a. SoCalGas forecasts the direct costs of labor and nonlabor in those categories only; everything that is not labor is classified as 'nonlabor.' This is derived by several means: historical averages or trends, by using the 2016 'base year,' or by some other method using values such as unit cost and volume or representative like-kind similar work.

A factor of 16.95% is added to direct labor to represent vacation and sick leave expense (V&S). Overhead values for pension, benefits and the like are added in the Results of Operations (RO) modeling, downstream of the individual witness' testimonies.

While historical components for labor and nonlabor such as straight time, overtime, materials and supplies might be used as forecasting inputs, only the general categories of labor and nonlabor are produced in forecasts.

b. Please also see the response to part a of this question. The original question's part d requested the capital cost model used, and may have assumed that the model is a spreadsheet. The principal model is a database, called GRID (see more description below) consisting of many tables and process 'modules.' The processes and components can be described as follows:

- Historical information for the previous 5 years (2012-2016) is extracted from SoCalGas' general ledger accounting system, SAP, an enterprise-wide accounting application used by many firms.
- That data is prepared in a database 'cube' (an SAP term to describe datasets used by that application) for subsequent use in preparing GRC forecasts and workpapers.
- That data 'cube' is used to populate the GRC forecasting database and application called 'GRID.' GRID consists of many tables and modules created using Microsoft SQL Server, Microsoft Visual Studio and Crystal Reports. SQL Server is an enterprise level application and does not reside on individual workstations. Visual Studio and Crystal Reports are used to craft the user-interface and the reports produced from GRID. Several of those reports are what constitute many of the GRC workpapers; although portions of them appear in tabular format, they are not derived from spreadsheets and do not contain formulae.
- For capital forecasting purposes, witnesses categorize budgets or projects into groups to be handled in similar fashion, these are called 'Workpaper Groups.'

SoCalGas Responses 8-7 Continued:

- Witnesses review and make necessary adjustments to the historical data to prepare it for forecasting. For capital forecasting, these adjustments are normally made to further group similar project budgets together.
- Witnesses then select an appropriate forecast methodology such as a 3-, 4- or 5-year average, a 3-, 4- or 5-year linear trend, the 'base year' (a CPUC Rate Case Plan term, meaning the most recently completed year prior to filing of the GRC application, in this case 2016), or some other method collectively called 'zero-base.' A zero-based method may consist of a unit-cost-times-volume process, the use of similar like-kind work as a model, or some other derivation that is not an average, trend or base-year process.
- Having selected a forecast methodology, witnesses than make adjustments to the forecast to account for predicted increases or decreases in the forecast years, such as for a planned ramp-up of a new activity or winding-down of another, or to add new project descriptions. In the case of capital work, this also consists of estimating monthly expenses over the course of project construction and an in-service (or Notice of Operation, NOP) date. In the case of routine (or blanket) budgets, which consist of a collection of many small, like-kind projects such as construction of residential mains and service lines, the monthly forecasting is often a consistent spend throughout the year, and will continue in that manner from year-to-year. In the case of individual, large (specific) projects such as a compressor station rebuild, the monthly expenses will vary significantly from month to month through the life of the project, and will culminate with an in-service date.
- Witnesses will review that forecast information, which will then be used in the RO modeling processes (SCG-43-2R, testimony Ryan Hom) . In the case of capital forecasts, the information is passed to the 'ratebase' model (RO model module) to estimate the capital overheads and ratebase impacts of the planned capital work. Once complete, that data is then used to calculate the capital-related costs (tax, depreciation, return) that are included in the Summary of Earnings revenue requirement forecast (SCG-43-2R) as required by the CPUC Rate Case Plan.
- The GRID application also produces the workpaper volumes for witness areas whose forecasts were prepared using the GRID application.

