

GENERAL RATE CASE PLAN WORKSHOP #3 REPORT

Uniformity in Results of Operations Model

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1. Executive Summary

On November 19, 2020, the California Public Utilities Commission's (CPUC) Energy Division (ED) hosted the third in a series of workshops to explore standardizing the organization and format of General Rate Case (GRC) filings for the large California energy utilities. The workshops were ordered in Decision (D.) 20-01-002, which modified the Commission's rate case plan (RCP) for the large energy utilities. The objective of the workshops is to further explore and develop proposals to streamline the GRC proceeding process. The scope of the third workshop involved exploring reasonable ways to make the Results of Operations (RO) models for the four large California utilities more uniform and user-friendly.

In addition to ED staff, identified attendees at the workshop included the five utilities - Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), Southern California Gas Company (SoCalGas), Bear Valley Electric - and The Utility Reform Network (TURN) and the Public Advocates Office (Cal Advocates).

The workshop scope included five topics, followed by open discussion:

- Introduction to RO Model
- Standard Format for Summary of Earnings
- User-Friendly Interface
- Uniform RO Model Format & Structure
- Working Relationship with Administrative Law Judge & Energy Division

On behalf of the joint investor-owned utilities (PG&E, SCE, SDG&E, and SoCalGas; collectively "IOUs"), SCE led the presentation for all topics except for introductory remarks and a portion of the topic on Working Relationship with Administrative Law Judge (ALJ) & Energy Division. ED, Cal Advocates, and TURN all posed questions during the workshop. Below is a high-level summary of the workshop discussion:

- **Introduction to RO Model:** SCE provided an introductory overview on what the RO model is, what it is designed to accomplish, and how the elements of the model work together. The presentation was designed to be a straightforward, high level explanation geared toward an audience with limited RO model experience. SCE explained that each utility's model is a tool to calculate a utility's revenue requirement based on the Operations and Maintenance (O&M) and capital forecast, subject to any input adjustments by the model user. The IOUs have and continue to strive to ensure that their models meet three standards to help streamline GRC proceedings: simplification, transparency, and user-friendliness. SCE highlighted the major functions a user should be able to perform with the model and discussed the standard features in each utility's model.
- **Standard Format for Summary of Earnings:** The Summary of Earnings (SoE) refers to a table containing the components of the utility's revenue requirements such as expenses, taxes, and return on rate base. SCE noted that each utility's SoE contains the same foundational principles, with each aligned toward each utility's specific business operations, accounting, and financial systems. Thus, there are some differences among the IOUs, which SCE then highlighted. SCE also discussed some of the presentation and formatting differences among the models, but noted that they are reasonable and appropriate. Nonetheless, the IOUs are committed to identifying and exploring opportunities for future alignment in these areas.

- **User-Friendly Interface:** To enable a user without extensive RO modeling training to enter inputs into the model to calculate the revenue requirement. Each utility’s RO model is uniquely standardized to help users navigate and understand what inputs can be changed and where the results of those changes can be located. Each model uses color coding, standard output tables, and has a standardization for file names to assist with this. SCE shared examples from each model and noted that while there is a slight variation in interfaces, all contain the same format, content, and structure to guide the user to make needed changes. The IOUs are committed to exploring further alignment on standardization on color coding, while remaining sensitive to the fact that each is customized to align with the individual business needs of each utility.
- **Uniform RO Model Format & Structure:** To be more consistent across the utilities and easier for the Commission and others outside the utilities to understand. Each RO model shares similar “DNA,” in that the foundational structures are consistent across IOUs and follow very similar processes for sharing and educating users on the model. SCE shared a simple visualization of how data flows through the model, and then presented data flow diagrams for each utility. There was also discussion on the data processing sequence within each model.
- **Working Relationship with ALJ & Energy Division:** ED staff began the discussion by sharing the RO modeling process from the CPUC’s vantage point. ED supports the Administrative Law Judge (ALJ) in a GRC by ensuring that the ALJ’s Proposed Decision (PD) contains accurate information. The CPUC typically executes a non-disclosure agreement (NDA) with one or more utility RO model experts to assist in this process. SCE then discussed how the NDA is a “black box” in that no one external or internal to the utility, other than the individuals under the NDA, have any knowledge of what is discussed or performed. SCE proposed to continue this process, with some modifications to bring a greater standardization of overall process to GRCs when a utility’s RO model expert provides assistance as requested by ED or the GRC ALJ. SCE also proposed that IOUs to be able to remotely perform this function.

A draft version of this workshop report was circulated for comment on December 7, 2020. The IOUs submitted their joint comments on December 14, which summarized points made during the workshop and responded to some of the comments made during the workshop. No other parties submitted post-workshop comments.

2. Introduction

On November 19, 2020, ED hosted the third in a series of workshops to explore opportunities for greater uniformity in the RO models that have been developed by the large California energy utilities for GRC filings. The large energy utilities are PG&E, SCE, SDG&E, and SoCalGas. The workshops were ordered in D.20-01-002, which modified the Commission’s RCP for energy utilities. The objective of the workshops is to further explore ideas to standardize GRC filings and streamline the process in order to increase the efficiency of GRC proceedings. The scope of the third workshop was to explore ways to make the RO models of the four utilities more uniform and user-friendly, specifically in regards to developing 1) a standard format for the SoE, 2) a user-friendly input interface, 3) a uniform RO model format or structure, and 4) a single approach to IOUs’ working relationship with the ALJ and ED staff. The workshop was facilitated by ED with support from SCE.

3. Background

On January 16, 2020, the Commission issued D.20-01-002 (the “Decision Modifying the Commission’s Rate Case Plan for Energy Utilities” in Rulemaking (R.) 13-11-006). D.20-01-002 adopted changes to the Rate Case Plan for large California energy utilities to enable the Commission to conduct GRC proceedings more efficiently, including modifications to the GRC procedural schedule and extending the GRC cycle for each utility from three years to four years. R.13-11-006 was closed upon the CPUC adoption of D.20-01-002.

The RCP decision also ordered a series of workshops to explore and develop proposals to increase the efficiency of GRC proceedings. The basic purpose of the series of the workshops is to see if various matters common to all GRCs can be redesigned and consistently applied to make the proceedings more efficient for the Commissions and parties alike. Based on the number of workshop topics, ED identified four workshops and invited parties to provide feedback on the scope of each workshop:

1. Workshop No. 1 - Stipulated Terms / Rebuttable Presumptions / Standardized Attrition Year Ratemaking – September 4, 2020
2. Workshop No. 2 - Standardization of GRC Filings – October 7, 2020
3. Workshop No. 3 - Results of Operations (RO) Model Uniformity – November 19, 2020
4. Workshop No. 4 - Standardization of RAMP Filings – February 2021

The IOUs are supporting ED staff in facilitating the workshops, and an IOU has been designated for each workshop. The RCP Decision also requires that no later than 30 days after the conclusion of the workshop, the designated IOU shall submit a report to the Directors of the Energy Division and Safety and Enforcement Division with copies served on the service list of R.13-11-006 summarizing the workshop and any agreed-upon proposals.

4. Workshop

ED held the third public workshop virtually via a recorded WebEx session on November 19, 2020. Due to the state’s public health order in response to the COVID-19 pandemic, there was no in-person attendance. ED sent a notice of the workshop to the service list for R.13-11-006. The public workshop notice was posted on the CPUC’s Daily Calendar and website. The workshop, scheduled from 10:00 am – 1:45 pm, included five agenda topics, followed by open discussion:

- Introduction to RO Model
- Standard Format for Summary of Earnings
- User-Friendly Interface
- Uniform RO Model Format & Structure
- Working Relationship with Administrative Law Judge & Energy Division

ED staff began the workshop by discussing the workshop logistics and background. SCE then provided an overview of the agenda and goals of the workshop. In addition to ED staff, identified attendees at the workshop included PG&E, SCE, SDG&E, SoCalGas, Bear Valley Electric, The Utility Reform Network (TURN), and the CPUC Public Advocates Office (Cal Advocates). While the RCP Decision identified Cal Advocates as the only party that runs the RO model aside from the utilities, Cal Advocates staff declined an invitation to present information on its RO modeling process or experience at the workshop. In addition, the RCP decision indicates that if any intervenors can demonstrate the value of greater

standardization, the utilities should consider those recommendations. Any refinements that ease the burden on GRC parties are likely to translate into greater efficiencies for the Commission’s decision making.

5. Topic 1: Introduction to RO Model

5.1 IOU Presentation on Introduction to RO Model

On behalf of the IOUs, SCE provided a brief and high-level overview of the model so that attendees who are less familiar with the model would be able to share a basic understanding of what the RO model is, why they are used, and what they are designed to accomplish. SCE emphasized that the IOUs work with the aim of bringing greater simplicity and transparency to this complex and technical area, and as such review their RO models prior to the beginning of every GRC to determine if there are opportunities for improvement that would serve this purpose.

SCE then defined the terms “revenue requirement” and “return on rate base.” SCE then pointed out the primary types of calculations and adjustments a user can make with the model. These are:

- Change O&M/Administrative and General (A&G)/Other Operating Revenue (OOR) and Capital Expenditure forecasts
- Change depreciation rates
- Calculate the lead-lag portion of working cash
- Calculate all taxes and tax depreciation
- Make plant adjustments including adjustments to beginning-of-year plant balances
- Calculate Revenue Requirement and Summary of Earnings

SCE concluded this introductory section by discussing the standard features found in each IOU’s RO model. These are user guides, tracking tools/audit logs, jurisdictional cost of service between FERC and CPUC, functionalization between distribution, generation, and gas (where applicable), and labor allocators to allocate general expenses.

6. Topic 2: Standard Format for Summary of Earnings

6.1 IOU Presentation on Standard Format for Summary of Earnings

SCE began by pointing out that each IOU’s SoE contains the same foundational principles, with each aligned toward the specific business operations and accounting and financial systems of each IOU. In order to determine if there are areas for further alignment, the IOUs collectively shared and reviewed their most recent GRC Decision appendix summary tables, as well as testimony tables, and workpaper content and structure. After completing this review, the IOUs determined that they all have the same general format and content, but there are some subtle differences.

