

Application No.: A.19-08-013
Exhibit No.: SCE-18 Vol. 01
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(U 338-E)

2021 General Rate Case Rebuttal Testimony

Results of Operations

Before the

Public Utilities Commission of the State of California

Rosemead, California
June 12, 2020

SCE-18, Vol. 01: Results of Operations

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I.

REVENUE REQUIREMENT REQUEST CHANGES

This section of testimony presents SCE's updated 2021, 2022, and 2023 GRC revenue requirement request based on various changes supported in SCE's rebuttal testimony.¹ Table I-1 below provides the changes that SCE is making along with updates to the Results of Operations (RO) model compared to SCE's original amended application, followed by descriptions of each line item.

***Table I-1
Change in 2021-2023 GRC Revenue Requirement
(Thousands of Dollars)***

Southern California Edison Company Change in 2021-2023 GRC Revenue Requirement (Thousands of Dollars)			
	CPUC		
	<u>2021</u>	<u>2022</u>	<u>2023</u>
1. Amended Application	7,625,153	8,043,743	8,578,188
2. SCE Revisions			
3. November 2019 Errata	(10,871)	(11,413)	(11,490)
4. January 2019 RO Model Corrections	(1,286)	443	(3,405)
5. February 2020 CSRP Amendment	(58,548)	(55,004)	(71,957)
6. Subtotal	(70,705)	(65,974)	(86,852)
7. Rebuttal Updates:			
8. Update for 2019 Recorded CapEx	19,196	53,263	49,401
9. Rebuttal RO Model Corrections	2,974	4,771	6,152
10. Errata	(17,012)	(34,074)	(40,848)
11. Subtotal	5,158	23,960	14,706
12. SCE Agreed to PAO/Intervenor Adjustments:			
13. SCE-02	(58)	(2,395)	(4,826)
14. SCE-03	(139)	(156)	(170)
15. SCE-05	(4,063)	(8,937)	(10,185)
16. SCE-06	(5,225)	(5,647)	(6,124)
17. SCE-07	(1,552)	(2,115)	(2,190)
18. Subtotal	(11,037)	(19,250)	(23,494)
19. Subtotal for Updates	(76,584)	(61,264)	(95,641)
20. Rebuttal	7,548,568	7,982,479	8,482,547

¹ Refer to Appendix A.

Line 1: provides the revenue requirement request included in SCE's November 7, 2019 amended application;

Line 3: provides the revenue requirement change related to changes to the calculations of SCE's High Fire Risk Areas (HFRA) amended testimony and various errata to direct testimony served on November 22, 2019;

Line 4: provides the revenue requirement change for updates to the RO model;

Line 5: provides the revenue requirement changes included in SCE's February 20, 2020 amended testimony that removed the implementation costs and offsetting benefits associated with the Customer Service Re-Platform Project (CSRP);

Line 8: provides proposed revenue requirement changes related to updating for 2019 recorded capital expenditures as discussed in SCE-12, Volume 1;

Line 9: provides the revenue requirement change for updates to the RO model

Line 10: provides the revenue requirement change related to SCE's errata changes as discussed throughout the rebuttal exhibits as provided on June 12, 2020;

Lines 12–18: provides the proposed revenue requirement changes related to SCE's agreement with various adjustments recommended by other parties,

Line 20: provides SCE's updated revenue requirement request in this Rebuttal as a result of the changes shown on lines 3-18.

Table I-2 below presents SCE's updated Results of Operations request for the years 2021 through 2023. The revised Results of Operations at proposed rates shows SCE will need \$7,549 billion, \$7,982 billion, and \$8,483 billion in CPUC jurisdictional base-related revenue in the years 2021, 2022, and 2023, respectively, to cover the costs of operations and earn its authorized rate of return.

Table I-2
Revised 2021 – 2023 Results of Operations at Proposed Rates
CPUC- Jurisdictional
(Thousands of Dollars)

		GRC CPUC		
Line	Item	2021	2022	2023
1.	Total Operating Revenues	7,548,568	7,982,479	8,482,547
2.	Operating Expenses:			
3.	Production			
4.	Steam	8,325	8,325	8,325
5.	Nuclear	75,123	75,123	75,123
6.	Hydro	45,189	45,189	45,189
7.	Other	83,320	83,320	83,320
8.	Total Production O&M	211,958	211,958	211,958
9.	Transmission	104,561	104,561	104,561
10.	Distribution	713,208	713,208	713,208
11.	Customer Accounts	141,353	141,353	141,353
12.	Uncollectibles	14,418	15,247	16,202
13.	Customer Service & Information	83,712	83,712	83,712
14.	Administrative & General	1,245,496	1,241,833	1,238,583
15.	Franchise Requirements	69,907	73,926	78,557
16.	Revenue Credits	(163,840)	(164,726)	(165,585)
17.	Total O&M	2,420,773	2,421,071	2,422,548
18.	Escalation	152,078	202,648	254,705
19.	Depreciation	2,133,019	2,274,278	2,443,357
20.	Taxes Other Than On Income			
21.	Property Taxes	353,592	384,364	424,545
22.	Payroll Taxes & Misc	66,702	69,089	71,389
23.	Taxes Based On Income	231,361	284,777	347,284
24.	Total Taxes	651,655	738,230	843,218
25.	Total Operating Expenses	5,357,524	5,636,226	5,963,828
26.	Net Operating Revenue	2,191,044	2,346,253	2,518,719
27.	Rate Base	28,794,669	30,834,418	33,100,972
28.	Rate Of Return	7.61%	7.61%	7.61%

As a result of the revised GRC Revenue Requirements for 2021, 2022, and 2023, Table I-3 below, identifies the requested Authorized Base Revenue Requirement (ABRR) and CPUC-jurisdictional base-related revenue changes.²

Table I-3
2021, 2022 and 2023 Revenue Changes Resulting from the 2021 Test Year
and 2022 and 2023 Post Test Year GRC Request
CPUC-Jurisdictional
(Thousands of Dollars)

ABRR and Revenue Change Including Impact of Previously Approved & Forecast ABRR Changes				
Line	Item	2021	2022	2023
1.	Proposed GRC Base Revenue Requirement	7,548,568	7,982,479	8,482,547
2.	Estimated Present (Prior Year) Revenue Requirement	6,445,433	7,548,568	7,982,479
3.	Change in Authorized Base Revenue Requirement	1,103,135	433,911	500,068
4.	Less GRC Revenue Growth:			
	GWhs			
5.	2020	82,223		
6.	2021	81,440		
7.	2021	81,440	5,527,181	
8.	2022	80,657	5,474,040	
9.	2022	80,657		5,474,040
10.	2023	80,609		5,470,782
11.	GRC Revenue Growth	(53,141)	(53,141)	(3,258)
12.	One-Time Memorandum Account Recovery			
13.	Customer Service Re-Platform Memorandum Account (CSRPMa)	—	—	
14.	IDER/Distribution Deferral Administration Costs Memorandum Accounts	847	(847)	
15.	Emergency Customer Protections Memorandum Account (ECPMA)	55	(55)	
16.	Balancing & Memorandum Account Recovery	902	(902)	—
17.	GRC Revenue Change	1,157,178	486,149	503,326
18.	Percent GRC Revenue Change	18.10%	6.49%	6.31%
19.	Total System Present Rate Revenues	10,201,615	9,895,847	9,827,072
20.	2021 GRC Revenue Change		1,157,178	1,157,178
21.	2022 GRC Revenue Change			486,149
22.	Total System Present Rate Revenues (Including GRC Revenue Change)	10,201,615	11,053,025	11,470,399
23.	Percent Total Revenue Change	11.34%	4.40%	4.39%

Appendix A to this rebuttal testimony includes updated Tables contained in Exhibit SCE-07, Volume 1.

² In Update testimony to be submitted later this year, SCE will revise the 2020 Present Revenue Requirement (Line 2) to reflect the 2020 Post Test Year Revenue Requirement filed in Advice 4136-E; in addition, the 2021 Test Year revenue requirement will be updated to reflect escalation rate changes.

II.

RENEWED REQUESTS FOR PROJECT FUNDING

At several places in testimony, Cal Advocates and TURN recommend that the Commission deny funding for a number of requested capital projects on the grounds that these projects were previously requested and authorized in prior GRCs.³ For a variety of reasons, the projects were not initiated or completed in the rate case cycle. Instead, SCE, in its management discretion, used the authorized funds to accomplish other work on behalf of customers that emerged as necessary and was not otherwise forecast. Having concluded in preparing this rate case that these projects remain appropriate for funding in the test year and beyond, SCE has renewed its funding request. Elsewhere in its rebuttal testimony regarding each such project, SCE addresses their merits.⁴

Here, SCE responds to the overall position that if customer funding for a project is not used when first authorized, it must then be funded by shareholders regardless of whether or not it would be prudent and beneficial to customers to complete the project at a later time. Were the Commission to adopt such a position, it would be a radical departure from a principle of ratemaking that has generally been applied to all rate-regulated public utilities in California for decades. It would strip utility management of the discretion they should and appropriately *do* exercise on behalf of customers when responding to realities and changed circumstances that can never be fully or perfectly forecast in a test year.⁵

³ See, e.g., discussion regarding grid modernization investments in Exhibit PAO-5C, p. 34, lines 14-15 (“[T]he Public Advocates Office generally recommends that SCE shareholders, rather than ratepayers, fund any remaining work required to provide the functionality SCE described in its TY 2018 GRC.”; Exhibit TURN-04, p. 5, lines 2-4 (agreeing with Cal Advocates). See also SEIA-01, pp. 4-5. Similar proposals are made for enterprise operations and unspent decommissioning for the San Gorgonio hydro plant. See Exhibit TURN-10, p. 10) (“The utility has apparently not spent any money on this project, meaning that the previously authorized \$48.6 million must have been redirected to other spending or shareholder profits.”); and Exhibit TURN-09, p. 16 (“Effectively ratepayers paid for a return [on] the project even though Edison didn’t do it. This enriched the shareholders . . . because Edison unjustifiably earned a return on money that it never invested.”).

⁴ For rebuttal in support of SCE’s grid modernization requests, see SCE-13, Vol. 04. Pt. 1. For enterprise operations rebuttal, see SCE-17, Volume 5. For rebuttal in support of San Gorgonio decommissioning costs, see Exhibit SCE-16, Volume 1.

⁵ Forecasts included in GRCs with three-year cycles are typically developed two-and-one-half to three years before they are authorized by the Commission for the Test Year. In SCE’s 2018 GRC, the Commission issued the final decision about four years after the forecast for the 2018 test year was initially developed.

1 **A. The Commission Has Long Recognized the Value of Management Discretion for Inter-**
2 **GRC Spending Decisions**

3 The Commission has recognized that “[u]nder GRC ratemaking, the utilities are given an
4 authorized revenue requirement to manage various parts of their utility business. Recognizing that the
5 utilities may need to re-prioritize spending and spend more or less in a particular area of their business,
6 the Commission affords them substantial flexibility to decide how much to spend in any particular
7 area.”⁶ Moreover, the Commission has specifically acknowledged that “new programs or projects may
8 come up, others may be cancelled, and there may be reprioritization. This process is expected and is
9 necessary for the utility to manage its operations in a safe and reliable manner.”⁷ TURN itself has stated
10 in written comments that “[p]articularly when it comes to safety and reliability, utilities are required to
11 spend the amounts necessary to meet their current needs, regardless of the level of authorized
12 spending.”⁸

13 **B. Perfect Estimation Is Not Feasible Or Expected In Forecast Ratemaking Jurisdictions Like**
14 **This One**

15 Utilities are not held, and cannot be held, to a standard of perfect forecasting in a rate case.
16 Instead, a utility’s forecasts are intended to represent reasonable estimates of what the utility foresees
17 will be spent at the time the forecast is prepared.⁹ The shareholder assignment recommendations would
18 substitute a mechanistic test for project funding rather than a reasoned inquiry as to why the company
19 did not pursue the project on the expected schedule, and why it believes the project still merits funding.

20 Proposing to assign future project costs to shareholders is just a shortcut way to erase customer
21 funding for SCE’s proposed capital projects without having to prove that the projects are unreasonable.
22 However, SCE is entitled to recover its investment on assets used and useful for customers, unless it can
23 be shown that the spending was not reasonable.

⁶ CPUC Resolution E-4464 (May 10, 2012), at p. 7.

⁷ D.11-05-018, at p. 27.

⁸ A.17-10-007 (Sempra Test Year 2019 GRC), Comments of the Utility Reform Network on the 2019 Risk Spending Accountability Report of the Sempra Utilities, p. 2.

⁹ See, e.g., D.08-09-026, Section 6.2 (“A GRC is used to set rates based on reasonable estimates of the costs the utility will incur in providing service. It is not generally intended to set a specific budget. Actual costs for the test year, including plant additions, may vary.”).

1 SCE recognizes its obligation to provide information to the Commission as requested if SCE
2 spends money on projects other than those approved in its rate case. The annual spending accountability
3 reports represent one such vehicle. For each year, SCE comprehensively reports on and explains any
4 variances between recorded spending and authorized spending for safety, reliability, and maintenance
5 projects and activities. For example, SCE's most recent spending accountability report (filed on June 1,
6 2020) addressed the variance in spending that occurred with respect to the T&D Training Center, one of
7 the projects that is being attacked here because funding was previously sought and authorized.

8 SCE has provided the Commission with evidence of the reasonableness of its actions. In
9 prepared testimony, SCE has explained why the approved project spending was appropriately deferred,
10 and why the original project remains reasonable and beneficial for customers in the present GRC. TURN
11 and other parties were welcome to offer opposing evidence and argument on each of these issues. But
12 they should not be permitted to rely simply on the fact that funding for these projects was previously
13 approved, but SCE elected instead to complete other, emergent projects beneficial to customers.

14 **C. TURN's Shareholder Enrichment Argument Lacks Merit**

15 TURN notes that SCE has sought and obtained cost recovery for San Gorgonio decommissioning
16 for several past rate cases without yet completing the work. SCE rebuts these claims in some detail in
17 Exhibit SCE-16, Volume 1 by describing the scope and pace of SCE's decommissioning spending for
18 San Gorgonio relative to prior GRC-authorized scope and amounts. Here, SCE addresses TURN's
19 allegation that a permanent disallowance of San Gorgonio decommissioning is warranted in the future,
20 that customers "paid Edison a rate of return on cost of removal (which is added to accumulated
21 depreciation as money is forecast to be spent to decommission the plant) for non-existent work," and
22 that "ratepayers paid for a return [on] the project even though Edison didn't do it." TURN continues,
23 "[t]his enriched the shareholders because Edison unjustifiably earned a return on money that it never
24 invested."¹⁰

25 TURN's argument rests on an unproven assumption that SCE earned a return on unspent capital.
26 As an initial matter, to the extent the Commission authorizes more capital than is ultimately spent in a
27 GRC cycle, the utility's rate base will be trued up on an actual, recorded basis in the test year of the next
28 cycle. Accordingly, any benefit to shareholders in that isolated example would be limited to the carrying
29 cost of the associated rate base in the short run prior to the subsequent GRC. And, in any event, any

¹⁰ TURN-09, p. 16.

marginal and temporary “benefit” can be offset by projects where capital spending within the GRC cycle is *greater* than forecast. In those situations, shareholders lose the carrying costs of the overspent capital until it is trued up in the next cycle.

As a practical and factual matter, however, there is no excess benefit (“unjust enrichment,” in TURN’s words) to shareholders if approved capital for a specific project is deployed, in the exercise of management discretion, to a different capital project. That is, for TURN’s “multi-GRC enrichment” allegations to be of any consequence, TURN would have to demonstrate that SCE repeatedly underspent capital. Its testimony does not do that. Indeed, the facts do not bear this out, and instead demonstrate that in eight out of the last eleven years, SCE *over-spent* as compared to authorized capital amounts.

Table II-4
Authorized vs. Recorded Capital Expenditures in Four Prior GRCs
in \$ millions

GRC	Year	CPUC GRC- Authorized	Actual Capital Expenditures	Variance
2009	2009	\$1,878	\$1,888	\$10
	2010	\$1,958	\$2,085	\$127
	2011	\$2,043	\$2,151	\$108
2012	2012	\$2,498	\$1,925	(\$573)
	2013	\$2,574	\$2,121	(\$453)
	2014	\$2,650	\$2,825	\$176
2015	2015	\$2,936	\$2,994	\$58
	2016	\$2,995	\$2,803	(\$192)
	2017	\$3,055	\$3,067	\$12
2018	2018	\$3,198	\$3,443	\$245
	2019	\$3,277	\$3,487	\$210
Total	2009-2019	\$29,063	\$28,791	(\$272) -0.9%

The table above shows there is no pattern of consecutive under-spending that would lead to SCE’s shareholders being enriched with a return on capital not spent. In fact, for most years over the last four GRC cycles, SCE has *over-spent* on capital projects relative to what it was authorized, and cumulatively over the past eleven years SCE has spent about exactly what has been authorized.¹¹ This is

¹¹ The aggregate under-spend (\$272 million) relative to authorized (\$29,063 million) is *under one percent*.

1 a more accurate picture than TURN's selection of individual projects that may have been under-spent in
2 a given GRC cycle. Moreover, SCE notes that TURN cannot have it both ways. When SCE *over*-spends
3 on important capital projects, TURN in the past has proposed that customers should not pay for the
4 assets over their useful lives.¹² Here, in targeted areas of underspending, TURN and others are arguing
5 that customers should not pay for these specific cost-of-service items. One main feature of a forecast test
6 year GRC is to set rates based on a forecast, with "re-setting" or "truing up" of capital in the test year of
7 the next GRC. Inevitable differences in spending-versus-authorized are expected to balance over time
8 and should therefore not result in shareholder assignment of costs simply because a particular project
9 underspends its forecast.

¹² The Commission disagreed on the merits in the last GRC. *See* D.19-05-020, p. 402, Finding of Fact #271 ("SCE's expenditures for T&D Infrastructure Replacement programs: Worst Circuit Rehabilitation, Substation Transformer Bank Replacement, Substation Circuit Breaker Replacement, and 'Other' (including Underground Oil Switch Replacement), and a new program: Overhead Conductor have resulted in used and useful assets at a just and reasonable expense [above authorized] of \$115 million for 2014 and \$120 million for 2015.")

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III.

GRC-RELATED RATEMAKING PROPOSALS

A. Introduction

In SCE-07, Vol. 01, Chapter V, SCE presented various GRC-related ratemaking proposals associated with SCE's requested CPUC-jurisdictional base-related revenue requirement.¹³ Cal Advocates and TURN address SCE's various ratemaking proposals throughout their volumes of testimony. In addition, CUE addresses SCE's Safety Reliability Investment Incentive Mechanism (SRIIM) and SEIA proposes memorandum account treatment for all DER-driven projects. In this section, SCE provides rebuttal to parties' positions on all of SCE's GRC-related ratemaking proposals (or directs readers to which exhibit SCE's rebuttal can be found).

On January 16, 2020, the Commission approved Decision (D.)20-01-02 modifying the Commission's Rate Case Plan for energy utilities. Specifically for SCE, this decision directed SCE to amend this application to propose an additional attrition year for 2024. In SCE's direct testimony, many of the ratemaking proposals addressed the "ABRR in 2021, 2022 and 2023" or stated a particular proposed balancing account would be effective over the "2021 GRC period." In light of D.20-01-02, the ratemaking proposals below are hereby modified, where applicable, to include the third attrition year of 2024, with the "2021 GRC cycle" now encompassing the years 2021 through 2024.

1. Establishment of the Wildfire Risk Mitigation Balancing Account (WRMBA)

SCE proposes to create a new two-way balancing account, the Wildfire Risk Mitigation Balancing Account (WRMBA), to record the difference between: (1) the revenue requirement related to recorded Operation and Maintenance (O&M) expenses and capital expenditures¹⁴ for activities approved in SCE's 2021-2023 Wildfire Mitigation Plans (WMPs), but excluding vegetation management

¹³ In SCE-07, Vol. 01, Chapter V, SCE proposed certain modifications to its Greenhouse Gas Revenue Balancing Account (GHGRBA), Tree Mortality Non-Bypassable Charge Balancing Account (TMNBCBA), and Energy Resource Recovery Account (ERRA). The Assigned Commissioner's Scoping Memo and Ruling dated November 25, 2019 stated that these proposed modifications are better addressed through SCE's ERRA forecast and compliance applications. Accordingly, SCE will include these proposals in its 2021 ERRA Forecast application. Effective upon a decision in the 2021 ERRA Forecast proceeding adopting SCE's proposal to recover these payments in the GHGRBA, TMNBCBA and the ERRA balancing account, SCE will remove the forecast related to these amounts from its forecast 2021 test year revenue requirement.

¹⁴ To the extent that SCE has not reached its pro-rata share of the AB 1054 capital expenditure exclusion from equity rate base (*i.e.*, \$1.575 billion) before 2021, SCE will remove any necessary capital expenditures from the WRMBA to seek recovery pursuant to the appropriate statutory procedure.

activities, including vegetation management activities in High Fire Threat Areas (HFRA); and (2) the authorized revenue requirement associated with forecast O&M and capital expenditures adopted in this proceeding. If the Commission adopts this proposal, it should obviate any potential concerns related to implementation of new wildfire-mitigation technologies, scope feasibility of SCE's proposed expenditures, and other related issues underlying potential forecast uncertainties for wildfire-mitigation-related spend.¹⁵

a) Cal Advocates

Cal Advocates does not contest SCE's proposal to establish the WRMBA over the 2021 GRC period.

b) TURN

(1) TURN's Position

TURN opposes SCE's request for a two-way WRMBA, claiming that SCE's proposal "assign[s] to ratepayers the entire cost recovery risk" because it would allow SCE to recover recorded costs in excess of the previously authorized amount "without the need for any demonstration of reasonableness."¹⁶ TURN considers SCE's proposal to perform annual compliance reviews of the operation of the WRMBA in the Energy Resource Recovery Account (ERRA) review proceeding to be insufficient, claiming that "[c]ompliance for ERRA purposes tends to be limited to cost accounting-type issues that do not require the utility to demonstrate the costs were reasonable based on what it knew or should have known at the time the costs were incurred."¹⁷ TURN further contends that SCE's proposal "appear[s] to undermine if not violate Public Utilities Code §8386.4, which describes reliance on a memorandum account "to track costs incurred for fire risk mitigation that are not otherwise covered in [SCE's] revenue requirements,"¹⁸ and requires reasonableness review of those costs in a GRC or standalone application prior to cost recovery.

¹⁵ Because the 2021 and forward costs of all wildfire mitigation-related activities will be recorded in the WRMBA, those costs will no longer record to the Grid Safety and Resiliency Program Memorandum/Balancing Account (GSRPMA/BA), Wildfire Mitigation Plan Memorandum Account (WMPMA), and Fire Risk Mitigation Memorandum Account (FRMMA). SCE intends to propose elimination or modification of those accounts once the pre-2021 balances have been disposed.

¹⁶ TURN-01 at p. 25.

¹⁷ *Ibid.*

¹⁸ TURN-01 at p. 26.

1 As such, TURN proposes a “one-way” balancing account for wildfire
2 program spending,¹⁹ which TURN claims will help SCE “control its costs” and ensure that funds are not
3 “shift[ed]...from wildfire mitigations to other activities...given the statewide focus on wildfire safety.”²⁰
4 TURN also recommends that SCE’s “desire to continue recording any overspending in memorandum
5 accounts” be denied.

6 **(2) SCE’s Rebuttal**

7 As a threshold matter, the Commission should reject TURN’s proposal for
8 a one-way balancing account because it is inconsistent with Public Utilities Code §8386.4. Senate Bill
9 901 and Assembly Bill 1054 clearly contemplate a scenario in which the amount a utility spends on
10 wildfire mitigation measures exceeds the amount reflected in its authorized revenue requirement, and
11 provides a path for cost recovery of such expenditures. Indeed, it is difficult to reconcile the request in
12 TURN-02 for a one-way wildfire mitigation balancing account with no opportunity to record and
13 recover amounts in excess of the authorized amount²¹ with the implicit acknowledgement in Exhibit
14 TURN-01 that wildfire mitigation costs in excess of the authorized amount can be tracked in a
15 memorandum account for after-the-fact reasonableness review and recovery.²² Given the authority
16 provided in Public Utilities Code §8386.4, TURN’s WRMBAs counter-proposal ultimately amounts to a
17 balancing and memorandum account hybrid, or a balancing account with a “soft-cap,” wherein costs
18 spent up to the cap (*i.e.*, forecast adopted in the 2021 GRC) are authorized in this proceeding and
19 considered *per se* reasonable, and costs spent in excess of the cap are subject to an after-the-fact
20 reasonableness review prior to cost recovery.²³

21 SCE’s position, consistent with its proposal in Direct Testimony, is that a
22 two-way balancing account with no after-the-fact reasonableness review of costs spent in excess of the
23 forecast adopted in this proceeding is appropriate for three reasons: (1) statute prohibits SCE from

¹⁹ TURN-01 at p. 28.

²⁰ TURN-02 at p. 30.

²¹ TURN-02 at pp. 29-30.

²² See generally TURN-01 at pp. 25-26.

²³ SCE suggests that a separate memorandum account to track expenditures in excess of those authorized is unnecessary if the Commission adopts this “balancing account with a soft cap.” A single balancing account with a soft cap is administratively simpler because it eliminates the need to switch accounts once the authorized amount has been exceeded, but still requires that the costs in excess of the authorized amount be reviewed for reasonableness prior to recovery.

1 shifting funds authorized for wildfire mitigation plan-related spending to non-wildfire-mitigation
2 programs, thus mooted TURN's purported concern of SCE "shift[ing funds]...from wildfire mitigations
3 to other activities;"²⁴ (2) the scope of the wildfire mitigation activities themselves are reviewed and in
4 SCE's view approved in the WMP process; and (3) a two-way balancing account is appropriate for new
5 activities whose actual costs can differ from the recorded data used in this proceeding to approve the
6 forecast. Although the WMP proceeding is not a cost recovery proceeding, it does provide a venue for
7 review and approval of the scope of SCE's wildfire mitigation activities and an opportunity to review
8 and measure the effectiveness of those activities on a regular basis. As such, the cost of activities
9 performed in compliance with the approved WMP should be considered *per se* reasonable and
10 recoverable from customers.

11 However, if the Commission is inclined to require an after-the-fact
12 reasonableness review of amounts in excess of forecast levels (sometimes called "above-authorized"
13 costs), it should, at a minimum, also adopt a "reasonableness threshold" like that approved in SCE's
14 Grid Safety and Resiliency Program.²⁵ Under this alternative proposal, the WRMBAs would be a
15 balancing account with a soft-cap of 120% of the initial authorization levels (which should be set at
16 SCE's forecast amounts set forth in Direct Testimony). The following describes the specific mechanics
17 of SCE's alternative rebuttal WRMBAs proposal in light of TURN's testimony:

- 18 • Annual over-collections (*i.e.*, if SCE's actual costs for a year are below
19 the initial authorization levels) will be carried over to offset costs in
20 later years of the cycle. Any over-collections at the end of the cycle
21 will be returned to customers.
- 22 • Actual costs above the initial authorization levels but below the 120%
23 reasonableness threshold will be considered *per se* reasonable and
24 transferred to the distribution sub-account of the Base Revenue

²⁴ TURN-02 at p. 30. *See also* Public Utilities Code §8386(i). Additionally, as noted in SCE-15, Volume 5 at p. 10, the return of over-collections in the WRMBAs also fully addresses Cal Advocates' concern that the rate of expansion of SCE's covered conductor circuit miles will be less than what SCE has set forth in its forecast.

²⁵ D.20-04-013 approving SCE's Grid Safety and Resiliency Program adopted a 115% reasonableness threshold for the Wildfire Covered Conductor Program. SCE's Pole Loading and Deteriorating Poles Program Balancing Account (Preliminary Statement Part J) has a similar 115% reasonableness threshold that allows SCE to recover up to 15% above the authorized amounts.

Requirement Balancing Account (BRRBA) for recovery from customers the following year.

- Actual costs above the 120% reasonableness threshold will be reviewed for reasonableness in a Tier 3 advice letter, and will be transferred to BRRBA upon approval of the Tier 3 advice letter. The advice letter may, but is not required to be, filed annually at SCE's discretion.

In discovery, TURN conceded that other ratemaking mechanisms that have been approved or are pending Commission approval, and which are logically indistinguishable from this alternative rebuttal proposal, are entirely consistent with Public Utilities Code §8386.4.²⁶

c) Conclusion

For the reasons set forth above, the Commission should reject TURN's recommendations regarding the WRMBA and adopt SCE's WRMBA as proposed in SCE's Direct Testimony. Alternatively, the Commission should adopt SCE's alternative WRMBA as outlined in this Rebuttal Testimony.

2. Establishment of the Vegetation Management Balancing Account (VMBA)

SCE proposes to create a new two-way balancing account, the Vegetation Management Balancing Account (VMBA) to record the difference between: (1) recorded vegetation management O&M expenses, including routine and wildfire-related vegetation management activities; and (2) the authorized vegetation management O&M expenses, including routine (*i.e.*, Distribution and Transmission Routine Vegetation Management) and wildfire-related (*i.e.*, Dead, Dying, and Diseased Tree Removal and Hazard Tree Mitigation Program (HTMP)) vegetation management activities adopted in this proceeding.²⁷

²⁶ See June 1, 2020 data request response to SCE-TURN-014, which is attached to this Volume as Appendix B, pp. B-2 to B-5

²⁷ Because the 2021 and forward costs of all vegetation management activities will be recorded in the VMBA, those costs will no longer record to the Drought Catastrophic Event Memorandum Account (CEMA), GSRPMA, Fire Hazard Prevention Memorandum Account (FHPMA), WMPMA, and FRMMA. SCE intends to propose elimination or modification of those accounts once the pre-2021 balances have been disposed.

1 **a) Cal Advocates**

2 Cal Advocates recommends that SCE establish a two-way Vegetation
3 Management Balancing Account with an expense level of \$176.134 9 million for its Vegetation
4 Management Program O&M expenses in the Test Year (TY). If SCE's Vegetation Management costs
5 exceed the expense level of \$176.134 million for the recommended two-way balancing account, SCE
6 would be required to track and record any excess costs above its TY forecast of \$216.935 million for a
7 reasonableness review. Implementing a two-way balancing account with an expense level of \$176.134
8 million and a required reasonableness review for costs in excess of \$216.935 million will protect
9 customers by ensuring that all costs are accurately identified, properly tracked and recorded.²⁸

10 **b) TURN**

11 TURN recommends that the Commission reject SCE's proposal for a two-way
12 Vegetation Management Balancing Account and claims that such an account would shift cost recovery
13 risk to customers.²⁹ Instead, TURN proposes a one-way balancing account specifically for the HTMP,
14 and no balancing account treatment for SCE's Routine Vegetation Management and Dead, Dying, and
15 Diseased Tree Removal programs.

16 **c) SCE's Rebuttal to Cal Advocates and TURN**

17 The Commission should reject TURN's recommendation to arbitrarily isolate the
18 HTMP from the other vegetation management activities. As SCE explained in its Opening Testimony,
19 consolidating all of the vegetation management program costs into a single balancing account eliminates
20 potential operational overlap and reduces potential confusion necessitated by reporting each recovery
21 mechanism separately. As a more general matter, SCE's vegetation management program has undergone
22 a comprehensive transformation over the last few years to evolve from a primarily compliance-oriented
23 operation to one that also incorporates risk management practices to evaluate issues and prioritize work.
24 There is also forecast uncertainty around SCE's HTMP and the new requirements for expanded clearing
25 distances in HFRA, which can impact the final scope of work for those programs and their associated
26 costs. For these reasons, it is appropriate to manage the suite of vegetation management activities as a
27 whole—something that cannot be effectively accomplished if one piece of that work, HTMP, is
28 arbitrarily subject to different cost recovery requirements.

²⁸ PAO-06 at p. 47.

²⁹ TURN-01 at p. 27.

1 The Commission should also reject TURN’s position that a two-way balancing
2 account is unnecessary and shifts risk to customers. TURN acknowledges that “[r]elative to covered
3 conductor, vegetation management activities are fairly low cost and will help mitigate the vegetation
4 driver of ignitions, which is the greatest contributor to ignitions in SCE’s HFRA.”³⁰ However, TURN
5 casually dismisses the cost pressures and uncertainty described in SCE-02 Volume 6,³¹ stating that [t]he
6 fact that costs may be higher going forward than they were in the past is not a sufficient justification for
7 two-way balancing account treatment.”³² These two positions are incongruous. Given the importance,
8 prominence, and relative cost-effectiveness of vegetation management activities in SCE’s overall
9 strategy to mitigate wildfires, it is critical that the Commission not place a cap on vegetation
10 management expenditures at a time when those costs are increasing for reasons completely outside of
11 SCE’s reasonable control and also uncertain. This is especially true in light of developments that have
12 occurred since SCE submitted its Opening Testimony. For example, subsequent to the filing of this
13 GRC, Governor Newsom signed into law Senate Bill 247, which requires that all qualified line clearance
14 tree trimmers be paid no less than the prevailing wage rate for a first period apprentice electrical utility
15 lineman.³³ This statutory change is expected to significantly increase SCE’s vegetation management
16 expenses above the forecast presented in SCE-02 Volume 6.³⁴

17 Cal Advocates recognizes the importance of having a two-way balancing account
18 that encompasses all of SCE’s vegetation management activities and thus proposes a balancing and
19 memorandum account hybrid with an authorized revenue requirement (\$176.134 million, which includes
20 Cal Advocates’ proposed reductions) and a “reasonableness threshold” soft cap (\$216.935 million,
21 which is SCE’s forecast set forth in Direct Testimony), wherein spending above the soft cap are subject
22 to a reasonableness review.

³⁰ TURN-02 at p. 37.

³¹ See SCE-02 Volume 6 at pp. 18-20, which describes how changes in clearance distances, increased competition for skilled labor and productivity pressures, and new program enhancements have significantly increased vegetation management costs.

³² TURN-01 at p. 26.

³³ See Public Utilities Code Section 8386.6(b).

³⁴ SCE will incorporate the increase to its vegetation management expense forecast as a result of SB 247 in GRC Track 1 Update Testimony to be submitted on July 24, 2020, or earlier.

1 SCE's position, consistent with its proposal in Direct Testimony, is that an after-
2 the-fact reasonableness review of costs spent in excess of the forecast adopted in this proceeding is
3 unnecessary. The Commission often authorizes two-way balancing accounts for activities whose costs
4 are difficult to forecast—for example, the costs of SCE's pension and medical benefits programs are
5 subject to a two-way balancing account and trued-up annually.³⁵ Given the critical nature of the
6 vegetation management program and the recent passage of Senate Bill 247, a two-way balancing
7 account for vegetation management is appropriate.

8 However, if the Commission is inclined to require an after-the-fact reasonableness
9 review of above-authorized vegetation management costs, it should, at a minimum, authorize a
10 balancing account with a soft cap of 120%, like that proposed for WRMBA above. This proposal is
11 identical to Cal Advocates' proposal, except that SCE maintains that the authorized revenue requirement
12 should be set at the forecast level presented in SCE's Direct Testimony. The following describes the
13 specific mechanics of SCE's alternative VMBA rebuttal proposal, which tracks SCE's alternative
14 WRMBA rebuttal proposal above:

- 15 • Annual over-collections (*i.e.*, if SCE's actual costs for a year are below the
16 initial authorization levels) will be carried over to offset costs in later years of
17 the cycle. Any over-collections at the end of the cycle will be returned to
18 customers.
- 19 • Actual costs above the initial authorization levels but below the 120%
20 reasonableness threshold will be considered *per se* reasonable and transferred
21 to the distribution sub-account of the Base Revenue Requirement Balancing
22 Account (BRRBA) for recovery from customers the following year.
- 23 • Actual costs above the 120% reasonableness threshold will be reviewed for
24 reasonableness in a Tier 3 advice letter, and will be transferred to BRRBA
25 upon approval of the Tier 3 advice letter. The advice letter may, but is not
26 required to be, filed annually at SCE's discretion.

27 **d) Conclusion**

28 For the reasons set forth above, the Commission should reject Cal Advocates' and
29 TURN's recommendations regarding the VMBA and adopt SCE's VMBA as proposed in SCE's Direct

³⁵ See Preliminary Statement PP and Preliminary Statement VV.

1 Testimony. Alternatively, the Commission should adopt SCE's alternative VMBA rebuttal proposal as
2 outlined in this Rebuttal Testimony.

3 **3. Establishment of the Risk Management Balancing Account (RMBA)**

4 SCE proposes to create a new two-way balancing account, the Risk Management
5 Balancing Account (RMBA) to record the difference between: (1) recorded insurance premium expenses
6 for wildfire liability coverage;³⁶ and (2) the authorized insurance premium expenses adopted in this
7 proceeding.^{37 38}

8 **a) Cal Advocates**

9 Cal Advocates does not oppose the establishment of the RMBA; however, its
10 position is contingent upon the sharing of wildfire insurance premiums between customers (75%) and
11 shareholders (25%). Therefore, in Cal Advocates' view, the RMBA should be created with the provision
12 that the 75/25 sharing is also captured in this account for the duration of the 2021-2023-time frame.³⁹

13 **b) TURN**

14 TURN opposes the establishment of the RMBA, claiming that it is "inappropriate
15 because it follows so closely on the heels of the creation of the Wildfire Expense Memorandum Account
16 (WEMA) which exists, in part, to permit the utility to track and later seek rate recovery of wildfire
17 liability insurance costs."⁴⁰ In addition TURN recommends the Commission authorize rate recovery of
18 \$312 million for wildfire liability insurance costs in the 2021 test year, based on allocating SCE's

³⁶ As described in SCE-06, Vol. 02, if SCE determines that it is uneconomic to purchase liability insurance for some portion of its wildfire exposure (*i.e.*, if the cost of insurance is excessive relative to the risk exposure), and if this is supported by actuarial analysis, the Commission should explicitly authorize SCE to self-insure that risk. SCE would apply the avoided cost of the insurance as a claims reserve for that self-insured risk and record the avoided cost as an expense in RMBA, to be trued up later based on actual claims paid.

³⁷ Expenses associated with SCE's other insurance policies, such as property insurance and non-wildfire liability insurance (*e.g.*, non-wildfire-related general liability, fiduciary liability, directors' and officers' liability, workers' compensation, nuclear liability, and cyber liability) will not be recorded in the RMBA.

³⁸ Because the 2021 and forward costs of all wildfire liability insurance costs will be recorded in the RMBA, those costs will no longer record to the WEMA. SCE thus proposes to modify the WEMA to no longer track post-2020 wildfire liability insurance expenses if SCE's ratemaking proposal is adopted here. The WEMA would remain open to track the incremental costs of claims and litigation expenses, consistent with D.18-11-051 and SCE's preliminary statement establishing the WEMA.

³⁹ PAO-10 at p. 22.

⁴⁰ TURN-01 at p. 27.

1 forecast of \$624 million equally between the utility’s customers and shareholders.⁴¹ TURN’s ratemaking
2 proposal for wildfire liability insurance costs is thus to (1) authorize recovery of \$312 million (not
3 subject to a balancing account), and (2) use the WEMA to track and seek recovery of costs in excess of
4 the forecast \$624 million.

5 **c) SCE’s Rebuttal to Cal Advocates and TURN**

6 SCE vigorously opposes Cal Advocates’ and TURN’s proposed “sharing” of the
7 costs of wildfire insurance premiums between customers and shareholders because it is inconsistent with
8 AB 1054, all existing Commission precedent, basic logic, and long-standing cost-of-service ratemaking
9 principles. That rebuttal can be found in SCE-17, Volume 02.

10 From a ratemaking perspective, the Commission should reject TURN’s proposal
11 to continue to rely on the WEMA and require SCE to seek after-the-fact reasonableness review and
12 recovery of wildfire liability insurance costs in excess of those authorized in this proceeding. SCE’s
13 forecast of 2021 wildfire liability insurance costs is consistent with prior requests in that it reflects the
14 forecast costs of maintaining \$1 billion in coverage. Moreover, it is consistent with Assembly Bill 1054
15 which requires each utility to cover the first \$1 billion of wildfire-related losses through its own
16 insurance programs.⁴² Because it is necessary for SCE to continue to maintain that level of coverage (or
17 self-insure commensurately), it is unreasonable to continue to require SCE to continue to carry potential
18 above-authorized costs for several years prior to cost recovery. The scope of the costs that would be
19 tracked in the RMBA is well defined, but the actual costs can differ from those authorized in this
20 proceeding. Accordingly, these costs are analogous to Pensions and Medical Programs costs and should
21 be afforded two-way balancing account treatment.

22 **d) Conclusion**

23 As supported in SCE-17, Volume 02, the Commission should reject Cal
24 Advocates and TURN’s ratepayer/shareholder sharing of wildfire insurance premiums. In addition, and
25 as supported above, SCE’s proposed RMBA should be adopted by the Commission.

⁴¹ TURN-01 at p. 5.

⁴² See Public Utilities Code Section 3280(f), which defines “eligible claims” as: “claims for third-party damages against an electrical corporation...exceeding the greater of (1) **one billion dollars** in the aggregate in any calendar year, or (2) the amount of the insurance coverage required to be in place for the electrical corporation pursuant to Section 3293, measured by the amount of that excess.” (emphasis added)

1 **4. Recovery of the 2018 – 2020 Emergency Customer Protections Memorandum**
2 **Account (ECPMA) Costs**

3 The purpose of the ECPMA is to track costs related to providing emergency customer
4 protections for customers affected by disasters declared a state of emergency by the Governor. Pursuant
5 to D.18-08-004, SCE has recorded \$0.054 million in the ECPMA through June 2019. SCE will provide
6 the most recent ECPMA recorded activity in the Update Phase of this GRC proceeding, with a final
7 ECPMA recorded December 31, 2020 balance provided in the advice letter implementing the 2021 GRC
8 decision.

9 Effective upon a decision in this proceeding finding that SCE's ECPMA recorded costs
10 are reasonable, SCE will transfer the December 31, 2020 balance in the ECPMA to the distribution sub-
11 account of the BRRBA to be recovered from all customers through distribution rate levels.

12 **a) Cal Advocates**

13 Cal Advocates does not contest SCE's proposed ECPMA recovery.

14 **b) Conclusion**

15 The Commission should adopt SCE's uncontested proposal to recover the
16 December 31, 2020 balance in the ECPMA through distribution rates.

17 **5. Recovery of 2018 – 2020 Integrated Distributed Energy Resources (IDER)**
18 **Administrative Costs (IDERACMA) and Distribution Deferral Administration**
19 **Costs Memorandum Account (DDACMA) Costs**

20 The purpose of the IDERACMA and DDACMA accounts is to track costs for activities
21 related to the Independent Professional Engineer (IPE), Independent Evaluator (IE)/Technology Neutral
22 Pro Forma Consultant (TNPFC), and Request for Offers (RFO) website. SCE estimates it will record a
23 total of \$0.838 million (excluding interest) in these two memorandum accounts over the January 1, 2018
24 through December 31, 2020 period. SCE will provide the most recent IDERACMA and DDACMA
25 recorded activity in the Update Phase of this GRC proceeding, with a final IDERACMA and DDACMA
26 recorded December 31, 2020 balance provided in the advice letter implementing the 2021 GRC
27 decision.

28 Effective upon a decision in this proceeding, SCE proposes to transfer the ending
29 December 31, 2020 IDERACMA and DDACMA balances, including accrued interest to date, to the
30 distribution sub-account of the BRRBA to be recovered from all customers through distribution rate
31 levels.

1 a) **Cal Advocates**

2 Cal Advocates does not contest SCE's proposed IDERACMA and DDACMA
3 recovery.

4 b) **Conclusion**

5 The Commission should adopt SCE's uncontested proposal to recover the
6 December 31, 2020 balances in the IDERACMA and DDACMA through distribution rates.

7 **6. Continuation of the Rule 20A Balancing Account (Rule20A-BA)**

8 In the 2018 GRC Decision, the Commission authorized the establishment of a one-way
9 Rule 20A Balancing Account (Rule20A-BA) to track the annual capital and expense costs for Rule 20A
10 undergrounding projects, on a forecast and recorded basis. Over collected balances in the account are to
11 remain available for future Rule 20A projects. The Commission is to review the balances in the account
12 in SCE's next GRC. SCE proposes to carry over the December 31, 2020 balance in the Rule20A-BA to
13 fund Rule 20A projects during the 2021 GRC cycle in the event SCE spends above the 2021 GRC
14 authorized amounts. In addition, during the 2021 GRC period, SCE proposes to maintain the Rule20A-
15 BA.

16 a) **Cal Advocates**

17 Cal Advocates does not object to SCE's proposal to maintain the Rule20A-BA
18 over the 2021 GRC cycle and agrees with SCE's proposes to carry over the December 31, 2020 balance
19 in the Rule20A-BA to fund Rule 20A projects during the 2021 GRC cycle in the event SCE spends
20 above the 2021 GRC authorized amounts.⁴³ However, Cal Advocates is proposing to reduce SCE's 2020
21 and 2021 Rule 20A forecasts by the historical 10-year average underspending percentage.⁴⁴ SCE's
22 rebuttal addressing Cal Advocates proposed reduction to the Rule 20A program can be found in SCE-13,
23 Volume 04, Part 3.

24 b) **TURN**

25 TURN supports SCE's proposal to maintain the one-way Rule 20A balancing
26 account over the 2021 GRC period.⁴⁵ However, TURN states that SCE's Rule 20A forecast must be

⁴³ PAO-04 at p. 34.

⁴⁴ PAO-04 at p.32.

⁴⁵ TURN-06 at p. 33.

1 adjusted by the balance in the Rule 20A account. SCE's rebuttal addressing TURN's proposed reduction
2 to the Rule 20A program can be found in SCE-13, Volume 04, Part 3.

3 **c) Conclusion**

4 The Commission should adopt SCE's unopposed proposal to maintain the
5 Rule20A-BA over the 2021 GRC cycle and authorize SCE to carry over the December 31, 2020 balance
6 in the Rule20A-BA to fund Rule 20A projects during the 2021 GRC cycle in the event SCE spends
7 above the 2021 GRC authorized amounts.

8 **7. Elimination of the Aliso Canyon Energy Storage UOG Balancing Account**
9 **(ACESBA)**

10 In response to the Resolution E-4791, SCE procured two energy storage systems from
11 Tesla Motors sited adjacent to the Mira Loma substation in Ontario, California and two energy storage
12 systems from General Electric (GE) for Enhanced Gas Turbines (EGTs) located at SCE's Peaker
13 Generating Stations in Norwalk and Rancho Cucamonga, California. On June 21, 2018, per D.18-06-
14 009, the Commission concluded that the four energy storage projects procured by SCE satisfy
15 Resolution E-4791 requirements, and, in particular, provide for enhanced system reliability in the Los
16 Angeles Basin. The Commission found that SCE's projects' costs are reasonable and thus grants cost
17 recovery in accordance with the provisions of D.18-06-009. In particular, the Commission granted
18 authority for SCE to implement the ACESBA to record the projects' actual costs

19 SCE has included both the on-going capital-related revenue requirement associated with
20 the recorded capital investment and the forecast O&M expenses associated with the Tesla and GE
21 projects in its 2021 GRC period ABRR. Therefore, effective upon a decision in this proceeding, SCE
22 will no longer record the revenue requirement in the ACESBA, and Preliminary Statement OOO,
23 ACESBA, will be eliminated from SCE's tariffs.

24 **a) Cal Advocates and TURN**

25 Cal Advocates and TURN do not contest SCE's proposal to eliminate the
26 ACESBA effective January 1, 2021.

27 **b) Conclusion**

28 The Commission should adopt SCE's uncontested proposal to eliminate the
29 ACESBA effective January 1, 2021 since the on-going capital-related revenue requirement associated
30 with the recorded capital investment and the forecast O&M expenses associated with the Tesla and GE
31 projects is in SCE's proposed 2021 GRC period ABRR.

1 **8. Continuation of the Residential Rate Implementation Memorandum Account**
2 **(RRIMA)**

3 The purpose of the RRIMA is to record SCE's incremental O&M costs and capital
4 revenue requirements associated with complying with the direction of the Commission in D.15-07-001
5 and Resolution E-4761 on Residential Rate Reform and Transition to Time-of-Use (TOU) Rates.

6 On July 11, 2019, the Commission approved D.19-07-004, *Phase IIB Decision*
7 *Addressing Residential Default Time-Of-Use Rate Design Proposals and Transition Implementation*,
8 which among other items, extended the RRIMA through 2023. Consistent with D.19-07-004, in its direct
9 testimony SCE proposed to maintain the RRIMA in its current form and therefore SCE has not included
10 any RRIMA-related activities in its 2021, 2022, and 2023 ABRR.

11 In SCE's Opening Comments on the Phase IIB Proposed Decision (PD), SCE requested,
12 among other items, a modification to the PD permitting SCE to keep RRIMA open through 2023 to
13 align the closing of RRIMA with the end of SCE's 2021 GRC cycle, rather than between attrition years.
14 In D.19-07-004, the Commission stated that the PD had been modified to clarify how SCE may track
15 and recover costs related to default TOU implementation, which included the extension of the RRIMA
16 through 2023. Consistent with D.20-01-02 modifying the Commission's Rate Case Plan, which includes
17 for SCE an additional attrition year of 2024, the Commission should authorize the extension of the
18 RRIMA through 2024 to align the closing of RRIMA with the end of the 2021 GRC cycle, rather than
19 between attrition years.

20 **a) Cal Advocates and TURN**

21 Cal Advocates and TURN do not contest SCE's proposed continuation of the
22 RRIMA over the 2021 GRC period.

23 **b) Conclusion**

24 The Commission should adopt SCE's uncontested proposal to continue the
25 RRIMA over the 2021 GRC period.

26 **9. Continuation of the Pole Loading and Deteriorated Pole Programs Balancing**
27 **Account (PLDPBA)**

28 The purpose of the two-way PLDPBA is to record the difference between: (1) recorded
29 capital-related revenue requirements for the Pole Loading Program and the Deteriorated Pole Program,
30 (2) O&M expenses for the Pole Loading Program, and (3) the authorized Pole Programs revenue
31 requirement as adopted in D.19-05-020. The level of expenditures to be recovered in the PLDPBA is

1 capped at 15% above the authorized levels. SCE proposes to continue the PLDPBA over the 2021 GRC
2 cycle.

3 a) **Cal Advocates**

4 Cal Advocates supports the continuation of the two-way PLDPBA over the 2021
5 GRC period.⁴⁶

6 b) **TURN**

7 TURN does not contest SCE's proposal to continue the two-way PLDPBA over
8 the 2021 GRC period.

9 c) **Conclusion**

10 The Commission should adopt SCE's proposal to continue the PLDPBA over the
11 2021 GRC period

12 **10. Continuation of the 2018 Tax Accounting Memorandum Account (TAMA 2018)**

13 The purpose of the two-way Tax Accounting Memorandum Account (TAMA 2018) is to
14 record any revenue differences resulting from the income tax expenses forecasted in the 2018 General
15 Rate Case (resolved in D.19-05-020) and the income tax expenses incurred during the 2018-2020 GRC
16 period.

17 For the 2021 GRC period, SCE proposes to continue the current operation of the TAMA
18 2018. SCE proposes to extend all of the applicable provisions of TAMA to include 2021 through 2024
19 and remain open until the IRS and CFTB audit periods for those years are closed.

20 a) **Cal Advocates**

21 Cal Advocates supports the continuation of the TAMA 2018 over the 2021 GRC
22 period.⁴⁷

23 b) **TURN**

24 TURN does not address the TAMA 2018 in its direct testimony.

25 c) **Conclusion**

26 The Commission should adopt SCE's proposal to continue the TAMA 2018 and
27 extend all of the currently applicable provisions of the TAMA 2018 over the 2021 GRC period. The
28 TAMA 2018 should remain open until the IRS and CFTB audit periods for those years are closed.

⁴⁶ PAO-04 at p. 44.

⁴⁷ PAO-02 at p. 10.

1 **11. Modification of the Safety and Reliability Investment Incentive Mechanism (SRIIM)**

2 The purpose of the SRIIM is to determine the difference between: (1) actual (recorded)
3 safety and reliability-related capital additions; and (2) the authorized level of safety and reliability-
4 related capital additions in D.19-05-020. Additionally, the SRIIM will track the staffing target. SCE is
5 proposing to maintain the SRIIM over the 2021 GRC cycle, with proposed modifications. As discussed
6 in Exhibit SCE-02, Vol. 01, Part 2, these changes include modifications to both the workforce and
7 capital investment components of the 2018 SRIIM approved in D.19-05-020.

8 **a) Cal Advocates**

9 Cal Advocates recommends that SCE's proposal to change the SRIIM headcount
10 target and the headcount measurement mechanism that were adopted by the Commission in SCE's 2018
11 GRC be denied. SCE should continue the SRIIM as adopted in SCE's 2018 GRC, with the only
12 exception being the modification to the Workforce Categories. Cal Advocates recommends that SCE's
13 proposal to remove the job classifications of Distribution Apprentice Groundman and Transmission
14 Apprentice Groundman from the workforce categories and include the job classifications of Distribution
15 Apparatus Technician and Distribution Apparatus be adopted.⁴⁸

16 **b) CUE**

17 CUE recommends that the Commission approve SCE's proposal on SRIIM
18 capital spending that would allow for expenditure of SRIIM capital amounts in wildfire programs only if
19 the headcount adjustment mechanism is eliminated.⁴⁹

20 **c) SCE's Rebuttal to Cal Advocates and CUE**

21 SCE's rebuttal addressing Cal Advocates and CUE's recommendations related to
22 the SRIIM can be found in SCE-13, Volume 02, Part 3.

23 **d) Conclusion**

24 For the reasons set forth in SCE-13, Volume 02, Part 3, the Commission should
25 adopt SCE's proposed modifications to the SRIIM.

⁴⁸ PAO-06 at p. 69.

⁴⁹ CUE at p. 6.

1 **12. Modification of CARE Balancing Account to Remove Recovery of Cooling Center**
2 **Costs**

3 Pursuant to D.16-11-022, SCE included the forecast O&M expenses associated with
4 cooling center activities in its 2021 GRC period ABRR. Therefore, effective upon a decision in this
5 proceeding, SCE will no longer record the cooling center costs in the CARE balancing account. In the
6 advice letter to be submitted in compliance with a final Commission decision in this proceeding, SCE
7 will modify Preliminary Statement Part AA, CARE, as required.

8 **a) Cal Advocates and TURN**

9 Cal Advocates and TURN do not contest SCE's proposal to remove recovery of
10 cooling center costs from Preliminary Statement Part AA, CARE, as required by D.16-11-022.

11 **b) Conclusion**

12 Pursuant to D.16-11-022, SCE included the forecast O&M expenses associated
13 with cooling center activities in its 2021 GRC period ABRR. Therefore, the Commission should adopt
14 SCE's uncontested proposal to remove recovery of cooling center costs from Preliminary Statement Part
15 AA, CARE.

16 **13. Modification of PTYR mechanism to add a Z-Factor Memorandum Account**
17 **(ZFMA)**

18 Similar to PG&E's authorized Z-Factor cost recovery, SCE proposes the addition of a Z-
19 Factor memorandum account to SCE's currently authorized PTYR Mechanism Preliminary Statement
20 Part AAA. The purpose of the Z-Factor Memorandum Account (ZFMA) will be to track costs associated
21 with events that are potential Z-Factors and protect against retroactive ratemaking concerns.

22 **a) Cal Advocates and TURN**

23 Cal Advocates and TURN do not contest SCE's proposal to establish a Z-Factor
24 Memorandum Account.

25 **b) Conclusion**

26 The Commission should adopt SCE's uncontested proposal to establish a ZFMA.

27 **14. Establishment of a Distribution Resources Plan Write-Off Costs Memorandum**
28 **Account to Recover Pre-Construction Costs in the Event a DER Solution is**
29 **Successful**

30 In Decision (D.)18-02-004, the Commission established the Distribution Investment
31 Deferral Framework (DIDF) to "identify and capture opportunities for DERs to cost-effectively defer or

1 avoid traditional IOU investments that are planned to mitigate forecasted deficiencies of the distribution
2 system.”⁵⁰ As part of this deferral process, the Commission recognized that SCE must perform
3 contingency planning to anticipate the possibility that the DER solution does not materialize as
4 anticipated and the grid need must be timely met through a traditional distribution system solution.⁵¹

5 SCE requests in this proceeding that the Commission explicitly authorize the tracking of
6 the contingency related costs for pre-construction activities (including, but not limited to, design and
7 engineering costs) in a DRP Write Off Costs memorandum Account (DRPWOCMA) effective January
8 1, 2021 with recovery in a future GRC or other appropriate ratemaking proceeding. In addition, SCE
9 requests that licensing costs related to deferred grid needs also be included in the memorandum account.

10 **a) Cal Advocates**

11 **(1) Cal Advocates Position**

12 Cal Advocates acknowledges that SCE requested a new “DRP Write Off
13 Costs memorandum Account (DRPWOCMA) effective January 1, 2021” for “tracking of the
14 contingency related costs for pre-construction activities” related to the DIDF.⁵² However, Cal Advocates
15 does not support or reject this proposal and instead recommends memorandum account treatment for all
16 DER-driven load growth programs.⁵³

17 **(2) SCE’s Rebuttal**

18 On May 11, 2020, ALJ Mason issued a Ruling in the DIDF Rulemaking
19 (R.14-08-013 et al.) further modifying the DIDF process and filings requirements.⁵⁴ Among other items,
20 this Ruling clarifies that the IOUs are allowed to record contingency plan spending in their currently
21 authorized Distribution Deferral Balancing Account and seek recovery for costs reasonably incurred in

⁵⁰ D.18-02-004, Finding of Fact No. 11.

⁵¹ *Id.* at p. 67 (“Contingency planning entails escalating degrees of design, cost estimation, procurement, and construction of traditional infrastructure solutions that can be implemented as the DER alternative progresses through stages of solicitation, construction, and operation.”). *See also id.* at Ordering Paragraph No. 2.x.

⁵² PAO-05 at p. 60-61.

⁵³ PAO-05 at p. 3.

⁵⁴ ALJ Ruling at p. 85.

1 their GRC.⁵⁵ Given this recent direction, SCE's proposal to track contingency-related costs in a
2 memorandum account is no longer necessary.⁵⁶

3 **b) Conclusion**

4 As discussed above, the May 11, 2020 ALJ Ruling in the DIDF rulemaking
5 renders SCE's proposal to establish a DRPWOCMA moot. Therefore, SCE respectfully withdraws its
6 request to establish a DRP Write Off Costs memorandum account from this 2021 GRC application.

7 **15. Continuation of the Post-Retirement Benefits Other Than Pensions Balancing**
8 **Account (PBOPBA)**

9 The purpose of the PBOPBA is to record the difference between: (1) PBOP expenses
10 authorized by the Commission; and (2) recorded PBOP expenses, after capitalization. SCE proposes to
11 continue the two-way PBOPBA during the 2021 GRC cycle as these costs can vary significantly from
12 the forecast.

13 **a) Cal Advocates**

14 Cal Advocates supports the continuation of the two-way PBOPBA over the 2021
15 GRC period.⁵⁷

16 **b) Conclusion**

17 The Commission should adopt SCE's uncontested proposal to continue the two-
18 way PBOPBA over the 2021 GRC period.

19 **16. Continuation of the Pensions Cost Balancing Account (PCBA)**

20 The purpose of the PCBA is to record the difference between: (1) pension expenses
21 authorized by the Commission; and (2) recorded pension expenses, after capitalization. SCE proposes to
22 continue the use of the two-way PCBA during the 2021 GRC cycle as these costs can vary significantly
23 from the forecast.

24 **a) Cal Advocates**

25 Cal Advocates supports the continuation of the two-way PCBA, which will
26 protect both customers and SCE from pension cost volatility.⁵⁸

⁵⁵ SCE will separately itemize contingency costs in this balancing account for visibility and audit purposes.

⁵⁶ SCE does not agree with the Cal Advocates proposal for a memorandum account for all DER activities that were included in SCE-02, Volume 4, Part 2. SCE's rebuttal testimony on this issue is included in SCE-15, Volume 4, Part. 2.

⁵⁷ PAO-11 at p. 10.

1 **b) Conclusion**

2 The Commission should adopt SCE's proposal to continue the two-way PCBA
3 over the 2021 GRC period.

4 **17. Continuation of the Medical Programs Balancing Account (MPBA)**

5 The purpose of the MPBA is to record the difference between: (1) medical, dental and
6 vision expenses authorized by the Commission; and (2) recorded medical, dental and vision expenses,
7 after capitalization. SCE proposes to continue the use of the two-way MPBA during the 2021 GRC
8 cycle as these costs can vary significantly from the forecast.

9 **a) Cal Advocates**

10 Cal Advocates supports the continuation of the two-way MPBA over the 2021
11 GRC period.⁵⁹

12 **b) Conclusion**

13 The Commission should adopt SCE's uncontested proposal to continue the two-
14 way MPBA over the 2021 GRC period.

15 **18. Continuation of the Short-Term Incentive Program Memorandum Account**
16 **(STIPMA)**

17 The purpose of the STIPMA is to compare the authorized and actual Short-Term
18 Incentive Program (STIP) expenses paid out, after capitalization. If authorized amounts exceed actual
19 payout amounts (*i.e.*, over-collections), that over-collection is returned to customers through the
20 BRRBA. If the actual payout amounts exceed the authorized amounts (*i.e.*, under-collections), the
21 under-collection is not recoverable. The Commission required SCE to continue to use the STIPMA
22 during the 2009, 2012, 2015, and 2018 GRC periods. SCE therefore proposes to continue the use of the
23 STIPMA in the 2021 GRC cycle.

24 **a) Cal Advocates and TURN**

25 Cal Advocates and TURN do not contest SCE's proposal to continue the STIPMA
26 over the 2021 GRC period.

Continued from the previous page

⁵⁸ PAO-11 at p. 10.

⁵⁹ PAO-11 at p. 10.

1 b) **Conclusion**

2 The Commission should adopt SCE's uncontested proposal to continue the one-
3 way STIPMA over the 2021 GRC period.

4 **19. Cal Advocates' Recommendation for the Establishment of a Property Tax**
5 **Memorandum Account Should Be Rejected**

6 a) **Cal Advocates**

7 Cal Advocates recommends that SCE continue using the five-year trend method
8 for calculating Ad Valorem Taxes for California and be authorized to establish a memorandum account
9 to record any differences between actual and forecasted property taxes for future disposition.⁶⁰

10 b) **SCE's Rebuttal**

11 SCE's rebuttal addressing Cal Advocates' recommendation to establish a property
12 tax memorandum account can be found in SCE-18, Volume 02.