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SOCALGAS RESPONSE
DATE RECEIVED: APRIL 5, 2018
DATE RESPONDED: APRIL 23, 2018

8-8. Please refer to SoCalGas's responses Indicated Shipper's requests 3.2, 3.6, 3.7, 4.1, 4.2, and 4.3, regarding six RAMP related projects sponsored by the testimony of Neil Navin, specifically at parts c. and d. of these responses.

a. Please explain at what level of detail SoCalGas forecasts its labor and non-labor expenses.

b. Please provide a step-by-step detailed explanation of the "several processes and components" that were utilized to determine the costs estimates presented.

c. The responses to part d suggests that additional detail of forecasted unit cost and activity in Mr. Navin's Capital Workpapers. Please identify the exact locations in Mr. Navin's workpaper that provide any detail on unit costs associated with these six projects.

SoCalGas Responses 8-8:

a. SoCalGas forecasts the direct costs of labor and nonlabor in those categories only, everything that is not labor is classified as 'nonlabor'. This is derived by several means: historical averages or trends, by using the 2016 'base year', or by some other method using values such as unit cost and volume or representative like-kind similar work.

A factor of 16.95% is added to direct labor to represent vacation and sick leave expense (V&S). Overhead values for pension, benefits and the like are added in the Results of Operations (RO) modeling, downstream of the individual witness testimonies.

While historical components for labor and nonlabor such as straight time, overtime, materials and supplies might be used as forecasting inputs, only the general categories of labor and nonlabor are produced in forecasts.

b. Please also see the response to part a of this question. The original question's part d requested the capital cost model used, and may have assumed that the model is a spreadsheet. The principal model is a database, called GRID (see more description below) consisting of many tables and process 'modules'. The processes and components can be described as follows:

- Historical information for the previous 5 years (2012-2016) is extracted from SoCalGas' general ledger accounting system, SAP, an enterprise-wide accounting application used by many firms.
- That data is prepared in a database 'cube' (an SAP term to describe datasets used by that application) for subsequent use in preparing GRC forecasts and workpapers.
- That data 'cube' is used to populate the GRC forecasting database and application called 'GRID.' GRID consists of many tables and modules created using Microsoft SQL Server, Microsoft Visual Studio and Crystal Reports. SQL Server is an enterprise level application and does not reside on individual workstations. Visual Studio and Crystal Reports are used to craft the user-interface and the reports produced from GRID. Several of those reports are what constitute many of the GRC workpapers, although portions of them appear in tabular format, they are not derived from spreadsheets and do not contain formulae.

SoCalGas Responses 8-8:-Continued

- For capital forecasting purposes, witnesses categorize budgets or projects into groups to be handled in similar fashion, these are called 'Workpaper Groups.'
- Witnesses review and make necessary adjustments to the historical data to prepare it for forecasting. For capital forecasting, these adjustments are normally made to further group similar project budgets together.
- Witnesses then select an appropriate forecast methodology such as a 3-, 4- or 5-year average, a 3-, 4- or 5-year linear trend, the 'base year' (a CPUC Rate Case Plan term, meaning the most recently completed year prior to filing of the GRC application, in this case 2016), or some other method collectively called 'zero-base'. A zero-based method may consist of a unit-cost-times-volume process, the use of similar like-kind work as a model, or some other derivation that is not an average, trend or base-year process.
- Having selected a forecast methodology, witnesses than make adjustments to the forecast to account for predicted increases or decreases in the forecast years, such as for a planned ramp-up of a new activity or winding-down of another, or to add new project descriptions. In the case of capital work, this also consists of estimating monthly expenses over the course of project construction and an in-service (or Notice of Operation, NOP) date. In the case of routine (or blanket) budgets, which consist of a collection of many small, like-kind projects such as construction of residential mains and service lines, the monthly forecasting is often a consistent spend throughout the year, and will continue in that manner from year-to-year. In the case of individual, large (specific) projects such as a compressor station rebuild, the monthly expenses will vary significantly from month to month through the life of the project, and will culminate with an in-service date.
- Witnesses will review that forecast information, which will then be used in the RO modeling processes (SCG-43-2R, testimony Ryan Hom). In the case of capital forecasts, the information is passed to the 'ratebase' model (RO model module) to estimate the capital overheads and ratebase impacts of the planned capital work. Once complete, that data is then used to calculate the capital-related costs (tax, depreciation, return) that are included in the Summary of Earnings revenue requirement forecast (SCG-43-2R) as required by the CPUC Rate Case Plan.
- The GRID application also produces the workpaper volumes for witness areas whose forecasts were prepared using the GRID application.

c. Exhibit No. SCG-10-CWP-R provides labor and non-labor forecasted expenses for the projects referenced in Indicated Shippers requests 3.2, 3.6, 3.7, 4.1, 4.2, and 4.3. The exact pages are noted below. Available detail on forecasted unit cost and activity is in the Capital Workpapers of each respective project within the Forecast Methodology section, Non-Labor – Zero-Based description sections.