At the workshop SCE walked through the components of each IOU’s SoE and discussed areas where there are presentation and format differences. The IOUs believe these differences are reasonable and appropriate; however there are opportunities for future alignment, which the IOUs have agreed to jointly explore, while remaining sensitive to the fact that each model may vary to align with individual business needs. Three areas were specifically discussed for future joint exploration with the aim toward standardization:

- Revenue Requirement/Other Operating Revenue
 - SCE presents Other Operating Revenue (OOR) as a separate line item within Operation and Maintenance (O&M) and Administrative and General (A&G) expenses, while other IOUs present OOR within the total revenue requirement
- O&M Escalation
 - SCE, SDG&E and SoCalGas presents this as a separate line item, while PG&E embeds escalation within O&M and A&G
- Uncollectible Expense and Franchise Requirements
 - There are slight differences among the IOUs

7. Topic 3: User-Friendly Interface

7.1 IOU Presentation on User-Friendly Interface

SCE stated that each RO model contains standardization tailored towards the internal business needs of each IOU. This includes standardized color coding (e.g. for inputs and recorded year balances), output tables (e.g. SoE, O&M summary, and rate base), and file names (e.g. O&M, Capital, and Tax). SCE then provided examples from each IOU to demonstrate the formatting and color-coding schemes employed in each IOU’s RO model. While there are some slight differences between IOUs, each is standardized within its own model in order to create a user-friendly interface.

8. Topic 4: Uniform RO Model Format & Structure

8.1 IOU Presentation on Uniform RO Model Format & Structure

SCE shared that each IOU’s RO model format and structure are tailored towards internal business requirements. However, RO models share similar foundational principles to bridge a generally uniform “look and feel” across IOUs. These are:

- O&M/A&G, Capital, Tax, and Summary modules
- User Guides (to show how model users should go about making changes, e.g. adjusting capital related projects)
- Data flow diagrams (to demonstrate how data flows from one workbook to another and across the model)
- Processing sequence
- Identification of inputs that can be changed

IOUs also offer a similar suite of support services to the CPUC and parties who wish to have a deeper understanding of their model. This includes holding RO model workshops following the filing of a GRC application, which are typically at the Commission’s offices and highlight any changes to the model from the previous rate case. IOUs will also hold more detailed working sessions on specific aspects of the model to show users the details behind the calculations. SCE noted that the IOUs continue to work together to identify opportunities to align across the utilities to enhance uniformity.

SCE then provided a high-level walk-through of each IOU’s model architecture in order to show how the data in each interdependent module flows within and between workbooks, i.e. one workbook’s outputs becomes another workbook’s inputs, in addition to any changes made by the user. In addition, any changes made to the O&M, Capital, and Tax modules flow to the Summary module. SDG&E/SoCalGas

noted that, like SCE, each section of their RO model flows into each other; and though the flow is slightly different among the IOUs, the functions are similar. PG&E noted that the PG&E diagram is a very high-level overview of the model's structure. Following this walk-through, SCE presented conceptual diagrams to demonstrate the processing sequence of each IOU's model.

8.2 Discussion on the IOUs' Presentation

ED asked how shared cost expenditures are allocated in the RO models, e.g. building insurance premium, shared cost between administrative and program cost, etc. SCE stated that, speaking for itself, it separates shared costs between FERC and CPUC jurisdictions, and then among functions (e.g., Distribution, Generation, Gas) and various balancing accounts. This is determined through a labor allocator assigned to different functions. PG&E stated that it takes a somewhat similar approach. In most cases PG&E uses recorded base year O&M expense dollars to develop factors to allocate shared costs across FERC and CPUC, which is then further allocated among components within CPUC. SDG&E/SoCalGas stated that it looks at historical information for allocation factors for gas and electric distribution. SDG&E/SoCalGas is also unique in its sharing of costs between the two utilities and relies on its witnesses to develop shared costs.

9. Topic 5: Working Relationship with ALJ & Energy Division

9.1 Energy Division Presentation on RO Modeling Process at the CPUC

ED presented on the RO modeling process at the CPUC and the relationship with IOUs. ED staff support the ALJ in a GRC by ensuring that the information provided to the ALJ for the PD, such as revenue requirement and RO model results, are accurate. The CPUC will, under an NDA, work with an IOU modeler to model the PD adjustments. ED will also seek interpretations and clarifications from ALJs and communicate relevant information to the IOU modeler when needed. The IOU modeler works under CPUC staff supervision to create detailed workpapers to support the effort. Workpapers are available to any parties who request them.

9.2 IOU Presentation on Working Relationship with ALJ & Energy Division

SCE explained how the CPUC and an IOU typically work together when the CPUC requests that the IOU assist ED and ALJ in connection with RO modeling while the PD is being developed. SCE first noted that utility participation in assisting with PD RO modeling is entirely determined by the CPUC, and represents an effort to leverage resources and efficiencies by tapping into IOU modeling expertise. Generally, the IOU modeling resource assists in whatever way ED and the ALJ deem necessary. Each modeling resource provided by an IOU is required to first enter into an NDA that governs the utility's assistance with the CPUC's RO modeling. If the utility is invited to participate, the designated expert(s) signs a "black box" NDA, which calls for the expert(s) to not disclose any information to the public nor to anyone at the utility, including legal counsel. The NDA is also "evergreen," in that there is no expiration date of the obligation to refrain from discussing or disclosing the items covered under the NDA.

Generally, the IOUs support the current process in the following ways when invited to participate by the CPUC:

- Engaging in working sessions with ED to share knowledge and foster familiarity with IOU RO Models
- Collaboratively creating templates and workpapers to support and perform modeling inputs

- Validating modeling results and supporting the generation of GRC Decision financial tables.

SCE also stated that, prior to the COVID-19 pandemic, the southern California utility RO expert(s) would travel to San Francisco for weeks at a time to assist in this effort. This effort can be burdensome and carries with it the expense associated with extended travel. During the course of its most recent rate case, PG&E was afforded the opportunity to assist the CPUC via remote RO modeling.¹ The IOUs proposed that this accommodation be extended to future rate cases, with the caveat that if in-person collaboration is ever needed then utility experts will continue to travel to CPUC offices. However, remote modeling would be the default going forward.

9.3 Discussion on the Energy Division and IOUs' Presentations

TURN noted that the IOUs' proposals seemed generally reasonable. TURN requested that RO modeling be as transparent as possible. SCE noted that the IOUs cannot share information concerning the PD RO modeling, because any such sharing with any non-CPUC person would constitute a violation of the NDA. SCE also identified concerns that would be raised if RO PD modeling information is selectively provided to one party versus another, and noted that disclosing RO modeling information and results (which carry significant economic and financial implications) before the PD is issued by the Commission could result in market effects or other negative consequences.

ED asked if the IOUs are proposing to make a checklist or spreadsheet in addition to the workpapers. SCE responded that, speaking for SCE, workpapers are a support process to validate numbers, and to make the overall modeling easier to perform. Workpapers also ensures the PD uses the most recent numbers on the record, help with needed supporting calculations, and serve as a guide as to where to go in the model to change a specific workbook and cell. The IOUs remain open to a collaborative effort to make sure workpapers and the process continue to meet ED's needs.

Regarding the proposal to permit remote IOU RO modeling in support of the CPUC, ED inquired if compared to pre-pandemic did the IOUs encounter any problems working remotely on the model, as opposed to in-person. PG&E is the only utility that has thus far participated in this effort remotely and responded that in their case it was a smooth process. ED followed up by inquiring about how PG&E was able to deal with modeling inputs, including if PG&E used templates or workpapers. PG&E replied that it cannot comment on the specifics due to the NDA, but in terms of process ED provided what inputs need to be changed. PG&E maintained a separate laptop for modeling and created a confidential folder within the utility's internal shared drive. PG&E and ED also established a confidential File Transfer Protocol (FTP). PG&E and ED held regular weekly calls, where screens were shared over Webex. ED concluded by stating that this process seems to have worked well. ED will consider the IOU proposal and bring it up to ED management.

In regards to the general display of information in the model, Cal Advocates suggested that separating A&G expense could be helpful to split out and display separately as there are some adjustments that are unique to A&G. SCE stated it can work with Cal Advocates offline on recommendations to make certain aspects of the model more transparent and adjustments easier to make.

¹ Administrative Law Judges' Ruling Adopting Amended Confidential Modeling Procedures, issued August 13, 2020.

9.4 Post Workshop Comments on Working Relationship with ALJ & Energy Division

In their post-workshop comments the IOUs raised two points. First, the IOUs responded to TURN's comment made during the workshop that consideration should be given to maximizing the transparency of the specifics of the utility's RO modeling assistance to the Commission in connection with the PD. The IOUs stated that: (1) any such disclosure by the utility would violate the non-disclosure agreement that the utility executes with the Commission; (2) prematurely disclosing such content before it has been accepted, validated, and finalized by the Commission personnel could lead to negative consequences; and (3) any change to the current protocols in this regard should originate from the Commissioners.

Second, the IOUs responded to the workshop discussion on the merits of authorizing remote PD modeling for utility RO model experts. In addition, the IOUs believe no formal regulatory ruling or activity is necessary to implement the concepts introduced during the Workshop, except for the remote modeling proposal. The IOUs encourage the Commission to authorize remote modeling as the default in support of PD development, with utility experts only traveling to Commission offices if specifically directed by the ALJs or Assigned Commissioner presiding over a given GRC proceeding. The IOUs reiterated their support for remote modeling and urged the ED Staff to discuss the proposal within the Commission. See Appendix B for the IOU comments.

11. Next Steps

Comments should be sent to the SCE representative and to ED. The schedule for comments and the report is:

- Workshop Comments: November 25, 2020
- Draft Report: December 7, 2020
- Draft Report Comments: December 14, 2020
- Final Report: December 21, 2020

The final report is to be issued within 30 days of the workshop conclusion and is to be sent to the Directors of Energy Division, Safety Policy Division, and the Safety and Enforcement Division, as well as to the proceeding service list.