13 c) **Conclusion**

14 For the reasons set forth in SCE-18, Volume 02, the Commission should reject
15 Cal Advocates recommendation to establish a property tax memorandum account.

16 **20. Cal Advocates' Recommendation for the Establishment of an Aerial Inspections**
17 **Memorandum Account Should Be Rejected**

18 a) **Cal Advocates**

19 Cal Advocates recommends the Commission approve \$15 million for
20 Transmission Aerial Inspection Maintenance for 2021 instead of \$27.315 million as requested by SCE.
21 Should SCE find Aerial Inspection Maintenance costs to be above \$15 million, SCE can request the
22 Commission to approve a memorandum account to track costs for Aerial Inspection Maintenance.⁶¹

23 b) **SCE's Rebuttal**

24 SCE's rebuttal addressing Cal Advocates recommendation regarding the
25 establishment of an Aerial Inspections memorandum account be found in SCE-13, Volume 02. As stated
26 in that rebuttal testimony, the authorization of a memorandum account is not necessary at this time.
27 Notwithstanding SCE's objection to this recommendation, if for some reason the Commission has
28 concerns with SCE's forecast level of spending on this activity and determines that there is a need to

⁶⁰ PAO-02 at p. 3.

⁶¹ PAO-03 at p. 12.

1 more closely track SCE's costs, the more appropriate regulatory accounting mechanism to use in this
2 circumstance would be a two-way balancing account authorized at SCE's request level.

3 **c) Conclusion**

4 For the reasons set forth in SCE-13, Volume 02, the Commission should reject
5 Cal Advocates recommendation regarding the establishment of an Aerial Inspections memorandum
6 account.

7 **21. SCE Does Not Object to Cal Advocates' and SEIA's Recommendation for the**
8 **Establishment of a DER-Driven Programs Memorandum for Certain Activities**

9 **a) Cal Advocates**

10 Cal Advocates recommends memorandum account treatment for DER-driven load
11 growth programs addressed in SCE's Load Growth testimony.⁶² This results in a zero forecast over the
12 2021 GRC period for DER-related load growth programs, but provides the potential for cost recovery in
13 future GRCs.⁶³

14 **b) SEIA**

15 SEIA proposes an expansion on Cal Advocates recommendation with
16 memorandum account treatment also for DER-driven Grid Reinforcements, DER-driven Distribution
17 Automation, DER-driven Substation Automation, and the Subtransmission Relay Upgrade Program.⁶⁴
18 This results in an authorization for these categories of \$0 over the 2021 GRC period, but provides the
19 potential for cost recovery in future GRCs.

20 **c) SCE's Rebuttal to Cal Advocates and SEIA**

21 SCE's rebuttal addressing Cal Advocates and SEIA's recommendations to
22 establish a DER-Driven Programs memorandum account be found in SCE-13, Volume 04, Part 1 and
23 SCE-13, Volume 04, Part 2. For reasons discussed in SCE-13, Volume 04, Part 1, SCE does not believe
24 that the DER-driven Distribution Automation, DER-driven Substation Automation, and the
25 Subtransmission Relay Upgrade Program should be subject to memorandum account treatment.

⁶² These load growth programs include: 1) DER-driven Distribution Circuit Upgrades, 2) DER-driven 4 kV Cutovers, 3) DER-driven New Circuits, 4) DER-driven Circuit Breaker Upgrades, and 5) DER-driven Substation Transformer Upgrades as discussed in SCE-02 Vol. 04 Pt. 1.

⁶³ PAO-05 at p. 3 and p. 45.

⁶⁴ SEIA, at p. 4.

1 As discussed in SCE-13, Volume 04, Part 2, SCE is amenable to the
2 establishment of a memorandum account *only* for DER-driven Load Growth programs.⁶⁵ This
3 memorandum account should be established, in a non-precedential manner, to track capital expenditures
4 associated with the early stages of these specific DER-driven Load Growth GRC activities. This
5 memorandum account should be effective for the time period 2021-2024, with an associated capital
6 expenditure “target” up to SCE’s originally requested 2021-2023 forecast of \$93.5 million. In Track 4 of
7 this proceeding addressing the third attrition year (i.e., 2024), SCE will propose a 2024 capital
8 expenditure “target.” Only amounts above the cumulative total of the 2021-23 and 2024 “targets” that
9 may result from emergent events such as higher adoption of DERs or greater impacts to reliability than
10 originally forecast should be subject to the retrospective reasonableness review that Cal Advocates
11 proposes.

12 Upon establishment of this memorandum account, SCE will track the recorded
13 revenue requirement associated with DER-driven Load Growth programs capital expenditures
14 (depreciation, taxes and return). At the end of each year over the 2021 – 2024 period, SCE will transfer
15 the memo account balance for capital expenditures up to the target amount, to the BRRBA for recovery
16 in distribution rates from all customers. In the event SCE’s recorded capital expenditures for the DER-
17 related Load Growth Programs exceed the 2021 – 2024 cumulative target, SCE will submit a Tier 3
18 advice letter for Commission review and recovery of the amounts above the target.

19 **d) Conclusion**

20 For the reasons set forth above, and in SCE-13, Volume 04, Part 2, the
21 Commission should authorize the establishment of a memorandum account to track the revenue
22 requirements related to DER-related Load Growth Program expenditures, and reject SEIA’s
23 recommendation to expand on this memorandum account to also track costs related to DER-driven Grid
24 Reinforcements, DER-driven Distribution Automation, DER-driven Substation Automation, and the
25 Subtransmission Relay Upgrade Program. In addition, the Commission should adopt SCE’s proposed
26 cost recovery of the memorandum account balances as described above.

65 1) DER-driven Distribution Circuit Upgrades, 2) DER-driven 4 kV Cutovers, 3) DER-driven New Circuits, 4)
DER-driven Circuit Breaker Upgrades, and 5) DER-driven Substation Transformer Upgrade.

1 IV.

2 **FORECASTS OF SALES, CUSTOMERS, AND NEW METER CONNECTIONS**

3 **A. Introduction**

4 For eight years SCE has relied on the input of expert third-party forecasts for the expected
5 change in the number of housing starts, in order for SCE to forecast new meter connections.⁶⁶ TURN
6 alleges that in past GRCs “SCE has consistently over-estimated the number of new meter connections
7 and corresponding new service connection capital expenses, primarily due to overly-optimistic housing
8 start forecasts”⁶⁷ and proposes a simple five-year historical average as the preferred methodology.⁶⁸ Past
9 forecasts have indeed surpassed recorded figures in hindsight, as no forecast can be perfect. But
10 TURN’s residential new meter connection proposal is arbitrary and unreasonable. In fact, below SCE
11 demonstrates that TURN’s proposed methodology would have resulted in significant under-estimation
12 of the new housing creation in a majority of the past eight years. If GRCs are to continue to be
13 conducted on a forecast basis grounded in reasoned methodologies, then SCE’s current selection of a
14 conservative scenario of predicted future housing starts should be accepted, and TURN’s hindsight-
15 based methodology must be rejected.

16 TURN’s residential new meter connection arguments should be rejected for three primary
17 reasons. First, SCE agrees that with the benefit of hindsight it is a simple matter to observe that the
18 forecast provided by Moody’s Analytics has indeed been higher than actual housing starts in the years
19 reviewed by TURN in its testimony. But such an observation gives no credence to TURN’s argument
20 that SCE and the Commission should discard the well-established methodology of forecasting new
21 meter connections on a forward-looking basis based on expert input on housing and other
22 macroeconomic trends. SCE will demonstrate in this testimony that TURN’s proposed methodology of
23 using an arbitrary historical average would have resulted in large forecast errors over the recent years

⁶⁶ “SCE seeks to produce forecasts that have a strong basis in economic theory and that rely on fundamental economic drivers whenever possible. ... the most powerful fundamental driver SCE found so far is new housing creation”. See p. 3 of SCE response to October 15, 2014 ALJ Question for H. Sheng. as part of SCE-66 in the A.13-11-003 GRC evidentiary hearings, Appendix C.

⁶⁷ Exhibit TURN-02C, p. 45, lines 18-20.

⁶⁸ TURN recommends a five-year average of actual housing starts from 2015-2019 as a replacement input into SCE’s regression model for residential meter forecasts, and a rejection of SCE’s regression for commercial meter forecasts, to be replaced with an average from 2015-2019. Exhibit TURN-02C, p. 55, lines 3-9; Exhibit TURN-02C, p. 59, lines 3-4.

1 2013-2019 and have led to significant under-prediction of new housing starts. Second, despite TURN's
2 preference for applying a backcast methodology to attempt to calculate the future of housing trends,
3 SCE must forecast these trends based on expert analysis on likely future outcomes, while also
4 considering historical performance. Given the choice of forecasts, SCE selected a vendor (Moody's
5 Analytics), which held a less optimistic view on housing starts compared to the other vendors SCE
6 considered, then selected a more conservative scenario compared to some of the alternatives Moody's
7 offered. Moreover, SCE made an additional modeling adjustment to reduce that housing start forecast.⁶⁹
8 Third, while TURN claims that it did not adjust its forecast due to the COVID-19 pandemic,⁷⁰ it is
9 important to not prejudge that issue because it is too early to tell if the short-term uncertainty introduced
10 by the pandemic will impact the long-term housing starts driven more by demographic and other
11 macroeconomic trends.

12 Regarding the commercial new meter connection forecast, SCE recognizes that residential meter
13 sets no longer appear to have robust explanatory power in forecasting commercial/industrial meter sets,
14 as they have in earlier periods. Thus for purposes of this GRC only, SCE is willing to adopt TURN's
15 commercial meter set proposal. SCE agrees that it is important to explore alternative forecasting
16 methods for commercial meter sets given the apparent current disconnect between residential housing
17 starts and new commercial meter sets.

18 **B. TURN's Residential Recommended Forecast Methodology Is Unfounded And Should Be**
19 **Rejected**

20 **1. Residential New Meter Connections**

21 **a) TURN's Proposal Is Both Contrary To Typical Housing Forecasting**
22 **Methods And To GRC Precedent**

23 TURN's proposal to take an average of 2015-2019 housing starts would lead to
24 inaccurate results and is contrary to common housing start forecasting methodologies. Taking a simple
25 average of historical data is a poor predictor of future activity when dealing with typical economic and
26 housing cycles; such complex and interconnected issues cannot be accurately described and forecasted
27 with a simple average. TURN alleges, without evidence, that applying a historical average of 2015-2019

⁶⁹ SCE Data Request response TURN-SCE-004 question 6 Revised, Appendix C. SCE's original response contains an error and has since been revised.

⁷⁰ Exhibit TURN-02c, p. 48, n. 151.

1 housing starts will provide a “more reasonable estimate” of housing starts than Moody’s Analytics.⁷¹ No
2 forecast can provide perfect foresight into the future state of the world, but SCE relies on neutral third-
3 party experts to provide the best inputs possible, and SCE selects the scenario that best aligns with its
4 understanding of likely future housing start trends. TURN would have the Commission rely on a simple
5 backwards-looking average to develop a forward-looking forecast of the complex and interrelated
6 macroeconomic factors which ultimately result in new housing starts.

7 If the Commission desires to impose a forecast that is based solely on hindsight
8 they should apply this significant change in forecasting approach prospectively. SCE maintains,
9 however, that hindsight is not necessarily predictive of future outcomes, particularly when it comes to
10 complex macroeconomic and demographic trends, which feed into new housing start forecasts. Though
11 a backwards-looking average is simple, forecasting future housing starts is a more complex exercise.
12 SCE appropriately relies on outside experts for complex forecasted information of the nature described
13 here. While Moody’s forecast in previous GRCs anticipated more housing starts than were eventually
14 realized, if TURN’s simplistic proposal to apply five-year historical average was adopted in past GRCs
15 it would have led to significant under-forecasting, as discussed below.

16 **b) TURN Does Not Account for Demographic Drivers of Housing Starts**

17 TURN states “SCE forecasts consistent growth of housing starts and
18 corresponding new meter connections into the test year despite the fact that the utility admits that the
19 economic expansion of the last 10 years has begun to ‘mature.’”⁷² This is an inaccurate understanding of
20 the term “mature” as it relates to the interaction of economic expansion and new housing starts. A
21 maturing economy and increased housing starts are not mutually exclusive, and professional economic
22 forecasting organizations such as Moody’s and others take this into account. Contrary to TURN’s
23 assertion, demographic drivers play a significant role in driving housing start growth. SCE made this
24 point in our direct testimony: “Household formations among families in the Millennial age group is
25 forecasted to bolster housing starts during the same period before reaching a peak in 2021.”⁷³

26 In addition, problematic in TURN’s simple averaging methodology is the lack of
27 economic or demographic drivers to explain its housing starts forecast. Fundamental economic and

⁷¹ Exhibit TURN-02c, p. 59, lines 7-9.

⁷² Exhibit TURN-02c, p. 48, lines 1-3.

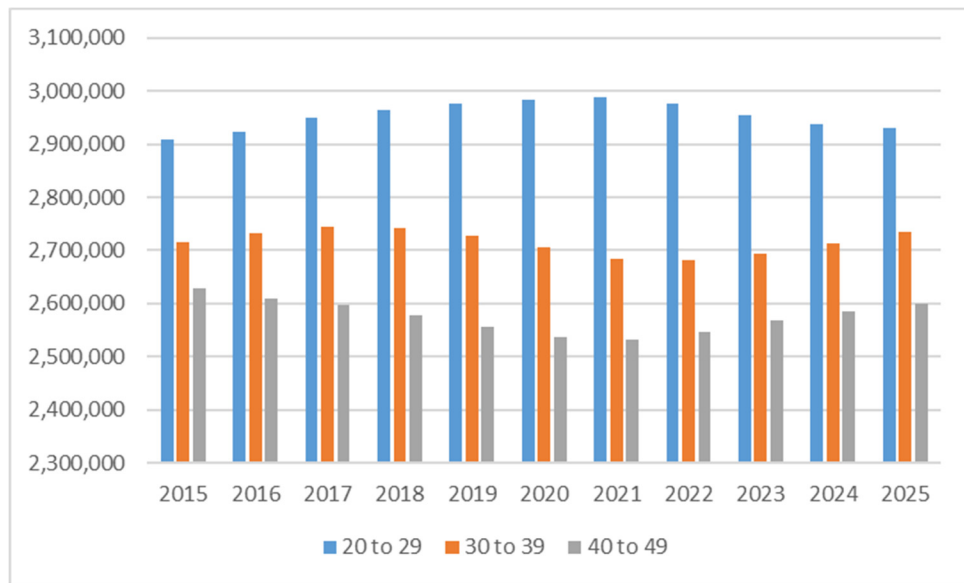
⁷³ Exhibit SCE-07, Vol. 1CA2, p. 70, lines 4-6.

1 demographic drivers such as household formation and interest rates etc. have significant impacts on
2 housing starts. The Southern California Association of Government ties demographic trends, such as the
3 recent increase in demand for multifamily units as a result of the growing number of young adults, with
4 new housing construction. As the report states “While housing construction follows economic cycles, it
5 also follows demographics”.⁷⁴ The California Department of Finance’s Demographic Research Unit
6 projects the number of young adults to continue to grow through 2021, adding to the region’s pool of
7 apartment and home dwellers.⁷⁵ Without including underlying demographic drivers, a housing start
8 forecast will not be as meaningful or robust. Figure IV-1 demonstrates the age groups in SCE’s service
9 territory, with the majority of the adults displayed below in the younger range of 20-29. As discussed
10 above, young adults from this age group are likely to drive more household formation which will
11 generate more demand for new housing construction.

⁷⁴ https://www.connectsocal.org/Documents/Draft/dConnectSoCal_Demographics-And-Growth-Forecast.pdf (p. 12).

⁷⁵ Based on Department of Finance population by age projections for Inyo, Kings, Los Angeles, Mono, Orange, Riverside, San Bernardino, Santa Barbara, and Ventura counties.

Figure IV-1
SCE Service Territory Population by Age⁷⁶



c) **TURN's Proposed Simple Five-Year Average is Unreliable**

TURN provides no robust proof that its preferred method is any better than third-party expert vendor methodologies for a going-forward forecast. TURN argues that it “finds an average of actual housing starts from 2015-2019 is a more reasonable estimate going forward for this GRC”⁷⁷ without demonstrating any empirical evidence or support. SCE has investigated using TURN's simple five-year historical average to produce past year's housing starts forecast in order to demonstrate poor predictive power of its proposed methodology.

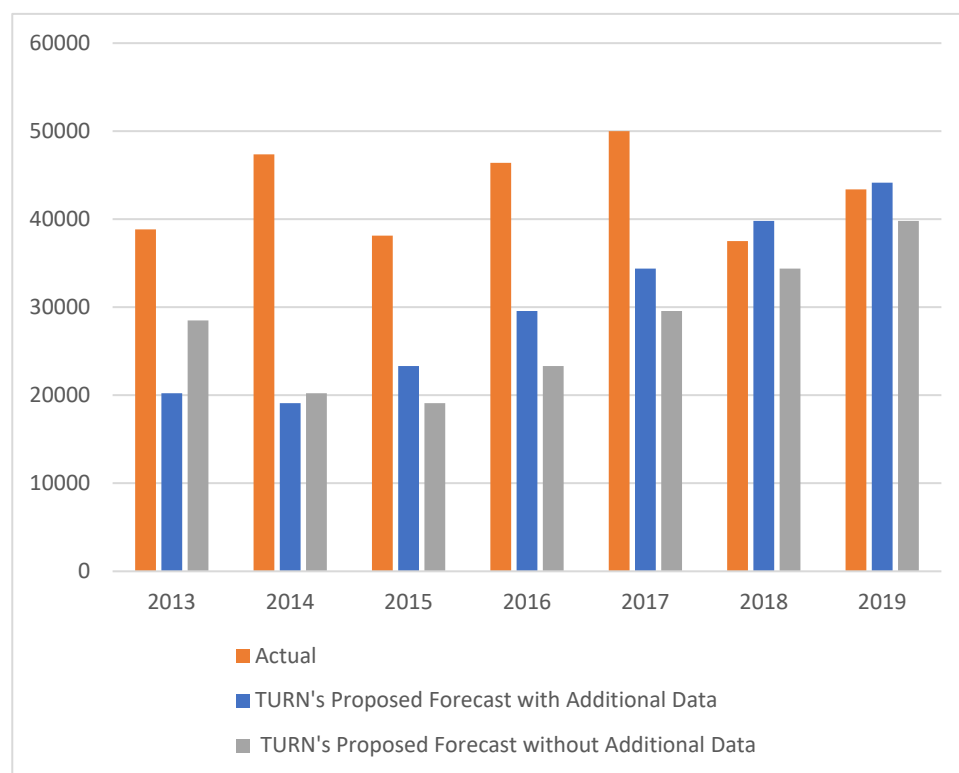
In Figure IV-2 below, SCE compares actual housing starts against TURN's proposed forecasts. TURN's proposed method relies on using additional actual housing start values (i.e. 2019 actual) which were not available when SCE's application was developed. To produce realistic forecast values for comparison purposes, SCE developed two sets of forecasts based on TURN's proposed method, one with an additional year of 2019 recorded housing starts and the other without the additional data. SCE found that TURN's method would lead to significant errors and under forecasting

⁷⁶ California Department of Finance Demographic Research Unit.

⁷⁷ Exhibit TURN-02C, p. 55, lines 7-9.

more than 70% of the time when using the additional year of data in the five-year average, and 100% of the time when excluding the additional year. TURN's method would have undercounted new housing starts by 30% over the 2013-2019 period.⁷⁸ Simply put, using TURN's proposed five-year hindsight-informed average would have been an extremely poor methodology to employ during the 2013-2019 period. TURN does not provide evidence, nor is there any reason to believe, that it would be a principled, long-term methodology going forward.

Figure IV-2
Housing Starts Recorded vs. TURN's Proposed Forecasts
2013-2019



SCE's backcast analysis demonstrates that TURN's proposed methodology is arbitrary and biased toward undercounting housing starts. Compared to TURN's unreliable method of using the simplistic five-year-average, SCE's choice of the conservative residential meter set forecast (discussed further below) is a better forecast that is balanced between TURN's underestimation and the vendor's more optimistic views.

⁷⁸ Refer to WP SCE-18 V. 1 Meter Forecast Housing Starts Data, Appendix C.

1 **2. Commercial New Meter Connections**

2 **a) SCE accepts TURN's proposed commercial meter sets forecast**

3 SCE utilizes its previously established model to generate its commercial meter
4 sets forecast. SCE's model relies on the strong correlation between commercial meter and residential
5 meter growth observed over time. However, SCE recognizes that residential meter sets no longer appear
6 to have robust explanatory power in forecasting commercial/industrial meter sets, as they have in earlier
7 periods. SCE acknowledges that its commercial/industrial meter equation likely over forecasts
8 commercial/industrial meter set additions. In absence of a better alternative forecast, SCE accepts
9 TURN's proposed commercial meter sets forecast (which is flat with 4,751 sets annually). SCE will
10 investigate alternative fundamental drivers to better forecast commercial/industrial meter sets.

11 **C. TURN's Criticisms of SCE's Forecast Are Not Relevant as SCE's Forecast Already**
12 **Address Those Concerns**

13 TURN's argument that SCE has consistently over-forecast residential new meter connections in
14 previous GRCs is not relevant as SCE's 2021 forecast relies on different and more conservative
15 scenarios compared to previous GRCs. The forecast SCE proposes is neither the result of the same
16 forecasting methodology used in previous GRCs as claimed by TURN, nor would it significantly
17 undercount housing starts, as TURN's proposal potentially would do, as SCE discussed above. SCE also
18 notes that it has reduced the magnitude of the model forecast errors over the past few GRCs.

19 **1. TURN's Is Mistaken In Its Assertion that SCE Is Using The Same Economic Case**
20 **Since 2012**

21 **a) SCE's 2021 GRC Uses A Conservative Approach to Vetting Economic**
22 **Vendor Forecasts**

23 TURN is incorrect in its assertion that SCE is using the same Moody's economic
24 "case" since the 2012 GRC.⁷⁹ In its testimony TURN points SCE-07, Volume 1, p. 77, Footnote 105 as
25 evidence for this assertion, however Footnote 105 simply states "SCE generates a relatively conservative
26 forecast for new meter connections as compared to vendors' potentially optimistic forecast predictions
27 for new housing starts." TURN's allegation is unfounded. As outlined in its response to a data request,
28 SCE's use of economic vendors has evolved in each GRC dating back to the 2012 GRC.⁸⁰ SCE switched

⁷⁹ Exhibit TURN-02C, p. 54, lines 5-6.

⁸⁰ SCE Data Request response TURN-SCE-004 question 4c, Appendix C.

1 to using housing starts instead of permits for the 2015 GRC and no longer averages multiple economic
2 vendors starting with the 2018 GRC. As discussed in a data request response, SCE selected Moody's
3 Analytics Base case as its housing start forecast for the 2021 GRC after vetting the IHS Connect forecast
4 and determining that it was overly optimistic, and vetting the Moody's Consensus forecast and
5 determining it was too volatile.⁸¹ SCE then made downward adjustments to the residential meter set
6 forecast to adjust for Moody's optimistic Base case housing starts forecast.⁸² This information is
7 provided in Appendix C, which is the same attachment provided in SCE's data request response. Thus
8 TURN's characterization that SCE continues to use the same methodology is incorrect.

9 **2. SCE's Forecast Is Improving**

10 SCE agrees with TURN that historically Moody's methodology has resulted in over-
11 forecast new meter connections. But the history TURN points to clearly demonstrates that the over-
12 forecast error is decreasing. Forecasting error has improved by almost 50% from 2015 to 2018 per
13 TURN's own diagram (Figure 12),⁸³ due in part to SCE's forecasting methodology improvements,
14 including vendor forecasting vetting, mentioned above.⁸⁴

15 **3. TURN's Non-Cost-Related Recommendation on Housing Starts Is Unnecessary As** 16 **TURN's Concerns Are Already Addressed**

17 TURN makes two non-cost-related recommendations. First, TURN proposes that SCE
18 should investigate how to adjust Moody's housing start forecasts and/or its residential meter regression
19 model to correct for the consistent upward bias demonstrated by TURN. Second, TURN recommends
20 that SCE should develop a new commercial meter forecast methodology.⁸⁵ The first recommendations
21 should be rejected as unnecessary. As explained in our testimony and data request responses,⁸⁶ SCE has
22 broadened the number of possible economic scenarios it has considered from vendors. For the 2021
23 GRC SCE selected a conservative scenario and made additional modeling adjustments which resulted in

⁸¹ Moody's Analytics and IHS data are confidential and can be provided upon request to Commission staff or other intervenors who have executed an appropriate non-disclosure agreement.

⁸² SCE Data Request response TURN-SCE-004 question 6 Revised, Appendix C.

⁸³ Exhibit TURN-02c, p. 52. lines 1-4.

⁸⁴ Percent difference between 2018 recorded to forecast and 2015 recorded to forecast: $(78,941/100,272-1) / (109,350/195,716-1) = 48\%$.

⁸⁵ Exhibit TURN-02c, p. 46, lines 14-18.

⁸⁶ SCE Data Request response TURN-SCE-004 question 6 Revised, Appendix C.

1 reduced forecasted housing starts, in acknowledgement of historical over-forecasting. SCE's 2021
2 scenario selection paired with the fact that SCE's forecast has improved over time as discussed above,
3 should alleviate TURN's first concern. SCE agrees to the second recommendation. SCE acknowledges
4 the need to enhance its commercial/industrial meter set forecast as discussed above.

5 **D. Impacts of COVID-19**

6 TURN's testimony asserts that it does not adjust its forecast due to the COVID-19 pandemic,⁸⁷
7 however as the issue is rightfully of such concern, we are addressing its relation to the new service
8 connections forecast here nonetheless. When SCE developed its new service connections forecasts the
9 COVID-19 pandemic had not yet developed. SCE notes that new housing start forecasts must consider
10 longer-term trends including demographics and not short-term economic fluctuations as outlined earlier.
11 While the near-term impacts of this pandemic are no doubt severe, SCE's new service connections
12 forecast must consider the long-term economic and housing trends that can impact its forecasts as well
13 as more analysis of the current recession and its likely impact on housing starts. Short-term uncertainty
14 does not warrant a wholesale revisiting of the methodology.

15 **E. Conclusion**

16 For the three primary reasons discussed herein, SCE recommends that the Commission reject
17 TURN's residential new meter connections recommendations and methodology, and adopt SCE's
18 forecast.

⁸⁷ Exhibit TURN-02c, p. 48, footnote 151.

V.

OTHER OPERATING REVENUE – NON-TARIFFED PRODUCTS AND SERVICES

A. Introduction

SCE's non-tariffed use of existing assets generates extra revenues for both customers and shareholders, at no extra cost to customers. SCE is not proposing any changes in this proceeding to its non-tariffed products & services (NTP&S) offerings or the gross revenue sharing mechanism (GRSM), which dictates how NTP&S revenues are allocated between customers and shareholders. Nevertheless, TURN devotes 12 pages of testimony to attacking SCE's NTP&S offerings and GRSM. First, TURN argues that the GRSM is not working as intended and recommends that the Commission adopt a new allocation for sharing incremental gross revenues that, if adopted, would drastically increase the customer portion at the expense of the shareholder portion. Second, TURN makes the broad recommendation that the Commission find that SCE's NTP&S offerings no longer satisfy the conditions of NTP&S set forth in D.98-08-035⁸⁸ and, thus, that the GRSM no longer applies to them. Critically, if either of these recommendations is adopted, it would make SCE's NTP&S offerings non-profitable, dry up additional shareholder investment, and eventually result in customers receiving zero income from NTP&S. Such a result does not benefit anyone.

On May 15, 2020, SCE filed a Motion to Strike TURN's testimony on NTP&S and the GRSM as raising issues that are beyond the scope of this proceeding. That Motion is still pending as of the date of this Rebuttal Testimony.⁸⁹ Thus, this Rebuttal Testimony repeats SCE's arguments for why TURN's recommendations go beyond the scope of this proceeding, while also rebutting TURN's recommendations on the merits.

As discussed in Section C below, TURN's recommendation that the Commission drastically alter the GRSM for incremental gross revenues should be rejected:

- Modifying the GRSM's shareholder/customer allocation goes beyond the scope of this GRC.
 - TURN has raised similar arguments in past GRCs, and each time the Commission has ruled that the GRC is not the appropriate venue for modifying the GRSM's shareholder/customer allocation.

⁸⁸ D.98-08-035 granted in part and denied in part several petitions for modification to the Affiliate Transaction Rules.

⁸⁹ On June 1, TURN filed a response to this motion, and, on June 5, SCE filed a reply.

- The customer share of incremental gross revenues that TURN seeks to increase flows to customers through the GRSM outside of the GRC and is not part of SCE's 2021 GRC revenue requirement.
- TURN has not provided sufficient evidence to support its proposed modification to the GRSM.
 - TURN does not provide any evidence that a 25/75 shareholder/customer allocation would be reasonable for the GRSM given that customers already receive millions upfront before this allocation and shareholders bear 100% of the incremental costs.
 - Adopting TURN's recommendation would significantly impair the shareholder incentive to invest in NTP&S given that customers have received 73% of GRSM net benefits over the life of the mechanism. Without this shareholder incentive to invest, NTP&S sales will decrease and customers will eventually receive zero NTP&S revenues.

As discussed in Section D below, TURN's recommendation that the Commission find that SCE's NTP&S offerings no longer satisfy the conditions of NTP&S set forth in D.98-08-035 should also be rejected:

- Disputing the appropriateness of SCE's Commission-approved NTP&S offerings goes beyond the scope of this GRC.
 - TURN inappropriately attempts to relitigate the outcome of a different proceeding in which the Commission's final decision states that a rulemaking is the appropriate venue for addressing TURN's concerns.
 - The Commission approved the categories of NTP&S SCE offers in Resolution E-3639 twenty years ago, not in a GRC.
 - TURN's attack on already-installed fiber optic investments is outside the scope of this GRC because those investments were approved in prior GRCs, and TURN does not contest SCE's pending request for going-forward fiber optic replacements.
- TURN has not provided sufficient evidence to support its recommendation that the Commission find SCE's NTP&S offerings to be inappropriate.
 - TURN's cited evidence shows only that SCE installs excess fiber optic capacity, not that SCE does so for a non-utility purpose. As this testimony demonstrates, SCE installs excess capacity to serve *utility* needs and installing excess capacity is prudent from a cost perspective.
 - TURN raises speculative conflict of interest and affiliate compliance concerns regarding Edison Carrier Solutions (ECS), but by treating ECS as part of the utility, SCE is complying with the Affiliate Transaction Rules and the accounting guidance therein.

1 **B. Background**

2 **1. Overview of NTP&S and the GRSM**

3 Generally speaking, NTP&S are products and services other than traditional electric
4 utility services that SCE offers that make secondary or complementary use of available capacity in
5 utility assets and personnel.⁹⁰ NTP&S are offered at market-based prices that are not regulated by the
6 Commission. For example, SCE leases available utility space on its rights-of-way and transmission
7 towers for the placement of other companies' wireless communication antennas and towers. In many
8 cases, offering these NTP&S requires significant incremental costs (both capital and expense).

9 On June 12, 1997, SCE filed Application (A.) 97-06-021 requesting a gross revenue
10 sharing mechanism for its NTP&S. SCE's proposed revenue sharing mechanism built upon several of
11 the activity-specific revenue sharing mechanisms the Commission had already adopted on a case-by-
12 case basis.⁹¹ The application was filed to encourage additional investment that would maximize the use
13 of existing utility assets for the benefit of both customers and shareholders and to bring more certainty to
14 the treatment of revenues from NTP&S.⁹² On September 16, 1999, the Commission issued D.99-09-070
15 approving the settlement of the GRSM between the Public Advocates Office (then known as the Office
16 of Ratepayer Advocates) and SCE, despite TURN's opposition.

17 SCE's GRSM shares the gross revenues from NTP&S between customers and
18 shareholders based upon pre-established sharing percentages *after* an initial \$16.671 million annual
19 revenue threshold (GRSM Threshold) has been met. The \$16.671 million GRSM Threshold is credited
20 back to customers on an annual basis as a revenue credit and is not shared with shareholders. Once the
21 GRSM Threshold has been met, the gross revenues in excess of the GRSM Threshold (Incremental
22 Gross Revenues) are shared between shareholders and customers in accordance with the sharing

⁹⁰ Rule VII of the Affiliate Transaction Rules issued in D.97-12-088 and most recently modified by D.06-12-029 sets forth the specific conditions under which utilities can offer NTP&S.

⁹¹ These revenue sharing mechanisms included those adopted for SCE's fuel oil pipeline system in D.94-10-044, for the commercialization of Research, Development & Demonstration products (the "Technology Commercialization Incentive Procedure") in Resolution E-3484 and the interim revenue sharing for telecommunication facility lease revenues adopted in D.96-07-038 and D.96-07-058.

⁹² In D.99-09-070, p. 15, the Commission noted, "We agree with the settling parties that the settlement promotes more certainty with respect to treatment of the revenues from non-tariffed products and services than does the existing PBR mechanism. Greater certainty should further enhance the use of utility assets, and thus lead to greater revenues, because the utility can better anticipate its risks and returns, and the financial viability of a given project."

percentages established in D.99-09-070. Per that Decision, the Incremental Gross Revenues from NTP&S categories designated as “Active” are shared between shareholders and customers on a 90/10 percentage basis.⁹³ For NTP&S categories designated as “Passive” the Incremental Gross Revenues are shared between shareholders and customers on a 70/30 percentage basis.

Because, under the GRSM, all incremental costs for NTP&S are the sole responsibility of SCE’s shareholders, the shareholder portion of these Incremental Gross Revenues is ultimately reduced by any incremental costs incurred. Incremental costs are defined as those costs that would not be incurred “but for” the offering of the NTP&S.⁹⁴ For example, in the leasing of a right-of-way for a self-storage facility, the original cost of the land would not be an incremental cost because customers are unaffected and still receive the full usage of the land for utility purpose. The use of the land for a complementary, secondary purpose does not affect customers’ costs associated with the land. However, if SCE was required to pay a fee to re-zone the land for a self-storage site, the fee would constitute an incremental cost and would be the entire responsibility of shareholders, not customers. Shareholders are also responsible for all risks and liabilities associated with SCE’s NTP&S offerings.⁹⁵

2. SCE Did Not Propose Any Changes to the GRSM or its NTP&S Offerings in its Testimony

Outside of the fact that the annual \$16.671 million GRSM Threshold is credited to customers on a forecast basis in the general rate case,⁹⁶ SCE’s GRSM generally operates outside of the general rate case process. SCE records the customers’ share of Incremental Gross Revenues in its Gross

⁹³ As part of the Settlement, SCE and the Public Advocates Office (then known as the Office of Ratepayer Advocates) pre-established the designation of each existing NTP&S category as either “Active” or “Passive.” NTP&S determined to be Active are typically those where SCE takes an active role in the business for which the utility assets are being used for secondary purposes and where SCE shareholders contribute new capital and resources in the opportunity. NTP&S categories designated as Passive are typically those in which SCE does not actively participate in the business activity for which the utility assets are being utilized or where SCE shareholders contribute little to no capital or resources in the business opportunity. In addition, the Settlement established a process for converting a Passive NTP&S category to Active. SCE’s NTP&S categories are described in detail in Advice 1286-EA filed April 5, 2000 and approved by Resolution E-3639.

⁹⁴ See, e.g., Advice 4028-E, SCE’s 2019 Affiliate Transaction Rules Compliance Plan, p. 58 (explaining SCE’s compliance with Rule VII.D and specifically application of the “but for” test).

⁹⁵ See D.99-09-070, p. 17: “We clarify here that we read the settlement to insulate the ratepayers from all liability associated with Edison’s products and service offerings, including but not limited to third-party litigation, environmental problems, and the like. In essence, the ratepayers are a limited liability partner in the venture, and in exchange for a lesser amount of the gross revenues, they do not assume the risks.”

⁹⁶ See Ex. SCE-07, Vol. 1A2, p. 99.

1 Revenue Sharing Tracking Account, which is flowed to customers outside of the GRC via the Electric
2 Deferred Refund Account (EDRA). Because the NTP&S incremental costs are shareholders'
3 responsibility, these costs are excluded from the general rate case revenue requirement.

4 Notably, the GRSM was adopted in an application separate from any of SCE's general
5 rate cases and SCE has not and is not proposing any changes to the mechanism in this or any prior
6 general rate case.⁹⁷ Similarly, SCE is not proposing any changes to its NTP&S offerings in this
7 proceeding.

8 **3. TURN's Proposed Changes to the GRSM and SCE's NTP&S Offerings**

9 Despite the fact that the GRSM largely operates outside of the general rate case process,
10 TURN recommends that the Commission modify the GRSM and adopt a 25% shareholder/75%
11 customer sharing allocation of Incremental Gross Revenues (i.e., remaining revenues, if any, after the
12 \$16.671 million GRSM Threshold amount is given to customers), instead of the current 90/10 (active)
13 and 70/30 (passive) allocations.⁹⁸ TURN argues that a 25% shareholder/75% customer sharing
14 mechanism for these incremental revenues would be more equitable than the current allocations and
15 would address TURN's miscellaneous concerns that SCE's NTP&S offerings violate the conditions for
16 NTP&S, create inappropriate conflicts of interest, and result in customers subsidizing shareholders.⁹⁹
17 Alternatively, TURN requests that the Commission, at a minimum, adopt a 50/50 sharing mechanism
18 between shareholders and customers for these Incremental Gross Revenues.¹⁰⁰

19 In making this proposal, TURN does not propose changing the \$16.671 million GRSM
20 Threshold Amount given exclusively to customers before the allocation of any Incremental Gross
21 Revenues. Nor does TURN propose changing the fact that the shareholder portion of the Incremental
22 Gross Revenues, unlike the customer portion, is ultimately reduced by any incremental costs incurred.

23 TURN also makes the broad recommendation that the Commission find that SCE's
24 NTP&S offerings no longer satisfy the conditions of NTP&S set forth in D.98-08-035 and, thus, that the
25 GRSM no longer applies to them.¹⁰¹ In support, TURN relies upon a Proposed Decision (PD) and

⁹⁷ See Ex. SCE-07, Vol. 1A2, p. 100.

⁹⁸ See Ex. TURN-06/Cheng, p. 31.

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ Ex. TURN-06/Cheng, p. 25.

1 Alternate Proposed Decision (APD) from a different proceeding—A.17-02-001, In the Matter of the
2 Application of SCE for Authority to Lease Certain Fiber Optic Cables to Verizon Wireless (*Verizon*
3 *Wireless*)—that were both effectively withdrawn and rendered moot by the issuance of a final decision
4 dismissing the underlying application entirely.

5 **C. TURN’s Proposal to Change the GRSM Sharing Allocation Should be Rejected**

6 **1. This Proposal is Out of Scope**

7 **a) The Commission has ruled multiple times that the GRC is not the**
8 **appropriate venue for modifying the GRSM**

9 The Commission should reject TURN’s proposal to change the GRSM sharing
10 allocation without reaching the merits because the GRC is not the appropriate venue for considering this
11 change. This is not the first time TURN has attempted to modify the GRSM in a GRC. In both SCE’s
12 2009 and 2012 GRCs, TURN raised similar arguments that the GRSM was not operating as intended
13 and similarly asked the Commission to modify the GRSM. In both instances, the Commission rejected
14 TURN’s arguments and explicitly ruled that the GRC was not the appropriate venue for modifying the
15 GRSM. In D.12-11051, the Commission explained:

16 [In SCE’s 2009 GRC,] [w]e agreed with TURN that the Commission should
17 “revisit” NTP&S and the GRSM, but in a separate rulemaking not in the
18 GRC. Such a rulemaking did not occur and the issues returned in this
19 proceeding.

20 We continue to believe that *the GRC is not the place to modify the*
21 *established GSRM* [sic] and TURN has not provided sufficient evidence to do
22 [sic] support a specific alternative.¹⁰²

23 TURN’s testimony is no more detailed in this rate case than in the prior ones, and
24 it does not address these rulings or even attempt to show any changed circumstances that warrant the
25 Commission revisiting these prior decisions in this GRC.

26 If TURN wishes to revisit the GRSM, it should petition the Commission to
27 initiate a rulemaking on the issue pursuant to Rule 6.3 of the Commission’s Rules of Practice and
28 Procedure, as the Commission advised TURN to do in the 2012 GRC.¹⁰³ The issues concerning NTP&S
29 and the GRSM are complicated and broad. A dedicated rulemaking would allow a full, detailed record to

¹⁰² D.12-11-051, p. 657 (emphasis added). *See also* D.09-03-025, pp. 301-02.

¹⁰³ D.12-11-051, p. 657.

1 be developed, beginning with service of the utility's direct testimony, which would better inform a
2 decision of whether to modify the GRSM.

3 **b) TURN's Proposed Changes to the GRSM Would Not Affect SCE's 2021**
4 **GRC Revenue Requirement**

5 An independent reason why the Commission should reject TURN's proposal
6 without reaching the merits is because the customer share of Incremental Gross Revenues—the only
7 aspect of the GRSM which TURN seeks to modify—is *not* part of SCE's 2021 GRC revenue
8 requirement. As discussed above, while the annual \$16.671 million GRSM Threshold is credited to
9 customers on a forecast basis in the GRC, SCE records the customers' share of Incremental Gross
10 Revenues in its Gross Revenue Sharing Tracking Account, which is flowed to customers outside of the
11 GRC via the EDRA.

12 As a result, TURN's proposal is plainly out of scope. Even if the Commission
13 adopted TURN's proposal, it would not affect SCE's GRC revenue requirement for Test Year 2021
14 because TURN is not proposing changes to the GRSM Threshold, but rather is only proposing changes
15 to the sharing allocation for Incremental Gross Revenues *greater than* the Threshold. Thus, regardless of
16 TURN's proposal, the annual \$16.671 million GRSM Threshold that is part of SCE's 2021 revenue
17 requirement will be credited to customers in this GRC.

18 **2. Even if Deemed in Scope, TURN Has Not Provided Sufficient Record Evidence in**
19 **Support of its Claims**

20 **a) If TURN's Recommendation is Adopted, it Would Significantly Impair**
21 **Shareholder Incentive to Invest in NTP&S Which Would Ultimately Harm**
22 **Customers**

23 TURN's proposal, if adopted, would put SCE's entire GRSM and shareholder
24 investment at risk, which ultimately would lead to zero NTP&S revenues for customers. TURN
25 assumes, without any support, that SCE would still provide NTP&S to third parties under a significant
26 change in the sharing allocation and that TURN's proposed allocations (25/75 and 50/50) would provide
27 enough revenues for SCE shareholders to continue to invest in NTP&S. Those assumptions are not true,
28 and without an adequate incentive for shareholders to invest additional capital at their own expense and
29 risk, new sales would cease, and customers would eventually receive zero Incremental Gross Revenue
30 for NTP&S.

1 In approving SCE's GRSM, the Commission highlighted the fact that a revenue
2 sharing mechanism must provide SCE with the incentive to make the substantial additional investments
3 that are often needed to generate revenues from NTP&S:

4 The overall concept of a revenue sharing mechanism for revenues from non-
5 tariffed products and services is in the public interest because *it provides the*
6 *utility with incentives to use utility property for other productive purposes*
7 without interfering with the utility's operation or affecting service to utility
8 customers¹⁰⁴

9 Shareholders incur 100% of the incremental costs and 100% of the business and
10 liability risks for NTP&S, and TURN has not introduced any evidence supporting the proposition that a
11 25/75 or 50/50 shareholder/customer allocation of Incremental Gross Revenues would be sufficient to
12 provide the incentive for shareholders to take on those expenses and risks. In fact, given the evidence
13 below that shareholders to-date have received just 27% of the net benefits from the GRSM while bearing
14 all of the business and liability risk, it is likely that significantly changing the shareholder/customer
15 allocation from 90/10 (active) and 70/30 (passive) to 25/75 or 50/50 as TURN proposes would halt
16 shareholder investment in NTP&S, causing new sales to cease, and ultimately leading to zero
17 Incremental Gross Revenues for customers. Indeed, as SCE noted in *Verizon Wireless*, if the PD's
18 proposed 25/75 allocation for fiber lease transactions had been adopted in that proceeding, SCE would
19 not have proceeded with the contemplated transactions.¹⁰⁵

20 **b) If TURN's Recommendation is Adopted it Would Frustrate SCE's**
21 **Reasonable Investment-Backed Expectations**

22 Not only would changing the sharing allocation as TURN proposes affect future
23 shareholder investments in NTP&S, but it would also threaten shareholder recovery of past investments
24 that were made with the reasonable expectation that the existing sharing allocation would apply. In

¹⁰⁴ D.99-09-070, 1999 Cal. PUC LEXIS 653, at *47-48 (emphasis added). *See also* D.11-03-038, p. 6 (Mar. 29, 2011) ("[T]he agreement makes productive use of what is currently vacant conduit space. It makes eminent good sense for California's energy utilities, with their extensive easements, rights of way, and underground conduits, to cooperate in this manner with the telecommunications utilities who are seeking to build the fiber optic network. Joint use of the utility facilities has obvious economic and environmental benefits. The public interest is served when utility property is used for other productive purposes without interfering with the utility's operation or affecting service to utility customers." (quoting D.93-04-019, 1993 Cal. PUC LEXIS 275, at *4)).

¹⁰⁵ *See* A.17-02-001, Comments of Southern California Edison Company (U 338-E) on the Proposed Decision Approving and Adopting 25/75 Revenue Allocation for Revenues Under the Master Dark Fiber Lease Agreement Between Southern California Edison Company and Verizon Wireless (Jan. 29, 2018), at p. 3.

1 reliance on the existing GRSM, shareholders have invested \$817 million between 1999 and 2019 in non-
2 rate based assets and other incremental costs for NTP&S offerings. SCE has made these investments
3 with the expectation that it would retain 70%-90% of the Incremental Gross Revenues from NTP&S,
4 after customers receive the first \$16.7 million each year. TURN's recommendation, however, would
5 completely change the economics of these investments from a program in which SCE retains 90% of
6 Incremental Gross Revenues to one in which it retains only 25%, a difference of 65 percentage points.
7 As such, TURN's recommendation not only renders future shareholder investments uneconomic, but
8 also impacts past investments, which SCE expected to amortize via the 90% Incremental Gross Revenue
9 formula. This sudden change in policy would be contrary to the public interest and fundamentally unfair.

10 c) **TURN Has Not Provided Any Evidence that a 25/75 Shareholder/Customer**
11 **Allocation Would Be Reasonable or Equitable for the GRSM**

12 Even ignoring the shareholder incentive aspect, TURN has does not provided any
13 evidence that a 25/75 or 50/50 shareholder/customer allocation of Incremental Gross Revenues would be
14 reasonable for the GRSM. There is no analysis or math to support TURN's conclusion that this
15 allocation would be equitable in practice. Nor does TURN attempt to explain why tilting the allocation
16 of Incremental Gross Revenues in customers' favor is fair given that (a) customers already receive
17 \$16.671 million upfront through the GRSM before this allocation and (b) the shareholder portion of the
18 allocation, unlike the customer portion, is effectively reduced by the incremental costs and taxes
19 incurred. Instead, TURN's support for a 25/75 or 50/50 allocation consists solely of conclusory
20 allegations that this would be consistent with the effectively-withdrawn and moot PD and APD in a
21 different proceeding, *Verizon Wireless*, and non-analogous sharing mechanisms for SDG&E.¹⁰⁶ None of
22 this is persuasive.

23 First, the PD and APD from *Verizon Wireless* cited by TURN are not appropriate
24 evidence. The only substantive CPUC decision from the *Verizon Wireless* proceeding was D.18-09-009
25 dismissing SCE's application requesting an order authorizing SCE to lease to Verizon Wireless certain
26 optical fibers.¹⁰⁷ The prior-issued PD and APD on the merits of the application, which TURN is relying

¹⁰⁶ See Ex. TURN-06/Cheng, pp. 30-31.

¹⁰⁷ As discussed more in Section IV.D.1.a below, in *Verizon Wireless*, SCE filed an application requesting an order authorizing SCE to lease to Verizon Wireless certain optical fibers. Following a lengthy period between the filing of the initial application and the issuance of both a PD and APD, the Commission granted SCE's

(Continued)

1 upon, have no force or effect. Instead, each represents nothing more than a single decisionmaker's
2 opinion regarding the sharing of revenues from fiber lease transactions based on the record in that
3 proceeding. Quotes from that PD and APD are irrelevant to the question of what the record in this GRC
4 proceeding supports.

5 Second, the two SDG&E shareholder/ratepayer revenue sharing allocations
6 TURN cites are not analogous to the GRSM.¹⁰⁸ As an initial matter, unlike the GRSM, which applies to
7 all of SCE's NTP&S offerings, the two SDG&E mechanisms were tailored to narrow, specific offerings:
8 revenues resulting from research and development activities in one instance and revenues from the sale
9 or lease of intellectual property in the other instance. More importantly, TURN omits the fact that
10 comparing the GRSM to the SDG&E mechanisms is an apples-to-oranges comparison given the absence
11 in the SDG&E mechanisms of any threshold amount that is given exclusively to customers. Given the
12 substantial \$16.671 GRSM Threshold Amount given upfront to customers in SCE's GRSM but not in
13 the SDG&E mechanisms, it is misleading and an oversimplification to say that the 25/75 allocation in
14 these two SDG&E mechanisms supports the same 25/75 allocation for the GRSM. Finally, TURN does
15 not provide any evidence that the 25/75 shareholder/customer sharing mechanism approved for SDG&E
16 in its 2012 GRC for research and development activities is actually working as intended in practice.
17 TURN's testimony conveniently omits mention of what revenues customers have actually received as a
18 result of this SDG&E mechanism, likely because the 25/75 allocation has not been providing a
19 meaningful incentive for SDG&E to make investments in those research and development activities. By
20 comparison, SCE's GRSM has provided over \$570 million in benefits to customers since the adoption of
21 SCE's GRSM, as discussed in the next section.

22 d) **Since its Inception, Customers Have Received 73% of the Net Benefits from**
23 **the GRSM**

24 The fact that the net benefits from the GRSM have historically been skewed in
25 favor of customers supports maintaining the current GRSM sharing allocation for Incremental Gross

Continued from the previous page

motion to withdraw its application because SCE no longer sought Commission authority to enter into the
lease agreement with Verizon.

¹⁰⁸ TURN cites a 25/75 shareholder/ratepayer sharing mechanism approved for SDG&E in its 2012 GRC, and a
March 2017 application filed by SDG&E (subsequently withdrawn), in which SDG&E proposed a 25/75
allocation for revenues resulting from the sale or lease of intellectual property. Ex. TURN-06/Cheng, p. 30.

Revenues. TURN's testimony does not dispute that, as shown in Table IV-4, customers have received 73% of the net benefits from the GRSM since its inception in 1999,¹⁰⁹ for a total of over \$570 million.

Table V-5
Customer and Shareholder Net Benefits from Gross Revenue Sharing Mechanism (1999-2019)

Line (\$ Millions)	1999*	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019**	Total
1 Total Gross Revenue	16.0	66.1	78.0	74.4	88.8	76.4	83.6	93.8	108.4	100.6	95.7	91.3	98.6	93.9	92.1	82.9	84.7	81.7	83.4	80.6	79.2	1750.2
2 GRSM Threshold	N/A	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	16.7	334.0
3 Total ratepayers' Share of Incremental Gross Revenues	2.7	8.0	9.8	9.9	11.2	10.6	11.7	12.7	16.6	13.6	13.0	12.5	13.5	12.8	12.0	11.1	11.4	11.2	11.9	11.6	11.6	239.4
4 Total ratepayers' Net Benefits (Line 2 + Line 3)	2.7	24.7	26.5	26.6	27.9	27.3	28.4	29.4	33.3	30.3	29.7	29.2	30.2	29.5	28.7	27.8	28.1	27.9	28.6	28.3	28.3	573.4
5 Shareholders' Share of Incremental Gross Revenues (Line 1 - Line 4)	13.3	41.4	51.5	47.8	60.9	49.1	55.2	64.4	75.1	70.3	66.0	62.1	68.4	64.4	63.4	55.1	56.6	53.8	54.8	52.3	50.9	1176.8
6 Total Incremental Costs (Allocated to Shareholders)	13.2	42.1	46.4	38.9	33.3	36.6	38.3	49.1	58.7	49.5	43.6	42.4	45.7	42.0	39.8	29.4	27.8	33.8	35.2	39.2	31.6	816.6
7 Pre-Tax Shareholders' Net Revenues (Line 5 - Line 6)	0.1	-0.7	5.1	8.9	27.6	12.5	16.9	15.3	16.4	20.8	22.4	19.7	22.7	22.4	23.6	25.7	28.8	20.0	19.6	13.1	19.3	360.2
8 Estimated Taxes (Line 7 * Tax Rate)***	0.0	-0.3	2.1	3.6	11.1	5.0	6.8	6.2	6.6	8.3	9.1	8.0	9.2	9.1	9.6	10.4	11.7	8.1	8.0	5.3	7.8	145.7
9 Total Shareholders' Net Benefits (Line 7 - Line 8)	0.1	-0.4	3.0	5.3	16.5	7.5	10.1	9.1	9.8	12.5	13.3	11.7	13.5	13.3	14.0	15.3	17.1	11.9	11.6	7.8	11.5	214.5
10 Ratepayer' Share of Net Revenues (Line 4) / (Line 4 + Line 9)	96%	102%	90%	83%	63%	78%	74%	76%	77%	71%	69%	71%	69%	69%	67%	65%	62%	70%	71%	78%	71%	73%
11 Shareholders' Share of Net Revenues (100% - Line 10)	4%	-2%	10%	17%	37%	22%	26%	24%	23%	29%	31%	29%	31%	31%	33%	35%	38%	30%	29%	22%	29%	27%

* Reflects partial year since GRSM effective 9/16/99

** 2019 results are draft and not final

*** The following tax rates were used 1999-2002: 40.551%; 2003-2005: 40.370%; 2006-2008: 40.146%; 2009-2019: 40.588%

Net benefits is the most accurate measure of examining the value actually received by both customers and shareholders because it takes into account all relevant puts and takes, including:

- the risk-free gross revenues customers have received with a minimum guaranteed annual value of \$16.7 million (Line 2);
- additional revenues customers have received based on revenues above the GRSM Threshold (Line 3);
- the incremental costs borne entirely by shareholders, including over \$200 million of capital invested to-date (included in Line 6 in the form of depreciation);

¹⁰⁹ The figure TURN cites in testimony, 74%, comes from SCE's response to TURN-SCE-063, Question 3, which did not take into account 2019 data.

- the annual investment of \$35-40 million in additional incremental costs made by shareholders (included in Line 6); and
- the tax payments borne by shareholders on their share of incremental revenues (Line 8).

While not disputing the fact that customers have received 73% of the net benefits, TURN calls this measure a “red herring” and “meaningless for ratepayers.”¹¹⁰ But in asking the Commission to ignore net benefits and instead focus solely on the allocation of Incremental Gross Revenues (which, on the surface, appears skewed in favor of shareholders), TURN is essentially asking the Commission to make a misleading comparison between the value received by shareholders and customers. Any comparison that ignores the risk-free GRSM Threshold Amount paid to customers, the incremental costs incurred solely by shareholders, and the taxes paid by shareholders on their portion of incremental revenues is an inappropriate apples-to-oranges comparison.

Moreover, TURN’s criticisms of the net benefits measure are all misdirected. First, TURN’s claim that “ratepayers paid for the assets being used to generate the revenue” is irrelevant.¹¹¹ As discussed in Section IV.D.2.a below, the NTP&S framework explicitly permits SCE to make secondary or complementary use of available capacity in utility assets that were acquired for the purpose of and are necessary and useful in providing tariffed utility services. This non-tariffed use of existing assets generates extra revenues for both customers and shareholders, at no extra cost to customers. Additionally, in some cases, customers actually avoid paying for some ongoing operational expenses as a result of SCE freely utilizing ECS assets paid for by shareholders for electrical system operations. Second, as discussed in in Section IV.D.2.b below, there is no inappropriate customer subsidization of ECS’s expenses. SCE fully complies with the periodic reporting and cost allocation requirements of the Affiliate Transaction Rules. Third, net benefits appropriately does not take into account the returns on rate base shareholders receive on the assets utilized by ECS because (1) whether ECS uses these assets does not change what is in rate base and (2) these assets are only temporarily available for ECS use and are relinquished to utility use upon request.

¹¹⁰ Ex. TURN-06/Cheng, p. 28.

¹¹¹ *Id.* It is also an oversimplification. Shareholders pay for some of the assets used to generate NTP&S revenue.

1 **D. TURN's Proposal that the Commission Find that SCE's NTP&S Offerings Are**
2 **Inappropriate and Ineligible for the GRSM Should be Rejected**

3 **1. This Proposal is Out of Scope**

4 **a) TURN is Attempting to Relitigate a Different Proceeding, in which the Final**
5 **Decision Stated that TURN's Concerns Should be Addressed in a**
6 **Rulemaking**

7 In Section III.A of Exhibit TURN-06, TURN inappropriately attempts to relitigate
8 the outcome from a different proceeding, A.17-02-001, *Verizon Wireless*. In that proceeding, SCE filed
9 an application requesting an order authorizing SCE to lease to Verizon Wireless certain optical fibers.
10 Following a lengthy period between the filing of the initial application and the issuance of both a PD and
11 APD, the Commission granted SCE's motion to withdraw its application, over TURN's objections,¹¹²
12 because SCE no longer sought Commission authority to enter into the lease agreement with Verizon due
13 to diminished business opportunities, which would have been exacerbated by the proposed 25/75
14 shareholder/customer sharing allocation reflected in the PD that was pending when SCE filed its
15 motion.¹¹³

16 In granting SCE's motion, in D.18-09-009, the Commission recognized TURN's
17 opposition but stated that *a rulemaking* was the appropriate venue for resolving TURN's concerns:

18 [T]he scope of the proceeding has raised broad policy issues that include
19 identifying what policy frameworks promote the most effective utilization of
20 ratepayer-funded dark fiber throughout California's regulated electric utility
21 infrastructure and assure safety, universal access to utility services, and non-
22 discriminatory access to this infrastructure, especially amidst policy changes
23 at the federal level. ***The Commission may consider opening a rulemaking to***
24 ***consider these and other broad policy issues*** and, in that broader context,
25 reconsider the appropriate revenue sharing allocation for dark fiber route
26 leases.¹¹⁴

27 Ignoring that Decision, TURN now attempts to rely on selective pieces of the
28 record in A.17-02-001 (including data requests and TURN's briefing) to achieve a different result in this

¹¹² See A.17-02-001, Feb. 3, 2017 Response of TURN to Motion of SCE to Withdraw the Application, p. 3.

¹¹³ D.18-09-009.

¹¹⁴ D.18-09-009, p. 5 (emphasis added).

1 GRC.¹¹⁵ This is inappropriate. First, as D.18-09-009 makes clear, a Rulemaking, not the GRC, is the
2 appropriate venue for TURN's concerns given the broad policy issues implicated. Second, TURN relies
3 upon quotations from both the PD and APD issued in that *Verizon Wireless* proceeding, which are
4 neither precedential nor in effect, and which were not intended to apply to the entire suite of NTP&S
5 offered under SCE's GRSM.¹¹⁶

6 **b) TURN's Request that the Commission in this GRC Find that SCE's NTP&S**
7 **Offerings are Inappropriate is Tardy and Misdirected**

8 In addition to being an improper attempt to relitigate the outcome in *Verizon*
9 *Wireless*, TURN's recommendation that the Commission find that SCE's NTP&S offerings are
10 inappropriate is misdirected. As a threshold matter, the scope of SCE's NTP&S offerings was decided
11 twenty years ago in Resolution E-3639, not a GRC. That Resolution approved the categories under
12 which ECS offers its products and services as meeting the NTP&S conditions set forth in D.98-08-
13 035.¹¹⁷ TURN is essentially asking the Commission in this GRC to reverse that decision based not on
14 changed Commission policy or precedent, but on the effectively-withdrawn PD and APD from *Verizon*
15 *Wireless*. If TURN would like the Commission to revisit the suite of SCE's NTP&S offerings, that is
16 better done in a Rulemaking.

17 More importantly, to the extent TURN is arguing that prior-approved fiber optic
18 investments that are already in the ground are excessive, TURN's argument is tardy and misplaced. That
19 argument should have been made at the time the Commission was considering whether to approve those
20 fiber optic investments in prior GRCs. It is not appropriate for TURN to raise that argument now, after-
21 the-fact, and ask the Commission to effectively unwind those investments. Critically, TURN did not
22 offer any testimony contesting SCE's pending request in this GRC for going-forward fiber optic
23 replacements.¹¹⁸

¹¹⁵ See Ex. TURN-06/Cheng, pp. 22-23.

¹¹⁶ The only substantive CPUC decision from that proceeding was D.18-09-009 dismissing the application. The prior-issued PD and APD on the merits of the application have no force or effect.

¹¹⁷ These categories are described in detail in Advice 1286-E-A.

¹¹⁸ See Ex. SCE-02, Vol. 3, pp. 32-24.

1 **2. Even if Deemed in Scope, TURN Has Not Provided Sufficient Record Evidence in**
2 **Support**

3 **a) There is No Record Evidence that Any Fiber Facilities in Rate Base are Not**
4 **Needed for Utility Purposes or that SCE Installed Such Facilities for the**
5 **Purpose of Supporting ECS**

6 TURN argues that SCE has been routinely installing far more fiber optic facilities
7 than are necessary for purposes of providing tariffed utility service within a reasonable period.¹¹⁹
8 However, this argument is supported by conjecture not evidence. TURN's cited evidence shows only
9 that SCE installs excess capacity, *not* that SCE does so for a non-utility purpose.

10 Installing excess capacity is a prudent and natural consequence of the construction
11 of fiber facilities to meet electric utility operational needs and is consistent with industry utility
12 standards. SCE installs "enough bandwidth to last for the next 15 to 20 years"¹²⁰—or, in other words, the
13 cable's useful life—in order to ensure these facilities will be adequate to meet the utility's projected
14 future needs for grid operation. SCE anticipates expanded energy-network functions, including smart
15 grid applications, in the future, and thus designs its fiber facilities to accommodate the likelihood that
16 utility operations will require increased bandwidth in the future as technology continues to develop. In
17 other words, SCE includes in rate base only those fiber optic facilities and routes that are needed for
18 electric utility operations. Any excess capacity installed is for *utility* needs, not for ECS purposes.