Request	**SCG-10-CWP-R Pages**
3.2 RSIMP – Inspection/Return to Operation	154-155, 157
3.6 Well Replacements	26-27, 29
3.7 Well Plug & Abandon	32-33, 35
4.1 Well Workovers	46-47, 49
4.2 Well Plug & Abandon - Accelerated	37
4.3 Aliso Pipe Bridge Replacement	75-76, 78

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SOCALGAS RESPONSE
DATE RECEIVED: APRIL 5, 2018
DATE RESPONDED: APRIL 23, 2018

8-9. Please refer to SoCalGas's response to Indicated Shipper's request 4.6 parts c. and d.

a. Please explain at what level of detail SoCalGas forecasts its labor and non-labor expenses.

b. Please provide a step-by-step detailed explanation of the "several processes and components" that were utilized to determine the costs estimates presented.

SoCalGas Responses 8-9:

a. SoCalGas forecasts the direct costs of labor and nonlabor in those categories only; everything that is not labor is classified as 'nonlabor.' This is derived by several means: historical averages or trends, by using the 2016 'base year,' or by some other method using values such as unit cost and volume or representative like-kind similar work.

A factor of 16.95% is added to direct labor to represent vacation and sick leave expense (V&S). Overhead values for pension, benefits and the like are added in the Results of Operations (RO) modeling, downstream of the individual witness' testimonies.

While historical components for labor and nonlabor such as straight time, overtime, materials and supplies might be used as forecasting inputs, only the general categories of labor and nonlabor are produced in forecasts.

b. Please also see the response to part a of this question. The original question's part d requested the capital cost model used, and may have assumed that the model is a spreadsheet. The principal model is a database, called GRID (see more description below) consisting of many tables and process 'modules.' The processes and components can be described as follows:

- Historical information for the previous 5 years (2012-2016) is extracted from SoCalGas' general ledger accounting system, SAP, an enterprise-wide accounting application used by many firms.
- That data is prepared in a database 'cube' (an SAP term to describe datasets used by that application) for subsequent use in preparing GRC forecasts and workpapers.
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- For capital forecasting purposes, witnesses categorize budgets or projects into groups to be handled in similar fashion, these are called 'Workpaper Groups.'
- Witnesses review and make necessary adjustments to the historical data to prepare it for forecasting. For capital forecasting, these adjustments are normally made to further group similar project budgets together.

SoCalGas Responses 8-9:-Continued

- Witnesses then select an appropriate forecast methodology such as a 3-, 4- or 5-year average, a 3-, 4- or 5-year linear trend, the 'base year' (a CPUC Rate Case Plan term, meaning the most recently completed year prior to filing of the GRC application, in this case 2016), or some other method collectively called 'zero-base.' A zero-based method may consist of a unit-cost-times-volume process, the use of similar like-kind work as a model, or some other derivation that is not an average, trend or base-year process.
- Having selected a forecast methodology, witnesses than make adjustments to the forecast to account for predicted increases or decreases in the forecast years, such as for a planned ramp-up of a new activity or winding-down of another, or to add new project descriptions. In the case of capital work, this also consists of estimating monthly expenses over the course of project construction and an in-service (or Notice of Operation, NOP) date. In the case of routine (or blanket) budgets, which consist of a collection of many small, like-kind projects such as construction of residential mains and service lines, the monthly forecasting is often a consistent spend throughout the year, and will continue in that manner from year-to-year. In the case of individual, large (specific) projects such as a compressor station rebuild, the monthly expenses will vary significantly from month to month through the life of the project, and will culminate with an in-service date.
- Witnesses will review that forecast information, which will then be used in the RO modeling processes (SCG-43-2R, testimony Ryan Hom) . In the case of capital forecasts, the information is passed to the 'ratebase' model (RO model module) to estimate the capital overheads and ratebase impacts of the planned capital work. Once complete, that data is then used to calculate the capital-related costs (tax, depreciation, return) that are included in the Summary of Earnings revenue requirement forecast (SCG-43-2R) as required by the CPUC Rate Case Plan.
- The GRID application also produces the workpaper volumes for witness areas whose forecasts were prepared using the GRID application.

