UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

## VOLUME 1

GENERAL INFORMATION

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TRANSMITTAL LETTER

April 11, 2019

Hon. Kimberly D. Bose, Secretary<br>Federal Energy Regulatory Commission<br>888 First Street, N.E.<br>Washington, DC 20426<br>RE: Southern California Edison Company<br>Docket No. ER19-<br>$\qquad$ - 000

## Southern California Edison Company's Transmission Owner Tariff Rate Filing

Dear Ms. Bose:

Pursuant to Section 205(d) of the Federal Power Act, 16 U.S.C. § 824d (2012), and Section 35.13 of the Federal Energy Regulatory Commission's ("FERC" or "Commission") regulations (18 C.F.R § 35.13), Southern California Edison Company ("SCE") tenders for filing revisions to its Transmission Owner Tariff ("TO Tariff"), FERC Electric Tariff, Volume No. 6. The filing amends the formula rate for the costs associated with SCE's transmission facilities.

SCE is making this filing due to dramatic material changes to SCE's regulatory and financial conditions that have occurred since SCE filed its currently effective Formula Rate (the "Second Formula Rate") in October 2017. ${ }^{1}$ Beginning in December

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2017, several wind-driven wildfires impacted portions of SCE's service territory and caused substantial damage to both residential and business properties and service outages for some of SCE's customers. California has unique inverse condemnation laws. These laws provide that an electric utility will be held strictly liable for property damages and legal fees if its facilities are the substantial cause of a fire regardless of fault and even if the utility was fully compliant with all applicable rules and regulations, and acted reasonably. As a result of these laws and recent fires, SCE is exposed to significant potential wildfire damage claims. In 2017, the California Public Utilities Commission ("CPUC") issued a decision holding that it could preclude a utility from recovering these court-assigned costs if it finds the utility was not prudent, even if the source of the alleged imprudent conduct was not directly the cause of the fire. ${ }^{2}$ The decision creates significant CPUC-related cost-recovery uncertainty and, as a result, SCE recently announced an accrual of a 2018 fourth quarter non-cash charge against earnings of $\$ 1.8$ billion due to potential wildfire damages that would be dependent upon CPUC-approval. ${ }^{3}$

[^1]The stock of SCE's parent company, Edison International ("EIX"), has dropped dramatically since 2017 as a result of this wildfire risk. On January 21, 2019, Standard \& Poor's ("S\&P") downgraded SCE from BBB+ to BBB. And on February 18, 2019, S\&P issued a report entitled "Will California Still Have an Investment-Grade Investor Owned Electric Utility?" in which they warned that further downgrades should be expected unless there is regulatory action to address wildfire risks to the utilities. On March 5, 2019, Moody's Investors Services ("Moody's") downgraded SCE's credit ratings including its senior unsecured rating to Baa2 from A3. This means that SCE is near the bottom of the investment grade category. Moody's based this downgrade on "the potential for multi-billion dollar exposure related to wildfire risk that is unique to investor-owned utilities in California." ${ }^{4}$ Moody's also classified SCE as "outlook negative" meaning that SCE is at risk of further downgrades if the legal and regulatory environment in California remains unchanged.

SCE is aggressively pursuing steps to strengthen its system and manage risks to protect against wildfire threats. SCE is investing significant amounts of capital to harden

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its system to reduce wildfire risk, with the goal of ensuring safety and maintaining reliability. At the same time, SCE is pursuing legislative, regulatory and legal strategies to address the application of a strict liability standard to wildfire-related damages and the prudency standard applied by the CPUC to determine whether a utility can recover these court-assigned costs. However, SCE cannot predict whether or when a comprehensive solution mitigating the significant risk faced by California utilities related to wildfires will be achieved. Accordingly, SCE is filing proposed revisions to its Formula Rate to account for this risk in a manner sufficient to attract the capital necessary to provide safe and reliable electric service.

## I. BACKGROUND

On April 1, 1998, SCE unbundled its retail transmission rates and transferred Operational Control of its network transmission facilities to the California Independent System Operator Corporation ("CAISO"). As the result of these events, the Commission gained jurisdiction over SCE's retail transmission rates, complementing its existing jurisdiction over SCE's wholesale transmission rates. SCE filed its Transmission Owner Tariff ("TO Tariff") and its first proposed Base Transmission Revenue Requirement ("Base TRR") ${ }^{5}$ on March 31, 1997 in Docket No. ER97-2355.

[^3]From April 1, 1997 through December 31, 2011, SCE's Base TRR was established through "Stated Rate" TRR filings. ${ }^{6}$ On June 3, 2011, SCE filed a TRR filing requesting a formula rate in Docket No. ER11-3697. The filing was accepted and suspended, set for hearing and settlement procedures, and given a January 1, 2012 effective date. The parties to Docket No. ER11-3697 engaged in settlement negotiations and the Commission approved the settlement on October 11, 2013. Since January 1, 2012, SCE's Base TRR has been established pursuant to the Original Formula Rate, with Annual Update filings being submitted each year covering a calendar year term. The protocols to the Original Formula Rate required SCE to file a replacement rate mechanism to recover SCE's Commission-jurisdictional transmission costs no later than 60 days prior to January 1, 2018 and request an effective date of January 1, 2018 in that filing. On October 27, 2017, SCE submitted this filing, proposing the Second Formula Rate in Docket No. ER18-169.

By order dated December 29, 2017, the Commission accepted SCE's TO2018
Formula Rate and related 2018 TRR, suspended it for a nominal period, to be effective

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January 1, 2018, subject to refund, and established hearing and settlement judge procedures. ${ }^{7}$ As of the date of this filing, parties in Docket No. ER18-169 remain in settlement proceedings.

SCE's Formula Rate consists of two components: (1) the Formula Rate Protocols ("Formula Protocols," Attachment 1 to Appendix IX of SCE's TO Tariff); and (2) the Formula Rate Spreadsheet ("Formula Spreadsheet," Attachment 2 to Appendix IX of SCE's TO Tariff). The Formula Protocols set forth process-related items, such as the Annual Update filing timeline, as well as various requirements that SCE must meet in Annual Update informational filings or while the Formula Rate is in effect. The Formula Spreadsheet is the set of calculations that SCE must follow in calculating its Base TRR.

Section 3 of the Formula Rate Protocols specifies that each year SCE will file an Annual Update on or before December 1, revising the Base TRR and associated rates to be effective on January 1 of the upcoming Rate Year. In accordance with Section 3, SCE filed its 2019 Annual Update ("TO2019 Annual Update") on November 29, 2018. That submission was an informational update and did not subject SCE's Formula Rate to modification. The Rate Year for TO2019 Annual Update is January 1, 2019 through December 31, 2019.

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## II. PURPOSE OF FILING

As stated above, SCE's regulatory and financial conditions have changed dramatically since the submission of the Second Formula Rate and a new filing is necessary. In this filing, SCE describes the operational measures it is implementing to strengthen its system and mitigate the increasing risk of wildfires to its customers' safety, property and its employees. However, there are significant wildfire factors outside of SCE's control that create a persistent risk of a devastating wildfire. ${ }^{8}$

There has been a dramatic change in financial risk to California utilities caused by the State Courts' application of inverse condemnation combined with the CPUC's recent decision denying wildfire-associated cost recovery. ${ }^{9}$ This confluence of factors combined with the increased risk of catastrophic wildfires, has driven one of the California utilities into bankruptcy and have put the other California utilities, including SCE, in danger of falling below investment grade. SCE is submitting revisions to its Formula Rate to account for this risk and ensure it can encourage investment sufficient to attract the capital necessary to provide safe and reliable electric service.

[^6]In this filing, SCE proposes a base ROE request that is founded on, and fully supported by, the Commission's established ROE policies. SCE thus applies the four financial models utilized in the Commission's October 2018 Order Directing Briefs
("NETO Briefing Order") ${ }^{10}$ —which includes the Discounted Cash Flow ("DCF") model, the Capital Asset Pricing Model ("CAPM"), the historical Risk Premium model, and Expected Earnings-and determines the "conventional" ROE that is required to reflect the significant non-wildfire regulatory and legislative risks that SCE faces as a public electric utility operating in California. ${ }^{11}$ SCE also analyzes how the additional risks it faces as a result of wildfires affect SCE's ability to attract capital. While these wildfire risks require additional analysis to complement the conventional application of the four financial models, this additional analysis is fully consistent with the Commission's rationale in the NETO Briefing Order because this analysis connects SCE's "particular circumstance[]" and its unique risks with the capital attraction standard that underlies the Commission's ROE policies. ${ }^{12}$ SCE accordingly requests an increase to its base ROE to account for the asymmetric wildfire risk that cannot be estimated fully by standard

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financial models. This ROE is described in Section IV below and summarized in the testimony of Mr. Daniel Wood, Exhibit No. SCE-19.

Besides changes to ROE, SCE is seeking certain limited revisions to the Second Formula Rate to improve the operation of the Formula Rate. These revisions are explained in Sections IV and V below and in the testimony of Mr. Jeff Nelson, Exhibit No. SCE-1. A full list of all proposed revisions to the Formula Rate is included in Exhibit Nos. SCE-5 (Formula Spreadsheet Revisions) and SCE-6 (Formula Protocol Revisions).

Under the proposed rates, SCE's proposed retail Base TRR for calendar year 2019 (effective June 12, 2019) will be $\$ 1,328,294,741$. This compares to the current Base TRR of $\$ 1,038,486,906$, as filed by SCE in 2018 in its TO2019 Annual Update.

Additionally, in this filing SCE is re-collating Attachment 1 to Appendix IX of SCE's TO Tariff and Attachment 2 to Appendix IX of SCE's TO Tariff. The re-collation is an administrative change and is being made to reassign new collation values to SCE's TO Tariff eTariff database. SCE is currently utilizing nearly the full range of the available collation values under the FERC XML schema. Because the tariff record collation value determines the position of the record in the tariff, SCE was severely limited in its ability to file additional tariff records to its eTariff database without inserting the new records in between existing records. The re-collation being performed in this filing will rearrange the position of the tariff record being submitted herein.

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## III. EFFECTIVE DATE

SCE requests that the Commission accept the proposed Formula Rate revisions set forth in this filing with an effective date of June 12, 2019 without suspension or hearing, which is 62 days after the date of this filing. If the Commission suspends the effective date for five months, ${ }^{13}$ SCE requests an effective date for Formula Rate of November 12, 2019. However, in the event of a suspension, SCE requests that, while the Formula Rate will be in effect beginning November 12, 2019, for administrative and customer clarity considerations, the associated retail and wholesale transmission rates be updated on January 1, 2020. ${ }^{14}$ January 1 aligns with SCE's normal rate update cycle and the requested delay will eliminate the need to update the rates twice within a period of less than two months. To the extent that waiver is required from the Commission's rules and regulations in order for SCE to implement this in the event that the Commission suspends SCE's filing for a period of five months, SCE respectfully requests waiver of any applicable rules or regulations.
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13 16 U.S.C. § $824 \mathrm{~d}(\mathrm{~d})$ (2018).
14 The Formula Rate will true-up any potential mismatch between the approved Formula Rate
and the wholesale and retail rates charged to customers from November 12, 2019 through
December 31,2019 as part of the normal 2019 True-up TRR process. Thus, customers will
be properly charged for transmission even with the slightly delayed implementation.

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## IV. DESCRIPTION OF FILING

## A. Return on Equity

The proposed Return on Equity ("ROE") in the Formula Rate reflects a base ROE of $17.12 \%{ }^{15}$ This ROE was derived by applying the "conventional" ROE for utilities of like risks of SCE without a consideration of wildfires and by analyzing the impact of the significant wildfire risk that SCE faces on the ROE level that SCE requires to attract capital and satisfy investors' expectations for companies with corresponding risks.

The conventional ROE is $11.12 \%$ and is determined by applying the multiple-model methodology proposed by the Commission in the NETO Briefing Order, with certain refinements to the proposed methodology. The conventional ROE does not reflect the extraordinary wildfire risks faced by SCE, and SCE applies a $6.0 \%$ adjustment to ROE to account for the extraordinary wildfire risks. ${ }^{16}$

## i. Conventional ROE

Dr. Villadsen's evaluation and recommendation concerning the conventional ROE for SCE is based on the Commission's most recent guidance and policy objectives, ${ }^{17}$

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including the multiple-model methodology proposed by the Commission in the NETO Briefing Order ${ }^{18}$ and Opinion No. 531. Dr. Villadsen first assembled a proxy group of comparable electric utilities using the proxy group screening criteria set forth in the

NETO Briefing Order. When establishing the proxy group, Dr. Villadsen did not apply the NETO Briefing Order criteria that screened a company because it was more than one notch above or below SCE's credit rating. She did this for two reasons: (1) such a restriction would lead to a sample that is too small to capture the electric utility industry; and (2) SCE's credit rating has been evolving over the past year and may continue to do so. For these reasons, Dr. Villadsen included all electric companies that are considered investment grade.

Dr. Villadsen then evaluated the cost of equity for SCE using the four financial models adopted in the NETO Briefing Order: the DCF model, the Capital Asset Pricing Model ("CAPM"), Expected Earnings, and Risk Premium. For CAPM, Dr. Villadsen applies a forecast yield, as opposed to the current yield, as a measure of the risk-free rate.

She explains that she made this adjustment to the NETO Briefing Order's guidance because it will more accurately reflect the rates expected to be in effect during time
${ }^{18}$ Martha Coakley et al. v. Bangor Hydro-Electric Co. et al., Order Directing Briefs, 165 FERC - 61,030 (2018) ("NETO Briefing Order"). In this order, the Commission proposed the new methodology and established a paper hearing on this proposed methodology to the issues in the relevant dockets. Id. at P 61. As of the date of this filing, the Commission has not issued a decision on the paper hearing. SCE simultaneously sought leave to be permitted to submit an Initial Brief and submitted an Initial Briefs to comment on specific policy questions of general applicability raised in the NETO Briefing Order.

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period the ROE will be in effect. She then develops a composite Zone of Reasonableness produced by the DCF, CAPM and Expected Earnings models, applying the enhancements discussed above, and identifies the central tendency for average and above-average risk utilities based upon the NETO Briefing Order.

Dr. Villadsen then considers the substantial risks and uncertainties unique to California transmission investment, including the risks analyzed in the testimony of Dr. Gary Stern in Exhibit SCE-21. Such risks include California's aggressive environmental policy designed to dramatically reduce carbon emissions, California's evolving approach to energy procurement and electric retail competition and the increasing regulatory uncertainty caused by state regulatory lag.

Dr. Villadsen concludes SCE is an above-average risk utility in its proxy group and should receive a $11.12 \%$ conventional ROE. Dr. Villadsen indicates this conclusion is made without consideration for the substantial wildfire risk SCE faces because the financial models described above do not reflect the extraordinary wildfire risk faced by SCE.

## ii. ROE Increase to Address Extraordinary Wildfire Risk

The analysis and testimony of Mr. Graves addresses the substantial wildfire risk SCE faces. ${ }^{19}$ Mr. Graves concludes that the extreme potential liabilities, and apparently growing risk of megafires in California, plus the state's unsettled legal and regulatory

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approach to assigning financial responsibilities of those events, create an environment that is not sustainable for utilities. Mr. Graves concludes that if left unaddressed, this environment will significantly impede a California utility's ability to fund ongoing normal business. Based upon extensive analysis, Mr. Graves concludes an ROE allowance of 600 basis points, is consistent with the apparent size of the problem as seen from either recent past fires or from pricing evidence for insurance and catastrophe bonds.

## iii. Conventional ROE Methodologies Do Not Account for

## Extraordinary Wildfire Risk

In the context of the increase to ROE to address wildfire risk, Dr. Villadsen indicates that utilizing solely a conventional application of the Commission's construct for determining a Zone of Reasonableness is not sufficient to satisfy the capital attraction standard that is the foundation of that construct. ${ }^{20}$ The impact of wildfire risk on SCE requires additional analysis of ROEs that are required to attract equity capital for companies (in other industries) that face risks as significant as the wildfire risk that SCE faces. As support for the reasonableness of SCE's request, Dr. Villadsen notes non-electric utilities with risks more comparable to those faced by SCE have ROEs significantly higher than SCE's requested $17.12 \%$. Further, she also creates a Zone

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of Reasonableness based on a capital-intensive network industries proxy group.
Compared to the traditional Commission utility proxy group, Dr. Villadsen's capital intensive network industries proxy group faces risk more comparable to those confronted by SCE. Based on this proxy group, she concludes SCE's Zone of Reasonableness extends to at least $18.2 \%$ and notes that, after excluding outliers, there are multiple results above $18.2 \%$, reaching as high as $26.4 \%$.

## iv. Recommended ROE

The testimony of Mr. Wood concludes that authorizing a 600 basis point increase to ROE is necessary to provide investors with confidence that they have a reasonable opportunity to earn a return on their investment at a level that is commensurate with conventional ROE, which is $11.12 \%$. The returns must be adjusted upwards based on a consideration of the wildfire-associated risks equity holders face. Mr. Wood and Mr. Graves each conclude that such an increase does not capture the true or full cost of the risks. But, increase is needed to compensate investors, albeit partially, for those risks. Therefore, looking at all of the evidence, Mr. Wood recommends a $17.12 \%$ base ROE, which includes a $6.0 \%$ consideration for wildfire risk, as a just and reasonable ROE for SCE that satisfies Hope and Bluefield. ${ }^{21}$

[^11]Additionally, pursuant to Commission policy, SCE's ROE request also includes (1) a requested 50 basis point ROE adder for SCE participation in a Commissionapproved Independent System Operator, the California Independent System Operator ${ }^{22}$ and (2) the specific project incentive adders that SCE has received for certain transmission projects. ${ }^{23}$ Dr. Villadsen's testimony explains that the 50 basis point adder for ISO/RTO membership has been approved by the Commission, ${ }^{24}$ and discusses the significant benefits that flow from membership in an ISO/RTO. ${ }^{25}$ Further, Dr. Villadsen explains the specific transmission project adders that SCE has received for three of its transmission projects. ${ }^{26}$
${ }^{22}$ The Commission initially approved this adder in Docket No. EL07-62-000. Southern California Edison Co., 121 FERC I[ 61,168 (2007) at P 158. On December 29, 2017 in Docket ER18-169-000, the Commission issued an order accepting SCE's Second Formula Rate subject to refund and granted SCE's request for the CAISO Adder. Southern California Edison Co., 161 FERC P 61,309 (2017). On February 28, 2018, the Commission issued an order granting a rehearing request concerning the grant of the CAISO Adder and that rehearing remains pending.
${ }^{23}$ The Commission has authorized the following transmission project adders: Rancho Vista, 0.75 percent; Tehachapi, 1.25 percent; and Devers-Colorado River, 1.00 percent. See, Southern California Edison Co., 121 FERC II 61,168 (2007) at P 129 and Southern California Edison Co., 132 FERC II 61,213 (2010).
${ }^{24}$ Dr. Villadsen's testimony recognizes this adder is currently under review by the Commission, both on rehearing in Docket No. ER18-169 and on remand in Docket Nos. ER14-2529-005, et al. However, as of the date of this filing, SCE remains eligible for that adder based upon approval by this Commission.
${ }^{25}$ Dr. Stern also addresses the benefits that flow from SCE's participation in the CAISO. See Exhibit SCE-21, at pp. 34-36.
${ }^{26}$ Exhibit SCE-25, at p. 18.

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## B. Adjustment to Total Proprietary Capital and Non-Rate Base Debt

On February 28, 2019, SCE filed its 2018 10-K financial report reflecting accrual of a fourth quarter non-cash net charge of $\$ 1.8$ billion against earnings due to potential damage claims and other costs associated with wildfire and mudslide events of 2017 and 2018 in SCE's service territory ("Wildfire Reserve"). SCE accrued this charge as required by accounting principles generally accepted in the United States of America ("GAAP"). GAAP requires that a contingent liability be recorded on an accrual basis when liability is probable and reasonably estimable, even though no actual liability has been incurred. As Mr. Sergio Deana explains in his testimony, SCE lacks sufficient information regarding cost recovery of wildfire-related liability at the CPUC to record an offsetting "regulatory asset" at this time. The impact of taking the Wildfire Reserve without sufficient offsets has been to lower SCE's equity ratio under the Second Formula Rate even though no equity has in fact been adjusted. This substantial non-cash net charge is due to the same unsettled legal and regulatory approach-i.e., California's strict liability inverse condemnation in conjunction with the CPUC's application of prudency standards to megafire cost recovery-and negatively impacts investor expectations. To reflect a just and reasonable return on capital, Mr. Deana concludes that wildfire related non-cash net charges, including this Wildfire Reserve, should be excluded when determining SCE's total proprietary capital.

In addition, Mr. Deana describes the Formula Rate's exclusion of debt that is not used to finance rate base when calculating SCE's capital structure. This currently

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includes debt dedicated toward fuel purchases, and may in the future include debt dedicated to finance wildfire liability.

## C. Overview of the Formula Rate

SCE's Base TRR is calculated by the Formula Rate according to the following basic formula: ${ }^{27}$

Base TRR = Prior Year TRR + Incremental Forecast Period TRR ("IFPTRR") + True Up Adjustment

Where:

- The Prior Year TRR represents SCE's costs of owning and operating SCE's CAISO-controlled transmission facilities, with rate base components being based on End-of-Year values for the Prior Year. ${ }^{28}$
- The Incremental Forecast Period TRR represents the incremental TRR costs that SCE is projected to incur during the Rate Year relative to

[^12]those already included in the Prior Year through the Prior Year TRR component.

- The True Up Adjustment component of the Base TRR reflects the difference between SCE's actual costs of owning and operating its CAISO-transmission assets during the Prior Year, and the actual retail transmission revenues that SCE received during the Prior Year. It is included as a component of the Base TRR to ensure that SCE recovers its actual costs of owning and operating its transmission system over time. To determine the True Up Adjustment, SCE's Formula Rate calculates a "True Up TRR," which is the measure of SCE's actual Base TRR costs incurred during the Prior Year.


## D. The Annual Update Process

The Annual Update process is set forth in the Section 3 of the Formula Protocols, and includes the following aspects:

1) On or before June 15 of each year, SCE will post on its website a "Draft Annual Update" which will include substantially all aspects of the Annual Update informational filing (Section 3.a of the Formula Rate Protocols).
2) On or before July 15 of each year, a Draft Annual Update conference is to be held, the purpose of which is for SCE to meet with customers to
discuss the Draft Annual Update (Section 3.b of Formula Rate Protocols).
3) Between the period from June 15 to November 1, customers may submit data requests to SCE, and SCE shall make a good faith effort to respond to information requests in writing within ten business days (Section 3.c of Formula Rate Protocols).
4) On or before December 1 of each year, SCE will submit the Annual Update informational filing (Section 3.d of Formula Rate Protocols).
5) On January 1 of the following year, the Base TRR and associated retail and wholesale transmission rates included in the Annual Update filing will be placed into effect (Section 3.d of Formula Rate Protocols).

SCE is not proposing any revisions to the Annual Update process relative to the process that is currently in effect.

## E. Allocation of Costs Between CAISO and Non-CAISO

Not all of the costs that SCE books as Transmission in its accounting system and reports to the Commission in its annual FERC Form No. 1 filings are Commissionjurisdictional. A significant portion of SCE's plant booked as Transmission plant, or costs booked as Transmission Operations and Maintenance ("O\&M") costs, represent costs that are under the CPUC jurisdiction. Accordingly, SCE must determine for ratemaking purposes the portion of Transmission plant and Transmission O\&M costs that are Commission-jurisdictional.

To determine the portion of plant booked for accounting purposes as Transmission Plant that is under the CAISO's Operational Control and therefore is Commissionjurisdictional ("ISO Transmission Plant"), SCE performs an annual Transmission Plant Study. The Transmission Plant Study examines all facilities that are booked as Transmission Plant and determines what portion of the facilities are ISO Transmission Plant. Mr. Jacob Moon fully supports and explains the Transmission Plant Study in his testimony, Exhibit No. SCE-9.