19 Additionally, installing excess capacity is prudent from a cost perspective. Once
20 SCE decides that a particular fiber optic facility is needed for utility operations, the vast majority of
21 costs associated with that facility stem from its siting, construction, and installation, which do not vary
22 based on the amount of fiber optic capacity that SCE chooses to install. This is because new advances in
23 fiber optics have resulted in significantly higher count fiber cables that are similar in size and weight to
24 older, lower count fiber cables. Thus, increasing the installed fiber optic capacity involves only de
25 minimis additional costs and is more prudent compared to the alternative of installing the smallest viable
26 cable but then incurring incremental installation costs to replace it prior to its useful life.

¹¹⁹ Ex. TURN-06/Cheng, p. 22.

¹²⁰ See Ex. TURN-06/Cheng, p. 22 (quoting SCE witness Jeff Gooding's testimony during the 2018 GRC hearings).

1 Finally, TURN's allegation that that the record in *Verizon Wireless* shows that
2 SCE installed 562% capacity of the level required to provide internal communications and electric
3 system monitoring and automation is meaningless,¹²¹ as usage on each individual cable segment varies
4 from 2% to 100% because usage is location dependent. In other words, TURN's allegation is akin to
5 saying that usage of Interstate 10 in downtown Los Angeles should be compared to the usage of
6 Interstate 10 in Desert Center, California because it is the same road. In any case, the percentage of
7 SCE's fiber network capacity currently used for electric utility operations is not evidence that SCE has
8 engaged in a systemic build-up of assets funded by customers for the purpose of supporting a non-
9 tariffed business. There is no record evidence to suggest that any fiber facilities in rate base are not
10 needed for utility purposes.¹²² To the contrary, as described in SCE's 2021 GRC testimony, the fiber
11 optic network provides some of the most critical connections to substations, customer call centers, data
12 centers, and large office facilities.¹²³ Indeed, it is telling that TURN does not contest SCE's pending
13 request in this GRC for going-forward fiber optic replacements.¹²⁴ Similarly, there is no record evidence
14 to suggest that SCE decides to add fiber facilities to rate base based on the business opportunities of
15 ECS. Notably, TURN's testimony conveniently ignores the fact that in the discovery actually conducted
16 in *this* proceeding, SCE explained to TURN that SCE adds facilities to rate base only if they are needed
17 for electric utility operations.¹²⁵

18 In sum, TURN is left with nothing but speculation that the near-term excess
19 capacity SCE installs must be because SCE is overbuilding for the purpose of benefiting ECS. But such
20 speculation is not an evidentiary basis on which to find that SCE's NTP&S offerings are inappropriate.
21 SCE, consistent with industry utility standards, takes a long-term view of its future utility needs for
22 bandwidth, and because the marginal cost of installing additional fiber optic capacity is de minimis, SCE

¹²¹ Ex. TURN-06/Cheng, p. 23.

¹²² Nor is this the proper proceeding in which to undertake such an inquiry. As discussed above, in multiple General Rate Cases, SCE has proposed, and the Commission has approved, capital expenditures to be added to rate base for fiber facilities, based on a showing that such facilities are needed for utility operations.

¹²³ Ex. SCE-02, Volume 3, p.33.

¹²⁴ See Ex. SCE-02, Volume 3, pp. 32-34.

¹²⁵ See SCE's response to TURN-SCE-028, Question 2i.ii, in Appendix D, p. D-2 to D-6, which states "...SCE designs its fiber facilities to accommodate the likelihood that utility operations will require increased bandwidth in the future as technology continues to develop. SCE does not include any possible NTP&S usage as part of its request for new fiber assets."

1 installs higher capacity fiber, resulting in excess capacity in the near-term. That near-term excess
2 capacity falls squarely within Rule VII.C.4 of the Affiliate Transaction Rules: assets “acquired for the
3 purpose of and [which are] necessary and useful in providing tariffed utility services.”

4 **b) TURN’s Speculative Conflict of Interest and Affiliate Compliance Concerns,**
5 **and its Claim that SCE is Inappropriately Subsidizing ECS, All Demonstrate**
6 **a Misunderstanding of ECS, NTP&S, and the Affiliate Transaction Rules**

7 Finally, TURN raises miscellaneous conflict of interest and affiliate compliance
8 concerns regarding ECS, including a claim that SCE is inappropriately subsidizing ECS by allowing
9 ECS to use utility resources without compensating either the utility or customers.¹²⁶ TURN provides no
10 evidence for these claims, just speculation. As shown below, TURN’s claims are false and demonstrate
11 TURN’s complete misunderstanding of ECS, the Affiliate Transaction Rules, and NTP&S.

12 First, by considering ECS as part of the utility, SCE is complying with the
13 Affiliate Transaction Rules (Rules). Rule VII.C.4 includes a list of products and services that the utility
14 may offer for sale as a non-affiliate, including assets “acquired for the purpose of and [that are]
15 necessary and useful in providing tariffed utility [electrical] services.”¹²⁷ As discussed above, the dark
16 fiber that SCE provides on a non-tariffed basis is available capacity from an asset that was acquired for
17 the purpose of providing needed electricity and is still necessary and useful in providing such services.
18 Moreover, Rule VII.F provides that SCE may continue to offer existing non-tariffed products and
19 services, provided that the utility complies with the cost allocation and reporting requirements and the
20 filing of advice letters.¹²⁸ SCE has consistently met the periodic reporting requirements in Rule VII.H
21 and has complied with the cost allocation requirements of the Rules.¹²⁹

22 Second, SCE has established accounting procedures and mechanisms as required
23 in Rule VII.D.1 to identify and record the incremental costs (for which shareholders are responsible)

¹²⁶ See Ex. TURN-06/Cheng, pp. 25-30.

¹²⁷ D.06-12-029, Appendix A-3 at 20 (Dec. 14, 2006).

¹²⁸ The advice letter required by this Rule was filed on January 30, 1998 (Advice 1286-E). A revised Advice Letter (Advice 1286-E-A), reflecting Commission-ordered revisions, was filed April 5, 2000, and approved on September 29, 2003, via Resolution E-3639 with an effective date of May 15, 2000.

¹²⁹ D.06-12-029, Appendix A-3, p. 22-23.

1 associated with non-tariffed products and services.¹³⁰ SCE applies a “but for” test to determine whether
2 a cost is incremental. If SCE would not have incurred the cost “but for” the offering of any NTP&S, the
3 cost is deemed incremental and allocated to shareholders. Thus, any incremental costs to support ECS
4 are charged directly to ECS; there is no need to “credit” or “reimburse” the utility for this work as these
5 costs were never borne by the utility. Because these incremental costs are charged to ECS work orders
6 and cost objects, these cost objects are not included in the GRC historical results or forecasts. As for
7 non-incremental costs—i.e., costs that SCE would have incurred regardless of the existence of NTP&S
8 offerings—there is similarly no need or requirement to “credit” or “reimburse” the utility for this work
9 as this work does not result in any increased costs to the utility. This accounting treatment for
10 incremental and non-incremental costs is all fully consistent with the Affiliate Transaction Rules and
11 NTP&S requirements.

12 Third, contrary to TURN’s allegation, SCE is not the “sole decision-maker” as to
13 which costs are considered incremental.¹³¹ SCE’s NTP&S offerings and SCE’s treatment of incremental
14 costs are reviewed by the Commission for compliance with the Affiliate Transaction Rules under the
15 Commission’s biennial affiliate transactions audit.¹³² SCE’s internal Audit Services Department also
16 conducts periodic reviews.

17 Fourth, as shown in the following bullet points, there is nothing improper with
18 any of TURN’s “select examples of ratepayer funded resources that have been freely provide to ECS”¹³³
19 because in each case SCE follows the appropriate accounting guidelines.

- 20 • **Office Space:** As office space occupied by ECS employees becomes needed
21 for SCE electric operations, SCE employees take priority and ECS relocates to
22 a different building that has temporary excess capacity. Notably, ECS has had
23 to move three times in the last ten years for this reason. During this time, ECS

¹³⁰ See e.g., Advice 4028-E, SCE’s 2019 Affiliate Transaction Rules Compliance Plan, p. 58 (explaining SCE’s compliance with Rule VII.D and specifically application of the “but for” test).

¹³¹ Ex. TURN-06/Cheng, p. 26.

¹³² SCE provides annual updates of its non-tariffed products and services, pursuant to Rule VII.H. SCE’s compliance with the Rules is described in SCE’s annual Affiliate Transaction Compliance Plan—see, e.g., AL-4028-E, 2019 Affiliate Compliance Plan, available at: https://library.sce.com/content/dam/sce-doclib/documents/regulatory/affiliate_trans_comp_plan.pdf—and its Annual Report on Subsidiary, Affiliate, and Holding Company Transactions in Compliance with R.92-08-008, Ordering Paragraph No. 2.

¹³³ Ex. TURN-06/Cheng, p. 26.

1 had to move to Rosemead, Irwindale, and finally Pomona, with a portion of
2 the staff in Irvine. When SCE temporary excess capacity becomes less
3 available, ECS rents E-Works spaces as needed, which is charged directly to
4 shareholders.

- 5 • **IT:** ECS purchases all its IT equipment and pays for its own
6 telecommunications services received from others (e.g., Verizon Wireless for
7 cell phones). For other IT needs, such as use of the help desk or other IT
8 services, ECS's small size (69 employees¹³⁴) relative to SCE's 12,000-person
9 employee base means that ECS's use of these resources has no impact on the
10 IT staffing plan or other impact on SCE's IT costs.
- 11 • **HR:** Similarly, the small number of ECS employees, as compared to the
12 overall SCE population, does not drive a need for additional headcount in the
13 HR organization or otherwise impact SCE's HR costs. Employees and
14 candidates self-select the positions that they are interested in and are placed
15 based on the best fit.
- 16 • **Legal:** Legal costs are allocated based on whether or not they are incremental,
17 as discussed above. For legal services related to contract negotiations,
18 credit/collection issues, and telecommunications regulatory and compliance
19 issues, ECS legal costs are deemed incremental and paid 100% by shareholder
20 funds. Contrary to TURN's allegation, during the *Verizon Wireless* litigation
21 (A.17-02-001), ECS paid for outside counsel and this was charged directly to
22 shareholders. Legal costs related to regulatory issues for SCE caused by
23 ECS's existence within the electric utility, such as this GRC, are not
24 incremental and are not charged to shareholders. SCE trains employees on
25 these cost allocation principles, which are subject to periodic CPUC
26 compliance reporting and a biennial audit.

¹³⁴ TURN incorrectly claims that ECS has 140 employees. Ex. TURN-06/Cheng, pp. 25-27. The ECS employee count in 2019 was actually 69. The rest of the individuals on the organization chart provided to TURN in response to a data request are not employees, but instead vendors who do not require support services from the rest of SCE. These 69 employees represent approximately 0.5% of the overall SCE headcount.

1 Critically, TURN has offered zero evidence that SCE failed to follow the appropriate accounting
2 guidelines for any of these examples.

3 Finally, TURN's comparison of ECS's net margin to AT&T and Verizon is
4 irrelevant and unavailing.¹³⁵ Verizon and AT&T are international communications giants, while ECS is
5 just a small regional wireline carrier. Unlike Verizon and AT&T, ECS does not have a wireless
6 business, a cable television business, satellites, an international presence, or an "obligation to serve" as
7 an incumbent local provider. Additionally, if TURN had correctly used only the ECS
8 telecommunications services in the net margin calculation, rather than including real estate rental
9 revenues, the result is much different. The telecommunications services net margin for ECS with a six-
10 year average is 1.2%, which is much lower than TURN's cited "median net margin for the
11 Telecommunications Services industry" of 3.84%. This is a more appropriate comparison.

12 **E. Conclusion**

13 For the reasons discussed above, the Commission should reject TURN's recommendations that
14 the Commission modify the shareholder/customer allocation of the GRSM and find that SCE's NTP&S
15 offerings are inappropriate. These recommendations are plainly out of scope of this GRC and, as the
16 Commission has determined multiple times, are better addressed in a Rulemaking given the broad and
17 complex policy issues implicated. Additionally, the evidence that TURN provides to support these
18 recommendations consists mostly of conjecture and is severely lacking. TURN has not provided
19 sufficient record evidence to support such drastic changes to the GRSM and SCE's NTP&S offerings.
20 Most importantly, if either of TURN's recommendations is adopted, it would make SCE's NTP&S
21 offerings non-profitable, dry up additional shareholder investment, and eventually result in customers
22 receiving zero income from NTP&S. Such a result does not benefit anyone.

¹³⁵ Ex. TURN-06/Cheng, pp. 27-28.

1 VI.

2 **OTHER OPERATING REVENUE – ADDED FACILITIES RATES**

3 A. **Introduction**

4 As discussed in SCE’s direct testimony,¹³⁶ customers may request that SCE install facilities that
5 are in addition to, or in substitution of, the standard facilities that the company would normally install.
6 These facilities are referred to as “Added Facilities” and are provided pursuant to a number of
7 Commission-approved tariff provisions, depending on the nature of the facilities.¹³⁷ The costs for Added
8 Facilities are generally paid for by the specific customers who request them and not by the balance of
9 SCE’s customers. SCE’s initial GRC revenue requirement includes the revenue requirement for all of its
10 capital investment, including Added Facilities. In order to make all other customers “indifferent” to
11 these Added Facilities, the estimated revenue generated from Added Facilities is included in OOR and is
12 used as a credit to offset the cost included in the final GRC revenue requirement. If the Commission
13 *reduces* the amount of Added Facilities OOR, SCE’s GRC revenue requirement that all other customers
14 must pay will *increase* on a 1:1 ratio. If the Commission *increases* the amount of Added Facilities OOR,
15 SCE’s GRC revenue requirement for all other customers will *decrease* on a 1:1 ratio. It is a zero-sum
16 game. As such, if the Added Facilities OOR is not compensatory, all other customers will inequitably
17 subsidize Added Facilities customers. Figure VI-3 below provides an illustrative view of how Added
18 Facilities ratemaking works within the GRC revenue requirement.

¹³⁶ Exhibit SCE-07, Vol. 1A, p. 100.

¹³⁷ See SCE’s Rule 2, Section H.

Figure VI-3
Illustration of SCE's GRC Revenue Requirement Net of Added Facilities



In order to pay for the Added Facilities, an Added Facilities customer chooses to either finance the investment itself, or can choose an option where SCE finances the Added Facilities. The Energy Producers & Users Coalition (EPUC)¹³⁸ is proposing three changes to the long-standing, Commission-approved methodology for calculating the monthly bill in the cases where the customer elects to have SCE finance the Added Facilities. Specifically, EPUC is advocating that SCE: 1) immediately cease collection of depreciation and return on investment for all investments for 1988 and prior, as well as for any subsequent years' investments where the net investment reaches zero between now and the time the Commission issues its decision in this proceeding; 2) retroactively compensate customers who, in EPUC's view, paid excess depreciation and return on investment; and 3) monitor future accumulations of depreciation and be required to cease collection of depreciation and return of each vintage of asset as it becomes fully depreciated.¹³⁹ EPUC's proposals should be rejected, as they are inconsistent with cost-of-service ratemaking and overlook key cost components accounted for in SCE's Added Facilities rates.¹⁴⁰

¹³⁸ Per Exhibit EPUC-01 (Direct Testimony & Schedule of Maurice Brubaker), p. 1, EPUC is an *ad hoc* group representing the electric end use and customer generation interests of its members, which include the California Resources Corporation, Chevron U.S.A., Inc., PBF Energy Company and Phillips 66 Company.

¹³⁹ Exhibit EPUC-01, pp. 2-3.

¹⁴⁰ Additionally, although EPUC's proposals are effectively challenges to SCE's Commission-approved tariffs relating to Added Facilities, EPUC has failed to explain why those challenges should be considered in a utility-specific GRC proceeding. This holds particularly true where EPUC's members, but not EPUC itself, can already avail themselves of the Commission's complaint process and allowing EPUC to litigate its members' objections in this GRC circumvents that process. *See, e.g.*, D.12-11-051, p. 102 (In SCE's 2012

(Continued)

1 **B. Background**

2 Pursuant to Advice Letter 245-E, effective March 15, 1955,¹⁴¹ SCE established standardized
3 monthly billing rates (also called monthly payment factors or Added Facilities rates) for customers
4 electing to enter into Added Facilities agreements with SCE. SCE has been using this methodology with
5 only a few modifications ever since. In GRC proceedings, while the Added Facilities rates have
6 themselves been subject to review, the Commission has consistently continued to adopt this underlying
7 ratemaking methodology. The monthly Added Facilities bill is determined by multiplying the Added
8 Facilities “investment base” (*i.e.*, the non-depreciated cost basis), by the Added Facilities rate. If the
9 customer chooses to have SCE finance the investment, there are effectively two Added Facilities rate
10 options. The first option is where the customer chooses to pay a *lower* monthly Added Facilities rate, but
11 agrees to increase the cost basis when the facility needs to be replaced. The second option is where the
12 customer chooses to pay a *higher* monthly Added Facilities rate and is correspondingly insulated from
13 being charged a higher cost basis when the facility needs to be replaced. These same basic options are
14 also available if the customer chooses to finance the investment rather than SCE. Customers who choose
15 the customer-financed option have full control over their own cost of capital.

16 The long-standing methodology for calculating the Added Facilities rate is based on levelized
17 rates. That is, Added Facilities rates are calculated to equal the net present value of a traditional
18 declining rate base revenue requirement stream. In the calculation of Added Facilities rates, SCE models
19 the revenue requirement for a portfolio of its transmission and distribution facilities over their average
20 service life. This produces a declining revenue requirement stream over approximately 47 years, which
21 is the weighted average economic life of SCE’s Added Facilities portfolio. SCE then calculates the net
22 present value of this declining revenue stream and converts the net present value stream into a levelized
23 rate. The same levelized rate is used each month until the rate changes as the result of a Commission-
24 approved change to assumptions in a GRC or Cost of Capital decision.

Continued from the previous page

GRC Decision, the Commission concluded that the Port of Long Beach’s request to recharacterize Added Facilities as either Private Lines or Standard Facilities was “better raised in a specific complaint proceeding, or a petition requesting a rulemaking to reconsider the current language of the tariffs.”)

¹⁴¹ See Appendix E, pp. E-2 to E-13 (SCE-25, Vol.1, Appendix D from A.10-11-015.).

1 **C. EPUC’s proposals are inconsistent with cost-of-service ratemaking and overlook key cost**
2 **components accounted for in SCE’s Added Facilities rates.**

3 **1. EPUC’s proposal that capital-related payments should be terminated once an**
4 **Added Facilities asset has reached the end of its book life is inconsistent with**
5 **traditional cost-of-service ratemaking.**

6 In effect, EPUC proposes that capital-related payments terminate once an Added
7 Facilities asset has reached the end of its book life.¹⁴² This is inconsistent with both traditional cost-of-
8 service ratemaking and the levelized ratemaking calculation on which Added Facilities rates are based.
9 When an individual Added Facility asset fails prior to its expected service life, the Added Facilities
10 customer is *not* obligated to pay for the unrecovered portion of the capital investment on the individual
11 asset. The *quid pro quo* is that the Added Facility customer continues to pay the Added Facilities rate on
12 an individual asset that continues in operation past its expected service life. This is consistent with
13 traditional cost-of-service ratemaking, where an asset is included in a gross plant account (to which a
14 depreciation rate is applied) as long as the asset is in service.¹⁴³ EPUC’s proposal contravenes cost-of-
15 service ratemaking and could result in all other customers subsidizing Added Facilities customers
16 because, under EPUC’s proposal, Added Facilities customers would only pay for the “book life” of the
17 asset in the cases that it reached its expected useful life but *not* in cases where it is retired earlier. That
18 result would be fundamentally one-sided and unfair to the millions of other SCE customers who would
19 be required to pay for the shortfall. To the extent EPUC’s argument are grounded in its members’
20 preference for greater flexibility regarding the cost of capital for Added Facilities, they already have the
21 option of choosing the customer-financed option rather than having them financed by SCE.

22 **2. EPUC’s Supporting Analysis Overlooks a Material Cost Component in Added**
23 **Facilities Rates**

24 EPUC asserts that SCE has over-accumulated depreciation for Added Facilities with a
25 1988 or prior vintage.¹⁴⁴ EPUC’s interpretation of Accumulated Depreciation and Net Investment is
26 incomplete and overlooks a key cost component accounted for in SCE’s depreciation accrual. When a

¹⁴² Exhibit EPUC-01, pp. 8-9.

¹⁴³ The recovery of an asset’s cost is handled by the depreciation expense over its average service life. Under-recovery resulting from early retirement is made up for by additional accruals for assets surviving beyond the average service life. See Exhibit SCE-18, Volume 3, Chapter IV.B.2

¹⁴⁴ Exhibit EPUC-01, pp. 5-6.

1 customer requests that SCE install Added Facilities, SCE incurs an upfront capital expenditure, which
2 SCE recovers over time in the form of depreciation accruals. In addition to the upfront capital
3 expenditures required to install Added Facilities, SCE also needs to recover the cost of *removing and*
4 *disposing of* Added Facilities at the end of an asset's service life. In traditional cost-of-service
5 ratemaking, this cost of removal is accounted for as part of SCE's depreciation accruals. Consistent with
6 traditional cost-of-service ratemaking, the cost of removal associated with Added Facilities investments
7 is also reflected in SCE's depreciation accruals. Therefore, EPUC's assertion that SCE has over-
8 accumulated depreciation for all Added Facilities investments with a 1988 or prior vintage is inaccurate.
9 As a reference, the weighted average cost of removal for SCE's current portfolio of Added Facilities in
10 the 2021 GRC is approximately 50% of the initial investment. Based on SCE's current portfolio of
11 Added Facilities, an investment of \$1,000 would result in SCE recovering the \$1,000 initial investment
12 plus \$500 associated with the cost of removal over approximately 47 years, which is the weighted
13 average economic life of SCE's current Added Facilities portfolio. On average, this would result in SCE
14 accruing a total of \$1,500 over approximately 47 years.

15 As stated earlier, SCE does not separately track the accumulation of depreciation for
16 Added Facilities, which are accounted for as part of the total plant and depreciation balances reflected in
17 SCE's GRC. Therefore, the depreciation figures SCE provided to EPUC in data request responses and
18 cited by EPUC in its testimony are estimates based on current assumptions reflected in the 2021 GRC
19 and do not reflect actual depreciation accruals.¹⁴⁵ Actual depreciation accruals for the historical period
20 EPUC is assessing would differ from the estimate SCE provided based on 1) the actual mix of assets,
21 both currently installed and already retired, that comprise the Added Facilities portfolio, and 2) the
22 underlying assumptions for depreciation and cost of removal rates that correspond with each of SCE's
23 historical GRCs. As such, acquiring the data required to determine the specific actual accruals for each
24 vintage of Added Facilities is not feasible.

25 **D. Conclusion**

26 Even if EPUC's proposals are properly considered here, the Commission should reject EPUC's
27 proposals as they are inconsistent with cost-of-service ratemaking and would result in all other
28 customers subsidizing Added Facilities customers.

29 ¹⁴⁵ Exhibit EPUC-01, Schedules MEB 1, MEB 2, and MEB 3

Appendix A
Workpapers

SCE-18, Vol. 01: Rebuttal Testimony on Result of Operations
Appendix A Index of Data Request Responses

Appendix A
Supporting Attachments to SCE-18, Volume 1, Chapter I

Errata
O&M, OOR, and Capital Expenditures

Southern California Edison
2021 GRC
Appendix A - Errata O&M Changes

\$ in Thousands

GRC Activity	Testimony Exhibit	SCE February 2020 Position (RO 1.4)				Errata Adjustments				SCE Errata			
		2021 Forecast				2021 Errata				2021 Adjusted Forecast			
		Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total
Palo Verde	SCE-05	-	78,669	-	78,669	-	(5,573)	-	(5,573)	-	73,096	-	73,096
Mountainview	SCE-05	-	12,589	-	12,589	-	(158)	-	(158)	-	12,431	-	12,431
Monitoring Bulk Power System	SCE-02	9,263	801	-	10,065	(818)	818	-	0	8,445	1,620	-	10,065
Transmission Support Activities	SCE-02	755	129	-	884	(328)	301	-	(27)	427	430	-	857
Enhanced Overhead Inspections and Remediations	SCE-04	3,242	33,355	-	36,596	(62)	(4,621)	-	(4,682)	3,180	28,734	-	31,914
Technology Assessment	SCE-02	-	1,051	-	1,051	-	(19)	-	(19)	-	1,033	-	1,033
Safety Activities - Transmission & Distribution	SCE-06	-	5,408	-	5,408	-	(950)	-	(950)	-	4,458	-	4,458
Distribution Preventive and Breakdown O&M Maintenance	SCE-02	19,614	20,324	-	39,938	(4,086)	5,527	-	1,441	18,382	22,613	-	40,995
Distribution Routine Vegetation Management	SCE-02	-	92,023	-	92,023	-	(3,098)	-	(3,098)	-	88,925	-	88,925
Distribution Storm Response O&M	SCE-04	-	8,350	-	8,350	-	890	-	890	-	9,240	-	9,240
Credit and Payment	SCE-03	-	5,524	-	5,524	-	(229)	-	(229)	-	4,856	-	4,856
Distribution Support Activities	SCE-02	836	940	-	1,776	(39)	(8)	-	(47)	797	932	-	1,729
Security Technology Operations and Maintenance	SCE-04	6,189	17,186	-	23,375	(4,988)	(14,279)	-	(19,267)	1,201	2,907	-	4,108
Work Force Protection/Insider Threat	SCE-04	-	213	-	213	4,988	14,279	-	19,267	4,988	14,492	-	19,480
Participant Credits and Charges - 925	SCE-06	-	314	-	314	-	(314)	-	(314)	-	-	-	-
Transmission Pole Loading Assessments	SCE-02	1	4	-	5	(1)	(4)	-	(5)	-	(0)	-	(0)
Total		39,900	276,881	-	316,782	(5,334)	(7,438)	-	(12,772)	37,421	265,766	-	303,187

Southern California Edison

2021 GRC

Appendix A - Errata O&M Changes By Exhibit (SCE-02)

\$ in Thousands

GRC Activity	Testimony Exhibit	SCE February 2020 Position (RO 1.4)				Errata Adjustments				SCE Errata			
		2021 Forecast				2021 Errata				2021 Adjusted Forecast			
		Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total
Monitoring Bulk Power System	SCE-02	9,263	801	-	10,065	(818)	818	-	0	8,445	1,620	-	10,065
Transmission Support Activities	SCE-02	755	129	-	884	(328)	301	-	(27)	427	430	-	857
Technology Assessment	SCE-02	-	1,051	-	1,051	-	(19)	-	(19)	-	1,033	-	1,033
Distribution Preventive and Breakdown O&M Maintenance	SCE-02	19,614	20,324	-	39,938	(4,086)	5,527	-	1,441	18,382	22,613	-	40,995
Distribution Routine Vegetation Management	SCE-02	-	92,023	-	92,023	-	(3,098)	-	(3,098)	-	88,925	-	88,925
Distribution Support Activities	SCE-02	836	940	-	1,776	(39)	(8)	-	(47)	797	932	-	1,729
Transmission Pole Loading Assessments	SCE-02	1	4	-	5	(1)	(4)	-	(5)	-	(0)	-	(0)
Total		30,469	115,273	-	145,743	(5,272)	3,517	-	(1,755)	28,051	115,552	-	143,604

Southern California Edison

2021 GRC

Appendix A - Errata O&M Changes By Exhibit (SCE-03)

\$ in Thousands

GRC Activity	Testimony Exhibit	SCE February 2020 Position (RO 1.4)				Errata Adjustments				SCE Errata			
		2021 Forecast				2021 Errata				2021 Adjusted Forecast			
		Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total
Credit and Payment	SCE-03	-	5,524	-	5,524	-	(229)	-	(229)	-	4,856	-	4,856

Southern California Edison

2021 GRC

Appendix A - Errata O&M Changes By Exhibit (SCE-04)

\$ in Thousands

GRC Activity	Testimony Exhibit	SCE February 2020 Position (RO 1.4)				Errata Adjustments				SCE Errata			
		2021 Forecast				2021 Errata				2021 Adjusted Forecast			
		Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total
Enhanced Overhead Inspections and Remediations	SCE-04	3,242	33,355	-	36,596	(62)	(4,621)	-	(4,682)	3,180	28,734	-	31,914
Distribution Storm Response O&M	SCE-04	-	8,350	-	8,350	-	890	-	890	-	9,240	-	9,240
Security Technology Operations and Maintenance	SCE-04	6,189	17,186	-	23,375	(4,988)	(14,279)	-	(19,267)	1,201	2,907	-	4,108
Work Force Protection/Insider Threat	SCE-04	-	213	-	213	4,988	14,279	-	19,267	4,988	14,492	-	19,480
Total		9,431	59,103	-	68,534	(62)	(3,731)	-	(3,792)	9,369	55,372	-	64,742

Southern California Edison

2021 GRC

Appendix A - Errata O&M Changes By Exhibit (SCE-05)

\$ in Thousands

GRC Activity	Testimony Exhibit	SCE February 2020 Position (RO 1.4)				Errata Adjustments				SCE Errata			
		2021 Forecast				2021 Errata				2021 Adjusted Forecast			
		Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total
Palo Verde	SCE-05	-	78,669	-	78,669	-	(5,573)	-	(5,573)	-	73,096	-	73,096
Mountainview	SCE-05	-	12,589	-	12,589	-	(158)	-	(158)	-	12,431	-	12,431
Total		-	91,258	-	91,258	-	(5,731)	-	(5,731)	-	85,527	-	85,527

Southern California Edison

2021 GRC

Appendix A - Errata O&M Changes By Exhibit (SCE-06)

\$ in Thousands

GRC Activity	Testimony Exhibit	SCE February 2020 Position (RO 1.4)				Errata Adjustments				SCE Errata			
		2021 Forecast				2021 Errata				2021 Adjusted Forecast			
		Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total
Safety Activities - Transmission & Distribution	SCE-06	-	5,408	-	5,408	-	(950)	-	(950)	-	4,458	-	4,458
Participant Credits and Charges - 925	SCE-06	-	314	-	314	-	(314)	-	(314)	-	-	-	-
Total		-	5,722	-	5,722	-	(1,264)	-	(1,264)	-	4,458	-	4,458

Southern California Edison
2021 GRC
Appendix A - Errata OOR Changes

\$ in Thousands

GRC Activity	Testimony Exhibit	SCE February 2020 Position (RO 1.4)				Errata Adjustments				SCE Errata			
		2021 Forecast				2021 Errata				2021 Adjusted Forecast			
		Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total
Community Choice Aggregation Service Fees	SCE-03	-	-	4,122	4,122	-	-	(239)	(239)	-	-	3,883	3,883
Late Payment Charges - Non-Residential	SCE-03	-	-	4,456	4,456	-	-	(456)	(456)	-	-	4,000	4,000
Late Payment Charges - Residential	SCE-03	-	-	7,451	7,451	-	-	(21)	(21)	-	-	7,430	7,430
Transmission and Distribution Services	SCE-02	-	-	55,424	55,424	-	-	195	195	-	-	55,619	55,619
Total		-	-	67,331	67,331	-	-	(282)	(282)	-	-	67,049	67,049

Southern California Edison
2021 GRC
Appendix A - Errata Capital Changes
\$ in Thousands

WBS Element	GRC Activity	Testimony	SCE February 2020 Position (RO 1.4)					Errata Adjustments					SCE Errata				
			2020	2021	2022	2023	Total	2020	2021	2022	2023	Total	2020	2021	2022	2023	Total
CET-PD-BM-BD-MTW	Distribution Preventive and Breakdown Capital Maintenance	SCE-02	136,057	140,385	144,446	148,601	569,489	38	40	41	42	161	135,918	140,242	144,299	148,449	568,908
CET-PD-CR-IF-MTW	Distribution Preventive and Breakdown Capital Maintenance	SCE-02	7,637	7,879	8,107	8,341	31,964	(622)	(643)	(661)	(679)	(2,605)	7,629	7,871	8,099	8,332	31,931
CET-PD-IR-PM-MTW	Distribution Preventive and Breakdown Capital Maintenance	SCE-02	133,963	138,224	142,222	146,313	560,722	(49)	(50)	(52)	(54)	(205)	133,826	138,084	142,077	146,164	560,150
CET-PD-CR-JD-MTW	Distribution Joint Pole Capital Credits	SCE-02	(51,694)	(66,710)	(45,726)	(32,131)	(196,261)	(13)	(20)	(13)	(9)	(55)	(51,707)	(66,729)	(45,740)	(32,140)	(196,316)
CET-PD-CR-JD-PL	Distribution Joint Pole Capital Credits	SCE-02	(35,944)	(34,785)	(58,703)	(75,303)	(204,735)	(9)	(10)	(17)	(22)	(58)	(35,953)	(34,795)	(58,721)	(75,325)	(204,794)
CIT-00-DM-DM-000249	Technology Infrastructure Maintenance and Replacement	SCE-06	14,461	30,170	10,891	20,723	76,245	(390)	-	-	-	(390)	14,071	30,170	10,891	20,723	75,854
CIT-00-OP-CS-000008	Technology Infrastructure Maintenance and Replacement	SCE-06	9,200	5,022	3,863	3,221	21,306	(88)	-	-	-	(88)	9,112	5,022	3,863	3,221	21,218
CIT-00-OP-CS-000009	Technology Infrastructure Maintenance and Replacement	SCE-06	6,500	3,316	2,584	2,133	14,533	(70)	-	-	-	(70)	6,430	3,316	2,584	2,133	14,463
CIT-00-OP-CS-000037	Technology Infrastructure Maintenance and Replacement	SCE-06	9,163	5,310	6,390	9,887	30,751	(110)	-	-	-	(110)	9,053	5,310	6,390	9,887	30,641
CIT-00-OP-DC-000007	Technology Infrastructure Maintenance and Replacement	SCE-06	8,000	7,088	8,663	7,000	30,750	(811)	-	-	-	(811)	7,189	7,088	8,663	7,000	29,939
CIT-00-OP-NS-000154	CRE Project Management	SCE-06	5,132	5,132	5,132	5,132	20,529	(1,499)	(2,414)	-	-	(3,912)	3,634	2,719	5,132	5,132	16,617
COS-00-RE-MA-NE0001	Facility Asset Management	SCE-06	21,562	23,421	23,890	24,367	93,240	(1,000)	(1,000)	(1,000)	(1,000)	(4,000)	20,562	22,421	22,890	23,367	89,240
COS-00-SP-RE-000000	All Hazards Assessment, Mitigation and Analytics	SCE-04	13,000	12,000	18,000	18,000	61,000	-	(3,564)	(14,032)	(11,412)	(29,008)	13,000	8,436	3,968	6,588	31,992
COS-00-SP-TD-000000	All Hazards Assessment, Mitigation and Analytics	SCE-04	8,640	7,560	2,880	2,880	21,960	-	664	14,032	11,412	26,108	8,640	8,224	16,912	14,292	48,068
CIT-00-TR-RM-000002	Cybersecurity Delivery and IT Compliance	SCE-04	19,602	37,577	37,415	35,417	130,012	(150)	-	-	-	(150)	19,452	37,577	37,415	35,417	129,862
CIT-00-TR-RM-781701	Grid Mod Cybersecurity	SCE-04	24,949	45,245	28,934	36,426	135,555	(408)	-	-	-	(408)	24,542	45,245	28,934	36,426	135,147
CET-PD-ST-DS-MTW	Distribution Storm Response Capital	SCE-04	43,616	45,003	46,305	47,637	182,561	8,297	8,561	8,809	9,062	34,728	48,910	50,466	51,926	53,419	204,721
CET-PD-ST-SS-SUBSNW	Transmission/Substation Storm Response Capital	SCE-04	477	488	497	510	1,972	(219)	(224)	(228)	(233)	(905)	144	147	150	154	594
CET-PD-ST-TS-TREAST	Transmission/Substation Storm Response Capital	SCE-04	1,433	1,464	1,492	1,526	5,914	1,788	1,826	1,861	1,903	7,380	2,922	2,984	3,041	3,110	12,058
CET-PD-WM-OC-MTW	Enhanced Overhead Inspections and Remediations	SCE-04	81,257	27,931	26,960	25,910	162,058	921	1,126	1,086	1,044	4,177	82,178	29,057	28,046	26,954	166,235
CET-PD-WM-TP-822400	Enhanced Overhead Inspections and Remediations	SCE-04	10,873	11,106	10,289	10,524	42,792	(1,691)	(1,727)	(1,600)	(1,636)	(6,654)	9,182	9,379	8,689	8,888	36,138
CET-PD-WM-TP-822401	Enhanced Overhead Inspections and Remediations	SCE-04	3,943	4,027	3,731	3,816	15,517	(613)	(626)	(580)	(593)	(2,413)	3,330	3,401	3,151	3,223	13,104
CET-PD-GR-FP-MTW	Wildfire Covered Conductor Program	SCE-04	64,252	92,814	109,141	133,333	399,539	(26,358)	(38,075)	(44,773)	(54,697)	(163,902)	37,894	54,739	64,368	78,636	235,637
CIT-00-OP-NS-000015	Distribution Substation Plan Substations	SCE-02	150	150	150	150	600	(150)	(150)	(150)	(150)	(600)	-	-	-	-	-
CET-PD-LG-TS-750500	Transmission Substation Plan (TSP)	SCE-02	2,452	-	-	-	2,452	-	-	-	-	-	2,217	-	-	-	2,217
CET-PD-IR-TG-TRSJAC	Transmission Capital Maintenance	SCE-02	4,572	14,165	14,426	14,760	47,922	-	(6,813)	(6,943)	(7,101)	(20,857)	4,572	7,352	7,483	7,659	27,065
CET-PD-CL-TC-TRSJAC	Transmission Claim	SCE-02	198	202	206	211	818	229	234	239	244	946	427	437	445	455	1,763
CET-PD-CR-JT-PL	Transmission Joint Pole Capital Credits	SCE-02	(2,375)	(2,108)	(7,635)	(10,994)	(23,112)	(1)	(1)	(3)	(4)	(9)	(2,376)	(2,109)	(7,638)	(10,999)	(23,121)
CET-PD-CR-JT-TREAST	Transmission Joint Pole Capital Credits	SCE-02	(12,762)	(18,750)	(13,621)	(10,749)	(55,882)	(5)	(7)	(5)	(4)	(22)	(12,767)	(18,758)	(13,627)	(10,753)	(55,904)
CIT-00-OP-NS-000662	CRE Project Management	Non-GRC	-	-	-	-	-	1,499	2,414	-	-	3,912	1,499	2,414	-	-	3,912
COS-00-RE-RC-FLS001	Facility Asset Management	SCE-06	-	-	-	-	-	1,000	1,000	1,000	1,000	4,000	1,000	1,000	1,000	1,000	4,000
CCS-00-SE-CO-CC-18001	CS Capital	SCE-03	-	-	-	-	-	1,768	200	-	-	1,968	1,768	200	-	-	1,968
Total			528,315	543,326	530,927	577,641	2,180,209	(18,715)	(39,258)	(42,991)	(52,887)	(153,851)	506,297	500,909	484,689	521,414	2,013,309

Note: 2019 capital expenditures are not shown because SCE updated 2019 for recorded amounts. See SCE-12 V1 and SCE-18 V1 workpapers.

WBS Element	GRC Activity	Testimony	SCE February 2020 Position (RO 1.4)					Errata Adjustments					SCE Errata				
			2020	2021	2022	2023	Total	2020	2021	2022	2023	Total	2020	2021	2022	2023	Total
CET-PD-BM-BD-MTW	Distribution Preventive and Breakdown Capital Maintenance	SCE-02	136,057	140,385	144,446	148,601	569,489	38	40	41	42	161	135,918	140,242	144,299	148,449	568,908
CET-PD-CR-IF-MTW	Distribution Preventive and Breakdown Capital Maintenance	SCE-02	7,637	7,879	8,107	8,341	31,964	(622)	(643)	(661)	(679)	(2,605)	7,629	7,871	8,099	8,332	31,931
CET-PD-IR-PM-MTW	Distribution Preventive and Breakdown Capital Maintenance	SCE-02	133,963	138,224	142,222	146,313	560,722	(49)	(50)	(52)	(54)	(205)	133,826	138,084	142,077	146,164	560,150
CET-PD-CR-JD-MTW	Distribution Joint Pole Capital Credits	SCE-02	(51,694)	(66,710)	(45,726)	(32,131)	(196,261)	(13)	(20)	(13)	(9)	(55)	(51,707)	(66,729)	(45,740)	(32,140)	(196,316)
CET-PD-CR-JD-PL	Distribution Joint Pole Capital Credits	SCE-02	(35,944)	(34,785)	(58,703)	(75,303)	(204,735)	(9)	(10)	(17)	(22)	(58)	(35,953)	(34,795)	(58,721)	(75,325)	(204,794)
CIT-00-OP-NS-000015	Distribution Substation Plan Substations	SCE-02	150	150	150	150	600	(150)	(150)	(150)	(150)	(600)	-	-	-	-	-
CET-PD-LG-TS-750500	Transmission Substation Plan (TSP)	SCE-02	2,452	-	-	-	2,452	-	-	-	-	-	2,217	-	-	-	2,217
CET-PD-IR-TG-TRSJAC	Transmission Capital Maintenance	SCE-02	4,572	14,165	14,426	14,760	47,922	-	(6,813)	(6,943)	(7,101)	(20,857)	4,572	7,352	7,483	7,659	27,065
CET-PD-CL-TC-TRSJAC	Transmission Claim	SCE-02	198	202	206	211	818	229	234	239	244	946	427	437	445	455	1,763
CET-PD-CR-JT-PL	Transmission Joint Pole Capital Credits	SCE-02	(2,375)	(2,108)	(7,635)	(10,994)	(23,112)	(1)	(1)	(3)	(4)	(9)	(2,376)	(2,109)	(7,638)	(10,999)	(23,121)
CET-PD-CR-JT-TREAST	Transmission Joint Pole Capital Credits	SCE-02	(12,762)	(18,750)	(13,621)	(10,749)	(55,882)	(5)	(7)	(5)	(4)	(22)	(12,767)	(18,758)	(13,627)	(10,753)	(55,904)
Total			182,254	178,652	183,871	189,199	733,977	(581)	(7,419)	(7,566)	(7,738)	(23,304)	181,786	171,595	176,677	181,842	711,901

Note: 2019 capital expenditures are not shown because SCE updated 2019 for recorded amounts. See SCE-12 V1 and SCE-18 V1 workpapers.

			SCE February 2020 Position (RO 1.4)					Errata Adjustments					SCE Errata				
WBS Element	GRC Activity	Testimony	2020	2021	2022	2023	Total	2020	2021	2022	2023	Total	2020	2021	2022	2023	Total
CCS-00-SE-CO-CC-18001	CS Capital	SCE-03	-	-	-	-	-	1,768	200	-	-	1,968	1,768	200	-	-	1,968

Note: 2019 capital expenditures are not shown because SCE updated 2019 for recorded amounts. See SCE-12 V1 and SCE-18 V1 workpapers.

WBS Element	GRC Activity	Testimony	SCE February 2020 Position (RO 1.4)					Errata Adjustments					SCE Errata				
			2020	2021	2022	2023	Total	2020	2021	2022	2023	Total	2020	2021	2022	2023	Total
COS-00-SP-RE-000000	All Hazards Assessment, Mitigation and Analytics	SCE-04	13,000	12,000	18,000	18,000	61,000	-	(3,564)	(14,032)	(11,412)	(29,008)	13,000	8,436	3,968	6,588	31,992
COS-00-SP-TD-000000	All Hazards Assessment, Mitigation and Analytics	SCE-04	8,640	7,560	2,880	2,880	21,960	-	664	14,032	11,412	26,108	8,640	8,224	16,912	14,292	48,068
CIT-00-TR-RM-000002	Cybersecurity Delivery and IT Compliance	SCE-04	19,602	37,577	37,415	35,417	130,012	(150)	-	-	-	(150)	19,452	37,577	37,415	35,417	129,862
CIT-00-TR-RM-781701	Grid Mod Cybersecurity	SCE-04	24,949	45,245	28,934	36,426	135,555	(408)	-	-	-	(408)	24,542	45,245	28,934	36,426	135,147
CET-PD-ST-DS-MTW	Distribution Storm Response Capital	SCE-04	43,616	45,003	46,305	47,637	182,561	8,297	8,561	8,809	9,062	34,728	48,910	50,466	51,926	53,419	204,721
CET-PD-ST-SS-SUBSNW	Transmission/Substation Storm Response Capital	SCE-04	477	488	497	510	1,972	(219)	(224)	(228)	(233)	(905)	144	147	150	154	594
CET-PD-ST-TS-TREAST	Transmission/Substation Storm Response Capital	SCE-04	1,433	1,464	1,492	1,526	5,914	1,788	1,826	1,861	1,903	7,380	2,922	2,984	3,041	3,110	12,058
CET-PD-WM-OC-MTW	Enhanced Overhead Inspections and Remediations	SCE-04	81,257	27,931	26,960	25,910	162,058	921	1,126	1,086	1,044	4,177	82,178	29,057	28,046	26,954	166,235
CET-PD-WM-TP-822400	Enhanced Overhead Inspections and Remediations	SCE-04	10,873	11,106	10,289	10,524	42,792	(1,691)	(1,727)	(1,600)	(1,636)	(6,654)	9,182	9,379	8,689	8,888	36,138
CET-PD-WM-TP-822401	Enhanced Overhead Inspections and Remediations	SCE-04	3,943	4,027	3,731	3,816	15,517	(613)	(626)	(580)	(593)	(2,413)	3,330	3,401	3,151	3,223	13,104
CET-PD-GR-FP-MTW	Wildfire Covered Conductor Program	SCE-04	64,252	92,814	109,141	133,333	399,539	(26,358)	(38,075)	(44,773)	(54,697)	(163,902)	37,894	54,739	64,368	78,636	235,637
Total			272,043	285,215	285,643	315,978	1,158,879	(18,433)	(32,039)	(35,425)	(45,150)	(131,046)	250,192	249,656	246,600	267,108	1,013,556

Note: 2019 capital expenditures are not shown because SCE updated 2019 for recorded amounts. See SCE-12 V1 and SCE-18 V1 workpapers.

WBS Element	GRC Activity	Testimony	SCE February 2020 Position (RO 1.4)					Errata Adjustments					SCE Errata				
			2020	2021	2022	2023	Total	2020	2021	2022	2023	Total	2020	2021	2022	2023	Total
CIT-00-DM-DM-000249	Technology Infrastructure Maintenance and Replacement	SCE-06	14,461	30,170	10,891	20,723	76,245	(390)	-	-	-	(390)	14,071	30,170	10,891	20,723	75,854
CIT-00-OP-CS-000008	Technology Infrastructure Maintenance and Replacement	SCE-06	9,200	5,022	3,863	3,221	21,306	(88)	-	-	-	(88)	9,112	5,022	3,863	3,221	21,218
CIT-00-OP-CS-000009	Technology Infrastructure Maintenance and Replacement	SCE-06	6,500	3,316	2,584	2,133	14,533	(70)	-	-	-	(70)	6,430	3,316	2,584	2,133	14,463
CIT-00-OP-CS-000037	Technology Infrastructure Maintenance and Replacement	SCE-06	9,163	5,310	6,390	9,887	30,751	(110)	-	-	-	(110)	9,053	5,310	6,390	9,887	30,641
CIT-00-OP-DC-000007	Technology Infrastructure Maintenance and Replacement	SCE-06	8,000	7,088	8,663	7,000	30,750	(811)	-	-	-	(811)	7,189	7,088	8,663	7,000	29,939
CIT-00-OP-NS-000154	CRE Project Management	SCE-06	5,132	5,132	5,132	5,132	20,529	(1,499)	(2,414)	-	-	(3,912)	3,634	2,719	5,132	5,132	16,617
COS-00-RE-MA-NE0001	Facility Asset Management	SCE-06	21,562	23,421	23,890	24,367	93,240	(1,000)	(1,000)	(1,000)	(1,000)	(4,000)	20,562	22,421	22,890	23,367	89,240
COS-00-RE-RC-FLS001	Facility Asset Management	SCE-06	-	-	-	-	-	1,000	1,000	1,000	1,000	4,000	1,000	1,000	1,000	1,000	4,000
Total			74,019	79,458	61,412	72,464	287,353	(2,967)	(2,414)	-	-	(5,381)	71,051	77,045	61,412	72,464	281,972

Note: 2019 capital expenditures are not shown because SCE updated 2019 for recorded amounts. See SCE-12 V1 and SCE-18 V1 workpapers.

Concessions | Forecast Adjustments
O&M, OOR, and Capital Expenditures

Southern California Edison
2021 GRC
Appendix A - Concession O&M Changes

\$ in Thousands

GRC Activity	Testimony Exhibit	SCE February 2020 Position (RO 1.4)				Concession Adjustments				SCE Rebuttal			
		2021 Forecast				2021 Errata				2021 Adjusted Forecast			
		Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total
Hydro	SCE-05	13,790	10,947	-	24,737	(27)	(242)	-	(269)	13,764	10,705	-	24,468
Fuel Cell	SCE-05	-	488	-	488	-	(18)	-	(18)	-	470	-	470
Catalina - Diesel	SCE-05	-	1,145	-	1,145	-	(103)	-	(103)	-	1,042	-	1,042
Mountainview	SCE-05	-	-	3,367	3,367	-	-	(822)	(822)	-	-	2,545	2,545
Credit and Payment	SCE-03	9,161	-	-	9,161	(189)	-	-	(189)	8,972	-	-	8,972
Develop and Manage Policy and Initiatives	SCE-06	-	1,040	-	1,040	-	(92)	-	(92)	-	948	-	948
OU Support Services	SCE-06	22,880	5,876	-	28,756	(1,289)	(2,204)	-	(3,493)	21,591	3,672	-	25,263
Participant Credits and Charges - 926	SCE-06	-	-	10,554	10,554	-	-	(2,801)	(2,801)	-	-	7,753	7,753
Vendor Discount and Other Miscellaneous Payments	SCE-06	-	(11,212)	-	(11,212)	-	(1,877)	-	(1,877)	-	(13,090)	-	(13,090)
Total		45,831	8,283	13,921	68,035	(1,505)	(4,537)	(3,623)	(9,665)	44,326	3,746	10,298	58,370

Southern California Edison

2021 GRC

Appendix A - Concession O&M Changes By Exhibit (SCE-03)

\$ in Thousands

	Testimony Exhibit	SCE February 2020 Position (RO 1.4)				Concession Adjustments				SCE Rebuttal			
		2021 Forecast				2021 Errata				2021 Adjusted Forecast			
GRC Activity		Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total
Credit and Payment	SCE-03	9,161	-	-	9,161	(189)	-	-	(189)	8,972	-	-	8,972

Southern California Edison

2021 GRC

Appendix A - Concession O&M Changes By Exhibit (SCE-05)

\$ in Thousands

GRC Activity	Testimony Exhibit	SCE February 2020 Position (RO 1.4)				Concession Adjustments				SCE Rebuttal			
		2021 Forecast				2021 Errata				2021 Adjusted Forecast			
		Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total
Hydro	SCE-05	13,790	10,947	-	24,737	(27)	(242)	-	(269)	13,764	10,705	-	24,468
Fuel Cell	SCE-05	-	488	-	488	-	(18)	-	(18)	-	470	-	470
Catalina - Diesel	SCE-05	-	1,145	-	1,145	-	(103)	-	(103)	-	1,042	-	1,042
Mountainview	SCE-05	-	-	3,367	3,367	-	-	(822)	(822)	-	-	2,545	2,545
Total		13,790	12,579	3,367	29,737	(27)	(363)	(822)	(1,212)	13,764	12,216	2,545	28,525

Southern California Edison

2021 GRC

Appendix A - Concession O&M Changes By Exhibit (SCE-06)

\$ in Thousands

GRC Activity	Testimony Exhibit	SCE February 2020 Position (RO 1.4)				Concession Adjustments				SCE Rebuttal			
		2021 Forecast				2021 Errata				2021 Adjusted Forecast			
		Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total
Develop and Manage Policy and Initiatives	SCE-06	-	1,040	-	1,040	-	(92)	-	(92)	-	948	-	948
OU Support Services	SCE-06	22,880	5,876	-	28,756	(1,289)	(2,204)	-	(3,493)	21,591	3,672	-	25,263
Participant Credits and Charges - 926	SCE-06	-	-	10,554	10,554	-	-	(2,801)	(2,801)	-	-	7,753	7,753
Vendor Discount and Other Miscellaneous Payments	SCE-06	-	(11,212)	-	(11,212)	-	(1,877)	-	(1,877)	-	(13,090)	-	(13,090)
Total		22,880	(4,296)	10,554	29,137	(1,289)	(4,174)	(2,801)	(8,264)	21,591	(8,470)	7,753	20,874

Southern California Edison
2021 GRC
Appendix A - Concession OOR Changes

\$ in Thousands

GRC Activity	Testimony Exhibit	SCE February 2020 Position (RO 1.4)				Concession Adjustments				SCE Rebuttal			
		2021 Forecast				2021 Errata				2021 Adjusted Forecast			
		Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total	Labor	NonLabor	Other	Total
Community Choice Aggregation Service Fees	SCE-03	-	-	4,122	4,122	-	-	(169)	(169)	-	-	3,953	3,953
Pole Rentals	SCE-02	-	-	11,141	11,141	-	-	(96)	(96)	-	-	11,045	11,045

WBS Element	GRC Activity	Testimony	SCE February 2020 Position (RO 1.4)					Concession Adjustments					SCE Rebuttal				
			2020	2021	2022	2023	Total	2020	2021	2022	2023	Total	2020	2021	2022	2023	Total
CET-PD-CL-DC-MTW	Distribution Claim	SCE-02	40,385	41,670	42,875	44,108	169,037	1,772	1,829	1,882	1,936	7,419	42,157	43,498	44,757	46,044	176,456
CG0-00-PP-MV-000104	Mountainview	SCE-05	22,950	42,440	0	(0)	65,390	(18,000)	(36,000)	-	-	(54,000)	4,950	6,440	0	(0)	11,390
CET-PD-AF-CS-MTW	Distribution Added Facilities	SCE-02	5,946	6,136	6,313	6,495	24,890	(775)	(799)	(822)	(846)	(3,242)	5,172	5,336	5,491	5,649	21,648
CET-PD-AF-DA-MTW	Distribution Added Facilities	SCE-02	8,827	9,108	9,371	9,641	36,947	(1,150)	(1,186)	(1,221)	(1,256)	(4,812)	7,677	7,922	8,151	8,385	32,135
CET-PD-CR-RL-MTW	Distribution Relocations	SCE-02	54,999	56,748	58,390	60,069	230,206	(2,747)	(2,850)	(2,942)	(3,023)	(11,562)	52,252	53,898	55,448	57,046	218,643
CET-PD-CR-2B-MTW	Rule 20 B/C Conversions	SCE-02	17,617	18,178	18,704	19,242	73,740	(699)	(721)	(742)	(763)	(2,924)	16,919	17,457	17,962	18,478	70,816
CET-PD-CR-2C-MTW	Rule 20 B/C Conversions	SCE-02	12,019	12,401	12,760	13,127	50,308	388	400	412	423	1,623	12,407	12,801	13,172	13,551	51,930
CET-PD-CR-TB-TREAST	Rule 20 B/C Conversions	SCE-02	5,785	5,909	6,021	6,159	23,874	52	60	67	75	254	5,836	5,969	6,088	6,234	24,128
CET-PD-CR-TC-TREAST	Rule 20 B/C Conversions	SCE-02	2,690	2,748	2,800	2,864	11,103	(1,080)	(1,101)	(1,121)	(1,145)	(4,447)	1,610	1,646	1,679	1,720	6,656
CIT-00-OP-NS-000003	Rule 20 B/C Conversions	SCE-02	308	307	307	307	1,229	3	3	3	4	13	311	310	310	311	1,242
CIT-00-OP-NS-000004	Rule 20 B/C Conversions	SCE-02	133	133	133	133	532	(53)	(53)	(53)	(53)	(213)	80	80	80	80	319
CET-PD-2A-2A-MTW	Rule 20A Conversions	SCE-02	17,015	17,556	18,064	18,584	71,220	-	(8,542)	(8,799)	(9,063)	(26,404)	17,015	9,014	9,265	9,521	44,815
CET-PD-CR-TR-TREAST	Transmission Relocations	SCE-02	15,098	15,422	15,716	16,076	62,312	(2,887)	(2,957)	(3,009)	(3,078)	(11,931)	12,211	12,465	12,707	12,998	50,381
CET-PD-NS-CL-MTW	Commercial New Service Connections	SCE-02	97,968	101,244	104,300	107,941	411,452	-	(12,710)	(13,206)	(14,227)	(40,144)	97,968	88,533	91,094	93,714	371,309
Total			301,740	329,999	295,754	304,746	1,232,239	(25,176)	(64,629)	(29,552)	(31,016)	(150,372)	276,564	265,371	266,203	273,730	1,081,868

Note: 2019 capital expenditures are not shown because SCE updated 2019 for recorded amounts. See SCE-12 V1 and SCE-18 V1 workpapers.

Southern California Edison

2021 GRC

Appendix A - Concession Capital Changes By Exhibit (SCE-02)

\$ in Thousands

WBS Element	GRC Activity	Testimony	SCE February 2020 Position (RO 1.4)					Concession Adjustments					SCE Rebuttal				
			2020	2021	2022	2023	Total	2020	2021	2022	2023	Total	2020	2021	2022	2023	Total
CET-PD-CL-DC-MTW	Distribution Claim	SCE-02	40,385	41,670	42,875	44,108	169,037	1,772	1,829	1,882	1,936	7,419	42,157	43,498	44,757	46,044	176,456
CET-PD-AF-CS-MTW	Distribution Added Facilities	SCE-02	5,946	6,136	6,313	6,495	24,890	(775)	(799)	(822)	(846)	(3,242)	5,172	5,336	5,491	5,649	21,648
CET-PD-AF-DA-MTW	Distribution Added Facilities	SCE-02	8,827	9,108	9,371	9,641	36,947	(1,150)	(1,186)	(1,221)	(1,256)	(4,812)	7,677	7,922	8,151	8,385	32,135
CET-PD-CR-RL-MTW	Distribution Relocations	SCE-02	54,999	56,748	58,390	60,069	230,206	(2,747)	(2,850)	(2,942)	(3,023)	(11,562)	52,252	53,898	55,448	57,046	218,643
CET-PD-CR-2B-MTW	Rule 20 B/C Conversions	SCE-02	17,617	18,178	18,704	19,242	73,740	(699)	(721)	(742)	(763)	(2,924)	16,919	17,457	17,962	18,478	70,816
CET-PD-CR-2C-MTW	Rule 20 B/C Conversions	SCE-02	12,019	12,401	12,760	13,127	50,308	388	400	412	423	1,623	12,407	12,801	13,172	13,551	51,930
CET-PD-CR-TB-TREAST	Rule 20 B/C Conversions	SCE-02	5,785	5,909	6,021	6,159	23,874	52	60	67	75	254	5,836	5,969	6,088	6,234	24,128
CET-PD-CR-TC-TREAST	Rule 20 B/C Conversions	SCE-02	2,690	2,748	2,800	2,864	11,103	(1,080)	(1,101)	(1,121)	(1,145)	(4,447)	1,610	1,646	1,679	1,720	6,656
CIT-00-OP-NS-000003	Rule 20 B/C Conversions	SCE-02	308	307	307	307	1,229	3	3	3	4	13	311	310	310	311	1,242
CIT-00-OP-NS-000004	Rule 20 B/C Conversions	SCE-02	133	133	133	133	532	(53)	(53)	(53)	(53)	(213)	80	80	80	80	319
CET-PD-2A-2A-MTW	Rule 20A Conversions	SCE-02	17,015	17,556	18,064	18,584	71,220	-	(8,542)	(8,799)	(9,063)	(26,404)	17,015	9,014	9,265	9,521	44,815
CET-PD-CR-TR-TREAST	Transmission Relocations	SCE-02	15,098	15,422	15,716	16,076	62,312	(2,887)	(2,957)	(3,009)	(3,078)	(11,931)	12,211	12,465	12,707	12,998	50,381
CET-PD-NS-CL-MTW	Commercial New Service Connections	SCE-02	97,968	101,244	104,300	107,941	411,452	-	(12,710)	(13,206)	(14,227)	(40,144)	97,968	88,533	91,094	93,714	371,309
Total			278,790	287,559	295,754	304,746	1,166,849	(7,176)	(28,629)	(29,552)	(31,016)	(96,372)	271,614	258,930	266,203	273,730	1,070,477

Note: 2019 capital expenditures are not shown because SCE updated 2019 for recorded amounts. See SCE-12 V1 and SCE-18 V1 workpapers.

Southern California Edison
2021 GRC
Appendix A - Concession Capital Changes By Exhibit (SCE-05)
\$ in Thousands

			SCE February 2020 Position (RO 1.4)					Concession Adjustments					SCE Rebuttal				
WBS Element	GRC Activity	Testimony	2020	2021	2022	2023	Total	2020	2021	2022	2023	Total	2020	2021	2022	2023	Total
CG0-00-PP-MV-000104	Mountainview	SCE-05	22,950	42,440	0	(0)	65,390	(18,000)	(36,000)	-	-	(54,000)	4,950	6,440	0	(0)	11,390

Note: 2019 capital expenditures are not shown because SCE updated 2019 for recorded amounts. See SCE-12 V1 and SCE-18 V1 workpapers.

