

EXHIBIT B

(SCE 2018 GRC DECISION)

ALJ/SCR/EW2/jt2

Date of Issuance 5/24/2019

Decision 19-05-020 May 16, 2019

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Southern California Edison Company (U338E) for Authority to Increase its Authorized Revenues for Electric Service in 2018, among other things, and to Reflect that increase in Rates.

Application 16-09-001

DECISION ON TEST YEAR 2018 GENERAL RATE CASE FOR SOUTHERN CALIFORNIA EDISON COMPANY

Capitalizing these costs helps ensure that full construction costs are paid by customers who received the services provided by the capital projects. It also helps ensure that investors' costs incurred during construction are fully recovered after the capital projects enter service.⁷³⁴ The Commission adopts SCE's proposed AFUDC rates.

17.11. Rate Base Components – Additional Issues

17.11.1. Long-Term Incentives

We discuss and have adopted the proposed disallowance of Long-Term Incentives in Section 8.2.2. of this decision. The authorized rate base is correspondingly increased by \$4.3 million.

17.11.2. Other Accounts Receivable

SCE estimates 2018 Accounts Receivable rate base of \$73 million. SCE's estimate is based on 2015 recorded data, the same approach followed in prior GRCs.⁷³⁵ TURN makes a revised proposal of a \$22.5 million reduction to SCE's forecast, based on recorded 2016 data.⁷³⁶ SCE has conceded concerning other accounts as to the greater reliability of recorded 2016 data over 2015 when making forecasts. We adopt TURN's recommendation, based on 2016 recorded data as reasonable and adopt \$50.8 million for this account.

18. Depreciation Study

SCE's recorded 2015 depreciation expense at authorized rates was \$1.656 billion. The proposed change due to plant growth from 2016-2018 is

⁷³⁴ SCE Opening Brief, at 230.

⁷³⁵ SCE-29, at 409.

⁷³⁶ SCE-60, at 14, Table VI-9 and TURN-15 (Marcus Update), at 4 and 6.

\$266 million. The additional newly proposed amount following SCE's Depreciation Study is \$81 million. The total proposed 2018 depreciation expense is \$2.003 billion, over one-third of the requested total revenue requirement.⁷³⁷

D.15-11-021, at 396, stated, "In D.12-11-051, we warned SCE against over-reliance on judgment without further explanation, and encouraged SCE to provide more transparency in its depreciation showing."⁷³⁸ In D.15-11-021, we again found significant shortcomings in SCE's showing and offered guidance for the current GRC. We offered guidance to avoid the possibility that a failure by SCE to meet its burden of proof for depreciation costs would burden future ratepayers with a disproportionate share of the costs of removal and salvage. We stated, "First, we believe that SCE can and must do more to explain and justify its use of judgment in its depreciation showing."⁷³⁹

We further stated,

Second, we direct SCE to provide considerably more detail in support of its net salvage proposals for at least five of the largest accounts, as measured by proposed annual depreciation expense. At a minimum, this detail shall include:

1. A quantitative discussion of the historical and anticipated future Cost of Removal (COR) on a per unit basis for the large (greater than 15% as measured by portion of plant balance) asset classes in the account. This discussion should identify and explain the key factors in changing or maintaining the per-unit COR.
2. A quantitative discussion of the historical and anticipated future retirement mix (i.e., retirements among different asset

⁷³⁷ SCE-09, Vol.02 at 17, Table 11-7.

⁷³⁸ See, e.g., D.12-11-051 at 673, 685.

⁷³⁹ D.15-11-021 at 397.

classes), identifying and explaining the key factors in changing or maintaining this mix.

3. A quantitative discussion of the life of assets and original cost of assets being retired, in relation to the COR, on both a historical and anticipated future basis. This discussion should be integrated with and/or cross-reference the proposal for life characteristics.
4. An account-specific discussion of the process for allocating costs to COR.⁷⁴⁰

And,

Third, we recognize that this is at least the second consecutive GRC that the Commission has expressed serious concern with the quality of SCE's depreciation showing. In order to motivate SCE to take these concerns seriously in developing its direct showing for its next GRC, we encourage ORA and TURN (and any other interested party) to consider making proposals in that GRC to shift a portion of the under-collection risk from future customers to SCE's shareholders. Parties should only make such proposals if SCE's direct showing in the following GRC exhibits the same types of shortcomings, discussed here and in D.12-11-051, in a widespread manner.⁷⁴¹

In response to these directives, SCE produced a Depreciation Study which under the guise of meeting the Commission's directives seeks to introduce a new method for determining depreciation rates. We find, however, the study brings us no closer to resolving questions about the reliability of SCE's depreciation showing. Indeed, the study presents additional questions and assumptions which are not readily verified or resolved. Most notably, SCE's study presents a new proposal for determining depreciation rates rather than simply, as the

⁷⁴⁰ *Id.* at 398.