SCE's Formula Rate also includes a mechanism to determine the portion of total Transmission O\&M expense that is related to the ISO Transmission Plant and will be recovered through the Formula Rate. Mr. Daniel Allstun supports and explains the overall Transmission O\&M Expense determination in his testimony, Exhibit No. SCE-10.

## F. Implementation of Changes

The Second Formula Rate includes a provision for a "Final True Up Adjustment, ${ }^{, 29}$ which states that SCE is entitled and required to recover any costs through the term of the Formula Rate. Accordingly, although SCE is proposing an effective date of June 12, 2019 for the proposed changes to the Formula Rate, the Original Formula Rate will still be utilized for the purpose of calculating the True Up

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TRR for the 2017 year and the Second Formula Rate will still be utilized for the purpose of calculating the True Up TRR for the 2018 year.

In addition, SCE is proposing provisions that will ensure that the True Up TRRs for the portion of time the Second Formula Rate was in effect in 2019 are calculated pursuant to the Second Formula Rate. Specifically, revised Section 6 of the Formula Rate protocols ("Transition of the Original Formula Rate to the Formula Rate") explains that "any transition from one formula rate to its successor formula rate shall ensure that the True Up TRRs for any years for which a previous formula rate or formula rates were in effect during all or part of that year are calculated utilizing the formula rate, or formula rates, that were in effect during the year being trued up." This requirement is implemented in the calculation of the True Up Adjustment component of the proposed 2019 Base TRR for the Formula Rate. The testimony of Mr. Hansen explains the implementation of this transition provision testimony, Exhibit No. SCE-3.

## G. Depreciation Rates

SCE is not making any changes to the depreciation rates used in the Second Formula Rate associated with ISO Transmission plant, in order to remain in alignment with the rates that SCE has proposed in its recent CPUC 2018 General Rate Case ("GRC"). The depreciation rates are supported by the testimony of Mr. David Gunn in Exhibit Nos. SCE-7 and SCE-8.

## H. Tax Cuts and Jobs Act and ADIT Methodology

On January 4, 2019, the Commission issued the Order Accepting Tariff Revisions, Subject to Condition in response to a request by SCE to revise its Transmission Owner Tariff as a result of Public Law 115-97, commonly referred to as the Tax Cuts and Jobs Act ("TCJA"). ${ }^{30}$ This order, effective November 16, 2018, approved changes to SCE's Second Formula Rate to reflect the tax-related ratemaking implications resulting from the TCJA. SCE maintains these recent changes that were adopted into its Second Formula Rate.

In addition, SCE submitted proposed revisions on January 22, 2019 to eliminate the use of two-step averaging methodology in the calculation of Accumulated Deferred Income Tax ("ADIT") balances in SCE’s currently-effective Second Formula Rate, with a proposed effective date of January 1, 2019. ${ }^{31}$ SCE now uses the pro rata method for averaging ADIT in the Income Tax Formula of the Second Formula Rate. SCE maintains this ADIT methodology change as adopted into its Second Formula Rate.

Mr. Lopez provides detailed discussion concerning these issues in his testimony, Exhibit No. SCE-11.

[^14]
## V. ADDITIONAL PROPOSED REFINEMENTS TO THE FORMULA RATE

Since filing its Second Formula Rate in late 2017, SCE has identified certain refinements that have the potential to benefit all parties, provide for a more efficient process, ensure compliance with evolving rules, and improve the treatment of certain costs. With that in mind, below is a short discussion of the key changes to the Second Formula Rate that are included in this filing. There are many less significant revisions that SCE is proposing to make to the Formula Rate. Exhibit Nos. SCE-5 and SCE-6, supported by Mr. Hansen, present a listing of all proposed revisions to the Formula Spreadsheet and Formula Protocols, and the witness supporting each.

## A. Proposed Refinements to the Formula Rate

1. Adjustment to Gross Load for purposes Calculation of Wholesale Rates To determine wholesale rates, SCE's Schedule 30 of the Formula Rate Spreadsheet uses "Gross Load," which is the sum of SCE's forecast MWh retail sales measured at the CAISO grid level, and SCE's forecast MWh pump load for the Rate Year. To ensure that SCE's Pump Load component of Gross Load will over time equal actual pump load, SCE is proposing to include a new mechanism: the addition of a new Line 3 Schedule 32 "Pump Load True Up," and a new Note 4 that defines the Pump Load True Up component. The new component is then added to the sum of SCE retail sales and the Pump Load forecast, ensuring that over time the amount of pump load equals actual MWh of Pump Load. Mr. Hansen discusses this in his testimony, Exhibit SCE-3.
2. Refinements to Schedule 17

To clarify the separate purposes of Schedule 17 and Schedule 18 of the Formula Rate Spreadsheet, SCE proposes to change Line 15 of Schedule 17 to remove reference to Schedule 18. SCE also proposes the following change to Instruction 1 of Schedule 17: Instruction 1:

1) Depreciation rates on Lines 17a-17m input from Schedule 18. However, in the event of a change in depreciation rates approved by the Commission, use Commission approved depreciation rates that were in effect during the Prior Year.

## 1) Depreciation rates on lines $17 \mathbf{a}-17 \mathrm{~m}$ are input based on the stated values of ISO Transmission Plant depreciation rates from Schedule 18 of the Formula Rate Spreadsheet in effect during the Prior Year.

Mr. Gunn discusses this change in his testimony, Exhibit SCE-7.
3. Use of FERC Form 1 to the Extent Possible

SCE is proposing revisions, primarily to Schedule 5 ROR-3, to improve the calculation of the cost of debt so that it is more fully based on cost information included in FERC Form 1. Mr. Deana discusses these revisions in his testimony, Exhibit SCE-17.

## B. Revisions to the Formula Rate Protocols

1. Adjustment to Definition of Material Accounting Changes

SCE proposes changes to the definition of "Material Accounting Changes," in footnote 4, to clarify the scope of information that must be included in each Draft Annual

Update. Specifically, "Material Accounting Changes" is proposed to be revised as
follows:
any material change that affects SCE's transmission rates as follows: in SCE's (i) accounting policies and practices from those in effect for the Prior Year upon which the immediately preceding Annual Update was based, including those resulting from any new or revised accounting guidance from the Financial Accounting Standards Board;-; or
(ii) internal corporate cost allocation policies or practices in effect for the Prior Year from those policies and/or practices in effect for the Prior Year upon which the immediately preceding Annual Update was based; or (iii) income tax elections from those in effect for the Prior Year upon which the immediately preceding Annual Update was based; or (iv) cost allocation policies between EIX, SCE, and subsidiaries of either, from those in effect for the Prior Year upon which the immediately preceding Annual Update was based. Additionally, a Material Accounting Change shall also include any: (i) initial implementation of an accounting standard; or (ii) initial implementation of accounting practices for unusual or unconventional items where the Commission has not provided specific accounting.

These clarifications and additions will provide greater transparency and predictability for stakeholders when they review the Draft Annual Update.

## VI. CONTENTS OF THIS FILING

The documents submitted with this filing consist of this letter of transmittal and the following documents:

1. A revised clean version of SCE's TO Tariff sheets reflecting the proposed revisions to the Formula Rate;
2. A red-lined version of the revised TO Tariff sheets reflecting the proposed revisions to the Formula Rate;
3. The relevant Cost of Service Statements;
4. Attestation by Aaron Moss, Vice President;
5. Prepared Direct Testimony, Exhibits, and Workpapers of the following witnesses:
a. Exhibits SCE-1 and SCE-2: Testimony of Mr. Jeffrey L. Nelson and exhibits thereto;
b. Exhibits SCE-3 through SCE-6: Testimony of Mr. Berton J. Hansen and exhibits thereto;
c. Exhibits SCE-7 through SCE-8: Testimony of Mr. David Gunn and exhibits thereto;
d. Exhibit SCE-9: Testimony of Mr. Jacob Moon;
e. Exhibit SCE-10: Testimony of Mr. Daniel J. Allstun;
f. Exhibit SCE-11: Testimony of Mr. Alfred Lopez;
g. Exhibit SCE-12: Testimony of Mr. Robert G. Mindess;
h. Exhibits SCE-13 through SCE-14: Testimony of Ms. Jee Kim and exhibits thereto;
i. Exhibit SCE-15: Testimony of Mr. Antonio Ocegueda;
j. Exhibit SCE-16: Testimony of Mr. Robert A. Thomas;
k. Exhibit SCE-17 and SCE-18: Testimony of Mr. Sergio Deana;
6. Exhibit SCE-19: Testimony of Mr. Daniel Wood;
m. Exhibit SCE-20: Testimony of Dr. Brian Chen;
n. Exhibit SCE-21: Testimony of Dr. Gary Stern;
o. Exhibits SCE-22 through SCE-24: Testimony of Mr. Frank Graves;
p. Exhibits SCE-25 through SCE-28: Testimony of Dr. Bente Villadsen and exhibits thereto;
q. Exhibit SCE-29: Workpapers supporting all witnesses

## VII. COMMUNICATIONS

SCE requests that all correspondence, pleadings and other communications concerning this filing be served upon:

Rebecca Furman
Law Department
Southern California Edison Company
P.O. Box 800

2244 Walnut Grove Avenue
Rosemead, CA 91770
Tel. (626) 302-3475
Rebecca.Furman@sce.com

Matthew Dwyer
Law Department
Southern California Edison Company
P.O. Box 800

2244 Walnut Grove Avenue
Rosemead, CA 91770
Tel. (626) 302-6521
Matthew.Dwyer@sce.com

Jeff Nelson ${ }^{32}$<br>Director, FERC Rates \& Regulation<br>Southern California Edison Company<br>P.O. Box 800<br>2244 Walnut Grove Avenue<br>Rosemead, CA 91770<br>Jeff.Nelson@sce.com

## VIII. REQUEST FOR WAIVERS

To the extent that waivers of the Commission's cost support regulations, in 18 C.F.R. § 35.13 (2010), are necessary, ${ }^{33}$ SCE respectfully requests such waivers, including waiver of the full Period I and Period II data requirements. Good cause exists for such waiver. The statements, testimony and exhibits accompanying this filing, together with SCE's publicly-available FERC Form 1 information, provide ample support for the reasonableness of the proposed revisions to the formula rates. Detailed statements of the applicant's cost of service are not needed where the proposed rates are formulary and will be based on actual costs as reflected in the applicant's audited books and records. Further, such waiver would be consistent with Commission precedent in SCE's Original Formula Rate and other formula rates of this nature. ${ }^{34}$

[^15]Hon. Kimberly D. Bose

April 11, 2019
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## IX. OTHER FILING REQUIREMENTS

No expenses or costs included in the cost of service statements tendered herein have been alleged or judged in any administrative or judicial proceeding to be illegal, duplicative or unnecessary costs that are demonstrably the product of discriminatory employment practices.

This filing conforms to any rule of general applicability and to any Commission order specifically applicable to SCE, and has made copies of this letter and all enclosures available for public inspection in SCE's principal office located in Rosemead, California.

SCE has e-mailed a link to this filing to those persons who are on the service lists for
Docket No. ER18-169.
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////
///I
////
(2008) (granting waiver of Sections 35.13(d)(1)-(2), 35.13(d)(5), and 35.13(h)); Okla. Gas \& Elec. Co., 122 FERC II 61,071 at P 41 (2008) (same); Am. Elec. Power Serv. Corp., 120 FERC II 61,205 at P 41 (2007) (granting waiver of Period I and II data); Commonwealth Edison Co., 119 FERC II 61,238 at PP 92-94 (2007) (granting waiver of Period I and II data and cost-of-service statements); Trans-Allegheny Interstate Line Co., 119 FERC II 61,219 at P 57 (2007) (same); Duquesne Light Co., 118 FERC II 61,087 at P 79 (2007) (granting waiver of Sections 35.13(d)(1)-(2) and 35.13(h)); Idaho Power Co., 115 FERC $\mathbb{I} 61,281$ at P 20 (2006) (granting waiver of Period II data); Allegheny Power Sys. Operating Cos., 111 FERC II 61,308 at PP 55-56 (2005) (granting waiver of Period I and II data).

Hon. Kimberly D. Bose
April 11, 2019
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Respectfully submitted,
/s/ Matthew Dwyer
Matthew Dwyer
Southern California Edison Company
P.O. Box 800

2244 Walnut Grove Avenue
Rosemead, CA 91770
Tel. (626) 302-6521
E-mail: Matthew.Dwyer@SCE.com

Dated: April 11, 2019

## COST OF SERVICE STATEMENTS

## Southern California Edison Company

Retail Revenues at Proposed Rates

| Revenues (\$) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rate Group | Jan 2019 | Feb 2019 | Mar 2019 | Apr 2019 | May 2019 | Jun 2019 |
| Domestic | \$49,167,632 | \$38,315,701 | \$40,478,754 | \$40,703,401 | \$41,730,488 | \$41,283,424 |
| TOU-GS-1 | \$8,663,255 | \$7,622,970 | \$8,008,929 | \$8,283,345 | \$8,446,416 | \$8,207,635 |
| TC-1 | \$61,384 | \$48,160 | \$59,131 | \$52,146 | \$53,436 | \$51,924 |
| TOU-GS-2 | \$18,040,031 | \$14,487,709 | \$16,125,973 | \$17,957,569 | \$19,029,700 | \$17,853,087 |
| TOU-GS-3 | \$9,521,057 | \$8,308,763 | \$9,214,766 | \$9,918,369 | \$10,850,310 | \$9,654,455 |
| TOU-8-Sec | \$9,342,897 | \$8,169,641 | \$8,975,167 | \$9,377,026 | \$9,837,658 | \$9,348,395 |
| TOU-8-Pri | \$5,877,033 | \$5,031,468 | \$5,480,331 | \$5,709,121 | \$6,108,190 | \$5,654,647 |
| TOU-8-Sub | \$5,664,371 | \$5,059,785 | \$5,320,700 | \$5,377,741 | \$5,765,445 | \$5,445,257 |
| TOU-8-Standby-SEC | \$237,593 | \$240,639 | \$248,466 | \$253,104 | \$253,886 | \$259,322 |
| TOU-8-Standby-PRI | \$739,600 | \$762,478 | \$780,154 | \$795,620 | \$841,095 | \$855,743 |
| TOU-8-Standby-SUB | \$1,773,076 | \$1,837,918 | \$1,813,058 | \$1,856,388 | \$1,930,709 | \$2,083,803 |
| TOU-PA-2 | \$1,667,282 | \$1,239,050 | \$1,339,957 | \$1,752,859 | \$1,868,898 | \$1,860,912 |
| TOU-PA-3 | \$1,232,954 | \$1,081,685 | \$1,159,885 | \$1,290,805 | \$1,373,824 | \$1,334,791 |
| Street Lighting | \$506,590 | \$469,414 | \$486,520 | \$477,687 | \$473,049 | \$449,706 |
| Total | \$112,494,756 | \$92,675,381 | \$99,491,789 | \$103,805,183 | \$108,563,105 | \$104,343,100 |


| Rate Group | Jul 2019 | Aug 2019 | Sep 2019 | Oct 2019 | Nov 2019 | Dec 2019 | Period II Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Domestic | \$55,880,995 | \$58,514,297 | \$54,698,226 | \$50,062,264 | \$37,991,664 | \$45,281,350 | \$554,108,197 |
| TOU-GS-1 | \$9,601,130 | \$9,734,055 | \$9,189,009 | \$9,241,950 | \$7,818,626 | \$8,421,695 | \$103,239,014 |
| TC-1 | \$52,512 | \$55,363 | \$48,508 | \$56,316 | \$50,621 | \$58,994 | \$648,496 |
| TOU-GS-2 | \$20,853,476 | \$21,592,000 | \$19,418,734 | \$20,535,540 | \$15,986,833 | \$17,451,367 | \$219,332,017 |
| TOU-GS-3 | \$11,112,270 | \$11,341,357 | \$10,809,010 | \$11,468,782 | \$9,141,949 | \$9,679,227 | \$121,020,316 |
| TOU-8-Sec | \$10,208,107 | \$10,862,667 | \$9,969,169 | \$10,532,158 | \$8,922,817 | \$9,347,778 | \$114,893,480 |
| TOU-8-Pri | \$6,259,328 | \$6,603,560 | \$5,934,161 | \$6,471,444 | \$5,465,171 | \$5,703,672 | \$70,298,127 |
| TOU-8-Sub | \$5,601,992 | \$6,128,860 | \$5,142,835 | \$5,720,909 | \$5,203,227 | \$5,272,371 | \$65,703,494 |
| TOU-8-Standby-SEC | \$261,274 | \$277,996 | \$276,038 | \$267,044 | \$250,585 | \$241,727 | \$3,067,674 |
| TOU-8-Standby-PRI | \$870,501 | \$902,258 | \$928,940 | \$856,077 | \$794,299 | \$755,403 | \$9,882,169 |
| TOU-8-Standby-SUB | \$2,113,110 | \$2,069,329 | \$2,094,483 | \$2,163,765 | \$2,069,193 | \$1,989,794 | \$23,794,626 |
| TOU-PA-2 | \$1,968,601 | \$2,068,439 | \$1,836,621 | \$1,968,652 | \$1,553,788 | \$1,720,940 | \$20,845,998 |
| TOU-PA-3 | \$1,460,322 | \$1,526,884 | \$1,400,889 | \$1,456,382 | \$1,184,908 | \$1,241,608 | \$15,744,938 |
| Street Lighting | \$463,505 | \$456,759 | \$460,497 | \$485,247 | \$477,756 | \$507,250 | \$5,713,981 |
| Total | \$126,707,124 | \$132,133,824 | \$122,207,122 | \$121,286,531 | \$96,911,436 | \$107,673,176 | \$1,328,292,528 |

## Notes:

1) Period II is January 2019 through December 2019.

Revenues are based on retail rates calculated in Schedule 33 of Formula Rate Spreadsheet.

| Rate Group | Jan 2019 |  |  | Feb 2019 |  |  | Mar 2019 |  |  | Apr 2019 |  |  | May 2019 |  |  | Jun 2019 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | GWh | MW* | MW** | GWh | MW* | MW** | GWh | MW* | MW** | GWh | MW* | MW** | GWh | MW* | MW** | GWh | MW* | MW** |  |  |  |
| Domestic | 2,397 |  | 0 | 1,868 |  | 0 | 1,973 |  | 0 | 1,984 |  | 0 | 2,034 |  | 0 | 2,012 |  | 0 |  |  |  |
| TOU-GS-1 | 495 |  | 0 | 436 |  | 0 | 458 |  | 0 | 473 |  | 0 | 483 |  | 0 | 469 |  | 0 |  |  |  |
| TC-1 | 5 |  | 0 | 4 |  | 0 | 5 |  | 0 | 5 |  | 0 | 5 |  | 0 | 5 |  | 0 |  |  |  |
| TOU-GS-2 |  | 3,693 | 3 |  | 2,965 | 3 |  | 3,301 | 3 |  | 3,676 | 3 |  | 3,895 | 3 |  | 3,654 | 3 |  |  |  |
| TOU-GS-3 |  | 1,784 | 6 |  | 1,556 | 6 |  | 1,727 | 6 |  | 1,859 | 6 |  | 2,034 | 6 |  | 1,809 | 6 |  |  |  |
| TOU-8-Sec |  | 1,670 | 0 |  | 1,460 | 0 |  | 1,604 | 0 |  | 1,676 | 0 |  | 1,758 | 0 |  | 1,671 | 0 |  |  |  |
| TOU-8-Pri |  | 1,071 | 0 |  | 917 | 0 |  | 999 | 0 |  | 1,041 | 0 |  | 1,114 | 0 |  | 1,031 | 0 |  |  |  |
| TOU-8-Sub |  | 1,025 | 0 |  | 916 | 0 |  | 963 | 0 |  | 973 | 0 |  | 1,044 | 0 |  | 986 | 0 |  |  |  |
| TOU-8-Standby-SEC |  | 24 | 24 |  | 24 | 24 |  | 26 | 24 |  | 27 | 24 |  | 27 | 24 |  | 28 | 24 |  |  |  |
| TOU-8-Standby-PRI |  | 94 | 114 |  | 98 | 114 |  | 101 | 114 |  | 104 | 114 |  | 112 | 114 |  | 115 | 114 |  |  |  |
| TOU-8-Standby-SUB |  | 238 | 699 |  | 249 | 699 |  | 245 | 699 |  | 253 | 699 |  | 266 | 699 |  | 294 | 699 |  |  |  |
| TOU-PA-2 |  | 650 | 0 |  | 483 | 0 |  | 522 | 0 |  | 683 | 0 |  | 728 | 0 |  | 725 | 0 |  |  |  |
| TOU-PA-3 |  | 386 | 1 |  | 339 | 1 |  | 363 | 1 |  | 404 | 1 |  | 430 | 1 |  | 418 | 1 |  |  |  |
| Street Lighting | 62 | 0 | 0 | 57 | 0 | 0 | 59 | 0 | 0 | 58 | 0 | 0 | 58 | 0 | 0 | 55 | 0 | 0 |  |  |  |
| Total: | 2,959 | 10,635 | 847 | 2,365 | 9,008 | 847 | 2,496 | 9,851 | 847 | 2,521 | 10,696 | 847 | 2,579 | 11,409 | 847 | 2,541 | 10,731 | 847 |  |  |  |
| Rate Group | Jul 2019 |  |  | Aug 2019 |  |  | Sep 2019 |  |  | Oct 2019 |  |  | Nov 2019 |  |  | Dec 2019 |  |  | Total |  |  |
|  | GWh | MW* | MW** | GWh | MW* | MW** | GWh | MW* | MW** | GWh | MW* | MW** | GWh | MW* | MW** | GWh | MW* | MW** | GWh | MW* | MW** |
| Domestic | 2,724 |  | 0 | 2,852 |  | 0 | 2,666 |  | 0 | 2,440 |  | 0 | 1,852 |  | 0 | 2,207 |  | 0 | 27,012 | 0 | 0 |
| TOU-GS-1 | 549 |  | 0 | 556 |  | 0 | 525 |  | 0 | 528 |  | 0 | 447 |  | 0 | 481 |  | 0 | 5,900 | 0 | 0 |
| TC-1 | 5 |  | 0 | 5 |  | 0 | 4 |  | 0 | 5 |  | 0 | 5 |  | 0 | 5 |  | 0 | 58 | 0 | 0 |
| TOU-GS-2 |  | 4,269 | 3 |  | 4,420 | 3 |  | 3,975 | 3 |  | 4,204 | 3 |  | 3,272 | 3 |  | 3,572 | 3 | 0 | 44,897 | 36 |
| TOU-GS-3 |  | 2,083 | 6 |  | 2,126 | 6 |  | 2,026 | 6 |  | 2,150 | 6 |  | 1,713 | 6 |  | 1,814 | 6 | 0 | 22,683 | 70 |
| TOU-8-Sec |  | 1,824 | 0 |  | 1,941 | 0 |  | 1,781 | 0 |  | 1,882 | 0 |  | 1,594 | 0 |  | 1,670 | 0 | 0 | 20,531 | 0 |
| TOU-8-Pri |  | 1,141 | 0 |  | 1,204 | 0 |  | 1,082 | 0 |  | 1,180 | 0 |  | 996 | 0 |  | 1,040 | 0 | 0 | 12,817 | 0 |
| TOU-8-Sub |  | 1,014 | 0 |  | 1,109 | 0 |  | 931 | 0 |  | 1,036 | 0 |  | 942 | 0 |  | 954 | 0 | 0 | 11,894 | 0 |
| TOU-8-Standby-SEC |  | 28 | 24 |  | 31 | 24 |  | 31 | 24 |  | 29 | 24 |  | 26 | 24 |  | 25 | 24 | 0 | 325 | 285 |
| TOU-8-Standby-PRI |  | 118 | 114 |  | 124 | 114 |  | 128 | 114 |  | 115 | 114 |  | 104 | 114 |  | 97 | 114 | 0 | 1,310 | 1,373 |
| TOU-8-Standby-SUB |  | 299 | 699 |  | 291 | 699 |  | 296 | 699 |  | 308 | 699 |  | 291 | 699 |  | 277 | 699 | 0 | 3,309 | 8,394 |
| TOU-PA-2 |  | 767 | 0 |  | 806 | 0 |  | 716 | 0 |  | 767 | 0 |  | 605 | 0 |  | 670 | 0 | 0 | 8,121 | 1 |
| TOU-PA-3 |  | 458 | 1 |  | 479 | 1 |  | 439 | 1 |  | 456 | 1 |  | 371 | 1 |  | 389 | 1 | 0 | 4,933 | 8 |
| Street Lighting | 57 | 0 | 0 | 56 | 0 | 0 | 56 | 0 | 0 | 59 | 0 | 0 | 58 | 0 | 0 | 62 | 0 | 0 | 698 | 0 | 0 |
| Total: | 3,334 | 12,001 | 847 | 3,469 | 12,532 | 847 | 3,252 | 11,405 | 847 | 3,033 | 12,128 | 847 | 2,362 | 9,916 | 847 | 2,756 | 10,509 | 847 | 33,667 | 130,819 | 10,166 |

Supplemental MW Demand

* Standby MW Demand


# Statement BG - Period II <br> Wholesale <br> Southern California Edison Company <br> Existing Transmission Contract <br> Revenues at Proposed Rates 

ETCs with rates that are presently based on SCE's TRR through the determination of the HVECAC rate:

| Customer | FERC <br> Rate <br> Sch. | Determinants <br> (MW) | Broposed <br> Rate | Revised <br> Revenue |
| :--- | ---: | ---: | ---: | ---: |
| City of Azusa | 373 | 4.000 | $\$ 7.39$ | $\$ 354,720$ |
| City of Banning | 379 | 3.000 | $\$ 7.39$ | $\$ 266,040$ |
| City of Colton | 362 | 3.000 | $\$ 7.39$ | $\$ 266,040$ |
| LADWP | 219 | 368.000 | $\$ 7.39$ | $\$ 32,634,240$ |
| City of Riverside | 390 | 30.000 | $\$ 7.39$ | $\$ 2,660,400$ |
| City of Riverside | 391 | 156.000 | $\$ 7.39$ | $\$ 13,834,080$ |
| City of Riverside | 392 | 12.000 | $\$ 7.39$ | $\$ 1,064,160$ |
| City of Vernon | 207 | 26.000 | $\$ 7.39$ | $\$ 2,305,680$ |
| City of Vernon | 360 | 11.000 | $\$ 7.39$ | $\$ 975,480$ |
|  |  | Total: |  | $\$ 54,360,840$ |

## Notes:

1) Period II is January 2019 through December 2019.
2) The Proposed Rate is the proposed High Voltage Existing Contracts Access Charge ("HVECAC") rate applicable to each ETC.
See Exhibit No. SCE-4 (Formula Rate Spreadsheet), Schedule 30, Line 9.