EXHIBIT SCE-18, VOLUME 01, CHAPTER I
REVENUE REQUIREMENT REQUEST CHANGES
RESULTS OF OPERATIONS AT PRESENT AND PROPOSED RATES

RESULTS OF OPERATIONS AT
CURRENTLY
AUTHORIZED BASE REVENUE REQUIREMENT (ABRR)

Southern California Edison
2021 General Rate Case
SoE | At Present Rate Revenues
\$ in Thousands

Line	Item	Recorded 2018	2019	Estimated 2020	2021	FERC 2021	CPUC 2021	CPUC 2022	CPUC 2023
1.	Total Operating Revenues	6,290,164	6,540,698	7,509,657	7,499,522	1,054,089	6,445,433	6,445,433	6,445,433
2.	Operating Expenses:								
3.	Production								
4.	Steam	9,220	7,356	7,351	8,325	—	8,325	8,325	8,325
5.	Nuclear	77,639	78,192	76,114	75,123	—	75,123	75,123	75,123
6.	Hydro	47,333	42,064	44,302	45,189	—	45,189	45,189	45,189
7.	Other	78,962	92,628	80,531	83,320	—	83,320	83,320	83,320
8.	Total Production O&M	213,154	220,240	208,297	211,958	—	211,958	211,958	211,958
9.	Transmission	194,691	220,960	188,128	184,954	80,393	104,561	104,561	104,561
10.	Distribution	589,094	884,532	882,841	722,307	9,099	713,208	713,208	713,208
11.	Customer Accounts	131,852	136,123	139,132	141,353	—	141,353	141,353	141,353
12.	Uncollectibles	10,968	15,680	15,845	14,353	2,287	12,066	15,221	16,180
13.	Customer Service & Information	49,177	58,699	68,122	83,712	—	83,712	83,712	83,712
14.	Administrative & General	896,291	1,160,760	1,324,922	1,339,697	94,201	1,245,496	1,241,833	1,238,583
15.	Franchise Requirements	53,631	59,808	68,668	69,592	11,089	58,503	73,804	78,453
16.	Revenue Credits	(213,091)	(214,741)	(218,101)	(218,351)	(54,511)	(163,840)	(164,726)	(165,585)
17.	Total O&M	1,925,767	2,542,061	2,677,854	2,549,575	142,558	2,407,017	2,420,925	2,422,423
18.	Escalation	—	58,482	112,853	162,584	10,506	152,078	202,648	254,705
19.	Depreciation	1,786,000	1,883,418	2,018,327	2,403,128	301,783	2,101,345	2,242,604	2,411,683
20.	Taxes Other Than On Income	385,579	402,287	451,096	509,558	89,264	420,294	453,453	495,934
21.	Taxes Based On Income	68,561	(93,792)	117,839	10,411	131,977	(121,566)	(52,002)	(111,979)
22.	Total Taxes	454,139	308,495	568,934	519,968	221,240	298,728	401,451	383,955
23.	Total Operating Expenses	4,165,906	4,792,456	5,377,969	5,635,255	676,087	4,959,167	5,267,628	5,472,766
24.	Net Operating Revenue	2,124,258	1,748,242	2,131,688	1,864,267	378,002	1,486,266	1,177,805	972,667
25.	Rate Base	27,903,908	31,121,279	33,406,418	35,645,998	6,851,329	28,794,669	30,834,418	33,100,972
26.	Rate of Return	7.61%	5.62%	6.38%	5.23%	5.52%	5.16%	3.82%	2.94%

AUTHORIZED BASE REVENUE REQUIREMENT
(ABRR)

Southern California Edison
2021 General Rate Case
Estimated Authorized Base Revenue Requirement
\$ in Thousands

Estimated Authorized Base Revenue Requirement		Authority
Line	Item	\$
1.	2018 Authorized Base Revenue Requirement	
2.	Distribution	4,414,199
3.	Generation	644,723
4.	Peaker Generation	56,938
5.	2018 Authorized Base Revenue Requirement	5,115,860
6.	2019 Post Test Year Ratemaking Changes	
7.	Distribution	314,237
8.	Generation	21,167
9.	Peaker Generation	(299)
10.	Aliso Canyon Energy Storage UOG Revenue Requirement	12,721
11.	2019 Post Test Year Ratemaking Changes	347,826
12.	2019 Authorized Base Revenue Requirement	5,463,686
13.	2020 Post Test Year Ratemaking Changes	
14.	Distribution	383,157
15.	Generation	32,822
16.	Peaker Generation	(4,340)
17.	Forecast GSRP revenue requirement (2018 - 2020)	229,072
18.	Forecast WEMA revenue requirement	252,601
19.	Forecast CEMA revenue requirement	88,435
20.	2020 Post Test Year Ratemaking Changes	981,747
21.	2020 Authorized Base Revenue Requirement	6,445,433
22.	Estimated 2021, 2022, 2023 Authorized Base Revenue Requirement	6,445,433

D.19-05-020, Advice Letter 4012-E
D.19-05-020, Advice Letter 4012-E
D.19-05-020, Advice Letter 4012-E
D.19-05-020, Advice Letter 4012-E
D.19-05-020, Advice Letter 4012-E
D.19-05-020, Advice Letter 4012-E
D.18-06-009, Advice Letter 3895-E
D.19-05-020 (Advice Letter to be submitted by 12/1/19)
D.19-05-020 (Advice Letter to be submitted by 12/1/19)
D.19-05-020 (Advice Letter to be submitted by 12/1/19)
A.18-09-002 Table III-2
A.19-07-020
A.19-07-021

Southern California Edison
2021 General Rate Case
Summary of Total Operating Revenues
\$ in Thousands

Summary of Total Operating Revenues (Excluding Amounts Requested in this Filing)							
Line	Description	2018	2019	2020	2021	2022	2023
1.	ABRR	5,115,860	5,463,686	6,445,433	6,445,433	6,445,433	6,445,433
2.	FERC	1,174,304	1,077,012	1,064,224	1,054,089	1,043,955	1,043,333
3.	Total	6,290,164	6,540,698	7,509,657	7,499,522	7,489,388	7,488,766

TOTAL COMPANY
SUMMARY OF EARNINGS WITHOUT ADJUSTMENTS AT ABRR
2018 THROUGH 2023

Southern California Edison
2021 General Rate Case
Results of Operations | At Present Rate Revenues
\$ in Thousands

Net-To-Gross Multiplier		Recorded	Forecast	Forecast	Forecast	Forecast	Forecast
Line	Description	2018	2019	2020	2021	2022	2023
1.	Revenues	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000
2.	Uncollectibles Rate	0.002110	0.002110	0.002110	0.001910	0.001910	0.001910
3.	Uncollectibles Amount Applied	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000
4.	Uncollectibles (Effective)	0.002110	0.002110	0.002110	0.001910	0.001910	0.001910
5.	Multiplier	0.997890	0.997890	0.997890	0.998090	0.998090	0.998090
6.	Franchise Fees Rate	0.009144	0.009144	0.009144	0.009261	0.009261	0.009261
7.	Franchise Fees Amount Applied	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000
8.	Franchise Fees (Effective)	0.009144	0.009144	0.009144	0.009261	0.009261	0.009261
9.	Multiplier	0.988746	0.988746	0.988746	0.988829	0.988829	0.988829
10.	Other State Income Tax Rate	—	—	—	—	—	—
11.	Other State Income Tax Amount Applied	0.988746	0.988746	0.988746	0.988829	0.988829	0.988829
12.	Other State Income Tax (Effective)	—	—	—	—	—	—
13.	Multiplier	0.988746	0.988746	0.988746	0.988829	0.988829	0.988829
14.	State Income Tax Rate	0.088400	0.088400	0.088400	0.088400	0.088400	0.088400
15.	State Income Tax Amount Applied	0.988746	0.988746	0.988746	0.988829	0.988829	0.988829
16.	State Income Tax (Effective)	0.087405	0.087405	0.087405	0.087412	0.087412	0.087412
17.	Multiplier	0.901341	0.901341	0.901341	0.901417	0.901417	0.901417
18.	Federal Income Tax	0.210000	0.210000	0.210000	0.210000	0.210000	0.210000
19.	Federal Income Tax Amount Applied	0.988746	0.988746	0.988746	0.988829	0.988829	0.988829
20.	Federal Income Tax (Effective)	0.207637	0.207637	0.207637	0.207654	0.207654	0.207654
21.	Multiplier	0.693704	0.693704	0.693704	0.693762	0.693762	0.693762
22.	Uncollectible & Franchise Fees Multiplier	1.011382	1.011382	1.011382	1.011297	1.011297	1.011297
23.	Net-To-Gross Multiplier	1.441537	1.441537	1.441537	1.441416	1.441416	1.441416

Rate of Return		Recorded	Forecast	Forecast	Forecast	Forecast	Forecast
Line	Description	2018	2019	2020	2021	2022	2023
24.	Cost Factor						
25.	Long-Term Debt	4.98%	4.98%	4.98%	4.98%	4.98%	4.98%
26.	Preferred Equity	5.82%	5.82%	5.82%	5.82%	5.82%	5.82%
27.	Common Equity	10.30%	10.30%	10.30%	10.30%	10.30%	10.30%
28.	Capitalization Ratios						
29.	Long-Term Debt	43.00%	43.00%	43.00%	43.00%	43.00%	43.00%
30.	Preferred Equity	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
31.	Common Equity	48.00%	48.00%	48.00%	48.00%	48.00%	48.00%
32.	Weighted Cost						
33.	Long-Term Debt	2.14%	2.14%	2.14%	2.14%	2.14%	2.14%
34.	Preferred Equity	0.52%	0.52%	0.52%	0.52%	0.52%	0.52%
35.	Common Equity	4.94%	4.94%	4.94%	4.94%	4.94%	4.94%
36.	Return on Rate Base	7.61%	7.61%	7.61%	7.61%	7.61%	7.61%

Southern California Edison
2021 General Rate Case
Results of Operations | At Present Rate Revenues
\$ in Thousands

Taxes Other than Income	Recorded	Forecast	Forecast	Forecast	Forecast	Forecast
Line Description	2018	2019	2020	2021	2022	2023
37. Ad Valorem Taxes						
38. Ad Valorem Taxes	320,529	326,409	374,240	437,957	480,278	528,137
39. Total Ad Valorem Taxes	320,529	326,409	374,240	437,957	480,278	528,137
40. Payroll Taxes						
41. Federal Insurance Contribution Act (FICA)	58,135	68,514	69,506	64,596	67,029	69,366
42. Federal Unemployment Tax Act (FUTA)	302	346	340	305	305	305
43. State Unemployment Tax Act (SUTA)	3,171	3,621	3,559	3,195	3,196	3,197
44. Total Payroll Taxes	61,608	72,481	73,405	68,096	70,530	72,868
45. Miscellaneous Taxes						
46. Federal - All Other	3,891	3,846	3,900	3,954	4,082	4,213
47. Total Miscellaneous Taxes	3,891	3,846	3,900	3,954	4,082	4,213
48. ITC Amortization on CTC Property	(449)	(449)	(449)	(449)	(449)	(449)
49. ARAM Expense on CTC Property	-	-	-	-	-	-
50. Total Taxes Other Than Income	385,579	402,287	451,096	509,558	554,441	604,769

Taxes State Income Tax Adjustments	Recorded	Forecast	Forecast	Forecast	Forecast	Forecast
Line Description	2018	2019	2020	2021	2022	2023
51. State Income Tax Adjustments						
52. Tax Depreciation	1,574,988	1,566,647	1,694,962	1,850,624	1,989,375	2,094,455
53. Interest On Long-Term Debt	596,444	665,448	714,484	766,238	831,007	885,298
54. Interest On Accumulated Deferred ITC	-	-	-	-	-	-
55. Uniform Capitalization	121,365	127,888	97,692	174,454	156,754	172,771
56. Capitalized Software	54,029	99,233	98,576	137,704	122,268	124,028
57. Ad Valorem Lien Date Adjustment	2,886	1,243	37,306	14,124	19,848	18,522
58. Percentage Repair Allowance	-	-	-	-	-	-
59. Removal Costs	712,093	539,166	450,257	583,460	686,537	709,911
60. Amortization of Land Rights	-	-	-	-	-	-
61. Wildfire Reserve	-	-	-	-	-	-
62. CIAC Revenues	(164,826)	(130,517)	(204,283)	(216,840)	(190,487)	(180,876)
63. Non Deductible Meals	(2,911)	(2,975)	(3,069)	(3,022)	(3,122)	(3,181)
64. Accrued Vacation Pay	(647)	(667)	(691)	(713)	(735)	(757)
65. ESOP Dividends	-	-	-	-	-	-
66. MHP BTM Reg Asset	10,707	-	-	-	-	-
67. Repair Deduction	942,642	982,344	878,684	893,177	976,295	1,010,417
68. Total State Income Tax Adjustments	3,846,770	3,847,810	3,763,918	4,199,207	4,587,741	4,830,588

Taxes Federal Income Tax Adjustments	Recorded	Forecast	Forecast	Forecast	Forecast	Forecast
Line Description	2018	2019	2020	2021	2022	2023
69. Federal Income Tax Adjustments						
70. Tax Depreciation	1,417,082	1,343,451	1,497,384	1,677,520	1,872,654	2,035,556
71. Interest On Long-Term Debt	597,534	666,431	715,365	767,018	831,692	885,895
72. Uniform Capitalization	121,365	127,888	97,692	174,454	156,754	172,771
73. Capitalized Software	54,029	99,233	98,576	137,704	-	-
74. Ad Valorem Lien Date Adjustment	2,886	1,243	37,306	14,124	19,848	18,522
75. Repair Deduction	942,642	982,344	878,684	893,177	976,295	1,010,417
76. Removal Costs	712,093	539,166	450,257	583,460	686,537	709,911
77. Amortization of Land Rights	-	-	-	-	-	-
78. Wildfire Reserve	-	-	-	-	-	-
79. CIAC Revenues	(164,826)	(130,517)	(204,283)	(216,840)	(190,487)	(180,876)
80. Non Deductible Meals	(7,020)	(7,175)	(7,401)	(7,286)	(7,529)	(7,671)
81. Accrued Vacation Pay	(647)	(667)	(691)	(713)	(735)	(757)
82. Leased Vehicles	-	-	-	-	-	-
83. ESOP Dividends	-	-	-	-	-	-
84. Preferred Dividend Deduction	-	-	-	-	-	-
85. Section 199 Manufacturer's Deduction	-	-	-	-	-	-
86. MHP BTM Reg Asset	10,707	-	-	-	-	-
87. Total FIT Adjustments	3,685,846	3,621,398	3,562,889	4,022,619	4,345,030	4,643,769

Southern California Edison
2021 General Rate Case
Results of Operations | At Present Rate Revenues
\$ in Thousands

Taxes State Income Taxes		Recorded	Forecast	Forecast	Forecast	Forecast	Forecast
Line	Description	2018	2019	2020	2021	2022	2023
88.	Operating Revenues	6,290,164	6,540,698	7,509,657	7,499,522	7,489,388	7,488,766
89.	Operating Expenses	1,925,767	2,598,663	2,790,708	2,711,990	2,760,986	2,811,917
90.	Taxes Other Than Income	385,579	402,287	451,096	509,558	554,441	604,769
91.	Total Expenses	2,311,345	3,000,950	3,241,804	3,221,548	3,315,427	3,416,686
92.	State Income Tax Adjustments	3,846,770	3,847,810	3,763,918	4,199,207	4,587,741	4,830,588
93.	State Taxable Income	132,048	(308,063)	503,935	78,767	(413,779)	(758,508)
94.	California Corporate Franchise Tax Rate	8.8400%	8.8400%	8.8400%	8.8400%	8.8400%	8.8400%
95.	California Corporate Franchise Tax Expense	11,673	(27,233)	44,548	6,963	(36,578)	(67,052)
96.	California Alternate Minimum Tax	-	-	-	-	-	-
97.	Arizona Income Tax Rate	-	-	-	-	-	-
98.	New Mexico Income Tax Rate	-	-	-	-	-	-
99.	D.C. Income Tax Rate	-	-	-	-	-	-
100.	Arizona Income Tax Expense	-	-	-	-	-	-
101.	New Mexico Income Tax Expense	-	-	-	-	-	-
102.	D.C. Income Tax Expense	-	-	-	-	-	-
103.	Total Other State Income Taxes	-	-	-	-	-	-
104.	Total State Income Taxes	11,673	(27,233)	44,548	6,963	(36,578)	(67,052)

Taxes Federal Income Taxes		Recorded	Forecast	Forecast	Forecast	Forecast	Forecast
Line	Description	2018	2019	2020	2021	2022	2023
105.	Operating Revenues	6,290,164	6,540,698	7,509,657	7,499,522	7,489,388	7,488,766
106.	Operating Expenses	1,925,767	2,598,663	2,790,708	2,711,990	2,760,986	2,811,917
107.	Taxes Other Than Income	385,579	402,287	451,096	509,558	554,441	604,769
108.	Total State Income Taxes	11,673	(27,233)	44,548	6,963	(36,578)	(67,052)
109.	Less: Current Year's CCFT	11,673	(27,233)	44,548	6,963	(36,578)	(67,052)
110.	Plus: Prior Year's CCFT	70,505	11,673	(27,233)	44,548	6,963	(36,578)
111.	Total Expenses	2,381,850	3,012,623	3,214,571	3,266,096	3,322,390	3,380,108
112.	Federal Income Tax Adjustments	3,685,846	3,621,398	3,562,889	4,022,619	4,345,030	4,643,769
113.	Federal Taxable Income	222,468	(93,323)	732,197	210,807	(178,032)	(535,111)
114.	Federal Income Tax Rate	21.0000%	21.0000%	21.0000%	21.0000%	21.0000%	21.0000%
115.	Federal Income Tax Expense	46,718	(19,598)	153,761	44,270	(37,387)	(112,373)
116.	Federal Alternative Income Tax	-	-	-	-	-	-
117.	Deferred Tax Expense (Plant)	30,749	(26,979)	(40,908)	6,432	33,808	51,259
118.	Deferred Tax Expense (AFUDC Debt)	-	-	-	-	-	-
119.	Deferred Tax Expense (Capitalized Interest)	-	-	-	-	-	-
120.	Contributions in Aid of Construction (CIAC)	(12,306)	(15,177)	(29,190)	(32,588)	(24,715)	(20,575)
121.	ITCC Deferred Tax Expense/(Benefit)	(4,256)	(1,033)	(6,852)	(5,244)	(3,471)	(3,039)
122.	Investment Tax Credit Amortization	(5,948)	(5,698)	(5,439)	(5,556)	(4,982)	(4,788)
123.	Wildfire Reserve Deferred Tax Expense/(Benefit)	-	-	-	-	-	-
124.	Accrued Vacation	1,931	1,925	1,919	(200)	(206)	(212)
125.	Total Federal Income Taxes	56,888	(66,559)	73,291	7,114	(36,953)	(89,729)
126.	Total Income Taxes (State + Federal)	68,561	(93,792)	117,839	14,077	(73,531)	(156,781)

Depreciation		Recorded	Forecast	Forecast	Forecast	Forecast	Forecast
Line	Description	2018	2019	2020	2021	2022	2023
127.	Depreciation Expense	1,786,000	1,883,418	2,018,327	2,403,128	2,577,894	2,763,282

Southern California Edison
2021 General Rate Case
Results of Operations | At Present Rate Revenues
\$ in Thousands

Rate Base (Weighted Average)		Recorded	Forecast	Forecast	Forecast	Forecast	Forecast
Line	Description	2018	2019	2020	2021	2022	2023
128.	Fixed Capital						
129.	Plant in Service	46,913,122	49,814,365	52,815,572	56,090,171	60,160,282	63,876,542
130.	Depreciation Reserve	(14,334,717)	(14,026,677)	(14,781,305)	(15,787,943)	(16,869,124)	(18,053,034)
131.	Total Net Plant	32,578,405	35,787,689	38,034,267	40,302,229	43,291,158	45,823,509
132.	Cash Working Capital						
133.	Customer Advance for Construction	(68,707)	(62,365)	(62,365)	(62,365)	(62,365)	(62,365)
134.	Customer Deposits	0	0	0	0	0	0
135.	Materials and Supplies	202,074	205,866	216,026	237,624	257,831	270,978
136.	Mountainview Emission Credits	5,388	5,018	4,675	4,354	4,056	3,778
137.	Working Cash	544,396	623,519	716,716	807,129	823,130	839,873
138.	Unfunded Pension Reserve	(55,942)	(53,840)	(51,948)	(52,826)	(56,336)	(59,797)
139.	Total Cash Working Capital	627,208	718,198	823,105	933,917	966,316	992,468
140.	Accumulated Deferred Taxes						
141.	Accumulated Deferred Taxes (Plant)	(5,347,852)	(5,435,649)	(5,511,558)	(5,492,528)	(5,511,653)	(5,553,583)
142.	Accumulated Deferred Taxes (Uniform Capitalization)	0	0	0	0	0	0
143.	Accumulated Deferred Taxes (CIAC)	32,455	39,278	50,763	65,952	83,700	98,132
144.	Accrued Vacation	13,692	11,764	9,842	8,982	9,185	9,394
145.	Total Accumulated Deferred Taxes	(5,301,705)	(5,384,607)	(5,450,954)	(5,417,594)	(5,418,768)	(5,446,057)
146.	Total Rate Base	27,903,908	31,121,279	33,406,418	35,818,551	38,838,707	41,369,919

Summary of Earnings		Recorded	Forecast	Forecast	Forecast	Forecast	Forecast
Line	Description	2018	2019	2020	2021	2022	2023
147.	Operating Revenues	6,290,164	6,540,698	7,509,657	7,499,522	7,489,388	7,488,766
148.	Operating Expenses						
149.	Escalation	—	58,482	112,853	162,584	216,650	272,300
150.	Generation - Steam	9,220	7,356	7,351	8,325	8,325	8,325
151.	Generation - Nuclear	77,639	78,192	76,114	75,123	75,123	75,123
152.	Generation - Hydro	47,333	42,064	44,302	45,189	45,189	45,189
153.	Generation - Other	78,962	92,628	80,531	83,320	83,320	83,320
154.	Transmission	194,691	220,960	188,128	184,954	184,954	184,954
155.	Distribution	589,094	884,532	882,841	722,307	722,307	722,307
156.	Customer Accounts	131,852	136,123	139,132	141,353	141,353	141,353
157.	Uncollectibles	10,968	13,801	15,845	14,324	14,305	14,304
158.	Customer Service and Information	49,177	58,699	68,122	83,712	83,712	83,712
159.	Total O&M Expenses	1,188,936	1,592,836	1,615,219	1,521,191	1,575,238	1,630,887
160.	Administrative & General	896,291	1,160,760	1,324,922	1,339,697	1,335,921	1,332,353
161.	Franchise Requirements	53,631	59,808	68,668	69,453	69,359	69,353
162.	Revenue Credits	213,091	214,741	218,101	218,351	219,532	220,677
163.	Total Operating Expenses	1,925,767	2,598,663	2,790,708	2,711,990	2,760,986	2,811,917
164.	Depreciation	1,786,000	1,883,418	2,018,327	2,403,128	2,577,894	2,763,282
165.	Taxes Other Than On Income	385,579	402,287	451,096	509,558	554,441	604,769
166.	Taxes Based On Income	68,561	(93,792)	117,839	14,077	(73,531)	(156,781)
167.	Total Taxes	454,139	308,495	568,934	523,634	480,910	447,988
168.	Total Operating Expenses	4,165,906	4,790,576	5,377,969	5,638,753	5,819,790	6,023,186
169.	Net Operating Revenue	2,124,258	1,750,122	2,131,688	1,860,769	1,669,598	1,465,580
170.	Rate Base (Weighted Average)	27,903,908	31,121,279	33,406,418	35,818,551	38,838,707	41,369,919
171.	Rate of Return	7.61%	5.62%	6.38%	5.19%	4.30%	3.54%

RESULTS OF OPERATIONS
CPUC
2021 - 2023

Southern California Edison
2021 General Rate Case
CPUC Results of Operations at Proposed Rates

\$ in Thousands

Line	Item	GRC CPUC		
		2021	2022	2023
1.	Total Operating Revenues	7,548,568	7,982,479	8,482,547
2.	Operating Expenses:			
3.	Production			
4.	Steam	8,325	8,325	8,325
5.	Nuclear	75,123	75,123	75,123
6.	Hydro	45,189	45,189	45,189
7.	Other	83,320	83,320	83,320
8.	Total Production O&M	211,958	211,958	211,958
9.	Transmission	104,561	104,561	104,561
10.	Distribution	713,208	713,208	713,208
11.	Customer Accounts	141,353	141,353	141,353
12.	Uncollectibles	14,418	15,247	16,202
13.	Customer Service & Information	83,712	83,712	83,712
14.	Administrative & General	1,245,496	1,241,833	1,238,583
15.	Franchise Requirements	69,907	73,926	78,557
16.	Revenue Credits	(163,840)	(164,726)	(165,585)
17.	Total O&M	2,420,773	2,421,071	2,422,548
18.	Escalation	152,078	202,648	254,705
19.	Depreciation	2,133,019	2,274,278	2,443,357
20.	Taxes Other Than On Income			
21.	Property Taxes	353,592	384,364	424,545
22.	Payroll Taxes & Misc	66,702	69,089	71,389
23.	Taxes Based On Income	231,361	284,777	347,284
24.	Total Taxes	651,655	738,230	843,218
25.	Total Operating Expenses	5,357,524	5,636,226	5,963,828
26.	Net Operating Revenue	2,191,044	2,346,253	2,518,719
27.	Rate Base	28,794,669	30,834,418	33,100,972
28.	Rate Of Return	7.61%	7.61%	7.61%

TOTAL COMPANY
SUMMARY OF EARNINGS AT
PROPOSED RATES WITHOUT
ADJUSTMENTS
2021 THROUGH 2023

Southern California Edison
2021 General Rate Case
Results of Operations
\$ in Thousands

1 Net-To-Gross Multiplier		Recorded	Forecast	Forecast	Forecast	Forecast	Forecast
Line	Description	2018	2019	2020	2021	2022	2023
1.	Revenues	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000
2.	Uncollectibles Rate	0.002110	0.002110	0.002110	0.001910	0.001910	0.001910
3.	Uncollectibles Amount Applied	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000
4.	Uncollectibles (Effective)	0.002110	0.002110	0.002110	0.001910	0.001910	0.001910
5.	Multiplier	0.997890	0.997890	0.997890	0.998090	0.998090	0.998090
6.	Franchise Fees Rate	0.009144	0.009144	0.009144	0.009261	0.009261	0.009261
7.	Franchise Fees Amount Applied	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000
8.	Franchise Fees (Effective)	0.009144	0.009144	0.009144	0.009261	0.009261	0.009261
9.	Multiplier	0.988746	0.988746	0.988746	0.988829	0.988829	0.988829
10.	Other State Income Tax Rate	—	—	—	—	—	—
11.	Other State Income Tax Amount Applied	0.988746	0.988746	0.988746	0.988829	0.988829	0.988829
12.	Other State Income Tax (Effective)	—	—	—	—	—	—
13.	Multiplier	0.988746	0.988746	0.988746	0.988829	0.988829	0.988829
14.	State Income Tax Rate	0.088400	0.088400	0.088400	0.088400	0.088400	0.088400
15.	State Income Tax Amount Applied	0.988746	0.988746	0.988746	0.988829	0.988829	0.988829
16.	State Income Tax (Effective)	0.087405	0.087405	0.087405	0.087412	0.087412	0.087412
17.	Multiplier	0.901341	0.901341	0.901341	0.901417	0.901417	0.901417
18.	Federal Income Tax	0.210000	0.210000	0.210000	0.210000	0.210000	0.210000
19.	Federal Income Tax Amount Applied	0.988746	0.988746	0.988746	0.988829	0.988829	0.988829
20.	Federal Income Tax (Effective)	0.207637	0.207637	0.207637	0.207654	0.207654	0.207654
21.	Multiplier	0.693704	0.693704	0.693704	0.693762	0.693762	0.693762
22.	Uncollectible & Franchise Fees Multiplier	1.011382	1.011382	1.011382	1.011297	1.011297	1.011297
23.	Net-To-Gross Multiplier	1.441537	1.441537	1.441537	1.441416	1.441416	1.441416

2 Rate of Return		Recorded	Forecast	Forecast	Forecast	Forecast	Forecast
Line	Description	2018	2019	2020	2021	2022	2023
24.	Cost Factor						
25.	Long-Term Debt	4.98%	4.98%	4.98%	4.98%	4.98%	4.98%
26.	Preferred Equity	5.82%	5.82%	5.82%	5.82%	5.82%	5.82%
27.	Common Equity	10.30%	10.30%	10.30%	10.30%	10.30%	10.30%
28.	Capitalization Ratios						
29.	Long-Term Debt	43.00%	43.00%	43.00%	43.00%	43.00%	43.00%
30.	Preferred Equity	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
31.	Common Equity	48.00%	48.00%	48.00%	48.00%	48.00%	48.00%
32.	Weighted Cost						
33.	Long-Term Debt	2.14%	2.14%	2.14%	2.14%	2.14%	2.14%
34.	Preferred Equity	0.52%	0.52%	0.52%	0.52%	0.52%	0.52%
35.	Common Equity	4.94%	4.94%	4.94%	4.94%	4.94%	4.94%
36.	Return on Rate Base	7.61%	7.61%	7.61%	7.61%	7.61%	7.61%

Southern California Edison
2021 General Rate Case
Results of Operations
\$ in Thousands

3	Taxes Other than Income	Recorded	Forecast	Forecast	Forecast	Forecast	Forecast
	Line Description	2018	2019	2020	2021	2022	2023
37.	Ad Valorem Taxes						
38.	Ad Valorem Taxes	320,529	326,409	374,240	437,957	480,278	528,137
39.	Total Ad Valorem Taxes	320,529	326,409	374,240	437,957	480,278	528,137
40.	Payroll Taxes						
41.	Federal Insurance Contribution Act (FICA)	58,135	68,514	69,506	64,596	67,029	69,366
42.	Federal Unemployment Tax Act (FUTA)	302	346	340	305	305	305
43.	State Unemployment Tax Act (SUTA)	3,171	3,621	3,559	3,195	3,196	3,197
44.	Total Payroll Taxes	61,608	72,481	73,405	68,096	70,530	72,868
45.	Miscellaneous Taxes						
46.	Federal - All Other	3,891	3,846	3,900	3,954	4,082	4,213
47.	Total Miscellaneous Taxes	3,891	3,846	3,900	3,954	4,082	4,213
48.	ITC Amortization on CTC Property	(449)	(449)	(449)	(449)	(449)	(449)
49.	ARAM Expense on CTC Property	-	-	-	-	-	-
50.	Total Taxes Other Than Income	385,579	402,287	451,096	509,558	554,441	604,769
4	Taxes State Income Tax Adjustments	Recorded	Forecast	Forecast	Forecast	Forecast	Forecast
	Line Description	2018	2019	2020	2021	2022	2023
51.	State Income Tax Adjustments						
52.	Tax Depreciation	1,574,988	1,566,647	1,694,962	1,850,624	1,989,375	2,094,455
53.	Interest On Long-Term Debt	596,444	665,448	714,484	766,238	831,007	885,298
54.	Interest On Accumulated Deferred ITC	-	-	-	-	-	-
55.	Uniform Capitalization	121,365	127,888	97,692	174,454	156,754	172,771
56.	Capitalized Software	54,029	99,233	98,576	137,704	122,268	124,028
57.	Ad Valorem Lien Date Adjustment	2,886	1,243	37,306	14,124	19,848	18,522
58.	Percentage Repair Allowance	-	-	-	-	-	-
59.	Removal Costs	712,093	539,166	450,257	583,460	686,537	709,911
60.	Amortization of Land Rights	-	-	-	-	-	-
61.	Wildfire Reserve	-	-	-	-	-	-
62.	CIAC Revenues	(164,826)	(130,517)	(204,283)	(216,840)	(190,487)	(180,876)
63.	Non Deductible Meals	(2,911)	(2,975)	(3,069)	(3,022)	(3,122)	(3,181)
64.	Accrued Vacation Pay	(647)	(667)	(691)	(713)	(735)	(757)
65.	ESOP Dividends	-	-	-	-	-	-
66.	MHP BTM Reg Asset	10,707	-	-	-	-	-
67.	Repair Deduction	942,642	982,344	878,684	893,177	976,295	1,010,417
68.	Total State Income Tax Adjustments	3,846,770	3,847,810	3,763,918	4,199,207	4,587,741	4,830,588
5	Taxes Federal Income Tax Adjustments	Recorded	Forecast	Forecast	Forecast	Forecast	Forecast
	Line Description	2018	2019	2020	2021	2022	2023
69.	Federal Income Tax Adjustments						
70.	Tax Depreciation	1,417,082	1,343,451	1,497,384	1,677,520	1,872,654	2,035,556
71.	Interest On Long-Term Debt	597,534	666,431	715,365	767,018	831,692	885,895
72.	Uniform Capitalization	121,365	127,888	97,692	174,454	156,754	172,771
73.	Capitalized Software	54,029	99,233	98,576	137,704	-	-
74.	Ad Valorem Lien Date Adjustment	2,886	1,243	37,306	14,124	19,848	18,522
75.	Repair Deduction	942,642	982,344	878,684	893,177	976,295	1,010,417
76.	Removal Costs	712,093	539,166	450,257	583,460	686,537	709,911
77.	Amortization of Land Rights	-	-	-	-	-	-
78.	Wildfire Reserve	-	-	-	-	-	-
79.	CIAC Revenues	(164,826)	(130,517)	(204,283)	(216,840)	(190,487)	(180,876)
80.	Non Deductible Meals	(7,020)	(7,175)	(7,401)	(7,286)	(7,529)	(7,671)
81.	Accrued Vacation Pay	(647)	(667)	(691)	(713)	(735)	(757)
82.	Leased Vehicles	-	-	-	-	-	-
83.	ESOP Dividends	-	-	-	-	-	-
84.	Section 199 Manufacturer's Deduction	-	-	-	-	-	-
85.	MHP BTM Reg Asset	10,707	-	-	-	-	-
86.	Total Federal Income Tax Adjustments	3,685,846	3,621,398	3,562,889	4,022,619	4,345,030	4,643,769

Southern California Edison
2021 General Rate Case
Results of Operations
\$ in Thousands

6 Taxes State Income Taxes		Recorded	Forecast	Forecast	Forecast	Forecast	Forecast
Line	Description	2018	2019	2020	2021	2022	2023
87.	Operating Revenues	6,290,164	7,431,509	8,077,510	8,730,941	9,310,057	9,865,543
88.	Operating Expenses	1,925,767	2,608,688	2,797,098	2,725,746	2,781,325	2,838,468
89.	Taxes Other Than Income	385,579	402,287	451,096	509,558	554,441	604,769
90.	Total Expenses	2,311,345	3,010,975	3,248,194	3,235,304	3,335,765	3,443,237
91.	State Income Tax Adjustments	3,846,770	3,847,810	3,763,918	4,199,207	4,587,741	4,830,588
92.	State Taxable Income	132,048	572,723	1,065,398	1,296,430	1,386,551	1,591,718
93.	California Corporate Franchise Tax Rate	8.8400%	8.8400%	8.8400%	8.8400%	8.8400%	8.8400%
94.	California Corporate Franchise Tax Expense	11,673	50,629	94,181	114,604	122,571	140,708
95.	California Alternate Minimum Tax	-	-	-	-	-	-
96.	Arizona Income Tax Rate	-	-	-	-	-	-
97.	New Mexico Income Tax Rate	-	-	-	-	-	-
98.	D.C. Income Tax Rate	-	-	-	-	-	-
99.	Arizona Income Tax Expense	-	-	-	-	-	-
100.	New Mexico Income Tax Expense	-	-	-	-	-	-
101.	D.C. Income Tax Expense	-	-	-	-	-	-
102.	Total Other State Income Taxes	-	-	-	-	-	-
103.	Total State Income Taxes	11,673	50,629	94,181	114,604	122,571	140,708
7 Taxes Federal Income Taxes		Recorded	Forecast	Forecast	Forecast	Forecast	Forecast
Line	Description	2018	2019	2020	2021	2022	2023
104.	Operating Revenues	6,290,164	7,431,509	8,077,510	8,730,941	9,310,057	9,865,543
105.	Operating Expenses	1,925,767	2,608,688	2,797,098	2,725,746	2,781,325	2,838,468
106.	Taxes Other Than Income	385,579	402,287	451,096	509,558	554,441	604,769
107.	Total State Income Taxes	11,673	50,629	94,181	114,604	122,571	140,708
108.	Less: Current Year's CCFT	11,673	50,629	94,181	114,604	122,571	140,708
109.	Plus: Prior Year's CCFT	70,505	11,673	50,629	94,181	114,604	122,571
110.	Total Expenses	2,381,850	3,022,648	3,298,823	3,329,485	3,450,369	3,565,808
111.	Federal Income Tax Adjustments	3,685,846	3,621,398	3,562,889	4,022,619	4,345,030	4,643,769
112.	Federal Taxable Income	222,468	787,463	1,215,797	1,378,837	1,514,658	1,655,966
113.	Federal Income Tax Rate	21.0000%	21.0000%	21.0000%	21.0000%	21.0000%	21.0000%
114.	Federal Income Tax Expense	46,718	165,367	255,317	289,556	318,078	347,753
115.	Federal Alternative Income Tax	-	-	-	-	-	-
116.	Deferred Tax Expense (Plant)	30,749	(26,979)	(40,908)	6,432	33,808	51,259
117.	Deferred Tax Expense (AFUDC Debt)	-	-	-	-	-	-
118.	Deferred Tax Expense (Capitalized Interest)	-	-	-	-	-	-
119.	Contributions in Aid of Construction (CIAC)	(12,306)	(15,177)	(29,190)	(32,588)	(24,715)	(20,575)
120.	ITCC Deferred Tax Expense/(Benefit)	(4,256)	(1,033)	(6,852)	(5,244)	(3,471)	(3,039)
121.	Investment Tax Credit Amortization	(5,948)	(5,698)	(5,439)	(5,556)	(4,982)	(4,788)
122.	Wildfire Reserve Deferred Tax Expense/(Benefit)	-	-	-	-	-	-
123.	Accrued Vacation	1,931	1,925	1,919	(200)	(206)	(212)
124.	Total Federal Income Taxes	56,888	118,406	174,847	252,400	318,512	370,397
125.	Total Income Taxes (State + Federal)	68,561	169,035	269,028	367,004	441,083	511,105
8 Depreciation		Recorded	Forecast	Forecast	Forecast	Forecast	Forecast
Line	Description	2018	2019	2020	2021	2022	2023
126.	Depreciation Expense	1,786,000	1,883,418	2,018,327	2,403,128	2,577,894	2,763,282

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\$ in Thousands

9	Rate Base (Weighted Average)		Recorded	Forecast	Forecast	Forecast	Forecast	Forecast
	Line	Description	2018	2019	2020	2021	2022	2023
	127.	Fixed Capital						
	128.	Plant in Service	46,913,122	49,814,365	52,815,572	56,090,171	60,160,282	63,876,542
	129.	Depreciation Reserve	(14,334,717)	(14,026,677)	(14,781,305)	(15,787,943)	(16,869,124)	(18,053,034)
	130.	Total Net Plant	32,578,405	35,787,689	38,034,267	40,302,229	43,291,158	45,823,509
	131.	Cash Working Capital						
	132.	Customer Advance for Construction	(68,707)	(62,365)	(62,365)	(62,365)	(62,365)	(62,365)
	133.	Customer Deposits	—	—	—	—	—	—
	134.	Materials and Supplies	202,074	205,866	216,026	237,624	257,831	270,978
	135.	Mountainview Emission Credits	5,388	5,018	4,675	4,354	4,056	3,778
	136.	Working Cash	544,396	623,519	716,716	807,129	823,130	839,873
	137.	Unfunded Pension Reserve	(55,942)	(53,840)	(51,948)	(52,826)	(56,336)	(59,797)
	138.	Total Cash Working Capital	627,208	718,198	823,105	933,917	966,316	992,468
	139.	Accumulated Deferred Taxes						
	140.	Accumulated Deferred Taxes (Plant)	(5,347,852)	(5,435,649)	(5,511,558)	(5,492,528)	(5,511,653)	(5,553,583)
	141.	Accumulated Deferred Taxes (Uniform Capitalization)	—	—	—	—	—	—
	142.	Accumulated Deferred Taxes (CIAC)	32,455	39,278	50,763	65,952	83,700	98,132
	143.	Accrued Vacation	13,692	11,764	9,842	8,982	9,185	9,394
	144.	Total Accumulated Deferred Taxes	(5,301,705)	(5,384,607)	(5,450,954)	(5,417,594)	(5,418,768)	(5,446,057)
	145.	Total Rate Base	27,903,908	31,121,279	33,406,418	35,818,551	38,838,707	41,369,919
10	Summary of Earnings		Recorded	Forecast	Forecast	Forecast	Forecast	Forecast
	Line	Description	2018	2019	2020	2021	2022	2023
	146.	Operating Revenues	6,290,164	7,431,509	8,077,510	8,730,941	9,310,057	9,865,543
	147.	Operating Expenses						
	148.	Escalation	—	58,482	112,853	162,584	216,650	272,300
	149.	Generation - Steam	9,220	7,356	7,351	8,325	8,325	8,325
	150.	Generation - Nuclear	77,639	78,192	76,114	75,123	75,123	75,123
	151.	Generation - Hydro	47,333	42,064	44,302	45,189	45,189	45,189
	152.	Generation - Other	78,962	92,628	80,531	83,320	83,320	83,320
	153.	Transmission	194,691	220,960	188,128	184,954	184,954	184,954
	154.	Distribution	589,094	884,532	882,841	722,307	722,307	722,307
	155.	Customer Accounts	131,852	136,123	139,132	141,353	141,353	141,353
	156.	Uncollectibles	10,968	15,680	17,044	16,676	17,782	18,843
	157.	Customer Service and Information	49,177	58,699	68,122	83,712	83,712	83,712
	158.	Total O&M Expenses	1,188,936	1,594,716	1,616,417	1,523,543	1,578,715	1,635,427
	159.	Administrative & General	896,291	1,160,760	1,324,922	1,339,697	1,335,921	1,332,353
	160.	Franchise Requirements	53,631	67,954	73,861	80,857	86,220	91,365
	161.	Revenue Credits	213,091	214,741	218,101	218,351	219,532	220,677
	162.	Total Operating Expenses	1,925,767	2,608,688	2,797,098	2,725,746	2,781,325	2,838,468
	163.	Depreciation	1,786,000	1,883,418	2,018,327	2,403,128	2,577,894	2,763,282
	164.	Taxes Other Than On Income	385,579	402,287	451,096	509,558	554,441	604,769
	165.	Taxes Based On Income	68,561	169,035	269,028	367,004	441,083	511,105
	166.	Total Taxes	454,139	571,322	720,123	876,561	995,524	1,115,874
	167.	Total Operating Expenses	4,165,906	5,063,428	5,535,549	6,005,436	6,354,742	6,717,623
	168.	Net Operating Revenue	2,124,258	2,368,080	2,541,961	2,725,505	2,955,315	3,147,920
	169.	Rate Base (Weighted Average)	27,903,908	31,121,279	33,406,418	35,818,551	38,838,707	41,369,919
	170.	Rate of Return	7.61%	7.61%	7.61%	7.61%	7.61%	7.61%

EXHIBIT SCE-18, VOLUME 01
CHAPTER I
GRC INCREMENTAL REVENUE AND RATE CHANGE PROPOSAL

Southern California Edison
2021 General Rate Case
2021 - 2023 Revenue Changes
\$ in Thousands

ABRR and Revenue Change Including Impact of Previously Approved & Forecast ABRR Changes					Reference
Line	Item	2021	2022	2023	
1.	Proposed GRC Base Revenue Requirement	7,548,568	7,982,479	8,482,547	Table II-5
2.	Estimated Present (Prior Year) Revenue Requirement	6,445,433	7,548,568	7,982,479	For 2021: Table II-3
3.	Change in Authorized Base Revenue Requirement	1,103,135	433,911	500,068	
4.	Less GRC Revenue Growth:				
5.	2020	82,223			Table VI-18
6.	2021	81,440	5,527,181		Table VI-18
7.	2021	81,440			Table VI-18
8.	2022	80,657	5,527,181		Table VI-18
9.	2022	80,657			Table VI-18
10.	2023	80,609		5,474,040	Table VI-18
11.	GRC Revenue Growth	(53,141)	(53,141)	(3,258)	
12.	One-Time Memorandum Account Recovery				
13.	Customer Service Re-Platform Memorandum Account (CSRMA)	—	—		Ch. II, p. 4, Plus FF&U
14.	IDER/Distribution Deferral Administration Costs Memorandum Accounts	847	(847)		Table V-13, Plus FF&U
15.	Emergency Customer Protections Memorandum Account (ECPMA)	55	(55)		Ch. V, p. 43
16.	Balancing & Memorandum Account Recovery	902	(902)	—	
17.	GRC Revenue Change	1,157,178	486,149	503,326	
18.	Percent GRC Revenue Change	18.10%	6.49%	6.31%	
19.	Total System Present Rate Revenues	10,201,615	9,895,847	9,827,072	Table VII-22
20.	2021 GRC Revenue Change		1,157,178	1,157,178	Line 17 (2021)
21.	2022 GRC Revenue Change			486,149	Line 17 (2022)
22.	Total System Present Rate Revenues (Including GRC Revenue Change)	10,201,615	11,053,025	11,470,399	Line 19 + Line 20 + Line 21
23.	Percent Total Revenue Change	11.34%	4.40%	4.39%	Line 17 / Line 22

EXHIBIT SCE-18, VOLUME 01
CHAPTER I
DEVELOPMENT OF THE CPUC-JURISDICTIONAL GRC REVENUE REQUIREMENT

CPUC-JURISDICTIONAL FACTORS AND REVENUE REQUIREMENTS
WITH ADJUSTMENTS

Southern California Edison
2021 General Rate Case
Results of Operations | Jurisdictional Allocation with Adjustments
\$ in Thousands

Line	Item	2021 GRC - CPUC		2022 GRC - CPUC		2023 GRC - CPUC	
		\$	%	\$	%	\$	%
1.	Total Operating Revenues	7,548,568	86.31%	7,982,479	85.62%	8,482,547	85.88%
2.	Operating Expenses:						
3.	Production						
4.	Steam	8,325	100.00%	8,325	100.00%	8,325	100.00%
5.	Nuclear	75,123	100.00%	75,123	100.00%	75,123	100.00%
6.	Hydro	45,189	100.00%	45,189	100.00%	45,189	100.00%
7.	Other	83,320	100.00%	83,320	100.00%	83,320	100.00%
8.	Total Production O&M	211,958	100.00%	211,958	100.00%	211,958	100.00%
9.	Transmission	104,561	56.53%	104,561	56.53%	104,561	56.53%
10.	Distribution	713,208	98.74%	713,208	98.74%	713,208	98.74%
11.	Customer Accounts	141,353	100.00%	141,353	100.00%	141,353	100.00%
12.	Uncollectibles	14,418	86.31%	15,247	85.62%	16,202	85.88%
13.	Customer Service & Information	83,712	100.00%	83,712	100.00%	83,712	100.00%
14.	Administrative & General (Excluding Property Insurance)	1,228,976	93.16%	1,225,458	93.16%	1,222,134	93.16%
15.	Administrative & General (Property Insurance)	16,520	80.74%	16,376	80.03%	16,448	80.39%
16.	Administrative & General	1,245,496	92.97%	1,241,833	92.96%	1,238,583	92.96%
17.	Franchise Requirements	69,907	86.31%	73,926	85.62%	78,557	85.88%
18.	Revenue Credits	(163,840)	75.04%	(164,726)	75.04%	(165,585)	75.04%
19.	Subtotal	2,420,773	94.44%	2,421,071	94.40%	2,422,548	94.40%
20.	Escalation	152,078	93.54%	202,648	93.54%	254,705	93.54%
21.	Depreciation	2,133,019	87.61%	2,274,278	87.15%	2,443,357	87.42%
22.	Taxes Other Than On Income						
23.	Taxes Other Than On Income - Property	353,592	80.74%	384,364	80.03%	424,545	80.39%
24.	Taxes Other Than On Income - Payroll	66,702	93.16%	69,089	93.16%	71,389	93.16%
25.	Taxes Based On Income	231,361	63.68%	284,777	65.17%	347,284	68.55%
26.	Total Taxes	651,655	74.65%	738,230	74.46%	843,218	75.87%
27.	Total Operating Expenses	5,357,524	88.79%	5,636,226	88.31%	5,963,828	88.42%
28.	Net Operating Revenue	2,191,044	80.78%	2,346,253	79.79%	2,518,719	80.42%
29.	Rate Base	28,794,669	80.78%	30,834,418	79.79%	33,100,972	80.42%
30.	Rate Of Return	7.61%		7.61%		7.61%	

Southern California Edison
2021 General Rate Case
Results of Operations | Jurisdictional Allocation with Adjustments
\$ in Thousands

Line	Item	Total	Estimated 2021		% for 2021		Total
			FERC	CPUC	FERC	CPUC	
1.	Total Operating Revenues	8,745,987	1,197,419	7,548,568	13.69%	86.31%	100.00%
2.	Operating Expenses:						
3.	Production						
4.	Steam	8,325	-	8,325	0.00%	100.00%	100.00%
5.	Nuclear	75,123	-	75,123	0.00%	100.00%	100.00%
6.	Hydro	45,189	-	45,189	0.00%	100.00%	100.00%
7.	Other	83,320	-	83,320	0.00%	100.00%	100.00%
8.	Total Production O&M	211,958	-	211,958	0.00%	100.00%	100.00%
9.	Transmission	184,954	80,393	104,561	43.47%	56.53%	100.00%
10.	Distribution	722,307	9,099	713,208	1.26%	98.74%	100.00%
11.	Customer Accounts	141,353	-	141,353	0.00%	100.00%	100.00%
12.	Uncollectibles	16,705	2,287	14,418	13.69%	86.31%	100.00%
13.	Customer Service & Information	83,712	-	83,712	0.00%	100.00%	100.00%
14.	Administrative & General (Excluding Property Insurance)	1,319,235	90,259	1,228,976	6.84%	93.16%	100.00%
15.	Administrative & General (Property Insurance)	20,462	3,942	16,520	19.26%	80.74%	100.00%
16.	Administrative & General	1,339,697	94,201	1,245,496	7.03%	92.97%	100.00%
17.	Franchise Requirements	80,997	11,089	69,907	13.69%	86.31%	100.00%
18.	Revenue Credits	(218,351)	(54,511)	(163,840)	24.96%	75.04%	100.00%
19.	Subtotal	2,563,331	142,558	2,420,773	5.56%	94.44%	100.00%
20.	Escalation	162,584	10,506	152,078	6.46%	93.54%	100.00%
21.	Depreciation	2,434,802	301,783	2,133,019	12.39%	87.61%	100.00%
22.	Taxes Other Than On Income						
23.	Taxes Other Than On Income - Property	437,957	84,365	353,592	19.26%	80.74%	100.00%
24.	Taxes Other Than On Income - Payroll	71,601	4,899	66,702	6.84%	93.16%	100.00%
25.	Taxes Based On Income	363,338	131,977	231,361	36.32%	63.68%	100.00%
26.	Total Taxes	872,895	221,240	651,655	25.35%	74.65%	100.00%
27.	Total Operating Expenses	6,033,612	676,087	5,357,524	11.21%	88.79%	100.00%
28.	Net Operating Revenue	2,712,375	521,331	2,191,044	19.22%	80.78%	100.00%
29.	Rate Base	35,645,998	6,851,329	28,794,669	19.22%	80.78%	100.00%
30.	Rate Of Return	7.61%	7.61%	7.61%			

Southern California Edison
2021 General Rate Case
Results of Operations | Jurisdictional Allocation with Adjustments
\$ in Thousands

Line	Item	Total	Estimated 2022		% for 2022		Total
			FERC	CPUC	FERC	CPUC	
1.	Total Operating Revenues	9,323,165	1,340,686	7,982,479	14.38%	85.62%	100.00%
2.	Operating Expenses:						
3.	Production						
4.	Steam	8,325	-	8,325	0.00%	100.00%	100.00%
5.	Nuclear	75,123	-	75,123	0.00%	100.00%	100.00%
6.	Hydro	45,189	-	45,189	0.00%	100.00%	100.00%
7.	Other	83,320	-	83,320	0.00%	100.00%	100.00%
8.	Total Production O&M	211,958	-	211,958	0.00%	100.00%	100.00%
9.	Transmission	184,954	80,393	104,561	43.47%	56.53%	100.00%
10.	Distribution	722,307	9,099	713,208	1.26%	98.74%	100.00%
11.	Customer Accounts	141,353	-	141,353	0.00%	100.00%	100.00%
12.	Uncollectibles	17,807	2,561	15,247	14.38%	85.62%	100.00%
13.	Customer Service & Information	83,712	-	83,712	0.00%	100.00%	100.00%
14.	Administrative & General (Excluding Property Insurance)	1,315,459	90,001	1,225,458	6.84%	93.16%	100.00%
15.	Administrative & General (Property Insurance)	20,462	4,086	16,376	19.97%	80.03%	100.00%
16.	Administrative & General	1,335,921	94,087	1,241,833	7.04%	92.96%	100.00%
17.	Franchise Requirements	86,342	12,416	73,926	14.38%	85.62%	100.00%
18.	Revenue Credits	(219,532)	(54,806)	(164,726)	24.96%	75.04%	100.00%
19.	Subtotal	2,564,821	143,750	2,421,071	5.60%	94.40%	100.00%
20.	Escalation	216,650	14,002	202,648	6.46%	93.54%	100.00%
21.	Depreciation	2,609,567	335,290	2,274,278	12.85%	87.15%	100.00%
22.	Taxes Other Than On Income						
23.	Taxes Other Than On Income - Property	480,278	95,914	384,364	19.97%	80.03%	100.00%
24.	Taxes Other Than On Income - Payroll	74,163	5,074	69,089	6.84%	93.16%	100.00%
25.	Taxes Based On Income	436,999	152,222	284,777	34.83%	65.17%	100.00%
26.	Total Taxes	991,440	253,210	738,230	25.54%	74.46%	100.00%
27.	Total Operating Expenses	6,382,478	746,251	5,636,226	11.69%	88.31%	100.00%
28.	Net Operating Revenue	2,940,687	594,434	2,346,253	20.21%	79.79%	100.00%
29.	Rate Base	38,646,467	7,812,049	30,834,418	20.21%	79.79%	100.00%
30.	Rate Of Return	7.61%	7.61%	7.61%			

Southern California Edison
2021 General Rate Case
Results of Operations | Jurisdictional Allocation with Adjustments
\$ in Thousands

		Estimated 2023				% for 2023	
Line	Item	Total	FERC	CPUC	FERC	CPUC	Total
1.	Total Operating Revenues	9,876,713	1,394,166	8,482,547	14.12%	85.88%	100.00%
2.	Operating Expenses:						
3.	Production						
4.	Steam	8,325	-	8,325	0.00%	100.00%	100.00%
5.	Nuclear	75,123	-	75,123	0.00%	100.00%	100.00%
6.	Hydro	45,189	-	45,189	0.00%	100.00%	100.00%
7.	Other	83,320	-	83,320	0.00%	100.00%	100.00%
8.	Total Production O&M	211,958	-	211,958	0.00%	100.00%	100.00%
9.	Transmission	184,954	80,393	104,561	43.47%	56.53%	100.00%
10.	Distribution	722,307	9,099	713,208	1.26%	98.74%	100.00%
11.	Customer Accounts	141,353	-	141,353	0.00%	100.00%	100.00%
12.	Uncollectibles	18,865	2,663	16,202	14.12%	85.88%	100.00%
13.	Customer Service & Information	83,712	-	83,712	0.00%	100.00%	100.00%
14.	Administrative & General (Excluding Property Insurance)	1,311,891	89,757	1,222,134	6.84%	93.16%	100.00%
15.	Administrative & General (Property Insurance)	20,462	4,014	16,448	19.61%	80.39%	100.00%
16.	Administrative & General	1,332,353	93,771	1,238,583	7.04%	92.96%	100.00%
17.	Franchise Requirements	91,468	12,911	78,557	14.12%	85.88%	100.00%
18.	Revenue Credits	(220,677)	(55,092)	(165,585)	24.96%	75.04%	100.00%
19.	Subtotal	2,566,292	143,745	2,422,548	5.60%	94.40%	100.00%
20.	Escalation	272,300	17,595	254,705	6.46%	93.54%	100.00%
21.	Depreciation	2,794,956	351,599	2,443,357	12.58%	87.42%	100.00%
22.	Taxes Other Than On Income						
23.	Taxes Other Than On Income - Property	528,137	103,592	424,545	19.61%	80.39%	100.00%
24.	Taxes Other Than On Income - Payroll	76,632	5,243	71,389	6.84%	93.16%	100.00%
25.	Taxes Based On Income	506,602	159,318	347,284	31.45%	68.55%	100.00%
26.	Total Taxes	1,111,371	268,153	843,218	24.13%	75.87%	100.00%
27.	Total Operating Expenses	6,744,919	781,091	5,963,828	11.58%	88.42%	100.00%
28.	Net Operating Revenue	3,131,794	613,075	2,518,719	19.58%	80.42%	100.00%
29.	Rate Base	41,157,993	8,057,021	33,100,972	19.58%	80.42%	100.00%
30.	Rate Of Return	7.61%	7.61%	7.61%			

2021 - 2023 FUNCTIONALIZED RATE BASE

Southern California Edison
2021 General Rate Case
Functionalized Rate Base Without Adjustments
\$ in Thousands

2021 Rate Base		CPUC			
Line	Item	FERC	Generation	Distribution	Total
1.	Gross Plant	10,804,830	5,827,367	39,457,973	56,090,171
2.	Reserve	(2,205,896)	(3,145,031)	(10,437,016)	(15,787,943)
3.	Customer Advances	-	-	(62,365)	(62,365)
4.	Material and Supplies	16,258	27,105	194,261	237,624
5.	Mountainview Emission Credits	-	4,354	-	4,354
6.	Working Cash	55,222	92,066	659,841	807,129
7.	Deferred Taxes	(1,816,086)	(323,496)	(3,286,995)	(5,426,576)
8.	Deferred Taxes - Vacation Accrual	615	1,025	7,343	8,982
9.	Unfunded Pension Reserves	(3,614)	(6,026)	(43,186)	(52,826)
10.	Total Company Rate Base	6,851,329	2,477,365	26,489,857	35,818,551
11.	CPUC		2,477,365	26,489,857	28,967,222

Southern California Edison
2021 General Rate Case
Functionalized Rate Base Without Adjustments
\$ in Thousands

2022 Rate Base		CPUC			
Line	Item	FERC	Generation	Distribution	Total
1.	Gross Plant	12,014,283	5,949,323	42,196,676	60,160,282
2.	Reserve	(2,400,011)	(3,295,579)	(11,173,533)	(16,869,124)
12.	Customer Advances	-	-	(62,365)	(62,365)
13.	Material and Supplies	17,640	29,410	210,781	257,831
14.	Mountainview Emission Credits	-	4,056	-	4,056
15.	Working Cash	56,317	93,892	672,921	823,130
16.	Deferred Taxes	(1,872,953)	(315,001)	(3,239,998)	(5,427,953)
17.	Deferred Taxes - Vacation Accrual	628	1,048	7,509	9,185
18.	Unfunded Pension Reserves	(3,854)	(6,426)	(46,055)	(56,336)
19.	Total Company Rate Base	7,812,049	2,460,721	28,565,936	38,838,707
20.	CPUC		2,460,721	28,565,936	31,026,657

Southern California Edison
2021 General Rate Case
Functionalized Rate Base Without Adjustments
\$ in Thousands

2023 Rate Base		CPUC			
Line	Item	FERC	Generation	Distribution	Total
1.	Gross Plant	12,529,142	6,088,135	45,259,265	63,876,542
2.	Reserve	(2,612,433)	(3,457,647)	(11,982,954)	(18,053,034)
21.	Customer Advances	-	-	(62,365)	(62,365)
22.	Material and Supplies	18,540	30,910	221,529	270,978
23.	Mountainview Emission Credits	-	3,778	-	3,778
24.	Working Cash	57,462	95,801	686,609	839,873
25.	Deferred Taxes	(1,932,242)	(305,932)	(3,217,277)	(5,455,451)
26.	Deferred Taxes - Vacation Accrual	643	1,072	7,680	9,394
27.	Unfunded Pension Reserves	(4,091)	(6,821)	(48,885)	(59,797)
28.	Total Company Rate Base	8,057,021	2,449,295	30,863,602	41,369,919
29.	CPUC		2,449,295	30,863,602	33,312,898

2021 GRC LABOR ALLOCATOR

2021 GRC Labor Allocator

	FERC		CPUC				A&G	Total
	Transmission	Distribution	Transmission	Distribution	Generation	Customers		
2018\$	36,658	9,099	51,532	307,971	76,285	191,631	360,680	1,033,857
Escalation	3,737	928	5,253	31,394	7,776	14,689	36,767	100,545
2021\$	40,395	10,026	56,785	339,365	84,062	206,321	397,448	1,134,401
2021% Total Company	3.56%	0.88%	5.01%	29.92%	7.41%	18.19%	35.04%	100.00%
2021% Total Company (Excluding A&G)	5.48%	1.36%	7.71%	46.05%	11.41%	28.00%		100.00%

Total Company (Excluding A&G)

FERC	6.84%
CPUC	81.75%
Generation	11.41%
2021% Total Company (Excluding A&G)	100.00%

CPUC Only (Excluding A&G)

FERC	
CPUC	87.76%
Generation	12.24%
2021% CPUC Only (Excluding A&G)	100.00%

RESULTS OF OPERATIONS
AT PROPOSED RATES - CPUC FUNCTIONALIZED 2021-2023
WITH ADJUSTMENTS

Southern California Edison
2021 General Rate Case
2021 Summary of Earnings
\$ in Thousands