⁷⁴¹ *Id.* at 398-399.

directives intended, providing additional evidence supporting SCE's depreciation testimony.

Apparently recognizing the untenability of the results of its study, SCE scales back the results the study would seemingly support and proposes a cap on depreciation following the principle of gradualism. Then, in a further display of the lack of support SCE provides for its study, SCE in its rebuttal testimony states it "is not proposing to change depreciation practices to an entirely different net salvage analysis method."⁷⁴²

We find little merit in either the results of the depreciation study or the application of gradualism to its results. Straight-line depreciation following Standard Practice U-4⁷⁴³ remains the proscribed means for determining depreciation rates. The multiplicity of assumptions underlying SCE's proposal argues against our deviating from our long-standing and accepted practice.

18.1. Foundational Overview

The purpose of depreciation is to allow a utility to recover the original cost of the asset, as well as the net salvage value (salvage minus cost of removal), over the life of the asset. This ensures assets are paid for by the customers who benefit from the use of the asset. To meet this objective, the Commission uses the Straight-line Remaining Life depreciation method described by Standard Practice U-4.

Under the straight-line remaining life depreciation method, the undepreciated asset amount (original cost less accumulated depreciation plus the

⁷⁴² SCE-25, Vol. 4, at 61-62.

⁷⁴³ Originally issued by the Commission in 1952 and subsequently revised in 1953, 1954, and 1961.

estimated net salvage) is depreciated over the remaining life of the asset. The net salvage includes the cost of removal of the asset at the end of its useful life as well as any salvage value the asset may have at that time. The original cost of the asset and the net salvage are expressed in nominal dollars. This is shown by the following formula:

$$\text{Depreciation Expense} = \frac{\text{Plant Balance} - \text{Reserve} - \text{Gross Salvage} + \text{Cost of Removal}}{\text{Remaining Service Life of Asset(s)}}$$

A net salvage rate under Standard Practice U-4 is applied to the plant balance to determine the future net salvage. The net salvage rate is computed as follows:

$$\frac{\text{Net Salvage (\$)}}{\text{Retirements (\$)}} = \frac{\text{Gross Salvage (\$)} - \text{Cost of Removal (\$)}}{\text{Retirements (\$)}}^{744}$$

Under the per-unit analysis proposed by SCE’s depreciation study, SCE determines the future net salvage rate based on a “per-unit net salvage.” In an effort to counter TURN’s contention as to the complexity of its method, SCE’s expert Dr. Ronald White describes it in his testimony:

The per-unit model is described by the following four simple steps:

Step 1. Average net salvage per-unit recorded over a few recent activity years to obtain a normalized per-unit ratio applicable to future vintage-year retirements.

Step 2. Divide the average ratio derived in Step 1 by vintaged per-unit additions.

Step 3. Multiply forecasted retirements by ratios derived in Step 2 and a selected age-adjusted inflation rate to obtain forecasted future net salvage for each future activity year.

⁷⁴⁴ SCE-09, Vol. 3, at 16, Figure II-2.

Step 4. Sum the forecasted future net salvage derived in Step 3 and divide by total plant in service to obtain estimate of future net salvage rate.⁷⁴⁵

The analysis incorporates as a multiplier an “age-adjusted inflation rate” to obtain the forecasted net salvage. Despite stating the forecasted net salvage in future inflated dollars, SCE did not similarly adjust the dollars to be accrued for that forecast.

TURN raises valid concerns about this issue, describing it as a “currency mismatch” due to the calculation of costs based on future currency that has a lower value than today’s dollars collected from current ratepayers.⁷⁴⁶ Although TURN may raise valid criticisms of SCE’s methods, TURN’s own proposal ignores Standard Practice U-4 and Commission precedent in support of SCE collecting approximately 1.2 times SCE’s incurred net salvage costs for recent years.

Both SCE’s per-unit analysis and TURN’s proposal are substantial deviations from Standard Practice U-4 and we do not adopt them here.