## Southern California Edison Company

Retail Revenues at Current Rates

# Statement BH - Period II <br> Wholesale <br> Southern California Edison Company <br> Existing Transmission Contract Revenues at Current Rates 

ETCs with rates that are presently based on SCE's TRR through the HVECAC rate:

| Customer | FERC <br> Rate <br> Sch. | $c$ <br> Determinants <br> (MW) | Current <br> Rate | Current <br> Revenue |
| :--- | ---: | ---: | ---: | ---: |
| City of Azusa | 373 | 4.000 | $\$ 5.68$ | $\$ 272,640$ |
| City of Banning | 379 | 3.000 | $\$ 5.68$ | $\$ 204,480$ |
| City of Colton | 362 | 3.000 | $\$ 5.68$ | $\$ 204,480$ |
| LADWP | 219 | 368.000 | $\$ 5.68$ | $\$ 25,082,880$ |
| City of Riverside | 390 | 30.000 | $\$ 5.68$ | $\$ 2,044,800$ |
| City of Riverside | 391 | 156.000 | $\$ 5.68$ | $\$ 10,632,960$ |
| City of Riverside | 392 | 12.000 | $\$ 5.68$ | $\$ 817,920$ |
| City of Vernon | 207 | 26.000 | $\$ 5.68$ | $\$ 1,772,160$ |
| City of Vernon | 360 | 11.000 | $\$ 5.68$ | $\$ 749,760$ |
|  |  | Total: |  | $\$ 41,782,080$ |

## Notes:

1) Period II is January 2019 through December 2019.
2) The Current Rate is the High Voltage Existing Contracts Access Charge ("HVECAC") rate applicable to each ETC in 2019:

$$
\text { HVECAC: } \quad \$ 5.68 \quad \text { Per kW per Month }
$$

See SCE November 29, 2018 Formula Rate Annual Update filing in ER18-169, Schedule 30, Line 12 of Formula Rate Spreadsheet.

Statement BL -- Period II

## Southern California Edison Company

Proposed Transmission Rates effective June 12, 2019
Retail Base Transmission Rates*:

| CPUC Rate Group | Regular Service |  |  | Standby Service |  | Transportation Electrification Charge |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$/kWh | \$/kW | \$/HP | \$/kW | \$/HP | \$/kWh |
| Total Residential (Domestic) | \$0.02051 |  |  |  |  |  |
| LSMP |  |  |  |  |  |  |
| TOU-GS-1 | \$0.01750 | \$3.57 |  | \$3.57 |  | \$0.01750 |
| TC-1 | \$0.01125 |  |  |  |  |  |
| TOU-GS-2 |  | \$4.88 |  | \$4.39 |  | \$0.01633 |
| TOU-GS-3 |  | \$5.32 |  | \$4.39 |  | \$0.01633 |
| Large Power |  |  |  |  |  |  |
| TOU-8-Sec |  | \$5.60 |  |  |  |  |
| TOU-8-Pri |  | \$5.48 |  |  |  |  |
| TOU-8-Sub |  | \$5.52 |  |  |  |  |
| TOU-8-Standby-Sec |  | \$5.60 |  | \$4.39 |  | \$0.01433 |
| TOU-8-Standby-Pri |  | \$5.48 |  | \$1.97 |  | \$0.01282 |
| TOU-8-Standby-Sub |  | \$5.52 |  | \$0.66 |  | \$0.01120 |
| Ag. \& Pumping |  |  |  |  |  |  |
| TOU-PA-2 |  | \$2.57 | \$1.91 | \$2.57 | \$1.91 |  |
| TOU-PA-3 |  | \$3.19 |  | \$3.19 |  |  |
| Street Lighting | \$0.00819 |  |  |  |  |  |

Wholesale Transmission Rates*:

Wholesale Rate
High Voltage Existing Contracts Access Charge
High Voltage Utility Specific Rate
Low Voltage Access Charge

Charge

| $\$ 7.39$ | per kW |
| ---: | :--- |
| $\$ 0.0138426$ | per kWh | $\$ 0.00045$ per kWh

*Retail Base Transmission Rates are as set forth in Schedule 33 of the Formula Rate Spreadsheet. Wholesale Transmission Rates are as set forth in Schedule 30 of the Formula Rate Spreadsheet.

Statement BM<br>Southern California Edison Company<br>Construction Program Statement

Statement BM is a summary of data and supporting assumptions relating to the economics of any construction program to replace or expand the utility's power supply that shall be filed if the utility is filing for construction work in progress in rate base under § 35.25(c)(3) of this chapter. The filing utility shall describe generally its program for providing reliable and economic power for the period beginning with the date of the filing and ending with the tenth year after the test period. The statement shall include an assessment of the relative costs of adopting alternative strategies including an analysis of alternative production plant, e.g., cogeneration, small power production, heightened load management and conservation efforts, additions to transmission plant or increased purchases of power, and an explanation of why the program adopted is prudent and consistent with a least-cost energy supply program.

Southern California Edison Company ("SCE") is currently authorized to recover through rates the Construction Work in Progress ("CWIP") expenditures related to eight transmission projects -the Tehachapi Renewable Transmission Project ("Tehachapi"), Calcite Substation Project (formerly Jasper; part of South of Kramer Transmission Project) ("Calcite"), West of Devers Transmission Project ("West of Devers"), Whirlwind Substation Expansion Project ("Whirlwind Expansion"), Colorado River Substation Expansion Project ("CRS Expansion"), Mesa Substation ("Mesa"), Alberhill System ("Alberhill"), and Eldorado-LugoMohave Upgrade ("ELM") (collectively, "Projects"). Authorization to recover 100\% of prudently-incurred CWIP associated with the Projects was granted by the Federal Energy Regulatory Commission ("FERC" or "Commission") in Docket Nos. EL07-62 in November 2007, EL10-81 in October 2010, EL11-10 in March 2011, and EL17-63 in October 2017. ${ }^{1}$

[^16]Currently, and over the next several years, SCE is engaging in a transmission infrastructure expansion in order to enlarge, improve, and reinforce the California Independent System Operator Corporation's ("CAISO") grid to maintain reliable service to customers and provide increased access to renewable generation sources. These projects will significantly improve the reliability of the CAISO bulk power transmission system and reduce the cost of power by reducing transmission congestion on the CAISO-controlled transmission grid. The Projects will also help SCE and other California utilities to meet the goals of the State of California’s Renewable Portfolio Standards ("RPS").

In order to develop the Tehachapi and West of Devers projects, SCE worked closely with the CAISO, the California Public Utilities Commission ("CPUC"), and other stakeholders to determine whether these three projects would provide reliable renewable power to California. Alternatives for each project were considered and the projects were approved by both the CAISO and the CPUC Certificates of Public Convenience and Necessity ("CPCN") process. The CPCN process is extremely thorough and requires both the applicant and the CPUC to consider alternatives to each of the proposed Projects. The CPCN process evaluates a number of factors including, but not limited to, impacts on the transmission grid and other transmission users, cost-effectiveness, reasonable and prudent costs, alternative routes and configurations, non-wires alternatives, and impacts on the environment. The CPUC deemed that Tehachapi and West of Devers are preferable to all considered alternatives and approved the projects.

The Calcite, West of Devers, Whirlwind Expansion, and CRS Expansion projects ("Interconnection Projects") were developed primarily to allow for interconnection and delivery of renewable generation projects. The need for the Interconnection Projects was identified in the interconnection studies sponsored by the CAISO in connection with the CAISO's interconnection planning process and the development of the Large Generator Interconnection Agreements ("LGIAs"), which are approved and executed by the CAISO.

Alberhill, Mesa, and ELM projects were developed primarily to maintain electric reliability in Southern California. Alberhill was approved through CAISO’s 2009 transmission planning process ("TPP") as a reliability project needed to serve current and projected demand for electricity and to main electric reliability in regions to the southeast of Alberhill $500 / 115 \mathrm{kV}$ Substation and south of existing Valley $500 / 115 \mathrm{kV}$ Substation in Riverside County. Mesa and ELM projects were both approved in CAISO’s 2013-2014 TPP. While Mesa was approved as a reliability project to address the permanent retirement of the San Onofre Nuclear Generating Station ("SONGS") and the scheduled Once-Through Cooling ("OTC") generation shutdowns, expected by December 31, 2020, ELM was approved as a policy-driven project to increase power flow through existing
transmission lines from Nevada to Southern California, and to relieve multiple area deliverability constraints.

All of the Projects will be placed under the CAISO’s Operational Control once each Project is placed in-service. SCE has described below the process by which each of the Projects was developed including the consideration of alternatives. Additional details of the Projects can be found in SCE's petitions in Docket Nos. EL07-62, EL10-81, EL11-10, and EL17-63.

## Tehachapi

The CAISO studied the Tehachapi Transmission Project as part of its CAISO South Regional Transmission Plan for 2006 ("CSRTP-2006") and developed a least-cost solution for the network component of the transmission infrastructure that will interconnect planned transmission projects in the Tehachapi Wind Resource Area ("TWRA") to the CAISO Controlled Grid.

The CAISO found that in addition to interconnecting several projects in the interconnection queue, the Tehachapi will provide system reliability and efficiency benefits. On January 24, 2007, the CAISO Board of Governors approved the entire Tehachapi Transmission Project and directed SCE, as the project sponsor, to proceed with the permitting and construction of the project. ${ }^{2}$ The CAISO found, among other things, that the Tehachapi would lay the groundwork to integrate large amounts of planned geothermal, solar, and wind generation and would make possible in the future a low cost expansion of the transfer capability of Path 26, a major north-south transmission corridor.

The CPUC issued its final approval of the CPCN for Tehachapi Segment 1 on March 1, 2007; ${ }^{3}$ the CPCN for Tehachapi Segments 2 and 3 on March 15, 2007; ${ }^{4}$ and the CPCN for Tehachapi Segments 4-11 on December 17, 2009.5 The CPUC found the proposed Project will: 1) support compliance with the State's RPS goals; 2) enable interconnection of wind generation projects in the Tehachapi region to SCE's transmission system; 3) eliminate existing constraints to the transmission of renewable energy from the Tehachapi region to Southern California; and 4) eliminate potential system-wide

[^17]power flow and reliability problems due to overloading of the existing transmission system.

In its evaluation of Tehachapi Segments 1-3, the CPUC also studied energy efficiency and demand response alternatives. The CPUC concluded that, even with an increasing emphasis on energy efficiency and demand response, investments in transmission projects such as the proposed Antelope-Pardee Transmission Project (Segment 1) and the proposed Tehachapi-Vincent Transmission Project (Segments 2 and 3) will be needed both to enable California to meet RPS goals as well as to assure the continuing reliability and safety of the transmission grid in Southern California as renewable power generation and SCE customer demands increase. They further concluded that there is no alternative that can meet these needs better than the proposed Segments 1-3. ${ }^{6}$ Segments 1-3A entered into service in 2009 and SCE is no longer collecting CWIP on these segments of the Tehachapi Project.

In addition, the CPUC concurred that Segments $4-11$ would: (a) provide the electrical facilities necessary to reliably interconnect and integrate in excess of 700 megawatts ("MW") and up to approximately 4,500 MW of new wind generation in the TWRA currently being planned or expected in the future, thereby helping SCE and other California utilities in meeting California RPS goals; (b) further address the reliability needs of the CAISO-controlled grid due to projected load growth in the Antelope Valley; and (c) address the South of Lugo transmission constraints, an ongoing source of concern for the Los Angeles Basin. ${ }^{7}$

## Calcite

On January 28, 2011, the FERC conditionally accepted the "Standard Large Generator Interconnection Agreement (LGIA) Among Abengoa Solar Inc. and Southern California Edison Company and California Independent System Operator Corporation" ${ }^{8}$ for interconnection of a 250 MW solar thermal generating facility to SCE's existing Cool Water-Kramer No. 1220 kV line at a new SCEowned 220 kV substation. On January 20, 2011, the FERC conditionally accepted the "Standard Large Generator Interconnection Agreement (LGIA) Among

[^18]Granite Wind, LLC. and Southern California Edison Company and California Independent System Operator Corporation"9 for interconnection of a 60 MW wind generating facility to SCE's transmission system at the proposed Jasper 220 kV Substation.

SCE proposed construction of South of Kramer in order to remedy the reliability and congestion problems that would result from the development and interconnection of at least 591 MW of renewable solar and wind generation. The proposed facilities will be located in the Mojave Desert region of Southern California. Five projects had entered the CAISO interconnection process seeking interconnection, which triggered the need for the South of Kramer transmission facilities.

South of Kramer will also provide incremental transfer capability for other generation projects in the greater Mojave Desert region located near the Cool Water-Lugo and Lugo-Pisgah corridors. The South of Kramer project is complementary to SCE's Lugo-Pisgah project in a way that it provides additional transfer capability and collector substations to allow interconnection of currently proposed and future potential generation situated in the Barstow and Lucerne Competitive Renewable Energy Zones, as identified in reports prepared by the Renewable Energy Transmission Initiative ("RETI"). ${ }^{10}$ The Cool Water-Lugo transmission corridor has been identified by RETI and by the California Transmission Planning Group ${ }^{11}$ as an important path for the transfer of location constrained renewable generation resources in the sparsely populated Mojave Desert to population centers in Southern California.

Through the CAISO’s Interconnection System Impact Studies, SCE’s existing transmission facilities were found to be inadequate to handle the proposed development of renewable generation in the area. In response to these studies, SCE proposed South of Kramer, which is needed to ensure reliability and full delivery of the renewable generation in the area as it is integrated into the grid.

[^19]Due to timing circumstances for the various elements of the South of Kramer Project, SCE modified the project during preparation of the CPCN application with the CPUC. The project was renamed the Coolwater-Lugo Transmission Project ("CWLTP") and a new substation, called Desert View, was added to the CPCN application to address load growth in the Victorville area along the path from Coolwater to Lugo Substation. Additionally, SCE did not include the Jasper Substation as part of the CPCN application because withdrawals from the CAISO's generator interconnection queue had eliminated the immediate need for SCE to move forward to license and develop that substation concurrently with CWLTP. However, the remaining elements of the CWLTP were the same as the originally proposed South of Kramer Project. SCE and generator signed LGIA in February 2016. The Jasper Substation was renamed the Calcite Substation and project development and licensing coordination are in progress.

On August 28, 2013, SCE filed a CPCN application and Proponent's Environmental Assessment (PEA) with the CPUC for the CWLTP. While the CPCN Application was pending before the CPUC, the CPUC and the CAISO received a letter stating that the Coolwater Generating Station would be shut down effective January 1, 2015. On March 17, 2015, the CAISO concluded that sufficient capacity was available in the area such that the CWTLP was no longer needed. On May 21, 2015, the CPUC dismissed SCE’s CPCN application without prejudice. ${ }^{12}$ Subsequently, on February 26, 2016, SCE filed a request under section 205 of the FPA to recover in its TO Tariff formula_rate the prudentlyincurred abandoned plant costs associated with the CWLTP. ${ }^{13}$

On January 10, 2017, SCE submitted an uncontested offer of settlement in the abandoned plant cost recovery proceeding between SCE and the intervening parties. Subsequently, on February 28, 2017, the settlement judge certified the settlement to the FERC as uncontested ${ }^{14}$ and the uncontested settlement was approved by the Commission on April 10, 2017. ${ }^{15}$

## West of Devers

On February 4, 2011, the FERC conditionally accepted the "Standard Large Generator Interconnection Agreement (LGIA) Among Palo Verde Solar II, LLC and Southern California Edison Company and California Independent System

[^20]Operator Corporation" ${ }^{16}$ for interconnection of a 1,000 MW solar thermal generating facility to SCE's transmission system at the proposed Colorado River 220 kV Substation. In order to fully deliver this generating facility's output, additional network upgrades to SCE's transmission system are needed in Eastern Riverside County.

West of Devers will allow the delivery of at least 2,200 MW of renewable solar generation. The proposed facilities will be located in Eastern Riverside County, California. Five projects have entered the CAISO interconnection process seeking interconnection that trigger the need for West of Devers. Solar generation projects account for all of the 2,200 MW of proposed generation triggering the need for West of Devers. CAISO Phase II Studies have been performed for five new generation projects that will utilize West of Devers via the CAISO's cluster interconnection process. Additionally, the CAISO performed deliverability studies as part of Phase II, and determined that without West of Devers, the generation projects in queue utilizing West of Devers would not be fully deliverable.

The interconnection studies identified West of Devers as needed to enable fully deliverable renewable generation. West of Devers does not directly interconnect any new sources of generation; however, the upgrades are needed to allow full delivery of multiple generation projects interconnecting at SCE's new Colorado River and Red Bluff Substations.

On October 25, 2013, SCE filed a CPCN application with the CPUC. The proposed project has been reviewed under both the California Environmental Quality Act ("CEQA") and the National Environmental Policy Act ("NEPA").

On August 18, 2016, the CPUC approved the project in Decision D.16-08017, including two alternatives. ${ }^{17}$ Subsequently, the Bureau of Land Management ("BLM") approved the project with its Record of Decision ("ROD") on December 27, 2016. ${ }^{18}$ The ROD includes a right-of-way grant decision and it applies only to BLM-administered lands.

[^21]
## Whirlwind Substation Expansion

On February 17, 2011, the FERC conditionally accepted the "Standard Large Generator Interconnection Agreement (LGIA) Among AV Solar Ranch I, LLC and Southern California Edison Company and California Independent System Operator Corporation" ${ }^{19}$ to interconnect a 250 MW solar photovoltaic generating facility to SCE's transmission system at the proposed Whirlwind Substation.

The expansion at Whirlwind provides capacity for an additional 2,000 megawatts (MW) of new generation resources. Whirlwind was originally planned as part of the Tehachapi project and it was designed for eventual expansion. At the time of SCE's petition in Docket No. EL07-62-000, however, the generators requesting interconnection at Whirlwind required a smaller subset of facilities to be constructed.

As of the end of 2010, additional generation resources have requested interconnection at Whirlwind, including four renewable generation projects, with a total capacity of $1,550 \mathrm{MW}$ in the transition cluster, and an additional eight wind and solar generation projects, with a total capacity of 2,451 MW. The transition cluster is comprised of interconnection requests that were submitted on or before June 2, 2008, which are studied under a slightly modified version of the generation interconnection process reform. These additional resources have triggered the need for an expansion of Whirlwind. The Whirlwind expansion has already been approved by the CAISO and the CPUC as part of the Tehachapi project.

## Colorado River Substation Expansion

As indicated above, the FERC conditionally accepted on February 4, 2011, the "Standard Large Generator Interconnection Agreement (LGIA) Among Palo Verde Solar II, LLC and Southern California Edison Company and California Independent System Operator Corporation" for interconnection of a 1,000 MW solar thermal generating facility to SCE's transmission system at the proposed Colorado River 220 kV Substation.

Colorado River expansion will provide capacity for up to 2,000 MW of new generation resources at Colorado River. The expansion will include both

[^22]reliability network upgrades and delivery network upgrades. Colorado River was originally proposed to be configured as a 500 kV switchyard as a component of DPV2 and designed to be expanded as additional resources requested interconnection to the substation. Additional renewable generation projects have requested interconnection to the Colorado River 500 kV switchyard, including solar generation projects in the CAISO's transition cluster and additional interconnection requests for solar generation in subsequent queue clusters. Consequently, Colorado River needs to be expanded to accommodate such requests. The CPUC has previously approved Colorado River, however, the proposed expansion will require enlargement of the previously-approved project's footprint.

On November 3, 2010, SCE sought a permit to construct ("PTC") from the CPUC to construct an expansion to the Colorado River Substation in order to interconnect the 1,000 MW Blythe Solar Power Project and the 250 MW Genesis Solar Energy Project to the CAISO-controlled transmission grid. No protests were filed.

On July 14, 2011, the CPUC granted SCE a permit to construct the Colorado River Substation expansion project with the mitigation measures attached to this order. ${ }^{20}$

## Mesa Substation

Mesa has been reviewed and approved by the CAISO through its 20132014 TPP as a reliability project needed to address reliability concerns resulting from the permanent retirement of the SONGS in 2013 and from OTC generation shutdowns expected by December 31, 2020. ${ }^{21}$ Mesa will help address these concerns by allowing for greater flexibility in the siting of future generation to meet local reliability needs in the western Los Angeles Basin, while reducing the

[^23]total amount of new generation required by providing additional transmission import capability.

Mesa involves demolishing the existing 220/66/16 kV Mesa Substation and constructing a new large 500/220/66/16 kV substation and includes both network transmission facilities as well as distribution, i.e., non-network facilities. It is contemplated that certain 500 kV and 220 kV transmission facilities would be under the Operational Control of the CAISO and subject to the requested incentives.

On March 13, 2015, SCE sought a PTC from the CPUC to address reliability concerns by providing additional transmission import capability, allowing greater flexibility in the siting of new generation, and reducing the total amount of new generation required to meet local reliability needs in the Western Los Angeles Basin area.