2021 Summary of Earnings		CPUC by Function Including Adjustments				
Line	Description	Distribution	Generation	Peakers	Energy Storage	Total
1.	Total Operating Revenues	6,693,014	788,785	57,432	9,337	7,548,568
2.	Operating Expenses:					
3.	Production					
4.	Steam	—	7,950	375	—	8,325
5.	Nuclear	—	75,123	—	—	75,123
6.	Hydro	—	45,189	—	—	45,189
7.	Other	—	75,266	7,462	593	83,320
8.	Total Production O&M	—	203,529	7,837	593	211,958
9.	Transmission	104,561	—	—	—	104,561
10.	Distribution	713,208	—	—	—	713,208
11.	Customer Accounts	141,353	—	—	—	141,353
12.	Uncollectibles	12,784	1,507	110	18	14,418
13.	Customer Service & Information	81,317	936	46	1,413	83,712
14.	Administrative & General (Excluding Property Insurance)	1,078,495	143,452	7,029	—	1,228,976
15.	Administrative & General (Property Insurance)	14,394	1,939	163	24	16,520
16.	Administrative & General	1,092,890	145,391	7,191	24	1,245,496
17.	Franchise Requirements	61,984	7,305	532	86	69,907
18.	Revenue Credits	(158,741)	(4,860)	(238)	—	(163,840)
19.	Total O&M	2,049,354	353,807	15,477	2,134	2,420,773
20.	Escalation	129,829	21,219	901	128	152,078
21.	Depreciation	1,918,147	196,330	15,276	3,266	2,133,019
22.	Taxes Other Than On Income					
23.	Property Taxes	323,352	27,114	2,667	459	353,592
24.	Payroll Taxes & Misc	58,535	8,132	36	—	66,702
25.	Taxes Based On Income	211,261	13,788	5,671	642	231,361
26.	Total Taxes	593,147	49,033	8,373	1,101	651,655
27.	Total Operating Expenses	4,690,478	620,389	40,028	6,630	5,357,524
28.	Net Operating Revenue	2,002,536	168,396	17,404	2,707	2,191,044
29.	Rate Base	26,317,304	2,213,056	228,730	35,580	28,794,669
30.	Rate of Return	7.61%	7.61%	7.61%	7.61%	7.61%

Southern California Edison
2021 General Rate Case
2022 Summary of Earnings
\$ in Thousands

2022 Summary of Earnings		CPUC by Function Including Adjustments				
Line	Description	Distribution	Generation	Peakers	Energy Storage	Total
1.	Total Operating Revenues	7,109,899	806,663	56,733	9,183	7,982,479
2.	Operating Expenses:					
3.	Production					
4.	Steam	—	7,950	375	—	8,325
5.	Nuclear	—	75,123	—	—	75,123
6.	Hydro	—	45,189	—	—	45,189
7.	Other	—	75,266	7,462	593	83,320
8.	Total Production O&M	—	203,529	7,837	593	211,958
9.	Transmission	104,561	—	—	—	104,561
10.	Distribution	713,208	—	—	—	713,208
11.	Customer Accounts	141,353	—	—	—	141,353
12.	Uncollectibles	13,580	1,541	108	18	15,247
13.	Customer Service & Information	81,317	936	46	1,413	83,712
14.	Administrative & General (Excluding Property Insurance)	1,075,408	143,041	7,009	—	1,225,458
15.	Administrative & General (Property Insurance)	14,352	1,849	152	22	16,376
16.	Administrative & General	1,089,760	144,890	7,161	22	1,241,833
17.	Franchise Requirements	65,845	7,471	525	85	73,926
18.	Revenue Credits	(159,600)	(4,887)	(239)	—	(164,726)
19.	Total O&M	2,050,023	353,480	15,438	2,130	2,421,071
20.	Escalation	173,128	28,151	1,197	172	202,648
21.	Depreciation	2,051,360	204,157	15,495	3,266	2,274,278
22.	Taxes Other Than On Income					
23.	Property Taxes	353,880	27,534	2,526	425	384,364
24.	Payroll Taxes & Misc	60,629	8,423	37	—	69,089
25.	Taxes Based On Income	261,867	16,610	5,581	718	284,777
26.	Total Taxes	676,377	52,566	8,144	1,143	738,230
27.	Total Operating Expenses	4,950,888	638,354	40,274	6,711	5,636,226
28.	Net Operating Revenue	2,159,011	168,309	16,460	2,472	2,346,253
29.	Rate Base	28,373,697	2,211,919	216,314	32,488	30,834,418
30.	Rate Of Return	7.61%	7.61%	7.61%	7.61%	7.61%

Southern California Edison
2021 General Rate Case
2023 Summary of Earnings
\$ in Thousands

2023 Summary of Earnings		CPUC by Function Including Adjustments				
Line	Description	Distribution	Generation	Peakers	Energy Storage	Total
1.	Total Operating Revenues	7,589,616	827,452	56,548	8,930	8,482,547
2.	Operating Expenses:					
3.	Production					
4.	Steam	—	7,950	375	—	8,325
5.	Nuclear	—	75,123	—	—	75,123
6.	Hydro	—	45,189	—	—	45,189
7.	Other	—	75,266	7,462	593	83,320
8.	Total Production O&M	—	203,529	7,837	593	211,958
9.	Transmission	104,561	—	—	—	104,561
10.	Distribution	713,208	—	—	—	713,208
11.	Customer Accounts	141,353	—	—	—	141,353
12.	Uncollectibles	14,496	1,580	108	17	16,202
13.	Customer Service & Information	81,317	936	46	1,413	83,712
14.	Administrative & General (Excluding Property Insurance)	1,072,491	142,653	6,990	—	1,222,134
15.	Administrative & General (Property Insurance)	14,498	1,785	145	21	16,448
16.	Administrative & General	1,086,989	144,438	7,134	21	1,238,583
17.	Franchise Requirements	70,287	7,663	524	83	78,557
18.	Revenue Credits	(160,432)	(4,912)	(241)	—	(165,585)
19.	Total O&M	2,051,779	353,234	15,408	2,126	2,422,548
20.	Escalation	217,670	35,319	1,498	218	254,705
21.	Depreciation	2,210,422	213,806	15,862	3,266	2,443,357
22.	Taxes Other Than On Income					
23.	Property Taxes	393,331	28,431	2,394	389	424,545
24.	Payroll Taxes & Misc	62,648	8,703	38	—	71,389
25.	Taxes Based On Income	321,420	19,562	5,612	691	347,284
26.	Total Taxes	777,398	56,696	8,044	1,080	843,218
27.	Total Operating Expenses	5,257,269	659,055	40,813	6,691	5,963,828
28.	Net Operating Revenue	2,332,347	168,397	15,735	2,239	2,518,719
29.	Rate Base	30,651,677	2,213,072	206,793	29,430	33,100,972
30.	Rate Of Return	7.61%	7.61%	7.61%	7.61%	7.61%

EXHIBIT SCE-18, VOLUME 01
CHAPTER I
OTHER OPERATING REVENUE

Southern California Edison
Test Year 2021 General Rate Case
Operation & Maintenance Expenses
(Nominal \$000)
Category: Other Operating Revenue

Line	Account	Description	Recorded/Adj.		Estimated (in Constant 2018\$)			
			2018	2019	2020	2021	2022	2023
1.	450	Forfeited Discounts	17,746	15,869	14,093	11,430	11,430	11,430
2.	451	Miscellaneous Service Revenues	13,945	10,019	10,098	9,880	9,880	9,880
3.	453	Sales of Water and Water Power	232	232	232	232	232	232
4.	454	Rent from Electric Property	66,658	70,480	72,601	72,682	72,682	72,682
5.	456	Other Electric Revenues	113,447	117,107	120,043	123,093	124,274	125,419
6.		Gains/Losses on Sale of Property	1,063	1,034	1,034	1,034	1,034	1,034
7.		Total Other Operating Revenue	213,091	214,741	218,101	218,351	219,532	220,677
8.		Escalation	-	-	-	-	-	-
9.		Total OOR (Including Escalation)	213,091	214,741	218,101	218,351	219,532	220,677
10.		Labor, Non-labor, and Other Detail (Constant 2018\$):						
11.		Labor	-	-	-	-	-	-
12.		Non-Labor	-	-	-	-	-	-
13.		Other	213,091	214,741	218,101	218,351	219,532	220,677
14.		Total OOR	213,091	214,741	218,101	218,351	219,532	220,677
15.		Escalation:						
16.		Labor	-	-	-	-	-	-
17.		Non-Labor	-	-	-	-	-	-
18.		Other	-	-	-	-	-	-
19.		Total Escalation	-	-	-	-	-	-
20.		Total OOR (Including Escalation)	213,091	214,741	218,101	218,351	219,532	220,677

Southern California Edison
Test Year 2021 General Rate Case
Other Operating Revenue
Nominal (\$000)

Line	FERC Description	Recorded		Forecast			Exhibit Reference
		2018	2019	2020	2021	2022	
1.	450.000 - Forfeited Discounts						
2.	Customer Service Operations OOR	17,746	15,869	14,093	11,430	11,430	SCE-03, Vol. 6
3.	451.000 - Miscellaneous Service Revenues						
4.	Customer Service Operations OOR	9,931	9,473	9,538	9,294	9,294	SCE-03, Vol. 6
5.	Transmission & Distribution OOR	4,014	546	560	586	586	SCE-02, Vol. 7
	Total 451.000	13,945	10,019	10,098	9,880	9,880	
6.	453.000 - Sales of Water & Water Power						
7.	Financial and Other Miscellaneous Revenues	-	-	-	-	-	SCE-07, Vol. 1
8.	454.000 - Rent from Electric Property						
9.	Transmission & Distribution OOR	57,842	61,664	63,785	63,866	63,866	SCE-02, Vol. 7
10.	Financial and Other Miscellaneous Revenues	-	-	-	-	-	SCE-07, Vol. 1
	Total 454.000	57,842	61,664	63,785	63,866	63,866	
11.	456.000 - Other Electric Revenue						
12.	Customer Service Operations OOR	3	3	3	3	3	SCE-03, Vol. 6
13.	CS&I Tariffed Products and Services OOR	699	1,653	3,143	4,018	4,018	SCE-03, Vol. 6
14.	Transmission & Distribution OOR	80,093	81,209	81,358	81,855	81,855	SCE-02, Vol. 7
15.	Financial and Other Miscellaneous Revenues	25,027	26,618	27,915	29,593	30,774	SCE-07, Vol. 2
	Total 456.000	105,823	109,483	112,419	115,469	116,650	
16.	Gains/Losses on Sale of Property	1,063	1,034	1,034	1,034	1,034	SCE-7, Vol. 2
17.	Gross Revenue Sharing Mechanism Authorized Threshold	16,672	16,672	16,672	16,672	16,672	SCE-07, Vol. 1
18.	Escalation	-	-	-	-	-	
19.	Total OOR	213,091	214,741	218,101	218,351	219,532	220,677

Southern California Edison Company
Authorized Gross Revenue Sharing Mechanism Threshold
In Whole Dollars

Authorized Gross Revenue Sharing Mechanism Threshold						
Line No.	FERC Account	Account Description	Authorized Threshold	FERC Threshold	Generation D.97-08-056	Distribution D.97-08-056
	453.000	SALES OF WATER & WATER POWER	(232,000)	—	(232,000)	—
1.	453 Accounts	Revenues received from Big Creek Project headwater benefits	(232,000)		(232,000)	—
	454.450	UNDERGROUND CONDUIT RENTAL	(1,898,000)			(1,898,000)
	454.000	RENTS RECD FOR USE OF PROP	—			—
	454.500	JOINT POLE RENTALS	(613,000)			(613,000)
	454.600	LAND & PROPERTY RENTALS	(848,548)	(58,056)	(96,791)	(693,701)
	454.602	FACILITY COST- UTILITY	(41,323)	(2,827)	(4,714)	(33,782)
	454.607	THIRD PARTY LEASED PROPERTY	—			—
	454.611	OPERATING REV - SECONDARY USE	(5,400,000)	(5,125,000)	(275,000)	—
	454.700	OIL & GAS ROYALTIES	(15,000)		(15,000)	—
2.	454 Accounts	Revenues received from the use of utility land, buildings, and other property	(8,815,871)	(5,185,883)	(391,505)	(3,238,483)
	456.903	LONG BEACH G & W METER REVENUE	(1,781,700)			(1,781,700)
	456.913	UTIL RLTD ERNGS-ENERGY SERV	(450,000)	(30,788)	(51,330)	(367,882)
	456.941	SSID MACHINE USAGE	(30,100)	(2,059)	(3,433)	(24,607)
	456.961	READ WATER AND GAS METERS	—			—
	456.962	READ WATER METERS	—			—
	456.967	APARATUS SRVCS FOR 3RD PARTIES	—			—
	456.000	MINERAL, OIL, GAS INCOME	—		—	—
	456.100	REVENUE FROM REC,FISH&WILDLIFE	(540,100)		(540,100)	—
	456.150	TIMBER SALES-LAKE	—		—	—
	456.500	COMM FROM CAFE & VEND MACHINES	(4,403)	(301)	(502)	(3,600)
	456.900	MISC ELECTRIC REVENUES	(3,969,291)	(271,571)	(452,763)	(3,244,957)
	456.902	MISCELLANEOUS INVESTMENT REVENUE	(522,024)	(35,716)	(59,545)	(426,763)
	456.910	UTILITY SUBS LABOR MARKUP	—			—
	456.915	UTIL.RLTD.ERNGS-SO.STS-REALTY	(100,000)	(6,842)	(11,407)	(81,752)
	456.920	INTEGRATED LIGHTING SYS REV	—			—
	456.940	LAND SERVICES - MISC FEES	(91,400)	(6,253)	(10,426)	(74,721)
	456.947	TRANSPORTATION SERVICES	—			—
	456.950	REV FROM SCRAP PAPER	(82,000)	(5,610)	(9,353)	(67,036)
	456.952	TARIFF SHEET REVENUE	(52,500)	(3,592)	(5,988)	(42,920)
	456.957	CTAC REVENUES- O&M	—			—
	456.958	AGTAC REVENUES- O&M	—			—
	456.981	CLEAN AIR TECHNOLOGIES	—			—
	456.982	SRVS/ENERLINK COMMERCIALZ FEES	—			—
	456.990	ACTION LINE - O&M	—			—
3.	456 Accounts	Revenues received for miscellaneous reasons.	(7,623,518)	(362,733)	(1,144,849)	(6,115,936)
4.	Total		(16,671,389)	(5,548,616)	(1,768,353)	(9,354,420)

TOTAL COMPANY O&M EXPENSE

Southern California Edison
Test Year 2021 General Rate Case
Operation And Maintenance Expenses
Nominal (\$000)
Category: Total O&M Expenses

Line	Description	Recorded/Adj.		Estimated (in Constant 2018\$)			
		2018	2019	2020	2021	2022	2023
1.	Production						
2.	Steam	9,220	7,356	7,351	8,325	8,325	8,325
3.	Nuclear	77,639	78,192	76,114	75,123	75,123	75,123
4.	Hydro	47,333	42,064	44,302	45,189	45,189	45,189
5.	Other	78,962	92,628	80,531	83,320	83,320	83,320
6.	Total Production	213,154	220,240	208,297	211,958	211,958	211,958
7.	Transmission	194,691	220,960	188,128	184,954	184,954	184,954
8.	Distribution	589,094	884,532	882,841	722,307	722,307	722,307
9.	Customer Accounts	131,852	136,123	139,132	141,353	141,353	141,353
10.	Interest Offset on Customer Deposits	—	—	—	—	—	—
11.	Uncollectibles (Account 904)	10,968	15,680	17,044	16,676	17,782	18,843
12.	Customer Service and Informational and Sales	49,177	58,699	68,122	83,712	83,712	83,712
13.	Administrative and General	896,291	1,160,760	1,324,922	1,339,697	1,335,921	1,332,353
14.	Franchise Requirements (Account 927)	53,631	67,954	73,861	80,857	86,220	91,365
15.	Total O&M	2,138,858	2,764,948	2,902,346	2,781,514	2,784,207	2,786,844
16.	Escalation	—	58,482	112,853	162,584	216,650	272,300
17.	Total O&M (Including Escalation)	2,138,858	2,823,429	3,015,199	2,944,097	3,000,857	3,059,145
18.	Less: Franchise Fees and Uncollectibles (FF&U)	(64,599)	(83,634)	(90,904)	(97,533)	(104,003)	(110,208)
19.	Total O&M (Excluding FF&U)	2,074,259	2,739,795	2,924,295	2,846,564	2,896,854	2,948,937
20.	Labor, Non-labor, and Other Expense Detail (Constant 2018\$):						
21.	Labor	868,084	999,166	987,356	986,327	986,327	986,327
22.	Non-Labor	931,371	1,231,325	1,215,234	1,110,264	1,110,267	1,110,270
23.	Other	339,403	534,457	699,757	684,923	687,613	690,248
24.	Total O&M	2,138,858	2,764,948	2,902,346	2,781,514	2,784,207	2,786,844
25.	Escalation:						
26.	Labor	—	30,361	65,962	100,545	133,867	166,494
27.	Non-Labor	—	27,634	45,915	60,504	80,722	103,211
28.	Other	—	486	977	1,535	2,061	2,596
29.	Total Escalation	—	58,482	112,853	162,584	216,650	272,300
30.	Total O&M (Including Escalation)	2,138,858	2,823,429	3,015,199	2,944,097	3,000,857	3,059,145
31.	Less : Franchise Fees and Uncollectibles (FF&U)	(64,599)	(83,634)	(90,904)	(97,533)	(104,003)	(110,208)
32.	Total O&M (Excluding FF&U)	2,074,259	2,739,795	2,924,295	2,846,564	2,896,854	2,948,937

TOTAL GENERATION EXPENSE

Southern California Edison
Test Year 2021 General Rate Case
Operation & Maintenance Expenses
(Nominal \$000)
Category: Total Generation Expenses

Line	Account	Description	Recorded/Adj.	Estimated (in Constant 2018\$)				
			2018	2019	2020	2021	2022	2023
1.		Steam:						
2.	500	Operation Supervision and Engineering	7,110	7,056	7,042	8,025	8,025	8,025
3.	501	Fuel	-	-	-	-	-	-
4.	502	Steam Expenses	-	-	-	-	-	-
5.	505	Electric Expenses	-	-	-	-	-	-
6.	506	Miscellaneous Steam Power Expenses	2,023	300	309	300	300	300
7.	507	Rents	-	-	-	-	-	-
8.	509	Allowances	-	-	-	-	-	-
9.	510	Maintenance Supervision and Engineering	88	-	-	-	-	-
10.	511	Maintenance of Structures	-	-	-	-	-	-
11.	512	Maintenance of Boiler Plant	-	-	-	-	-	-
12.	513	Maintenance of Electric Plant	-	-	-	-	-	-
13.	514	Maintenance of Miscellaneous Steam Plant	-	-	-	-	-	-
14.		Total Steam	9,220	7,356	7,351	8,325	8,325	8,325
15.		Nuclear:						
16.	517	Operation Supervision and Engineering	16,762	16,606	16,212	16,741	16,741	16,741
17.	518	Nuclear Fuel Expense	-	-	-	-	-	-
18.	519	Coolants and Water	7,468	7,576	7,369	7,183	7,183	7,183
19.	520	Steam Expenses	4,700	5,158	5,018	4,891	4,891	4,891
20.	523	Electric Expenses	5,407	6,261	6,090	5,936	5,936	5,936
21.	524	Miscellaneous Nuclear Power Expenses	20,602	22,364	21,750	21,196	21,196	21,196
22.	525	Rents	-	-	-	-	-	-
23.	528	Maintenance Supervision and Engineering	2,932	3,223	3,135	3,055	3,055	3,055
24.	529	Maintenance of Structures	1,188	1,025	997	972	972	972
25.	530	Maintenance of Reactor Plant Equipment	9,220	11,089	10,786	10,513	10,513	10,513
26.	531	Maintenance of Electric Plant	7,133	3,785	3,682	3,589	3,589	3,589
27.	532	Maintenance of Miscellaneous Nuclear Plant	2,226	1,104	1,074	1,047	1,047	1,047
28.		Total Nuclear	77,639	78,192	76,114	75,123	75,123	75,123
29.		Hydro:						
30.	535	Operation Supervision and Engineering	4,313	167	162	158	158	158
31.	536	Water for Power	5,225	4,901	4,901	5,071	5,071	5,071
32.	537	Hydraulic Expenses	2,286	769	769	769	769	769
33.	538	Electric Expenses	1,771	-	-	-	-	-
34.	539	Miscellaneous Hydraulic Power Generation Expenses	17,278	23,897	25,580	26,145	26,145	26,145
35.	540	Rents	1,169	-	-	-	-	-
36.	541	Maintenance Supervision and Engineering	5,097	-	-	-	-	-
37.	542	Maintenance of Structures	752	-	-	-	-	-
38.	543	Maintenance of Reservoirs, Dams and Waterways	3,086	266	268	269	269	269
39.	544	Maintenance of Electric Plant	4,609	-	-	-	-	-
40.	545	Maintenance of Miscellaneous Hydraulic Plant	1,747	12,063	12,621	12,778	12,778	12,778
41.		Total Hydro	47,333	42,064	44,302	45,189	45,189	45,189
42.		Other:						
43.	546	Operation Supervision and Engineering	4,353	273	266	255	255	255
44.	547	Fuel	-	-	-	-	-	-
45.	548	Generation Expenses	3,768	-	-	-	-	-
46.	549	Miscellaneous Other Power Generation Expenses	10,950	31,768	18,883	19,778	19,778	19,778
47.	550	Rents	2,671	4,380	4,108	4,138	4,138	4,138
48.	551	Maintenance Supervision and Engineering	2,626	-	-	-	-	-
49.	552	Maintenance of Structures	1,020	-	-	-	-	-
50.	553	Maintenance of Generating and Electric Plant	18,268	1,826	1,190	1,251	1,251	1,251
51.	554	Maintenance of Miscellaneous Other Power Generation Plant	2,932	21,828	23,654	25,492	25,492	25,492
52.	555	Purchased Power	-	-	-	-	-	-
53.	556	System Control and Load Dispatching	1,136	1,120	1,089	1,062	1,062	1,062
54.	557	Other Expenses	31,239	31,433	31,342	31,345	31,345	31,345
55.		Total Other	78,962	92,628	80,531	83,320	83,320	83,320
56.		Total Production	213,154	220,240	208,297	211,958	211,958	211,958
57.		Escalation	-	6,133	9,994	14,622	19,311	24,270
58.		Total O&M (Including Escalation)	213,154	226,373	218,292	226,580	231,269	236,229
59.		Labor, Non-labor, and Other Expense Detail (Constant 2018\$):						
60.		Labor	75,776	75,202	75,055	76,285	76,285	76,285
61.		Non-Labor	135,220	140,916	129,121	132,374	132,374	132,374
62.		Other	2,159	4,121	4,121	3,299	3,299	3,299
63.		Total O&M	213,154	220,240	208,297	211,958	211,958	211,958
64.		Escalation:						
65.		Labor	-	2,285	5,014	7,776	10,354	12,877
66.		Non-Labor	-	3,738	4,823	6,675	8,736	11,113
67.		Other	-	110	157	170	222	281
68.		Total Escalation	-	6,133	9,994	14,622	19,311	24,270
69.		Total O&M (Including Escalation)	213,154	226,373	218,292	226,580	231,269	236,229

Southern California Edison
Test Year 2021 General Rate Case
Operation & Maintenance Expenses
(Nominal \$000)
Category: Total Generation - Operating Unit - STIP

Line	Account	Description	Recorded/Adj.	Estimated (in Constant 2018\$)				
			2018	2019	2020	2021	2022	2023
1.		Steam:						
2.	500	Operation Supervision and Engineering	7,110	7,056	7,042	8,025	8,025	8,025
3.	501	Fuel	-	-	-	-	-	-
4.	502	Steam Expenses	-	-	-	-	-	-
5.	505	Electric Expenses	-	-	-	-	-	-
6.	506	Miscellaneous Steam Power Expenses	-	-	-	-	-	-
7.	507	Rents	-	-	-	-	-	-
8.	509	Allowances	-	-	-	-	-	-
9.	510	Maintenance Supervision and Engineering	-	-	-	-	-	-
10.	511	Maintenance of Structures	-	-	-	-	-	-
11.	512	Maintenance of Boiler Plant	-	-	-	-	-	-
12.	513	Maintenance of Electric Plant	-	-	-	-	-	-
13.	514	Maintenance of Miscellaneous Steam Plant	-	-	-	-	-	-
14.		Total Steam	7,110	7,056	7,042	8,025	8,025	8,025
15.		Nuclear:						
16.	517	Operation Supervision and Engineering	-	-	-	-	-	-
17.	518	Nuclear Fuel Expense	-	-	-	-	-	-
18.	519	Coolants and Water	-	-	-	-	-	-
19.	520	Steam Expenses	-	-	-	-	-	-
20.	523	Electric Expenses	-	-	-	-	-	-
21.	524	Miscellaneous Nuclear Power Expenses	-	-	-	-	-	-
22.	525	Rents	-	-	-	-	-	-
23.	528	Maintenance Supervision and Engineering	-	-	-	-	-	-
24.	529	Maintenance of Structures	-	-	-	-	-	-
25.	530	Maintenance of Reactor Plant Equipment	-	-	-	-	-	-
26.	531	Maintenance of Electric Plant	-	-	-	-	-	-
27.	532	Maintenance of Miscellaneous Nuclear Plant	-	-	-	-	-	-
28.		Total Nuclear	-	-	-	-	-	-
29.		Hydro:						
30.	535	Operation Supervision and Engineering	-	-	-	-	-	-
31.	536	Water for Power	-	-	-	-	-	-
32.	537	Hydraulic Expenses	-	-	-	-	-	-
33.	538	Electric Expenses	-	-	-	-	-	-
34.	539	Miscellaneous Hydraulic Power Generation Expenses	-	-	-	-	-	-
35.	540	Rents	-	-	-	-	-	-
36.	541	Maintenance Supervision and Engineering	-	-	-	-	-	-
37.	542	Maintenance of Structures	-	-	-	-	-	-
38.	543	Maintenance of Reservoirs, Dams and Waterways	-	-	-	-	-	-
39.	544	Maintenance of Electric Plant	-	-	-	-	-	-
40.	545	Maintenance of Miscellaneous Hydraulic Plant	-	-	-	-	-	-
41.		Total Hydro	-	-	-	-	-	-
42.		Other:						
43.	546	Operation Supervision and Engineering	-	-	-	-	-	-
44.	547	Fuel	-	-	-	-	-	-
45.	548	Generation Expenses	-	-	-	-	-	-
46.	549	Miscellaneous Other Power Generation Expenses	-	-	-	-	-	-
47.	550	Rents	-	-	-	-	-	-
48.	551	Maintenance Supervision and Engineering	-	-	-	-	-	-
49.	552	Maintenance of Structures	-	-	-	-	-	-
50.	553	Maintenance of Generating and Electric Plant	-	-	-	-	-	-
51.	554	Maintenance of Miscellaneous Other Power Generation Plant	-	-	-	-	-	-
52.	555	Purchased Power	-	-	-	-	-	-
53.	556	System Control and Load Dispatching	-	-	-	-	-	-
54.	557	Other Expenses	-	-	-	-	-	-
55.		Total Other	-	-	-	-	-	-
56.		Total Production	7,110	7,056	7,042	8,025	8,025	8,025
57.		Escalation	-	214	470	818	1,089	1,355
58.		Total O&M (Including Escalation)	7,110	7,270	7,512	8,843	9,114	9,379
59.		Labor, Non-labor, and Other Expense Detail (Constant 2018\$):						
60.		Labor	7,110	7,056	7,042	8,025	8,025	8,025
61.		Non-Labor	-	-	-	-	-	-
62.		Other	-	-	-	-	-	-
63.		Total O&M	7,110	7,056	7,042	8,025	8,025	8,025
64.		Escalation:						
65.		Labor	-	214	470	818	1,089	1,355
66.		Non-Labor	-	-	-	-	-	-
67.		Other	-	-	-	-	-	-
68.		Total Escalation	-	214	470	818	1,089	1,355
69.		Total O&M (Including Escalation)	7,110	7,270	7,512	8,843	9,114	9,379

TRANSMISSION AND DISTRIBUTION O&M EXPENSE

Southern California Edison
Test Year 2021 General Rate Case
Operation & Maintenance Expenses
(Nominal \$000)
Category: Transmission Expenses

Line	Account	Description	Recorded/Adj.	Estimated (in Constant 2018\$)				
			2018	2019	2020	2021	2022	2023
1.		Operation:						
2.	560	Operation Supervision and Engineering	7,832	7,360	7,361	7,350	7,350	7,350
3.	561	Load Dispatching	15,051	16,341	16,331	16,343	16,343	16,343
4.	562	Station Expenses	22,200	20,842	20,851	20,857	20,857	20,857
5.	563	Overhead Line Expenses	5,388	24,378	10,395	13,249	13,249	13,249
6.	564	Underground Line Expenses	1,930	1,943	1,943	1,943	1,943	1,943
7.	565	Transmission of Electricity by Others	273	615	615	615	615	615
8.	566	Miscellaneous Transmission Expenses	46,074	51,831	50,141	41,053	41,053	41,053
9.	567	Rents	16,460	17,024	17,261	17,748	17,748	17,748
10.		Total Operation	115,209	140,333	124,898	119,159	119,159	119,159
11.		Maintenance:						
12.	568	Maintenance Supervision and Engineering	2,820	2,759	2,760	2,761	2,761	2,761
13.	569	Maintenance of Structures	40,738	2,375	3,037	2,375	2,375	2,375
14.	570	Maintenance of Station Equipment	5,804	8,519	12,291	11,001	11,001	11,001
15.	571	Maintenance of Overhead Lines	29,048	64,511	40,492	44,395	44,395	44,395
16.	572	Maintenance of Underground Lines	323	435	2,621	3,234	3,234	3,234
17.	573	Maintenance of Miscellaneous Transmission Plant	748	2,029	2,029	2,029	2,029	2,029
18.		Total Maintenance	79,482	80,627	63,230	65,795	65,795	65,795
19.		Total O&M	194,691	220,960	188,128	184,954	184,954	184,954
20.		Escalation	—	4,797	7,732	11,820	15,697	19,694
21.		Total O&M (Including Escalation)	194,691	225,757	195,860	196,774	200,651	204,647
22.		Labor, Non-labor, and Other Expense Detail (Constant 2018\$):						
23.		Labor	75,344	89,208	78,501	88,189	88,189	88,189
24.		Non-Labor	103,325	115,002	92,639	79,290	79,290	79,290
25.		Other	16,022	16,751	16,988	17,475	17,475	17,475
26.		Total O&M	194,691	220,960	188,128	184,954	184,954	184,954
27.		Escalation:						
28.		Labor	—	2,711	5,244	8,990	11,969	14,887
29.		Non-Labor	—	2,086	2,488	2,830	3,728	4,807
30.		Other	—	—	—	—	—	—
31.		Total Escalation	—	4,797	7,732	11,820	15,697	19,694
32.		Total O&M (Including Escalation)	194,691	225,757	195,860	196,774	200,651	204,647

Southern California Edison
Test Year 2021 General Rate Case
Operation & Maintenance Expenses
(Nominal \$000)
Category: Distribution Expenses

Line	Account	Description	Recorded/Adj.	Estimated (in Constant 2018\$)				
			2018	2019	2020	2021	2022	2023
1.		Operation:						
2.	580	Operation Supervision and Engineering	11,590	15,758	15,525	15,242	15,242	15,242
3.	582	Station Expenses	34,617	33,743	33,582	36,562	36,562	36,562
4.	583	Overhead Line Expenses	70,752	143,987	97,292	73,475	73,475	73,475
5.	584	Underground Line Expenses	7,885	6,478	6,902	6,960	6,960	6,960
6.	585	Street Lighting and Signal System Expenses	64	64	64	64	64	64
7.	586	Meter Expenses	21,206	22,453	22,453	22,454	22,454	22,454
8.	587	Customer Installations Expenses	17,983	19,860	19,890	19,888	19,888	19,888
9.	588	Miscellaneous Distribution Expenses	146,193	180,862	169,371	156,449	156,449	156,449
10.	589	Rents	2,683	2,672	2,734	2,863	2,863	2,863
11.		Total Operation	312,973	425,877	367,815	333,956	333,956	333,956
12.		Maintenance:						
13.	590	Maintenance Supervision and Engineering	2,560	2,559	2,559	2,558	2,558	2,558
14.	591	Maintenance of Structures	59	58	58	58	58	58
15.	592	Maintenance of Station Equipment	4,101	6,124	10,892	10,497	10,497	10,497
16.	593	Maintenance of Overhead Lines	173,173	359,690	414,169	274,330	274,330	274,330
17.	594	Maintenance of Underground Lines	59,678	60,785	58,245	70,939	70,939	70,939
18.	595	Maintenance of Line Transformers	3,726	4,987	4,718	4,704	4,704	4,704
19.	596	Maintenance of Street Lighting and Signal Systems	5,483	5,483	5,483	5,483	5,483	5,483
20.	597	Maintenance of Meters	5,162	2,600	2,600	2,600	2,600	2,600
21.	598	Maintenance of Miscellaneous Distribution Plant	22,179	16,369	16,303	17,181	17,181	17,181
22.		Total Maintenance	276,121	458,655	515,026	388,351	388,351	388,351
23.		Total O&M	589,094	884,532	882,841	722,307	722,307	722,307
24.		Escalation	-	22,765	42,307	51,183	67,853	85,932
25.		Total O&M (Including Escalation)	589,094	907,297	925,147	773,490	790,160	808,239
26.		Labor, Non-labor, and Other Expense Detail (Constant 2018\$):						
27.		Labor	304,229	373,489	361,107	317,070	317,070	317,070
28.		Non-Labor	282,182	508,371	518,999	402,374	402,374	402,374
29.		Other	2,683	2,672	2,734	2,863	2,863	2,863
30.		Total O&M	589,094	884,532	882,841	722,307	722,307	722,307
31.		Escalation:						
32.		Labor	—	11,349	24,124	32,322	43,034	53,522
33.		Non-Labor	—	11,416	18,182	18,861	24,819	32,410
34.		Other	—	—	—	—	—	—
35.		Total Escalation	—	22,765	42,307	51,183	67,853	85,932
36.		Total O&M (Including Escalation)	589,094	907,297	925,147	773,490	790,160	808,239

Southern California Edison
Test Year 2021 General Rate Case
Operation & Maintenance Expenses
(Nominal \$000)
Category: Transmission Expenses - T&D Operating Unit - STIP

Line	Account	Description	Recorded/Adj.		Estimated (in Constant 2018\$)			
			2018	2019	2020	2021	2022	2023
1.		Operation:						
2.	560	Operation Supervision and Engineering	-	-	-	-	-	-
3.	561	Load Dispatching	-	-	-	-	-	-
4.	562	Station Expenses	-	-	-	-	-	-
5.	563	Overhead Line Expenses	-	-	-	-	-	-
6.	564	Underground Line Expenses	-	-	-	-	-	-
7.	565	Transmission of Electricity by Others	-	-	-	-	-	-
8.	566	Miscellaneous Transmission Expenses	-	-	-	-	-	-
9.	567	Rents	-	-	-	-	-	-
10.		Total Operation	-	-	-	-	-	-
11.		Maintenance:						
12.	568	Maintenance Supervision and Engineering	-	-	-	-	-	-
13.	569	Maintenance of Structures	-	-	-	-	-	-
14.	570	Maintenance of Station Equipment	-	-	-	-	-	-
15.	571	Maintenance of Overhead Lines	-	-	-	-	-	-
16.	572	Maintenance of Underground Lines	-	-	-	-	-	-
17.	573	Maintenance of Miscellaneous Transmission Plant	-	-	-	-	-	-
18.		Total Maintenance	-	-	-	-	-	-
19.		Total O&M	-	-	-	-	-	-
20.		Escalation	-	-	-	-	-	-
21.		Total O&M (Including Escalation)	-	-	-	-	-	-
22.		Labor, Non-labor, and Other Expense Detail (Constant 2018\$):						
23.		Labor	-	-	-	-	-	-
24.		Non-Labor	-	-	-	-	-	-
25.		Other	-	-	-	-	-	-
26.		Total O&M	-	-	-	-	-	-
27.		Escalation:						
28.		Labor	-	-	-	-	-	-
29.		Non-Labor	-	-	-	-	-	-
30.		Other	-	-	-	-	-	-
31.		Total Escalation	-	-	-	-	-	-
32.		Total O&M (Including Escalation)	-	-	-	-	-	-

Southern California Edison
Test Year 2018 General Rate Case
Operation And Maintenance Expenses
(Nominal \$000)
Category: Distribution Expenses - T&D Operating Unit

Line	Account	Description	Recorded/Adj.		Estimated (in Constant 2018\$)			
			2018	2019	2020	2021	2022	2023
1.		Operation:						
2.	580	Operation Supervision and Engineering	-	-	-	-	-	-
3.	582	Station Expenses	-	-	-	-	-	-
4.	583	Overhead Line Expenses	-	-	-	-	-	-
5.	584	Underground Line Expenses	-	-	-	-	-	-
6.	585	Street Lighting and Signal System Expenses	-	-	-	-	-	-
7.	586	Meter Expenses	-	-	-	-	-	-
8.	587	Customer Installations Expenses	-	-	-	-	-	-
9.	588	Miscellaneous Distribution Expenses	69,319	84,919	81,779	81,397	81,397	81,397
10.	589	Rents	-	-	-	-	-	-
11.		Total Operation	69,319	84,919	81,779	81,397	81,397	81,397
12.		Maintenance:						
13.	590	Maintenance Supervision and Engineering	-	-	-	-	-	-
14.	591	Maintenance of Structures	-	-	-	-	-	-
15.	592	Maintenance of Station Equipment	-	-	-	-	-	-
16.	593	Maintenance of Overhead Lines	-	-	-	-	-	-
17.	594	Maintenance of Underground Lines	-	-	-	-	-	-
18.	595	Maintenance of Line Transformers	-	-	-	-	-	-
19.	596	Maintenance of Street Lighting and Signal Systems	-	-	-	-	-	-
20.	597	Maintenance of Meters	-	-	-	-	-	-
21.	598	Maintenance of Miscellaneous Distribution Plant	-	-	-	-	-	-
22.		Total Maintenance	-	-	-	-	-	-
23.		Total O&M	69,319	84,919	81,779	81,397	81,397	81,397
24.		Escalation	-	2,580	5,463	8,297	11,047	13,740
25.		Total O&M (Including Escalation)	69,319	87,500	87,242	89,695	92,444	95,137
26.		Labor, Non-labor, and Other Expense Detail (Constant 2018\$):						
27.		Labor	69,319	84,919	81,779	81,397	81,397	81,397
28.		Non-Labor	-	-	-	-	-	-
29.		Other	-	-	-	-	-	-
30.		Total O&M	69,319	84,919	81,779	81,397	81,397	81,397
31.		Escalation:						
32.		Labor	-	2,580	5,463	8,297	11,047	13,740
33.		Non-Labor	-	-	-	-	-	-
34.		Other	-	-	-	-	-	-
35.		Total Escalation	-	2,580	5,463	8,297	11,047	13,740
36.		Total O&M (Including Escalation)	69,319	87,500	87,242	89,695	92,444	95,137

CUSTOMER ACCOUNTS AND CUSTOMER SERVICE & INFORMATION / SALES O&M
EXPENSE

Southern California Edison
Test Year 2021 General Rate Case
Operation & Maintenance Expenses
(Nominal \$000)
Category: Customer Accounts Expenses

Line	Account	Description	Recorded/Adj.		Estimated (in Constant 2018\$)			
			2018	2019	2020	2021	2022	2023
1.	901	Supervision	15,833	13,227	13,901	13,488	13,488	13,488
2.	902	Meter Reading Expenses	3,227	3,135	3,135	3,135	3,135	3,135
3.	903	Customer Records and Collection Expenses	98,032	103,733	105,512	105,190	105,190	105,190
4.	904	Uncollectible Accounts	10,968	15,680	17,044	16,676	17,782	18,843
5.	905	Miscellaneous Customer Accounts Expenses	14,759	16,027	16,585	19,539	19,539	19,539
6.		Interest Offset on Customer Deposits	—	—	—	—	—	—
7.		Total O&M	142,819	151,803	156,176	158,029	159,135	160,196
8.		Escalation	—	3,300	7,297	11,663	15,640	19,590
9.		Total O&M (Including Escalation)	142,819	155,103	163,473	169,692	174,775	179,786
10.		Less: Account 904 (Uncollectible Accounts)	(10,968)	(15,680)	(17,044)	(16,676)	(17,782)	(18,843)
11.		Total O&M (Less Account 904)	131,852	139,423	146,430	153,016	156,993	160,943
12.		Labor, Non-labor, and Other Expense Detail (Constant 2018\$):						
13.		Labor	84,908	91,432	92,236	97,830	97,830	97,830
14.		Non-Labor	30,801	28,945	31,344	30,115	30,115	30,115
15.		Other	27,110	31,427	32,596	30,083	31,189	32,250
16.		Total O&M	142,819	151,803	156,176	158,029	159,135	160,196
17.		Escalation:						
18.		Labor	—	2,778	6,162	9,973	13,278	16,514
19.		Non-Labor	—	522	1,136	1,691	2,363	3,076
20.		Other	—	—	—	—	—	—
21.		Total Escalation	—	3,300	7,297	11,663	15,640	19,590
22.		Total O&M (Including Escalation)	142,819	155,103	163,473	169,692	174,775	179,786
23.		Less: Account 904 (Uncollectible Accounts)	(10,968)	(15,680)	(17,044)	(16,676)	(17,782)	(18,843)
24.		Total O&M (Less Account 904)	131,852	139,423	146,430	153,016	156,993	160,943

Southern California Edison
Test Year 2021 General Rate Case
Operation & Maintenance Expenses
(Nominal \$000)
Category: Customer Service & Information and Sales Expenses

Line	Account	Description	Recorded/Adj.		Estimated (in Constant 2018\$)			
			2018	2019	2020	2021	2022	2023
1.	907	Supervision	2,436	2,146	2,154	2,155	2,155	2,155
2.	908	Customer Assistance Expenses	28,854	38,183	43,550	54,534	54,534	54,534
3.	909	Informational and Instructional Advertising Expenses	13,817	11,486	15,323	19,686	19,686	19,686
4.	910	Miscellaneous Customer Service and Informational Expenses	—	—	—	—	—	—
5.	912	Demonstrating and Selling Expenses	4,144	6,884	7,095	7,338	7,338	7,338
6.	913	Advertising Expenses	—	—	—	—	—	—
7.		Total Customer Service & Information	49,251	58,699	68,122	83,712	83,712	83,712
8.	916	Miscellaneous Sales Expenses	(74)	—	—	—	—	—
9.		Total Sales Expense	(74)	—	—	—	—	—
10.		Total O&M	49,177	58,699	68,122	83,712	83,712	83,712
11.		Escalation	—	1,502	3,463	6,433	8,647	10,904
12.		Total O&M (Including Escalation)	49,177	60,201	71,585	90,145	92,359	94,616
13.		Labor, Non-labor, and Other Expense Detail (Constant 2018\$):						
14.		Labor	32,113	34,493	37,988	46,272	46,272	46,272
15.		Non-Labor	17,061	24,206	30,135	37,441	37,441	37,441
16.		Other	3	—	—	—	—	—
17.		Total O&M	49,177	58,699	68,122	83,712	83,712	83,712
18.		Escalation:						
19.		Labor	—	1,048	2,538	4,717	6,280	7,811
20.		Non-Labor	—	454	925	1,716	2,367	3,093
21.		Other	—	—	—	—	—	—
22.		Total Escalation	—	1,502	3,463	6,433	8,647	10,904
23.		Total O&M (Including Escalation)	49,177	60,201	71,585	90,145	92,359	94,616

Southern California Edison
Test Year 2021 General Rate Case
Operation & Maintenance Expenses
(Nominal \$000)
Category: Customer Accounts Expenses - STIP

Line	Account	Description	Recorded/Adj.		Estimated (in Constant 2018\$)			
			2018	2019	2020	2021	2022	2023
1.	901	Supervision	-	-	-	-	-	-
2.	902	Meter Reading Expenses	-	-	-	-	-	-
3.	903	Customer Records and Collection Expenses	-	-	-	-	-	-
4.	904	Uncollectible Accounts	-	-	-	-	-	-
5.	905	Miscellaneous Customer Accounts Expenses	15,019	16,022	16,578	19,532	19,532	19,532
6.		Interest Offset on Customer Deposits	-	-	-	-	-	-
7.		Total O&M	15,019	16,022	16,578	19,532	19,532	19,532
8.		Escalation	-	487	1,107	1,991	2,651	3,297
9.		Total O&M (Including Escalation)	15,019	16,509	17,685	21,524	22,183	22,830
10.		Less: Account 904 (Uncollectible Accounts)	-	-	-	-	-	-
11.		Total O&M (Less Account 904)	15,019	16,509	17,685	21,524	22,183	22,830
12.		Labor, Non-labor, and Other Expense Detail (Constant 2018\$):						
13.		Labor	15,019	16,022	16,578	19,532	19,532	19,532
14.		Non-Labor	-	-	-	-	-	-
15.		Other	-	-	-	-	-	-
16.		Total O&M	15,019	16,022	16,578	19,532	19,532	19,532
17.		Escalation:						
18.		Labor	-	487	1,107	1,991	2,651	3,297
19.		Non-Labor	-	-	-	-	-	-
20.		Other	-	-	-	-	-	-
21.		Total Escalation	-	487	1,107	1,991	2,651	3,297
22.		Total O&M (Including Escalation)	15,019	16,509	17,685	21,524	22,183	22,830
23.		Less: Account 904 (Uncollectible Accounts)	-	-	-	-	-	-
24.		Total O&M (Less Account 904)	15,019	16,509	17,685	21,524	22,183	22,830

Southern California Edison
Test Year 2021 General Rate Case
Operation & Maintenance Expenses
(Nominal \$000)
Category: Customer Service & Information and Sales Expenses - STIP

Line	Account	Description	Recorded/Adj.		Estimated (in Constant 2018\$)			
			2018	2019	2020	2021	2022	2023
1.	907	Supervision	-	-	-	-	-	-
2.	908	Customer Assistance Expenses	-	-	-	-	-	-
3.	909	Informational and Instructional Advertising Expenses	-	-	-	-	-	-
4.	910	Miscellaneous Customer Service and Informational Expenses	-	-	-	-	-	-
5.	912	Demonstrating and Selling Expenses	-	-	-	-	-	-
6.	913	Advertising Expenses	-	-	-	-	-	-
7.		Total Customer Service & Information	-	-	-	-	-	-
8.	916	Miscellaneous Sales Expenses	-	-	-	-	-	-
9.		Total Sales Expense	-	-	-	-	-	-
10.		Total O&M	-	-	-	-	-	-
11.		Escalation	-	-	-	-	-	-
12.		Total O&M (Including Escalation)	-	-	-	-	-	-
13.		Labor, Non-labor, and Other Expense Detail (Constant 2018\$):						
14.		Labor	-	-	-	-	-	-
15.		Non-Labor	-	-	-	-	-	-
16.		Other	-	-	-	-	-	-
17.		Total O&M	-	-	-	-	-	-
18.		Escalation:						
19.		Labor	-	-	-	-	-	-
20.		Non-Labor	-	-	-	-	-	-
21.		Other	-	-	-	-	-	-
22.		Total Escalation	-	-	-	-	-	-
23.		Total O&M (Including Escalation)	-	-	-	-	-	-

ADMINISTRATIVE & GENERAL EXPENSE

Southern California Edison
Test Year 2021 General Rate Case
Operation & Maintenance Expenses
(Nominal \$000)
Category: Administrative & General Expenses

Line	Account	Description	Recorded/Adj.	Estimated (in Constant 2018\$)				
			2018	2019	2020	2021	2022	2023
1.		Operation:						
2.	920	Administrative and General Salaries	280,600	327,537	333,305	351,282	351,282	351,282
3.	921	Office Supplies and Expenses	242,389	276,591	285,270	311,701	311,701	311,701
4.	922	Administrative Expenses Transferred - Credit	(153,376)	(166,004)	(173,707)	(273,881)	(281,454)	(288,917)
5.	923	Outside Services Employed	49,153	63,111	50,449	51,623	51,623	51,623
6.	924	Property Insurance	16,155	16,662	18,600	20,513	20,513	20,513
7.	925	Injuries and Damages	310,469	479,185	639,684	692,020	692,020	692,020
8.	926	Employee Pensions and Benefits	108,913	118,032	124,279	140,397	144,191	148,083
9.	927	Franchise Requirements	53,631	67,954	73,861	80,857	86,220	91,365
10.	928	Regulatory Commission Expenses	42	1,176	1,101	42	42	42
11.	930	General Advertising Expenses-Miscellaneous General Expenses	15,462	15,554	15,365	13,798	13,798	13,798
12.	931	Rents	8,411	11,669	11,208	13,190	13,190	13,190
13.		Reduction for A&G Credit for Catalina Utilities	(757)	(980)	(1,119)	(1,131)	(1,128)	(1,125)
14.		Total Operation	931,091	1,210,487	1,378,297	1,400,410	1,401,997	1,403,574
15.		Maintenance:						
16.	935	Maintenance of General Plant	18,831	18,227	20,485	20,144	20,144	20,144
17.		Total Maintenance	18,831	18,227	20,485	20,144	20,144	20,144
18.		Total O&M	949,922	1,228,714	1,398,782	1,420,554	1,422,141	1,423,718
19.		Escalation	—	19,984	42,059	66,862	89,502	111,910
20.		Total O&M (Including Escalation)	949,922	1,248,697	1,440,842	1,487,417	1,511,643	1,535,628
21.		Less: Account 927 (Franchise Requirements)	(53,631)	(67,954)	(73,861)	(80,857)	(86,220)	(91,365)
22.		Total O&M (Less Account 927)	896,291	1,180,744	1,366,981	1,406,559	1,425,422	1,444,263
23.		Labor, Non-labor, and Other Expense Detail (Constant 2018\$):						
24.		Labor	295,713	335,342	342,470	360,680	360,680	360,680
25.		Non-Labor	362,783	413,885	412,995	428,671	428,674	428,677
26.		Other	291,427	479,487	643,317	631,203	632,787	634,361
27.		Total O&M	949,922	1,228,714	1,398,782	1,420,554	1,422,141	1,423,718
28.		Escalation:						
29.		Labor	—	10,190	22,879	36,767	48,953	60,883
30.		Non-Labor	—	9,418	18,360	28,730	38,710	48,712
31.		Other	—	376	820	1,365	1,840	2,315
32.		Total Escalation	—	19,984	42,059	66,862	89,502	111,910
33.		Total O&M (Including Escalation)	949,922	1,248,697	1,440,842	1,487,417	1,511,643	1,535,628
34.		Less: Account 927 (Franchise Requirements)	(53,631)	(67,954)	(73,861)	(80,857)	(86,220)	(91,365)
35.		Total O&M (Less Account 927)	896,291	1,180,744	1,366,981	1,406,559	1,425,422	1,444,263

Southern California Edison
Test Year 2021 General Rate Case
Operation & Maintenance Expenses
(Nominal \$000)
Category: Administrative & General Expenses - STIP

Line	Account	Description	Recorded/Adj.	Estimated (in Constant 2018\$)					
			2018	2019	2020	2021	2022	2023	
1.		Operation:							
2.	920	Administrative and General Salaries	45,579	60,115	62,620	69,284	69,284	69,284	
3.	921	Office Supplies and Expenses	-	-	-	-	-	-	
4.	922	Administrative Expenses Transferred - Credit	-	-	-	-	-	-	
5.	923	Outside Services Employed	-	-	-	-	-	-	
6.	924	Property Insurance	-	-	-	-	-	-	
7.	925	Injuries and Damages	-	-	-	-	-	-	
8.	926	Employee Pensions and Benefits	-	-	-	-	-	-	
9.	927	Franchise Requirements	-	-	-	-	-	-	
10.	928	Regulatory Commission Expenses	-	-	-	-	-	-	
11.	930	General Advertising Expenses-Miscellaneous General Expenses	-	-	-	-	-	-	
12.	931	Rents	-	-	-	-	-	-	
13.		Reduction for A&G Credit for Catalina Utilities	-	-	-	-	-	-	
14.		Total Operation	45,579	60,115	62,620	69,284	69,284	69,284	
15.		Maintenance:							
16.	935	Maintenance of General Plant	-	-	-	-	-	-	
17.		Total Maintenance	-	-	-	-	-	-	
18.		Total O&M	45,579	60,115	62,620	69,284	69,284	69,284	
19.		Escalation	-	1,827	4,183	7,063	9,403	11,695	
20.		Total O&M (Including Escalation)	45,579	61,942	66,804	76,347	78,687	80,979	
21.		Less: Account 927 (Franchise Requirements)	-	-	-	-	-	-	
22.		Total O&M (Less Account 927)	45,579	61,942	66,804	76,347	78,687	80,979	
23.		Labor, Non-labor, and Other Expense Detail (Constant 2018\$):							
24.		Labor	45,579	60,115	62,620	69,284	69,284	69,284	
25.		Non-Labor	-	-	-	-	-	-	
26.		Other	-	-	-	-	-	-	
27.		Total O&M	45,579	60,115	62,620	69,284	69,284	69,284	
28.		Escalation:							
29.		Labor	-	1,827	4,183	7,063	9,403	11,695	
30.		Non-Labor	-	-	-	-	-	-	
31.		Other	-	-	-	-	-	-	
32.		Total Escalation	-	1,827	4,183	7,063	9,403	11,695	
33.		Total O&M (Including Escalation)	45,579	61,942	66,804	76,347	78,687	80,979	
34.		Less: Account 927 (Franchise Requirements)	-	-	-	-	-	-	
35.		Total O&M (Less Account 927)	45,579	61,942	66,804	76,347	78,687	80,979	

REDUCTION FOR A&G FOR CATALINA GAS / WATER

Southern California Edison
Test Year 2021 General Rate Case
Operation & Maintenance Expenses
(Nominal \$000)
Category: Administrative & General Expenses - Catalina A&G Reduction

Line	Account	Description	Recorded/Adj.		Estimated (in Constant 2018\$)			
			2018	2019	2020	2021	2022	2023
1.		Operation:						
2.	920	Administrative and General Salaries	-	-	-	-	-	-
3.	921	Office Supplies and Expenses	-	-	-	-	-	-
4.	922	Administrative Expenses Transferred - Credit	-	-	-	-	-	-
5.	923	Outside Services Employed	-	-	-	-	-	-
6.	924	Property Insurance	-	-	-	-	-	-
7.	925	Injuries and Damages	-	-	-	-	-	-
8.	926	Employee Pensions and Benefits	-	-	-	-	-	-
9.	927	Franchise Requirements	-	-	-	-	-	-
10.	928	Regulatory Commission Expenses	-	-	-	-	-	-
11.	930	General Advertising Expenses-Miscellaneous General Expenses	-	-	-	-	-	-
12.	931	Rents	-	-	-	-	-	-
13.		Reduction for A&G Credit for Catalina Utilities	(757)	(980)	(1,119)	(1,131)	(1,128)	(1,125)
14.		Total Operation	(757)	(980)	(1,119)	(1,131)	(1,128)	(1,125)
15.		Maintenance:						
16.	935	Maintenance of General Plant	-	-	-	-	-	-
17.		Total Maintenance	-	-	-	-	-	-
18.		Total O&M	(757)	(980)	(1,119)	(1,131)	(1,128)	(1,125)
19.		Escalation	-	(22)	(50)	(76)	(102)	(128)
20.		Total O&M (Including Escalation)	(757)	(1,003)	(1,169)	(1,207)	(1,230)	(1,253)
21.		Less: Account 927 (Franchise Requirements)	-	-	-	-	-	-
22.		Total O&M (Less Account 927)	(757)	(1,003)	(1,169)	(1,207)	(1,230)	(1,253)
23.		Labor, Non-labor, and Other Expense Detail (Constant 2018\$):						
24.		Labor	-	-	-	-	-	-
25.		Non-Labor	(757)	(980)	(1,119)	(1,131)	(1,128)	(1,125)
26.		Other	-	-	-	-	-	-
27.		Total O&M	(757)	(980)	(1,119)	(1,131)	(1,128)	(1,125)
28.		Escalation:						
29.		Labor	-	-	-	-	-	-
30.		Non-Labor	-	(22)	(50)	(76)	(102)	(128)
31.		Other	-	-	-	-	-	-
32.		Total Escalation	-	(22)	(50)	(76)	(102)	(128)
33.		Total O&M (Including Escalation)	(757)	(1,003)	(1,169)	(1,207)	(1,230)	(1,253)
34.		Less: Account 927 (Franchise Requirements)	-	-	-	-	-	-
35.		Total O&M (Less Account 927)	(757)	(1,003)	(1,169)	(1,207)	(1,230)	(1,253)

Capitalized Administration & General														Workpaper Reference
Line	FERC	Item Description	Cost Type	2014 Rec/Adj	2015 Rec/Adj	2016 Rec/Adj	2017 Rec/Adj	2018 Rec/Adj	2019 Forecast	2020 Forecast	2021 Adj Forecast	2022 Forecast	2023 Forecast	Testimony Reference
1.	920921	Administrative and General Salaries	L	432,322	331,556	297,830	282,918	280,600	337,490	355,572	387,091	398,959	410,579	SCE-02, SCE-03, SCE-04, SCE-06 SCE-02, SCE-03, SCE-04, SCE-06
2.	920921	Office Supplies and Expenses	NL	179,739	214,599	226,408	254,011	239,582	282,885	297,952	332,591	339,848	347,120	
3.		Total Account 920/921 (Including STIP)		612,062	546,155	524,237	536,929	520,182	620,375	653,525	719,682	738,807	757,699	
4.		Incremental STIP Adjustments:												
5.	STIP	Short-Term Incentive Program - Generation	L											SCE-06, Vol. 3 Pt. 1 SCE-06, Vol. 3 Pt. 1 SCE-06, Vol. 3 Pt. 1 SCE-06, Vol. 3 Pt. 1
6.	STIP	Short-Term Incentive Program - Transmission & Distribution	L											
7.	STIP	Short-Term Incentive Program - Customer Service	L											
8.	STIP	Short-Term Incentive Program - A&G	L											
9.		Total STIP (Including Escalation)		(72,181)	(47,989)	(36,228)	(45,125)	(45,579)	(61,942)	(66,804)	(76,347)	(78,687)	(80,979)	
10.		Exclusions												
11.		Severance	A&G	(10,965)	(5,081)	(13,891)	(4,079)	(1,608)	(2,930)	(3,034)	(3,134)	(3,230)	(3,324)	
12.		Long-Term Incentives	A&G	(20,090)	(15,302)	(12,487)	(11,050)	(8,130)	(11,859)	(12,325)	(12,785)	(13,177)	(13,561)	
13.		Total Exclusions		(31,055)	(20,384)	(26,378)	(15,130)	(9,737)	(14,789)	(15,359)	(15,919)	(16,407)	(16,885)	
14.		A&G Capitalization Base		508,825	477,782	461,632	476,674	464,866	543,644	571,362	627,417	643,713	659,835	SCE-07, Vol. 01 Chpt XIII
15.		Proposed A&G Capitalization Rate		24.05%	24.05%	24.05%	24.05%	24.05%	24.05%	24.05%	24.05%	28.00%	28.00%	
16.		Capitalized 920/921 (Excluding STIP)		(122,372)	(114,907)	(111,022)	(114,640)	(111,800)	(130,746)	(137,413)	(175,677)	(180,240)	(184,754)	
17.		2018 GRC Authorized EIC						2,770	1,883	1,938	—	—	—	D.19.05.020 SCE-06, Vol. 3 Pt. 1 Figure III-9
18.		2021 GRC Forecast EIC						3,004	2,320	2,285	—	—	—	
19.		EIC To Be Capitalized						2,770	1,883	1,938	—	—	—	SCE-07, Vol. 01 Chpt XIII
20.		Proposed EIC Capitalization Rate		24.05%	24.05%	24.05%	24.05%	24.05%	24.05%	24.05%	28.00%	28.00%	28.00%	
21.		Capitalized EIC		—	—	—	—	666	463	466	—	—	—	
22.		2018 GRC Authorized STIP						76,500	78,484	80,792	—	—	—	
23.		2021 GRC Forecast STIP						137,027	173,221	179,243	196,408	202,429	208,325	
24.		STIP to Be Capitalized						76,500	78,484	80,792	196,408	202,429	208,325	
25.		Proposed EIC Capitalization Rate		45.50%	45.50%	45.50%	45.50%	45.50%	45.50%	45.50%	50.00%	50.00%	50.00%	
26.		Capitalized STIP		—	—	—	—	(34,808)	(35,710)	(36,760)	(98,204)	(101,215)	(104,163)	
27.		Capitalized A&G Expense - 922		(122,372)	(114,907)	(111,022)	(114,640)	(145,942)	(166,004)	(173,707)	(273,881)	(281,454)	(288,917)	

Southern California Edison
Capitalized Pensions & Benefits
\$ in Thousands (Nominal)

Capitalized Pensions & Benefits									
Line	Activity	FERC	2018 Rec/Adj	2019 Forecast	2020 Forecast	2021 Adj Forecast	2022 Forecast	2023 Forecast	Testimony Reference
1.	401K Savings Plan	926	71,567	84,101	87,333	94,177	96,832	99,431	SCE-06, Vol. 3 Pt. 1
2.	Accounting, Financial Compliance and Financial Reporting	926	32	—	—	—	—	—	SCE-06, Vol. 2
3.	Corporate Services	926	(127)	(163)	(169)	(176)	(180)	(184)	SCE-06, Vol. 2
4.	Dental Plans	926	11,256	12,996	13,382	13,098	13,491	13,896	SCE-06, Vol. 3 Pt. 1
5.	Disability Management - Administration	926	539	671	695	587	605	622	SCE-06, Vol. 3 Pt. 1
6.	Disability Management - Programs	926	14,681	17,465	18,078	17,745	18,289	18,822	SCE-06, Vol. 3 Pt. 1
7.	Employee and Contractor Safety	926	20	—	—	—	—	—	SCE-06, Vol. 4
8.	Executive Benefits (Service)	926	2,536	2,324	2,324	3,422	3,422	3,422	SCE-06, Vol. 3 Pt. 1
9.	Executive Compensation	926	420	292	305	315	324	334	SCE-06, Vol. 3 Pt. 1
10.	Group Life Insurance	926	1,229	1,420	1,419	1,349	1,349	1,349	SCE-06, Vol. 3 Pt. 1
11.	Hydro	926	(2)	—	—	—	—	—	SCE-05, Vol. 1
12.	Law - In-house Legal Resources & Corporate Governance & Mit	926	24	—	—	—	—	—	SCE-06, Vol. 2
13.	Long-term Incentives	926	(2,410)	(2,284)	(2,297)	(2,306)	(2,377)	(2,446)	SCE-06, Vol. 3 Pt. 1
14.	Medical Programs	926	81,798	94,442	99,136	98,921	103,867	109,061	SCE-06, Vol. 3 Pt. 1
15.	Miscellaneous Benefit Programs	926	5,671	6,548	6,546	6,221	6,221	6,221	SCE-06, Vol. 3 Pt. 1
16.	OU Support Services	926	7,151	10,354	10,800	7,179	7,364	7,548	SCE-06, Vol. 3 Pt. 1
17.	Participant Credits and Charges - 926	926	6,349	10,366	10,110	7,753	7,753	7,753	SCE-06, Vol. 2
18.	PBOP Costs (Service)	926	36,316	31,550	31,337	31,099	31,112	31,126	SCE-06, Vol. 3 Pt. 1
19.	Pension Costs (Service)	926	120,492	110,270	105,292	103,170	103,170	103,170	SCE-06, Vol. 3 Pt. 1
20.	Recognition	926	856	76	78	79	81	83	SCE-06, Vol. 3 Pt. 1
21.	Vision Service Plan	926	2,330	2,744	2,825	2,765	2,848	2,934	SCE-06, Vol. 3 Pt. 1
23.	Total Account 926 to Be Capitalized		360,747	383,171	387,192	385,396	394,171	403,139	
24.	Below the Line		(591)	(642)	(677)	(765)	(786)	(808)	
25.	Total Account 926 To Be Capitalized (After BTL Items)		360,156	382,529	386,515	384,632	393,385	402,331	

Capitalized Pensions & Benefits									
Line	Activity	FERC	2018 Rec/Adj	2019 Forecast	2020 Forecast	2021 Adj Forecast	2022 Forecast	2023 Forecast	Testimony Reference
26.	Accounting, Financial Compliance and Financial Reporting	925	—	—	—	—	—	—	SCE-06, Vol. 2
27.	Billing	925	—	—	—	—	—	—	SCE-03, Vol. 1
28.	Business Account Management	925	—	—	—	—	—	—	SCE-03, Vol. 4
29.	Business Account Management Services	925	—	—	—	—	—	—	SCE-03, Vol. 5
30.	Business Planning	925	394	—	—	—	—	—	SCE-06, Vol. 2
31.	Claims - Injuries & Other Damages	925	19,517	20,941	22,103	16,140	16,492	16,845	SCE-06, Vol. 2
32.	Corporate Services	925	—	—	—	—	—	—	SCE-06, Vol. 2
33.	Credit and Payment	925	—	—	—	—	—	—	SCE-03, Vol. 1
34.	Customer Contact Center	925	—	—	—	—	—	—	SCE-03, Vol. 4
35.	Customer Programs Management	925	—	—	—	—	—	—	SCE-03, Vol. 5
36.	Distribution Support Activities	925	0	—	—	—	—	—	SCE-02, Vol. 1 Pt. 2
37.	Employee and Contractor Safety	925	3,722	(597)	(1,098)	(1,100)	(1,135)	(1,169)	SCE-06, Vol. 4
38.	Environmental Management and Development	925	—	—	—	—	—	—	SCE-06, Vol. 4
39.	Executive Compensation	925	—	—	—	—	—	—	SCE-06, Vol. 3 Pt. 1
40.	External Communications	925	—	—	—	—	—	—	SCE-03, Vol. 2
41.	Facility and Land Operations	925	8	—	—	—	—	—	SCE-06, Vol. 5
42.	Fixed Price Technology and Maintenance	925	—	—	—	—	—	—	SCE-06, Vol. 1 Pt. 1
43.	Law - In-house Legal Resources & Corporate Governance & Mit	925	0	—	—	—	—	—	SCE-06, Vol. 2
44.	Law - Outside Counsel	925	8,848	6,346	6,165	9,395	9,600	9,806	SCE-06, Vol. 2
45.	Liability Insurance - Wildfire	925	—	—	—	—	—	—	SCE-06, Vol. 2
46.	Liability Insurance (Non-Wildfire)	925	25,153	32,360	35,146	35,851	35,851	35,851	SCE-06, Vol. 2
47.	Logistics, Graphics, and Center of Excellence	925	—	—	—	—	—	—	SCE-06, Vol. 2
48.	OU Support Services	925	—	—	—	—	—	—	SCE-06, Vol. 3 Pt. 1
49.	Participant Credits and Charges - 925	925	25	—	—	—	—	—	SCE-06, Vol. 2
50.	Public Safety	925	295	—	13	14	14	14	SCE-06, Vol. 4
51.	Safety Culture Transformation	925	591	2	2	2	2	2	SCE-06, Vol. 4
52.	Security Technology Operations and Maintenance	925	—	—	—	—	—	—	SCE-04, Vol. 4
53.	Software Maintenance and Replacement	925	—	—	—	—	—	—	SCE-06, Vol. 1 Pt. 1
54.	Technology Delivery	925	—	—	—	—	—	—	SCE-06, Vol. 1 Pt. 1
55.	Technology Infrastructure Maintenance and Replacement	925	—	—	—	—	—	—	SCE-06, Vol. 1 Pt. 1
56.	Technology Planning, Design and Support	925	—	—	—	—	—	—	SCE-06, Vol. 1 Pt. 1
57.	Telecommunication Line Rents	925	0	—	—	—	—	—	SCE-02, Vol. 7
58.	Work Force Protection/Insider Threat	925	—	—	—	—	—	—	SCE-04, Vol. 4
59.	Workers' Compensation - Administration	925	5,160	5,275	5,752	5,660	5,816	5,969	SCE-06, Vol. 2
60.	Workers' Compensation - Injuries & Damages	925	11,503	7,773	10,131	8,508	8,694	8,880	SCE-06, Vol. 2
61.	Total Account 925 to Be Capitalized		75,216	72,099	78,214	74,470	75,334	76,198	
62.	Below the Line		(1,686)	(2,606)	(3,483)	(3,771)	(3,775)	(3,780)	
63.	Total Account 925 To Be Capitalized (After BTL Items)		73,530	69,493	74,731	70,699	71,558	72,418	

64.	P&B Capitalization Base	433,686	452,022	461,246	455,331	464,943	474,748	
65.	Proposed P&B Capitalization Rate	45.5%	45.5%	45.5%	50.0%	50.0%	50.0%	SCE-07, Vol. 01 Chpt XIII
66.	Forecast Capitalized P&B Expense	(197,327)	(205,670)	(209,867)	(227,665)	(232,471)	(237,374)	

Southern California Edison
Short-Term Incentive Program (STIP)

\$ in Thousands (Constant)

STIP - 2018 Recorded Data		2018	
Function		STIP Rec/Adj	Labor Rec/Adj
Generation		7,110	68,666
Less: Participant Credits ¹		—	
Net Generation		7,110	68,666
Transmission & Distribution		69,319	310,254
Customer Service ²		15,019	147,784
Administrative & General		53,708	242,005
Total Company		145,156	768,708

STIP Adjustment	
STIP Component	%
Base STIP	100%
Incremental STIP	100%

STIP - Forecast	2018	2019		2020		2021		2022		2023	
Function	STIP/ Labor	Labor Forecast	STIP Forecast	Labor Forecast	STIP Forecast	Labor Forecast	STIP Forecast	Labor Forecast	STIP Forecast	Labor Forecast	STIP Forecast
Generation	10.4%	68,147	7,056	68,013	7,042	68,261	8,025	68,261	8,025	68,261	8,025
Less: Participant Credits			—		—		—		—		—
Net Generation		68,147	7,056	68,013	7,042	68,261	8,025	68,261	8,025	68,261	8,025
Transmission & Distribution	22.3%	377,777	84,406	357,829	79,949	323,863	81,397	323,863	81,397	323,863	81,397
Customer Service ²	10.2%	157,433	15,999	161,176	16,380	172,099	19,532	172,099	19,532	172,099	19,532
Administrative & General	22.2%	263,718	58,527	268,296	59,543	279,794	69,284	279,794	69,284	279,794	69,284
Total Company		867,074	165,988	855,314	162,914	844,016	178,238	844,016	178,238	844,016	178,238
STIP/Labor Forecast %			19.1%		19.0%		21.1%		21.1%		21.1%

1) Participant Credits for Results Sharing are recorded in labor for 2018.