Following the directive of D.15-11-021, SCE performed this analysis on nine T&D accounts, “which comprise 85% of the total COR expense proposed.”⁷⁴⁷ SCE contends, in an effort to establish the reasonableness of its per unit analysis, “Comparing the results of both approaches demonstrates that the results are largely comparable ... and underscores the reasonableness of SCE’s proposal.”⁷⁴⁸

⁷⁴⁵ SCE-25, Vol. 4, at 64:20 – 65:2.

⁷⁴⁶ TURN Opening Brief, at 297.

⁷⁴⁷ SCE-09, Vol. 3, at 12:8-9.

⁷⁴⁸ SCE-25, Vol. 4, at 15:13-14.

*Comparison of Traditional vs. Per-Unit Net Salvage Analysis Results*⁷⁴⁹

Account	Traditional Analysis	Per-Unit with 2.72% Inflation	SCE Proposed	Traditional compared to Per-Unit
354	-931%	-185%	-75%	Higher
355	-175%	-499%	-90%	Lower
356	-388%	-210%	-100%	Higher
364	-656%	-488%	-263%	Higher
365	-293%	-538%	-144%	Lower
366	-228%	-401%	-38%	Lower
367	-178%	-261%	-75%	Lower
368	-68%	-47%	-25%	Higher
369	-520%	-387%	-125%	Higher

Likely recognizing that these net salvage rates are significantly different, SCE explains,

These variances between the results produced by a traditional analysis versus a per-unit analysis do not demonstrate flaws in the per-unit approach; rather, they reflect the difference between past retirement experience and what one can reasonably expect about future retirements and costs.⁷⁵⁰

SCE then further explains by reference to its traditional analysis which supports a depreciation increase of \$782 million and the per-unit analysis supporting an increase of \$893 million, “... the traditional analysis, without application of expert judgment, produces depreciation expense approximately as large as the results supported by SCE’s per-unit analysis.”⁷⁵¹ Notably missing from this explanation is that expert judgment is a required element of the

⁷⁴⁹ *Id.*, at 16, Table II-3.

⁷⁵⁰ *Id.*, at 16.

⁷⁵¹ SCE-25, Vol. 4 at 16:17-20, at 17, Figure II-2.

traditional analysis, Standard Practice U-4. We further note, we have questioned the expert judgment applied by SCE for its traditional analysis in the previous two SCE general rate case decisions, D.12-11-051 and D.15-11-021.

We are left with little that supports recognition of SCE's proposed ballooning amount for depreciation. SCE, however, rather than requesting as part of its revenue requirement the nearly \$1 billion its analysis would suggest proposing, moderates its proposal to less than one-tenth of what – if reliable – would be fiscally responsible and proposes an \$84 million increase to its depreciation accrual.

We are left with a failure of any party to establish by a preponderance of the evidence the validity of their proposed net salvage ratios, along with our own recognition that due to the costs of removal net salvage is nearly always negative. Therefore, we find it reasonable to maintain the net salvage ratios which were previously adopted by D.15-11-021. Although SCE introduced a great volume of evidence, volume alone is not sufficient to meet the burden of proof and change net salvage ratios. We also note Standard Practice U-4's reliance on regularly updated numbers increases the likelihood future net salvage ratios are reliable. As SCE states, "in future rate cases, SCE will have the ability to take its then-surviving plant balances to even better refine its projections about the future in light of then-available conclusions about historical costs-per-unit."⁷⁵²

⁷⁵² SCE Exhibit 09, Vol. 3, at 8:6-8.

18.2. T&D Net Salvage

SCE has proposed increases to most net salvage ratios, tempered by a 25% cap for T&D accounts. As discussed above, we do not adopt the proposed net salvage ratios based on SCE's depreciation studies, but rather maintain the ratios adopted in the 2015 GRC. The following table provides a summary of the contested accounts and the amounts authorized.