On February 9, 2017, the CPUC issued a final decision approving the project largely consistent with SCE's proposal and rejected alternative project configurations proposed by CPUC staff. ${ }^{22}$ In October 2017, SCE awarded the competitive bid for the new 220 kV portion of substation construction. SCE updated the expected cost of the Project due to schedule delays and scope changes. The remainder ( 500 kV portion of substation construction) will be put out for bid by early 2019 and SCE expects that costs associated with the project may change as a result of the competitive bidding process.

## Alberhill System

Alberhill has been reviewed and approved through the CAISO's 2009 TPP as a reliability project to serve current and projected demand for electricity and maintain electric system reliability in portions to the southeast of Alberhill Substation and south of Valley Substation, including the cities of Lake Elsinore, Canyon Lake, Perris, Menifee, Murrieta, Murrieta Hot Springs, Temecula, and Wildomar, as well as the surrounding unincorporated portions of Riverside County. CAISO found that the project was the "most robust transmission alternative with expected minimum environmental impact in meeting reliability needs and providing long-term transformer capacity for serving load growth in the southwestern Riverside County."23

[^24]Alberhill would relieve the Valley South 115 kilovolt (kV) system by transferring five existing 115/12 kV substations (Ivyglen, Fogarty, Elsinore, Skylark and Newcomb 115 kV substations) to the new Alberhill system. Alberhill will include construction of the following facilities: (1) a new 500/115 kV substation with 500 kV switchrack and two three-phase $500 / 115 \mathrm{kV}$ transformers; and (2) two new 500 kV transmission line segments ( 3.3 miles in length) to connect the new substation to SCE's existing Serrano-Valley 500 kV line. It is contemplated that the 500 kV switchrack and 500 kV transmission line segments would be under the Operational Control of the CAISO and subject to the requested incentives.

On September 30, 2009, SCE filed its CPCN application with the CPUC to construct the Alberhill System Project to relieve projected electrical demand that would exceed the operating limit of the two load-serving Valley South 115 kV system 500/115 kV transformers within the electrical needs area, and to provide electricity in place of the Alberhill 115 kV system during maintenance, during emergency events, or to relieve other operational issues on one of the system.

On April 2, 2013, SCE proposed a modification to the previously-approved permit to construct the Valley-Ivyglen 115 kV Subtransmission Line Project (Valley-Ivyglen Project), which purpose is to relieve loads on the existing Valley-Elsinore-Fogarty 115 kV Subtransmission Line and provide a second source of power to Ivyglen Substation. ${ }^{24}$ Specifically, SCE sought to modify the project design by, among other things, realigning portions of the subtransmission line route and undergrounding a portion of the line and to modify the construction method and techniques by, among other things, using shooflies, blasting, and helicopters.

In April 2018 and July 2018, the CPUC issued a proposed decision and an alternate proposed decision, both denying SCE's ability to construct the Alberhill System Project based on a perceived lack of need. SCE filed comments on both proposed decisions requesting that the CPUC grant the certificate of public convenience and necessity for the Alberhill System Project.

In August 2018, the CPUC directed SCE to submit supplemental information on the Alberhill System Project including details of demand and load forecasts and possible alternatives to the proposed project. ${ }^{25}$ Ongoing capital spending has been deferred as a result of the CPUC request for additional information and alternatives. Given the uncertainty associated with the resolution of the permitting process, potential revisions to the project have not been reflected

[^25]in total direct expenditures. SCE continues to believe the Alberhill System Project is needed and is unable to predict the timing of a final CPUC decision in connection with the Alberhill System Project.

## Eldorado-Lugo-Mohave Upgrade

CAISO approved the Lugo-Eldorado series capacitor and terminal equipment upgrade in its 2012-2013 TPP and the Lugo-Mohave series cap and terminal equipment upgrade in its 2013-2014 TPP as policy-driven upgrades to relieve deliverability constraints in order to support achievement of California's renewable goals. It will increase power flow through existing transmission lines from Nevada to Southern California and provides renewable integration, deliverability and reliability benefits. CAISO identified reliability benefits of the project in that it relieves overloads on certain 500 kV facilities in the neighboring Los Angeles Department of Water and Power's (LADWP's) transmission system.

The ELM project would modify SCE's existing Eldorado, Lugo, and Mohave electrical substations to accommodate the increased current flow from Nevada to Southern California; increase the power flow through the existing Eldorado-Lugo, Eldorado-Mohave, and Lugo-Mohave 500 kV transmission lines for the purpose of increasing the amount of power delivered from California's Ivanpah Valley, Nevada, and Arizona to the Electrical Needs Area (ENA) through the SCE system in an effort to meet requirements associated with the California Renewables Portfolio Standard (RPS) by constructing two new 500 kV mid-line series capacitors (i.e., the proposed Newberry Springs Series Capacitors and Ludlow Series Capacitors) and associated equipment; raise transmission tower heights to meet ground clearance requirements; and install communication wire on SCE's transmission lines to allow for communication between existing SCE substations.

SCE has proposed an expedited schedule and a non-standard review process with the regulatory permitting agencies in order to meet the current inservice date. During September 2017, SCE awarded the competitive bid for the project which resulted in a decrease to the expected capital forecast for the project.

On May 2, 2018, SCE filed an application for a PTC authorizing SCE to construct electrical facilities known as the Eldorado-Lugo-Mohave Series Capacitor Project.

On January 9, 2019, the CPUC directed SCE to file an amended application for a CPCN. SCE is currently assessing the impact of this decision on the timing and the cost of the project. ${ }^{26}$

[^26]
## ATTESTATION BY

## AARON D MOSS,

VICE PRESIDENT

## ATTESTATION

Aaron D Moss attests that he is Vice President of Southern California Edison Company, and that the cost of service statements and supporting data submitted as a part of this filing which purport to reflect the books of Southern California Edison Company are true, accurate, and current representations of the utility's books and other corporate documents to the best of his knowledge and belief.


Dated: April 5, 2019

# REVISED CLEAN VERSION OF SCE'S TO TARIFF SHEETS REFLECTING THE PROPOSED <br> FORMULA RATE 

## APPENDIX IX

## ATTACHMENT 1

## FORMULA RATE PROTOCOLS

## 1. INTRODUCTION

SCE shall calculate its Base Transmission Revenue Requirement ("Base TRR"), as defined in Section 3.6 of the main definitions section of this TO Tariff, using the formula rate that is presented in spreadsheet format in Attachment 2 to Appendix IX ("Formula Rate Spreadsheet"). ${ }^{1}$ The Formula Rate Spreadsheet contains fixed formulae that are only subject to change pursuant to Sections 205 and 206 of the Federal Power Act, and will be populated with data from SCE's annual Federal Energy Regulatory Commission ("FERC" or the "Commission") Form 1 filing or from other SCE records. The sources of the data used in the Formula Rate will be: (a) identified in the Formula Rate Spreadsheet by fixed references to specific locations in FERC Form 1, or (b) provided by SCE in accordance with Section 3 of these Protocols.

The Base TRR shall be calculated annually in accordance with the Formula Rate and shall be equal to the sum of the Prior Year TRR, the Incremental Forecast Period TRR, and the True Up Adjustment. Additionally, SCE shall include a Cost Adjustment in the Base TRR for the upcoming Rate Year in the event that a discrete cost of service item (e.g., individual O\&M expense, tax expense, or revenue credit) incurred anytime between the beginning of the Prior Year and the September 30 immediately preceding the Annual Update filing (i.e., a 21 month window) is a one-time item that will not recur in such Rate Year. Individual items shall not be aggregated for purpose of determining a discrete cost of service item. The discrete cost of service item must amount to at least $3 \%$ of the Base TRR in such Annual Update filing in order for a Cost Adjustment to be included as a component of the Base TRR. The Cost Adjustment shall be handled as follows:
a) If the discrete cost of service item occurred during the Prior Year, then the Cost Adjustment component of the Base TRR shall be an amount with the same magnitude but of the opposite sign as the discrete cost of service item. For example, if the discrete cost of service item is a $\$ 100$ million one-time property tax refund (a negative item) received during 2012 but which will not recur during $2014,+\$ 100$ million will be included as a Cost Adjustment component of the Base TRR in the Annual Update for the 2014 Rate Year. If the discrete cost of

[^27]service item is a $\$ 100$ million one-time O\&M cost (a positive item) incurred during 2012 that will not recur in 2014, - $\$ 100$ million will be included as a Cost Adjustment component of the Base TRR in the Annual Update for the 2014 Rate Year. Both examples assume the $3 \%$ threshold is met.
b) If the discrete cost of service item occurred between January 1 and September 30 of the year in which the Annual Update filing is submitted to FERC (i.e., the year before the upcoming Rate Year), then the Cost Adjustment component of the Base TRR shall be an amount with the same magnitude and the same sign as the discrete cost of service item. For example, if the discrete cost of service item is a $\$ 100$ million one-time property tax refund (a negative item) received during the first nine months of 2013 but which will not recur during 2014, - \$100 million will be included as a Cost Adjustment component of the Base TRR in the Annual Update for the 2014 Rate Year. If the discrete cost of service item is a $\$ 100$ million one-time O\&M cost (a positive item) incurred during the first nine months of 2013 that will not recur in 2014, + $\$ 100$ million will be included as a Cost Adjustment component of the Base TRR in the Annual Update for the 2014 Rate Year. Both examples assume the 3\% threshold is met.

If SCE includes a Cost Adjustment in its Base TRR, SCE shall include with its Annual Update an explanation of its belief that the discrete cost of service item that is the subject of such Cost Adjustment will not recur in the upcoming Rate Year.

The Wholesale Base TRR is equal to the Base TRR adjusted as follows (as set forth in Schedule 25): (1) Uncollectibles Expense is not included in the Wholesale Base TRR; (2) the Wholesale Rate Base Adjustment and associated Wholesale Expense Difference is included in the Wholesale TRR; (3) EEI dues and EPRI dues are excluded from the Wholesale Base TRR; and (4) Franchise Fees Expense included in the Wholesale Base TRR is lower than that included in the Base TRR due to the Franchise Fee Factor being applied to a lower Base TRR.

## 2. TERM OF THE FORMULA RATE

The Formula Rate shall become effective on the date the Commission determines, and SCE's Base TRR shall be subject to true up beginning on that date in accordance with these Protocols. Retail and Wholesale transmission rates shall become effective on the date the Commission determines, and shall be redetermined annually in accordance with these Protocols and the Formula Rate Spreadsheet. The Formula Rate will remain in effect without termination unless and until SCE files pursuant to Section 205 of the Federal Power Act to replace the Formula Rate with a successor transmission rate mechanism and the Commission accepts such successor transmission rate mechanism. This Formula Rate shall remain in effect until the date that the successor rate mechanism filing is made effective by the Commission.

## 3. PROCEDURES FOR UPDATING THE BASE TRR

For as long as this Formula Rate is in effect, SCE shall update its Base TRR for the upcoming Rate Year $^{2}$ according to the timeline and procedures described in this Section. A summary of the procedures for updating the Base TRR is set forth in the following table:

| Event | Date |
| :--- | :--- |
| Posting Date of Draft Annual Update | June 15 |
| Start of Information Requests | June 15 |
| Draft Annual Update Conference | June 15 - July 15 |
| End of Information Requests | November 1 |
| Annual Update filed with FERC | December 1 |
| Rate Goes into Effect | January 1 |

a) Draft Annual Update

On or before June 15 of each year, SCE will post to its website (www.sce.com) its Draft Annual Update and will provide electronic notice of such posting to the Service List. ${ }^{3}$ The Draft Annual Update shall set forth the Base TRR for the upcoming Rate Year, and shall include populated versions of all Schedules comprising the Formula Rate in their native format with all formulas and links intact. In addition to the foregoing, the Draft Annual Update shall include the following:

1) All workpapers used in the calculation of the Base TRR. The workpapers shall be provided in their native format, with all formulas and links intact.
2) The Plant Study described in Section 9 of the Protocols in native format with all formulas and links intact, along with all workpapers prepared in support of the plant study, and a description of any changes in the methodology used to perform the Plant Study as compared with the Prior Year's Annual Update.

[^28]3) Workpapers supporting the inputs that appear in Schedule 27 in equivalent form to the workpapers provided in FERC Docket No. ER11-3697, Volume 4, Workpapers for Exhibit SCE-600, pages 1-268.
4) Workpapers that demonstrate the historical corporate overhead expenses recorded for ISO projects by Project Identification Number (PIN) that closed in the prior year and have accumulated ISO project costs greater than $\$ 5$ million.
5) Workpapers that demonstrate the derivation of the AFUDC rates applicable to all projects in the prior year.
6) Workpapers supporting the forecasted gross plant expenditures shown on Schedule 16.
7) A statement that identifies each ISO project (PIN) with total direct expenditures (recorded and forecast) greater than $\$ 5$ million projected to go into rate base during the forecast period. The statement will also include the monthly budgeted direct expenditures, to the extent such currently projected costs are shown on the most recent applicable SCE budget documents, and the total project cost of each project.
8) Workpapers showing the beginning of year and end of year outstanding network upgrade credits, as well as interest on network upgrade credits that is recorded in Account 252 listed by entity due those credits. The workpapers shall be provided in equivalent form to the workpapers entitled "Workpapers for Exhibit SCE-800" provided by SCE in FERC Docket No. ER11-3697.
9) Workpapers showing forecast period incentive Construction Work in Progress ("CWIP") projects by PIN and by month that support the values in Schedule 10 at lines 29-70 in equivalent form to the workpapers provided in FERC Docket No. ER11-3697, Volume 3, Workpapers for Exhibit SCE-500, pages 149-175.
10)A description of any Material Accounting Changes contained in the Draft Annual Update. ${ }^{4}$

[^29]11)A workpaper describing the nature and amount of each project/activity, the costs of which are booked to Account 930.2 and which are recovered under the Formula Rate. The workpaper shall include, for each account 930.2 line item cost shown in FERC Form 1, the following information: 1) Total FERC Form 1 cost; 2) Amount Included; 3) Amount Excluded; and 4) Formula rate reference to the reason for the exclusion(s).
12)A workpaper identifying each discrete $A \& G$ cost item that has been excluded from Schedule 20 of the Formula Rate (including both "positive exclusions" and "negative exclusions"), together with a summation of such items by account.
13)A description of any facilities SCE projects will change classification between CPUC and CAISO jurisdictions through the Rate Year. This description should include an estimated date for when the project will change classification, the reason for the classification change, and the proposed future rate recovery (i.e., whether through FERC or CPUC rates).
b) Draft Annual Update Conference

SCE will provide notice to parties on the Service List of a one-day meeting, to take place on or before July 15 of each year, to discuss the Draft Annual Update. By mutual agreement of SCE and the parties on the Service List, such a meeting may take place in-person, via telephone, or video-conference. SCE shall make appropriate personnel available for such meeting. Additional meetings to discuss the Draft Annual Update shall be scheduled as SCE and the parties on the Service List may mutually agree.
c) Information Requests

1) At any time from June 15 until November 1, parties on the Service List may submit reasonable information requests to SCE regarding the Draft Annual Update.
2) SCE shall make a good faith effort to respond to information requests in writing within ten (10) business days of receipt. Alternatively, if SCE in good faith believes that the information request is unreasonable, SCE may object to the request. SCE shall contemporaneously provide copies of all responses to all parties on the Service List that have indicated to SCE that they wish to receive such copies. If SCE objects to an information request, then SCE shall make a good faith effort to provide its objections within ten (10) business days of receipt of the information requests to the party serving the request. SCE shall include in its objection the basis for the objection. SCE and the party serving the information request on SCE will work cooperatively and in good
faith to resolve any questions, objections, or disputes relating to the information requests.
3) Responses to information requests shall not be designated as settlement communications or produced under the Commission's rules and regulations governing settlements, unless provided as a privileged settlement communication in a Commission proceeding being conducted under the Commission's settlement rules. SCE may mark materials provided in response to an information request as Protected Materials in accordance with Exhibit A to the Protocols. To the extent an information request response calls for the production of Protected Materials, SCE will only provide such materials to the parties with whom it has entered into a non-disclosure agreement that is included in Exhibit A.
4) To the extent SCE and any interested party(ies) are unable to resolve disputes related to information requests submitted in accordance with these Protocols, SCE or any interested party may petition the FERC to appoint an Administrative Law Judge as a discovery master. Neither SCE nor any interested party shall object to a request for a Discovery Master. The discovery master shall have the power to issue orders to resolve discovery disputes, as appropriate, in accordance with these Protocols and consistent with the FERC's discovery rules. The discovery master's orders shall be subject to appeal to the Commission and to the courts to the same extent and under the same rules as would be applicable to an Initial Decision issued under Rule 708 of the Commission's Rules of Practice and Procedure. In the event the Commission establishes hearing procedures for an Annual Update, the discovery master's responsibilities shall be transferred to the Presiding Judge for such hearing effective upon his or her appointment.
d) Annual Update
5) On or before December 1 of each year, SCE shall file with the Commission its Annual Update setting forth the Base TRR and associated rates for the upcoming Rate Year. It is expressly intended by these Protocols that the Commission will issue public notice of the Annual Update inviting public comment, and SCE shall request in its Annual Update filing that the Commission issue public notice of the Annual Update inviting public comment.
6) SCE shall identify in the Annual Update any corrections or other changes to the Draft Annual Update, and shall provide an explanation of the reason for the changes. SCE shall also include in the Annual Update any changes to the Draft Annual Update that it and any other party have agreed upon as of November 15.
7) The Annual Update shall not modify the Formula Rate or subject the Formula Rate to modification, and shall not constitute a rate change filing under Section 205 of the Federal Power Act. Any party may challenge the justness and reasonableness of SCE's implementation of its Formula Rate with respect to: (a) whether SCE has properly and reasonably applied the Formula Rate Spreadsheet and the procedures in these Protocols; (b) whether the costs to be recovered have been accurately stated, properly recorded and accounted for pursuant to applicable FERC accounting practices and procedures; (c) whether the costs to be recovered through the Base TRR and associated rates have been or will be prudently incurred; (d) whether SCE's projections have been reasonably made; (e) whether its calculation methodologies are consistent with the Formula Rate; (f) whether SCE has made the required filings under Section 8(a) of these Protocols to reflect any intervening change(s) to the Uniform System of Accounts or FERC Form 1; and (g) whether any Material Accounting Changes are reasonable and consistent with the Uniform System of Accounts.
8) The Base TRR set forth in the Annual Update and associated rates shall be effective on January 1 of the upcoming Rate Year.
9) Any party may comment on or protest the Annual Update. Any party may request that FERC establish hearing and/or settlement procedures regarding an Annual Update, and all parties reserve their rights to oppose such requests on their merits, but may not object to such requests on the basis that hearing and/or settlement procedures are prohibited by these Protocols or the Formula Rate Spreadsheet. Nothing in these Protocols shall act as a bar to a party raising an issue in comments or in protests to the Annual Update that it has not raised in a prior Annual Update proceeding (including pre-filing phases of such proceeding) or with respect to which it has not previously exercised its rights under the Federal Power Act. It is expressly intended by these Protocols that FERC issue an order taking action, assuming any action is requested, on the Annual Update if protests and/or comments on the Annual Update are filed.
10) In any Annual Update proceeding, SCE shall bear the burden, consistent with Section 205 of the Federal Power Act, of showing the justness and reasonableness of the implementation of its Formula Rate by demonstrating that: (a) it has properly and reasonably applied the Formula Rate Spreadsheet and the procedures in these Protocols; (b) the costs to be recovered have been accurately stated, properly recorded and accounted for pursuant to applicable FERC accounting practices and procedures; (c) its projections have been reasonably made; (d) its calculation methodologies are consistent with the Formula Rate; and (e) any Material Accounting Changes are reasonable and consistent with the Uniform System of Accounts; Nothing herein is intended to alter the burden of proof applied by the Commission with respect to prudence.
11) SCE will make any revisions to the Base TRR and associated rates that are required by a final ${ }^{5}$ Commission order with respect to each Annual Update. Unless otherwise ordered by the Commission, such revisions shall be effective as of the first day of the applicable Rate Year and shall be reflected, with interest calculated pursuant to the interest rate in Section 35.19a of the Commission's regulations, in the next subsequent Annual Update as a component of the True Up Adjustment. If the term of the Formula Rate is expiring so that there will be no future Annual Update, SCE shall include the TRR difference in the Final True Up Adjustment.
12) If SCE determines or concedes that a previously-filed Annual Update with a Prior Year not more than two years previous to the Prior Year of the current Annual Update contained errors that affected the True Up TRR calculated in that Annual Update, including but not limited to filed corrections to its FERC Form 1 that affect inputs to the Formula Rate, or errors in other input data used in determining the True Up TRR, SCE shall promptly serve notice to the Commission in the docket of the affected Annual Update that SCE intends to file an Amended Annual Update, with a brief description of the errors to be corrected in such filing. SCE shall additionally notify the entities that have participated in SCE's Annual Update filings of the errors and the upcoming Amended Annual Update. The Amended Annual Update shall:
i recalculate the True Up TRR for all affected Prior Years;
ii compare, on a monthly basis, the difference between the initial incorrect True Up TRR and the revised correct True Up TRR; and
iii determine the cumulative amount of the difference in (ii), including interest calculated pursuant to the interest rate in 18 C.F.R. § 35.19a.

The difference in (iii) shall be included as an additional component to SCE's True Up Adjustment in the subsequent Annual Update as a One Time True Up Adjustment in accordance with the Formula Rate.

If the difference in (iii) would not result in an increase to the True-Up TRR of more than $\$ 1$ million, however, then SCE need not submit to the Commission an Amended Annual Update, as described above, but may include the difference in (iii) in its Draft Annual Update, or, if the error is discovered after the posting of a Draft Annual Update on June 15, in an amended Draft Annual Update posted on SCE's website no later than October 31.
${ }^{5}$ All references in these Protocols to Commission orders or actions refer to the final form of such orders or actions (in accordance with the Federal Power Act and applicable Commission regulations, including without limitation Commission regulations with respect to a stay of a Commission order upon rehearing and/or an appeal), including as they may be modified as a result of a request for rehearing or Court appeal.

In the event that SCE has identified multiple input errors, SCE shall identify each such error and its correction individually. The amount proposed to be included in an Amended Annual Update, a Draft Annual Update, or an amended Draft Annual Update as a One Time True Up Adjustment shall be subject to scrutiny through the information exchange process and annual update procedures described in this Section 3.

## 4. THE ANNUAL TRUE UP ADJUSTMENT AND THE FINAL TRUE UP ADJUSTMENT

The Annual True Up Adjustment component of the Base TRR ensures that during the time the Formula Rate is in effect, SCE will recover its actual costs of owning and operating its ISO transmission facilities, as defined by the True Up TRR. The Annual True Up Adjustment is calculated for each Annual Update for the previous calendar year (the "Prior Year"), if the Formula Rate, or a previous formula rate, was in effect during some or all of that year, through the following steps:
a) Calculate SCE's actual costs during the Prior Year, as measured by the "True Up TRR." The True Up TRR, as defined in the Formula Rate, is equal to the Prior Year TRR as defined in the Formula Rate, except that all of the Rate Base components used in the True Up TRR are based on 13-month average values or beginning-of-year and end-of-year average values.
b) Attribute the True Up TRR to each month of the Prior Year as specifically defined in the Formula Rate.
c) Determine SCE's actual retail base transmission revenues attributable to the Formula Rate on a monthly basis for each month of the Prior Year, in accordance with the Formula Rate.
d) Compare SCE's monthly True Up TRR to SCE's monthly actual retail base transmission revenues. Each monthly difference shall be cumulated, including interest calculated on a monthly basis using the interest rate specified in the regulations of the Commission at 18 C.F.R § 35.19a, through the end of the Prior Year, in accordance with the Formula Rate to determine a "Shortfall or Excess Revenue in the Prior Year". The "Shortfall or Excess Revenue in the Prior Year" shall also include the "Shortfall or Excess Revenue in the Prior Year" from the previous Annual Update, as specifically included in Schedule 3 of the Formula Rate Spreadsheet, Schedule 3, Line 11, and any applicable One Time Adjustments.
e) As stated in Section 6 below, the True Up Adjustment included in the Base TRR effective January 1, 2018 shall include the Final True Up Adjustment for the 2016 year calculated pursuant to the Original Formula Rate. The Final True Up Adjustment for the 2017 year calculated pursuant to the Original Formula Rate shall be included in the True Up Adjustment for the Annual Update submitted by December 1, 2018. The True Up Adjustment included in the Base TRR effective January 1, 2020 shall include the Final True Up Adjustment for the 2018 year calculated pursuant to the Second Formula Rate. The True Up Adjustment included in the Base TRR effective January 1, 2021 shall include the Final True Up Adjustment for the portion of the 2019 year for which the Second Formula

Rate was in effect, calculated pursuant to the Second Formula Rate.
In the event that this Formula Rate terminates, SCE shall calculate a Final True Up Adjustment. The Final True Up Adjustment shall cover the period of time ending on the expiration of the Formula Rate and beginning on the day after the period covered by the most recent Annual True Up Adjustment that was included in the Base TRR. For example, if the Formula Rate terminates on December 31, 2030, SCE will determine a Final True Up Adjustment in 2031 for calendar year 2030. Except as otherwise stated in this paragraph, the Final True Up Adjustment shall be determined using the same calculation methodology as the Annual True Up Adjustment.