12. Appendix A: Workshop Presentation

Rate Case Plan (Decision 20-01-002)
Workshop No. 3
Uniformity in Results of Operations (RO)
Model

November 19, 2020
10 am – 1:45 pm
(with Lunch Break)
California Public Utilities Commission (CPUC)

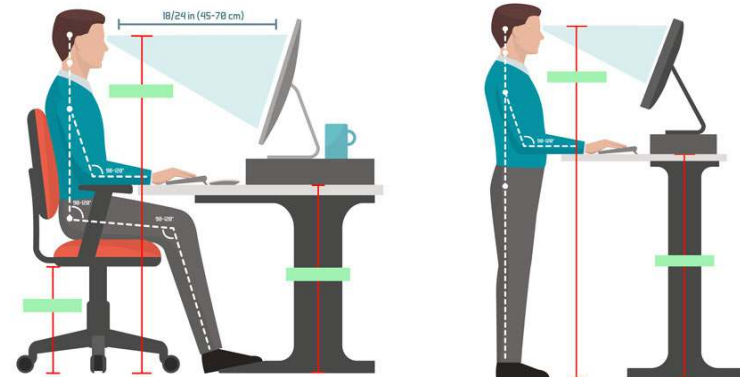
CPUC Energy Division
SCE Lead



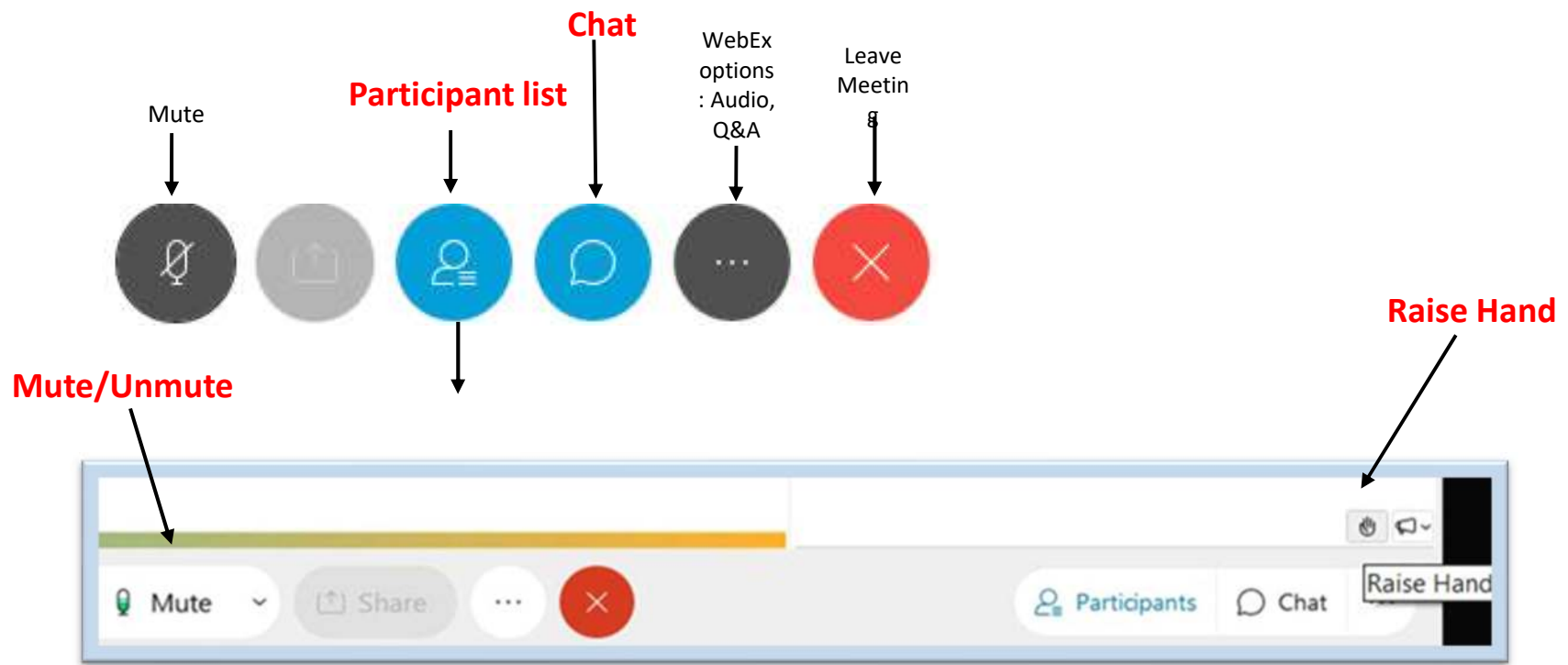
California Public
Utilities Commission

Workshop Logistics

- Online only
 - Audio through computer or phone
 - Dial 415-655-0002
 - Access code: 146 292 5835
 - ***This workshop is being recorded***
- Hosts:
 - SCE Representatives
 - Energy Division Staff:
 - Gelila Berhane
 - Jenny Au
- Safety
 - Note surroundings and emergency exits
 - Ergonomic Check



How to Use WebEx





Introductions

- CPUC – Energy Division
- Facilitators – SCE Representatives
- Panelists – SCE, PG&E, and Sempra Utilities
- Organizations – via **Chat function**

Workshop Purpose

- Meet requirements of RCP Decision 20-01-002
- Series of four workshops
 - Workshop #1 – Stipulated Terms & Rebuttal Presumptions – September 4, 2020.
 - Workshop #2 - General Rate Case Filing Standardization – October 7, 2020.
 - Workshop #3 – RO Modeling – November 19, 2020
 - Workshop #4 – RAMP Filing – February 2021
- Reports are available at <https://www.cpuc.ca.gov/General.aspx?id=6442454678>



Rate Case Plan Workshop #3

Results Of Operations (RO) Model

November 19, 2020

Rate Case Plan Workshop #3 - Agenda

Topic	Facilitator	Time
Introduction & Meeting Goals	Energy Division Kris Vyas (SCE)	15 minutes
Introduction to RO Model	Doug Tessler (SCE)	15 minutes
Standard Format for Summary of Earnings	Doug Tessler (SCE)	15 minutes
User-Friendly Interface	Doug Tessler (SCE)	30 minutes
Uniform RO Model Format & Structure	David Gunn (SCE)	30 minutes
<i>LUNCH</i>		45 minutes
Working Relationship with ALJ & Energy Division	Kris Vyas (SCE)	30 minutes
Open Discussion	Doug Tessler (SCE)	30 minutes
Next Steps and Wrap Up	Energy Division Kris Vyas (SCE)	15 minutes

Introduction & Meeting Goals

- Decision 20-01-002 recommended a future workshop to “explore ways to make the RO models of the four utilities more uniform and user-friendly”. Issues to be discussed should include:
 - Developing a standard format for the Summary of Earnings table
 - Developing a user-friendly input interface for the RO model
 - Developing a uniform RO model format or structure
 - Utilities to explain their perspectives and develop a single approach to their working relationship with the ALJ and Energy Division staff

Introduction to RO Model

Why the RO Model is Used in GRCs

In D.00-07-050 the Commission has stated that the single most important effort to streamline proceedings is to ensure the simplification and transparency of the RO Model

- A user-friendly model facilitates the quick calculation of a Revenue Requirement for various scenarios, allowing for quicker turnaround in the GRC process

With only moderate training, a user should be able to accomplish the following:

- Change O&M/A&G/OOR and Capital Expenditure forecasts
- Change depreciation rates
- Calculate the lead-lag portion of working cash
- Calculate all taxes and tax depreciation
- Make plant adjustments including adjustments to beginning-of-year plant balances
- Calculate Revenue Requirement and Summary of Earnings

In the spirit of promoting simplicity and transparency, IOUs review the RO Model prior to the commencement of every GRC to assess opportunities for improvement.

Revenue Requirement and Rate Base

Revenue Requirement

O&M/A&G
+ Depreciation Expense
+ Property Tax Expense
+ Payroll Tax Expense
+ Income Tax Expense
+ Return on Rate Base

= **Revenue Requirement**

Return on Rate Base

Net Plant-In-Service
+ Working Capital
– Reserves
– Accumulated Deferred Taxes

= **Rate Base**
x Rate of Return

= **Return on Rate Base**



CA IOU RO Models – Standard Features

- IOU RO models are excel-based with background VBA code to “run” the model
 - Visual Basic (VBA) code is the standard protocol to “run” the model:
 - Code opens files, refreshes links, saves and closes files
 - Average IOU run time is approximately 10-20 minutes
- User Guides are provided with the RO models
 - PC requirements
 - Structure of model
 - “How to” sections with examples
 - Troubleshooting
- Tracking Tool/Audit Log to document changes
- Jurisdictionalization between FERC and CPUC
- Functionalization between Distribution, Generation, Gas
- Labor Allocator: Dynamic calculation to allocate general expenses and expenditures between Jurisdictions (SCE) and Functions (All IOUs)

Standard Format for Summary of Earnings (SoE)

Standard Format for Summary of Earnings (SoE)

- To identify improvements and movement toward standardization, IOUs reviewed:
 - Decision Appendix Summary Tables
 - Testimony tables and workpaper content and structure

IOUs' Summary of Earnings contain the same foundational principles, each aligned toward the specific business operations and accounting and financial systems.

SoE – High Level IOU Comparison

SCE

Appendix C 2018 CPUC Results of Operations	
Line	Item
1.	Total Operating Revenues
2.	Operating Expenses:
3.	Production
4.	Steam
5.	Nuclear
6.	Hydro
7.	Other
8.	Total Production O&M
9.	Transmission
10.	Distribution
11.	Customer Accounts
12.	Uncollectibles
13.	Customer Service & Information
14.	Administrative & General
15.	Franchise Requirements
16.	Revenue Credits
17.	Total O&M
18.	Escalation
19.	Depreciation
20.	Taxes Other Than On Income
21.	Taxes Based On Income
22.	Total Taxes
23.	Total Operating Expenses
24.	Net Operating Revenue
25.	Rate Base
26.	Rate of Return
27.	Revenues at Present Rates
28.	Increase/(Decrease) Over Present Revenue Requirement In Rates
29.	Balancing/Memorandum Account Undercollection
30.	Net Increase/(Decrease) Over Present Rates
31.	Decrease Over Present Revenue Requirement In Rates
32.	Net Decrease Over Present Rates

PG&E

Line No.	Description
REVENUE:	
1	Revenue Collected in Rates
2	Plus Other Operating Revenue
3	Total Operating Revenue
OPERATING EXPENSES:	
4	Energy Costs
5	Production / Procurement
6	Storage
7	Transmission
8	Distribution
9	Customer Accounts
10	Uncollectibles
11	Customer Services
12	Administrative and General
13	Franchise & SFGR Tax Requirement
14	Amortization
15	Wage Change Impacts
16	Other Price Change Impacts
17	Other Adjustments
18	Subtotal Expenses:
TAXES:	
19	Superfund
20	Property
21	Payroll
22	Business
23	Other
24	State Corporation Franchise
25	Federal Income
26	Total Taxes
27	Depreciation
28	Fossil/Hydro Decommissioning
29	Nuclear Decommissioning
30	Total Operating Expenses
31	Net for Return
32	Rate Base
RATE OF RETURN:	
33	On Rate Base
34	On Equity