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DATE RECEIVED: APRIL 5, 2018
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8-10. Please refer to SoCalGas's response to Indicated Shipper's request 4.7 parts c. and d.

a. Please explain at what level of detail SoCalGas forecasts its labor and non-labor expenses.

b. Please provide a step-by-step detailed explanation of the "several processes and components" that were utilized to determine the costs estimates presented.

SoCalGas Responses 8-10:

a. SoCalGas forecasts the direct costs of labor and nonlabor in those categories only, everything that is not labor is classified as 'nonlabor'. This is derived by several means: historical averages or trends, by using the 2016 'base year', or by some other method using values such as unit cost and volume or representative like-kind similar work.

A factor of 16.95% is added to direct labor to represent vacation and sick leave expense (V&S). Overhead values for pension, benefits and the like are added in the Results of Operations (RO) modeling, downstream of the individual witness' testimonies.

While historical components for labor and nonlabor such as straight time, overtime, materials and supplies might be used as forecasting inputs, only the general categories of labor and nonlabor are produced in forecasts.

b. Please also see the response to part a of this question. The original question's part d requested the capital cost model used, and may have assumed that the model is a spreadsheet. The principal model is a database, called GRID (see more description below), consisting of many tables and process 'modules.' The processes and components can be described as follows:

- Historical information for the previous 5 years (2012-2016) is extracted from SoCalGas' general ledger accounting system, SAP, an enterprise-wide accounting application used by many firms.
- That data is prepared in a database 'cube' (an SAP term to describe datasets used by that application) for subsequent use in preparing GRC forecasts and workpapers.
- That data 'cube' is used to populate the GRC forecasting database and application called 'GRID.' GRID consists of many tables and modules created using Microsoft SQL Server, Microsoft Visual Studio and Crystal Reports. SQL Server is an enterprise level application and does not reside on individual workstations. Visual Studio and Crystal Reports are used to craft the user-interface and the reports produced from GRID. Several of those reports are what constitute many of the GRC workpapers; although portions of them appear in tabular format, they are not derived from spreadsheets and do not contain formulae.
- For capital forecasting purposes, witnesses categorize budgets or projects into groups to be handled in similar fashion, these are called 'Workpaper Groups.'
- Witnesses review and make necessary adjustments to the historical data to prepare it for forecasting. For capital forecasting, these adjustments are normally made to further group similar project budgets together.

SoCalGas Responses 8-10 Continued:

- Witnesses then select an appropriate forecast methodology such as a 3-, 4- or 5-year average, a 3-, 4- or 5-year linear trend, the 'base year' (a CPUC Rate Case Plan term, meaning the most recently completed year prior to filing of the GRC application, in this case 2016), or some other method collectively called 'zero-base.' A zero-based method may consist of a unit-cost-times-volume process, the use of similar like-kind work as a model, or some other derivation that is not an average, trend or base-year process.
- Having selected a forecast methodology, witnesses than make adjustments to the forecast to account for predicted increases or decreases in the forecast years, such as for a planned ramp-up of a new activity or winding-down of another, or to add new project descriptions. In the case of capital work, this also consists of estimating monthly expenses over the course of project construction and an in-service (or Notice of Operation, NOP) date. In the case of routine (or blanket) budgets, which consist of a collection of many small, like-kind projects such as construction of residential mains and service lines, the monthly forecasting is often a consistent spend throughout the year, and will continue in that manner from year-to-year. In the case of individual, large (specific) projects such as a compressor station rebuild, the monthly expenses will vary significantly from month to month through the life of the project, and will culminate with an in-service date.
- Witnesses will review that forecast information, which will then be used in the RO modeling processes (SCG-43-2R, testimony Ryan Hom). In the case of capital forecasts, the information is passed to the 'ratebase' model (RO model module) to estimate the capital overheads and ratebase impacts of the planned capital work. Once complete, that data is then used to calculate the capital-related costs (tax, depreciation, return) that are included in the Summary of Earnings revenue requirement forecast (SCG-43-2R) as required by the CPUC Rate Case Plan.
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8-11. Please refer to the excel version of the Rate Base workpaper provided as "SCG-35-WP-R_PMoersen_Excel-Based_WP.xlsx" in response to IS-SCG-1.6.