2) Historical labor is adjusted to include \$45.781 million and forecast labor includes an additional \$47.53 million for labor related to Public Purpose, Demand Response Programs.

Southern California Edison
Incremental STIP Forecast
Compensation Redesign Project (CDP) | Key Contributor Incentive Plan (KCIP)
\$ in Thousands

Calculate Annualized Incremental STIP			
Year	Target Jobs	Incremental STIP	Total Incremental STIP
2019	Phase 3	10,400	10,400
2020	Phase 4	18,300	28,700
Total		28,700	39,100

Annualized 2021 STIP 19,550

Calculate Functionalized 2018 Base STIP Payout			
FERC Account	Function	Payout (\$)	Payout (%)
500	Generation	7,110	4.9%
588	T&D	69,319	47.8%
905	Customer Service	15,019	10.3%
920	A&G	53,708	37.0%
Total		145,156	100.0%

Functionalize Incremental STIP Across Forecast					
FERC	Function	2021	2022	2023	Total
500	Generation	958	958	958	2,873
588	T&D	9,336	9,336	9,336	28,008
905	Customer Service	2,023	2,023	2,023	6,068
920	A&G	7,234	7,234	7,234	21,701
Total		19,550	19,550	19,550	58,650

Baseline Labor Forecast					
FERC	Function	2021	2022	2023	
500	Generation	68,287	68,287	68,287	
588	T&D	334,582	334,582	334,582	
905	Customer Service	170,421	170,421	170,421	
920	A&G	281,530	281,530	281,530	
Total		854,820	854,820	854,820	

Incremental STIP/Baseline Labor Forecast					
FERC	Function	2021	2022	2023	
500	Generation	1.4%	1.4%	1.4%	
588	T&D	2.8%	2.8%	2.8%	
905	Customer Service	1.2%	1.2%	1.2%	
920	A&G	2.6%	2.6%	2.6%	
Total		7.9%	7.9%	7.9%	

Current Labor Forecast					
FERC	Function	2021	2022	2023	
500	Generation	68,261	68,261	68,261	
588	T&D	323,863	323,863	323,863	
905	Customer Service	172,099	172,099	172,099	
920	A&G	279,794	279,794	279,794	
Total		844,016	844,016	844,016	

Incremental STIP Forecast Based on Current Labor Forecast					
FERC	Function	2021	2022	2023	Total
500	Generation	957	957	957	2,872
588	T&D	9,037	9,037	9,037	27,111
905	Customer Service	2,043	2,043	2,043	6,128
920	A&G	7,189	7,189	7,189	21,567
Total		19,226	19,226	19,226	57,678

WILDFIRE MANAGEMENT CAPITAL EXPENDITURES
AB 1054 Reduction Amounts

Southern California Edison
2021 General Rate Case | BPE: Wildfire Management
AB 1054 Wildfire Risk Mitigation
Nominal \$ in Thousands

A - DIRECT CAPITAL EXPENDITURES							AB1054 Adjustment				Net Wildfire Management			
Line	GRC Activity	WBS	2019	2020	2021	Total	2019	2020	2021	Total	2019	2020	2021	Total
1	Distribution Fault Anticipation	CET-PD-WM-FI-MTW	3,445	0	6,270	9,715	(2,126)	(0)	(2,357)	(4,483)	1,319	-	3,913	5,232
2	Enhanced Overhead Inspections and Remediations	CET-PD-WM-OC-MTE	-	29,119	-	29,119	-	(29,119)	-	(29,119)	-	-	-	-
3	Enhanced Overhead Inspections and Remediations	CET-PD-WM-OC-MTECOV	-	1,558	2,813	4,372	-	(1,558)	(1,058)	(2,616)	-	-	1,756	1,756
4	Enhanced Overhead Inspections and Remediations	CET-PD-WM-OC-MTW	229,992	82,178	29,057	341,226	(141,935)	(82,178)	(10,923)	(235,036)	88,056	-	18,134	106,190
5	Enhanced Overhead Inspections and Remediations	CET-PD-WM-PM-822400	17,610	22,946	6,555	47,110	(10,868)	(22,946)	(2,464)	(36,277)	6,742	-	4,091	10,833
6	Enhanced Overhead Inspections and Remediations	CET-PD-WM-TP-822400	52,990	9,182	9,379	71,552	(32,702)	(9,182)	(3,526)	(45,410)	20,288	-	5,853	26,142
7	Enhanced Overhead Inspections and Remediations	CET-PD-WM-TP-822401	-	3,330	3,401	6,731	-	(3,330)	(1,278)	(4,608)	-	-	2,122	2,122
8	Enhanced Situational Awareness	COS-00-GR-BR-815900	4,282	3,939	-	8,221	(2,643)	(3,939)	-	(6,582)	1,640	-	-	1,640
9	Enhanced Situational Awareness	COS-00-GR-BR-815902	970	220	-	1,189	(598)	(220)	-	(818)	371	-	-	371
10	Fire Science and Advanced Modeling	CIT-00-GR-DM-815900	767	3,926	-	4,694	(474)	(3,926)	-	(4,400)	294	-	-	294
11	Fire Science and Advanced Modeling	CIT-00-GR-DM-815902	40	960	-	1,000	(25)	(960)	-	(985)	16	-	-	16
12	Fire Science and Advanced Modeling	COS-00-GR-BR-815901	5,679	800	1,102	7,581	(3,505)	(800)	(414)	(4,719)	2,174	-	688	2,862
13	Fusing Mitigation	CET-PD-GR-FI-MTE	70,298	8,304	-	78,602	(43,383)	(8,304)	-	(51,687)	26,915	-	-	26,915
14	Fusing Mitigation	CET-PD-WM-SF-CAT	-	3,142	-	3,142	-	(3,142)	-	(3,142)	-	-	-	-
15	HFRA Sectionalizing Devices	CET-PD-FH-RA-MTE	9,176	-	-	9,176	(5,663)	-	-	(5,663)	3,513	-	-	3,513
16	HFRA Sectionalizing Devices	CET-PD-FH-RA-MTECOV	839	-	-	839	(518)	-	-	(518)	321	-	-	321
17	HFRA Sectionalizing Devices	CET-PD-GR-AR-MTECOV	-	1,571	-	1,571	-	(1,571)	-	(1,571)	-	-	-	-
18	HFRA Sectionalizing Devices	CET-PD-GR-AR-MTW	1,936	6,910	-	8,846	(1,195)	(6,910)	-	(8,105)	741	-	-	741
19	HFRA Sectionalizing Devices	CET-PD-GR-RP-MTW	-	19,972	5,209	25,181	-	(19,972)	(1,958)	(21,930)	-	-	3,251	3,251
20	PSPS Execution	CCS-00-WF-CR-00-19001	1,766	1,212	738	3,716	(1,090)	(1,212)	(277)	(2,579)	676	-	460	1,137
21	Undergrounding	CET-PD-GR-UG-CAT	-	-	22,507	22,507	-	-	(8,461)	(8,461)	-	-	14,047	14,047
22	Wildfire Covered Conductor Program	CET-PD-GR-FP-MTW	9,329	37,894	54,739	101,962	(5,757)	(37,894)	(20,577)	(64,228)	3,572	-	34,162	37,734
23	Wildfire Covered Conductor Program	CET-PD-GR-OC-MTW	239,911	454,369	656,353	1,350,632	(148,057)	(454,369)	(246,726)	(849,152)	91,854	-	409,627	501,481
24	Wildfire Covered Conductor Program	CET-PD-GR-TA-MTW	49	15,183	21,932	37,164	(30)	(15,183)	(8,244)	(23,457)	19	-	13,688	13,706
25			649,078	706,712	820,056	2,175,847	(400,568)	(706,712)	(308,263)	(1,415,543)	248,511	-	511,793	760,304
26	Enhanced Overhead Inspections and Remediations	CET-PD-WM-TP-822401	-	3,330	3,401	6,731	-	(3,330)	(1,278)	(4,608)	-	-	2,122	2,122
27			649,078	703,382	816,656	2,169,116	(400,568)	(703,382)	(306,985)	(1,410,935)	248,511	-	509,671	758,182
B - CAPITALIZED OVERHEADS														
Line	GRC Activity	WBS	2019	2020	2021	Total	2019	2020	2021	Total	2019	2020	2021	Total
28	Distribution Fault Anticipation	CET-PD-WM-FI-MTW	432	0	790	1,222	(267)	(0)	(297)	(564)	166	-	493	659
29	Enhanced Overhead Inspections and Remediations	CET-PD-WM-OC-MTE	-	3,154	-	3,154	-	(3,154)	-	(3,154)	-	-	-	-
30	Enhanced Overhead Inspections and Remediations	CET-PD-WM-OC-MTECOV	-	169	354	523	-	(169)	(133)	(302)	-	-	221	221
31	Enhanced Overhead Inspections and Remediations	CET-PD-WM-OC-MTW	28,870	8,900	3,661	41,431	(17,817)	(8,900)	(1,376)	(28,093)	11,054	-	2,285	13,338
32	Enhanced Overhead Inspections and Remediations	CET-PD-WM-PM-822400	2,211	2,485	826	5,521	(1,364)	(2,485)	(310)	(4,160)	846	-	515	1,362
33	Enhanced Overhead Inspections and Remediations	CET-PD-WM-TP-822400	5,700	861	1,042	7,603	(3,518)	(861)	(392)	(4,770)	2,182	-	650	2,832
34	Enhanced Overhead Inspections and Remediations	CET-PD-WM-TP-822401	-	312	378	690	-	(312)	(142)	(454)	-	-	236	236
35	Enhanced Situational Awareness	COS-00-GR-BR-815900	621	489	-	1,110	(383)	(489)	-	(872)	238	-	-	238
36	Enhanced Situational Awareness	COS-00-GR-BR-815902	-	-	-	-	-	-	-	-	-	-	-	-
37	Fire Science and Advanced Modeling	CIT-00-GR-DM-815900	88	391	-	480	(54)	(391)	-	(446)	34	-	-	34
38	Fire Science and Advanced Modeling	CIT-00-GR-DM-815902	5	96	-	100	(3)	(96)	-	(99)	2	-	-	2
39	Fire Science and Advanced Modeling	COS-00-GR-BR-815901	411	52	90	554	(254)	(52)	(34)	(340)	157	-	56	214
40	Fusing Mitigation	CET-PD-GR-FI-MTE	8,824	899	-	9,724	(5,446)	(899)	-	(6,345)	3,379	-	-	3,379
41	Fusing Mitigation	CET-PD-WM-SF-CAT	-	340	-	340	-	(340)	-	(340)	-	-	-	-
42	HFRA Sectionalizing Devices	CET-PD-FH-RA-MTE	1,152	-	-	1,152	(711)	-	-	(711)	441	-	-	441
43	HFRA Sectionalizing Devices	CET-PD-FH-RA-MTECOV	105	-	-	105	(65)	-	-	(65)	40	-	-	40
44	HFRA Sectionalizing Devices	CET-PD-GR-AR-MTECOV	-	170	-	170	-	(170)	-	(170)	-	-	-	-
45	HFRA Sectionalizing Devices	CET-PD-GR-AR-MTW	243	748	-	991	(150)	(748)	-	(898)	93	-	-	93
46	HFRA Sectionalizing Devices	CET-PD-GR-RP-MTW	-	2,163	656	2,819	-	(2,163)	(247)	(2,410)	-	-	410	410
47	PSPS Execution	CCS-00-WF-CR-00-19001	203	121	86	410	(125)	(121)	(32)	(279)	78	-	54	132
48	Undergrounding	CET-PD-GR-UG-CAT	-	-	2,836	2,836	-	-	(1,066)	(1,066)	-	-	1,770	1,770
49	Wildfire Covered Conductor Program	CET-PD-GR-FP-MTW	1,171	4,104	6,896	12,171	(723)	(4,104)	(2,592)	(7,419)	448	-	4,304	4,752
50	Wildfire Covered Conductor Program	CET-PD-GR-OC-MTW	30,115	49,209	82,689	162,013	(18,585)	(49,209)	(31,083)	(98,877)	11,530	-	51,606	63,136
51	Wildfire Covered Conductor Program	CET-PD-GR-TA-MTW	6	1,644	2,763	4,413	(4)	(1,644)	(1,039)	(2,687)	2	-	1,724	1,727
52			80,158	76,308	103,066	259,533	(49,468)	(76,308)	(38,743)	(164,519)	30,690	-	64,323	95,013
53	Enhanced Overhead Inspections and Remediations	CET-PD-WM-TP-822401	-	312	378	690	-	(312)	(142)	(454)	-	-	236	236
54			80,158	75,996	102,689	258,843	(49,468)	(75,996)	(38,601)	(164,065)	30,690	-	64,087	94,777
C - TOTAL CAPITAL EXPENDITURES & CAPITALIZED OVERHEADS														
Line	GRC Activity	WBS	2019	2020	2021	Total	2019	2020	2021	Total	2019	2020	2021	Total
55	Distribution Fault Anticipation	CET-PD-WM-FI-MTW	3,877	0	7,060	10,937	(2,393)	(0)	(2,654)	(5,047)	1,484	-	4,406	5,890
56	Enhanced Overhead Inspections and Remediations	CET-PD-WM-OC-MTE	-	32,272	-	32,272	-	(32,272)	-	(32,272)	-	-	-	-
57	Enhanced Overhead Inspections and Remediations	CET-PD-WM-OC-MTECOV	-	1,727	3,168	4,895	-	(1,727)	(1,191)	(2,918)	-	-	1,977	1,977
58	Enhanced Overhead Inspections and Remediations	CET-PD-WM-OC-MTW	258,862	91,078	32,717	382,657	(159,752)	(91,078)	(12,299)	(263,128)	99,110	-	20,419	119,528
59	Enhanced Overhead Inspections and Remediations	CET-PD-WM-PM-822400	19,820	25,431	7,381	52,632	(12,232)	(25,431)	(2,774)	(40,437)	7,589	-	4,606	12,195
60	Enhanced Overhead Inspections and Remediations	CET-PD-WM-TP-822400	58,690	10,043	10,421	79,154	(36,220)	(10,043)	(3,917)	(50,180)	22,471	-	6,504	28,974
61	Enhanced Overhead Inspections and Remediations	CET-PD-WM-TP-822401	-	3,642	3,779	7,421	-	(3,642)	(1,420)	(5,063)	-	-	2,358	2,358
62	Enhanced Situational Awareness	COS-00-GR-BR-815900	4,903	4,428	-	9,331	(3,026)	(4,428)	-	(7,454)	1,877	-	-	1,877
63	Enhanced Situational Awareness	COS-00-GR-BR-815902	970	220	-	1,189	(598)	(220)	-	(818)	371	-	-	371
64	Fire Science and Advanced Modeling	CIT-00-GR-DM-815900	856	4,318	-	5,173	(528)	(4,318)	-	(4,846)	328	-	-	328
65	Fire Science and Advanced Modeling	CIT-00-GR-DM-815902	45	1,055	-	1,100	(28)	(1,055)	-	(1,083)	17	-	-	17
66	Fire Science and Advanced Modeling	COS-00-GR-BR-815901	6,090	852	1,193	8,135	(3,758)	(852)	(448)	(5,059)	2,332	-	744	3,076
67	Fusing Mitigation	CET-PD-GR-FI-MTE	79,123	9,203	-	88,326	(48,829)	(9,203)	-	(58,033)	30,293	-	-	30,293
68	Fusing Mitigation	CET-PD-WM-SF-CAT	-	3,482	-	3,482	-	(3,482)	-	(3,482)	-	-	-	-
69	HFRA Sectionalizing Devices	CET-PD-FH-RA-MTE	10,328	-	-	10,328	(6,374)	-	-	(6,374)	3,954	-	-	3,954
70	HFRA Sectionalizing Devices	CET-PD-FH-RA-MTECOV	944	-	-	944	(583)	-	-	(583)	361	-	-	361
71	HFRA Sectionalizing Devices	CET-PD-GR-AR-MTECOV	-	1,741	-	1,741	-	(1,741)	-	(1,741)	-	-	-	-
72	HFRA Sectionalizing Devices	CET-PD-GR-AR-MTW	2,179	7,658	-	9,837	(1,345)	(7,658)	-	(9,003)	834	-	-	834
73	HFRA Sectionalizing Devices	CET-PD-GR-RP-MTW	-	2										

EXHIBIT SCE-18, VOLUME 01
2019 RECORDED CAPITAL EXPENDITURE UPDATE

				2019 SCE Request (1.4 CSRP Amendment)			Variance			2019 Recorded		
Exhibit_1	Exhibit	BPE	GRC Activity	Total	FERC	CPUC	Total	FERC	CPUC	Total	FERC	CPUC
SCE-02	SCE-02, Vol. 1 Pt. 1	Infrastructure Replacement	4 kV Cutovers	48,326	0	48,326	10,087	0	10,087	58,414	0	58,414
SCE-02	SCE-02, Vol. 1 Pt. 1	Infrastructure Replacement	4 kV Substation Eliminations	6,054	0	6,054	(196)	0	(196)	5,857	0	5,857
SCE-02	SCE-02, Vol. 1 Pt. 1	Infrastructure Replacement	Automatic Reclosers Replacement Program	2,435	0	2,435	(948)	0	(948)	1,488	0	1,488
SCE-02	SCE-02, Vol. 1 Pt. 1	Infrastructure Replacement	Cable Life Extension (CLE) Program	20,574	0	20,574	(9,339)	0	(9,339)	11,235	0	11,235
SCE-02	SCE-02, Vol. 1 Pt. 1	Infrastructure Replacement	Cable-in-Conduit (CIC) Replacement Program	17,074	0	17,074	2,898	0	2,898	19,973	0	19,973
SCE-02	SCE-02, Vol. 1 Pt. 1	Infrastructure Replacement	Capacitor Bank Replacement Program	10,318	0	10,318	(581)	0	(581)	9,736	0	9,736
SCE-02	SCE-02, Vol. 1 Pt. 1	Infrastructure Replacement	Overhead Conductor Program (OCP)	100,063	0	100,063	24,966	0	24,966	125,029	0	125,029
SCE-02	SCE-02, Vol. 1 Pt. 1	Infrastructure Replacement	PCB Transformer Removal	1,813	0	1,813	301	0	301	2,114	0	2,114
SCE-02	SCE-02, Vol. 1 Pt. 1	Infrastructure Replacement	Underground Structure Replacements	27,573	0	27,573	20,674	0	20,674	48,247	0	48,247
SCE-02	SCE-02, Vol. 1 Pt. 1	Infrastructure Replacement	Underground Switch Replacements	3,389	0	3,389	5,205	0	5,205	8,594	0	8,594
SCE-02	SCE-02, Vol. 1 Pt. 1	Infrastructure Replacement	Worst Circuit Rehabilitation (WCR)	67,291	0	67,291	7,940	0	7,940	75,231	0	75,231
		Infrastructure Replacement Total		304,910	0	304,910	61,009	0	61,009	365,919	0	365,919
SCE-02	SCE-02, Vol. 1 Pt. 2	Capital Related Expense & Other	Distribution Tools and Work Equipment	3,325	0	3,325	(378)	0	(378)	2,947	0	2,947
SCE-02	SCE-02, Vol. 1 Pt. 2	Capital Related Expense & Other	Distribution Transformers	95,737	0	95,737	6,695	0	6,695	102,432	0	102,432
SCE-02	SCE-02, Vol. 1 Pt. 2	Capital Related Expense & Other	Prefabrication	18,946	0	18,946	(679)	0	(679)	18,267	0	18,267
		Capital Related Expense & Other Total		118,008	0	118,008	5,638	0	5,638	123,646	0	123,646
SCE-02	SCE-02, Vol. 1 Pt. 2	Infrastructure Replacement	Streetlight Maintenance and LED Conversions	52,984	0	52,984	(89)	0	(89)	52,895	0	52,895
		Infrastructure Replacement Total		52,984	0	52,984	(89)	0	(89)	52,895	0	52,895
SCE-02	SCE-02, Vol. 1 Pt. 2	Inspections & Maintenance	Distribution Claim	38,879	0	38,879	2,969	0	2,969	41,848	0	41,848
SCE-02	SCE-02, Vol. 1 Pt. 2	Inspections & Maintenance	Distribution Preventive and Breakdown Capital Maintenance	280,238	0	280,238	83,556	0	83,556	363,794	0	363,794
		Inspections & Maintenance Total		319,117	0	319,117	86,525	0	86,525	405,642	0	405,642
SCE-02	SCE-02, Vol. 1 Pt. 3	Meter Activities	Meter Engineering	27,327	0	27,327	(3,057)	0	(3,057)	24,270	0	24,270
SCE-02	SCE-02, Vol. 1 Pt. 3	Meter Activities	Meter System Maintenance Design	850	0	850	(562)	0	(562)	288	0	288
		Meter Activities Total		28,177	0	28,177	(3,619)	0	(3,619)	24,558	0	24,558
SCE-02	SCE-02, Vol. 2	Capital Related Expense & Other	Transmission Emergency Equipment	154	0	154	(154)	0	(154)	0	0	0
SCE-02	SCE-02, Vol. 2	Capital Related Expense & Other	Transmission Tools and Work Equipment	1,306	0	1,306	(494)	0	(494)	812	0	812
		Capital Related Expense & Other Total		1,460	0	1,460	(648)	0	(648)	812	0	812
SCE-02	SCE-02, Vol. 2	Inspections & Maintenance	Telecommunication Inspection and Maintenance	3,207	0	3,207	2,177	0	2,177	5,384	0	5,384
SCE-02	SCE-02, Vol. 2	Inspections & Maintenance	Transmission Capital Maintenance	43,527	11,968	31,560	(10,663)	(8,341)	(2,321)	32,865	3,626	29,239
SCE-02	SCE-02, Vol. 2	Inspections & Maintenance	Transmission Claim	3,344	193	3,151	971	56	915	4,315	249	4,066
SCE-02	SCE-02, Vol. 2	Inspections & Maintenance	Transmission Line Rating Remediation (TLRR)	129,295	117,548	11,747	(13,140)	(12,206)	(934)	116,156	105,342	10,814
SCE-02	zEXCLUDED - BEYOND 202	Inspections & Maintenance	Transmission Line Rating Remediation (TLRR)	90	90	0	76	76	0	165	165	0
		Inspections & Maintenance Total		179,463	129,798	49,666	(20,579)	(20,416)	(163)	158,885	109,382	49,503
SCE-02	SCE-02, Vol. 3	Capital Related Expense & Other	Oil Containment Diversion System	375	0	375	260	0	260	635	0	635
SCE-02	SCE-02, Vol. 3	Capital Related Expense & Other	Substation Emergency Equipment	25,116	15,360	9,756	(3,518)	(4,647)	1,129	21,598	10,713	10,885
SCE-02	SCE-02, Vol. 3	Capital Related Expense & Other	Substation Tools and Work Equipment	7,202	0	7,202	196	0	196	7,398	0	7,398
		Capital Related Expense & Other Total		32,693	15,360	17,333	(3,061)	(4,647)	1,585	29,632	10,713	18,918
SCE-02	SCE-02, Vol. 3	Grid Monitoring & Operability	Monitoring Bulk Power System	45,925	0	45,925	5,487	0	5,487	51,412	0	51,412
		Grid Monitoring & Operability Total		45,925	0	45,925	5,487	0	5,487	51,412	0	51,412
SCE-02	SCE-02, Vol. 3	Infrastructure Replacement	Circuit Breaker Replacement	42,956	1,171	41,785	(3,808)	(623)	(3,186)	39,148	548	38,600
SCE-02	SCE-02, Vol. 3	Infrastructure Replacement	Relays, Protection and Control Replacements	36,655	7,313	29,342	(253)	6,646	(6,899)	36,402	13,959	22,443
SCE-02	SCE-02, Vol. 3	Infrastructure Replacement	Substation Switchrack Rebuild	21,320	2,200	19,120	(7,938)	(1,402)	(6,537)	13,382	799	12,583
SCE-02	SCE-02, Vol. 3	Infrastructure Replacement	Substation Transformer Bank Replacement	65,112	31,425	33,687	(25,670)	(30,436)	4,766	39,442	989	38,453
		Infrastructure Replacement Total		166,044	42,110	123,935	(37,671)	(25,815)	(11,856)	128,374	16,295	112,079
SCE-02	SCE-02, Vol. 3	Inspections & Maintenance	Preventive Maintenance	45,210	21,240	23,970	20,229	12,101	8,128	65,438	33,341	32,097
SCE-02	SCE-02, Vol. 3	Inspections & Maintenance	Substation Capital Breakdown Maintenance	12,241	1,298	10,943	5,018	(508)	5,526	17,259	790	16,468
SCE-02	SCE-02, Vol. 3	Inspections & Maintenance	Substation Claim	369	47	322	(392)	(48)	(344)	(23)	(1)	(22)
SCE-02	N/A	Inspections & Maintenance	Utility Joint Ownership Obligations	30,614	30,614	0	11,967	11,967	0	42,582	42,582	0
		Inspections & Maintenance Total		88,434	53,199	35,234	36,822	23,512	13,309	125,255	76,712	48,544
SCE-02	SCE-02, Vol. 4 Pt. 1	Energy Storage	Energy Storage	18,615	0	18,615	(15,518)	0	(15,518)	3,097	0	3,097
		Energy Storage Total		18,615	0	18,615	(15,518)	0	(15,518)	3,097	0	3,097
SCE-02	SCE-02, Vol. 4 Pt. 1	Grid Modernization	Automation	73,398	0	73,398	(29,031)	0	(29,031)	44,368	0	44,368
SCE-02	SCE-02, Vol. 4 Pt. 1	Grid Modernization	Communications	13,445	0	13,445	38	0	38	13,483	0	13,483
SCE-02	SCE-02, Vol. 4 Pt. 1	Grid Modernization	DER-Driven Grid Reinforcement	491	0	491	(352)	0	(352)	139	0	139
SCE-02	SCE-02, Vol. 4 Pt. 1	Grid Modernization	Engineering and Planning Software Tools	32,530	0	32,530	4,468	0	4,468	36,998	0	36,998
SCE-02	zEXCLUDED - BEYOND 202	Grid Modernization	Engineering and Planning Software Tools	3,821	0	3,821	(3,821)	0	(3,821)	0	0	0
SCE-02	SCE-02, Vol. 4 Pt. 1	Grid Modernization	Grid Management System	33,064	0	33,064	(847)	0	(847)	32,217	0	32,217
		Grid Modernization Total		156,750	0	156,750	(29,545)	0	(29,545)	127,205	0	127,205
SCE-02	SCE-02, Vol. 4 Pt. 1	Grid Technology Assessments, Pilots & Adoption	Laboratory Operations	4,455	0	4,455	(3,679)	0	(3,679)	776	0	776
		Grid Technology Assessments, Pilots & Adoption Total		4,455	0	4,455	(3,679)	0	(3,679)	776	0	776
SCE-02	SCE-02, Vol. 4 Pt. 2	Load Growth	4 kV Cutovers - Load Growth Driven	38,118	0	38,118	(18,626)	0	(18,626)	19,492	0	19,492
SCE-02	SCE-02, Vol. 4 Pt. 2	Load Growth	DER-Driven 4 kV Cutovers	0	0	0	0	0	0	0	0	0
SCE-02	SCE-02, Vol. 4 Pt. 2	Load Growth	DER-Driven Circuit Breaker Upgrades	0	0	0	0	0	0	0	0	0
SCE-02	SCE-02, Vol. 4 Pt. 2	Load Growth	DER-Driven Distribution Circuit Upgrades	0	0	0	0	0	0	0	0	0
SCE-02	SCE-02, Vol. 4 Pt. 2	Load Growth	DER-Driven Substation Transformer Upgrades	0	0	0	0	0	0	0	0	0
SCE-02	SCE-02, Vol. 4 Pt. 2	Load Growth	Distribution Circuit Upgrades	50,038	0	50,038	3,122	0	3,122	53,160	0	53,160
SCE-02	SCE-02, Vol. 4 Pt. 2	Load Growth	Distribution Plant Betterment	17,333	0	17,333	11,559	0	11,559	28,892	0	28,892
SCE-02	SCE-02, Vol. 4 Pt. 2	Load Growth	Distribution Substation Plan (DSP) Circuits	36,340	0	36,340	(5,583)	0	(5,583)	30,758	0	30,758
SCE-02	SCE-02, Vol. 4 Pt. 2	Load Growth	Distribution Substation Plan Substations	75,652	0	75,652	(2,788)	0	(2,788)	72,864	0	72,864
SCE-02	zEXCLUDED - BEYOND 202	Load Growth	Distribution Substation Plan Substations	150	0	150	(12)	0	(12)	138	0	138
SCE-02	SCE-02, Vol. 4 Pt. 2	Load Growth	Distribution Volt VAR Control and Capacitor Automation Program	2,365	0	2,365	(342)	0	(342)	2,023	0	2,023
SCE-02	SCE-02, Vol. 4 Pt. 2	Load Growth	Land Rights Management	580	0	580	1,214	0	1,214	1,795	0	1,795
SCE-02	SCE-02, Vol. 4 Pt. 2	Load Growth	New Capacitors	9,427	0	9,427	(2,459)	0	(2,459)	6,968	0	6,968
SCE-02	SCE-02, Vol. 4 Pt. 2	Load Growth	New DER-Driven DSP Circuits	0	0	0	0	0	0	0	0	0
SCE-02	SCE-02, Vol. 4 Pt. 2	Load Growth	Substation Equipment Replacement Program	16,315	0	16,315	(4,509)	0	(4,509)	11,806	0	11,806
SCE-02	SCE-02, Vol. 4 Pt. 2	Load Growth	Transmission Substation Plan (TSP)	85,442	1,994	83,447	(13,975)	(1,724)	(12,251)	71,467	270	71,197
SCE-02	zEXCLUDED - BEYOND 202	Load Growth	Transmission Substation Plan (TSP)	1,634	785	849	901	(667)	1,569	2,535	118	2,417
		Load Growth Total		333,394	2,780	330,614	(31,497)	(2,392)	(29,105)	301,897	388	301,509
SCE-02	SCE-02, Vol. 4 Pt. 2	Transmission Projects	Generation Interconnection Remedial Action Scheme	4,914	0	4,914	(1,072)	0	(1,072)	3,842	0	3,842
SCE-02	SCE-02, Vol. 4 Pt. 2	Transmission Projects	Grid Reliability Projects	243,261	153,656	89,605	(57,523)	(21,935)	(35,587)	185,738	131,720	54,018
SCE-02	SCE-02, Vol. 4 Pt. 2	Transmission Projects	Renewable Transmission Projects	190,194	182,075	8,119	59,339	61,529	(2,191)	249,533	243,604	5,928
		Transmission Projects Total		438,369	340,644	97,724	744	38,522	(37,778)	439,113	379,166	59,946
SCE-02	SCE-02, Vol. 4 Pt. 3	Customer Requested System Modifications	Distribution Added Facilities	14,223	0	14,223	(7,005)	0	(7,005)	7,217	0	7,217
SCE-02	SCE-02, Vol. 4 Pt. 3	Customer Requested System Modifications	Distribution Relocations	52,947	0	52,947	(5,200)	0	(5,200)	47,747	0	47,747
SCE-02	SCE-02, Vol. 4 Pt. 3	Customer Requested System Modifications	Rule 20 B/C Conversions	37,186	0	37,186	(6,398)	0	(6,398)	30,788	0	30,788
SCE-02	SCE-02, Vol. 4 Pt. 3	Customer Requested System Modifications	Rule 20A Conversions	16,723	0	16,723	(4,391)	0	(4,391)	12,332	0	12,332
SCE-02	SCE-02, Vol. 4 Pt. 3	Customer Requested System Modifications	Transmission Relocations	14,692	0	14,692	(5,680)	0	(5,680)	9,012	0	9,012
SCE-02	SCE-02, Vol. 4 Pt. 3	Customer Requested System Modifications	Transmission/Substation Added Facilities - Customer Financed	12,791	4,907	7,884	(8,835)	(3,054)	(5,781)	3,956	1,853	2,103
SCE-02	SCE-02, Vol. 4 Pt. 3	Customer Requested System Modifications	Transmission/Substation Added Facilities - SCE Financed	13,618	7,885	5,733	(8,930)	4,086	(4,980)	12,724	11,971	753
SCE-02	SCE-02, Vol. 4 Pt											

Exhibit_1	Exhibit	BPE	GRC Activity	2019 SCE Request (1.4 CSRP Amendment)			Variance			2019 Recorded		
				Total	FERC	CPUC	Total	FERC	CPUC	Total	FERC	CPUC
SCE-02	SCE-02, Vol. 5	Poles	Distribution Joint Pole Capital Credits	(77,447)	0	(77,447)	(17,745)	0	(17,745)	(95,192)	0	(95,192)
SCE-02	SCE-02, Vol. 5	Poles	Distribution Pole Loading Program Pole Replacement	174,701	0	174,701	(16,751)	0	(16,751)	157,950	0	157,950
SCE-02	SCE-02, Vol. 5	Poles	Distribution Wood Pole Disposal	2,582	0	2,582	397	0	397	2,979	0	2,979
SCE-02	SCE-02, Vol. 5	Poles	Distribution Wood Pole Disposal - Pole Loading Program	1,131	0	1,131	559	0	559	1,690	0	1,690
SCE-02	SCE-02, Vol. 5	Poles	Telecommunication Deteriorated Pole Replacement	3,197	50	3,148	(1,380)	63	(1,444)	1,817	113	1,704
SCE-02	SCE-02, Vol. 5	Poles	Telecommunication Pole Loading Program Replacement	177	1	176	(175)	(1)	(175)	1	0	1
SCE-02	SCE-02, Vol. 5	Poles	Transmission Deteriorated Pole Replacement	81,228	1,268	79,959	7,553	3,701	3,852	88,781	4,970	83,811
SCE-02	SCE-02, Vol. 5	Poles	Transmission Joint Pole Capital Credits	(17,581)	0	(17,581)	11,247	0	11,247	(6,333)	0	(6,333)
SCE-02	SCE-02, Vol. 5	Poles	Transmission Pole Loading Program Replacement	29,156	88	29,068	12,316	29	12,287	41,471	116	41,355
		Poles Total		357,251	1,407	355,844	32,575	3,793	28,783	389,826	5,199	384,627
SCE-03	SCE-03, Vol. 5	Energy Efficiency	CS Capital	390	0	390	1,300	0	1,300	1,691	0	1,691
		Energy Efficiency Total		390	0	390	1,300	0	1,300	1,691	0	1,691
SCE-04	SCE-04, Vol. 1	Business Continuation	All Hazards Assessment, Mitigation and Analytics	43,900	19,360	24,540	1,081	1,766	(685)	44,981	21,126	23,855
SCE-04	SCE-04, Vol. 1	Business Continuation	Climate Adaptation and Severe Weather	0	0	0	0	0	0	0	0	0
		Business Continuation Total		43,900	19,360	24,540	1,081	1,766	(685)	44,981	21,126	23,855
SCE-04	SCE-04, Vol. 2	Emergency Management	Distribution Storm Response Capital	41,988	0	41,988	24,120	0	24,120	66,108	0	66,108
SCE-04	SCE-04, Vol. 2	Emergency Management	Transmission/Substation Storm Response Capital	6,164	1,859	4,305	3,441	628	2,813	9,605	2,486	7,118
		Emergency Management Total		48,152	1,859	46,293	27,561	628	26,933	75,713	2,486	73,226
SCE-04	SCE-04, Vol. 3	Cybersecurity	Cybersecurity Delivery and IT Compliance	36,000	0	36,000	8,701	0	8,701	44,701	0	44,701
SCE-04	SCE-04, Vol. 3	Cybersecurity	Grid Mod Cybersecurity	25,702	0	25,702	433	0	433	26,136	0	26,136
		Cybersecurity Total		61,702	0	61,702	9,134	0	9,134	70,837	0	70,837
SCE-04	SCE-04, Vol. 4	Physical Security	NERC Compliance Programs	33,303	32,848	455	(1,731)	(2,346)	614	31,572	30,502	1,070
SCE-04	SCE-04, Vol. 4	Physical Security	Protection of Generation Assets	2,335	0	2,335	(541)	0	(541)	1,794	0	1,794
SCE-04	SCE-04, Vol. 4	Physical Security	Protection of Grid Infrastructure Assets	20,774	6,312	14,462	(7,822)	2,585	(10,407)	12,952	8,897	4,055
SCE-04	SCE-04, Vol. 4	Physical Security	Protection of Major Business Functions	9,738	0	9,738	(157)	0	(157)	9,581	0	9,581
		Physical Security Total		66,151	39,160	26,991	(10,251)	240	(10,491)	55,899	39,400	16,500
SCE-04	SCE-04, Vol. 5	Wildfire Management	Distribution Fault Anticipation	2,340	0	2,340	1,105	0	1,105	3,445	0	3,445
SCE-04	SCE-04, Vol. 5	Wildfire Management	Enhanced Overhead Inspections and Remediations	154,849	12,679	142,170	145,743	(12,679)	158,422	300,592	0	300,592
SCE-04	SCE-04, Vol. 5	Wildfire Management	Enhanced Situational Awareness	6,364	0	6,364	(1,113)	0	(1,113)	5,252	0	5,252
SCE-04	SCE-04, Vol. 5	Wildfire Management	Fire Science and Advanced Modeling	12,953	0	12,953	(6,466)	0	(6,466)	6,487	0	6,487
SCE-04	SCE-04, Vol. 5	Wildfire Management	Fusing Mitigation	54,795	0	54,795	15,503	0	15,503	70,298	0	70,298
SCE-04	SCE-04, Vol. 5	Wildfire Management	HFRS Sectionalizing Devices	6,292	0	6,292	5,658	0	5,658	11,951	0	11,951
SCE-04	SCE-04, Vol. 5	Wildfire Management	PSPS Execution	180	0	180	1,586	0	1,586	1,766	0	1,766
SCE-04	SCE-04, Vol. 5	Wildfire Management	Undergrounding	0	0	0	0	0	0	0	0	0
SCE-04	SCE-04, Vol. 5	Wildfire Management	Wildfire Covered Conductor Program	156,337	0	156,337	92,952	0	92,952	249,288	0	249,288
		Wildfire Management Total		394,111	12,679	381,431	254,968	(12,679)	267,647	649,078	0	649,078
SCE-05	SCE-05, Vol. 1	Fossil Fuel Generation	Catalina - Diesel	2,860	0	2,860	2,326	0	2,326	5,186	0	5,186
SCE-05	SCE-05, Vol. 1	Fossil Fuel Generation	Mountainview	1,228	0	1,228	1,764	0	1,764	2,992	0	2,992
SCE-05	SCE-05, Vol. 1	Fossil Fuel Generation	Peakers	1,300	0	1,300	(56)	0	(56)	1,244	0	1,244
		Fossil Fuel Generation Total		5,388	0	5,388	4,034	0	4,034	9,422	0	9,422
SCE-05	SCE-05, Vol. 1	Hydro	Hydro - Dams and Waterways	12,156	0	12,156	2,808	0	2,808	14,964	0	14,964
SCE-05	SCE-05, Vol. 1	Hydro	Hydro - Decommissioning	650	0	650	140	0	140	790	0	790
SCE-05	SCE-05, Vol. 1	Hydro	Hydro - Electrical Equipment	6,470	0	6,470	(969)	0	(969)	5,501	0	5,501
SCE-05	SCE-05, Vol. 1	Hydro	Hydro - Prime Movers	10,470	0	10,470	(7,384)	0	(7,384)	3,086	0	3,086
SCE-05	SCE-05, Vol. 1	Hydro	Hydro - Relicensing	6,230	0	6,230	1,574	0	1,574	7,804	0	7,804
SCE-05	SCE-05, Vol. 1	Hydro	Hydro - Structures and Grounds	8,666	0	8,666	(1,543)	0	(1,543)	7,123	0	7,123
		Hydro Total		44,642	0	44,642	(5,375)	0	(5,375)	39,267	0	39,267
SCE-05	SCE-05, Vol. 1	Palo Verde	Palo Verde	37,920	0	37,920	(367)	0	(367)	37,553	0	37,553
		Palo Verde Total		37,920	0	37,920	(367)	0	(367)	37,553	0	37,553
SCE-05	SCE-05, Vol. 1	Solar	Solar	100	0	100	3,778	0	3,778	3,878	0	3,878
		Solar Total		100	0	100	3,778	0	3,778	3,878	0	3,878
SCE-05	SCE-05, Vol. 2	Energy Resource Management	Communications Equipment	965	0	965	(221)	0	(221)	744	0	744
		Energy Resource Management Total		965	0	965	(221)	0	(221)	744	0	744
SCE-06	SCE-06, Vol. 1 Pt. 1	Enterprise Technology	Software Maintenance and Replacement	23,507	0	23,507	(4,407)	0	(4,407)	19,100	0	19,100
SCE-06	SCE-06, Vol. 1 Pt. 1	Enterprise Technology	Technology Infrastructure Maintenance and Replacement	50,376	0	50,376	1,402	0	1,402	51,778	0	51,778
		Enterprise Technology Total		73,884	0	73,884	(3,006)	0	(3,006)	70,878	0	70,878
SCE-06	SCE-06, Vol. 1 Pt. 2	Audit, Ethics & Compliance	Technology Solutions	2,280	0	2,280	2,334	0	2,334	4,614	0	4,614
		Audit, Ethics & Compliance Total		2,280	0	2,280	2,334	0	2,334	4,614	0	4,614
SCE-06	SCE-06, Vol. 1 Pt. 2	Business & Financial Planning	Technology Solutions	0	0	0	0	0	0	0	0	0
		Business & Financial Planning Total		0	0	0	0	0	0	0	0	0
SCE-06	SCE-06, Vol. 1 Pt. 2	Business Continuation	Technology Solutions	0	0	0	0	0	0	0	0	0
		Business Continuation Total		0	0	0	0	0	0	0	0	0
SCE-06	SCE-06, Vol. 1 Pt. 2	Capital Related Expense & Other	Technology Solutions	39,496	0	39,496	(9,899)	0	(9,899)	29,596	0	29,596
		Capital Related Expense & Other Total		39,496	0	39,496	(9,899)	0	(9,899)	29,596	0	29,596
SCE-06	SCE-06, Vol. 1 Pt. 2	CS Replatform	Technology Solutions	1,448	0	1,448	(0)	0	(0)	1,448	0	1,448
		CS Replatform Total		1,448	0	1,448	(0)	0	(0)	1,448	0	1,448
SCE-06	SCE-06, Vol. 1 Pt. 2	Customer Care Services	Technology Solutions	0	0	0	0	0	0	0	0	0
		Customer Care Services Total		0	0	0	0	0	0	0	0	0
SCE-06	SCE-06, Vol. 1 Pt. 2	Customer Contacts	Technology Solutions	1,312	0	1,312	518	0	518	1,830	0	1,830
		Customer Contacts Total		1,312	0	1,312	518	0	518	1,830	0	1,830
SCE-06	SCE-06, Vol. 1 Pt. 2	Cybersecurity	Technology Solutions	8,183	0	8,183	(2,893)	0	(2,893)	5,290	0	5,290
		Cybersecurity Total		8,183	0	8,183	(2,893)	0	(2,893)	5,290	0	5,290
SCE-06	SCE-06, Vol. 1 Pt. 2	Employee Benefits & Programs	Technology Solutions	0	0	0	0	0	0	0	0	0
		Employee Benefits & Programs Total		0	0	0	0	0	0	0	0	0
SCE-06	SCE-06, Vol. 1 Pt. 2	Energy Resource Management	Technology Solutions	11,755	0	11,755	(508)	0	(508)	11,247	0	11,247
		Energy Resource Management Total		11,755	0	11,755	(508)	0	(508)	11,247	0	11,247
SCE-06	SCE-06, Vol. 1 Pt. 2	Enterprise Technology	Technology Solutions	18,385	0	18,385	15,533	0	15,533	33,917	0	33,917
		Enterprise Technology Total		18,385	0	18,385	15,533	0	15,533	33,917	0	33,917
SCE-06	SCE-06, Vol. 1 Pt. 2	Environmental Services	Technology Solutions	0	0	0	0	0	0	0	0	0
		Environmental Services Total		0	0	0	0	0	0	0	0	0
SCE-06	SCE-06, Vol. 1 Pt. 2	Financial Oversight & Transactional Processing	Technology Solutions	1,500	0	1,500	2,723	0	2,723	4,223	0	4,223
		Financial Oversight & Transactional Processing Total		1,500	0	1,500	2,723	0	2,723	4,223	0	4,223
SCE-06	SCE-06, Vol. 1 Pt. 2	Fossil Fuel Generation	Technology Solutions	1,840	0	1,840	(1,366)	0	(1,366)	473	0	473
		Fossil Fuel Generation Total		1,840	0	1,840	(1,366)	0	(1,366)	473	0	473
SCE-06	SCE-06, Vol. 1 Pt. 2	Hydro	Technology Solutions	1,245	0	1,245	54	0	54	1,299	0	1,299
		Hydro Total		1,245	0	1,245	54	0	54	1,299	0	1,299
SCE-06	SCE-06, Vol. 1 Pt. 2	Legal	Technology Solutions	3,643	0	3,643	(1,885)	0	(1,885)	1,758	0	1,758
		Legal Total		3,643	0	3,643	(1,885)	0	(1,885)	1,758	0	1,758
SCE-06	SCE-06, Vol. 1 Pt. 2	Meter Activities	Technology Solutions	0	0	0	0	0	0	0	0	0
		Meter Activities Total		0	0	0	0	0	0	0	0	0
SCE-06	SCE-06, Vol. 1 Pt. 2	Physical Security	Technology Solutions	5,076	0	5,076	(3,169)	0	(3,169)	1,907	0	1,907
		Physical Security Total		5,076	0	5,076	(3,169)	0	(3,169)	1,907	0	1,907
SCE-06	SCE-06, Vol. 1 Pt. 2	Pricing & Ratemaking	Technology Solutions	0	0	0	0	0	0	0	0	0
		Pricing & Ratemaking Total		0	0	0	0	0	0	0	0	0
SCE-06	SCE-06, Vol. 1 Pt. 2	Safety Programs	Technology Solutions	0	0	0	0	0	0	0	0	0
		Safety Programs Total		0	0	0	0	0	0	0	0	0
SCE-06	SCE-06, Vol. 1 Pt. 2	Transportation Services	Technology Solutions	251	0	251	(251)	0	(251)	0	0	0
		Transportation Services Total		251	0	251	(251)	0	(251)	0	0	0

				2019 SCE Request (1.4 CSRP Amendment)			Variance			2019 Recorded		
Exhibit_1	Exhibit	BPE	GRC Activity	Total	FERC	CPUC	Total	FERC	CPUC	Total	FERC	CPUC
SCE-06	SCE-06, Vol. 2	Business & Financial Planning	Digital and Process Transformation	4,545	0	4,545	(842)	0	(842)	3,703	0	3,703
		Business & Financial Planning Total		4,545	0	4,545	(842)	0	(842)	3,703	0	3,703
SCE-06	SCE-06, Vol. 2	Supply Chain Management	Logistics, Graphics, and Center of Excellence	371	0	371	(77)	0	(77)	294	0	294
		Supply Chain Management Total		371	0	371	(77)	0	(77)	294	0	294
SCE-06	SCE-06, Vol. 4	Environmental Services	Environmental Programs	560	0	560	120	0	120	680	0	680
		Environmental Services Total		560	0	560	120	0	120	680	0	680
SCE-06	SCE-06, Vol. 5	Facility & Land Operations	Acquire and Dispose of Land Rights	1,580	0	1,580	(462)	0	(462)	1,119	0	1,119
SCE-06	SCE-06, Vol. 5	Facility & Land Operations	CRE Project Management	55,586	6,349	49,237	(8,442)	(2,922)	(5,520)	47,144	3,427	43,718
SCE-06	SCE-06, Vol. 5	Facility & Land Operations	Facility Asset Management	53,528	4,697	48,831	5,930	(4,697)	10,627	59,458	0	59,458
		Facility & Land Operations Total		110,694	11,046	99,648	(2,973)	(7,619)	4,646	107,721	3,427	104,294
SCE-06	SCE-06, Vol. 5	Transportation Services	Air Operations	2,559	0	2,559	(238)	0	(238)	2,320	0	2,320
SCE-06	SCE-06, Vol. 5	Transportation Services	Fleet Asset Management	2,372	0	2,372	(140)	0	(140)	2,232	0	2,232
SCE-06	SCE-06, Vol. 5	Transportation Services	Fleet Operations and Maintenance	482	0	482	(37)	0	(37)	445	0	445
		Transportation Services Total		5,413	0	5,413	(416)	0	(416)	4,997	0	4,997
zEXCLUDED	zEXCLUDED - NON-GRC	CS Replatform	CS Replatform	131,430	0	131,430	(18,554)	0	(18,554)	112,877	0	112,877
		CS Replatform Total		131,430	0	131,430	(18,554)	0	(18,554)	112,877	0	112,877
zEXCLUDED	zEXCLUDED - NON-GRC	Inspections & Maintenance	Long Beach Remediation	805	0	805	1,201	0	1,201	2,006	0	2,006
		Inspections & Maintenance Total		805	0	805	1,201	0	1,201	2,006	0	2,006
zEXCLUDED	zEXCLUDED - NON-GRC	Customer Requested System Modifications	Mobile Home Park - Customer Side	27,612	0	27,612	17,376	0	17,376	44,988	0	44,988
zEXCLUDED	zEXCLUDED - NON-GRC	Customer Requested System Modifications	Mobile Home Park - SCE Responsibility	18,450	0	18,450	(18,314)	0	(18,314)	136	0	136
		Customer Requested System Modifications Total		46,062	0	46,062	(938)	0	(938)	45,125	0	45,125
zEXCLUDED	zEXCLUDED - NON-GRC	Transportation Electrification	Charge Ready SCE Portion	12,767	0	12,767	(4,026)	0	(4,026)	8,741	0	8,741
zEXCLUDED	zEXCLUDED - NON-GRC	Transportation Electrification	Transportation Electrification Priority Review Projects	45,724	0	45,724	(45,438)	0	(45,438)	286	0	286
		Transportation Electrification Total		58,492	0	58,492	(49,465)	0	(49,465)	9,027	0	9,027
zEXCLUDED	zEXCLUDED - NON-GRC	Catalina (Gas & Water)	Catalina Gas and Water	5,185	0	5,185	(3,053)	0	(3,053)	2,132	0	2,132
zEXCLUDED	zEXCLUDED - NON-GRC	Catalina (Gas & Water)	Other - Catalina (Gas and Water)	915	0	915	(400)	0	(400)	515	0	515
		Catalina (Gas & Water) Total		6,100	0	6,100	(3,453)	0	(3,453)	2,647	0	2,647
zEXCLUDED	zEXCLUDED - NON-GRC	Edison Carrier Solutions	Edison Carrier Solutions	39,662	0	39,662	(314)	0	(314)	39,348	0	39,348
		Edison Carrier Solutions Total		39,662	0	39,662	(314)	0	(314)	39,348	0	39,348
zEXCLUDED	zEXCLUDED - NON-GRC	Customer Care Services	Technology Solutions	305	0	305	(96)	0	(96)	209	0	209
		Customer Care Services Total		305	0	305	(96)	0	(96)	209	0	209
zEXCLUDED	zEXCLUDED - NON-GRC	Demand Response	Technology Solutions	1,152	0	1,152	418	0	418	1,570	0	1,570
		Demand Response Total		1,152	0	1,152	418	0	418	1,570	0	1,570
zEXCLUDED	zEXCLUDED - NON-GRC	Facility & Land Operations	CRE Project Management	11,608	0	11,608	(1,905)	0	(1,905)	9,703	0	9,703
		Facility & Land Operations Total		11,608	0	11,608	(1,905)	0	(1,905)	9,703	0	9,703
		Grand Total		4,374,908	682,214	3,692,694	211,624	(3,735)	215,359	4,586,532	678,479	3,908,053

EXHIBIT SCE-18, VOLUME 01
SCE PRELIMINARY MODELING OF CALPA AND TURN TESTIMONY REDUCTIONS

EXHIBIT SCE-18, VOLUME 01
SCE PRELIMINARY MODELING OF CALPA TESTIMONY REDUCTIONS
O&M, CAPITAL EXPENDITURES, AND CAPITAL ADDITIONS