SDG&E | SoCal Gas

Line No.	Description	
1	Base Margin	
2	Miscellaneous Revenues	
3	Revenue Requirement	
<u>Operating and Maintenance Expenses</u>		
4	Gas Distribution	
5	Transmission	
6	Underground Storage	
7	Engineering	
8	PSEP	
9	Procurement	
10	Customer Services	
11	Information Technology	
12	Support Services	
13	Administrative and General	
14	Subtotal (2016\$)	
15	Shared Services Adjustments	
16	Reassignments	
17	Escalation	
18	Uncollectibles (0.313%)	
19	Franchise Fees (1.372%)	
20	Total O&M (2019\$)	
21	Depreciation & Amortization	
22	Taxes on Income	
23	Taxes Other Than on Income	
24	Total Operating Expenses	
25	Return	
26	Rate Base	
27	Rate of Return	
28	Derivation of Base Margin	
29	O&M Expenses	(Line 20)
30	Depreciation	(Line 21)
31	Taxes	(Line 22+23)
32	Return	(Line 25)
33	Revenue Requirement	
34	Less: Miscellaneous Revenues	(Line 2)
35	Base Margin	(Line 1)

SoE – SCE With Detail

Appendix C | 2018 CPUC Results of Operations

Line	Item	Adopted CPUC Total	SCE Request (Based on Feb 2018 Tax Update Testimony)	Difference (Adopted Less SCE Request)
1.	Total Operating Revenues	5,115,860	5,534,406	(418,546)
2.	Operating Expenses:			
3.	Production			
4.	Steam	6,251	7,845	(1,594)
5.	Nuclear	76,747	76,747	–
6.	Hydro	41,446	41,446	–
7.	Other	81,962	81,965	(3)
8.	Total Production O&M	206,406	208,003	(1,597)
9.	Transmission	91,023	91,118	(95)
10.	Distribution	497,023	532,099	(35,077)
11.	Customer Accounts	155,395	159,329	(3,934)
12.	Uncollectibles	10,879	11,954	(1,075)
13.	Customer Service & Information	21,277	21,007	270
14.	Administrative & General	608,210	647,853	(39,644)
15.	Franchise Requirements	47,145	50,607	(3,461)
16.	Revenue Credits	(151,220)	(153,070)	1,850
17.	Total O&M	1,486,137	1,568,900	(82,763)
18.	Escalation	95,628	103,952	(8,324)
19.	Depreciation	1,579,362	1,752,338	(172,976)
20.	Taxes Other Than On Income	315,332	324,801	(9,469)
21.	Taxes Based On Income	(19,063)	38,919	(57,982)
22.	Total Taxes	296,269	363,720	(67,451)
23.	Total Operating Expenses	3,457,396	3,788,910	(331,514)
24.	Net Operating Revenue	1,658,464	1,745,496	(87,032)
25.	Rate Base	22,321,623	22,939,281	(617,659)
26.	Rate of Return	7.43%	7.61%	14.09%
27.	Revenues at Present Rates	5,640,432	5,640,432	
28.	Increase/(Decrease) Over Present Revenue Requirement In Rates	(524,572)	(106,026)	(418,546)
29.	Balancing/Memorandum Account Undercollection	41,469	41,469	–
30.	Net Increase/(Decrease) Over Present Rates	(483,103)	(64,557)	(418,546)
31.	Decrease Over Present Revenue Requirement In Rates	-9.30%		
32.	Net Decrease Over Present Rates	-8.57%		

Line	Item	Total CPUC	2018		
			Generation	Peakers	Distribution
			With Adjustments		
1.	Total Operating Revenues	5,115,860	644,723	56,938	4,414,199
2.	Operating Expenses:				
3.	Production				
4.	Steam	6,251	6,251	–	–
5.	Nuclear	76,747	76,747	–	–
6.	Hydro	41,446	41,446	–	–
7.	Other	81,962	74,511	7,451	–
8.	Total Production O&M	206,406	198,955	7,451	–
9.	Transmission	91,023	–	–	91,023
10.	Distribution	497,023	–	–	497,023
11.	Customer Accounts	155,395	–	–	155,395
12.	Uncollectibles	10,879	1,360	120	9,398
13.	Customer Service & Information	21,277	1,597	–	19,680
14.	Administrative & General	608,210	83,040	4,388	520,781
15.	Franchise Requirements	47,145	5,895	521	40,729
16.	Revenue Credits	(151,220)	(1,871)	–	(149,349)
17.	Total O&M	1,486,137	288,976	12,480	1,184,680
18.	Escalation	95,628	19,940	425	75,263
19.	Depreciation	1,579,362	161,917	14,467	1,402,978
20.	Taxes Other Than On Income				
21.	Property Taxes	255,217	21,798	3,535	229,884
22.	Payroll Taxes & Misc	60,115	8,594	47	51,474
23.	Taxes Based On Income	(19,063)	(8,917)	7,632	(17,778)
24.	Total Taxes	296,269	21,475	11,214	263,580
25.	Total Operating Expenses	3,457,396	492,308	38,586	2,926,502
26.	Net Operating Revenue	1,658,464	152,415	18,352	1,487,697
27.	Rate Base	22,321,623	2,003,032	241,180	20,077,411
28.	Rate Of Return	7.43%	7.61%	7.61%	7.41%

SoE – SDG&E/SoCalGas With Detail

Table KN-2
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
ELECTRIC SUMMARY OF EARNINGS
(Thousands of Dollars)

Line No.	Description	2019 Present Rates (2019\$)	2019 Proposed Rates (2019\$)
1	Base Margin	\$ 1,637,656	\$ 1,748,829
2	Miscellaneous Revenues	15,852	14,653
3	Revenue Requirement	\$ 1,653,508	\$ 1,763,482
<u>OPERATING & MAINTENANCE EXPENSES</u>			
4	Distribution	157,783	157,783
5	Gas Transmission	-	-
6	PSEP	-	-
7	Generation	63,131	63,131
8	Engineering	-	-
9	Procurement	8,641	8,641
10	Customer Services	59,422	59,422
11	Information Technology	71,478	71,478
12	Support Services	78,040	78,040
13	Administrative and General	435,493	435,493
14	Subtotal (2016\$)	873,988	873,988
15	Shared Services Adjustments	(24,626)	(24,626)
16	Reassignments	(142,668)	(142,668)
17	FERC Transmission Costs	(82,815)	(82,815)
18	Escalation	22,877	22,877
19	Uncollectibles (0.174%)	2,850	3,043
20	Franchise Fees (3.4468%)	56,447	60,279
21	Total O&M (2019\$)	706,053	710,078
22	Depreciation & Amortization	474,694	474,694
23	Taxes on Income	33,485	65,087
24	Taxes Other Than on Income	102,451	102,451
25	Total Operating Expenses	\$ 1,316,683	\$ 1,352,310
26	Return	336,825	411,172
27	Rate Base	5,443,898	5,445,982
28	Rate of Return	6.19%	7.55%

Table KN-5
SAN DIEGO GAS & ELECTRIC COMPANY
TEST YEAR 2019
GAS SUMMARY OF EARNINGS
(Thousands of Dollars)

Line No.	Description	2019 Present Rates (2019\$)	2019 Proposed Rates (2019\$)
1	Base Margin	\$ 324,291	\$ 432,393
2	Miscellaneous Revenues	4,206	2,843
3	Revenue Requirement	\$ 328,497	\$ 435,236
<u>OPERATING & MAINTENANCE EXPENSES</u>			
4	Distribution	36,480	36,480
5	Gas Transmission	6,668	6,668
6	PSEP	-	-
7	Generation	280	280
8	Engineering	11,000	11,000
9	Procurement	-	-
10	Customer Services	35,031	35,031
11	Information Technology	24,879	24,879
12	Support Services	22,314	22,314
13	Administrative and General	112,067	112,067
14	Subtotal (2016\$)	248,718	248,718
15	Shared Services Adjustments	6,265	6,265
16	Reassignments	(41,185)	(41,185)
17	FERC Transmission Costs	-	-
18	Escalation	10,024	10,024
19	Uncollectibles (0.174%)	564	752
20	Franchise Fees (2.0799%)	6,745	8,993
21	Total O&M (2019\$)	231,132	233,568
22	Depreciation & Amortization	84,968	84,968
23	Taxes on Income	(15,357)	15,756
24	Taxes Other Than on Income	22,151	22,151
25	Total Operating Expenses	\$ 322,894	\$ 356,444
26	Return	5,603	78,792
27	Rate Base	1,041,851	1,043,608
28	Rate of Return	0.54%	7.55%

SoE – PG&E With Detail

APPENDIX A: Table 3-A
Pacific Gas and Electric Company
2017 CPUC General Rate Case (GRC)
Results of Operations at Proposed Rates - Test Year 2017
Electric Distribution Summary
(Thousands of Dollars)

Line No.	Description	Settlement (A)	Adopted (B)	Difference (C) = (B) - (A)	Line No.
REVENUE:					
1	Revenue Collected in Rates	4,151,048	4,151,048	0	1
2	Plus Other Operating Revenue	117,977	117,977	0	2
3	Total Operating Revenue	4,269,025	4,269,025	0	3
OPERATING EXPENSES:					
4	Energy Costs	0	0	0	4
5	Production / Procurement	0	0	0	5
6	Storage	0	0	0	6
7	Transmission	1,068	1,068	0	7
8	Distribution	710,221	710,221	0	8
9	Customer Accounts	173,659	173,659	0	9
10	Uncollectibles	14,454	14,454	0	10
11	Customer Services	19,048	19,048	0	11
12	Administrative and General	381,817	381,817	0	12
13	Franchise & SFGR Tax Requirement	33,346	33,346	0	13
14	Amortization	0	0	0	14
15	Wage Change Impacts	0	0	0	15
16	Other Price Change Impacts	0	0	0	16
17	Other Adjustments	(6,420)	(6,420)	0	17
18	Subtotal Expenses:	1,327,191	1,327,191	0	18
TAXES:					
19	Superfund	0	0	0	19
20	Property	167,698	167,698	0	20
21	Payroll	39,116	39,116	0	21
22	Business	453	453	0	22
23	Other	1,076	1,076	0	23
24	State Corporation Franchise	72,073	72,073	0	24
25	Federal Income	181,580	181,580	0	25
26	Total Taxes	461,996	461,996	0	26
27	Depreciation	1,364,495	1,364,495	0	27
28	Fossil/Hydro Decommissioning	0	0	0	28
29	Nuclear Decommissioning	0	0	0	29
30	Total Operating Expenses	3,153,681	3,153,681	0	30
31	Net for Return	1,115,344	1,115,344	0	31
32	Rate Base	13,838,010	13,838,010	0	32
RATE OF RETURN:					
33	On Rate Base	8.06%	8.06%		33
34	On Equity	10.40%	10.40%		34

APPENDIX A: Table 3-B
Pacific Gas and Electric Company
2017 CPUC General Rate Case (GRC)
Results of Operations at Proposed Rates - Test Year 2017
Gas Distribution Summary
(Thousands of Dollars)