a. On the tab titled "SCG-35-WP-R Section II, e" column E provides an identifier for each project as either Routine or Non-Routine. Please explain how these Non-Routine projects influences the Post Test Year Capital Expenditures.

b. Please provide SoCalGas's reasoning for including non-routine capital expenditures that occur in 2017-2019 in the five year average that is used to determine the PTY capital expenditures.

SoCalGas Responses 8-11:

8-11a The capital additions related to both the routine and non-routine projects are included as part of the five year average capital additions.

8-11b Non-routine projects are projects with specific in-service dates, while routine projects are projects that are projected to close to plant in-service based on historical trend. Certain projects may have been identified as non-routine in witness Patrick Moersen's workpapers, however, there is a recurring nature for those non-routine projects. As shown in witness Jawaad Malik's workpapers (page 14 of 16), the 2015 and 2016 historical capital additions excluded capital additions that are either outside of the scope of the 2019 General Rate Case (e.g., Pipeline Safety Enhancement Plan capital additions that are subject to reasonableness reviews) or are truly non-recurring in nature (e.g., Advanced Metering Infrastructure capital additions). As shown in the actuals, non-routine adds happen every year and therefore a history of non-routine adds over time, in this case 5 years, acts as a reasonable predictor of future adds. While the specific adds in each year may be non-routine, the fact that non-routine occurs in each year shows that a five year average of non-routine should be included in the ask.

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8-11. Please refer to the excel version of the Rate Base workpaper provided as "SCG-35-WP-R_PMoersen_Excel-Based_WP.xlsx" in response to IS-SCG-1.6.

c. Please provide a version of this document with all formulas and links intact.

d. Please provide all of the workpapers taken directly from the RO model that are identified in the RO Mapping Column of the tab titled "SCG-35-WP-R_Excel-Based-WP," with all formulas and links intact.

SoCalGas Responses 8-11:

c. This workpaper is copied from the RO model. Please refer to the response to Question 8-6.

d. This workpaper is copied from the RO model. Please refer to the response to Question 8-6.

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SOCALGAS RESPONSE
DATE RECEIVED: APRIL 5, 2018
DATE RESPONDED: APRIL 26, 2018

SoCalGas Question 8-12.

Please refer to SoCal Gas's response to IS-SCG-5.2. f. The instructions provided in this illustrative example do not result in the split of O&M and Capital for this project as presented in the PSEP supplemental workpaper, nor can the procedure be utilized to determine the O&M and Capital splits for any other PSEP pressure test project identified in IS-SCG-5. Please provide workbooks for each of the PSEP Pressure Test projects identified in IS-SCG-5.1 through IS-SCG-5.11 that shows the exact calculations performed to determine the split between O&M costs and Capital Costs as they are presented on page 29 of the Supplemental PSEP workpaper, SCG-15-WPS.

SoCalGas Responses 8-12:

The exact calculations starting at WP-I-A19 to determine the split between O&M and Capital Costs are represented in the following manner.

Project Costs – O&M	Prior to 2018*	2018	2019	2020	2021	Total
DIRECT LABOR	$3,481	$0	$0	$850,520	$0	$854,001
DIRECT NON-LABOR	$101,177	$0	$0	$24,723,629	$0	$24,824,806
TOTAL DIRECT COSTS	$104,658	$0	$0	$25,574,149	$0	$25,678,807
Total O&M Costs	$104,658	$0	$0	$25,574,149	$0	$25,678,807

* Actual costs incurred associated with planning and engineering design work are included in the project cost estimates.