Interest included in the Final True Up Adjustment shall be calculated through the date of the termination of the Formula Rate (or, in the event of a partial determination of the Final True Up Adjustment, through the end of the period covered by that partial determination). The Final True Up Adjustment shall be subject to the procedures described in Section 3 of the Protocols. If the Final True Up Adjustment reflects an undercollection by SCE, then SCE shall be entitled and required to recover the amount of this Final True Up Adjustment in SCE's successor transmission rates to this Formula Rate. If the Final True Up Adjustment reflects an overcollection by SCE, then SCE shall be required to refund the amount of this Final True Up Adjustment to its customers.

## 5. THE INCREMENTAL FORECAST PERIOD TRR

The Incremental Forecast Period TRR ("IFPTRR"), calculated in Schedule 2 (Incremental Forecast Period TRR) of the Formula Rate Spreadsheet, is a component of SCE's Base TRR that represents the amount of transmission revenue requirement that SCE anticipates during the upcoming Rate Year that is incremental to that reflected in the Prior Year TRR as a result of additions of plant in service (identified in Schedule 16 (Plant Additions) of the Formula Rate) and/or CWIP expenditures (identified in Schedule 10 (CWIP) of the Formula Rate) to Rate Base. The IFPTRR shall be calculated in accordance with the Formula Rate.

## 6. TRANSITION OF THE ORIGINAL AND SECOND FORMULA RATES TO SUCCESSOR FORMULA RATES

Pursuant to Section 4 of the Formula Rate Protocols for the Original Formula Rate, SCE is entitled and required to reflect the amount of any Final True Up Adjustment from the Original Formula Rate for the 2016 and 2017 years in its successor transmission rates. This Section 6 ensures that this requirement from the Original Formula Rate is implemented accurately.

The Formula Rate Base TRR and associated rates for the Rate Years 2018 and 2019 shall reflect a True Up Adjustment that is based on a True Up TRR for the years 2016 and 2017 respectively calculated pursuant to the Original Formula Rate. This shall be implemented in the rate filing for the 2018 Rate Year and the Annual Update for the 2019 Rate Year by including as a "One Time Adjustment" any difference in the True Up TRR for the Prior Years of 2016 and 2017 calculated under this Formula Rate and the True Up TRR amounts calculated pursuant to the Original Formula Rate in Column 4 of Schedule 3 of the Formula Rate Spreadsheet. The One Time Adjustment included in the 2018 Rate Year filing will reflect the difference between the 2016 year True Up TRR
calculated pursuant to the Second Formula Rate and the Original Formula Rate. The Annual Update for the 2019 Rate Year will reflect the difference between the 2017 year True Up TRR calculated pursuant to the Second Formula Rate and the Original Formula Rate. The 2017 True Up TRR calculated pursuant to the Original Formula Rate shall include an amount of Excess Deferred Income Taxes for year-end 2017 relating to the 2017 Tax Cuts and Jobs Act as a component of the calculation of Accumulated Deferred Income Taxes ("ADIT") in Schedule 9 of the Formula Rate Spreadsheet created as a result of the change in the Federal Income Tax Rate. Such amount shall be included along with Account 190, 282, and 283 amounts in the calculation of End-ofYear "Total Accumulated Deferred Income Taxes" on Line 4 of Schedule 9.

Additionally, any transition from one formula rate to its successor formula rate shall ensure that the True Up TRRs for any years for which a previous formula rate or formula rates were in effect during all or part of that year are calculated utilizing the formula rate, or formula rates, that were in effect during the year being trued up. This shall be implemented through a "One Time Adjustment" reflecting the difference between the True Up TRR calculated using the Formula Rate in effect at the time of the Annual Update, and the True Up TRR calculated pursuant to the formula rate, or formula rates, that were in effect during the year being trued up. In the event that any year being trued up has two or more formulas in effect during that year, the True Up TRR for that year shall be based on a weighted average of the True Up TRRs calculated pursuant to the formula rates in effect that year, with the weighting being based on the number of days during the year that each was in effect. Any Annual Update which includes a Final True Up Adjustment for a previous year shall include a workpaper with a calculation of the associated One Time Adjustments.

## 7. DEPRECIATION RATES

Depreciation rates for Transmission Plant, Distribution Plant, General Plant, and Intangible Plant shall be as stated in the Formula Rate Spreadsheet.

## 8. REVISIONS TO CERTAIN FORMULA RATE PROVISIONS

SCE will be required to make single-issue Section 205 filings to change the Formula Rate as provided in Section 8, parts (a) through (e). In addition to the single-issue filings provided for in this Section 8 and subject to the limitations set forth in Section 11, SCE may make Section 205 filings that present only a single issue or limited discrete issues for consideration by the Commission, i.e., proposing to change any one or more elements of its Formula Rate. Such filings shall not be governed by the provisions of this Section 8, and the parties and SCE reserve their rights with respect to any such filing.

In a proceeding commenced by such a single-issue Section 205 filing under Section 8, parts (a) and (b), the sole issues that can or shall be addressed are whether the changes proposed by SCE are consistent with these Protocols and are just and reasonable.

In a proceeding commenced by a single-issue filing under Section 8, part (c), the sole issues that can or shall be addressed are whether the changes proposed by SCE are just and reasonable and correctly implement the applicable California Public Utilities

Commission ("CPUC") order.
In a proceeding commenced by a single-issue filing under Section 8, parts (d) and (e), the sole issue that can or shall be addressed is whether the changes proposed by SCE correctly implement the applicable CPUC order.

The proceedings commenced in response to the filings described in this Section shall not include or allow for consideration or examination of any other aspects of the Formula Rate or other issues associated with the Formula Rate, except to the extent that the proposed changes directly impact other Formula Rate components that are not the subject of the single-issue filing. All parties will have all applicable rights under the Federal Power Act and FERC's regulations with respect to such single-issue Section 205 filings, except as limited by this Section 8.
a) SCE will make a single-issue Section 205 filing to update the references in the Formula to reflect any changes to the format and/or content of the FERC Form 1 or the Uniform System of Accounts that affect the calculations set forth in the Formula in the event that a Commission order revises the format and/or content of the FERC Form 1 or the Uniform System of Accounts. This filing shall be submitted within sixty days of the implementation of any FERC decision to revise the FERC Form 1 or the Uniform System of Accounts, and shall be effective on the date of the revisions to the FERC Form 1 or Uniform System of Accounts, as applicable.
b) With respect to Post-Retirement Benefits Other than Pensions ("PBOPs"), the Formula Rate identifies an Authorized PBOPs Expense Amount in Note 3 on Schedule 20 (Administrative and General Expenses). SCE shall make a singleissue Section 205 filing by April 1 of each year to revise the Authorized PBOPs Expense Amount, seeking an effective date of January 1 of the year of the filing.
c) SCE will make a single-issue Section 205 filing seeking Commission approval to put in effect conforming changes to Schedule 21 of the Formula Rate any time that the CPUC adopts revisions to the Gross Revenue Sharing Mechanism ("GRSM"). SCE will make its filing with the Commission, as set forth in this Section, between January 1 and March 1 of the year following the year that the CPUC order became effective.
d) SCE will make a single-issue Section 205 filing to revise Schedule 33 of the Formula Rate determination of retail transmission rates to reflect any change in Rate Groups, Rate Schedules, or the design of retail rates applicable to each Rate Schedule subsequent to any final CPUC order that affects these aspects of retail transmission rates. SCE will make such a filing only if and when the change in Rate Groups, Rate Schedules, or the design of retail rates cannot otherwise be reflected through the normal operation of the Formula Rate. In the single-issue Section 205 filing to the Commission, SCE will propose revisions to Schedule 33 of the Formula Rate that conform to the CPUC order. SCE will make a filing under this Section 8(d) by the later of either the filing date for the next Annual Update following the CPUC ruling or sixty days after the CPUC ruling.
e) SCE will make a single-issue Section 205 filing to change the depreciation rates for General, Intangible or Distribution plant in Schedule 18 upon approval by the CPUC of revised depreciation rates for these plant categories. SCE shall make a filing at the Commission, as set forth in this section, between January 1 and March 1 of the year following the year that the CPUC order became effective.

## 9. DETERMINATION OF AMOUNT OF TRANSMISSION PLANT - ISO AND DISTRIBUTION PLANT - ISO

SCE shall perform for the Prior Year a study ("Plant Study") to determine:

- The amount of plant classified as Transmission in SCE's annual FERC Form 1 filing that is under the Operational Control of the ISO. Such amount shall be called Transmission Plant - ISO; and
- The amount of plant classified as Distribution in SCE's annual FERC Form 1 filing that is under the Operational Control of the ISO. Such amount shall be called Distribution Plant - ISO.

The Plant Study determination of Transmission Plant - ISO and Distribution Plant - ISO will correspond to the end-of-year plant values for transmission and distribution published in SCE's FERC Form 1, and also shall be based on actual end-of-year ISO Operational Control of facilities. SCE will identify in the Plant Study major transmission facilities that have moved to or from ISO Operational Control in the Prior Year. Additionally, in submitting its future CPUC General Rate Case applications, SCE shall exclude from its CPUC-jurisdictional cost of service forecast, the cost of transmission and distribution facilities that SCE projects will be under the Operational Control of the ISO during the test year.

The methodology used in the Plant Study to determine Transmission Plant - ISO and Distribution Plant - ISO shall be as follows:
a) For each Transmission account 350-359 and Distribution account 360-362, identify the year-end recorded gross plant amount.
b) For Transmission accounts 350-359 and Distribution accounts 360-362, classify the assets by each location into one of the following categories:

1) All ISO: All Transmission or Distribution assets at the location are under the Operational Control of the ISO.
2) Non-ISO: No Transmission or Distribution assets at the location are under the Operational Control of the ISO.
3) Mixed ISO and Non-ISO Substation: The Transmission or Distribution substation location has a mixture of assets under the Operational Control of the ISO and assets that are not under the Operational Control of the ISO.
4) Mixed ISO and Non-ISO Line: Transmission line locations that have a mixture of assets under the Operational Control of the ISO and assets that are not under the Operational Control of the ISO that need to be analyzed
using the Transmission Line methodology.
5) Other: Assets for which there is not sufficient data to categorize into one of the above categories.

For all plant costs classified as (1) "All ISO", classify all such plant costs as Transmission Plant - ISO or Distribution Plant - ISO, as appropriate. For all plant costs classified as (2) "Non-ISO", classify none of such plant costs as "Transmission Plant - ISO" or "Distribution Plant - ISO."

For all plant costs classified as (3) "Mixed ISO and Non-ISO Substation," perform an analysis of plant costs based on individual components of the substation.
Component plant costs that are under the Operational Control of the ISO shall be attributed to either Transmission Plant - ISO or Distribution Plant - ISO, as appropriate. Component plant costs that are not under the Operational Control of the ISO shall not be attributed to either Transmission Plant - ISO or Distribution Plant - ISO. Dual Use assets (supporting both ISO and non-ISO plant) shall be allocated to Transmission Plant - ISO or Distribution Plant - ISO based on the percentage of ISO assets for the location.

For all plant costs classified as (4) "Mixed ISO and Non-ISO Line," apply the methodology set forth in Section 9(c) below to classify such costs.

For all plant costs classified as (5) "Other" in a location, classify such costs as Transmission Plant - ISO or Distribution Plant - ISO in proportion to the total percentage of Transmission Plant - ISO or Distribution Plant - ISO determined in parts (1) through (4) for that location.
c) Transmission line costs (including any amounts in accounts 350, 352, and 353) required to be analyzed under the Transmission Line methodology pursuant to (b) (4) above shall be attributed to Transmission Plant - ISO according to the following methodology:

1) For each location, determine the total line miles and total line miles that are under the Operational Control of the ISO. Determine the percent of total line miles under the Operational Control of the ISO to total line miles at that location. This calculation shall be done separately for overhead and underground facilities in the location.
2) Determine the amount of Transmission Plant - ISO by applying the percent determined in (1) to the appropriate plant costs by account at that location.

SCE shall present a summary of the Plant Study for the Prior Year in each annual Draft Annual Update, in accordance with the Formula Rate.

## 10. DETERMINATION OF AMOUNT OF ISO OPERATION AND MAINTENANCE EXPENSE

SCE shall annually determine the amount of recorded Transmission and Distribution Operation and Maintenance ("O\&M") expenses that is attributable to facilities under the Operational Control of the ISO ("ISO O\&M Expense"). The method used to determine ISO O\&M Expense shall be to allocate total recorded O\&M Expenses as stated in FERC Form 1 based on specific allocation factors applied to the expenses recorded to the O\&M accounts set forth in Schedule 19 of the Formula Rate Spreadsheet.

In the event that SCE experiences an extraordinary event, resulting in costs otherwise recoverable through the Formula Rate in a year to be recorded to Account 435 (Extraordinary Deductions) of the Uniform System of Accounts, SCE shall recover the full amount of such Account 435 costs, including any expenses or return on capital, in accordance with the Commission Order authorizing such recovery.

## 11. RESERVATION OF RIGHTS

a) Nothing in these Protocols shall be deemed to limit in any way the right of any party admitted as an intervenor to this Formula Rate proceeding or admitted as an intervenor to any future proceeding involving an Annual Update to file a request for relief under any applicable provision of the FPA and/or the Commission's regulations or participate in Annual Update proceedings.
b) Nothing in these Protocols shall be deemed to limit in any way SCE's right to file unilaterally, pursuant to Section 205 of the FPA and the regulations thereunder, to seek to change or cancel the Formula Rate, or to submit any other request for relief under any applicable provision of the FPA and/or the Commission's regulations.
c) The party filing a proposed change to the Formula Rate Spreadsheet or Formula Rate Protocols under Section 205 or 206 of the FPA bears the standard burdens associated with such a filing.

## 12. USE OF INFORMATION

Information produced pursuant to these Protocols may be used in any proceeding concerning the Formula Rate Spreadsheet, the Protocols, or the Annual Update; provided, however, that to the extent that any information provided pursuant to these Protocols has been designated and provided as Protected Materials, subject to the provisions of Exhibit A to these Protocols, the use of such information shall be governed by Exhibit A.

This section shall not apply to any information produced in the course of Commissionestablished settlement proceedings pursuant to the Commission's rules and regulations governing settlement.

## EXHIBIT A

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

## PROTECTIVE ORDER APPLICABLE TO INFORMATION PRODUCED BY SOUTHERN CALIFORNIA EDISON COMPANY PURSUANT TO THE FORMULA RATE PROTOCOLS

1. This Exhibit (hereinafter referred to as the "Protective Order") shall govern the use of all Protected Materials produced by, or on behalf of, Southern California Edison Company ("SCE") pursuant to the SCE Formula Rate Protocols.
2. This Protective Order applies to the following two categories of materials: (A) A Participant may designate as protected those materials which customarily are treated by that Participant as sensitive or proprietary, which are not available to the public, and which, if disclosed freely, would subject that Participant or its customers to risk of competitive disadvantage or other business injury; and (B) A Participant shall designate as protected those materials which contain critical energy infrastructure information, as defined in 18 CFR§ 388.113(c)(1) ("Critical Energy Infrastructure Information").
3. Definitions -- For purposes of this Order:
(a) The term "Participant" shall mean a Participant as defined in 18 CFR § 385.102(b).
(b) (1) The term "Protected Materials" means (A) materials (including depositions) provided by a Participant in response to discovery requests and designated by such Participant as protected; (B) any information contained in or obtained from such designated materials; (C) any other materials which are made subject to this Protective Order by the Presiding Administrative Law Judge appointed upon the Annual Update being set for hearing and/or settlement procedures or by the Discovery Master appointed pursuant to the Formula Rate Protocols (both referred to herein as the "Presiding Judge"), by the Commission, by any court or other body having appropriate authority, or by agreement of the Participants; (D) notes of Protected Materials; and (E) copies of Protected Materials. The Participant producing the Protected Materials shall physically
mark them on each page as "PROTECTED MATERIALS" or with words of similar import as long as the term "Protected Materials" is included in that designation to indicate that they are Protected Materials. If the Protected Materials contain Critical Energy Infrastructure Information, the Participant producing such information shall additionally mark on each page containing such information the words "Contains Critical Energy Infrastructure Information B Do Not Release".
(2) The term "Notes of Protected Materials" means memoranda, handwritten notes, or any other form of information (including electronic form) which copies or discloses materials described in Paragraph 3(b)(1). Notes of Protected Materials are subject to the same restrictions provided in this order for Protected Materials except as specifically provided in this order.
(3) Protected Materials shall not include (A) any information or document that has been filed with and accepted into the public files of the Commission, or contained in the public files of any other federal or state agency, or any federal or state court, unless the information or document has been determined to be protected by such agency or court, or (B) information that is public knowledge, or which becomes public knowledge, other than through disclosure in violation of this Protective Order. Protected Materials do include any information or document contained in the files of the Commission that has been designated as Critical Energy Infrastructure Information.
(c) The term "Non-Disclosure Certificate" shall mean the certificate annexed hereto by which Participants who have been granted access to Protected Materials shall certify their understanding that such access to Protected Materials is provided pursuant to the terms and restrictions of this Protective Order, and that such Participants have read the Protective Order and agree to be bound by it. All Non-Disclosure Certificates shall be served on all parties on the Service List, as defined in the SCE Formula Rate Protocols.
(d) The term "Reviewing Representative" shall mean a person who has signed a Non-Disclosure Certificate and who is:
(1) Commission Trial Staff;
(2) an attorney who has made an appearance for a Participant;
(3) attorneys, paralegals, and other employees associated with an attorney described in Subparagraph (2);
(4) an expert or an employee of an expert retained by a Participant for the purpose of advising, preparing for or testifying in connection with the Annual Update for which the information was requested;
(5) a person designated as a Reviewing Representative by order of the Presiding Judge or the Commission; or
(6) employees or other representatives of Participants with significant responsibility for SCE's Formula Rate.
4. Protected Materials shall be made available under the terms of this Protective Order only to Participants and only through their Reviewing Representatives as provided in Paragraphs 7-9.
5. Protected Materials shall remain available to Participants until the date that any Commission proceeding relating to the Protected Material is concluded and no longer subject to judicial review. If requested to do so in writing after that date, the Participants shall, within fifteen days of such request, return the Protected Materials (excluding Notes of Protected Materials) to the Participant that produced them, or shall destroy the materials, except that copies of filings, official transcripts and exhibits in this proceeding that contain Protected Materials, and Notes of Protected Material may be retained, if they are maintained in accordance with Paragraph 6, below. Within such time period each Participant, if requested to do so, shall also submit to the producing Participant an affidavit stating that, to the best of its knowledge, all Protected Materials and all Notes of Protected Materials have been returned or have been destroyed or will be maintained in accordance with Paragraph 6. To the extent Protected Materials are not returned or destroyed, they shall remain subject to the Protective Order.
6. All Protected Materials shall be maintained by the Participant in a secure place. Access to those materials shall be limited to those Reviewing Representatives specifically authorized pursuant to Paragraphs 8-9. The Secretary shall place any Protected Materials filed with the Commission in a non-public file. By placing such documents in a nonpublic file, the Commission is not making a determination of any claim of privilege. The Commission retains the right to make determinations regarding any claim of privilege and the discretion to release information necessary to carry out its jurisdictional responsibilities. For documents submitted to Commission Trial Staff ("Staff"), Staff shall follow the notification procedures of 18 CFR § 388.112 before making public any Protected Materials.
7. Protected Materials shall be treated as confidential by each Participant and by the Reviewing Representative in accordance with the certificate executed pursuant to