Line No.	Description	Settlement (A)	Adopted (B)	Difference (C) = (B) - (A)	Line No.
REVENUE:					
1	Revenue Collected in Rates	1,738,493	1,738,493	0	1
2	Plus Other Operating Revenue	28,081	28,081	0	2
3	Total Operating Revenue	1,766,584	1,766,584	0	3
OPERATING EXPENSES:					
4	Energy Costs	0	0	0	4
5	Production / Procurement	3,288	3,288	0	5
6	Storage	0	0	0	6
7	Transmission	0	0	0	7
8	Distribution	429,689	429,689	0	8
9	Customer Accounts	116,810	116,810	0	9
10	Uncollectibles	5,642	5,642	0	10
11	Customer Services	22,273	22,273	0	11
12	Administrative and General	258,547	258,547	0	12
13	Franchise & SFGR Tax Requirement	16,291	16,291	0	13
14	Amortization	0	0	0	14
15	Wage Change Impacts	0	0	0	15
16	Other Price Change Impacts	0	0	0	16
17	Other Adjustments	(3,485)	(3,485)	0	17
18	Subtotal Expenses:	849,043	849,043	0	18
TAXES:					
19	Superfund	0	0	0	19
20	Property	53,820	53,820	0	20
21	Payroll	30,790	30,790	0	21
22	Business	297	297	0	22
23	Other	707	707	0	23
24	State Corporation Franchise	(14,482)	(14,482)	0	24
25	Federal Income	(50,406)	(50,406)	0	25
26	Total Taxes	20,726	20,726	0	26
27	Depreciation	480,014	480,014	0	27
28	Fossil/Hydro Decommissioning	0	0	0	28
29	Nuclear Decommissioning	0	0	0	29
30	Total Operating Expenses	1,349,782	1,349,782	0	30
31	Net for Return	416,801	416,801	0	31
32	Rate Base	5,171,234	5,171,234	0	32
RATE OF RETURN:					
33	On Rate Base	8.06%	8.06%		33
34	On Equity	10.40%	10.40%		34

APPENDIX A: Table 3-C
Pacific Gas and Electric Company
2017 CPUC General Rate Case (GRC)
Results of Operations at Proposed Rates - Test Year 2017
Electric Generation Summary
(Thousands of Dollars)

Line No.	Description	Settlement (A)	Adopted (B)	Difference (C) = (B) - (A)	Line No.
REVENUE:					
1	Revenue Collected in Rates	2,114,946	2,114,946	0	1
2	Plus Other Operating Revenue	6,025	6,025	0	2
3	Total Operating Revenue	2,120,971	2,120,971	0	3
OPERATING EXPENSES:					
4	Energy Costs	0	0	0	4
5	Production / Procurement	644,140	644,140	0	5
6	Storage	0	0	0	6
7	Transmission	6,050	6,050	0	7
8	Distribution	0	0	0	8
9	Customer Accounts	2,403	2,403	0	9
10	Uncollectibles	7,181	7,181	0	10
11	Customer Services	0	0	0	11
12	Administrative and General	271,819	271,819	0	12
13	Franchise & SFGR Tax Requirement	16,567	16,567	0	13
14	Amortization	176	176	0	14
15	Wage Change Impacts	0	0	0	15
16	Other Price Change Impacts	0	0	0	16
17	Other Adjustments	(20,000)	(20,000)	0	17
18	Subtotal Expenses:	928,336	928,336	0	18
TAXES:					
19	Superfund	0	0	0	19
20	Property	56,197	56,197	0	20
21	Payroll	32,612	32,612	0	21
22	Business	308	308	0	22
23	Other	733	733	0	23
24	State Corporation Franchise	24,561	24,561	0	24
25	Federal Income	95,821	95,821	0	25
26	Total Taxes	210,233	210,233	0	26
27	Depreciation	550,402	550,402	0	27
28	Fossil/Hydro Decommissioning	3,094	3,094	0	28
29	Nuclear Decommissioning	0	0	0	29
30	Total Operating Expenses	1,692,065	1,692,065	0	30
31	Net for Return	428,906	428,906	0	31
32	Rate Base	5,321,410	5,321,410	0	32
RATE OF RETURN:					
33	On Rate Base	8.06%	8.06%		33
34	On Equity	10.40%	10.40%		34

SoE – Presentation/Format Differences

- Revenue Requirement | Other Operating Revenue
 - PG&E | SDG&E | SoCal Gas: Presented with total revenue requirement
 - SCE: Separate line items within O&M section
- Escalation:
 - SCE | SDG&E | SoCal Gas: separate line item below O&M
 - PG&E: embedded in O&M
- Uncollectible Expense & Franchise Requirements:
 - SCE | PG&E: Separate line items within O&M section
 - SDG&E | SoCalGas: Separate line items after O&M and escalation section

IOUs' Summary of Earnings contain reasonable and appropriate differences, however, opportunities for future alignment exist and will be jointly explored.

User-Friendly Interface

User-Friendly Interface

- IOU RO models contain standardization tailored towards internal business needs:
 - Standardized Color Coding
 - Inputs to effectuate changes
 - Recorded year balances
 - Standard output tables (e.g. SoE, O&M summary, rate base, etc.)
- File names
 - Standardization exists within each IOU RO model
 - Files are identifiable (e.g., O&M, Capital, Tax)

Formatting & Color Coding

Cell Formatting			
Cell Type	SCE	SDG&E / SoCalGas	PG&E
Inputs/Plugs where changes are not meant to be made	Blue	Blue	Black
Inputs/Plugs where changes are meant to be made	Blue Yellow Shading	Blue Yellow Shading	Black Green Shading
Links to Worksheets	Green	Black	Black
Links to Workbooks	Red	Red	Black
Calculations	Black	Black	Black

Tab/Worksheet Formatting			
Tab/Worksheet Type	SCE	SDG&E / SoCalGas	PG&E
Inputs	Tab Name	N/A	Black Green Shading
Calculations	Tab Name	N/A	Black
Outputs	Tab Name	N/A	Black
Tab Divider (Inputs, Calculations, Outputs)	Tab Divider Name	Tab Divider Name	Tab Divider Name
Info Tab	Info Tab	Info	Module Name TOC/Notes
Audit Log	Audit Log	Tracker	Tracker
Checks	Checks	Validation	Check / Comparison

SCE – Example of User-Friendly Interface

- Escalation:

Labor					
Escalation Rates	2019	2020	2021	2022	2023
Steam	2.89%	3.48%	2.76%	3.49%	3.43%

Non-Labor					
Escalation Rate	2019	2020	2021	2022	2023
Steam	2.46%	(0.82%)	(0.55%)	2.21%	2.70%

- O&M | A&G | OOR:

FERC Account	GRC Activity Name	Testimony Exhibit	Witness	Cost Type	2021 Forecast	2021 Adjustments	2021 Adj Forecast
454	SCE-Financed Added Facilities	SCE-02, Vol. 7	T. Reeves	O	34,227	(39)	34,188
560	Grid Engineering	SCE-02, Vol. 4 Pt. 2	D. Cabbell	L	2,462		2,462
560	Grid Engineering	SCE-02, Vol. 4 Pt. 2	D. Cabbell	NL	1,559		1,559

- Capital Expenditures:

					Forecast Capital Expenditures			Capital Expenditure Adjustments			Adjusted Capital Expenditure Forecast		
RO Model ID	GRC Activity	Exhibit	Witness	WBS	2019	2020	2021	2019	2020	2021	2019	2020	2021
10	Underground Structure Replacements	SCE-02, Vol. 1 Pt. 1	R. Tucker	CET-PD-IR-UG-MTE	8,015	8,208	8,420	(8,015)			-	8,208	8,420
11	Underground Structure Replacements	SCE-02, Vol. 1 Pt. 1	R. Tucker	CET-PD-IR-UG-MTW	19,558	13,563	5,142	28,689			48,247	13,563	5,142

SDG&E/SoCalGas – Example of User-Friendly Interface

- Escalation:

	Non Composite				Composite
	Elec/Gen/Gas Labor	Elec/Gen Non Labor (Nbr)	Gas Non Labor (Nbr)	Elec/Gen/Gas NSE	Elec/Gen/Gas Composite
2016	1	1	1	1	0
2017	1.0244	1.0146	1.019	1	0
2018	1.0539	1.0435	1.0453	1	0
2019	1.0869	1.0648	1.0648	1	0
2019 Revised	1.0869	1.0648	1.0648	1	0
Variance	0	0	0	0	0

- O&M | A&G | OOR:

Company:	SDG&E (2100-NGS)				
SOE Area:	A&G				
Functional Area:	A&G				
Wkp Grp - Sub:	A&G001-000				
Wkp Grp Desc:	Oper CTR-NGS-Controllers -Pkg & Reg Accts				
Witness Name:	Sandra K. Hina				

	2016	2017	2018	2019	2019 Revised	2019 Variance
Labor:	3837	3836	4036	4036	4036	0
Non-Labor:	128	99	47	47	47	0
NSE:	0	0	0	0	0	0
FTE:	35.3	36.8	38.8	38.8	38.8	0

- Capital Expenditures:

Project_ID	Budget_Code	Project_Sub_Name	Witness_Name	Repair Allowance	Phased_In_Pct	AFUDC	AFUDC_CWIP	CWIP	Revised	Revised Forecasts		
									In_Service_Dates	2017	2018	2019
1	000060.001	Generation Capital Tools & Test Eqpt.	Baerman, D.	N	1.0000	-	-	-		275	275	275
10	002020.001	ELECTRIC METERS & REGULATORS	Colton, A.	Y	1.0000	-	-	-		4,065	4,108	4,596
100	08729A.001	Alternative Energy Systems	Tattersall, R.	N	0.1546	1	2	499		2,625	2,814	5,724

PG&E – Example of User-Friendly Interface

- Escalation:

EscGrp	CostElement	Year	EscRate	EscFactor
OM	LAB	2017	0	1.00000
OM	LAB	2017RA	0	1.00000
OM	LAB	2018	0.033	1.03300
OM	LAB	2019	0.0326	1.06668
OM	LAB	2020	0.0326	1.10145
OM	LAB	2021	0.0326	1.13736
OM	LAB	2022	0.0326	1.17443
ED	MAT	2017	0	1.00000
ED	MAT	2017RA	0	1.00000
ED	MAT	2018	0.013	1.01300
ED	MAT	2019	0.014	1.02718
ED	MAT	2020	0.019	1.04670
ED	MAT	2021	0.018	1.06554
ED	MAT	2022	0.018	1.08472

- Capital Expenditures:

i. Change Costs and/or Operative Date in a Capital Planning Order.