Project Costs – Capital	Prior to 2018*	2018	2019	2020	2021	Total
DIRECT LABOR	$1,567	$0	$0	$370,288	$0	$371,855
DIRECT NON-LABOR	$45,547	$0	$0	$10,763,850	$0	$10,809,397
TOTAL DIRECT COSTS	$47,114	$0	$0	$11,134,138	$0	$11,181,252
Total Capital Costs	$47,114	$0	$0	$11,134,138	$0	$11,181,252

* Actual costs incurred associated with planning and engineering design work are included in the project cost estimates.

Total Project Costs	Prior to 2018*	2018	2019	2020	2021	Total
DIRECT LABOR	$5,048	$0	$0	$1,220,808	$0	$1,225,856
DIRECT NON-LABOR	$146,724	$0	$0	$35,487,479	$0	$35,634,203
TOTAL DIRECT COSTS	$151,772	$0	$0	$36,708,287	$0	$36,860,059
Total Costs**	$151,772	$0	$0	$36,708,287	$0	$36,860,059

The calculations can be found on the "WOA" Recap Worksheet within "IS-DR-05 Q02f CONFIDENTIAL 235 W Sec 2 Ph2 Stage 3 Est 05-08-17_redacted" estimate. The "PLANT," in column B, plus the "ABD," in column C, is equal to the "Project Costs-Capital" match the workpaper's split of O&M and Capital.

INDICATED SHIPPER DATA REQUEST
IS-SCG-008
SOCALGAS 2019 GRC – A.17-10-008
SOCALGAS RESPONSE
DATE RECEIVED: APRIL 5, 2018
DATE RESPONDED: APRIL 26, 2018

SoCalGas Responses 8-12: -Continued

	A	B	C	D	E
1	L-235 West Section 2				
2					
3					
4	WO# 0	Total Sheet		Includes GMA/PMO	
5					
6	WR#				
7	ELEMENTS OF	TOTAL	TOTAL	TOTAL	TOTAL EST.
8	ESTIMATED COSTS	PLANT	ABD.	O&M	COSTS
9					
10					
11	Miles	20.41	0.00	0.00	
12	**LENGTH OF PIPE (in feet)**	107,768			
13	CONTRACT COSTS	$ 5,345,411	$ -	$ 15,871,231	$ 21,216,641
14	COMPANY LABOR	$ 274,599	$ -	$ 1,007,721	$ 1,282,320
15	**TOTAL COMPANY LABOR &**				
16	**CONTRACT COST**	$ 5,620,010	$ -	$ 16,878,952	$ 22,498,962
17					
18	PIPE COSTS				
19	OTHER STORES MATERIAL				
20	PURCHASED MATERIAL	$ 455,650	$ -	$ -	$ 455,650
21	PURCHASED SERVICES	$ 3,147,351	$ 1,846,045	$ 8,705,807	$ 13,699,203
22	PAVING	$ -	$ -	$ -	$ -
23	PERMITS	$ 28,318	$ -	$ 98,112	$ 126,429
24	OTHER DIRECT COSTS	$ 83,879	$ -	$ -	$ 83,879
25					
26	**TOTAL DIRECT COSTS**	$ 9,335,208	$ 1,846,045	$ 25,682,871	$ 36,864,123

The Calculations are as follows:
Cell "B26" + "C26" (as located in the WOA Recap worksheet) = $11,181,253 Capital Expenditures
Cell "D26" = $25,682,871 O&M Expenditures
The calculation for cell B13 is as follows: "=SUMIF(Estimate!K:K,I13,Estimate!W:W)" and cell I13 is equal to "PCC"
The calculation for cell C13 is as follows: "=SUMIF(Estimate! K:K,J13,Estimate!W:W)" and cell J13 is equal to "ACC"
The calculation for cell D13 is as follows: "=SUMIF(Estimate!K:K,K13,Estimate!W:W)"and cell K13 is equal to "OCC"