Account (all values are negative)	2015 GRC	SCE	TURN	Adopted
Transmission Plant				
352 - Structures and Improvements	35%	35%	35%	35%
353 - Station Equipment	15%	10%	10%	15%
354 - Towers and Fixtures	60%	75%	35%	60%
355 - Poles and Fixtures	72%	90%	100%	72%
356 - Overhead Conductors & Devices	80%	100%	60%	80%
357 - Underground Conduit	0%	0%	5%	0%
358 - Underground Conductors & Devices	15%	19%	15%	15%
359 - Roads and Trails	0%	0%	5%	0%
Distribution Plant				
361 - Structures and Improvements	25%	30%	30%	25%
362 - Station Equipment	25%	31%	30%	25%
364 - Poles, Towers and Fixtures	210%	263%	210%	210%
365 - Overhead Conductors & Devices	115%	144%	100%	115%
366 - Underground Conduit	30%	38%	50%	30%
367 - Underground Conductors & Devices	60%	75%	75%	60%
368 - Line Transformers	20%	25%	35%	20%
369 - Services	100%	125%	70%	100%
370 - Meters	5%	0%	0%	5%
373 - Street Lighting & Signal Systems	30%	38%	100%	30%

18.3. Life

SCE's proposed service lives are disputed for only three categories of assets: (1) T&D (Account 369), (2) hydroelectric (hydro) facilities; and (3) solar photovoltaic facilities.

18.3.1. T&D Life

SCE proposed service lives for all but two T&D accounts that are the same, or longer, as the service lives authorized in the 2015 GRC. ORA did not oppose any of SCE's T&D life proposals. TURN disputed only the proposed life for Account 369, Services.

SCE proposed decreasing the service life for Account 353, Station Equipment, by five years. The dollar-weighted average service life for this category is 44 years. We find the evidence does not support changing the adopted service life from the currently authorized 45 years.

SCE proposed decreasing the service life for Account 367, Underground Conductors & Devices, by two years, to 43 years. The proposal is consistent with the weighted average service life for this account and is adopted.

SCE proposed maintaining a 45 year service life for Account 369, Services, even while acknowledging that its own data produces a result suggesting an estimated service life of 65 years. SCE however, questions its own data due to a change from three-phase bare-wire conductor which was identified as three units of property to triplex which is categorized as one unit. This change then resulted in accounting modifications which leads SCE to doubt the analysis as to the estimated service life. Instead of relying on data driven analysis – as SCE does for other accounts – SCE argues we should revert to reliance on a simulated plant record and maintain the authorized service life from the 2015 GRC. We find SCE's disregard for its own data troubling and are not persuaded by SCE's arguments against its consideration. TURN's proposal to accept a 55 year service life is reasonable and is more consistent with historical data and therefore, is adopted.

Unless otherwise noted above, SCE's proposals are approved. The following table shows a summary of the accounts.

Account	2015 GRC	SCE	TURN	Adopted	
TRANSMISSION PLANT					
350.2	Easements	60	60		60
352	Structures and Improvements	55 S 3.0	55 L 1.0		55 L 1.0
353	Station equipment	45 R 0.5	40 L 0.5		45 R 0.5
354	Towers & Fixtures	65 R 5	65 R 5		65 R 5
355	Poles & Fixtures	50 R 0.5	65 SC		65 SC
356	Overhead Conductors & Devices	61 R 3	61 R 3		61 R 3
357	Underground Conduit	55 R 3.0	55 R 3.0		55 R 3.0
358	Underground Conductors & Devices	40 R 2.5	45 S 1.0		45 S 1.0
359	Roads and Trails	60 SQ	60 R 5.0		60 R 5.0
DISTRIBUTION PLANT					
360.2	Easements	60	60		60
361	Structures and Improvements	42 R 2.5	50 L 0.5		50 L 0.5
362	Station Equipment	45 R 1.5	65 L 0.5		65 L 0.5
364	Poles, Towers & Fixtures	47 L 0.5	55 R 1.0		55 R 1.0
365	Overhead Conductors & Devices	45 R 0.5	55 R 0.5		55 R 0.5
366	Underground Conduit	59 R 3.0	59 R 3.0		59 R 3.0
367	Underground Conductors & Devices	45 R 0.5	43 R 1.5		43 R 1.5
368	Line Transformers	33 R 1	33 S 1.5		33 S 1.5
369	Services	45 R 1.5	45 R 1.5	55 R 1.5	55 R 1.5
370	Meters	20 R 3.0	20 R 3.0		20 R 3.0
373	Street Lighting & Signal Systems	40 L 0.5	48 L 1.0		48 L 1.0
GENERAL BUILDING					
390	Structures and Improvements	38 R 3.0	45 R 0.5		45 R 0.5