Tab: Adjustments

Order	Description	MWC	Asset Class	Func	UCC	CGF	Operative Date	Dec 2014 CWP	2015	2016	2017	2018	2019
5755439	SAN JOSE A. REPL REL ON TB 1< 2< & 3	9		EDP	301	F	5/1/2015						
5755444	SPAULDING PH: INSTALL D-SCADA	9		EDP	301	F	9/1/2015						
5755449	Tivy Valley: Install D-SCADA on CB1108 &	9		EDP	301	F	9/1/2016						
5755450	Vineyard: Replace RTU	9		EDP	301	F	9/1/2016						
5755452	West Point PH: Install D-SCADA on Bk< Fe	9		EDP	301	F	12/1/2017						
5755453	WESTPARK INSTALL D-SCADA 09	9		EDP	301	F	12/1/2014						
5755455	WILSON SUB: INSTALL D-SCADA	9		EDP	301	F	6/1/2017						
5755456	WISE PH: INSTALL D-SCADA	9		E									
5755524	09-BIG BASIN - REPLACE PDAC ON BANK	9		E									
5755527	HEROLYN SUB: INSTALL D-SCADA	9		EDP	301	F	7/1/2018						
5755530	NC_BURBIA STA E INST D-SCADA-BK 1	9		EDP	301	F	6/1/2016						

The user can adjust any of the project plan amounts and change the operative dates.

- O&M:

RowNo	Year	ExhCh	MWC	Bus_Are	Acct	MNEM	FuncGrp	EscGrp	UCC	CostElem	CostElem	SortCE	Nominal\$	NominalSubTotal	NominalAlloc	NominalAdj	Alloc		
241	2020	004-008	GA	ED	588	DT	ED	ED	301	LAB	Labor		407.50	17,771.54	2.29%				
242	2020	004-008	GA	ED	588	DT	ED	ED	301	MAT	MAT		320.95		1.81%				
243	2020	004-008	GA	ED	593	DT	ED	ED	301	LAB	Labor		1,552.70		8.74%				
244	2020	004-008	GA	ED	593	DT	ED	ED	301	MAT	MAT		15,463.19		87.01%				
245	2020	004-008	GA	ED	598	DT	ED	ED	301	LAB	Labor		52.60		0.30%				
246	2020	004-008	GA	ED	598	DT	ED	ED	301	MAT	MAT		-25.41		-0.14%				
247	2020	004-008	GA	ED	456	Rev	Rev	Rev	301	Rev	Rev		-4,183.50		0.00%				
TOTAL													2,891,298.20	2,926,439.81			0		
MWC O&M RO Input Adjustment excluding Burden & PR Tax:																			
Less: Burden													0.00						
Less: Revenue													-35,141.62	35,141.62	0.00				
MWC RO Input													2,926,439.81						
Less: MWC A&G RO Input													473,660.84						
MWC O&M RO Input													2,452,778.97						

Uniform RO Model Format & Structure

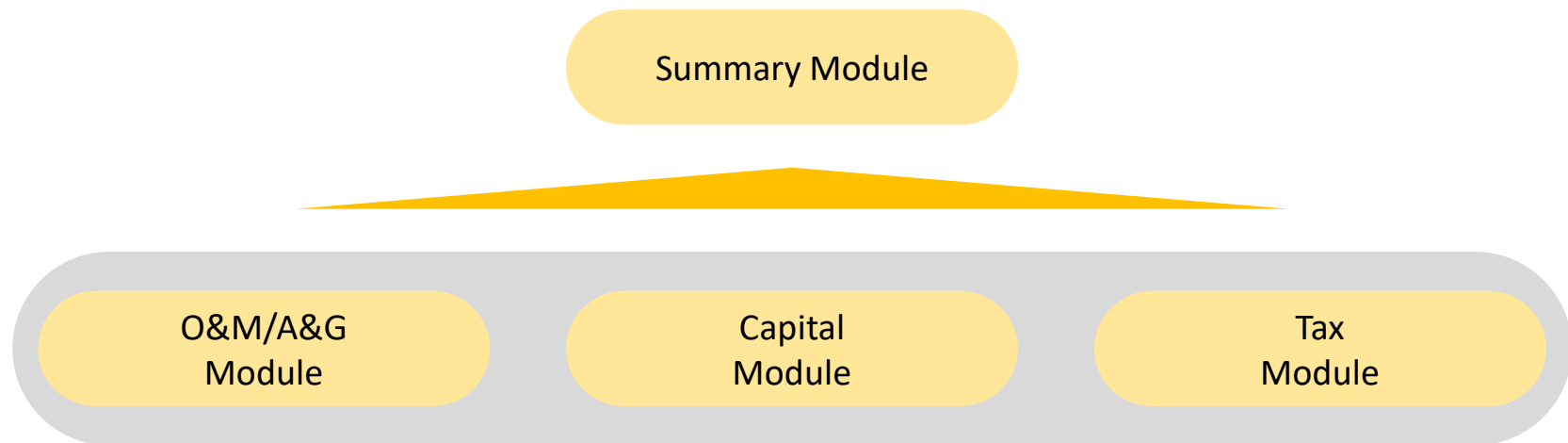
Uniform RO Model Format & Structure

IOU RO Models share similar “DNA”

- Foundational structure is consistent across IOUs
 - O&M/A&G, Capital, Tax, and Summary modules
 - User Guides
 - Data flow diagrams
 - Processing sequence
 - Identification of inputs that can be changed
- IOU RO Model Workshops following filing of Application
- Working sessions with PAO and Energy Division
- Revenue requirement calculation:
 - PG&E: Gross-up factors
 - SCE, SDG&E/SoCal Gas: Goal Seek

RO Model format and structure is tailored towards each IOUs’ internal business requirements. However, IOU RO Models share similar foundational principles to bridge a generally uniform “look and feel” across IOUs.

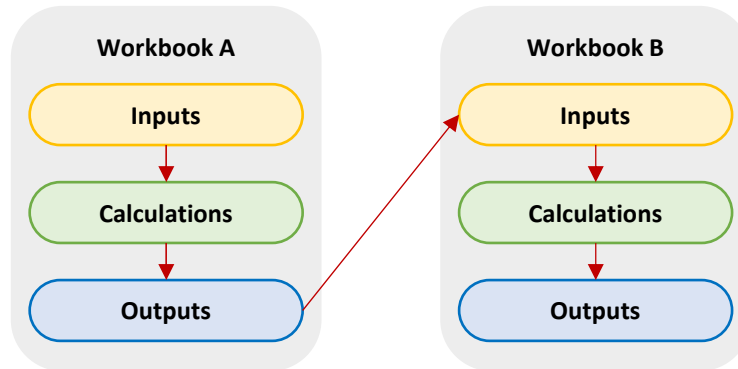
RO Model Overview



- The RO Model consists of interdependent modules
- Any changes made to the O&M, Capital, and Tax modules flow to the Summary module
- The Summary module uses information from the O&M, Capital, and Tax modules to calculate Revenue Requirement

SCE RO Model Architecture | Data Interaction

How Data Flows Within and Between Workbooks



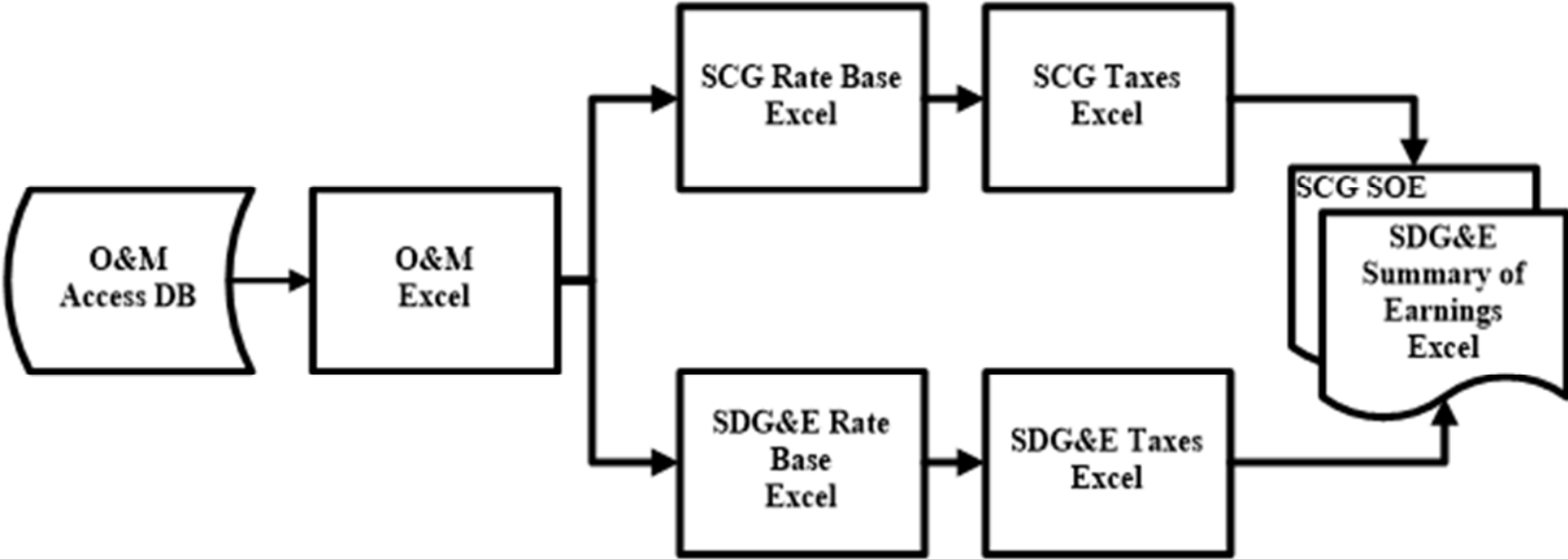
- **Inputs** centralization improves transparency and highlights workbook's main drivers
- **Calculations** only use data within workbooks
- **Outputs** centralization provides insights into the flow of data out of workbooks