The calculation for cell B14 is as follows: "=SUMIF(Estimate!K:K,I14,Estimate!W:W)" and cell I14 is equal to "PCL"
The calculation for cell C14 is as follows: "=SUMIF(Estimate!K:K,J14,Estimate!W:W)" and cell J14 is equal to "ACL"

SoCalGas Responses 8-12: -Continued

The calculation for cell D14 is as follows: "=SUMIF(Estimate!K:K,K14,Estimate!W:W)"and cell K14 is equal to "OCL"

The calculation for cell B20 is as follows: "=SUMIF(Estimate!K:K,I20,Estimate!W:W)" and cell I20 is equal to "PM"
The calculation for cell C20 is as follows: "=SUMIF(Estimate!K:K,J20,Estimate!W:W)" and cell J20 is equal to "AM"
The calculation for cell D20 is as follows: "=SUMIF(Estimate!K:K,K20,Estimate!W:W)"and cell K20 is equal to "OM"

The calculation for cell B21 is as follows: "=SUMIF(Estimate!K:K,I21,Estimate!W:W)" and cell I21 is equal to "PS"
The calculation for cell C21 is as follows: "=SUMIF(Estimate!K:K,J21,Estimate!W:W)" and cell J21 is equal to "AS"
The calculation for cell D21 is as follows: "=SUMIF(Estimate!K:K,K21,Estimate!W:W)"and cell K21 is equal to "OS"

The calculation for cell B22 is as follows: "=SUMIF(Estimate!K:K,I22,Estimate!W:W)" and cell I22 is equal to "Ppav"
The calculation for cell C22 is as follows: "=SUMIF(Estimate!K:K,J22,Estimate!W:W)" and cell J22 is equal to "Apav"
The calculation for cell D22 is as follows: "=SUMIF(Estimate!K:K,K22,Estimate!W:W)"and cell K22 is equal to "Opav"

The calculation for cell B23 is as follows: "=SUMIF(Estimate!K:K,I23,Estimate!W:W)" and cell I23 is equal to "Pperm"
The calculation for cell C23 is as follows: "=SUMIF(Estimate!K:K,J23,Estimate!W:W)" and cell J23 is equal to "Aperm"
The calculation for cell D23 is as follows: "=SUMIF(Estimate!K:K,K23,Estimate!W:W)"and cell K23 is equal to "Operm"

The calculation for cell B24 is as follows: "=SUMIF(Estimate!K:K,I24,Estimate!W:W)" and cell I24 is equal to "PODC"
The calculation for cell C24 is as follows: "=SUMIF(Estimate!K:K,J24,Estimate!W:W)" and cell J24 is equal to "AODC"
The calculation for cell D24 is as follows: "=SUMIF(Estimate!K:K,K24,Estimate!W:W)"and cell K24 is equal to "OODC"

Disallowances for 235 West Section 2 are equal to $4,064 and were for 17 feet of pipe in the O&M portion of the project, which is coded "OCC." The $25,678,807, in the workpaper, plus $4,064 equals $25,682,871, which matches the WOA Recap in Cell D26.

INDICATED SHIPPER DATA REQUEST
IS-SCG-008
SOCALGAS 2019 GRC – A.17-10-008
SOCALGAS RESPONSE
DATE RECEIVED: APRIL 5, 2018
DATE RESPONDED: APRIL 27, 2018

8-13. Please refer to Page 158 of Exhibit SCG-10-CWP. This workpaper page indicates that the SIMP program will be accelerated from six years to four years.

a. What is driving the decision to accelerate the SIMP program.

b. Please identify any State, local and/or Federal regulations or CPUC orders mandating the acceleration of this program.

c. Please identify the year in which the SIMP program will be completed under the 4 year accelerated schedule.