O&M In Use					2021	2021	2021	2022	2023
RO ID	FERC Account	GRC Activity Name	Testimony Exhibit	Cost Type	Forecast	Adjustments	Adj Forecast	Forecast	Forecast
11	451	Service Guarantee Program	SCE-03, Vol. 6	O	(985)	985	(0)	(0)	(0)
17	454	SCE-Financed Added Facilities	SCE-02, Vol. 7	O	34,227	(39)	34,188	34,188	34,188
23	456	Generation Radial Tie-Lines	SCE-02, Vol. 7	O	1,571	(210)	1,361	1,361	1,361
24	456	Income Tax Component of Contribution	SCE-7, Vol. 2	O	28,203	(1,519)	26,684	27,994	29,275
25	456	Miscellaneous Revenues - Customer Interactions	SCE-03, Vol. 6	O	-	3	3	3	3
28	456	SCE Energy Manager	SCE-03, Vol. 6	O	-	133	133	133	133
33	500	Short-Term Incentive Program - Generation	SCE-06, Vol. 3 Pt. 1	L	8,028	(5,218)	2,810	2,810	2,810
150	561	Monitoring Bulk Power System	SCE-02, Vol. 3	L	9,263	(726)	8,537	8,537	8,537
171	563	Transmission Line Patrols	SCE-02, Vol. 2	L	5,457	(1,079)	4,378	4,378	4,378
171	563	Transmission Line Patrols	SCE-02, Vol. 2	NL	1,776	(824)	952	952	952
203	566	Transmission/Substation Work Order Write-Off	SCE-02, Vol. 7	L	1,794	(742)	1,052	1,052	1,052
203	566	Transmission/Substation Work Order Write-Off	SCE-02, Vol. 7	NL	2,891	742	3,633	3,633	3,633
205	567	Transmission Line Rents	SCE-02, Vol. 7	O	17,894	(419)	17,475	17,475	17,475
229	571	Enhanced Overhead Inspections and Remediations	SCE-04, Vol. 5	L	1,007	(1,007)	0	0	0
229	571	Enhanced Overhead Inspections and Remediations	SCE-04, Vol. 5	NL	5,707	(5,707)	(0)	(0)	(0)
233	571	Transmission Line Rating Remediation (TLRR)	SCE-02, Vol. 2	L	596	(277)	319	319	319
233	571	Transmission Line Rating Remediation (TLRR)	SCE-02, Vol. 2	NL	1,194	(554)	640	640	640
234	571	Transmission O&M Maintenance	SCE-02, Vol. 2	L	10,831	(5,778)	5,053	5,053	5,053
234	571	Transmission O&M Maintenance	SCE-02, Vol. 2	NL	5,382	(3,078)	2,304	2,304	2,304
253	580	Distribution Overhead Detail Inspections	SCE-02, Vol. 1 Pt. 2	L	761	553	1,314	1,314	1,314
253	580	Distribution Overhead Detail Inspections	SCE-02, Vol. 1 Pt. 2	NL	331	(201)	130	130	130
264	580	Technology Assessment	SCE-02, Vol. 4 Pt. 1	L	2,760	(724)	2,036	2,036	2,036
281	583	Distribution Overhead Detail Inspections	SCE-02, Vol. 1 Pt. 2	L	2,634	718	3,352	3,352	3,352
281	583	Distribution Overhead Detail Inspections	SCE-02, Vol. 1 Pt. 2	NL	1,022	512	1,534	1,534	1,534
285	583	Distribution Routine Vegetation Management	SCE-02, Vol. 6	L	-	156	156	156	156
285	583	Distribution Routine Vegetation Management	SCE-02, Vol. 6	NL	(0)	31	31	31	31
289	583	Enhanced Overhead Inspections and Remediations	SCE-04, Vol. 5	L	9,627	(9,627)	(0)	(0)	(0)
289	583	Enhanced Overhead Inspections and Remediations	SCE-04, Vol. 5	NL	12,691	(8,461)	4,230	4,230	4,230
311	587	Load Side Support	SCE-02, Vol. 4 Pt. 2	NL	377	(205)	172	172	172
322	588	Distribution Overhead Detail Inspections	SCE-02, Vol. 1 Pt. 2	L	68	(25)	43	43	43
322	588	Distribution Overhead Detail Inspections	SCE-02, Vol. 1 Pt. 2	NL	130	48	178	178	178
323	588	Distribution Preventive and Breakdown O&M Maintenance	SCE-02, Vol. 1 Pt. 2	L	26	(3)	23	23	23
323	588	Distribution Preventive and Breakdown O&M Maintenance	SCE-02, Vol. 1 Pt. 2	NL	10	2	12	12	12
340	588	Organizational Support	SCE-04, Vol. 5	NL	645	(645)	0	0	0
345	588	Short-Term Incentive Program - Transmission & Distribution	SCE-06, Vol. 3 Pt. 1	L	84,091	(57,271)	26,820	26,820	26,820
356	588	Underground Utility Locating Service - Distribution	SCE-02, Vol. 7	L	43	1	44	44	44
356	588	Underground Utility Locating Service - Distribution	SCE-02, Vol. 7	NL	8,341	137	8,478	8,478	8,478
359	589	Distribution Line Rents	SCE-02, Vol. 7	O	2,968	(105)	2,863	2,863	2,863
380	593	Distribution Pole Loading Work Order Related Expense	SCE-02, Vol. 7	NL	2,508	(161)	2,347	2,347	2,347
381	593	Distribution Preventive and Breakdown O&M Maintenance	SCE-02, Vol. 1 Pt. 2	L	22,468	(2,854)	19,614	19,614	19,614
381	593	Distribution Preventive and Breakdown O&M Maintenance	SCE-02, Vol. 1 Pt. 2	NL	17,086	3,238	20,324	20,324	20,324
382	593	Distribution Routine Vegetation Management	SCE-02, Vol. 6	L	8,168	624	8,793	8,793	8,793
382	593	Distribution Routine Vegetation Management	SCE-02, Vol. 6	NL	92,023	(7,727)	84,297	84,297	84,297
385	593	Enhanced Overhead Inspections and Remediations	SCE-04, Vol. 5	NL	27,648	(19,887)	7,761	7,761	7,761
391	593	Wildfire Vegetation Management	SCE-02, Vol. 6	L	1,299	(617)	682	682	682
391	593	Wildfire Vegetation Management	SCE-02, Vol. 6	NL	57,638	(33,268)	24,370	24,370	24,370
392	593	Wildfire Work Order Related Expense Distribution	SCE-02, Vol. 7	NL	9,355	(638)	8,717	8,717	8,717
394	594	Distribution Preventive and Breakdown O&M Maintenance	SCE-02, Vol. 1 Pt. 2	L	29,548	(7,361)	22,187	22,187	22,187
394	594	Distribution Preventive and Breakdown O&M Maintenance	SCE-02, Vol. 1 Pt. 2	NL	29,946	1,342	31,288	31,288	31,288
395	594	Distribution Work Order Related Expense	SCE-02, Vol. 7	NL	8,456	(1,231)	7,225	7,225	7,225
399	595	Distribution Preventive and Breakdown O&M Maintenance	SCE-02, Vol. 1 Pt. 2	L	3,385	(430)	2,955	2,955	2,955
399	595	Distribution Preventive and Breakdown O&M Maintenance	SCE-02, Vol. 1 Pt. 2	NL	1,332	253	1,585	1,585	1,585
406	598	Distribution Preventive and Breakdown O&M Maintenance	SCE-02, Vol. 1 Pt. 2	L	25	(3)	22	22	22
406	598	Distribution Preventive and Breakdown O&M Maintenance	SCE-02, Vol. 1 Pt. 2	NL	600	114	714	714	714
411	901	Billing	SCE-03, Vol. 1	L	3,130	(150)	2,980	2,980	2,980
415	901	Customer Contact Center	SCE-03, Vol. 4	L	3,792	(150)	3,643	3,643	3,643
423	901	Training and Development	SCE-06, Vol. 3 Pt. 1	L	2,228	(321)	1,907	1,907	1,907
431	903	Billing	SCE-03, Vol. 1	L	21,237	(2,901)	18,336	18,336	18,336
431	903	Billing	SCE-03, Vol. 1	NL	6,479	81	6,560	6,560	6,560
434	903	Credit and Payment	SCE-03, Vol. 1	L	9,161	(200)	8,961	8,961	8,961
434	903	Credit and Payment	SCE-03, Vol. 1	NL	5,086	439	5,524	5,524	5,524
437	903	Customer Contact Center	SCE-03, Vol. 4	L	25,123	177	25,300	25,300	25,300
437	903	Customer Contact Center	SCE-03, Vol. 4	NL	15,318	(15)	15,303	15,303	15,303
446	903	Postage	SCE-03, Vol. 1	O	13,177	230	13,407	13,407	13,407
452	904	Uncollectible Expenses	SCE-03, Vol. 1	O	17,763	(2,361)	15,402	16,272	17,254
463	905	Short-Term Incentive Program - Customer Service	SCE-06, Vol. 3 Pt. 1	L	19,276	(13,029)	6,247	6,247	6,247
478	908	Business Account Management	SCE-03, Vol. 4	L	16,609	492	17,101	17,101	17,101
479	908	Business Account Management	SCE-03, Vol. 4	L	183	(4,877)	(4,694)	(4,694)	(4,694)
479	908	Business Account Management	SCE-03, Vol. 4	NL	1,182	(665)	517	517	517
480	908	Business Account Management Services	SCE-03, Vol. 5	L	4,049	(932)	3,117	3,117	3,117
480	908	Business Account Management Services	SCE-03, Vol. 5	NL	960	(219)	741	741	741
481	908	Community Resiliency Incentives	SCE-04, Vol. 5	L	191	(122)	69	69	69
481	908	Community Resiliency Incentives	SCE-04, Vol. 5	NL	3,259	(2,178)	1,081	1,081	1,081
492	908	eMobility	SCE-03, Vol. 5	L	2,816	(2,817)	(1)	(1)	(1)
492	908	eMobility	SCE-03, Vol. 5	NL	750	(749)	1	1	1
500	909	Customer Communications, Education and Outreach	SCE-03, Vol. 2	L	1,173	(1,352)	(179)	(179)	(179)
500	909	Customer Communications, Education and Outreach	SCE-03, Vol. 2	NL	6,932	(3,848)	3,084	3,084	3,084
511	920921	Accounting, Financial Compliance and Financial Reporting	SCE-06, Vol. 2	L	11,065	(316)	10,749	10,749	10,749
512	920921	All Hazards Assessment, Mitigation and Analytics	SCE-04, Vol. 1	NL	1,004	(204)	800	800	800
514	920921	Audits	SCE-06, Vol. 4	L	4,730	(784)	3,946	3,946	3,946
524	920921	Cybersecurity Delivery and IT Compliance	SCE-04, Vol. 3	L	19,982	(5,129)	14,853	14,853	14,853
524	920921	Cybersecurity Delivery and IT Compliance	SCE-04, Vol. 3	NL	12,250	(6,175)	6,075	6,075	6,075
538	920921	Enhanced Situational Awareness	SCE-04, Vol. 5	L	460	(68)	392	392	392
538	920921	Enhanced Situational Awareness	SCE-04, Vol. 5	NL	3,134	(466)	2,668	2,668	2,668
547	920921	Fire Science and Advanced Modeling	SCE-04, Vol. 5	NL	3,948	(1,744)	2,204	2,204	2,204
548	920921	Fixed Price Technology and Maintenance	SCE-06, Vol. 1 Pt. 1	NL	73,400	(4,846)	68,554	68,554	68,554
553	920921	IT Project Support	SCE-02, Vol. 4 Pt. 1	NL	4,577	(2,104)	2,473	2,473	2,473
557	920921	Long-term Incentives	SCE-06, Vol. 3 Pt. 1	L	13,695	(13,695)	0	0	0
560	920921	Monitoring Bulk Power System	SCE-02, Vol. 3	L	29,849	(7,243)	22,606	22,606	22,606
560	920921	Monitoring Bulk Power System	SCE-02, Vol. 3	NL	12,949	(1,843)	11,106	11,106	11,106
562	920921	Organizational Support	SCE-04, Vol. 5	NL	2,708	(2,708)	0	0	0
571	920921	Security Technology Operations and Maintenance	SCE-04, Vol. 4	NL	17,186	(524)	16,662	16,662	16,662
573	920921	Short-Term Incentive Program - A&G	SCE-06, Vol. 3 Pt. 1	L	69,511	(46,487)	23,024	23,024	23,024
574	920921	Software Maintenance and Replacement	SCE-06, Vol. 1 Pt. 1	NL	84,947	(7,819)	77,128	77,128	77,128
581	920921	Technology Delivery	SCE-06, Vol. 1 Pt. 1	L	4,737	(408)	4,330	4,330	4,330
581	920921	Technology Delivery	SCE-06, Vol. 1 Pt. 1	NL	9,344	(2,486)	6,859	6,859	6,859

O&M In Use									
RO ID	FERC Account	GRC Activity Name	Testimony Exhibit	Cost Type	2021 Forecast	2021 Adjustments	2021 Adj Forecast	2022 Forecast	2023 Forecast
582	920921	Technology Infrastructure Maintenance and Replacement	SCE-06, Vol. 1 Pt. 1	NL	7,937	250	8,187	8,187	8,187
593	922	Capitalized A&G Expense	SCE-07, Vol. 1	O	(180,139)	(13,001)	(193,140)	(198,323)	(203,439)
594	923	Accounting, Financial Compliance and Financial Reporting	SCE-06, Vol. 2	NL	10,156	(1,767)	8,389	8,389	8,389
620	924	Property Insurance	SCE-06, Vol. 2	O	20,462	(1,228)	19,234	19,234	19,234
640	925	Liability Insurance - Wildfire	SCE-06, Vol. 2	O	623,804	(155,951)	467,853	467,853	467,853
641	925	Liability Insurance (Non-Wildfire)	SCE-06, Vol. 2	O	35,851	(3,585)	32,266	32,266	32,266
657	926	401K Savings Plan	SCE-06, Vol. 3 Pt. 1	O	95,229	(7,051)	88,178	90,662	93,094
661	926	Capitalized P&B Expense	SCE-07, Vol. 1	O	(331,842)	111,083	(220,760)	(225,370)	(230,071)
665	926	Dental Plans	SCE-06, Vol. 3 Pt. 1	O	13,270	(948)	12,322	12,691	13,072
669	926	Disability Management - Programs	SCE-06, Vol. 3 Pt. 1	O	17,978	(1,418)	16,560	17,068	17,565
681	926	Executive Benefits (Non-Service)	SCE-06, Vol. 3 Pt. 1	O	12,208	(6,313)	5,895	5,895	5,895
682	926	Executive Benefits (Service)	SCE-06, Vol. 3 Pt. 1	O	3,334	(1,724)	1,610	1,610	1,610
687	926	Group Life Insurance	SCE-06, Vol. 3 Pt. 1	O	1,366	(98)	1,269	1,269	1,269
691	926	Long-term Incentives	SCE-06, Vol. 3 Pt. 1	L	(2,093)	2,093	(0)	(0)	(0)
692	926	Medical Programs	SCE-06, Vol. 3 Pt. 1	O	100,217	(7,160)	93,057	97,710	102,595
693	926	Miscellaneous Benefit Programs	SCE-06, Vol. 3 Pt. 1	O	6,302	(450)	5,852	5,852	5,852
698	926	Participant Credits and Charges - 926	SCE-06, Vol. 2	O	10,554	(2,801)	7,753	7,753	7,753
700	926	PBOP Costs (Service)	SCE-06, Vol. 3 Pt. 1	O	30,469	(0)	30,469	30,469	30,469
705	926	Recognition	SCE-06, Vol. 3 Pt. 1	O	74	(37)	37	37	37
721	926	Vision Service Plan	SCE-06, Vol. 3 Pt. 1	O	2,802	(200)	2,602	2,680	2,760
723	927	Franchise Fees	SCE-06, Vol. 2	O	81,436	(6,758)	74,678	78,899	83,660
729	930	Develop and Manage Policy and Initiatives	SCE-06, Vol. 6	NL	—	(181)	(181)	(181)	(181)
738	930	Professional Development and Education	SCE-06, Vol. 6	NL	1,880	(1,669)	211	211	211
743	930	Vendor Discount and Other Miscellaneous Payments	SCE-06, Vol. 2	NL	(11,212)	(1,877)	(13,089)	(13,089)	(13,089)
745	931	Billing	SCE-03, Vol. 1	O	—	26	26	26	26
765	935	Telecommunication Inspection and Maintenance	SCE-02, Vol. 2	L	3,150	(1,911)	1,239	1,239	1,239
765	935	Telecommunication Inspection and Maintenance	SCE-02, Vol. 2	NL	1,724	(544)	1,180	1,180	1,180
771	9990	Reduction in A&G For Catalina	N/A	NL	(1,132)	170	(963)	(961)	(960)
772	9991	Interest Offset on Customer Deposits	N/A	O	—	(8,460)	(8,460)	(8,460)	(8,460)
774	925	Adjustment for Shareholder P&B - 925	N/A	O	(3,562)	861	(2,701)	(2,701)	(2,701)
775	926	Adjustment for Shareholder P&B - 926	N/A	L	(10)	(11)	(21)	(21)	(21)
775	926	Adjustment for Shareholder P&B - 926	N/A	O	(196)	(448)	(644)	(662)	(682)
Total					1,682,213	(420,653)	1,261,559	1,266,243	1,271,708

Southern California Edison

2.17 CalPA Capital Inputs - 2019-2023 Forecast Capital Expenditures | Capital Adjustments Only

Nominal \$ in Thousands

PTVR Option: Escalate Adds - Forecast

							2,084,834	2,625,300	2,689,586	2,889,504	(235,700)	(469,663)	(106,366)	(88,724)	1,849,134	2,155,637	2,583,220	2,800,780
RO Model ID	GRC Activity	Exhibit	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
891	Technology Solutions	SCE-06, Vol. 1 Pt. 2	3,909	-	-	-	(3,409)	3,361			500	3,361	-	-				
952	Technology Solutions	SCE-06, Vol. 1 Pt. 2	414	-	-	-	1,590	36			2,003	36	-	-				
895	Technology Solutions	SCE-06, Vol. 1 Pt. 2	-	10,290	12,505	14,739		(2,576)	112	107	-	7,714	12,617	14,846				
924	Technology Solutions	SCE-06, Vol. 1 Pt. 2	415	414	1,474	1,474	(415)	(414)	(1,474)	(1,474)	-	-	-	-				
22	Distribution Transformers	SCE-02, Vol. 1 Pt. 2	6,334	10,891	11,206	11,528	22	425			6,356	11,316	11,206	11,528				
23	Distribution Transformers	SCE-02, Vol. 1 Pt. 2	88,126	89,245	92,439	95,097	303	3,479			88,429	92,724	92,439	95,097				
24	Prefabrication	SCE-02, Vol. 1 Pt. 2	14,544	15,007	15,441	15,885	(973)	(2,940)			13,571	12,067	15,441	15,885				
25	Prefabrication	SCE-02, Vol. 1 Pt. 2	4,299	7,391	7,605	7,824	(288)	(1,448)			4,011	5,943	7,605	7,824				
896	Technology Solutions	SCE-06, Vol. 1 Pt. 2	-	3,430	4,168	4,913		(859)	37	36	-	2,571	4,206	4,949				
14	Distribution Claim	SCE-02, Vol. 1 Pt. 2	40,385	41,670	42,875	44,108	1,782	1,825			42,167	43,495	42,875	44,108				
15	Distribution Preventive and Breakdown Capital Maintenance	SCE-02, Vol. 1 Pt. 2	135,880	140,202	144,258	148,407	(142)	(192)	-	-	135,738	140,010	144,258	148,407				
16	Distribution Preventive and Breakdown Capital Maintenance	SCE-02, Vol. 1 Pt. 2	8,251	8,514	8,760	9,012	(9)	(12)	-	-	8,242	8,502	8,760	9,012				
17	Distribution Preventive and Breakdown Capital Maintenance	SCE-02, Vol. 1 Pt. 2	133,875	138,134	142,129	146,217	(140)	(189)	-	-	133,735	137,945	142,129	146,217				
29	Meter Engineering	SCE-02, Vol. 1 Pt. 3	17,412	27,194	25,681	21,760	(2,300)	(2,300)			15,112	24,894	25,681	21,760				
762	Distribution Deteriorated Pole Replacement	SCE-02, Vol. 5	217,560	186,113	191,496	197,004	(16,874)	(12,740)			200,686	173,373	191,496	197,004				
763	Distribution Deteriorated Pole Replacement	SCE-02, Vol. 5	19,208	22,266	22,910	23,569	(1,490)	(1,524)			17,718	20,742	22,910	23,569				
764	Distribution Joint Pole Capital Credits	SCE-02, Vol. 5	(51,694)	(66,710)	(45,726)	(32,131)	(5,208)	(8,368)			(56,902)	(75,078)	(45,726)	(32,131)				
765	Distribution Joint Pole Capital Credits	SCE-02, Vol. 5	(35,944)	(34,785)	(58,703)	(75,303)	(3,621)	(4,363)			(39,565)	(39,148)	(58,703)	(75,303)				
766	Distribution Pole Loading Program Pole Replacement	SCE-02, Vol. 5	148,380	251,168	258,433	265,867	(11,508)	(17,194)			136,872	233,974	258,433	265,867				
767	Distribution Pole Loading Program Pole Replacement	SCE-02, Vol. 5	3,522	10,004	10,293	10,589	(273)				3,249	9,319	10,293	10,589				
897	Technology Solutions	SCE-06, Vol. 1 Pt. 2	-	2,058	2,501	2,948		(515)	22	21	-	1,543	2,523	2,969				
940	Technology Solutions	SCE-06, Vol. 1 Pt. 2	-	500	500	-		5,550	1,593	314	-	6,050	2,093	314				
898	Technology Solutions	SCE-06, Vol. 1 Pt. 2	-	37,729	45,852	54,041		(9,444)	411	393	-	28,285	46,263	54,434				
845	Catalina - Diesel	SCE-05, Vol. 1	5,013	6,046	-	-	(5,013)	(6,046)			0	0	-	-				
846	Catalina - Diesel	SCE-05, Vol. 1	166	5,374	6,190	-	-	(5,374)	(6,190)		166	-	0	-				
847	Catalina - Diesel	SCE-05, Vol. 1	121	80	4,810	6,000		(4,810)	(6,000)	(6,000)	121	80	(0)	-				
899	Technology Solutions	SCE-06, Vol. 1 Pt. 2	-	1,372	1,667	1,965		(343)	15	14	-	1,029	1,682	1,979				
788	All Hazards Assessment, Mitigation and Analytics	SCE-04, Vol. 1	8,640	7,560	2,880	2,880	(2,029)				8,640	5,531	2,880	2,880				
788	All Hazards Assessment, Mitigation and Analytics	SCE-04, Vol. 1	15,360	13,440	5,120	5,120	(3,608)				15,360	9,832	5,120	5,120				
900	Technology Solutions	SCE-06, Vol. 1 Pt. 2	-	10,290	12,505	14,739		(2,576)	112	107	-	7,714	12,617	14,846				
796	Cybersecurity Delivery and IT Compliance	SCE-04, Vol. 3	19,602	37,577	37,415	35,417	(19,727)				19,602	17,850	37,415	35,417				
800	Grid Mod Cybersecurity	SCE-04, Vol. 3	24,949	45,245	28,934	36,426	(19,703)				24,949	25,542	28,934	36,426				
792	Distribution Storm Response Capital	SCE-04, Vol. 2	40,613	41,905	43,117	44,357	3,003	3,098	3,188	3,280	43,616	45,003	46,305	47,637				
793	Transmission/Substation Storm Response Capital	SCE-04, Vol. 2	363	371	378	386	114	117	119	123	477	488	497	510				
794	Transmission/Substation Storm Response Capital	SCE-04, Vol. 2	1,134	1,158	1,180	1,207	300	306	312	319	1,433	1,464	1,492	1,526				
810	Protection of Grid Infrastructure Assets	SCE-04, Vol. 4	8,834	5,182	3,971	9,652	(5,065)	(2,037)			3,769	3,145	3,971	9,652				
811	Protection of Grid Infrastructure Assets	SCE-04, Vol. 4	110	2,938	5,047	401	(63)	(1,155)			47	1,783	5,047	401				
813	Protection of Grid Infrastructure Assets	SCE-04, Vol. 4	170	202	-	-	(97)	(80)			73	122	-	-				
813	Protection of Grid Infrastructure Assets	SCE-04, Vol. 4	774	922	-	-	(444)	(362)			330	560	-	-				
814	Protection of Grid Infrastructure Assets	SCE-04, Vol. 4	4,629	999	-	-	(2,654)	(393)			1,975	606	-	-				
815	Protection of Grid Infrastructure Assets	SCE-04, Vol. 4	3,745	820	-	-	(2,147)	(322)			1,598	498	-	-				
816	Protection of Grid Infrastructure Assets	SCE-04, Vol. 4	3,908	1,105	10,098	2,527	(2,241)	(434)			1,667	671	10,098	2,527				
817	Protection of Grid Infrastructure Assets	SCE-04, Vol. 4	431	94	-	-	(247)	(37)			184	57	-	-				
817	Protection of Grid Infrastructure Assets	SCE-04, Vol. 4	3,489	762	-	-	(2,000)	(300)			1,489	462	-	-				
818	Protection of Grid Infrastructure Assets	SCE-04, Vol. 4	357	416	-	-	(205)	(164)			152	252	-	-				
809	Protection of Grid Infrastructure Assets	SCE-04, Vol. 4	2,320	1,030	-	-	(1,330)	(405)			990	625	-	-				
812	Protection of Grid Infrastructure Assets	SCE-04, Vol. 4	4,167	5,582	6,783	7,006	(2,389)	(2,194)			1,778	3,388	6,783	7,006				
812	Protection of Grid Infrastructure Assets	SCE-04, Vol. 4	5,719	7,661	9,310	9,615	(3,279)	(3,011)			2,440	4,650	9,310	9,615				
843	Wildfire Covered Conductor Program	SCE-04, Vol. 5	454,369	656,353	771,815	942,892	(237,296)				454,369	419,057	771,815	942,892				
77	Oil Containment Diversion System	SCE-02, Vol. 3	370	382	393	404	16	12	8	7	386	394	401	411				
105	Substation Tools and Work Equipment	SCE-02, Vol. 3	7,072	7,297	7,508	7,724	329	263	196	156	7,401	7,560	7,704	7,880				
901	Technology Solutions	SCE-06, Vol. 1 Pt. 2	-	3,430	4,168	4,913		(859)	37	36	-	2,571	4,206	4,949				
80	Preventive Maintenance	SCE-02, Vol. 3	23,722	21,197	20,985	26,739	657	438	309	450	24,379	21,635	21,294	27,189				
81	Preventive Maintenance	SCE-02, Vol. 3	13,575	17,228	22,039	21,129	376	356	325	356	13,951	17,584	22,364	21,485				
83	Preventive Maintenance	SCE-02, Vol. 3	1,697	2,221	-	-	47	46			1,744	2,267	-	-				
84	Preventive Maintenance	SCE-02, Vol. 3	4,653	5,545	4,320	461	129	114	64	8	4,782	5,659	4,384	469				
85	Preventive Maintenance	SCE-02, Vol. 3	1,264	-	-	-	35				1,299	-	-	-				
78	Preventive Maintenance	SCE-02, Vol. 3	305	305	305	305	(58)	(52)	(48)	(42)	247	253	257	263				
82	Preventive Maintenance	SCE-02, Vol. 3	71	71	71	71	(13)	(12)	(11)	(10)	58	59	60	61				
99	Substation Capital Breakdown Maintenance	SCE-02, Vol. 3	540	551	562	575	794	810	825	846	1,334	1,362	1,387	1,421				
100	Substation Claim	SCE-02, Vol. 3	17	17	18	18	31	32	32	34	48	49	50	52				
935	Technology Solutions	SCE-06, Vol. 1 Pt. 2	-	3,750	1,250	-		(3,750)	(1,250)		-	-	-	-				
570	Distribution Added Facilities	SCE-02, Vol. 4 Pt. 3	5,946	6,136	6,313	6,495	(2,787)	(800)			3,159	5,336	6,313	6,495				
571	Distribution Added Facilities	SCE-02, Vol. 4 Pt. 3	8,827	9,108	9,371	9,641	(4,136)	(1,188)			4,691	7,920	9,371	9,641				
572	Distribution Relocations	SCE-02, Vol. 4 Pt. 3	54,999	56,748	58,390	60,069	(22,747)	(2,850)			32,252	53,898	58,390	60,069				

Southern California Edison

2.17 CalPA Capital Inputs - 2019-2023 Forecast Capital Expenditures | Capital Adjustments Only

Nominal \$ in Thousands

PTVR Option: Escalate Adds - Forecast

							2,084,834	2,625,300	2,689,586	2,889,504	(235,700)	(469,663)	(106,366)	(88,724)	1,849,134	2,155,637	2,583,220	2,800,780
RO Model ID	GRC Activity	Exhibit	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
578	Rule 20 B/C Conversions	SCE-02, Vol. 4 Pt. 3	17,617	18,178	18,704	19,242	(430)	(450)			17,187	17,728	18,704	19,242				
579	Rule 20 B/C Conversions	SCE-02, Vol. 4 Pt. 3	12,019	12,401	12,760	13,127	308	315			12,327	12,716	12,760	13,127				
574	Rule 20 B/C Conversions	SCE-02, Vol. 4 Pt. 3	5,785	5,909	6,021	6,159	(132)	(132)			5,653	5,777	6,021	6,159				
575	Rule 20 B/C Conversions	SCE-02, Vol. 4 Pt. 3	2,690	2,748	2,800	2,864	(1,067)	(1,089)			1,623	1,659	2,800	2,864				
576	Rule 20 B/C Conversions	SCE-02, Vol. 4 Pt. 3	308	307	307	307	(7)	(7)			301	300	307	307				
577	Rule 20 B/C Conversions	SCE-02, Vol. 4 Pt. 3	133	133	133	133	(53)	(53)			80	80	133	133				
581	Rule 20A Conversions	SCE-02, Vol. 4 Pt. 3	17,015	17,556	18,064	18,584	(6,048)	(6,241)			10,967	11,315	18,064	18,584				
580	Rule 20A Conversions	SCE-02, Vol. 4 Pt. 3	369	369	369	369	(131)	(131)			238	238	369	369				
583	Transmission Relocations	SCE-02, Vol. 4 Pt. 3	15,098	15,422	15,716	16,076	(2,887)	(2,957)			12,211	12,465	15,716	16,076				
120	Engineering and Planning Software Tools	SCE-02, Vol. 4 Pt. 1	2,246	613	-	-	(2,246)	(613)			0	(0)	-	-				
121	Engineering and Planning Software Tools	zEXCLUDED - BEYOND 2023	3,844	5,037	2,626	2,195	(3,844)	(5,037)	(2,626)	(2,195)	0	(0)	0	(0)				
122	Engineering and Planning Software Tools		SCE-02, Vol. 4 Pt. 1	1,315	1,438	2,780	2,410	(1,315)	(1,438)	(2,780)	(2,410)	(0)	0	(0)	0			
123	Engineering and Planning Software Tools		SCE-02, Vol. 4 Pt. 1	5,424	6,124	-	-	(5,424)	(6,124)			0	0	-	-			
124	Engineering and Planning Software Tools		SCE-02, Vol. 4 Pt. 1	6,631	8,174	6,193	4,843	(6,631)	(8,174)	(6,193)	(4,843)	0	(0)	(0)	0			
125	Engineering and Planning Software Tools	SCE-02, Vol. 4 Pt. 1	5,684	5,827	6,129	4,435	(5,684)	(5,827)	(6,129)	(4,435)	0	0	(0)	(0)				
126	Grid Management System	SCE-02, Vol. 4 Pt. 1	35,724	47,611	44,864	30,682		(10,155)	(44,864)	(30,682)	35,724	37,456	(0)	0				
130	DER-Driven 4 kV Cutovers	SCE-02, Vol. 4 Pt. 2	-	9,058	4,830	8,390			(9,058)	(8,390)	-	0	(0)	0				
131	DER-Driven Circuit Breaker Upgrades	SCE-02, Vol. 4 Pt. 2	455	1,608	2,409	2,538	(455)	(1,608)	(2,409)	(2,538)	0	0	0	0				
132	DER-Driven Distribution Circuit Upgrades	SCE-02, Vol. 4 Pt. 2	-	13,876	2,046	3,303		(13,876)	(2,046)	(3,303)	-	(0)	0	0				
133	DER-Driven Substation Transformer Upgrades	SCE-02, Vol. 4 Pt. 2	57	843	1,093	-	(57)	(843)	(1,093)		-	0	(0)	-				
161	Distribution Substation Plan Substations	SCE-02, Vol. 4 Pt. 2	1,926	19,920	18,669	14,595	533	(317)	(1,901)	(832)	2,459	19,603	16,768	13,763				
162	Distribution Substation Plan Substations	SCE-02, Vol. 4 Pt. 2	31	587	730	-	(31)	(426)	(363)	532	(0)	161	367	532				
165	Distribution Substation Plan Substations	SCE-02, Vol. 4 Pt. 2	-	11	91	11		(11)	(91)	(11)	-	(0)	(0)	0				
163	Distribution Substation Plan Substations	SCE-02, Vol. 4 Pt. 2	1,522	8,154	-	-	(502)	742	2,264	300	1,020	8,896	2,264	300				
399	New DER-Driven DSP Circuits	SCE-02, Vol. 4 Pt. 2	-	17,138	12,410	13,445		(17,138)	(12,410)	(13,445)	-	(0)	0	(0)				
481	Transmission Substation Plan (TSP)	SCE-02, Vol. 4 Pt. 2	-	-	-	38					-	-	-	(0)				
494	Transmission Substation Plan (TSP)	SCE-02, Vol. 4 Pt. 2	68,342	53,986	2,499	676		(2,262)			68,342	51,724	2,499	676				
517	Transmission Substation Plan (TSP)	SCE-02, Vol. 4 Pt. 2	-	-	-	-	1,197				1,197	-	-	-				
523	Transmission Substation Plan (TSP)	SCE-02, Vol. 4 Pt. 2	982	-	-	-	(244)				738	-	-	-				
524	Transmission Substation Plan (TSP)	SCE-02, Vol. 4 Pt. 2	583	601	-	-	(583)	(601)			0	0	-	-				
538	Transmission Substation Plan (TSP)	SCE-02, Vol. 4 Pt. 2	70	-	-	-	(70)				(0)	-	-	-				
539	Transmission Substation Plan (TSP)	SCE-02, Vol. 4 Pt. 2	65	-	-	-	(65)				0	-	-	-				
529	Transmission Substation Plan (TSP)	SCE-02, Vol. 4 Pt. 2	2,217	-	-	-	235				2,452	-	-	-				
568	Agricultural New Service Connections	SCE-02, Vol. 4 Pt. 3	7,233	7,465	7,681	7,902	(7)	9			7,226	7,474	7,681	7,902				
569	Commercial New Service Connections	SCE-02, Vol. 4 Pt. 3	97,968	101,244	104,300	107,941	(29,973)	(12)			67,995	101,232	104,300	107,941				
573	Residential New Service Connections	SCE-02, Vol. 4 Pt. 3	137,670	149,787	162,737	166,412	(59,973)	(13)			77,697	149,774	162,737	166,412				
582	Streetlights New Service Connections	SCE-02, Vol. 4 Pt. 3	23,726	25,464	27,712	30,068	(9,996)	(1)			13,730	25,463	27,712	30,068				
280	Grid Reliability Projects	SCE-02, Vol. 4 Pt. 2	8,000	-	-	-	(8,000)				-	-	-	-				
426	Renewable Transmission Projects	SCE-02, Vol. 4 Pt. 2	1,990	-	-	-	(1,990)				-	-	-	-				
36	Transmission Capital Maintenance	SCE-02, Vol. 2	4,572	14,165	14,426	14,760	(4,572)				-	14,165	14,426	14,760				
36	Transmission Capital Maintenance	SCE-02, Vol. 2	10,852	30,310	30,888	31,595	18,684	(227)	(242)	(244)	29,536	30,083	30,646	31,351				
38	Transmission Capital Maintenance	SCE-02, Vol. 2	14,112	14,882	15,163	15,511	(14,112)	(14,047)	(14,589)	(15,271)	-	835	574	240				
770	Telecommunication Deteriorated Pole Replacement	SCE-02, Vol. 5	115	221	226	231	4	5			119	226	226	231				
771	Telecommunication Pole Loading Program Replacement	SCE-02, Vol. 5	58	1,094	1,115	1,141	2	26			60	1,120	1,115	1,141				
772	Transmission Deteriorated Pole Replacement	SCE-02, Vol. 5	1,301	1,496	1,525	1,560	49	36			1,350	1,532	1,525	1,560				
772	Transmission Deteriorated Pole Replacement	SCE-02, Vol. 5	82,025	94,322	96,120	98,322	3,079	2,261			85,104	96,583	96,120	98,322				
774	Transmission Joint Pole Capital Credits	SCE-02, Vol. 5	(2,375)	(2,108)	(7,635)	(10,994)	(239)	(264)			(2,614)	(2,372)	(7,635)	(10,994)				
775	Transmission Joint Pole Capital Credits	SCE-02, Vol. 5	(12,762)	(18,750)	(13,621)	(10,749)	(1,286)	(2,352)			(14,048)	(21,102)	(13,621)	(10,749)				
776	Transmission Pole Loading Program Replacement	SCE-02, Vol. 5	46	129	132	135	2	3			48	132	132	135				
776	Transmission Pole Loading Program Replacement	SCE-02, Vol. 5	15,235	42,752	43,567	44,565	572	1,025			15,807	43,777	43,567	44,565				
(blank)	Technology Solutions	SCE-06 , Vol. 1 Pt. 2	-	-	-	-	1,151				1,151	-	-	-				
(blank)	Distribution Substation Plan Substations	SCE-02 , Vol. 4 Pt. 2	-	-	-	-	575				575	-	-	-				

Southern California Edison

PTYR Option: Escalate Adds - Forecast

OK

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Capital Inputs - 2019-2023 Forecast Capital Expenditures

Nominal \$ in Thousands

2.17 CalPA Alt PTY

\$ in Thousands		Total Capital Additions - Adjusted				
Asset Type	PTYR Category	2019	2020	2021	2022	2023
	PTYR Category					
	GRC - Wildfire	131,169	80,426	63,034	64,484	65,967
	GRC - New Service Connections (Res and Comm)	104,980	98,159	131,125	134,141	137,226
	GRC - All Other	3,485,981	2,636,232	2,837,937	2,903,210	2,969,984
	Non-GRC	806,769	1,129,176	1,868,361	1,911,334	1,955,294
	Total	4,528,898	3,943,994	4,900,458	5,013,168	5,128,471
	% Increase (Decrease) - GRC		-24.38%	7.72%	2.30%	2.30%
	% Increase (Decrease) - Non-GRC		39.96%	65.46%	2.30%	2.30%
	% Increase (Decrease) - Total		-12.91%	24.25%	2.30%	2.30%
	Totals:	4,528,898	3,943,994	4,900,458	5,013,168	5,128,471
		Total Capital Additions - Adjusted				
Asset Type	PTYR Category	2019	2020	2021	2022	2023
Palo Verde	GRC - All Other	69,923	39,864	38,928	39,823	40,739
Hydro	GRC - All Other	25,737	33,910	29,601	30,282	30,979
Pebbly Beach	GRC - All Other	3,959	2,624	1,907	1,951	1,996
Energy Storage	GRC - All Other	275	1	1	1	1
Mountainview	GRC - All Other	1,783	9,199	32,559	33,308	34,074
Peakers	GRC - All Other	1,988	852	0	0	0
Solar PV	GRC - All Other	106	105	105	107	110
Transmission - Land Rights	GRC - All Other	2,493	786	8,069	8,255	8,445
Transmission Substations	GRC - All Other	275,444	201,941	410,818	420,267	429,933
Transmission Lines	GRC - All Other	256,409	216,402	273,322	279,608	286,039
Transmission Lines PLIP	GRC - All Other	107,952	95,514	110,738	113,285	115,891
Transmission - Land Rights ISO	Non-GRC	0	0	77,658	79,444	81,271
Transmission Substations ISO	Non-GRC	309,204	205,741	594,191	607,857	621,838
Transmission Lines ISO	Non-GRC	207,868	181,841	156,876	160,484	164,175
Transmission - Land Rights Inc. ISO	Non-GRC	156	84	11,597	11,864	12,137
Transmission Substations Inc. ISO	Non-GRC	6,297	108	19,548	19,998	20,457
Transmission Lines Inc. ISO	Non-GRC	232	45,844	643,413	658,212	673,351
Distribution - Fee Land	GRC - All Other	8,370	2,032	0	0	0
Distribution - Land Rights	GRC - All Other	2,977	16,094	3,689	3,773	3,860
Distribution Substations	GRC - All Other	274,173	216,516	210,721	215,568	220,526
Distribution Lines	GRC - All Other	1,134,788	783,952	671,803	687,255	703,062
Distribution Lines PLIP	GRC - All Other	224,131	247,601	301,773	308,714	315,814
Meters	GRC - All Other	280,831	41,894	36,990	37,841	38,712
Streetlights	GRC - All Other	60,404	44,130	43,863	44,872	45,904
General - Land Rights	GRC - All Other	256	343	350	358	366
General Buildings	GRC - All Other	102,087	81,475	81,482	83,356	85,274
Computers	GRC - All Other	42,685	45,811	59,494	60,862	62,262
Security Monitoring (DDSMS)	GRC - All Other	18,814	9,568	10,172	10,406	10,645
Furniture & Equipment	GRC - All Other	5,211	7,431	7,806	7,985	8,169
Stores/Lab/Miscellaneous	GRC - All Other	16,741	22,202	27,923	28,566	29,223
Telecommunications	GRC - All Other	198,599	122,573	116,553	119,234	121,976
General Other	GRC - All Other	5,937	6,813	4,921	5,034	5,149
Hydro Relicensing	GRC - All Other	15,240	16,660	15,905	16,271	16,645
Cap Soft 5yr	GRC - All Other	289,058	218,771	185,028	189,283	193,637
Cap Soft 7yr	GRC - All Other	23,118	0	0	0	0
Transmission Lines PLIP ISO	Non-GRC	1,900	1,311	1,394	1,426	1,459
Cap Soft 5yr - GM	GRC - All Other	86,411	30,739	29,321	29,996	30,686
Cap Soft 7yr - GM	GRC - All Other	36,928	39,388	42,036	43,003	43,992
Distribution Lines - GM	GRC - All Other	78,008	49,721	35,756	36,578	37,420
Distribution Substations - GM	GRC - All Other	25,160	4,170	1,932	1,976	2,022
Telecommunications - GM	GRC - All Other	61,516	16,428	33,795	34,572	35,367
Transmission Substations - GM	GRC - All Other	341	0	0	0	0
Cap Soft 5yr - GR	GRC - Wildfire	305	4,161	141	144	147
Distribution Lines - GR	GRC - Wildfire	123,926	53,108	59,329	60,694	62,090
Distribution Substations - GR	GRC - Wildfire	642	816	825	844	864
Furniture & Equipment - GR	GRC - Wildfire	0	0	2,345	2,399	2,454
Telecommunications - GR	GRC - Wildfire	574	1,877	9	9	9
Transmission Lines - GR	GRC - Wildfire	4,572	17,158	431	441	451
Transmission Lines - GR ISO	Non-GRC	2,842	11,537	4,187	4,284	4,382
Computers - GR	GRC - Wildfire	1,151	3,308	-45	-46	-47
Distribution Lines - Rule 20A	GRC - All Other	7,905	10,431	10,301	10,538	10,780
Telecommunications - Rule 20A	GRC - All Other	221	290	273	280	286
Non-GRC	Non-GRC	278,269	682,711	359,497	367,765	376,224
Distribution Lines - NSC (Res_Comm)	GRC - New Service Connections (Res and Comm)	104,980	98,159	131,125	134,141	137,226

EXHIBIT SCE-18, VOLUME 01
SCE PRELIMINARY MODELING OF TURN TESTIMONY REDUCTIONS
O&M, CAPITAL EXPENDITURES, AND CAPITAL ADDITIONS

O&M In Use					2021	2021	2021	2022	2023
RO ID	FERC Account	GRC Activity Name	Testimony Exhibit	Cost Type	Forecast	Adjustments	Adj Forecast	Forecast	Forecast
11	451	Service Guarantee Program	SCE-03, Vol. 6	O	(985)	985	(0)	(0)	(0)
17	454	SCE-Financed Added Facilities	SCE-02, Vol. 7	O	34,227	(39)	34,188	34,188	34,188
23	456	Generation Radial Tie-Lines	SCE-02, Vol. 7	O	1,571	(210)	1,361	1,361	1,361
24	456	Income Tax Component of Contribution	SCE-7, Vol. 2	O	28,203	(162)	28,041	28,988	30,012
25	456	Miscellaneous Revenues - Customer Interactions	SCE-03, Vol. 6	O	-	3	3	3	3
27	456	Non Tariffed Revenues (456)	SCE-7, Vol. 1	O	7,624	475	8,099	8,099	8,099
28	456	SCE Energy Manager	SCE-03, Vol. 6	O	-	133	133	133	133
33	500	Short-Term Incentive Program - Generation	SCE-06, Vol. 3 Pt. 1	L	8,028	(3,414)	4,614	4,614	4,614
40	517	Palo Verde	SCE-05, Vol. 1	NL	14,700	(1,347)	13,353	13,353	13,353
45	519	Palo Verde	SCE-05, Vol. 1	NL	7,730	(708)	7,021	7,021	7,021
47	520	Palo Verde	SCE-05, Vol. 1	NL	5,263	(482)	4,781	4,781	4,781
48	523	Palo Verde	SCE-05, Vol. 1	NL	6,388	(585)	5,803	5,803	5,803
50	524	Palo Verde	SCE-05, Vol. 1	NL	22,810	(2,090)	20,719	20,719	20,719
52	528	Palo Verde	SCE-05, Vol. 1	NL	3,288	(301)	2,987	2,987	2,987
53	529	Palo Verde	SCE-05, Vol. 1	NL	1,046	(96)	950	950	950
54	530	Palo Verde	SCE-05, Vol. 1	NL	11,313	(1,037)	10,277	10,277	10,277
55	531	Palo Verde	SCE-05, Vol. 1	NL	3,862	(354)	3,508	3,508	3,508
56	532	Palo Verde	SCE-05, Vol. 1	NL	1,127	(103)	1,023	1,023	1,023
60	536	Hydro	SCE-05, Vol. 1	NL	5,069	(63)	5,006	5,006	5,006
67	539	Hydro	SCE-05, Vol. 1	NL	10,947	(136)	10,811	10,811	10,811
78	545	Hydro	SCE-05, Vol. 1	NL	3,528	(44)	3,484	3,484	3,484
90	549	Catalina - Diesel	SCE-05, Vol. 1	NL	1,456	(58)	1,399	1,399	1,399
93	549	Fuel Cell	SCE-05, Vol. 1	NL	488	(18)	470	470	470
95	549	Mountainview	SCE-05, Vol. 1	NL	4,619	(158)	4,461	4,461	4,461
123	554	Catalina - Diesel	SCE-05, Vol. 1	NL	1,145	(45)	1,099	1,099	1,099
124	554	Mountainview	SCE-05, Vol. 1	O	3,367	(822)	2,545	2,545	2,545
127	556	Palo Verde	SCE-05, Vol. 1	NL	1,143	(105)	1,038	1,038	1,038
203	566	Transmission/Substation Work Order Write-Off	SCE-02, Vol. 7	L	1,794	(742)	1,052	1,052	1,052
203	566	Transmission/Substation Work Order Write-Off	SCE-02, Vol. 7	NL	2,891	742	3,633	3,633	3,633
205	567	Transmission Line Rents	SCE-02, Vol. 7	O	17,894	(419)	17,475	17,475	17,475
323	588	Distribution Preventive and Breakdown O&M Maintenance	SCE-02, Vol. 1 Pt. 2	L	26	(3)	23	23	23
323	588	Distribution Preventive and Breakdown O&M Maintenance	SCE-02, Vol. 1 Pt. 2	NL	10	2	12	12	12
345	588	Short-Term Incentive Program - Transmission & Distribution	SCE-06, Vol. 3 Pt. 1	L	84,091	(59,829)	24,262	24,262	24,262
356	588	Underground Utility Locating Service - Distribution	SCE-02, Vol. 7	L	43	1	44	44	44
356	588	Underground Utility Locating Service - Distribution	SCE-02, Vol. 7	NL	8,341	137	8,478	8,478	8,478
359	589	Distribution Line Rents	SCE-02, Vol. 7	O	2,968	(105)	2,863	2,863	2,863
365	592	Distribution Fault Anticipation	SCE-04, Vol. 5	NL	68	(68)	0	0	0
381	593	Distribution Preventive and Breakdown O&M Maintenance	SCE-02, Vol. 1 Pt. 2	L	22,468	(2,854)	19,614	19,614	19,614
381	593	Distribution Preventive and Breakdown O&M Maintenance	SCE-02, Vol. 1 Pt. 2	NL	17,086	3,238	20,324	20,324	20,324
391	593	Wildfire Vegetation Management	SCE-02, Vol. 6	L	1,299	(645)	653	653	653
391	593	Wildfire Vegetation Management	SCE-02, Vol. 6	NL	57,638	(37,554)	20,085	20,085	20,085
394	594	Distribution Preventive and Breakdown O&M Maintenance	SCE-02, Vol. 1 Pt. 2	L	29,548	(3,754)	25,794	25,794	25,794
394	594	Distribution Preventive and Breakdown O&M Maintenance	SCE-02, Vol. 1 Pt. 2	NL	29,946	5,676	35,622	35,622	35,622
399	595	Distribution Preventive and Breakdown O&M Maintenance	SCE-02, Vol. 1 Pt. 2	L	3,385	(430)	2,955	2,955	2,955
399	595	Distribution Preventive and Breakdown O&M Maintenance	SCE-02, Vol. 1 Pt. 2	NL	1,332	253	1,585	1,585	1,585
406	598	Distribution Preventive and Breakdown O&M Maintenance	SCE-02, Vol. 1 Pt. 2	L	25	(3)	22	22	22
406	598	Distribution Preventive and Breakdown O&M Maintenance	SCE-02, Vol. 1 Pt. 2	NL	600	114	714	714	714
411	901	Billing	SCE-03, Vol. 1	L	3,130	(748)	2,382	2,382	2,382
415	901	Customer Contact Center	SCE-03, Vol. 4	L	3,792	(150)	3,643	3,643	3,643
423	901	Training and Development	SCE-06, Vol. 3 Pt. 1	L	2,228	(321)	1,907	1,907	1,907
431	903	Billing	SCE-03, Vol. 1	L	21,237	(3,407)	17,830	17,830	17,830
431	903	Billing	SCE-03, Vol. 1	NL	6,479	(23)	6,457	6,457	6,457
434	903	Credit and Payment	SCE-03, Vol. 1	L	9,161	(837)	8,324	8,324	8,324
434	903	Credit and Payment	SCE-03, Vol. 1	NL	5,086	399	5,484	5,484	5,484
437	903	Customer Contact Center	SCE-03, Vol. 4	L	25,123	177	25,300	25,300	25,300
437	903	Customer Contact Center	SCE-03, Vol. 4	NL	15,318	(15)	15,303	15,303	15,303
446	903	Postage	SCE-03, Vol. 1	O	13,177	30	13,207	13,207	13,207
452	904	Uncollectible Expenses	SCE-03, Vol. 1	O	17,763	(4,035)	13,727	14,629	16,958
463	905	Short-Term Incentive Program - Customer Service	SCE-06, Vol. 3 Pt. 1	L	19,276	(8,905)	10,371	10,371	10,371
478	908	Business Account Management	SCE-03, Vol. 4	L	16,609	(4,669)	11,940	11,940	11,940
480	908	Business Account Management Services	SCE-03, Vol. 5	L	4,049	(912)	3,137	3,137	3,137
480	908	Business Account Management Services	SCE-03, Vol. 5	NL	960	(239)	721	721	721
486	908	Customer Programs Management	SCE-03, Vol. 5	L	3,377	(458)	2,919	2,919	2,919
492	908	eMobility	SCE-03, Vol. 5	L	2,816	(2,816)	-	-	-
492	908	eMobility	SCE-03, Vol. 5	NL	750	(750)	0	0	0
500	909	Customer Communications, Education and Outreach	SCE-03, Vol. 2	NL	6,932	(6,682)	250	250	250
501	909	Customer Experience Management	SCE-03, Vol. 5	L	4,553	(283)	4,270	4,270	4,270
501	909	Customer Experience Management	SCE-03, Vol. 5	NL	2,845	(376)	2,469	2,469	2,469
503	909	Digital Operations and Management	SCE-03, Vol. 4	NL	2,603	(865)	1,738	1,738	1,738
542	920921	Executive Compensation	SCE-06, Vol. 3 Pt. 1	L	8,224	(8,224)	-	-	-
542	920921	Executive Compensation	SCE-06, Vol. 3 Pt. 1	NL	2,627	(1,391)	1,236	1,236	1,236
548	920921	Fixed Price Technology and Maintenance	SCE-06, Vol. 1 Pt. 1	NL	73,400	200	73,600	73,600	73,600
557	920921	Long-term Incentives	SCE-06, Vol. 3 Pt. 1	L	13,695	(13,695)	-	-	-
563	920921	OU Support Services	SCE-06, Vol. 3 Pt. 1	L	17,647	(994)	16,653	16,653	16,653
563	920921	OU Support Services	SCE-06, Vol. 3 Pt. 1	NL	3,950	(876)	3,074	3,074	3,074
573	920921	Short-Term Incentive Program - A&G	SCE-06, Vol. 3 Pt. 1	L	69,511	(49,577)	19,935	19,935	19,935
574	920921	Software Maintenance and Replacement	SCE-06, Vol. 1 Pt. 1	NL	84,947	3,608	88,555	88,555	88,555
581	920921	Technology Delivery	SCE-06, Vol. 1 Pt. 1	L	4,737	(408)	4,330	4,330	4,330
581	920921	Technology Delivery	SCE-06, Vol. 1 Pt. 1	NL	9,344	(2,486)	6,859	6,859	6,859
582	920921	Technology Infrastructure Maintenance and Replacement	SCE-06, Vol. 1 Pt. 1	NL	7,937	250	8,187	8,187	8,187
593	922	Capitalized A&G Expense	SCE-07, Vol. 1	O	(180,139)	(24,326)	(204,465)	(209,168)	(214,397)
601	923	Executive Compensation	SCE-06, Vol. 3 Pt. 1	NL	6,995	(3,705)	3,290	3,290	3,290
609	923	OU Support Services	SCE-06, Vol. 3 Pt. 1	L	2,097	(118)	1,978	1,978	1,978
609	923	OU Support Services	SCE-06, Vol. 3 Pt. 1	NL	110	(24)	86	86	86
640	925	Liability Insurance - Wildfire	SCE-06, Vol. 2	O	623,804	(311,902)	311,902	311,902	311,902
657	926	401K Savings Plan	SCE-06, Vol. 3 Pt. 1	O	95,229	(3,560)	91,669	93,607	95,763
661	926	Capitalized P&B Expense	SCE-07, Vol. 1	O	(331,842)	105,179	(226,664)	(229,671)	(233,016)
665	926	Dental Plans	SCE-06, Vol. 3 Pt. 1	O	13,270	(487)	12,783	13,077	13,404
669	926	Disability Management - Programs	SCE-06, Vol. 3 Pt. 1	O	17,978	(659)	17,318	17,717	18,160
681	926	Executive Benefits (Non-Service)	SCE-06, Vol. 3 Pt. 1	O	12,208	(12,196)	12	12	12
682	926	Executive Benefits (Service)	SCE-06, Vol. 3 Pt. 1	O	3,334	(3,330)	3	3	3
683	926	Executive Compensation	SCE-06, Vol. 3 Pt. 1	NL	17	(9)	8	8	8
687	926	Group Life Insurance	SCE-06, Vol. 3 Pt. 1	O	1,366	(50)	1,316	1,316	1,316
691	926	Long-term Incentives	SCE-06, Vol. 3 Pt. 1	L	(2,093)	2,093	-	-	-
692	926	Medical Programs	SCE-06, Vol. 3 Pt. 1	O	100,217	(3,675)	96,542	98,762	101,231
693	926	Miscellaneous Benefit Programs	SCE-06, Vol. 3 Pt. 1	O	6,302	(231)	6,071	6,071	6,071

O&M In Use					2021	2021	2021	2022	2023
RO ID	FERC Account	GRC Activity Name	Testimony Exhibit	Cost Type	Forecast	Adjustments	Adj Forecast	Forecast	Forecast
697	926	OU Support Services	SCE-06, Vol. 3 Pt. 1	L	3,136	(177)	2,960	2,960	2,960
697	926	OU Support Services	SCE-06, Vol. 3 Pt. 1	NL	5,876	(1,303)	4,573	4,573	4,573
698	926	Participant Credits and Charges - 926	SCE-06, Vol. 2	O	10,554	(874)	9,680	9,680	9,680
700	926	PBOP Costs (Service)	SCE-06, Vol. 3 Pt. 1	O	30,469	(0)	30,469	30,469	30,469
721	926	Vision Service Plan	SCE-06, Vol. 3 Pt. 1	O	2,802	(103)	2,699	2,761	2,830
723	927	Franchise Fees	SCE-06, Vol. 2	O	81,436	(8,791)	72,645	77,417	82,226
737	930	Participant Credits and Charges - 930	SCE-06, Vol. 2	NL	11,886	(1,052)	10,835	10,835	10,835
771	9990	Reduction in A&G For Catalina	N/A	NL	(1,132)	281	(851)	(849)	(846)
772	9991	Interest Offset on Customer Deposits	N/A	O	-	7,207	7,207	7,207	7,207
774	925	Adjustment for Shareholder P&B - 925	N/A	O	(3,562)	1,684	(1,878)	(1,878)	(1,878)
775	926	Adjustment for Shareholder P&B - 926	N/A	L	(10)	(10)	(20)	(20)	(20)
775	926	Adjustment for Shareholder P&B - 926	N/A	NL	(35)	7	(28)	(28)	(28)
775	926	Adjustment for Shareholder P&B - 926	N/A	O	(196)	(432)	(628)	(638)	(650)
Total					1,462,769	(477,067)	985,702	989,518	994,561