How RO Model Workbooks Interact

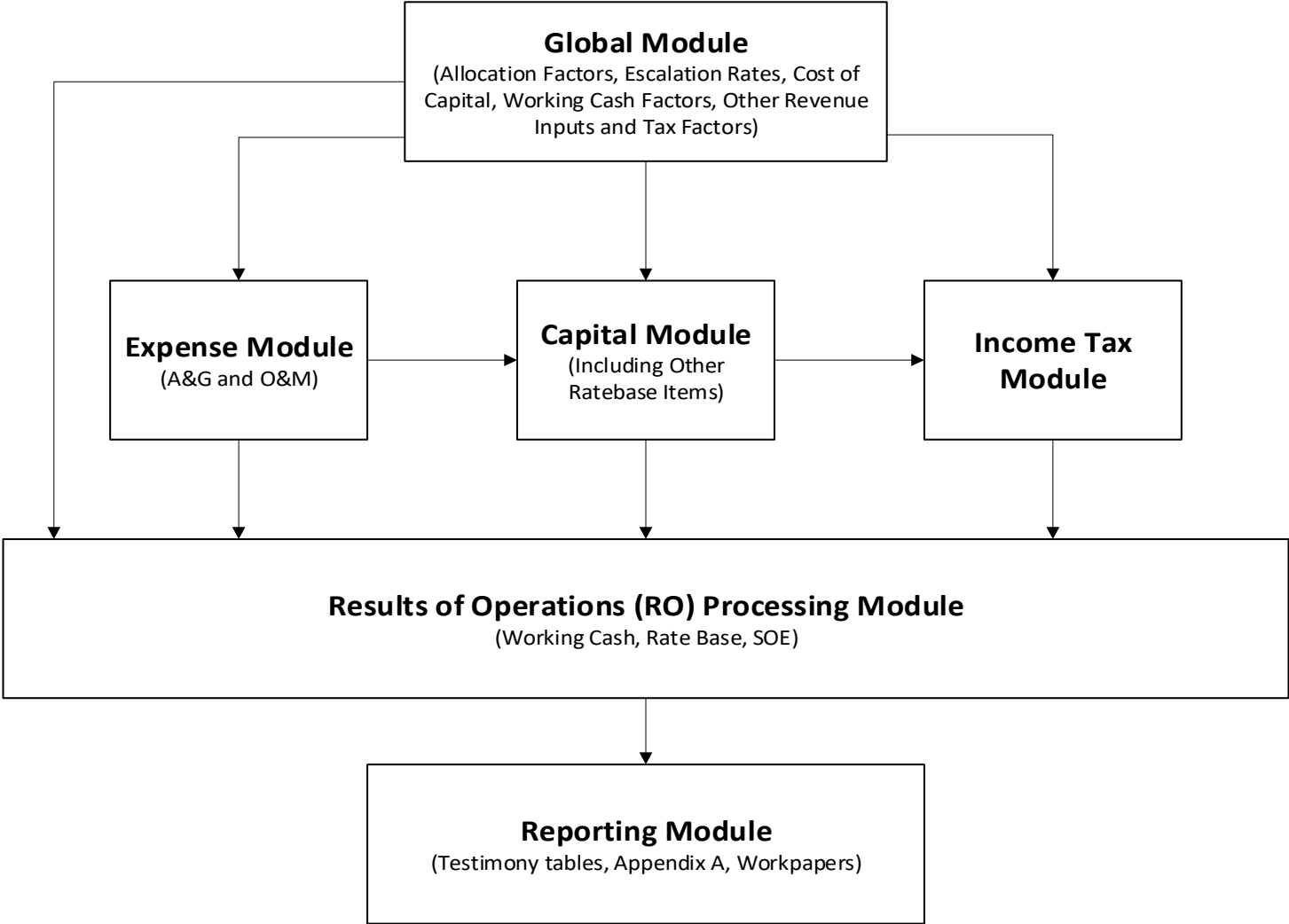


- **Linear Flow** of information enhances interaction between workbooks
- **Model Connections** are controlled within *Inputs* and *Outputs* sections of workbooks

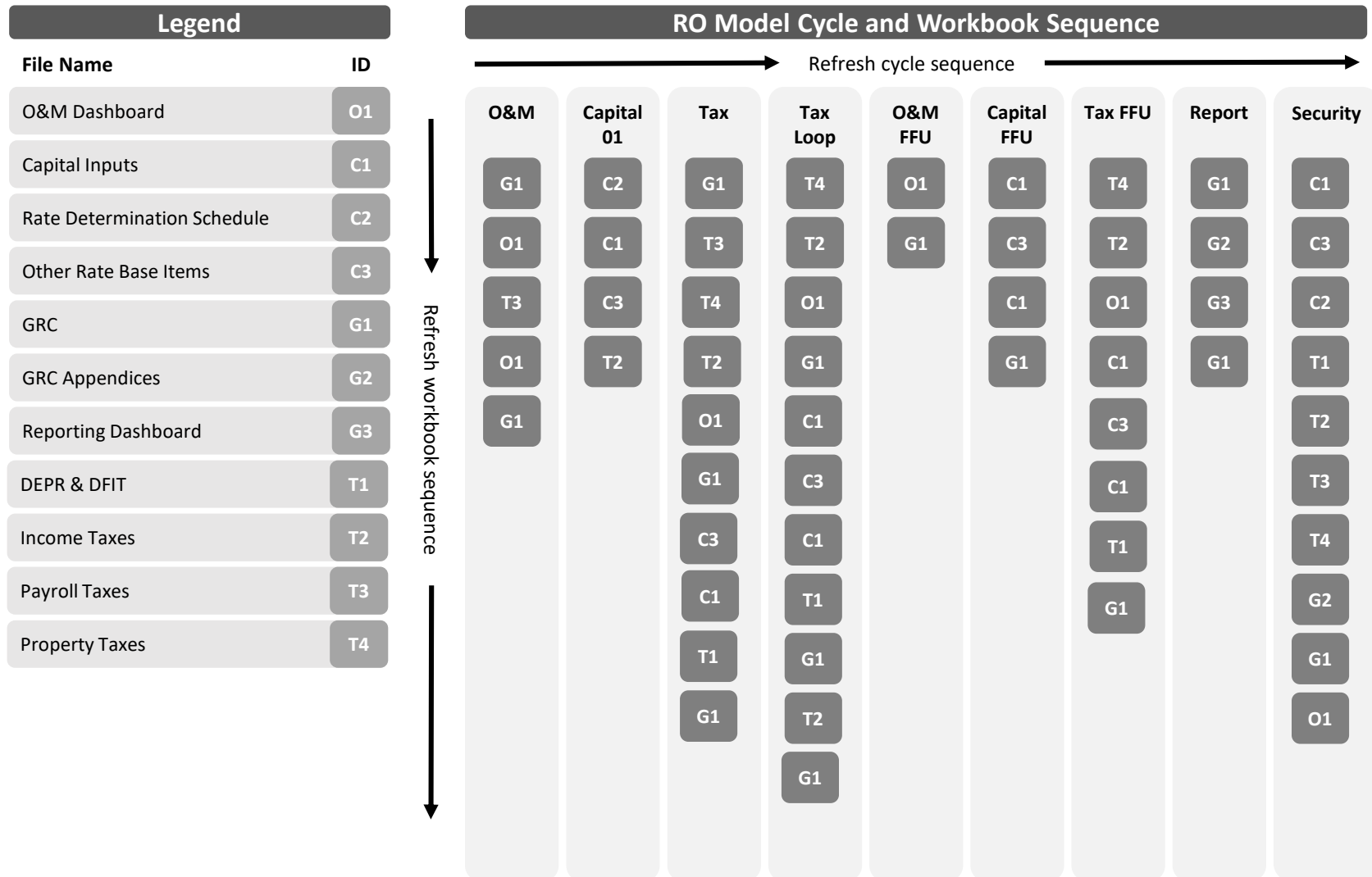
SDG&E/SoCalGas RO Model Architecture | Data Interaction



PG&E RO Model Architecture | Data Interaction



RO Model – SCE Processing Sequence



RO Model – SDG&E/SoCalGas Processing Sequence

Sequence #1 - Refresh Sequence					
ID	File Name	Module	ID	File Name	Module
0	omUSSCalculation.xlsb	O&M	23	rbSDGEDataInput.xlsb	RateBase
1	rbSCGBilledCap.xlsb	RateBase	24	rbSDGEData.xlsb	RateBase
2	rbSDGEBilledCap.xlsb	RateBase	25	rbSDGEAdds.xlsb	RateBase
3	sum.xlsb	SOE	26	rbSDGEPlantSum.xlsb	RateBase
4	omAllLoadRODb.xlsb	O&M	27	rbSDGETax.xlsb	RateBase
5	omAllCalculation.xlsb	O&M	28	taxSDGEDeferred.xlsb	Tax
6	om.xlsb	O&M	29	rbSDGETotals.xlsb	RateBase
7	omAllCalculation.xlsb	O&M	30	taxSDGE.xlsb	Tax
8	om.xlsb	O&M	31	taxSDGEDeferred.xlsb	Tax
9	taxSCG.xlsb	Tax	32	sum.xlsb	SOE
10	rbSCGDataInput.xlsb	RateBase	33	omAllLoadRODb.xlsb	O&M
11	rbSCGPit1.xlsb	RateBase	34	omAllCalculation.xlsb	O&M
12	rbSCGPit2.xlsb	RateBase	35	om.xlsb	O&M
13	rbSCGPit3.xlsb	RateBase	36	sum.xlsb	SOE
14	rbSCGPit4.xlsb	RateBase	37	rbSCGTotals.xlsb	RateBase
15	rbSCGSharedAsset.xlsb	RateBase	38	rbSDGETotals.xlsb	RateBase
16	rbSCGPlantSum.xlsb	RateBase	39	wcSCG.xlsb	Working Cash
17	taxSCGDeferred.xlsb	Tax	40	wcSDGE.xlsb	Working Cash
18	rbSCGTotals.xlsb	RateBase	41	taxSCG.xlsb	Tax
19	rbSCGSharedAsset.xlsb	RateBase	42	taxSDGE.xlsb	Tax
20	taxSCG.xlsb	Tax	43	rptSummary.xlsb	SOE
21	taxSCGDeferred.xlsb	Tax	44	Sum.xlsb	SOE
22	taxSDGE.xlsb	Tax			

Sequence #2 - Net Operating Loss Calculation		
ID	File Name	Module
0	taxSCGDeferred.xlsb	Tax
1	rbSCGTotals.xlsb	RateBase
2	rbSCGSharedAsset.xlsb	RateBase
3	taxSCG.xlsb	Tax
4	taxSCGDeferred.xlsb	Tax
5	taxSDGEDeferred.xlsb	Tax
6	rbSDGETotals.xlsb	RateBase
7	taxSDGE.xlsb	Tax
8	taxSDGEDeferred.xlsb	Tax
9	sum.xlsb	SOE
10	rbSCGTotals.xlsb	RateBase
11	rbSDGETotals.xlsb	RateBase
12	wcSCG.xlsb	Working Cash
13	wcSDGE.xlsb	Working Cash
14	taxSCG.xlsb	Tax
15	taxSDGE.xlsb	Tax
16	rptSummary.xlsb	SOE
17	Sum.xlsb	SOE