SoCalGas Responses 8-13:

a. The California Division of Oil Gas and Geothermal Resources (DOGGR) regulations and state law includes initial inspection requirements that are anticipated to be met on a 4-year SIMP timeframe. Federal and state guidance has been issued indicating the importance of integrity assessments to validate well integrity. Finally, it will improve the risk profile of the SoCalGas storage facilities by physical actions - such as abandoning wells that do not pass DOGGR inspection and by risk assessment activities – such as analysis of the well inspection results.

b. The SIMP falls under both state and federal jurisdiction:
   - State level jurisdiction falls under the DOGGR, 14 California Code of Regulations (CCR) 1724.9(g) and California Public Utilities Commission (CPUC), as applicable. DOGGR Order 1109 mandates Aliso Canyon wells to be inspected or plugged and abandoned within one year and Senate Bill 887 (Pavley) also requires operators of gas storage wells in California to commence a mechanical integrity testing regime before January 1, 2018.. Proposed DOGGR regulations, Title 14, Article 4 of CCR §§ 1726 through 1726.10 also would require SIMP work.
   - Federal jurisdiction falls under PHMSA's Underground Storage Interim Final Rule (PHMSA IFR), the details of which are codified in 49 CFR Part 192.12.

c. SIMP is an ongoing program to verify and demonstrate storage integrity. The SIMP baseline assessments of the wells will be completed in 2019 then each well will have a reassessment date. Per proposed DOGGR Underground Gas Storage regulations, wells must be reassessed on a 24-month interval or DOGGR may approve a less frequent inspection schedule for a well if the operator demonstrates to the DOGGR's satisfaction that the well's corrosion rate is low enough that biennial inspection is not necessary.

INDICATED SHIPPER DATA REQUEST
IS-SCG-008
SOCALGAS 2019 GRC – A.17-10-008
SOCALGAS RESPONSE
DATE RECEIVED: APRIL 5, 2018
DATE RESPONDED: APRIL 20, 2018

8-14. Please refer to SCG-35-WP-R_PMoersen_Excel-Based_WP.xlsx which was provided in response to IS-SCG-1.6 specifically at the tab titled "SCG-35-WP R Section II, e" at lines 8-33 which provide a unique ID for each project type. Please provide for each unique ID, the allocation factors used to allocate these costs to each SoCalGas rate class.

SoCalGas Responses 8-14:

In the GRC, SoCalGas does not derive/apply allocation factors to the referenced project types to allocate these costs to each SoCalGas rate class. In its cost allocation proceedings (*e.g.*, Triennial Cost Allocation Proceeding), SoCalGas derives cost allocation factors for the following broad functional categories: customer-related, medium pressure distribution, high pressure distribution, local transmission, backbone transmission, and storage. These functional cost allocation factors depend of cost studies (for both capital-related annualized cost and O&M costs combined) and cost drivers for each function by customer class.

INDICATED SHIPPER DATA REQUEST
IS-SCG-008
SOCALGAS 2019 GRC – A.17-10-008
SOCALGAS RESPONSE
DATE RECEIVED: APRIL 5, 2018
DATE DUE: APRIL 24, 2018

8-15. Please refer to the Direct Testimony of Richard Phillips at page 14. Regarding the decision that 8 miles or less was the appropriate interval to install Automatic Shutoff Valve(ASV)/Remote Control Valve (RCV) on pipelines greater than 20-inch diameter and pipelines 12 inches or greater that operate at a Hoop Stress greater than 30% of SMYS. Please explain why an eight-mile interval was selected and explain or compare this eight-mile proposed interval to intervals used in valve safety planning at (i) other California Gas Utilities and (ii) US Gas utilities generally.

SoCalGas Responses 8-15:

SoCalGas objects to the request to compare the company's proposed valve interval to other gas utilities on the grounds that it is overly broad, lacks foundation, does not seek information of a factual nature, and seeks a response that is beyond the scope of permissible discovery contemplated by Rule 10.1 of the Rules of Practice and Procedure of the California Public Utilities Commission. Subject to and without waiving the foregoing objections, SoCalGas responds as follows:

Please see the record of R.11-02-019 and A.11-02-002, wherein SoCalGas and SDG&E submitted the proposed Valve Enhancement Plan, which was ultimately approved by the Commission in D.14-06-007. The record includes written testimony, workpapers, a report by the Consumer Safety Protection Division (CPSD) of the California Public Utilities Commission, comments on the CPSD Report, oral testimony at hearings and written briefs.