Southern California Edison

3.12 TURN Capital Inputs - 2019-2023 Forecast Capital Expenditures | Capital Adjustments Only

Nominal \$ in Thousands

PTFR Option: Forecast

							1,367,461	1,713,637	1,743,782	1,933,642	(94,019)	(766,195)	(785,262)	(958,906)	1,273,442	947,442	958,520	974,736
RO Model ID	GRC Activity	Exhibit	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
891	Technology Solutions	SCE-06, Vol. 1 Pt. 2	3,909	-	-	-	(3,409)	3,361	-	-	500	3,361	-	-	-	-	-	-
952	Technology Solutions	SCE-06, Vol. 1 Pt. 2	414	-	-	-	1,590	36	-	-	2,003	36	-	-	-	-	-	-
895	Technology Solutions	SCE-06, Vol. 1 Pt. 2	-	10,290	12,505	14,739	-	(2,576)	112	107	-	7,714	12,617	14,846	-	-	-	-
924	Technology Solutions	SCE-06, Vol. 1 Pt. 2	415	414	1,474	1,474	(415)	(414)	(1,474)	(1,474)	-	-	-	-	-	-	-	-
896	Technology Solutions	SCE-06, Vol. 1 Pt. 2	-	3,430	4,168	4,913	-	(859)	37	36	-	2,571	4,206	4,949	-	-	-	-
15	Distribution Preventive and Breakdown Capital Maintenance	SCE-02, Vol. 1 Pt. 2	135,880	140,202	144,258	148,407	177	183	188	194	136,057	140,385	144,446	148,601	-	-	-	-
16	Distribution Preventive and Breakdown Capital Maintenance	SCE-02, Vol. 1 Pt. 2	8,251	8,514	8,760	9,012	(614)	(635)	(653)	(671)	7,637	7,879	8,107	8,341	-	-	-	-
17	Distribution Preventive and Breakdown Capital Maintenance	SCE-02, Vol. 1 Pt. 2	133,875	138,134	142,129	146,217	88	90	93	96	133,963	138,224	142,222	146,313	-	-	-	-
897	Technology Solutions	SCE-06, Vol. 1 Pt. 2	-	2,058	2,501	2,948	-	(515)	22	21	-	1,543	2,523	2,969	-	-	-	-
940	Technology Solutions	SCE-06, Vol. 1 Pt. 2	-	500	500	-	-	5,550	1,593	314	-	6,050	2,093	314	-	-	-	-
898	Technology Solutions	SCE-06, Vol. 1 Pt. 2	-	37,729	45,852	54,041	-	(9,444)	411	393	-	28,285	46,263	54,434	-	-	-	-
977	CRE Project Management	SCE-06, Vol. 5	5,132	5,132	5,132	5,132	(793)	-	(1,576)	(125)	4,339	5,132	3,556	5,007	-	-	-	-
990	CRE Project Management	SCE-06, Vol. 5	6,438	30,942	5,999	-	(6,438)	(30,942)	(5,999)	-	-	-	-	-	-	-	-	-
993	CRE Project Management	SCE-06, Vol. 5	226	-	-	-	(226)	-	-	-	-	-	-	-	-	-	-	-
993	CRE Project Management	SCE-06, Vol. 5	1,018	-	-	-	(1,018)	-	-	-	-	-	-	-	-	-	-	-
994	CRE Project Management	SCE-06, Vol. 5	1,282	-	-	-	(1,282)	-	-	-	-	-	-	-	-	-	-	-
994	CRE Project Management	SCE-06, Vol. 5	1,758	-	-	-	(1,758)	-	-	-	-	-	-	-	-	-	-	-
980	CRE Project Management	SCE-06, Vol. 5	-	-	10,000	12,289	-	-	(10,000)	(12,289)	-	-	-	-	-	-	-	-
986	CRE Project Management	SCE-06, Vol. 5	-	-	1,068	14,055	-	-	(1,068)	(14,055)	-	-	-	-	-	-	-	-
855	Mountainview	SCE-05, Vol. 1	22,950	42,440	0	(0)	(18,000)	(36,000)	-	-	4,950	6,440	0	(0)	-	-	-	-
850	Hydro - Decommissioning	SCE-05, Vol. 1	2,250	2,250	1,145	270	(2,250)	(2,250)	(1,145)	(270)	-	-	-	-	-	-	-	-
899	Technology Solutions	SCE-06, Vol. 1 Pt. 2	-	1,372	1,667	1,965	-	(343)	15	14	-	1,029	1,682	1,979	-	-	-	-
784	All Hazards Assessment, Mitigation and Analytics	SCE-04, Vol. 1	2,100	300	300	-	(214)	(31)	(31)	-	1,886	269	269	-	-	-	-	-
787	All Hazards Assessment, Mitigation and Analytics	SCE-04, Vol. 1	13,000	12,000	18,000	18,000	(3,841)	(6,056)	(15,204)	(13,358)	9,159	5,944	2,796	4,642	-	-	-	-
788	All Hazards Assessment, Mitigation and Analytics	SCE-04, Vol. 1	8,640	7,560	2,880	2,880	(1,120)	(772)	4,024	3,203	7,520	6,788	6,904	6,083	-	-	-	-
788	All Hazards Assessment, Mitigation and Analytics	SCE-04, Vol. 1	15,360	13,440	5,120	5,120	(1,991)	(1,372)	7,153	5,694	13,369	12,068	12,273	10,814	-	-	-	-
789	All Hazards Assessment, Mitigation and Analytics	SCE-04, Vol. 1	4,000	3,300	3,300	3,300	(408)	(337)	(337)	(337)	3,592	2,963	2,963	2,963	-	-	-	-
900	Technology Solutions	SCE-06, Vol. 1 Pt. 2	-	10,290	12,505	14,739	-	(2,576)	112	107	-	7,714	12,617	14,846	-	-	-	-
792	Distribution Storm Response Capital	SCE-04, Vol. 2	40,613	41,905	43,117	44,357	3,003	3,098	3,188	3,280	43,616	45,003	46,305	47,637	-	-	-	-
793	Transmission/Substation Storm Response Capital	SCE-04, Vol. 2	363	371	378	386	114	117	119	123	477	488	497	510	-	-	-	-
794	Transmission/Substation Storm Response Capital	SCE-04, Vol. 2	1,134	1,158	1,180	1,207	300	306	312	319	1,433	1,464	1,492	1,526	-	-	-	-
821	Distribution Fault Anticipation	SCE-04, Vol. 5	0	6,270	12,903	13,274	-	(6,270)	(12,903)	(13,274)	0	-	-	-	-	-	-	-
823	Enhanced Overhead Inspections and Remediations	SCE-04, Vol. 5	1,558	2,813	2,895	-	-	(2,813)	(2,895)	-	1,558	-	-	-	-	-	-	-
843	Wildfire Covered Conductor Program	SCE-04, Vol. 5	454,369	656,353	771,815	942,892	-	(547,845)	(672,379)	(862,207)	454,369	108,508	99,436	80,685	-	-	-	-
844	Wildfire Covered Conductor Program	SCE-04, Vol. 5	15,183	21,932	25,790	31,507	-	(15,622)	(19,298)	(24,828)	15,183	6,311	6,492	6,679	-	-	-	-
77	Oil Containment Diversion System	SCE-02, Vol. 3	370	382	393	404	16	12	8	7	386	394	401	411	-	-	-	-
105	Substation Tools and Work Equipment	SCE-02, Vol. 3	7,072	7,297	7,508	7,724	329	263	196	156	7,401	7,560	7,704	7,880	-	-	-	-
901	Technology Solutions	SCE-06, Vol. 1 Pt. 2	-	3,430	4,168	4,913	-	(859)	37	36	-	2,571	4,206	4,949	-	-	-	-
80	Preventive Maintenance	SCE-02, Vol. 3	23,722	21,197	20,985	26,739	657	438	309	450	24,379	21,635	21,294	27,189	-	-	-	-
81	Preventive Maintenance	SCE-02, Vol. 3	13,575	17,228	22,039	21,129	376	356	325	356	13,951	17,584	22,364	21,485	-	-	-	-
83	Preventive Maintenance	SCE-02, Vol. 3	1,697	2,221	-	-	47	46	-	-	1,744	2,267	-	-	-	-	-	-
84	Preventive Maintenance	SCE-02, Vol. 3	4,653	5,545	4,320	461	129	114	64	8	4,782	5,659	4,384	469	-	-	-	-
85	Preventive Maintenance	SCE-02, Vol. 3	1,264	-	-	-	35	-	-	-	1,299	-	-	-	-	-	-	-
78	Preventive Maintenance	SCE-02, Vol. 3	305	305	305	305	(58)	(52)	(48)	(42)	247	253	257	263	-	-	-	-
82	Preventive Maintenance	SCE-02, Vol. 3	71	71	71	71	(13)	(12)	(11)	(10)	58	59	60	61	-	-	-	-
99	Substation Capital Breakdown Maintenance	SCE-02, Vol. 3	540	551	562	575	794	810	825	846	1,334	1,362	1,387	1,421	-	-	-	-
100	Substation Claim	SCE-02, Vol. 3	17	17	18	18	31	32	32	34	48	49	50	52	-	-	-	-
935	Technology Solutions	SCE-06, Vol. 1 Pt. 2	-	3,750	1,250	-	-	(3,750)	(1,250)	-	-	-	-	-	-	-	-	-
581	Rule 20A Conversions	SCE-02, Vol. 4 Pt. 3	17,015	17,556	18,064	18,584	-	(8,714)	(8,961)	(9,213)	17,015	8,842	9,103	9,370	-	-	-	-
113	Automation	SCE-02, Vol. 4 Pt. 1	34,809	23,872	25,141	25,356	(24,918)	(15,154)	-	-	9,891	8,718	25,141	25,356	-	-	-	-
120	Engineering and Planning Software Tools	SCE-02, Vol. 4 Pt. 1	2,246	613	-	-	(2,246)	(613)	-	-	-	-	-	-	-	-	-	-
121	Engineering and Planning Software Tools	EXCLUDED - BEYOND 2023	3,844	5,037	2,626	2,195	(3,844)	(5,037)	-	-	-	-	-	-	-	-	-	-
122	Engineering and Planning Software Tools	SCE-02, Vol. 4 Pt. 1	1,315	1,438	2,780	2,410	(1,315)	(1,438)	-	-	-	-	-	-	-	-	-	-
123	Engineering and Planning Software Tools	SCE-02, Vol. 4 Pt. 1	5,424	6,124	-	-	(5,424)	(6,124)	-	-	-	-	-	-	-	-	-	-
124	Engineering and Planning Software Tools	SCE-02, Vol. 4 Pt. 1	6,631	8,174	6,193	4,843	(6,631)	(8,174)	-	-	-	-	-	-	-	-	-	-
125	Engineering and Planning Software Tools	SCE-02, Vol. 4 Pt. 1	5,684	5,827	6,129	4,435	(5,684)	(5,827)	-	-	-	-	-	-	-	-	-	-
126	Grid Management System	SCE-02, Vol. 4 Pt. 1	35,724	47,611	44,864	30,682	-	(10,155)	-	-	35,724	37,456	44,864	30,682	-	-	-	-
161	Distribution Substation Plan Substations	SCE-02, Vol. 4 Pt. 2	1,926	19,920	18,669	14,595	533	(317)	(1,901)	(832)	2,459	19,603	16,768	13,763	-	-	-	-
162	Distribution Substation Plan Substations	SCE-02, Vol. 4 Pt. 2	31	587	730	-	(31)	(426)	(363)	532	(0)	161	367	532	-	-	-	-
165	Distribution Substation Plan Substations	SCE-02, Vol. 4 Pt. 2	-	11	91	11	-	(11)	(91)	(11)	-	(0)	(0)	0	-	-	-	-
163	Distribution Substation Plan Substations	SCE-02, Vol. 4 Pt. 2	1,522	8,154	-	-	(502)	742	2,264	300	1,020	8,896	2,264	300	-	-	-	-
481	Transmission Substation Plan (TSP)	SCE-02, Vol. 4 Pt. 2	-	-	-	38	-	-	-	(38)	-	-	-	(0)	-	-	-	-
494	Transmission Substation Plan (TSP)	SCE-02, Vol. 4 Pt. 2	68,342	53,986	2,499	676	-	(2,262)	-	-	68,342	51,724	2,499	676	-	-	-	-
517	Transmission Substation Plan (TSP)	SCE-02, Vol. 4 Pt. 2	-	-	-	-	1,197	-	-	-	1,197	-	-	-	-	-	-	-
523	Transmission Substation Plan (TSP)	SCE-02, Vol. 4 Pt. 2	982	-	-	-	(244)	-	-	-	738	-	-	-	-	-	-	-
524	Transmission Substation Plan (TSP)	SCE-02, Vol. 4 Pt. 2	583	601	-	-	(583)	(601)	-	-	0	0	-	-	-	-	-	-
538	Transmission Substation Plan (TSP)	SCE-02, Vol. 4 Pt. 2	70	-	-	-	(70)	-	-	-	(0)	-	-	-	-	-	-	-
539	Transmission Substation Plan (TSP)	SCE-02, Vol. 4 Pt. 2	65	-	-	-	(65)	-	-	-	0	-	-	-	-	-	-	-
529	Transmission Substation Plan (TSP)	SCE-02, Vol. 4 Pt. 2	2,217	-	-	-	235	-	-	-	2,452	-	-	-	-	-	-	-
569	Commercial New Service Connections	SCE-02, Vol. 4 Pt. 3	97,968	101,244	104,300	107,941												

				1,367,461	1,713,637	1,743,782	1,933,642					(94,019)	(766,195)	(785,262)	(958,906)	1,273,442	947,442	958,520	974,736
RO Model ID	GRC Activity	Exhibit		2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
280	Grid Reliability Projects	SCE-02, Vol. 4 Pt. 2		8,000	-	-	-	(8,000)	-	-	-	-	-	-	-	-	-	-	-
426	Renewable Transmission Projects	SCE-02, Vol. 4 Pt. 2		1,990	-	-	-	(1,990)	-	-	-	-	-	-	-	-	-	-	-
(blank)	Technology Solutions	SCE-06, Vol. 1 Pt. 2		-	-	-	-	1,151	-	-	-	1,151	-	-	-	-	-	-	-
(blank)	Distribution Substation Plan Substations	SCE-02, Vol. 4 Pt. 2		-	-	-	-	575	-	-	-	575	-	-	-	-	-	-	-

Southern California Edison

PTYR Option: Forecast

OK

OK

OK

OK

OK

Capital Inputs - 2019-2023 Forecast Capital Expenditures

Nominal \$ in Thousands

\$ in Thousands

3.12 TURN Fix Int Offset Cust Deposits & CIAC

PTYR Category

GRC - Wildfire

GRC - New Service Connections (Res and Comm)

GRC - All Other

Non-GRC

Total

% Increase (Decrease) - GRC

% Increase (Decrease) - Non-GRC

% Increase (Decrease) - Total

Totals:

Total Capital Additions - Adjusted				
2019	2020	2021	2022	2023

131,243 80,470 2,332 42,670 215,296

110,989 136,194 129,439 129,947 147,299

3,417,374 2,637,280 2,899,196 2,899,196 2,899,196

811,007 1,129,898 1,885,805 1,885,805 1,885,805

4,470,611 3,983,842 4,916,772 4,957,618 5,147,596

-22.01% 6.20% 1.35% 6.18%

39.32% 66.90% 0.00% 0.00%

-10.89% 23.42% 0.83% 3.83%

4,470,611 3,983,842 4,916,772 4,957,618 5,147,596

Asset Type	PTYR Category	2019	2020	2021	2022	2023
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Palo Verde GRC - All Other 69,924 39,865 38,915 38,915 38,915

Hydro GRC - All Other 25,741 33,908 29,621 29,621 29,621

Pebble Beach GRC - All Other 3,959 2,625 13,726 13,726 13,726

Energy Storage GRC - All Other 275 1 1 1 1

Mountainview GRC - All Other 1,784 2,712 6,057 6,057 6,057

Peakers GRC - All Other 1,989 849 0 0 0

Solar PV GRC - All Other 106 105 106 106 106

Transmission - Land Rights GRC - All Other 2,493 786 8,073 8,073 8,073

Transmission Substations GRC - All Other 275,990 196,870 412,961 412,961 412,961

Transmission Lines GRC - All Other 255,622 212,669 275,359 275,359 275,359

Transmission Lines PLIP GRC - All Other 97,455 87,951 108,658 108,658 108,658

Transmission - Land Rights ISO Non-GRC 0 0 78,320 78,320 78,320

Transmission Substations ISO Non-GRC 311,653 201,650 605,107 605,107 605,107

Transmission Lines ISO Non-GRC 209,765 187,090 160,608 160,608 160,608

Transmission - Land Rights Inc. ISO Non-GRC 156 84 11,619 11,619 11,619

Transmission Substations Inc. ISO Non-GRC 6,298 108 19,573 19,573 19,573

Transmission Lines Inc. ISO Non-GRC 232 45,812 644,257 644,257 644,257

Distribution - Fee Land GRC - All Other 8,371 2,033 0 0 0

Distribution - Land Rights GRC - All Other 2,977 16,080 3,702 3,702 3,702

Distribution Substations GRC - All Other 276,551 221,491 216,039 216,039 216,039

Distribution Lines GRC - All Other 1,081,188 769,542 686,006 686,006 686,006

Distribution Lines PLIP GRC - All Other 213,307 264,783 332,821 332,821 332,821

Meters GRC - All Other 22,700 44,395 39,829 39,829 39,829

Streetlights GRC - All Other 60,479 44,057 44,177 44,177 44,177

General - Land Rights GRC - All Other 256 342 351 351 351

General Buildings GRC - All Other 98,353 78,008 76,382 76,382 76,382

Computers GRC - All Other 42,698 45,737 59,761 59,761 59,761

Security Monitoring (DDSMS) GRC - All Other 18,815 9,567 10,177 10,177 10,177

Furniture & Equipment GRC - All Other 5,211 7,431 7,806 7,806 7,806

Stores/Lab/Miscellaneous GRC - All Other 16,962 22,282 27,923 27,923 27,923

Telecommunications GRC - All Other 198,910 123,023 119,548 119,548 119,548

General Other GRC - All Other 5,941 6,888 4,918 4,918 4,918

Hydro Relicensing GRC - All Other 15,242 16,631 16,014 16,014 16,014

Cap Soft 5yr GRC - All Other 289,087 218,605 186,982 186,982 186,982

Cap Soft 7yr GRC - All Other 23,120 0 0 0 0

Transmission Lines PLIP ISO Non-GRC 1,766 1,211 1,364 1,364 1,364

Cap Soft 5yr - GM GRC - All Other 88,906 59,266 36,575 36,575 36,575

Cap Soft 7yr - GM GRC - All Other 36,929 39,396 41,951 41,951 41,951

Distribution Lines - GM GRC - All Other 78,035 32,920 47,877 47,877 47,877

Distribution Substations - GM GRC - All Other 25,162 4,173 1,954 1,954 1,954

Telecommunications - GM GRC - All Other 61,522 16,396 34,079 34,079 34,079

Transmission Substations - GM GRC - All Other 341 0 0 0 0

Cap Soft 5yr - GR GRC - Wildfire 305 4,163 14 1 0

Distribution Lines - GR GRC - Wildfire 123,996 53,138 4 41,598 210,294

Distribution Substations - GR GRC - Wildfire 642 816 1 558 709

Furniture & Equipment - GR GRC - Wildfire 0 0 2,345 0 0

Telecommunications - GR GRC - Wildfire 574 1,878 9 0 0

Transmission Lines - GR GRC - Wildfire 4,574 17,166 50 513 4,292

Transmission Lines - GR ISO Non-GRC 2,843 11,539 4,187 4,187 4,187

Computers - GR GRC - Wildfire 1,151 3,309 -90 0 0

Distribution Lines - Rule 20A GRC - All Other 10,726 15,486 10,423 10,423 10,423

Telecommunications - Rule 20A GRC - All Other 245 405 424 424 424

Non-GRC Non-GRC 278,292 682,405 360,769 360,769 360,769

Distribution Lines - NSC (Res_Comm) GRC - New Service Connections (Res and Comm) 110,989 136,194 129,439 129,947 147,299

Appendix B

GRC-Related Ratemaking Proposals Data Request Response

SCE-18, Vol. 01: Rebuttal Testimony on Result of Operations
Appendix B Index of Data Request Responses

Data Requests	PAGE(S)
SCE-TURN-014-MC	B-2 – B-5

SCE-TURN-014-MC

Proceeding Number: A.19-08-013
Proceeding Name: SCE's 2021 GRC
Exhibit Reference: TURN-02
Date: May 26, 2020
Responses Due: June 2, 2020
Witness: Eric Borden
Martin Collette
Southern California Edison
Company
Originated by: 8631 Rush Street
Rosemead, CA 91770
(626-302-5328), (310-880-4070)
Martin.collette@sce.com

Douglas.Snow@sce.com
Cc: Russell.Archer@sce.com
scegrc@sce.com

Data Request No: SCE-TURN-014-MC

Please note that we are requesting an expedited response. We apologize for the inconvenience, but with the short turn around for rebuttal, and we have attempted to pose a limited scope in the requests, we hope that it will be feasible.

Please provide the following items:

Questions:

1. TURN's answer to SCE-TURN-05, Question 3 is not fully responsive. Please answer the original question with a "yes" or a "no": "Does TURN consider the PG&E 2020 GRC Settlement Agreement (A.18-12-009, pending Commission approval) and the Grid Safety & Reliability Program Settlement Agreement (A.18-09-002, approved in D.20-04-013) to be consistent with the provisions of AB 1054?"

Response: Yes. TURN's testimony cited Section 8386.4(b) and its requirement that the Commission determine that the cost of implementing a utility's wildfire mitigation plan is just and reasonable, and citing either the general rate case or a separate application for that determination. It is not clear to TURN that the provisions of AB 1054 apply to the Grid Safety & Reliability Program (GS&RP) application or settlement, as the application was submitted prior to and separately from SCE's Wildfire Mitigation Plan (WMP), and the language of Section 8386.4 refers only to WMPs. If the Commission were to conclude that Section 8386.4 applies to SCE's GS&RP, TURN believes the adopted

settlement in that proceeding achieves at least constructive compliance with the statutory language, There will be a reasonableness review of above-authorized costs for the entire amount above authorized for all activities other than the Covered Conductor program, and for everything above 115% of the authorized amount for the Covered Conductor program. In the event of such above-authorized spending, a true reasonableness review of the recorded amounts (rather than some sort of “compliance” review as typically takes place in an ERRA proceeding) could satisfy the statutory requirement.

In the PG&E test year 2020 GRC, for the “Community Wildfire Safety Program” costs to be recorded in the Wildfire Mitigation Balancing Account, the utility is required to establish the reasonableness of the amount of its actual costs that exceed either 115% of the total authorized costs or 115% of the per mile unit costs. For vegetation management costs recorded in the Vegetation Management Balancing Account, the utility is required to establish the reasonableness of the amount of its actual costs that exceed 120% of adopted forecast. Again, in the event of such above-authorized spending, a true reasonableness review of the recorded amounts (rather than some sort of “compliance” review as typically takes place in an ERRA proceeding) could satisfy the statutory requirement.

Please be aware that the testimony appearing in Sections II.G. and II.H. of TURN-02 and any associated summary in that testimony will be sponsored by Robert Finkelstein on behalf of TURN.

2. TURN’s answer to SCE-TURN-05, Question 3 states that “the provision of SCE’s proposal that appears inconsistent with AB 1054 is ‘SCE’s proposal to recover costs in the ERRA proceeding.’” Please clarify if TURN is willing to drop its objection to SCE’s proposed two-way wildfire mitigation balancing account if SCE agreed to adjudicate the reasonableness of spending over some presumptively authorized amount in a forum other than ERRA.

Response: TURN’s testimony responds to the SCE proposal as presented in SCE’s prepared testimony. If SCE presents a changed position in its rebuttal testimony, TURN would assess that changed position and, on that basis, consider modifying this recommendation.

Please be aware that the testimony appearing in Sections II.G. and II.H of TURN-02 and any associated summary in that testimony will be sponsored by Robert Finkelstein on behalf of TURN.

Provide electronic responses if possible. All data responses need to have each page numbered, referenced, and indexed so worksheets can be followed. If any number is

calculated, include a copy of all electronic files so the formula and their sources can be reviewed.

If you have any questions regarding this DR, please call originator at above phone number.

Appendix C

Forecasts of Sales, Customers, and New Meter Connections

SCE-18, Vol. 01: Rebuttal Testimony on Result of Operations
Appendix C Index of Data Request Responses

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SCE response to October 15, 2014
ALJ Question for H. Sheng

Application No.: A.13-11-003
Exhibit No.: SCE-66
Witnesses: H. Sheng



(U 338-E)

***SCE response to October 15, 2014 ALJ Question for
H. Sheng***

Before the

Public Utilities Commission of the State of California

At the October 15, 2014 evidentiary hearings for SCE’s 2015 General Rate Case, A.13-11-003, Administrative Law Judge (ALJ) Dudney read several questions into the record for Hongyan Sheng. Ms. Sheng is SCE’s witness on the sales and customer forecasts. Before listing the questions, ALJ Dudney noted that all of his questions for Ms. Sheng “are in relation to her forecast for new meter connections.” Please see below for SCE’s answers to ALJ Dudney’s questions with respect to SCE’s new meter connections forecast.

I. ALJ Dudney’s Question 1

“First question is I would like to see in symbolic notation the forecast equations that Ms. Sheng used to create her forecast. Please describe the equation type and all of the terms in the equations. And please explain the basis for selecting this particular statistical model. Briefly identify if any other models were considered and why the model chosen is superior to those others.”

a. Equations Used in SCE’s Model

Please see Attachment A, which SCE previously provided to TURN in response to data request TURN-SCE-014 Question 14. SCE attached an EXCEL file in its response to demonstrate how input data are used to forecast output. The symbolic notation of SCE’s forecast equation can be expressed in the following way.

SCE Res Meter

$$\begin{aligned} &= \beta_0 + \beta_1 JAN + \beta_2 FEB + \beta_3 B1205 + \beta_4 B0706 + \beta_5 B1103 + \beta_6 B2011 \\ &+ \beta_7 B2012 + \beta_8 SCESTART_0 + \beta_9 SCESTART_{-1} + \beta_{10} SCESTART_{-2} \\ &+ \beta_{11} SCESTART_{-3} + \beta_{12} SCESTART_{-4} + \beta_{13} SCESTART_{-5} + \beta_{14} SCESTART_{-6} \\ &+ \beta_{15} SCESTART_{-7} + \beta_{16} SCESTART_{-8} + \beta_{17} SCESTART_{-9} + \beta_{18} SCESTART_{-10} \\ &+ \beta_{19} SCESTART_{-11} + \beta_{20} SCESTART_{-12} \end{aligned}$$

The forecast equation is essentially a regression type model which depends on using other explanatory variables (such as housing starts) to predict the dependent variable which is SCE’s residential new meter connections. The equation can be rewritten as the following using the estimated coefficients from SCE’s model outputs.¹

SCE Res Meter

$$\begin{aligned} &= 628.3 - 503.3 * JAN - 683.1 * FEB + 1150.5 * B1205 - 1107.9 * B0706 \\ &- 1133.9 * B1103 - 526.0 * B2011 - 481.7 * B2012 + 0.020 * SCESTART_0 \\ &+ 0.037 * SCESTART_{-1} + 0.051 * SCESTART_{-2} + 0.062 * SCESTART_{-3} \\ &+ 0.070 * SCESTART_{-4} + 0.075 * SCESTART_{-5} + 0.076 * SCESTART_{-6} \\ &+ 0.075 * SCESTART_{-7} + 0.070 * SCESTART_{-8} + 0.062 * SCESTART_{-9} \\ &+ 0.051 * SCESTART_{-10} + 0.037 * SCESTART_{-11} + 0.020 * SCESTART_{-12} \end{aligned}$$

¹ See SCE’s Workpaper from SCE-10 Volume 01, Chapter V, Part 01 at p. 54.

The above equation provides the basic calculation one can conduct to forecast SCE's residential new meter connections using the basic inputs SCE included in its model such as the housing starts ("SCESTART") variables.

In general, the explanatory variables or the input data SCE used in deriving its residential new meter forecast can be categorized as the following:

- Seasonal Dummy Variables
 - JAN: Equal to one in January and zero for all other months
 - FEB: Equal to one in February and zero for all other months

These seasonal or monthly dummies are specified to account for the decrease in new meter connections during the winter months when meter starts are historically lower than the economic driver would indicate. The dummy variables are used consistently by ORA and SCE.
- Other Monthly Dummy Variables, So Called "Spike" Dummy Variables
 - B1205: Equal to one in December 2005 and zero for all other months
 - B0706: Equal to one in July 2006 and zero for all other months
 - B1103: Equal to one in December 2003 and zero for all other months
 - B2011: Equal to one in 2011 and zero for all other months
 - B2012: Equal to one in 2012 and zero for all other months

These monthly dummy variables are created specifically because of the extraordinary results in those specific months. The dummy variables help mitigate the impact of these extraordinary results on the forecast. The dummy variables are used consistently by ORA and SCE.
- Fundamental Economic Indicator or Driver
 - Housing starts over SCE-served counties, or SCESTART. See Attachment B, SCE Workpapers, SCE-10-Volume 01, Chapter V, Part 2, pp. 161-168. The source data for this variable is from Moody's Analytics and IHS Global Insights, which is included in Attachment C, SCE Workpapers, SCE-10-Volume 01, Chapter V, Part 2, pp. 169-192. A "housing start" is defined by the United States Census Bureau as the start of construction, meaning when excavation begins for the footings or foundation of a building. SCE has included the lagged series of housing starts to account for the varying lagged effects housing starts have on residential new meter connections. For example, *SCESTART*₋₆ represents lagged-6-month SCESTART data.
 - As discussed herein, SCE's reliance on the fundamental economic driver of housing starts is the critical driver of SCE's model and the most significant point where SCE's model differs from ORA's model.

b. SCE's Basis for Selecting the Particular Statistical Model

SCE seeks to produce forecasts that have a strong basis in economic theory and that rely on fundamental economic drivers whenever possible. Historically, there is a strong statistical relationship between the fundamental economic drivers and residential new meter connections. SCE's model relies upon this historical relationship to capture the impact that economic activities have on the new meter forecast. This allows SCE's forecasters to explain the forecast results with sound economic reasons, and to statistically validate the results as well. In the case of residential meter connections, the most powerful fundamental driver SCE found so far is new housing creation. This fundamental driver is not only a strong predictor of residential meter connections based on its strong statistical correlation with residential new meter connections, but also represents a strong economic driver which one can explain intuitively. This relationship is shown in Figure IV of Section II below.

According to the Census Bureau, the lifecycle of housing creation includes three stages: permitting, housing start, and completion of housing construction.² Once the housing unit is completed, a meter can be installed, yielding one new meter connection. Ideally, the indicator used for meter sets would be housing completion; however, SCE staff have not found sources that forecast housing completions. SCE is also not aware of any source that forecasts new meter connections. There are forecasts of permits and SCE has relied upon these forecasts in the past. However, reliance on housing starts produces slightly more accurate results than reliance on permits.³ This leads to the use of housing start data as the key fundamental driver of the forecast of residential meter connections.

SCE's model is essentially a multivariate regression model with lagged explanatory variables constrained by a polynomial distribution. The purpose of the polynomial distributed lag (PDL) regression model is to determine the fundamental relationship between a dependent variable (new residential meters) and independent variables (housing starts) over time with varying lagged impacts. SCE's model uses lags to reflect the fact that houses are not built in a day. In fact, it can take months or years to complete a housing project. Using both theory and trial-and-error, SCE determined that for residential meter connections, using housing starts from the past twelve months (12 lags) yields the most reasonable results. Besides the housing start variables, SCE also included some dummy variables to account for some monthly irregularities or patterns. As noted above, SCE's meter set forecast is mainly driven by housing starts, and therefore dummy variables are used to refine the model, and are not a major driver.

c. Other Models Considered by SCE

Other model specifications have been considered by SCE in the past. New specifications are tested each time the forecast is refreshed. Other specifications considered or tested include using

² See e.g., <http://www.census.gov/construction/nrc/nrcdatarelationships.html>

³ See SCE's Response to TURN-SCE-014 Question 9b.

building permits rather than housing starts, inclusion of additional seasonal and monthly factors, different lag lengths for housing starts, adding trend variables, and various combinations thereof. SCE's forecast methods can be seen as evolutionary, building on previous forecasts and model testing. Each alternative specification we consider is tested to see if it is an improvement over the current method. The final model specification used for SCE's internal planning and the 2015 GRC is the result of this process.

As noted, where possible, SCE's forecasts are based on fundamental economic drivers. Models – such as ORA's ARIMA⁴-based model that emphasizes the most recent historic period, rather than an economic forecast – produce results that are inconsistent with historical correlations and basic intuition. SCE has not found a monthly meter set model that has better characteristics than the general model described above and outlined in SCE's testimony.

II. ALJ Dudney's Question 2

“SCE criticizes ORA's proposed ARIMA, A-R-I-M-A, model. I would like to know if SCE believes that there could be some specifications of an ARIMA model that would be appropriate for this use and why or why not. I'd like SCE to provide a technical analysis comparing SCE and ORA's models and evaluate their relative strengths and weaknesses. I would like SCE to provide comments on whether there are other examples of forecasts for housing starts or new meter connections done, for instance, by government agencies or forecasting firms that use a similar method to SCE for this purpose.”

In subsection a, we describe the main differences between SCE's and ORA's model, namely the use of ARIMA in ORA's new meter connections model versus reliance on fundamental economic drivers in SCE's model. In subsection b, we compare technical analyses of each model through a variety of tests, including the in-sample model fitness, residual tests, out-of-sample testing, and comparison to historical results. Finally, in subsection c, we reference examples of PDL forecasts for housing starts, new meter connections, or other applications done by governmental and forecast agencies.

a. Key Difference Between SCE's and ORA's Models: ORA's Model Relies Heavily on ARIMA Whereas SCE's Model Relies on Fundamental Economic Drivers

ARIMA models are useful for short-term forecasting. Because ARIMA models rely heavily on data from the most recent historical period, they tend to produce fairly accurate results in the short-term. The effectiveness of ARIMA models degrade as the forecast extends further out. A good example would be predicting the weather. An ARIMA model would look at today's weather to forecast tomorrow's weather, and the forecast of tomorrow's weather to predict the day after that. While one might be able to use ARIMA to forecast weather for tomorrow,

⁴ ARIMA stands for Autoregressive Integrated Moving Average model.

TURN-SCE-004 question 6 Revised

Southern California Edison
A.19-08-013 – SCE 2021 GRC

DATA REQUEST SET T U R N - S C E - 0 0 4

To: TURN
Prepared by: Eduardo Martinez
Job Title: Sr. Advisor
Received Date: 5/26/2020

Response Date: 5/26/2020

Question 06.a-c Revised:

Footnote 105 on page 77 of SCE-07, vol. 1, states “SCE generates a relatively conservative forecast for new meter connections as compared to vendors’ potentially optimistic forecast predictions for new housing starts.”

- a. Please explain which vendors SCE uses for housing starts forecasts in this GRC and whether and how this differs from previous GRCs, including SCE’s TY 2012, 2015, and 2018 GRCs.
- b. In Excel, please provide a quantitative comparison of each vendor’s housing starts forecast versus the “relatively conservative” housing starts forecast used by SCE to forecast new meter connections. Please provide all supporting data/workpapers and an explanation for how SCE’s forecast was determined.
- c. In Excel, please provide a quantitative comparison of the vendors’ forecast of new meters by customer class versus SCE’s forecast of new meters by customer class for the forecast period. Please provide all supporting data and workpapers.

Response to Question 06.a-c Revised:

- a. SCE refers TURN to the response for TURN-SCE-004 Question 04.b.
- b. In its original response to TURN-SCE-004 question b, SCE inadvertently stated that it used the Consensus Scenario forecast data. SCE provides corrected information herein. For the 2021 GRC, SCE compared IHS Connect’s Base Case, Moody’s Analytics Base Case and Moody’s Analytics’ Consensus Forecast Scenario forecasts. SCE made the decision to use the Base Case forecast from Moody’s Analytics in its 2021 GRC forecast based on an overly optimistic base case forecast from IHS Connect and near-term volatility in the Moody’s Analytics Consensus Forecast. See annual summaries (pivot table) in “TURN-SCE-004-CONFIDENTIAL_IHS_MA_BASE_CONSENSUS.xlsx” (MA Base Consensus and IHS MA tabs).

SCE notes that it experimented with its res meter equation specification using Moody’s 8/2018 base case forecast as an explanatory variable. The original res meter forecast specification using the Moody’s base case forecast resulted in a forecast of 39,874 in 2021. SCE subsequently adjusted its res meter forecast specification and as a result its adopted res meter forecast equation produced a reduced forecast of 36,443 meters in 2021. SCE refers TURN to “resmeter_original.csv” for the original res meter model specification without SCE’s adjustment, “resmeter_2021grc.csv” for the model with SCE’s downward

adjustment, and “TURN-SCE-004-2021 GRC SCE Res Meter Forecasts.xlsx” to see a comparison of the original res meter forecast and SCE’s adjusted forecast.

- c. Economic vendors do not produce forecasts of new meters in the SCE service territory. SCE produces these forecasts internally using inputs such as housing starts from economic vendors. See answer b above.

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Basis for Confidentiality In Accompanying Confidentiality Declaration.

Public Disclosure Restricted.

TURN-SCE-004 question 6 Revised - TURN-SCE-004-2021 GRC SCE Res Meter Forecasts

Period	RESMETERF_OLD*	RESMETER_0**	
1999			
2000	45,996	45,996	*RESMETERF_OLD is the resulting forecast of SCE's initial res meter equation (resmeter_original.csv)
2001	51,772	51,772	**RESMETER_0 is the resulting forecast of SCE's updated res meter equation that was used in the 2021 GRC forecast (resmeter_2021 grc.csv)
2002	51,736	51,736	
2003	62,051	62,051	
2004	66,401	66,401	
2005	71,184	71,184	
2006	73,558	73,558	
2007	51,548	51,548	
2008	32,594	32,594	
2009	23,643	23,643	
2010	19,146	19,146	
2011	14,125	14,125	
2012	17,692	17,692	
2013	21,840	21,840	
2014	24,339	24,339	
2015	26,423	26,423	
2016	32,231	32,231	
2017	34,489	34,489	
2018	34,724	34,377	
2019	35,331	34,747	
2020	37,201	35,035	
2021	39,874	36,443	
2022	42,943	38,545	
2023	42,404	40,653	

TURN-SCE-004 question 6 Revised - Resmeter_original

Dependent Variable: RESMETER

Method: Least Squares

Date: 10/12/18 Time: 17:27

Sample: 2008M01 2018M08

Included observations: 128

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1165.877	187.2959	6.224788	0
SCESTR(-6)	0.047051	0.002946	15.971	0
SCMULTISHARE(-6)	-1155.544	322.8563	-3.57913	0.0005
JAN	-130.5748	157.4428	-0.829348	0.4087
FEB	-330.5941	157.4141	-2.100156	0.0379
MAR	-82.62145	157.4482	-0.524753	0.6008
APR	-289.8276	157.5614	-1.839458	0.0685
MAY	-61.37584	157.7061	-0.389179	0.6979
JUN	71.83056	157.7248	0.455417	0.6497
JUL	-184.3399	157.6546	-1.169264	0.2448
AUG	-1.626899	157.5621	-0.010325	0.9918
SEP	-101.3513	161.1722	-0.628839	0.5307
OCT	7.376762	161.1412	0.045778	0.9636
NOV	-153.6912	161.1175	-0.953908	0.3422
DUMMY_REC0809	525.3532	83.32818	6.304628	0
R-squared	0.722119	Mean dependent var		2104.445
Adjusted R-squared	0.687691	S.D. dependent var		644.4586
S.E. of regression	360.153	Akaike info criterion		14.72067
Sum squared resid	14657254	Schwarz criterion		15.05489
Log likelihood	-927.1227	Hannan-Quinn criter.		14.85646
F-statistic	20.97492	Durbin-Watson stat		1.375947
Prob(F-statistic)	0			

TURN-SCE-004 question 6 Revised - F. Resmeter_2021grc

Dependent Variable: RESMETER

Method: Least Squares

Date: 04/26/19 Time: 16:15

Sample: 2008M01 2018M08

Included observations: 128

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	970.2359	139.8129	6.93953	0
SCESTRT(-15)	0.041807	0.002666	15.68132	0
JAN	-230.9807	161.9688	-1.426081	0.1566
FEB	-458.5681	161.9521	-2.831505	0.0055
MAR	-180.9715	161.8535	-1.118119	0.2659
APR	-331.1994	161.7642	-2.047421	0.0429
MAY	-73.7893	161.7387	-0.456225	0.6491
JUN	28.32685	161.7764	0.175099	0.8613
JUL	-285.7871	161.8758	-1.765472	0.0802
AUG	-132.46	161.9563	-0.817875	0.4151
SEP	-209.8502	165.5176	-1.267842	0.2074
OCT	-22.6512	165.4977	-0.136867	0.8914
NOV	-134.463	165.4934	-0.812497	0.4182
DUMMY_REC0809	-207.3204	89.69395	-2.31142	0.0226
R-squared	0.704033	Mean dependent var		2104.445
Adjusted R-squared	0.670283	S.D. dependent var		644.4586
S.E. of regression	370.0546	Akaike info criterion		14.7681
Sum squared resid	15611205	Schwarz criterion		15.08004
Log likelihood	-931.1582	Hannan-Quinn criter.		14.89484
F-statistic	20.85989	Durbin-Watson stat		1.31429
Prob(F-statistic)	0			

WP SCE-18 V. 1 Meter Forecast Housing Starts Data

WP SCE-18 V. 1 Meter Forecast Housing Starts Data

GRC Rebuttal Graph Data

Figure III-1

Housing Starts Recorded vs. TURN's Proposed Forecasts 2013-2019

Year	Actual	TURN's Proposed Forecast with Additional Data (Method A)	TURN's Proposed Forecast without Additional Data (Method B)	Percentage Forecast Error (Method A)	Percentage Forecast Error (Method B)
2005	81,215				
2006	60,671				
2007	33,939				
2008	17,738				
2009	16,030				
2010	14,047				
2011	19,286				
2012	28,316				
2013	38,826	20,208	28,485	-48%	-27%
2014	47,350	19,083	20,208	-60%	-57%
2015	38,117	23,301	19,083	-39%	-50%
2016	46,397	29,565	23,301	-36%	-50%
2017	49,993	34,379	29,565	-31%	-41%
2018	37,507	39,801	34,379	6%	-8%
2019	43,379	44,136	39,801	2%	-8%
Total over	301,568	210,473	194,821	-30%	-35%

Note that: 1) TURN's Proposed Forecast with Additional Data is derived by taking the simple previous 5-year average (year t-5 to t-1) of actual housing starts (e.g 2019 forecast is equal to the average of actual 2014 to 2018 housing starts.

2) TURN's Proposed Forecast without Additional Data is derived by taking the simple 5-year-average of actual housing starts over the period of year t-6 to t-2. (e.g 2019 forecast is calculated as the average of actual 2013 to 2017 housing starts.

TURN-SCE-004 Question 4c

Southern California Edison
A.19-08-013 – SCE 2021 General Rate Case

DATA REQUEST SET T U R N - S C E - 0 0 4

To: TURN
Prepared by: Eduardo Martinez
Job Title: Senior Advisor
Received Date: 12/5/2019

Response Date: 12/20/2019

Question 04.a-c:

Regarding Figure VI-5, p. 69, in SCE-07, vol. 1:

- a. Please provide this Figure in Excel with all supporting data and workpapers.
- b. Please provide Moody's forecast in Excel for each year in this Figure from previous GRCs.
- c. Please provide in Excel other vendors' forecasts used by SCE in previous GRCs for its analysis of new meter forecasts.

Response to Question 04.a-c:

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The Attachment(s) Are Marked Confidential In Accordance With D. 16-08-024 and D.17-09-023.
Basis for Confidentiality In Accompanying Confidentiality Declaration.
Public Disclosure Restricted.

- a. SCE refers TURN to MDR-18 Q.01 CONFIDENTIAL Attachment.zip (CONFIDENTIAL Sales and Customer Forecast Work Papers – 5.xlsx ResMeter tab) and WPSCE0701CGVI HSheng.
- b. SCE refers TURN to the attached spreadsheets:

2018 GRC	2018 GRC CONFIDENTIAL Sales and Customer Forecast Workpapers – 5.xls (ResMeter tab)
2015 GRC	2015 GRC CONFIDENTIAL Sales and Customer Forecast Workpapers -5 Final.xls (ResMeter and ResMeter Supp tabs)
2012 GRC	2012 GRC CONFIDENTIAL Sales and Customer Forecast Workpapers – 5.xls (ResMeter tab)

- c. SCE only used multiple economic vendor forecasts (Global Insight and Moody's Analytics) for the 2015 GRC. See attached CONFIDENTIAL 2015 GRC combined starts.xlsx. See below for the economic vendors used for the 2012, 2018, and 2021 GRCs:

2021 GRC	Moody's Analytics (starts)
2018 GRC	Moody's Analytics (starts)
2012 GRC	Global Insight (permits)

The above vendor forecasts are provided in the response to Question 04.a.

Appendix D

Other Operating Revenue – Non-Tariffed Products and Services

SCE-18, Vol. 01: Rebuttal Testimony on Result of Operations
Appendix D Index of Data Request Responses

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TURN-SCE-028, Question 2i.ii

Southern California Edison
A.19-08-013 – SCE 2021 General Rate Case

DATA REQUEST SET T U R N - S C E - 0 2 8

To: TURN
Prepared by: Michael Do
Job Title: Sr. Advisor
Received Date: 3/6/2020

Response Date: 3/27/2020

Question 02.a-i:

The following questions relate to SCE-03V02.

Re. pp. 32 (starting at line 8), SCE states, “307 miles of cable have been identified as being unable to reliably handle the newer, higher capacity fiber optic terminals we are installing to meet increasing network capacity requirements. Incompatibility of fiber segments result in reduced network performance and reliability due to reduced capacity caused by unusable fiber optic segments. This refresh program focuses on replacing about 108 miles of our oldest cables annually which will address about 2.0% of our fiber optic cable population per year.”

- a. Please provide the report, analysis, etc. that support SCE’s program to increase the number of fiber miles for replacement.
- b. Please provide the report, analysis, etc. that support SCE’s program to install “higher capacity fiber optic terminals.”
- c. If not provided as part of the response to subpart b, please provide a benefit-cost analysis of SCE’s proposal to install “higher capacity fiber optic terminals.” To the extent available, please include the benefit of increased data-transfer speed and any other quantitative benefit as well as the cost of the fiber replacement as part of the benefit-cost analysis. To the extent that there are qualitative benefits that do not lend themselves to a quantitative benefit-cost analysis, please identify, discuss and justify each such benefit.
- d. Please identify the date that SCE began installing the “higher capacity fiber optic terminals.”
- e. Please identify the name of the program(s) under which SCE is installing the terminals and cite any and all references to the program in the testimony and workpapers (by exhibit, volume, part, page number, as relevant).
- f. Please provide a description of the program to install “higher capacity fiber optic terminals”, comprising the annual units and total cost in 2014-2019 (recorded) and 2019-2023 (forecasted), the total units to be completed from inception through completion, and the year that SCE expects to complete the program.
- g. Please provide a qualitative discussion that distinguishes the fiber that is being replaced under the “refresh program” from the fiber that is being installed as part of the Wide Area Network (WAN) proposal that SCE identifies and discusses at Ex. SCE-02V10, pp. 80 (starting at line 80) – 84. Please include in the discussion but do not necessarily limit it to whether there is overlap and, if so, what the overlap is, why SCE has proposed two separate tracks for completing the work, whether the portion of the “refresh program” that owes to “higher capacity fiber optic terminals” would be necessary if SCE were not implementing the referenced WAN proposal, and whether the “higher capacity fiber optic terminals” are being installed as part of the referenced WAN proposal.
- h. Re. the current, lower-capacity fiber and terminals, please:
 - i. Identify the data throughput (Mbps) and speed (ms) for the average fiber segment and terminal.

- ii. Identify the percentage of the capacity by (1) electric system communications, (2) internal communications, (3) NTP&S, and (4) idle.
- i. Re. the current, higher-capacity fiber and terminals, please:
 - i. Identify the expected data throughput (Mbps) and speed (ms) for the average fiber segment and terminal.
 - ii. Identify the expected percentage of the capacity by (1) electric system communications, (2) internal communications, (3) NTP&S, and (4) idle.

Response to Question 02.a-i:

- a. SCE has 5,505 miles fiber cable assets installed with a useful life of 25 years. SCE would need to replace on average approximately 220 miles per year in order to replace all of the fiber cable based on the useful life period. Since this is a relatively new program, SCE is being cautious in the approach by asking for funding for 108 miles of cable per year as the program ramps up.
- b. As indicated in the response to Data Request Set PubAdv-SCE-011-MW5 Question 03.b, “there was a larger average incremental increase in recent years in data networking devices and in network traffic.” This increase was generally attributable to SCE OU projects and asset refresh programs for telecommunication assets. As network traffic increases, it requires both higher capacity fiber optic cables and the corresponding higher capacity terminals. Therefore, the high capacity fiber optic terminals were installed accordingly.. Testimony can be found in SCE02V03 Page 38-41 “Transmission Network & Facilities” and WPSCE02V03 Page 41-43 “Transmission & Network Replacements Cost Forecast.”
- c. There is no benefit-cost analysis to install higher capacity fiber optic terminals. As stated in SCE’s response to part b of this data request, as network traffic increases, it requires both higher capacity fiber optic cables and the corresponding high capacity terminals. The increase in network traffic drives the increase in the amount of routers and switches. All of which would require more capacity on the network. As the network equipment grows, the terminals are required to carry more capacity.
- d. SCE began installing high speed capacity fiber optic terminals in 1999.
- e. Testimony can be found in SCE02V03 Page 38-41 “Transmission Network & Facilities” and WPSCE02V03 Page 41-43 “Transmission & Network Replacements Cost Forecast.”
- f. The Transmission Network & Facilities program replaces obsolete, failed, beyond useful life, and damaged transmission telecommunications network equipment. The telecommunications transmission network is the backbone on which the data and voice network run. This network consists of wireless infrastructure (e.g. Satellite Communication Terminals) and the transport layer (fiber optic equipment and terminals). Please see attached “TURN-SCE-028 – 02 Response Support.xlsx” for the number of units for 2014-2018 and

the forecast units and cost for 2019-2023. Please note that the recorded costs for 2014-2018 would require a review of hundreds of work orders to identify the costs. Based on management judgment, SCE estimates the average cost for low capacity installations was \$45,000 and \$120,000 for high capacity units as indicated in the attachment to this data request. As this program is an asset lifecycle replacement program that replaces equipment when it has reached the end of its useful life, the program will continue as long as SCE has these terminals in place.

- g. The Fiber Replacement program focuses on the replacement of existing fiber cable that has reached its end of life or requires replacement and differs from the fiber that is being installed as part of the Wide Area Network (WAN). The fiber that is being installed as part of the Wide Area Network (WAN) focuses on installing new fiber where it is deemed necessary for Grid Mod.
- h.
 - i. Any fiber optic terminal running below 2.5Gbps is considered as lower-capacity.
 - ii. SCE does not create forecasts for the expected percentage of capacity used by electric system communications, internal communications, NTP&S, and idle. Forecasting an expected percentage of capacity for electric system communications would not be possible for the GRC period as the makeup of the system capacity may change throughout the years as SCE constructs fiber optic facilities to meet utility needs. SCE designs its fiber facilities to accommodate the likelihood that utility operations will require increased bandwidth in the future as technology continues to develop. SCE does not include any possible NTP&S usage as part of its request for new fiber assets.
- i.
 - i. Any fiber optic terminal running at or above 2.5Gbps is considered as higher-capacity.
 - ii. SCE does not create forecasts for the expected percentage of capacity used by electric system communications, internal communications, NTP&S, and idle. Forecasting an expected percentage of capacity for electric system communications would not be possible for the GRC period as the makeup of the system capacity may change throughout the years as SCE constructs fiber optic facilities to meet utility needs. SCE designs its fiber facilities to accommodate the likelihood that utility operations will require increased bandwidth in the future as technology continues to develop. SCE does not include any possible NTP&S usage as part of its request for new fiber assets.

Project Cost Estimate Summary - Transmission Network and Facilities
(All Costs in Thousands)

	Description	2014	2015	2016	2017	2018	From Workpaper				
							2019	2020	2021	2022	2023
Fiber Optic Terminals		156	120	81	9	75	70	67	76	76	76
Fiber System Cost per Terminal	Replace old repeaters or add capacity on existing systems						\$ 120.0	\$ 120.0	\$ 120.0	\$ 120.0	\$ 120.0
Fiber Terminals Total Cost		\$16,320.0*	\$9,600.0*	\$7,620.0*	\$1,080.0*	\$7,950.0*	\$ 8,400.0	\$ 8,040.0	\$ 9,120.0	\$ 9,120.0	\$ 9,120.0

Lower Capacity Terminals Installed	32	64	28	0	14
Average cost of Lower Capacity Terminal Install*	\$ 45.0	\$ 45.0	\$ 45.0	\$ 45.0	\$ 45.0
Total cost of Lower Capacity Terminal Install	\$ 1,440.0	\$ 2,880.0	\$ 1,260.0	\$ -	\$ 630.0

Higher Capacity Terminals Installed	124	56	53	9	61
Average cost of Higher Capacity Terminal Install*	\$ 120.0	\$ 120.0	\$ 120.0	\$ 120.0	\$ 120.0
Total cost of Higher Capacity Terminal Install	\$ 14,880.0	\$ 6,720.0	\$ 6,360.0	\$ 1,080.0	\$ 7,320.0

**Average cost estimated using management judgement in order to provide approximate recorded costs for 2014-2018
A review of the historical costs would require additional analysis to review hundreds of work order to identify the actual recorded costs*

Appendix E

Other Operating Revenue – Added Facilities Rates

SCE-18, Vol. 01: Rebuttal Testimony on Result of Operations
Appendix E Index of Data Request Responses

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Advice Letter 245-E

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

RETURN TO ELECTRIC SECTION

RESOLUTION NO. E-880

Copy for:

Orig. & Copy
to Secretary

UTILITIES DIVISION

SECTION: Electric

DATE: March 15, 1955

R E S O L U T I O N

Director
Numerical File
Alphabetical File
Accounting Officer

SUBJECT: Order Authorizing Revisions in Tariff Schedules which will Result in Increased Rates or Charges on Less than Statutory Notice.

WHEREAS: SOUTHERN CALIFORNIA EDISON COMPANY, by Advice No. 245, filed March 8, 1955 having requested authority to make revisions in its tariff schedules as designated in Schedule A-7, General Service, Rule and Regulation No. 2, Character of Service, and Rule and Regulation No. 7, Deposits, and Table of Contents, set forth on Cal. P.U.C. Sheets Nos. 2645-E to 2650-E, inclusive, to become effective on March 16, 1955, which is less than 30 days' notice, which said revisions will result in increased charges of a minor nature and may provide more restrictive conditions for future customers, requiring authorization from the Commission; and

It appearing that such conditions or charges as will result from the above revisions are justified and good cause appearing,

IT IS HEREBY ORDERED that authority be granted under Section 454 and 491 of the Public Utilities Code to make Cal. P.U.C. Sheets Nos. 2645-E to 2650-E, inclusive, effective on March 16, 1955.

IT IS HEREBY FURTHER ORDERED that said tariff sheets be marked to show that such sheets were issued under Resolution No. E-880 of the Public Utilities Commission of the State of California.

I hereby certify that the foregoing Resolution was duly introduced, passed and adopted at a regular session of the Public Utilities Commission of the State of California, held on the 15th day of March, 1955, the following Commissioners voting favorably thereon:

PETER E. MITCHELL, JUSTUS F. CRAEMER,
RAY E. UNTERBINER, MATTHEW J. DOOLEY.

Noel Coleman
Asst. Secretary

TOTAL P.01

March 7, 1955

Advice No. 245

Public Utilities Commission
State of California
State Building, Civic Center
San Francisco 2, California

Gentlemen:

Southern California Edison Company hereby transmits for filing the following changes in tariff schedules applicable to its entire territory and which are attached hereto:

Cal. P.U.C. Sheet No.	Title of Sheet	Cancelling Revised Cal. P.U.C. Sheet No.
Revised 2645-E	Schedule A-7, General Service	2597-E
Revised 2646-E	Rule and Regulation No. 2, Character of Service	2598-E
Original 2647-E	Rule and Regulation No. 2, Character of Service	-
Revised 2648-E	Rule and Regulation No. 7, Deposits	524-E
Revised 2649-E	Table of Contents	2632-E
Revised 2650-E	Table of Contents	2644-E

The principal changes provided by this filing are as follows:

Schedule A-7. The only change in attached Schedule A-7 is in the last sentence of Special Condition (a). This change is made to conform to provisions of attached Rule and Regulation No. 2 relating to standard voltages, 120 and 208 volts.

Rule and Regulation No. 2. Section (A), General, of this rule and regulation has been completely revised. It states the present standard voltages of the Company and the conditions under which rate schedules are applicable with respect to source of electrical supply and the distribution facilities utilized. Part 6-c of this section provides that where the Company maintains 4-wire wye-connected polyphase secondary mains, 120, 120/208, and 208 volts are standard voltages. This addition occasioned the revision referred to above in Schedule A-7. Its purpose is to realize the economies in distribution plant costs which will be achieved if all tenants of a shopping center or similar commercial structure are required to take service at such voltage where the principal customer qualifies for and requests 4-wire wye-connected 120/208 volt service.

March 7, 1955

-2-

Section (4), Added Facilities, has been added to Rule and Regulation No. 2. This provision is consistent with the practice followed by the Company in recent years of requiring an additional monthly payment for the facilities added to provide alternate line service. Such practice has required entering into a contract with each customer requesting such additional service, followed by an application for Commission authorization. By this addition to Rule and Regulation No. 2, it is believed that such special agreements will not hereafter be necessary. The charge to be made for facilities which are in addition to or in substitution for the standard facilities which the Company would normally install will become a part of the filed tariff schedules. Attached hereto and designated "Table 1" are factors which were considered in establishing the monthly charge as a percentage of investment.

Rule and Regulation No. 7. By this proposed rule and regulation, the amount of deposit required to establish or re-establish credit for domestic service would be based on the estimated bills of the customer with a minimum deposit of \$5. The present rule and regulation specifies a deposit of \$2.50 for residences of less than eight rooms and \$5 for eight or more rooms. Such deposit is evidently based on the bill experience in the early '20s, and, as is indicated in Table 2, attached, there has been a substantial growth in the average monthly domestic bill. At the present time it approaches \$5 per month. It is believed that the continuation of a fixed deposit for domestic service is unrealistic and that \$5 represents a reasonable minimum deposit. Also shown on Table 2 is information relating to the write-offs which indicates the necessity for immediate establishment of adequate service deposits. As is there stated, about 70% of the domestic closing bills written off are for customers who have taken service for less than a 12-month period. In addition, the trend of total write-off is believed to demonstrate the growing need for adequate deposits.

The Commission is requested to authorize Southern California Edison Company to make the tariff sheets attached hereto effective as soon as practicable. The changes in rules and regulations filed herewith will increase certain charges and may provide certain more restrictive conditions for customers in the future. A showing in justification thereof is submitted herewith in accordance with the provisions of both Section 454 of the Public Utilities Code of the State of California and paragraph VI of General Order 96 of the Public Utilities Commission of the State of California. Otherwise, this filing does not involve any increase in rates or charges for service to any existing customer or the withdrawal of any service now rendered nor will it conflict with other schedules or rules and regulations.

Very truly yours,

SOUTHERN CALIFORNIA EDISON COMPANY

C. L. ASHLEY
Rate Engineer

CLA:fh
Attach.

cc: Public Utilities Commission
Los Angeles, California

SCHEDULE A-7
GENERAL SERVICE

APPLICABILITY:

This schedule is applicable to three-phase general service including power and lighting.

TERRITORY:

Within the entire territory served.

RATE:

Demand Charge:

	PER MONTH
First 75 kw or less of billing demand	\$75.00 per meter
Next 125 kw of billing demand	0.80 per kw
Next 1,800 kw of billing demand	0.70 per kw
Next 8,000 kw of billing demand	0.60 per kw
All excess kw of billing demand	0.50 per kw

Energy Charge (to be added to demand charge):

First 150 kwhr per month per kw of billing demand:	
First 15,000 kwhr per month	1.7¢ per kwhr
Balance of kwhr per month	0.9¢ per kwhr
Next 150 kwhr per month per kw of billing demand	0.7¢ per kwhr
All excess kwhr per month per kw of billing demand	0.5¢ per kwhr

Minimum Charge:

The monthly minimum charge shall be the monthly demand charge.

RULES AND REGULATIONS, AND SPECIAL CONDITIONS:

This schedule is subject to the Rules and Regulations, and to the Special Conditions following:

SPECIAL CONDITIONS:

- (a) **Voltage.** Service will be supplied at one standard voltage. Service will also be supplied under this schedule at 120/208 volts 4-wire wye where: (1) written application is made for such service by the customer; (2) the customer's load is of such size as to require an individual transformer installation of not less than 150 kva of transformer capacity; (3) the customer provides space acceptable to the Company on his premises to accommodate the installation of the Company's facilities; and (4) the customer guarantees not less than 125 kw of billing demand. The foregoing requirements do not apply where 120 and 208 volts are standard voltages.
- (b) **Billing Demand.** The billing demand shall be the kilowatts of measured maximum demand but not less than 50% of the highest billing demand established in the preceding 11 months. However, in no case shall the billing demand be less than 75 kw. Billing demand shall be determined to the nearest 1/10 kw.
- (c) **Maximum Demand Measurement.** The measured maximum demand in any month shall be the maximum average kilowatt input, indicated or recorded by instruments to be supplied by the Company, during any 15-minute metered interval in the month, provided, however, that whenever such monthly maximum demand has exceeded 400 kw for three consecutive months and thereafter until it has fallen below 300 kw for 12 consecutive months, a 30-minute interval will be used. Where the demand is intermittent or subject to violent fluctuations, a 5-minute interval may be used.
- (d) **Voltage Discount.** The charges before power factor adjustment will be reduced by 3% for service delivered and metered at voltages of from 2 to 10 kv; by 4% for service delivered and metered at voltages of from 11 kv to 50 kv; and by 5% for service delivered and metered at voltages over 50 kv; except that when only one transformation from a transmission voltage level is involved, a customer normally entitled to a 3% discount will be entitled to a 4% discount.
- (e) **Power Factor Adjustment.** When the billing demand has exceeded 200 kw for three consecutive months, a kilovar-hour meter will be installed as soon as practicable and, thereafter, until the billing demand has been less than 150 kw for 12 consecutive months, the charges will be adjusted each month for the power factor as follows:

The charges will be decreased by 20 cents per kilowatt of measured maximum demand and will be increased by 20 cents per kilovar of reactive demand. However, in no case shall the kilovars used for the adjustment be less than one-fifth the number of kilowatts.
The kilovars of reactive demand shall be calculated by multiplying the kilowatts of measured

(Continued)

RULE AND REGULATION NO. 2

CHARACTER OF SERVICE

(A) General.

1. The character of service available at any particular location should be ascertained by inquiry at the Company's office.
2. The rate schedules included herein are applicable for service where the customer purchases his entire electrical requirements from the Company, except where such schedules specifically provide otherwise, and are not applicable where a part of the customer's electrical requirements are supplied from some other source.
3. The rate schedules included herein are only applicable for service provided from overhead distribution facilities (or where underground distribution facilities are provided for the Company's operating convenience or in accordance with the provisions of the tariff schedules) except where schedules specifically provide otherwise.
4. Alternating current service of approximately 60-cycle frequency will be supplied.
5. Voltages referred to in the tariff schedules are nominal voltages.
6. Standard nominal voltages of the Company are as follows:
 - a. Distribution voltages—120, 120/240, 240, 480, 2400, 4160 volts; or depending on location, 12,000 or 16,500 volts.
 - b. Voltages in excess of 16,500 volts are transmission voltages. For its operating convenience the Company may elect to supply a customer from lines of transmission voltage. Where such transmission voltage is 66,000 volts, the customer may select as a standard delivery voltage one of the following: 2400, 4160, 6900, 12,000, 13,800, 16,500 volts, or such other voltage as the Company may approve.
 - c. Where the Company maintains four-wire wye-connected polyphase secondary mains: 120, 120/208, and 208 volts.
 - d. Where specified in rate schedules, combined lighting and power service may be supplied at 120/208 volts four-wire wye.
 - e. In the City of Vernon: 120, 120/240, 240, 480, 2400, and 6900 volts.

(B) Lighting, Heating, Cooking, and Miscellaneous Service.

1. Energy supplied for lighting, heating, cooking, and miscellaneous uses in general will be single phase, alternating current, two-wire 120 volt service or three-wire 120-240 volt service.
2. Residence, apartment, and business lighting installations, not exceeding 3300 watts or four circuits, will be supplied through a two-wire 120 volt service. Installations exceeding 3300 watts or four circuits will be supplied through a three-wire 120-240 volt service.
3. Electric signs and illuminated billboards having a connected load of 2000 watts or two circuits will be supplied through a three-wire 120-240 volt service.
4. Heating or cooking loads, X-ray apparatus, etc., not exceeding 2000 watts and where the maximum current does not exceed 30 amperes, will be supplied through a two-wire 120 volt service. Where the load exceeds 2000 watts or where the maximum current exceeds 30 amperes, service will be supplied through either a three-wire 120-240 volt service, or through a two-wire 240 volt service.
5. Single stereopticons, outlets for battery charging, and other devices which are most economically operated at 120 volts, will be served at this voltage. Where more than one such device is installed on the same meter, they should be balanced as nearly as possible, and will be supplied through a three-wire 120-240 volt service.

(Continued)

RULE AND REGULATION No. 2 (Continued)

(O) Added Facilities. Added facilities are facilities provided by the Company which are in addition to, or in substitution for, the standard facilities which the Company would normally install. Except where otherwise provided, by rate schedule, when a customer makes written application for added facilities and the installation of such facilities is acceptable to the Company, the added facilities will be installed under the following conditions:

1. The customer shall pay a monthly charge for the added facilities in the amount of one and one-fourth (1¼) percent of the added investment as determined by the Company.
2. In the event that the added facilities are abandoned prior to five years from the date service is first rendered from the added facilities, the customer will pay to the Company the Company's costs (less the estimated salvage) of installing and removing the added facilities.

RULE AND REGULATION NO. 7

DEPOSITS

Amount of Deposit. The amount of deposit required to establish or re-establish credit is twice the estimated average monthly bill if the billing period is monthly, or $1\frac{1}{2}$ times the estimated average bimonthly bill if the billing period is bimonthly, or twice the estimated average weekly bill if the billing period is weekly, but not less than \$5.00.

Advice Letter No. 245

Issued by
G. N. Hawley
Vice-President

Date Filed:
Effective:
Resolution No.

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Advice Letter No. 245

Issued by
G. N. Hawley
Vice-President

Dated Filed:
Effective:
Resolution No.

Table 1

ANNUAL COST AS A
PERCENTAGE OF INVESTMENT

Cost Element	Range of Cost	
	Low %	High %
Operation & Maintenance	0.5 (Structures)	2.0 (Equipment)
Depreciation (S.L.)	3.0 (33-1/3 yrs.)	5.0 (20 yrs.)
Insurance & Misc. (A. & G.)	0.5 (Good Risk)	1.0 (Poor Risk)
Ad Valorem Tax	2.0 (Rural)	4.0 (Urban)
Income Taxes	2.8 (Longer Life)	2.9 (Shorter Life)
Return (6% Avg.)	<u>3.1</u> " "	<u>3.2</u> " "
Per Year	11.9	18.1

DOMESTIC DEPOSITS TO ESTABLISH CREDIT

1. Average Monthly Domestic Bill

1925	\$1.93
1930	2.51
1935	2.58
1940	3.05
1945	3.45
1950	3.93
1951	4.09
1952	4.37
1953	4.55
1954	4.77

2. Length of Service of Domestic Customers Whose Closing Bills Were Written Off

Less than 6 months service	48.3% of bills written off
" " 12 " "	69.9% " " " "
" " 2 years "	82.3% " " " "
Over 2 " "	17.7% " " " "

(Based on experience in Nov. & Dec. 1954 and Jan. 1955)

3. Trend of Total Net Write-off

	Amount of Write-off	Index (1935-1954 Avg. = 100)	
		Volume of Write-off	Rate of Write-off
1947	\$ 65,123	55	52
1948	96,757	82	70
1949	144,476	122	94
1950	171,701	145	103
1951	164,227	139	88
1952	208,077	176	102
1953	269,969	228	119
1954	350,971	297	141