Paragraph 9. Protected Materials shall not be used except as necessary under SCE's Formula Rate Protocols, nor shall they be disclosed in any manner to any person except a Reviewing Representative who is engaged in working on SCE's Annual Update for which the information was requested and who needs to know the information in order to carry out such responsibilities. Reviewing Representatives may make copies of Protected Materials, but such copies become Protected Materials. Reviewing Representatives may make notes of Protected Materials, which shall be treated as Notes of Protected Materials if they disclose the contents of Protected Materials.
8. (a) If a Reviewing Representative's scope of employment includes the marketing of energy, the direct supervision of any employee or employees whose duties include the marketing of energy, the provision of consulting services to any person whose duties include the marketing of energy, or the direct supervision of any employee or employees whose duties include the marketing of energy, such Reviewing Representative may not use information contained in any Protected Materials obtained under SCE's Formula Rate Protocols to give any Participant or any competitor of any Participant a commercial advantage.
(b) In the event that a Participant wishes to designate as a Reviewing Representative a person not described in Paragraph 3 (d) above, the Participant shall seek agreement from the Participant providing the Protected Materials. If an agreement is reached that person shall be a Reviewing Representative pursuant to Paragraphs 3(d) above with respect to those materials. If no agreement is reached, the Participant shall submit the disputed designation to the Presiding Judge for resolution.
9. (a) A Reviewing Representative shall not be permitted to inspect, participate in discussions regarding, or otherwise be permitted access to Protected Materials pursuant to this Protective Order unless that Reviewing Representative has first executed a NonDisclosure Certificate; provided, that if an attorney qualified as a Reviewing Representative has executed such a certificate, the paralegals, secretarial and clerical personnel under the attorney's instruction, supervision or control need not do so. A copy of each Non-Disclosure Certificate shall be provided to counsel for the Participant asserting confidentiality prior to disclosure of any Protected Material to that Reviewing Representative.
(b) Attorneys qualified as Reviewing Representatives are responsible for ensuring that persons under their supervision or control comply with this order.
10. Any Reviewing Representative may disclose Protected Materials to any other Reviewing Representative as long as the disclosing Reviewing Representative and the receiving Reviewing Representative both have executed a Non-Disclosure Certificate. In the event that any Reviewing Representative to whom the Protected Materials are disclosed ceases to be engaged in working on the Annual Update, as set forth above, or is employed or retained for a position whose occupant is not qualified to be a Reviewing Representative under Paragraph 3(d), access to Protected Materials by that person shall be terminated. Even if no longer engaged in this proceeding, every person who has executed a NonDisclosure Certificate shall continue to be bound by the provisions of this Protective Order and the certification.
11. Subject to Paragraph 18, the Presiding Administrative Law Judge shall resolve any disputes arising under this Protective Order. Prior to presenting any dispute under this Protective Order to the Presiding Administrative Law Judge, the parties to the dispute shall use their best efforts to resolve it. Any participant that contests the designation of materials as protected shall notify the party that provided the protected materials by specifying in writing the materials the designation of which is contested. This Protective Order shall automatically cease to apply to such materials five (5) business days after the notification is made unless the designator, within said 5-day period, files a motion with the Presiding Administrative Law Judge, with supporting affidavits, demonstrating that the materials should continue to be protected. In any challenge to the designation of materials as protected, the burden of proof shall be on the participant seeking protection. If the Presiding Administrative Law Judge finds that the materials at issue are not entitled to protection, the procedures of Paragraph 18 shall apply. The procedures described above shall not apply to protected materials designated by a Participant as Critical Energy Infrastructure Information. Materials so designated shall remain protected and subject to the provisions of this Protective Order, unless a Participant requests and obtains a determination from the Commission's Critical Energy Infrastructure Information Coordinator that such materials need not remain protected.
12. All copies of all documents reflecting Protected Materials, including the portion of the hearing testimony, exhibits, transcripts, briefs and other documents which refer to Protected Materials, shall be filed and served in sealed envelopes or other appropriate containers endorsed to the effect that they are sealed pursuant to this Protective Order. Such documents shall be marked "PROTECTED MATERIALS" and shall be filed under seal and served under seal upon the Presiding Judge and all Reviewing Representatives who are on the service list. Such documents containing Critical Energy Infrastructure Information shall be additionally marked "Contains Critical Energy Infrastructure Information - Do Not Release". For anything filed under seal, redacted versions or, where an entire
document is protected, a letter indicating such, will also be filed with the Commission and served on all parties on the service list and the Presiding Judge. Counsel for the producing Participant shall provide to all Participants who request the same, a list of Reviewing Representatives who are entitled to receive such material. Counsel shall take all reasonable precautions necessary to assure that Protected Materials are not distributed to unauthorized persons.
13. If any Participant desires to include, utilize or refer to any Protected Materials or information derived therefrom in testimony or exhibits during a hearing under the SCE Formula Rate Protocols in such a manner that might require disclosure of such material to persons other than reviewing representatives, such participant shall first notify both counsel for the disclosing participant and the Presiding Judge of such desire, identifying with particularity each of the Protected Materials. Thereafter, use of such Protected Material will be governed by procedures determined by the Presiding Judge.
14. Nothing in this Protective Order shall be construed as precluding any Participant from objecting to the use of Protected Materials on any legal grounds.
15. Nothing in this Protective Order shall preclude any Participant from requesting the Presiding Judge, the Commission, or any other body having appropriate authority, to find that this Protective Order should not apply to all or any materials previously designated as Protected Materials pursuant to this Protective Order. The Presiding Judge may alter or amend this Protective Order as circumstances warrant at any time during the course of this proceeding.
16. Each party governed by this Protective Order has the right to seek changes in it as appropriate from the Presiding Judge or the Commission.
17. All Protected Materials filed with the Commission, the Presiding Judge, or any other judicial or administrative body, in support of, or as a part of, a motion, other pleading, brief, or other document, shall be filed and served in sealed envelopes or other appropriate containers bearing prominent markings indicating that the contents include Protected Materials subject to this Protective Order. Such documents containing Critical Energy Infrastructure Information shall be additionally marked "Contains Critical Energy Infrastructure Information - Do Not Release."
18. If the Presiding Judge finds at any time in the course of a proceeding that all or part of the Protected Materials need not be protected, those materials shall, nevertheless, be subject to the protection afforded by this Protective Order for three (3) business days from the date of issuance of the Presiding Judge's determination, and if the Participant seeking protection files an interlocutory
appeal or requests that the issue be certified to the Commission, for an additional seven (7) business days. None of the Participants waives its rights to seek additional administrative or judicial remedies after the Presiding Judge's decision respecting Protected Materials or Reviewing Representatives, or the Commission's denial of any appeal thereof. The provisions of 18 CFR §§ 388.112 and 388.113 shall apply to any requests under the Freedom of Information Act. (5 U.S.C. § 552) for Protected Materials in the files of the Commission.
19. Nothing in this Protective Order shall be deemed to preclude any Participant from independently seeking through discovery in any other administrative or judicial proceeding information or materials produced under the SCE Formula Rate Protocols under this Protective Order.
20. None of the Participants waives the right to pursue any other legal or equitable remedies that may be available in the event of actual or anticipated disclosure of Protected Materials.
21. The contents of Protected Materials or any other form of information that copies or discloses Protected Materials shall not be disclosed to anyone other than in accordance with this Protective Order and shall be used only in connection with this (these) proceeding(s). Any violation of this Protective Order and of any NonDisclosure Certificate executed hereunder shall constitute a violation of an order of the Commission.

## UNITED STATES OF AMERICA <br> FEDERAL ENERGY REGULATORY COMMISSION


#### Abstract

NON-DISCLOSURECERTIFICATE I hereby certify my understanding that access to Protected Materials is provided to me pursuant to the terms and restrictions of the Protective Order under the Southern California Edison Formula Rate Protocols, that I have been given a copy of and have read the Protective Order, and that I agree to be bound by it. I understand that the contents of the Protected Materials, any notes or other memoranda, or any other form of information that copies or discloses Protected Materials shall not be disclosed to anyone other than in accordance with that Protective Order. I acknowledge that a violation of this certificate constitutes a violation of an order of the Federal Energy Regulatory Commission.


By:
Printed Name: $\qquad$
Title: $\qquad$
Representing: $\qquad$
Date: $\qquad$

## Attachment 2 to Appendix IX

Formula Rate Spreadsheet

Table of Contents

| Worksheet Name | Schedule | Purpose |
| :---: | :---: | :---: |
| Overview |  | Base TRR Components. |
| BaseTRR | 1 | Full Development of Retail and Wholesale Base TRRs |
| IFPTRR | 2 | Calculation of the Incremental Forecast Period TRR |
| TrueUpAdjust | 3 | Calculation of the True Up Adjustment |
| TUTRR | 4 | Calculation of the True Up TRR |
| ROR | 5 | Determination of Capital Structure |
| PlantInService | 6 | Determination of Plant In Service balances |
| PlantStudy | 7 | Summary of Split of T\&D Plant into ISO and Non-ISO |
| AccDep | 8 | Calculation of Accumulated Depreciation |
| ADIT | 9 | Calculation of Accumulated Deferred Income Taxes |
| CWIP | 10 | Presentation of Prior Year CWIP and Forecast Period Incremental CWIP |
| PHFU | 11 | Calculation of Plant Held for Future Use |
| AbandonedPlant | 12 | Calculation of Abandoned Plant |
| WorkCap | 13 | Calculation of Materials and Supplies and Prepayments |
| IncentivePlant | 14 | Summary of Incentive Plant balances in the Prior Year |
| IncentiveAdder | 15 | Calculation of Incentive Adder component of the Prior Year TRR |
| PlantAdditions | 16 | Forecast Additions to Net Plant |
| Depreciation | 17 | Calculation of Depreciation Expense |
| DepRates | 18 | Presentation of Depreciation Rates |
| OandM | 19 | Calculation of Operations and Maintenance Expense |
| AandG | 20 | Calculation of Administrative and General Expense |
| RevenueCredits | 21 | Calculation of Revenue Credits |
| NUCs | 22 | Calculation of Network Upgrade Credits and Network Upgrade Interest Expense |
| RegAssets | 23 | Calculation of Regulatory Assets/Liabilities and Regulatory Debits |
| CWIPTRR | 24 | Calculation of Contribution of CWIP to TRRs |
| WholesaleDifference | 25 | Calculation of the Wholesale Difference to the Base TRR |
| TaxRates | 26 | Calculation of Composite Tax Rate |
| Allocators | 27 | Calculation of Allocation Factors |
| FFU | 28 | Calculation of Franchise Fees Factor and Uncollectibles Expense Factor |
| WholesaleTRRs | 29 | Calculation of components of SCE's Wholesale TRR |
| Wholesale Rates | 30 | Calculation of SCE's Wholesale transmission rates |
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| GrossLoad | 32 | Presentation of forecast Gross Load for wholesale rate calculations |
| RetailRates | 33 | Calculation of retail transmission rates |
| Unfunded Reserves | 34 | Calculation of Unfunded Reserves |

## Overview

## Overview of SCE Retail Base TRR

SCE's retail Base Transmission Revenue Requirement is the sum of the following components:

## TRR Component

Prior Year TRR
Incremental Forecast Period TRR
True-Up Adjustment
Cost Adjustment
Base TRR (retail)

Amount

| $\$$ | - |
| :--- | :--- |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ |  |

These components represent the following costs that SCE incurs:

1) The Prior Year TRR component is the TRR associated with the Prior Year (most recent calendar year). The Prior Year TRR is calculated using End-of-Year Rate Base values, as set forth in the "1-BaseTRR" Worksheet
2) The Incremental Forecast Period TRR is the component of Base TRR associated with forecast additions to in-service plant or CWIP, as set forth in the "2-IFPTRR" Worksheet.
3) The True Up Adjustment is a component of the Base TRR that reflects the difference between projected and actual costs, as set forth in the "3-TrueUpAdjust" Worksheet.
4) The Cost Adjustment component may be included as provided in the Tariff protocols

Southern California Edison Company


## INCOME TAXES

57 Federal Income Tax Rate
58 State Income Tax Rate
59 Composite Tax Rate

60 Amortization of Excess Deferred Tax Liability
Note 3
61 Investment Tax Credit Flowed Through
N 3
62 South Georgia Income Tax Adjustment Credits and Other

Income Taxes
Income Taxes $=[((R B * E R)+D) *(C T R /(1-C T R))]+C O /(1-C T R)$

[^30]26-Tax Rates, Line 1
26-Tax Rates, Line 8
(L57 + L58) - (L57 * L58

|  | $\$$ | - |
| :--- | :--- | ---: |
| Line 60 + Line 61+ Line 62 | $\$$ | - |
| Formula on Line 65 | $\$$ | - |

Line 18
Line 55
Line 59
Line 63
SCE Records

Southern California Edison Company
Cells shaded yellow are input cells


## TOTAL BASE TRANSMISSION REVENUE REQUIREMENT

Calculation of Base Transmission Revenue Requirement
82 Prior Year TRR
83 Incremental Forecast Period TRR
84 True Up Adjustment
85 Cost Adjustment

Note 4

For Retail Purposes

## Line 81

2-IFPTRR, Line 82
3-TrueUpAdjust, Line 30
$L 82+L 83+L 84+L 85$

Line 86
25-WholesaleDifference, Line 45
Line 87 + Line 88

\$

Wholesale Base Transmission Revenue Requirement
87 Base TRR (Retail)
88 Wholesale Difference to the Base TRR
89 Wholesale Base Transmission Revenue Requirement

## Notes:

1) Any amount of "Sub-Total Local Taxes" or "Payroll Taxes Expense" may be excluded if appropriate with the provision of a workpaper showing the reason for the exclusion and the amount of the exclusion.
2) No change in Return on Common Equity will be made absent a Section 205 filing at the Commission.

Does not include any project-specific ROE adders.
In the event that the Return on Common Equity is revised from the initial value, enter cite to Commission Order approving the revised ROE on following line. Order approving revised ROE:
3) No change in the South Georgia Income Tax Adjustment "Credits and Other" term will be made absent a filing at the Commission. Investment Tax Credit Flowed Through amount shall be negative $\$ 520,000$ through the Prior Year of 2018, negative $\$ 183,000$ for the Prior Year of 2019, and $\$ 0$ thereafter.
4) Cost Adjustment may be included as provided in the Tariff protocols.

Schedule 2
Incremental Forecast Period TRR

## Calculation of Incremental Forecast Period TRR ("IFPTRR")

The IFP TRR is equal to the sum of:

1) Forecast Plant Additions * AFCR
2) Forecast Period Incremental CWIP * AFCR for CWIP
3) Calculation of Annual Fixed Charge Rates:
```
a) Annual Fixed Charge Rate for CWIP ("AFCRCWIP")
    AFCRCWIP represents the return and income tax costs associated with $1 of CWIP,
    expressed as a percent.
    AFCRCWIP = CLTD + (COS * (1/(1-CTR)))
    where:
    CLTD = Weighted Cost of Long Term Debt
    COS = Weighted Cost of Common and Preferred Stock
    CTR = Composite Tax Rate
Reference
Wtd. Cost of Long Term Debt: - \% 1-BaseTRR, Line 51
Wtd. Cost of Common + Pref. Stock: \(\quad-\% \quad\) 1-BaseTRR, Line 55
Composite Tax Rate: \(\quad-\% \quad\) 1-BaseTRR, Line 59
AFCRCWIP \(=\quad-\% \quad\) Line \(12+(\) Line 13 * (1/(1-Line 14) \())\)
```

b) Annual Fixed Charge Rate ("AFCR")

The AFCR is calculated by dividing the Prior Year TRR (without CWIP related costs) by Net Plant:

AFCR $=($ Prior Year TRR - CWIP-related costs) $/$ Net Plant

Determination of Net Plant:
Reference
Transmission Plant-ISO: \$ - 6-PlantInService, Line 13
Distribution Plant - ISO: \$ - 6-PlantInService, Line 16
Transmission Dep. Reserve - ISO: \$ - 8-AccDep, Line 13
Distribution Dep. Reserve - ISO: \$ - 8-AccDep, Line 16
Net Plant: \$ $\quad$ (L27 + L28) - (L29 + L30)

## Determination of Prior Year TRR without CWIP related costs:

a) Determination of CWIP-Related Costs

1) Direct (without ROE adder) CWIP costs

CWIP Plant - Prior Year: \$ AFCRCWIP:
Direct CWIP Related Costs: \$

- 10-CWIP, L 13 C1
- \% Line 16
- Line 37 * Line 38


## 2) CWIP ROE Adder costs:

IREF: \$ - 15-IncentiveAdder, Line 3

Tehachapi CWIP Amount: \$ - 10-CWIP, Line 13
Tehachapi ROE Adder \%: - \% 15-IncentiveAdder, Line 5
Tehachapi ROE Adder \$: \$ - Formula on Line 52

DCR CWIP Amount: \$ - 10-CWIP, Line 13
DCR ROE Adder \%: - \% 15-IncentiveAdder, Line 6
DCR ROE Adder \$: \$ - Formula on Line 52

ROE Adder \$ = (CWIP/\$1,000,000) * IREF * (ROE Adder/1\%)
CWIP Related Costs wo FF\&U: \$ - Line 39 + Line 46 + Line 50
FF\&U Expenses: \$ - (28-FFU, L5 FF Factor + U Factor) * L54
CWIP Related Costs with FF\&U: \$ - Line 54 + Line 55

Schedule 2
Incremental Forecast Period TRR
b) Determination of AFCR:

CWIP Related Costs wo FF\&U: \$
Prior Year TRR wo FF\&U: \$ Prior Year TRR wo CWIP Related Costs: \$
$75 \%$ of O\&M and A\&G in Prior Year TRR: \$ AFCR:
2) Calculation of IFP TRR

Forecast Plant Additions: \$ AFCR:
AFCR * Forecast Plant Additions: \$
Forecast Period Incremental CWIP: \$ AFCRCWIP:
AFCRCWIP * FP Incremental CWIP: \$
IFPTRR without FF\&U: \$
Franchise Fees Expense: \$ Uncollectibles Expense: \$

Incremental Forecast Period TRR: \$

- Line 54
- 1-BaseTRR, Line 78
- Line 61 - Line 60
- (1-BaseTRR, Line 66 + Line 67) *. 75
- \% (Line 62 - Line 63) / Line 31


## Reference

- 16-PlantAdditions, L 25, C10
- \% Line 64
- Line 69 * Line 70
- 10-CWIP, L 54, C8
- \% Line 16
- Line 73 * Line 74
- $\quad$ Line $71+$ Line 75
- Line 77 * FF (from 28-FFU, L 5)
- Line 77 * U (from 28-FFU, L 5)
- Line 77 + Line 79 + Line 80


## Calculation of True Up Adjustment Component of TRR

1) Summary of True Up Adjustment calculation:
a) Attribute True Up TRR to months in the Prior Year (see Note \#1) to determine "Monthly True Up TRR" for each month (see Note \#2).
b) Determine monthly retail transmission revenues attributable to this formula transmission rate received during Prior Year.
c) Compare costs in (a) to revenues in (b) on a monthly basis and determine "Cumulative Excess (-) or Shortfall (+) in Revenue with Interest".
d) Include previous Annual Update Cumulative Excess or Shortfall in Prior Year (from Previous Annual Update Line 23)
and any One-Time Adjustments in Column 4 (Lines 11 and 12 respectively).
e) Continue interest calculation through the end of the Prior Year (Line 23) to determine Cumulative Excess or Shortfall for this Annual Update.

## 2) Comparison of True Up TRR and Actual Retail Transmission Revenues received during the Prior Year,

 Including previous Annual Update Cumulative Excess or Shortfall in Revenue.| Line |
| :---: |
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |
| 6 |
| 7 |
| 8 |
| 9 |
| 10 |
| 11 |
| 12 |
| 13 |
| 14 |
| 15 |
| 16 |
| 17 |
| 18 |
| 19 |
| 20 |
| 21 |
| 22 |
| 23 |
| 24 |


| 38 |  | Partial Year |  |
| :---: | :---: | :---: | :---: |
| 39 | Month | TRR AAF | Note: |
| 40 | January | 6.376\% | See Note 2. |
| 41 | February | 5.655\% |  |
| 42 | March | 7.183\% |  |
| 43 | April | 8.224\% |  |
| 44 | May | 8.018\% |  |
| 45 | June | 8.945\% |  |
| 46 | July | 9.891\% |  |
| 47 | August | 10.141\% |  |
| 48 | September | 10.218\% |  |
| 49 | October | 9.179\% |  |
| 50 | November | 7.530\% |  |
| 51 | December | 8.640\% |  |
| 52 | Total: | 100.000\% |  |


"Total Sales to Ultimate Consumers" from FERC Form 1 Page 300, Line 10, Column b:

## Schedule 3

## True Up Adjustmen

## Instructions

Enter applicable years on Column 1, Lines 11-23 (Prior Year and December of the year previous to the Prior Year)
2) Enter Previous Annual Update True Up Adjustment (if any) on Line 27.

Enter with the same sign as in previous Annual Update. If there is no Previous Annual Update True Up Adjustment, then enter $\$ 0$.
3) Enter monthly interest rates in accordance with interest rate specified in the regulations of FERC at

18 C.F.R. $\$ 35.19$ a on lines 12 to 23, Column 6
4) Enter any One Time Adjustments on Column 4, Line 12 (or other appropriate). If SCE is owed enter as positive, if SCE is to return to customers enter as negative. One Time Adjustments include
a) In the event that a Commission Order revises SCE's True Up TRR for a previous Prior Year

SCE shall include that difference in the True Up Adjustment, including interest, at the first opportunity, in accordance with tariff protocols.
Entering on Line 12 (or other appropriate) ensures these One Time Adjustments are recovered from or returned to customers.
b) Any refunds attributable to SCE's previous CWIP TRR cases (Docket Nos. ER08-375, ER09-187, ER10-160, and ER11-1952), not previously returned to customers
c) Amounts resulting from input errors impacting the True Up TRR in a previous Formula Rate Annual Update pursuant to Protocol Section 3(d)(8).
5) Fill in matrix of all retail revenues from Prior Year in table on lines 63 to 74
6) Enter Total Sales to Ultimate Consumers on line 77 and verify that it equals the total on line 75
7) If true up period is less than entire calendar year, then adjust calculation accordingly by including $\$ 0$ Monthly True Up TRR and $\$ 0$ Actual Retail Base Transmission Revenues for any months not included in True Up Period.

## Notes:

1) The true up period is the portion (all or part) of the Prior Year for which the Formula Transmission Rate was in effect.
2) The Monthly True Up TRR is derived by multiplying the annual True Up TRR on Line 1 by $1 / 12$, if formula was in effect. In the event of a Partial Year True Up, use the Partial Year TRR Attribution Allocation Factors on Lines 40 to 51 for each month of Partial Year True Up. Only enter in the Prior Year, Lines 12 to 23, or portion of year formula was in effect in case of Partial Year True Up.
Partial Year True Up Allocation Factors calculated based on three years (2008-2010) of monthly SCE retail base transmission revenues
3) "Actual Retail Base Transmission Revenues" are SCE retail transmission revenues attributable to this formula transmission rate
as shown on Lines 63 to 74, Column 1.
4) Enter "Shortfall or Excess Revenue in Previous Annual Update" on Line 11, or other appropriate (from Previous Annual Update, Line 23, Column 9).
5) Monthly Interest Rates in accordance with interest rate specified in the regulations of FERC (See Instruction \#3).
6) "Cumulative Excess (-) or Shortfall (+) in Revenue wo Interest for Current Month" is, beginning for the January month,
the amount in Column 9 for previous month plus the current month amount in Column 5. For the first December, it is the amount in Column 5
7) Interest for Current Month is calculated on average of beginning and ending balances (Column 9 previous month and Column 7 current month) No interest is applied for the first December.
8) Only provide if formula was in effect during Prior Year
9) Only include Base Transmission Revenue attributable to this formula transmission rate

Any other Base Transmission Revenue or refunds is included in "Other"
The Base Transmission Revenues shown in Column 1 shall be reduced to reflect any retail customer refunds provided by SCE associated with the formula transmission rate that are made through a CPUC-authorized mechanism.
10) Other Transmission Revenue includes the following:
a) Transmission Revenue Balancing Account Adjustment revenue.
b) Transmission Access Charge Balancing Account Adjustment.
c) Reliability Services Revenue.
d) Any Base Transmission Revenue not attributable to this formula

## Calculation of True Up TRR

A) Rate Base for True Up TRR

| Line |
| :---: |
| 1 |
| 2 |
| 3 |
| 4 |
|  |
|  |
| 5 |
| 6 |
| 7 |
| 8 |


| Rate Base Item |
| :--- |
| ISO Transmission Plant |
| General + Elec. Misc. Intangible Plant |
| Transmission Plant Held for Future Use |
| Abandoned Plant |
| Working Capital Amounts |
| Materials and Supplies |
| Prepayments |
| Cash Working Capital |
| Working Capital |
| Accumulated Depreciation Reserve Amounts |
| Transmission Depreciation Reserve - ISO |
| Distribution Depreciation Reserve - ISO |
| G + Depreciation Reserve |
| Accumulated Depreciation Reserve |
| Accumulated Deferred Income Taxes |
| CWIP Plant |
| Network Upgrade Credits |
| Unfunded Reserves |
| Other Regulatory Assets/Liabilities |
| Rate Base |


| Calculation |
| ---: |
| Method |

13-Month Avg.
BOY/EOY Avg.
BOY/EOY Avg.
BOY/EOY Avg

Notes

## FERC Form 1 Reference

 or InstructionAmount 6-PlantInService, Line 18 6-PlantInService, Line 24
1 -PHFU, Line 9
12-AbandonedPlant Line 4

13-WorkCap, Line 17
13-WorkCap, Line 33
1-Base TRR Line 7
Line $5+$ Line $6+$ Line 7


| 13-Month Avg. | Negative amount | 8-AccDep, Line 14, Col. 12 |
| :--- | :--- | :--- |
| BOY/EOY Avg. | Negative amount | 8-AccDep, Line 17, Col. 5 |
| BOY/EOY Avg. | Negative amount | 8-AccDep, Line 23 |


| $\$$ | - |
| :--- | :--- |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
|  | - |
|  | - |
|  |  |

## C) Income Taxes

Income Taxes = [((RB * ER) + D) * (CTR/(1-CTR))] + CO/(1-CTR)
\$

## Where:

RB = Rate Base
$E R=$ Equity ROR inc. Com. and Pref. Stock Instruction 1
CTR = Composite Tax Rate
$\mathrm{CO}=$ Credits and Other
$D=$ Book Depreciation of AFUDC Equity Book Basis

Line 18
nstruction 1, Line k
1-Base TRR L 59
1-Base TRR L 63
1-Base TRR L 65

- $\%$
- \%

23
25

## B) Return on Capital

Income Taxes $=[((R B * E R)+D) *(C T R /(1-C T R))]+C O /(1-C T R)$\$
D) True Up TRR Calculation