18.3.2. Hydro Life

SCE proposes to set the depreciable life of hydroelectric facilities equal to the average remaining years on the facilities' current FERC licenses, unless the license is expired or will expire within five years. For those facilities, the

depreciable life is assumed to be extended by forty years to approximate the anticipated renewal period. For facilities outside the five-year window of expiration, renewal is not assumed. SCE argues in its Reply Brief that it is not suggesting all hydro facilities more than five years from license expiration will be decommissioned. "Rather, the point is to estimate a reasonable depreciable life for the turbines, generators, and other hydro assets that will be replaced before the final decommissioning of the overall facility."⁷⁵³ SCE further contends this is consistent with Commission practice, logically ties to applicable federal regulations, and avoids assuming renewal of licenses for small hydro facilities due to their uncertain economics.⁷⁵⁴

TURN was the only party to contest SCE's proposal for hydroelectric facilities. TURN does not dispute SCE's approach for facilities with over 15 years to license expiration (adopt as the service life the time to license expiration) or for facilities with under five and one-half years to license expiration (adopt as the service life the time to expiration, extended by forty years). TURN proposes, for those facilities with between 5.5 and 15 years remaining life until license expiration, the service life be extended by 33.7 years. TURN derives this number by reducing the 40 year renewal period by 16% (reflecting SCE's experience of decommissioning of hydro facilities).⁷⁵⁵

The currently authorized hydro depreciation rate is 2.68%. SCE's proposal would increase the rate to 3.57% and would increase the annual accrual by

⁷⁵³ SCE Reply Brief, at 161-162.

⁷⁵⁴ SCE Reply Brief, at 161.

⁷⁵⁵ TURN Opening Brief, at 325.

\$10.5 million. TURN's proposal would result in a rate of 2.13%, a decrease of \$5.5 million.⁷⁵⁶

The evidence supports recognizing the vast majority of licenses will be renewed. SCE has not met its burden to establish the authorized depreciation rate of its hydroelectric plant is 3.57% based on its anticipated service life which presumes all facilities with a remaining service life over five and one-half years will not be renewed. We adopt as reasonable a rate of 2.13%.

18.3.3. Solar Life

The 2015 GRC adopted a 25-year average service life for SCE's solar PV assets based in part on an admission on SCE's website and manufacturer warranties.⁷⁵⁷ SCE now contends the previously authorized 20-year average service life should be readopted. We find SCE's contention that the service life for solar PV assets should more nearly match the roof life and lease life is reasonable. We adopt a 20-year average service life for solar PV assets.

18.4. Generation Decommissioning

SCE proposes to escalate costs of decommissioning generation plant to the anticipated cost in the year of retirement and, based on that inflated cost, seeks to accrue depreciation on an annual basis over the remaining service life of the plant. For example, based on a solar PV decommissioning expense of \$80.8 million in 2038, assuming a twenty year service life, SCE proposes we adopt an annual accrual of \$4.04 million.

⁷⁵⁶ The difference between the two proposals is \$16 million. SCE Opening Brief, at 268.

⁷⁵⁷ D.15-11-021, at 429-430.

TURN counters decommissioning expenses should be escalated to 2020, consistent with Standard Practice U-4. TURN's proposal avoids collecting dollars now on a vastly inflated expense. TURN's proposal is persuasive; SCE has not met their burden to support recovery of the escalated expense without a concurrent adjustment to the annual accrual. We therefore adopt the annual accrual proposed by TURN for Mountainview 3 & 4 of \$0.3 million, Solar PV of \$3.2 million, and Peakers of \$0.2 million.

18.5. Depreciation Study – Additional Issues

We continue to be troubled by the inadequacy of SCE's evidence supporting its claimed depreciation expense. As indicated (but not accepted) by the per unit analysis and suggested gradualism, the depreciation expense may be significantly greater than what is accepted here. If so, the cost of removing plant may not be adequately funded by the depreciation reserves. That outcome could raise the question as to whether future ratepayers should bear the burden of paying more for plant than the benefit they receive or whether that cost should be borne by shareholders due to SCE's own evidentiary failings and to avoid the proscription of Public Utilities Code Section 454.8.

Therefore, we direct SCE to present its depreciation testimony in the next GRC in a workshop, so that interested parties and the Energy Division may ask questions regarding SCE's testimony.

19. Rate Base – Additional Issues

We discussed in Section 17 that Rate Base represents the depreciated value of assets used to provide service to customers and the product of the Rate Base and the authorized rate of return equals a utility's return on its shareholders' investment.