RO Model – PG&E Processing Sequence

PG&E RO Model Workbook Sequence		
Sequence	Filename	Module
1	EscFactor_Revised.xlsx	Global
2	labor_alloc_factor.xlsx	Global
3	GRCWMCExpense.xlsm	Expense
4	GRCAGExpense.xlsm	Expense
5	Global.xlsm	Global
6	InputsExpenseRO.xlsx	Expense
7	CapitalModel.xlsm	Capital
8	OtherRatebase.xlsm	Capital
9	InputsCapitalRO.xlsx	Capital
10	CapResOutputToTax.xlsm	Capital->Tax
11	Tax_Unbundling.xlsm	Tax
12	Simplified_Tax.xlsm	Tax
13	Tax_Summary.xlsm	Tax
14	InputsTaxRO.xlsx	Tax
15	GRCROModel.xlsm	RO Processing Module
16	ROTestimonyTables.xlsx	Reporting Module
17	RO_AppendixA.xlsx	Reporting Module
18	RO_Workpapers.PDF	Reporting Module

Working Relationship with ALJ & Energy Division



RO Modeling Process at the CPUC

- Energy Division staff support the ALJ in a GRC
- Under a Non-Disclosure Agreement, ED staff works with IOU to incorporate draft PD adjustments in the RO Model
- Liaison for ALJ and IOU modeler – PD interpretations
- Collaborate with IOU modeler to produce workpapers for every PD adjustments

Working Relationship with ALJ & Energy Division

- Decision language: “workshops would provide an opportunity for the utilities to explain their perspectives and develop a single approach to their working relationship with the ALJ and Energy Division staff, to be used by all utilities in all GRCs going forward. This would improve the predictability of this stage of preparing the PD.”
- Continue process of utility expert supporting CPUC throughout PD development process, as requested by CPUC.
- Early engagement with IOUs for a modified process:
 - Working sessions to gain familiarity with IOU RO model
 - Energy Division creates templates and workpapers to support modeling inputs
 - IOUs conduct initial modeling
 - IOUs and Energy Division review templates, workpapers, and modeling inputs
 - IOUs support Energy Division to validate modeling results
- Update the Results of Operations Modeling Procedures, Protective Order, and Certificate of Compliance to allow for remote modeling

Discussion

Next Steps and Wrap Up

Wrap Up

Please send comments to: kris.vyas@sce.com and gelila.berhane@cpuc.ca.gov.

Comments and report schedule:

Workshop Comments: November 25, 2020

Draft Report: December 7, 2020

Draft Report Comment: December 14, 2020

Final Report: December 21, 2020

Workshops #1 and #2 reports are available at:

<https://www.cpuc.ca.gov/General.aspx?id=6442454678>

13. Appendix B: Post Workshop Comments

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE
STATE OF CALIFORNIA**

Order Instituting Rulemaking to Develop a Risk-Based Decision-Making Framework to Evaluate Safety and Reliability Improvements and Revise the General Rate Case Plan for Energy Utilities.

R.13-11-006

**JOINT COMMENTS OF SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E),
SOUTHERN CALIFORNIA GAS COMPANY (U 904-G), SAN DIEGO GAS &
ELECTRIC COMPANY (U 902-M), AND PACIFIC GAS AND ELECTRIC
COMPANY (U 39-M) ON RATE CASE PLAN WORKSHOP NUMBER 3**

<p>CLAIRE E. TORCHIA KRIS G. VYAS Attorneys for SOUTHERN CALIFORNIA EDISON COMPANY 2244 Walnut Grove Avenue Post Office Box 800 Rosemead, California 91770 Telephone: (626) 302-6613 E-mail: Kris.Vyas@sce.com</p>	<p>SHARON L. COHEN Attorney for SAN DIEGO GAS & ELECTRIC COMPANY AND SOUTHERN CALIFORNIA GAS COMPANY 8330 Century Park Court, CP32D San Diego, California 92123 Telephone: (619) 696-4355 Facsimile: (619) 699-5027 E-mail: slcohen@semprautilities.com</p>
<p>MARY GANDESBERY Attorney for PACIFIC GAS AND ELECTRIC COMPANY 77 Beale Street, B30A San Francisco, California 94105 Telephone: (415) 973-0675 Facsimile: (415) 973-5520 E-mail: Mary.Gandesbery@pge.com</p>	

Dated: **December 14, 2020**

Joint Comments of Southern California Edison Company (U 338-E), Southern California Gas Company (U 904-G), San Diego Gas & Electric Company (U 902-M), and Pacific Gas and Electric Company (U 39-M) on Rate Case Plan Workshop Number 3

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COMPANY (U 39-M) ON RATE CASE PLAN WORKSHOP NUMBER 3**

I.

INTRODUCTION

In accordance with guidance provided by the Staff of the California Public Utilities Commission (“Commission”), the Investor-Owned Utilities (“IOUs”) Southern California Edison Company (“SCE”), Southern California Gas Company (“SoCalGas”), San Diego Gas & Electric Company (“SDG&E”) and Pacific Gas and Electric Company (“PG&E”) (collectively, the “IOUs”) respectfully submit their joint comments¹ regarding the November 19, 2020 General Rate Case Workshop (“Workshop 3”). Workshop 3 was conducted pursuant to the Commission’s recent decision (“D”) in Rulemaking (“R.”) 13-11-006 (the “Rate Case Plan” or “RCP” Rulemaking), D.20-01-002 (hereinafter referred to as the “RCP Decision”).

The workshop scope encompassed five topics, followed by open discussion:

¹ Pursuant to Commission Rule of Practice and Procedure 1.8(d), counsel for SCE confirms that PG&E, SoCalGas, and SDG&E have authorized SCE to file these joint comments on their behalf.

- Introduction to Results of Operations (“RO”) Model
- Standard Format for Summary of Earnings
- User-Friendly Interface
- Uniform RO Model Format & Structure
- Working Relationship with Administrative Law Judge (“ALJ”) & Energy Division

The IOUs reiterate their commitment to continuing assessment of their RO Models to identify prudent and practical opportunities to align across IOUs, to foster simplicity and transparency and to promote a more user-friendly experience. The IOUs intend to continue to consult and collaborate with each other and remain open to feedback from other parties on reasonable opportunities to align aspects of the models, improve the user experience, and carry out other ideas for overall improvement.

With the exception of one item (which is discussed below), the IOUs believe no formal regulatory ruling or activity is necessary in order to implement the concepts introduced during Workshop 3; areas for possible alignment of models have already been identified and shared at Workshop 3. The IOUs agreed to explore the concepts that were introduced during Workshop 3 and, if feasible, implement the modifications in the IOUs’ next general rate case (“GRC”) Applications. Consistent with other model changes, these modifications will be communicated in a fully transparent manner to Energy Division Staff and any interested stakeholder in the applicable GRC proceeding.

These Workshop 3 comments are limited to the topics raised by non-IOU participants during the workshop, and otherwise do not repeat points that IOU representatives presented that did not garner further questions or comments during the workshop.

II.

DISCUSSION

A. The IOUs Do Not Recommend That Confidential Information Be Disclosed During the Course of Development of the GRC Proposed Decision

During the workshop, SCE, on behalf of the IOUs, discussed how the IOUs support Commission Staff and ALJs in incorporating draft Proposed Decision (“PD”) adjustments in the RO model. This activity is conducted pursuant to a strict non-disclosure agreement (“NDA”). Under the NDA, the utility expert(s) assisting the Commission may not disclose the nature of their work to external parties, or internally within their own utility. Following SCE’s workshop presentation, TURN requested that the RO modeling conducted in preparation of a PD be as transparent as possible. The IOUs agree with the spirit of this comment and share in the desire to be as transparent as possible.

However, it would be inappropriate to share RO modeling information during the period that utility staff is working with the Commission to develop a PD. This period involves the Commission asking the utility’s personnel to take information that Commission personnel have identified or selected, and run or process it through modeling so that the Commission personnel can assess outcomes. The utility’s efforts assist the Commission in developing a PD. Transparency under these circumstances would infringe on the Commission’s decision-making process, by disclosing its “in progress” thought processes and analysis before the PD is approved for issuance. It may inadvertently cause confusion if information is shared, but then changes substantially as further work occurs on the PD. The IOUs are also concerned by the risk of disclosing market-sensitive information in a piecemeal fashion or prematurely before it has been properly checked, validated, and then approved by Commission leadership.

The current protocols call for strict non-disclosure except as between the designated utility expert(s) and the Commission. The IOUs strongly feel that any change to the current protocols in this regard must originate solely from the Commissioners and be clearly

communicated after notice and a full opportunity to be heard. The IOUs do not recommend changing the timing and nature of disclosing (or not disclosing) RO modeling information while the PD is still under development.

B. The IOUs Encourage the Commission to Authorize Remote PD Modeling as the Default

In general, the IOUs do not believe the proposals discussed during Workshop 3 require or warrant any action from the Commission, as the IOUs are committed to exploring the opportunities discussed during the workshop for purposes of possible future alignment. The IOUs are also committed to sharing any changes in a transparent manner.

There is one exception to this IOU viewpoint. One proposal that appears to warrant an Order from the Commission involves updating the Results of Operations Modeling Procedures, Protective Order, and Certificate of Compliance to allow for remote modeling. The recent Ruling in the PG&E GRC can be used as a template.² During Workshop 3, SCE noted the expense and burden associated with the Southern California utility experts needing to travel to and stay in San Francisco for several weeks or more at a time to assist in the PD RO modeling. SCE also pointed out the positive environmental impact of avoiding this extended travel.

In response to questions from Energy Division Staff, PG&E noted that the remote modeling undertaken in collaboration with Energy Division during the COVID-19 pandemic has proceeded smoothly and without incident. PG&E and Energy Division held regular working calls, and PG&E stated it was able to securely share screens and files, and confidentially store those files as well.

Energy Division Staff appeared receptive to the IOU proposal to move to a default of remote modeling in support of PD development, with utility experts only traveling to Commission offices if specifically directed to do so by the ALJs or Assigned Commissioner

² Administrative Law Judges' Ruling Adopting Amended Confidential Modeling Procedures, issued August 13, 2020.

presiding over a given GRC proceeding. As such, the IOUs respectfully urge Energy Division Staff to discuss this proposal within the Commission to ascertain if the Commission can issue guidance that authorizes such a change on a going-forward basis.

III.

CONCLUSION

The IOUs appreciate the opportunity to present to, and collaborate with, other stakeholders during Workshop 3. The IOUs also thank the Commission for the opportunity to provide written comments. The IOUs look forward to working toward greater alignment across the RO models where practical, and engaging in further discussions with all interested parties regarding efficiencies that can be reasonably achieved in GRC proceedings.

Respectfully submitted,

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/s/ Kris G. Vyas

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December 14, 2020