O\&M Expense
A\&G Expense
Network Upgrade Interest Expense
Depreciation Expense
Abandoned Plant Amortization Expense
Other Taxes
Revenue Credits
Return on Capital
Income Taxes
Gains and Losses on Transmission Plant Held for Future Use -- Land Amortization and Regulatory Debits/Credits
Total without True Up Incentive Adder
True Up Incentive Adder

True Up TRR without Franchise Fees and Uncollectibles Expense included:
E) Calculation of final True Up TRR with Franchise Fees and Uncollectibles Expenses

| True Up TRR wo FF: | $\$$ |  | Reference: |
| ---: | :--- | :--- | :--- |
| Franchise Fee Factor: | - | Line 40 |  |
| Franchise Fee Expense: | $\$$ | $-\%$ | $28-F F U$, L 5 |
| Uncollectibles Expense Factor: |  | - | Line 41 * Line 42 |
| Uncollectibles Expense: | $\$$ | $-\%$ | $28-F F U$, L 5 |
| True Up TRR: | $\$$ | - | Line 41 * Line 44 |
| U | - | L 41 + L 43 + L 45 |  |

1-Base TRR L 66
1-Base TRR L 67
1-Base TRR L 68
1-Base TRR L 69
1-Base TRR L 70
1-Base TRR L 71
1-Base TRR L 72
ine 20
Line 21
1-Base TRR L 75
1-Base TRR L 76
Sum Line 27 to Line 37

| $\$$ | - |
| :--- | :--- |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |

Line 40
28-FFU, L 5
Line 41 * Line 42
Line 41 * Line 44
L 41 + L 43 + L 45

## Schedule 4 <br> True Up TRR

## Instructions:

1) Use weighted average (by time) of the Return on Equity in effect during the Prior Year in determining the "Cost of Capital Rate" on Line 19
and the "Equity Rate of Return Including Preferred Stock" on Line 23 in the event that the ROE is revised during the Prior Year. In this event, the ROE used in Schedule 1 will differ from the ROE used in this Schedule 4, because the Schedule 1 ROE will be the most recent ROE,
whereas the Schedule 4 Cost of Capital Rate and Equity Rate of Return including Com. + Pref. Stock will be based on the weighted-average ROE

## Calculation of weighted average Cost of Capital Rate in Prior Year:

If ROE does not change during year, then attribute all days to Line a "ROE at end of Prior Year" and none to "ROE at start of PY"
a ROE at end of Prior Year
b ROE start of Prior Year
c
d Wtd. Avg. ROE in Prior Year

| Percentage | Reference: | From | To |
| :---: | :---: | :---: | :---: |
| $-\%$ See Line e below | --- | --- | Days ROE <br> In Effect |
| $-\%$ See Line f below | --- | --- |  |

Total days in year:

- \% ((Line a ROE * Line a days) + (Line b ROE * Line b days)) / Total Days in Year

Commission Decisions approving ROE:
e End of Prior Year
f Beginning of Prior Year
g Wtd. Cost of Long Term Debt
h Wtd.Cost of Preferred Stock
i Wtd.Cost of Common Stock
j Cost of Capital Rate

## Reference:

$\square$

Percentage Reference:

> | $-\%$ 1-Base TRR L 51 |
| :--- |
| $-\%$ 1-Base TRR L 52 |
| $-\%$ 1-Base TRR L 47 * Line d |
| $-\%$ Sum of Lines g to i |

Calculation of Equity Rate of Return Including Common and Preferred Stock

| RETURN AND CAPITALIZATION CALCULATIONS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Line | Calculation of Long Term Debt Amount |  |  |  |  |
| 1 | Bonds -- Account 221 | 13-month avg. | 5-ROR-2, Line 1 | \$ |  |
| 2 | Less Reacquired Bonds -- Account 222 | 13-month avg. | 5-ROR-2, Line 2 | \$ |  |
| 3 | Long Term Debt Advances from Associated Companies -- Account 223 | 13-month avg. | 5-ROR-2, Line 3 | \$ |  |
| 4 | Other Long Term Debt -- Account 224 | 13-month avg. | $5-\mathrm{ROR}-2$, Line 4 | \$ |  |
| 5 | Unamortized Premium on Long Term Debt - Account 225 | 13-month avg. | 5-ROR-2, Line 5 | \$ |  |
| 6 | Less Unamortized Discount on Long Term Debt -- Account 226 | 13-month avg.; enter negative | 5-ROR-2, Line 6 | \$ |  |
| 7 | Unamortized Debt Expenses -- Account 181 | 13-month avg.; enter negative | 5 -ROR-2, Line 7 | \$ |  |
| 8 | Unamortized Loss on Reacquired Debt -- Account 189 | 13-month avg.; enter negative | 5 -ROR-2, Line 8 | \$ |  |
| 9 | Composite Tax Rate |  | 1-BaseTRR, Line 59 |  | \% |
| 10 | After tax amount of Unamortized Loss on Reacquired Debt |  | Line 8*(1-Line 9) | \$ |  |
| 11 | Removal of Long Term Debt Related to Fuel Inventories | 13-month avg.; enter negative | 5-ROR-2, Line 9 | \$ |  |
| 12 | Adjustments related to "LT Debt Related to Fuel Inventories" |  | 5-ROR-2, Line 10 | \$ |  |
| 13 | Long Term Debt Amount |  | Sum of Lines 1 to 7 and 10 to 12 | \$ |  |
|  | Calculation of Preferred Stock Amount |  |  |  |  |
| 14 | Preferred Stock Amount -- Account 204 | 13-month avg. | 5-ROR-2, Line 11 | \$ |  |
| 15 | Unamortized Issuance Costs | 13-month avg. | 5-ROR-2, Line 12 | \$ |  |
| 16 | Net Gain (Loss) From Purchase and Tender Offers | 13-month avg. | 5-ROR-2, Line 13 | \$ |  |
| 17 | Preferred Stock Amount |  | Sum of Lines 14 to 16 | \$ | - |
|  | Calculation of Common Stock Equity Amount |  |  |  |  |
| 18 | Total Proprietary Capital | 13-month avg. | 5-ROR-2, Lines $14+14 \mathrm{a}$ | \$ | - |
| 19 | Less Preferred Stock Amount -- Account 204 | Same as L 14, but negative | 5-ROR-2, Line 11 | \$ | - |
| 20 | Minus Net Gain (Loss) From Purchase and Tender Offers | Same as L 16 , but reverse sign | 5 -ROR-2, Line 13 | \$ | - |
| 21 | Less Unappropriated Undist. Sub. Earnings -- Acct. 216.1 | 13-month avg. | 5-ROR-2, Line 15 | \$ |  |
| 22 | Less Accumulated Other Comprehensive Loss -- Account 219 | 13-month avg. | 5-ROR-2, Line 16 | \$ | - |
| 23 | Common Stock Equity Amount |  | Sum of Lines 18 to 22 | \$ |  |

Calculation of 13-Month Average Capitalization Balances
Year


1) Enter 13 months of balances for capital structure for Prior Year and December previous to Prior Year in Columns 2-14.

Beginning and End of year amounts in Columns 2 and 14 are from FERC Form 1, as referenced in below notes.

[^31]
## 1) Calculation of "Long Term Debt Cost Percentage



Total Annual Cost of Outstanding Series Debt: Total Annual Amortized Loss on Reacquired Debt:

$$
\begin{aligned}
\text { Amount } & \\
& \text { Reference } \\
- & \text { Line 200, Col } 10 \\
& \text { FF1 117.64c } \\
& =\mathrm{L} 1+\mathrm{L} 2
\end{aligned}
$$

Total "Principal Amount Outstanding" Debt: \$ Total Reacquired Debt: \$
Total Unamortized Loss on Reacquired Debt: \$ Composite Tax Rate
After-Tax Total Unamortized Loss on Reacquired Debt: \$
Line 200, Col
Line 205, Col 5
5-ROR-2, Line 8, Col. 14 (Negative of FF1 111.81c)

- \% 1-BaseTRR, Line 59
- $=\mathrm{L} 7$ * ( 1 - L8)
$=\mathrm{L} 5+\mathrm{L} 6+\mathrm{L} 9$
$-\%=$ L3 / L10
Long Term Debt Cost Percentage:
- \% = L3 / L10

|  | 2) Long Term Debt Infor $\text { FF1 } \frac{\text { Col } 1}{256, \text { Col a }}$ | for each Outs $\text { FF1 } \frac{\text { Col } 2}{256, \text { Col }}$ | $\begin{aligned} & \text { anding Series } \\ & \text { Col } 3 \\ & \text { FF1 } 256, \text { Col e } \end{aligned}$ | $\text { FF1 } \frac{\mathrm{Col} 4}{256, \mathrm{Col} \text { a }}$ | $\text { FF1 } \frac{\text { Col 5 }}{257, \text { Col h }}$ | $\frac{\text { Col } 6}{\text { Note } 1}$ | $\begin{gathered} \frac{\text { Col 7 }}{256, ~ C o l ~ c ~} \\ \text { Note } 2 \end{gathered}$ | $=\frac{\mathrm{Col} 8}{5-\mathrm{Col} 7}$ | $\frac{\text { Col } 9}{\text { Note } 3}$ | $=\frac{\operatorname{Col} 10}{\operatorname{Col} 5 * \operatorname{Col} 9}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Line | Series | Date of Offering | Maturity Date | Coupon Rate | Principal <br> Amount Oustanding (\$000s) | Amort- <br> ization <br> Period <br> (Years) | Net Discount \& Issuance Cost (\$000s) | $\begin{gathered} \text { Net Proceeds } \\ \text { (\$000s) } \\ \hline \end{gathered}$ | Cost of Money | Annual Cost (\$000s) | Comments: See below |
| 101 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ |  |
| 102 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ |  |
| 103 |  |  |  |  |  | --- | \$ - | \$ | - \% | \$ |  |
| 104 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ |  |
| 105 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ - |  |
| 106 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ |  |
| 107 |  |  |  |  |  | --- | \$ - | \$ | - \% | \$ - |  |
| 108 |  |  |  |  |  | --- | \$ - | \$ | - \% | \$ - |  |
| 109 |  |  |  |  |  | --- | \$ - | \$ | - \% | \$ - |  |
| 110 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ - |  |
| 111 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ - |  |
| 112 |  |  |  |  |  | --- | \$ - | \$ | - \% | \$ - |  |
| 113 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ - |  |
| 114 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ |  |
| 115 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ - |  |
| 116 |  |  |  |  |  | --- | \$ - | \$ | - \% | \$ - |  |
| 117 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ |  |
| 118 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ |  |
| 119 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ |  |
| 120 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ - |  |
| 121 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ |  |
| 122 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ |  |
| 123 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ |  |
| 124 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ |  |
| 125 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ |  |
| 126 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ |  |
| 127 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ |  |
| 128 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ |  |
| 129 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ |  |
| 130 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ |  |
| 131 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ |  |
| 132 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ |  |
| 133 |  |  |  |  |  |  |  |  |  |  |  |

## Comments for Section 2 "Long Term Debt Information for each Outstanding Series"


3) Long Term Debt Information for each Reacquired Series


Comments for Section 3 "Long Term Debt Information for each Reacquired Series":
Comment \#: Comment

## otes:

1) Equal to maturity date less the date of offering yea
2) Sum of all amounts for each issuance
3) 18 CFR 35.13 (22) Statement AV - Rate of Return (ii)(B)(6) Cost of money
4) Excludes debt or portions thereof, that does not finance Rate Base

## Preferred Stock Cost Percentage

Prior Year:

## 1) Calculation of "Preferred Stock Cost Percentage"

| Line |  |  |  | Reference |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Total Annual Cost of Preferred Stock: | \$ | - | Line 112, Col 9 |
| 2 | Total Reacquired Preferred Stock Cost: | \$ | - | Line 312, Col 6 |
| 3 | Total Annual Cost of Preferred: | \$ | - | = L1 + L2 |
| 4 |  |  |  |  |
| 5 | Total Preferred Stock Amount Outstanding: | \$ | - | FF1 112.3c |
| 6 | Net Gain (Loss) from Purchase and Tender Offers: | \$ | - | Line 312, Col 4 |
| 7 | Total Preferred Balance: | \$ | - | = L5-L6 |
| 8 |  |  |  |  |
| 9 | Preferred Stock Cost Percentage: |  | \% | L3 / L7 |

2) Preferred Stock Information for each Outstanding Series

3) Preferred Stock Issuance Cost Details for each Outstanding Series

$$
\text { Same list } \frac{\text { Col } 1}{\text { as in Section } 2} \quad \text { SCE } \frac{\text { Col } 2}{\text { Records }} \quad \frac{\text { Col } 3}{\text { RCE }} \quad \text { Col } 4
$$

|  | Total <br> Issuance | Full <br> Amortization <br> Cost (\$000s) <br> Period | Notes |
| :--- | :---: | :---: | :---: |

4) Reacquired Preferred Stock Information


## Notes:

1) If issuance costs not fully amortized then the "Cost of Money Effective Rate" is the 18 CFR 35.13 (22) Statement AV - Rate of Return (ii)(B)(6) Cost of money. If the issuance costs are fully amortized then the "Cost of Money Effective Rate" is equal to Column 3 / Column 7.

Schedule 6

## Plant In Service

Inputs are shaded yellow

1) Transmission Plant - ISO

Balances for Transmission Plant - ISO during the Prior Year, including December of previous year (See Note 1):

2) Distribution Plant - ISO

Balances for Distribution Plant - ISO for December of Prior Year and year before Prior Year (See Note 2)


ISO Transmission Plant is the sum of "Transmission Plant - ISO" and "Distribution Plant - ISO"

|  | Amount <br> Average value: <br> EOY Value: <br> $\$$$\quad-\quad$ Sum of Line 14, Col 12 and Line 17, Col 5 |
| ---: | :--- |
| $\$$ | $-\quad$ Sum of Line 13, Col 12 and Line 16, Col 5 |

4) General Plant + Electric Miscellaneous Intangible Plant ("G\&I Plant")
General and Intangible Plant is an allocated portion of Total G\&I Plant based on the Trans. W\&S Allocation Factor


## Transmission Activity Used to Determine Monthly Transmission Plant - ISO Balances


2) Total Transmission Activity by Account (See Note 4):

|  | Col 1 |  | Col 2 |  |  | Col 3 |  |  | Col 4 |  |  | Col 5 |  |  | Col 6 |  |  | Col 7 |  |  | Col 8 |  |  | Col 9 |  |  | Col 10 |  |  | Col 11 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Mo/YR |  | 350.1 |  |  | 350.2 |  |  | 352 |  |  | 353 |  |  | 354 |  |  | 355 |  |  | 356 |  |  | 357 |  |  | 358 |  |  | 359 |  |  |  |
| 41 | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 42 | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 43 | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 44 | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 45 | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 46 | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 47 | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ | - |
| 48 | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 49 | - | \$ |  |  |  |  | - | \$ |  |  |  |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 50 | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ | - |
| 51 | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ | - |
| 52 | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 53 | Total: | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |

## 3) ISO Incentive Plant Balances (See Note 5)



## 4) ISO Incentive Plant Activity (See Note 6)



Schedule 6
Plant In Service
5) Total Transmission Activity Not Including Incentive Plant Activity (See Note 7)

|  | Col 1 |  | Col 2 |  |  | Col 3 |  |  | Col 4 |  |  | Col 5 |  |  | Col 6 |  |  | Col 7 |  |  | Col 8 |  |  | Col 9 |  |  | Col 10 |  |  | Col 11 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Mo/YR |  | 350.1 |  |  | 350.2 |  |  | 352 |  |  | 353 |  |  | 354 |  |  | 355 |  |  | 356 |  |  | 357 |  |  | 358 |  |  | 359 |  |  |  |
| 80 | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 81 | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 82 | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 83 | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 84 | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 85 | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 86 | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ | - |
| 87 | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ | - |
| 88 | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 89 | - | \$ |  |  |  |  | - | \$ |  |  |  |  |  | \$ |  |  | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ | - |
| 90 | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ | - |
| 91 | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ | - |
| 92 | Total: | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ | - |

6) Total Monthly Transmission Activity as a Percent of Annual Transmission Activity (See Note 8


## Schedule 6

## Plant In Service

|  | ther I |  | miss |  | ctivity with |  | e | ive Pl | Ac | ctiv | (See | ote |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Col 1 |  | Col 2 |  | Col 3 |  |  | Col 4 |  |  | Col 5 |  |  | Col 6 |  |  | Col 7 |  |  | Col 8 |  |  | Col 9 |  |  | Col 10 |  |  | Col 11 |  | Col 12 |
|  | Mo/YR |  | 350.1 |  | 350.2 |  |  | 352 |  |  | 353 |  |  | 354 |  |  | 355 |  |  | 356 |  |  | 357 |  |  | 358 |  |  | 359 |  | Sum C2-C11 Total |
| 108 | - | \$ |  | - | \$ | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ - |
| 109 | - | \$ |  | - |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |
| 110 | - | \$ |  | - | \$ | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |
| 111 | - | \$ |  |  | \$ | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |
| 112 | - | \$ |  | - |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |
| 113 | - | \$ |  | - |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |
| 114 | - | \$ |  | - |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |
| 115 | - | \$ |  | - | \$ | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |
| 116 | - | \$ |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |
| 117 | - | \$ |  |  |  |  | \$ |  |  | \$ |  |  |  |  |  | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |
| 118 | - | \$ |  | - |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |
| 119 | - | \$ |  | - |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |
| 120 | tal: | \$ |  |  | \$ |  | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  |  | \$ |  |  |  |  |  |  |

Notes:
Amounts on Line 13 from corresponding account Schedule 7, column 2
Amounts on Line 1 must match corresponding account Schedule 7, Column 2 for previous year
The amounts for each month on the remaining lines are calculated by summing the following values:
a) Other ISO Transmission Activity without Incentive Plant Activity on Lines 108-119 for the same month;

ISO Incentive Plant Activity on Lines 67 to 78 for the same month; and
The previous month balance of the Transmission Plant - ISO amounts on Lines 1-13
For instance, the amount for May of the Prior Year (on Line 6) for Account 353 (Column 5) is the sum of the following values:
a) the "Other ISO Transmission Activity without Incentive Plant Activity" for May of the Prior Year (on Line 112, Column 5);
b) the "ISO Incentive Plant Activity" for May of the Prior Year (on Line 71, Column 5),
) and the "Transmission Plant - ISO" amount for April of the Prior Year (on Line 5, Column 5)
2) Amounts on Line 15 must match 6-Plant Study amounts for Distribution Plant - ISO for previous year

Amounts on Line 16 must match amounts on 6-PlantStudy for Distribution Plant - ISO
) Reconciles to BOY and EOY FERC Form 1 (FF1 207, Lines 48-56, Column g)
Includes recorded Transmission Plant-In-Service additions, retirements, transfers and adjustments. From SCE internal acounting records
5) Includes balances for SCE Incentive Projects.
6) Monthly differences from previous matrix. Other columns from SCE internal accounting records
) Amount in matrix on lines 41 to 52 minus amount in matrix on lines 67 to 78
8) Amount in "Total Transmission Activity Not Including Incentive Plant Activity" matrix divided by Total on Line 92 for each account/month.
9) Amount on Line 13 less amount on Line 1 for each account
0) Line 79
11) Amount on Line 105 less amount on Line 106 for each account.
12) For each column (FERC Account) divide Line 107 by Line 92 to arrive at a ratio for each column.

Apply the ratio of each column to each monthly value from Lines 80-91 to calculate the values for
the corresponsing months listed in Lines 108-119.
A) Plant Classified as Transmission in FERC Form 1 for Prior Year:


| $\frac{\text { Line }}{22}$ | Account |  | Total Plant |  | Data Source | Distribution <br> Plant-ISO |  | $\begin{aligned} & \text { ISO \% } \\ & \text { of Total } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23 | Land: |  |  |  |  |  |  |  |
| 24 | 360 | \$ |  | - | FF1 207.60g | \$ | - | - \% |
| 25 | Structures: |  |  |  |  |  |  |  |
| 26 | 361 | \$ |  | - | FF1 207.61g | \$ | - | - \% |
| 27 | 362 | \$ |  | - | FF1 207.62g | \$ | - | - \% |
| 28 | Total Structures | \$ |  | - | L 26 + L 27 | \$ | - | - \% |
| 29 |  |  |  |  |  |  |  |  |
| 30 | Total Distribution | \$ |  | - | L 24 + L 28 | \$ | - | - \% |

## Notes:

1) Total transmission does not include account 359.1 "Asset Retirement Costs for Transmission Plant" Total on this line is also equal to FF1 207.58g (Total Transmission Plant) less FF1 207.57 g (Asset Retirement Costs for Transmission Plant).
2) Only accounts 360-362 included as there is no ISO plant in any other Distribution accounts.

## Instructions:

1) Perform annual Transmission Study pursuant to instructions in tariff.
2) Enter total amounts of plant from FERC Form 1 in Column 1, "Total Plant".
3) Enter ISO portion of plant in Column 2, "Transmission Plant - ISO, or "Distribution Plant - ISO".

Schedule 8

## Accumulated Depreciation Reserve

Input cells are shaded yellow

1) Transmission Depreciation Reserve - ISO

Prior Year:
Balances for Transmission Depreciation Reserve - ISO during the Prior Year, including December of previous year (See Note 1):

2) Distribution Depreciation Reserve - ISO (See Note 2)

15
16
17


Col 5
=Sum C2 to C4
Total
Notes
S0 Beginning of Year ("BOY") amount
\$0 End of Year ("EOY") amount
\$0 Average of Line 15 and Line 16
3) General and Intangible Depreciation Reserve


Transmission Activity Used to Determine Monthly Transmission Depreciation Reserve - ISO Balances

1) ISO Depreciation Expense (See Note 3)

| Col 1 |  | Col 2 |  |  | Col 3 |  | Col 4 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mo/YR |  | 350.1 |  |  | 350.2 |  |  | 352 |  |
| - | \$ |  | - | \$ |  | - | \$ |  | - |
| - | \$ |  | - | \$ |  | - | \$ |  | - |
| - | \$ |  | - | \$ |  | - | \$ |  | - |
| - | \$ |  | - | \$ |  | - | \$ |  | - |
| - | \$ |  | - | \$ |  | - | \$ |  | - |
| - | \$ |  | - | \$ |  | - | \$ |  | - |
| - | \$ |  | - | \$ |  | - | \$ |  | - |
| - | \$ |  | - | \$ |  | - | \$ |  | - |
| - | \$ |  |  | \$ |  | - | \$ |  | - |
| - | \$ |  |  | \$ |  | - | \$ |  | - |
| - | \$ |  | - | \$ |  | - | \$ |  | - |
| - | \$ |  | - | \$ |  | - | \$ |  | - |
| Total: | \$ |  | - | \$ |  | - | \$ |  | - |


| Col 5 | Col 6 |
| :---: | :---: |
| 353 | 354 |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |





2) Total Transmission Allocation Factors (See Note 4)

| Col 1 | Col 2 | Col 3 | Col 4 | Col 5 | Col 6 | Col 7 | Col 8 | Col 9 | Col 10 | Col 11 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mo/YR | 350.1 | 350.2 | 352 | 353 | 354 | 355 | 356 | 357 | 358 | 359 |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |

## 3) Calculation of Non-Incentive ISO Reserve


4) Other Transmission Activity (See Note 8)


## Notes:

1) Amounts on Line 13 based on current year Plant Study. Amounts on Line 1 shall be based on previous year Plant Study, and
shall match amounts on Line 13 in previous year Annual Update.
The amounts for each month on the remaining lines are calculated by summing the following values:
a) Depreciation Expense (on Lines 27 to 38) for the same month;
b) Other Transmission Activity (on Lines 55 to 66) for the same month; and
c) Balances for Transmission Depreciation Reserve (on Lines 1 to 13) for the previous month

For instance, the amount for May of the Prior Year (on Line 6) for Account 353 (Column 5) is the sum of the following values
a) Depreciation Expense for May of the Prior Year (on Line 44, Column 5)
b) Other Transmission Activity for May of the Prior Year (on Line 59, Column 5); and
) The balances for Transmission Depreciation Reserve for April of the Prior Year (on Line 5, column 5),
) Amounts on Line 15 derived from Plant Study for previous year Prior Year
Amounts on Line 16 derived from Plant Study for Prior Year
From 17-Depreciation, Lines 24 to 35
4) From 6-PlantInService, Lines 93 to 104
) Line 13 - Line 1
6) Line 39 .
) Line 52 - Line 53
8) Multiply the montly "Total Transmission Allocation Factors" ratios found in Lines 40-51 by the "Other Activity" on Line 54

## Accumulated Deferred Income Taxes and Net Excess Deferred Tax Liabilities

1) Summary of Accumulated Deferred Income Taxes and Net Excess Deferred Tax Liabilities
a) End of Year Accumulated Deferred Income Taxes and Net Excess Deferred Tax Liabilities

| Line | Account | Total Balance | Source |
| :---: | :---: | :---: | :---: |
| 1 | Account 190 | \$ | Line 353, Col. 2 |
| 2 | Account 282 | \$ | Line 452, Col. 2 |
| 3 | Account 283 | \$ | Line 803, Col. 2 |
| 4 | Net Excess/Deficient Deferred Tax Liability/Asset-2017 TCAJA | \$ | FF1 278, see Notes 4 and 5 |
| 5 | Total Accumulated Deferred Income Taxes | \$ | Sum of Lines 1 to 4 |
| 6 | and Net Excess Deferred Tax Liabilities |  |  |
| 7 | b) Beginning of Year Accumulated Deferred Income Taxes and Net Excess Deferred Tax Liabilities |  |  |
| 8 | BOY |  |  |
| 9 |  | Balance | Source |
| 10 | Total Accumulated Deferred Income Taxes | \$ | Previous Year Informational Filing, Line 5, Col. 2 |
| 11 |  |  |  |
| 12 | c) Prorata Average of Beginning and End of Year Accumulated Deferred Income Taxes and Net Excess Deferred Tax Liabilities |  |  |
| 13 | Average |  |  |
| 14 |  | ADIT | Source |
| 15 | Prorata Average Balance: \$ | - Line 817, Column 8 |  |








Prior Year CWIP and Forecast Period Incremental CWIP by Project
Prior Year CWIP is the amount of Construction Work In Progress for projects that have received Commission approval to include CWIP in Rate Base.


3) Forecast Period CWIP Expenditures by Project (see Note 1) 3a) Project:







13-Month Averages:
Notes:

1) Forecast Period is the calendar year two years after the Prior Year (i.e., PY+2).
2) Sum of project specific values from lines 55-79, 81-105, 107-131, 133-157, 159-183, 185-209, 211-235, 237-261, 263-287, 289-313,...

## Instructions:

1) Enter recorded amounts of CWIP during Prior Year on Lines 1-13, 15-27 (including December of year previous to Prior Year).
) Enter forecast project specific values on lines 55-79, 81-105, 107-131, 133-157, 159-183, 185-209, 211-235, 237-261, 263-287, 289-313,
2) If Commission approval is granted to include CWIP in Rate Base for additional projects, include additional tables for each of those additional projects.

Transmission Plant Held for Future Use shall be amounts of Electric Plant Held for Future Use (account 105) intended to be placed under the Operational Control of the ISO, plus an allocated amount of any General Electric Plant Held for Future Use, with the allocation factor being the Transmission Wages and Salaries AF.

| Line |  | Beginning of Year Balance |  | End of Year Balance | Source |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Total Electric PHFU | \$ | \$ | - - | FF1 page 214.47d |
| Plant intended to be placed under the Operational Control of the ISO: |  |  |  |  |  |
|  | Col $1 \quad$ Col 2 | Col 3 |  | Col 4 | Col 5 |
|  | Description $\begin{gathered}\text { Type } \\ \text { of Plant }\end{gathered}$ | Beginning of Year Balance |  | End of Year Balance | Source |
| 2a |  | \$ - | \$ | End - |  |
| 2b |  | \$ | \$ | - |  |
| 2c |  | \$ | \$ | - |  |
| 2d |  | \$ | \$ | - |  |
| 2e |  | \$ | \$ | - |  |
| 2 f |  | \$ | \$ | - |  |
| 2 g |  | \$ | \$ | - |  |
| 2h |  | \$ - | \$ | - |  |
|  | ... |  |  |  |  |
| 3 | Total: | \$ - | \$ | - | Sum of above lines |
|  |  | Beginning of Year Balance |  | End of Year Balance | Source |
| 4 | General Plant Held for Future Use | \$ - | \$ |  | FF1 page 214 |
| 5 | Wages and Salaries AF: | - \% |  | - \% | 27-Allocators, L 9 |
| 6 | Portion for Transmission PHFU: | \$ - | \$ | - | L 4 * L 5 |

All other Electric Plant Held for Future Use not intended to be placed under the Operational Control of the ISO:

| Beginning of Year Balance |  |  |
| :--- | :--- | :--- |
| $\$$ | End of Year Balance | Source |

Transmission PHFU: $\quad$ Beginning of Year Balance $\quad$ End of Year Balance $\quad-\quad$ Source

Average of BOY and EOY
9 Transmission PHFU:
\$
Sum of Line 8 / 2

## Calculation of Gain or Loss on Transmission Plant Held for Future Use -- Land

10 Gain or Loss on Transmission Plant Held for Future Use --- Land $\quad \$ \quad$ Source $\quad$ - SCE Records

## Instructions:

1) For any Electric Plant Held for Future Use intended to be placed under the Operational Control of the ISO, list on lines $2 \mathrm{a}, 2 \mathrm{~b}$, etc. Provide description in Column 1. Note type of plant (land or other) in Column 2. Under "Source" (Column 5), state the line number on FERC Form 1 page 214 from which the amount is derived. BOY amount will be EOY value from previous year FERC Form 1, EOY amount will be in current year FF1.
2) For any Electric Plant Held for Future Use classified as General note amount on Line 4.
3) Add additional lines $2 \mathrm{i}, \mathrm{j}, \mathrm{k}$, etc. as necessary to include additional projects intended to be placed under the Operational Control of the ISO.
4) Gains and Losses on Transmission Plant Held for Future Use - Land is treated in accordance with Commission policy. Any gain or loss on non-land portions of Transmission Plant Held for Future Use is not included.

Notes:

1) Amount of Line 1 not intended to be placed under the Operational Control of the ISO.

Initially Abandoned Plant Amortization Expense and Abandoned Plant are both zero.

Upon Commission approval of recovery of abandoned plant costs for a specific project or projects, SCE will complete this worksheet in accordance with that Order

Orders Providing for Abandoned Plant Cost Recovery:


Abandoned Plant for each project represents the amount of costs that the Order approves for inclusion in Rate Base.

Abandoned Plant Amortization Expense for each project represents the annual amortization of abandoned costs that the Order approves as an annual expense.

Amount for

|  | Prior Year |  |
| ---: | :--- | ---: |
| Abandoned Plant Amortization Expense: | $\$$ | - |
| Abandoned Plant (BOY): | $\$$ | - |
| Abandoned Plant (EOY): | $\$$ | - |
| Abandoned Plant (BOY/EOY Average): | $\$$ | - |

Note:
Sum of projects below for PY.
Sum of projects below for PY.
Sum of projects below for PY.
Average of Lines 2 and 3.
Sum of projects below for PY.

|  | First Project: Fill in Name |  |  |  | Abandoned Plant Amort. Expense |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year |  |  |  |  |  |  |
| 2015 | \$ | - | \$ | - | \$ | - |
| 2016 | \$ | - | \$ | - | \$ | - |
| 2017 | \$ | - | \$ | - | \$ | - |
| 2018 | \$ | - | \$ | - | \$ | - |
| 2019 | \$ | - | \$ | - | \$ | - |
| 2020 | \$ | - | \$ | - | \$ | - |
| 2021 | \$ | - | \$ | - | \$ | - |
| 2022 | \$ | - | \$ | - | \$ | - |
| 2023 | \$ | - | \$ | - | \$ | - |
| 2024 | \$ | - | \$ | - | \$ | - |
| 2025 | \$ | - | \$ | - | \$ | - |



## Notes:

1) "EOY HV Abandoned Plant" is amount of "EOY Abandoned Plant" that would have been High Voltage (>= 200 kV ).

## Instructions:

1) Upon Commission approval of recovery of abandoned plant costs for a project:
a) Fill in the name the project in order (First Project, Second Project, etc.).
b) Fill in the table with annual End of Year ("EOY") Abandoned Plant, EOY HV Abandoned Plant, and Abandoned Plant Amortization Expense amounts in Accordance with the Order.
If table can not be filled out completely, fill out at least through the Prior Year at issue.
c) Sum project-specific amounts for each project and enter in lines 1, 2, and 3 for the Prior Year at issue.
(BOY value is EOY value from previous year)
2) Add additional projects if necessary in same format.
3) Add additional years past 2025 if necessary.

## Calculation of Components of Working Capital

1) Calculation of Materials and Supplies

Materials and Supplies is the amount of total Account 154 Materials and Supplies
times the Transmission Wages and Salaries AF

2) Calculation of Prepayments

Prepayments is an allocated portion of Total Prepayments based on the Transmission Wages and Salaries Allocation Factor.

Plant Balances For Incentive Projects Receiving either ROE Incentives ("Transmission Incentive Plant") or CWIP ("CWIP Plant")

Input data is shaded yellow
A) Summary of Incentive Project plant balances receiving ROE incentives
("Transmission Incentive Plant") and/or CWIP ("CWIP Plant") and calculation
of balances needed to determine the following:

1) Rate Base in Prior Year
2) Prior Year Incentive Rate Base - End of Year
3) Prior Year Incentive Rate Base - 13-Month Average

Transmission Incentive Project plant balances and CWIP Plant may affect the following:
a) CWIP Plant during the Prior Year is included in Rate Base (used in Prior Year TRR and True Up TRR).
b) Forecast Period Incremental CWIP contributes to Incremental Forecast Period TRR
c) CWIP Plant receiving an ROE adder contributes to Prior Year Incentive Rate Base - EOY, or Prior Year Incentive Rate Base - 13 Month Average as appropriate.
d) "TIP Net Plant In Service" at EOY Prior Year is used to calculate the PY Incentive Rate Base (on EOY basis).
e) "TIP Net Plant In Service" in PY is used to calculate the Prior Year Incentive Rate Base (on 13-month average basis).

1) Summary of CWIP Plant in Prior Year and Forecast Period

2) Summary of Prior Year Incentive Rate Base amounts (EOY Values)

3) Summary of Prior Year Incentive Rate Base amounts (13-Month Average values)



## 6) Calculation of Prior Year Net Plant in Service amounts for each Incentive Project






6) Summary of Incentive Projects and incentives granted


## Instructions:

1) Upon Commission approval of any incentives for additional projects, add additional projects and provide cite to the Commission decision.

## Schedule 15

Incentive Adders

Determination of Incentive Adders Components of the TRR
Input data is shaded yellow
Two Incentive Adders are calculated:
a) The Prior Year Incentive Adder is a component of the Prior Year TRR.
b) The True Up Incentive Adder is a component of the True Up TRR.

1) Calculation of Incremental Return on Equity Factor

The Incremental Return on Equity Factor is the incremental Prior Year TRR expressed per 100 basis points of ROE incentive, for each million dollars of Incentive Net Plant. It is calculated according to the following formula:
$\operatorname{IREF}=\operatorname{CSCP} * 0.01^{*}(1 /(1-\operatorname{CTR})) * \$ 1,000,000$
3) Calculation of Prior Year Incentive Adder (EOY)

1) Determine Prior Year Incentive Adder for each Incentive Project by multiplying the IREF, the Multiplicative Factor, and the million \$ of Prior Year Incentive Rate Base.
2) Sum project-specific Incentive Adders to yield the total Prior Year Incentive Adder.

|  |  | Prior Year Incentive Rate Base |  | Multiplicative Factor |  | Prior Year Incentive Adder |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1) Rancho Vista | \$ |  | - | -- | \$ |  |
| 2) Tehachapi | \$ |  | - | -- | \$ |  |
| 3) Devers to Col. River | \$ |  | - | -- | \$ |  |

## Source

14-IncentivePlant, L 184
14-IncentivePlant, L 187
14-IncentivePlant, L 190

## 4) Calculation of True-Up Incentive Adder

1) Determine True Up Incentive Adder for each Incentive Project by multiplying the

IREF, the Multiplicative Factor, and the million \$ of True Up Incentive Net Plant.
2) Sum project-specific Incentive Adders to yield the total True Up Incentive Adder.

|  | True-Up <br> Incentive | Multiplicative <br> Net Plant | True-Up <br> Incentive |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1) Rancho Vista | $\$$ |  | - | -- | $\$$ |
| Factor |  |  |  |  |  |

True-Up Incentive Adder = \$

- Sum of above PY Incentive Adders for each individual project

5) Calculation of Total ROE for Plant-In Service in the True Up TRR
a) Transmission Incentive Plant Net Plant In Service

| Incentive <br> Project | 13-Month Avg. <br> TIP Net Plant |  |
| :--- | :--- | :--- |
| In Service | Source <br> Rancho Vista | $\$$ |
| 2) Tehachapi | $\$$ | - |
| 14-IncentivePlant, L 19, Col. 3 |  |  |
| 3) Devers to Col. River | $\$$ | - |
| 14-IncentivePlant, L 20, Col. 3 |  |  |
|  | $\$$ | - |
| 14-IncentivePlant, L 21, Col. 3 |  |  |

b) Calculation of ROE Adders on TIP Net Plant In Service


Total: \$
c) Equity Portion of Plant In Service Rate Base

d) Total ROE for Plant In Service in the True Up TRR

| Plant In Service ROE Adder Percentage: | $-\%$ | Line $30 /$ Line 35 |
| ---: | ---: | :--- |
| Base ROE (Including 50 basis point |  |  |
| CAISO Participation Adder): | $-\frac{-\%}{}$ | 1-BaseTRR, Line 50 |
| Total ROE for Plant In Service in True Up TRR: | $-\%$ | Line $36+$ Line 38 |

Instructions:

1) If additional projects receive ROE adders, add to end of lists, and include in calculation of each Incentive Adder.

## Notes:

1) Column 1: The True Up Incentive Adder for each Incentive Project equals the IREF on Line 3, times the applicable Multiplicative Factor on Lines 15 to 18, times the million \$ of TIP Net Plant In Service on Lines 21 to 24.
Column 2: The After Tax True Up Incentive Adder is derived by multiplying the amounts in Column 1 by ( $1-$ CTR) (Where the CTR is on Line 2).

Forecast Plant Additions for in-Service ISO Transmission Plan
Yellow shaded cells are Input Data
Forecast Plant Additions represents the total increase in ISO Transmission Net Plant, not including CWIP
during the Rate Year, incremental to the year-end Prior Year amount.
It is calculated on a 13 -Month Average Basis during the Rate Year.



| ) Non-Incentive Plant Forecast (See Note 1) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Col 1 |  | Col 2 | Col 3 |  | Col 4 |  | Col 5 |  | Col 6 |  | Col 7 |  | Col 8 |  | Col 9 |  | Col 10 |  | Col 11 |  | $=C 11^{*} 12(1-\mathrm{L} 75)$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | = Prior Month C2 |  | Prior Month C7 |  | $=$ Prior Month C9 |  |  |  |  |  | $=C 11^{*}(1-L 75)$ |
|  |  |  |  |  |  | $=(\mathrm{C} 1-\mathrm{C} 2)^{*} \mathrm{~L} 74$ |  | $=(C 1-C 2+C 3) *$ L75 |  | =C1-C2+C3-C4 |  | =C5*L76 |  | +C2+C5+C6 |  | * L91/12 |  | + C 4 + C 8 |  | =C7-C9 |  |  |  | *(1+L74+L76) |
|  | Forecast |  | Unloaded |  |  |  |  |  |  | AFUDC |  |  |  |  |  |  |  |  |  |  |  | Unloaded |  | Loaded |
|  | Period |  | Total |  | Prior Period | Over Heads |  | Cost of |  | Eligible Plant |  |  |  | Incremental |  | Depreciation |  | Incremental |  |  |  | Low Voltage |  | Low Voltage |
| Line | Mont | Year | Plant Adds |  | CWIP Closed | Closed to PIS |  | Removal |  | Additions |  | AFUDC |  | Gross Plant |  | Accrual |  | Reserve |  | Net Plant |  | Additions |  | Additions |
| 50 | January |  | \$ | \$ |  | \$ | \$ |  | \$ |  | \$ |  | \$ |  | \$ |  |  |  | \$ |  | - \$ |  | \$ |  |
| 51 | February | - | \$ | \$ |  | \$ | \$ |  | \$ |  | \$ |  | \$ |  |  |  | \$ |  | - \$ |  | - \$ |  | - \$ |  |
| 52 | March | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | \$ |  | \$ |  | \$ |  | \$ |  | - \$ |  |  |  |
| 53 | April | - | \$ | \$ |  | \$ | \$ |  | \$ |  | \$ |  | - \$ |  |  |  | \$ |  | - \$ |  | - \$ |  | - |  |
| 54 | May | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | - \$ |  |  |  | \$ |  | - |  | - \$ |  | - |  |
| 55 | June | - | \$ | \$ |  | \$ | \$ |  | \$ |  | \$ |  | \$ |  | \$ |  | \$ |  | - \$ |  | \$ |  | - |  |
| 56 | July | - | s | \$ | - | \$ | \$ |  | \$ |  | \$ |  | \$ |  |  | - | \$ |  | - \$ |  | - \$ |  | - |  |
| 57 | August | - | \$ | \$ |  | \$ | \$ |  | \$ |  | \$ |  | \$ |  |  | - | \$ |  | - \$ |  | - \$ |  | - |  |
| 58 | September | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | \$ |  |  | - | \$ |  | - \$ |  | - \$ |  | - \$ |  |
| 59 | October | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | - \$ |  |  |  | \$ |  | - \$ |  | \$ |  |  |  |
| 60 | November | - | \$ | \$ |  | \$ | \$ |  | \$ |  | \$ |  | - \$ |  |  | - | \$ |  | - \$ |  | \$ |  | - \$ |  |
| 61 | December | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | \$ | - |  | - | \$ |  | - |  |  |  |  |  |
| 62 | January | - | \$ | \$ |  | \$ | \$ |  | \$ |  | \$ |  | \$ |  |  | - | \$ |  | - |  | - \$ |  | - \$ |  |
| 63 | February | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | \$ |  |  | - | \$ |  | - |  |  |  |  |  |
| 64 | March | - | \$ | \$ |  | \$ | \$ |  | \$ |  | \$ |  | \$ |  |  |  | \$ |  | - \$ |  | - \$ |  |  |  |
| 65 | April | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | \$ |  |  | - |  |  | - \$ |  | \$ |  | - \$ |  |
| 66 | May | - | \$ | \$ |  | \$ | \$ |  | \$ |  | \$ |  | - \$ |  |  |  | \$ |  | - \$ |  | - \$ |  | - \$ |  |
| 67 | June | - | \$ | \$ |  | \$ | \$ |  | \$ |  | \$ |  | - \$ |  |  | - | \$ |  | - \$ |  | - |  | - |  |
| 68 | July | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | - \$ |  |  |  | \$ |  | - \$ |  | - \$ |  |  |  |
| 69 | August | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | - \$ |  |  | - | \$ |  | - \$ |  | - \$ |  | - |  |
| 70 | September | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | \$ |  |  | - | \$ |  | - \$ |  | - \$ |  | - |  |
| 71 | October | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | - \$ |  |  | - | \$ |  | - \$ |  | - \$ |  | - |  |
| 72 | November | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | - \$ |  |  | - | \$ |  | - \$ |  | \$ |  | - |  |
| 73 | December | - | \$ | \$ | - | \$ | \$ |  | \$ | - | \$ |  | - \$ |  |  | - | \$ |  | - |  | \$ |  | - \$ |  |

## I) ISO Corporate Overhead Loader

| Line |  |  |
| :---: | :---: | :---: |
| 74 | ISO Corp OH Rate | 7.50\% |
| 5) ISO Cost of Removal Percent |  |  |
| Line |  |  |
| 75 | Cost of Removal Rate | 8.00\% |


| ${ }^{\text {Line }}$ |  |
| :--- | :--- | :--- |
| $\frac{\text { 6) AFUDC Loader Rate }}{}$ |  |
| ISO AFUDC Rate | $3.00 \%$ |



## Depreciation Expense

1) Calculation of Depreciation Expense for Transmission Plant - ISO

Balances for Transmission Plant - ISO during the Prior Year, including December of previous year:


Input cells are shaded yellow
Prior Year:
Source: 6-PlantInService, Lines 1-13.

5 Depreciation Rates (Percent per year) See Instruction 1.



Schedule 18
Depreciation Rates

## Depreciation Rates

| Line | ssion Plan <br> FERC <br> Account | ISO Description | Plant <br> Less <br> Salvage | $\begin{gathered} \text { Removal } \\ \text { Cost } \end{gathered}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 350.1 | Fee Land | 0.00\% | 0.00\% | 0.00\% |
| 2 | 350.2 | Easements | 1.67\% | 0.00\% | 1.67\% |
| 3 | 352 | Structures and Improvements | 1.79\% | 0.62\% | 2.41\% |
| 4 | 353 | Station Equipment | 2.39\% | 0.45\% | 2.84\% |
| 5 | 354 | Towers and Fixtures | 1.20\% | 1.53\% | 2.73\% |
| 6 | 355 | Poles and Fixtures | 1.06\% | 1.78\% | 2.84\% |
| 7 | 356 | Overhead Conductors and Devices | 0.78\% | 2.46\% | 3.24\% |
| 8 | 357 | Underground Conduit | 1.73\% | 0.00\% | 1.73\% |
| 9 | 358 | Underground Conductors and Devices | 1.62\% | 0.79\% | 2.41\% |
| 10 | 359 | Roads and Trails | 1.65\% | 0.00\% | 1.65\% |

2) Distribution Plant - ISO

| FERC |
| ---: | :--- |
| Account |


| 360 | Land and Land Rights |
| ---: | :--- |
| 361 | Structures and Improvements |
| 362 | Station Equipment |


| Plant <br> Less | Removal <br> Salvage |  |
| :---: | :---: | :---: |
| $1.67 \%$ | Cost | Total |
| $1.75 \%$ | $0.00 \%$ | $1.67 \%$ |
| $1.32 \%$ | $0.69 \%$ | $2.39 \%$ |
|  |  | $2.01 \%$ |


|  | Plant <br> FERC <br> Account | Description |
| :---: | :---: | :---: |
| 15 | 389 | Land and Land Rights |
| 16 | 390 | Structures and Improvements |
| 17 | 391.1 | Office Furniture |
| 18 | 391.5 | Office Equipment |
| 19 | 391.6 | Duplicating Equipment |
| 20 | 391.2 | Personal Computers |
| 21 | 391.3 | Mainframe Computers |
| 22 | 391.7 | PC Software |
| 23 | 391.4 | DDSMS - CPU \& Processing |
| 24 | 391.4 | DDSMS - Controllers, Receivers, Comm. |
| 25 | 391.4 | DDSMS - Telemetering \& System |
| 26 | 391.4 | DDSMS - Miscellaneous |
| 27 | 391.4 | DDSMS - Map Board |
| 28 | 393 | Stores Equipment |
| 29 | 395 | Laboratory Equipment |
| 30 | 398 | Misc Power Plant Equipment |
| 31 | 397 | Data Network Systems |
| 32 | 397 | Telecom System Equipment |
| 33 | 397 | Netcomm Radio Assembly |
| 34 | 397 | Microwave Equip. \& Antenna Assembly |
| 35 | 397 | Telecom Power Systems |
| 36 | 397 | Fiber Optic Communication Cables |
| 37 | 397 | Telecom Infrastructure |
| 38 | 392 | Transportation Equip. |
| 39 | 394.4 | Garage \& Shop -- Equip. |
| 40 | 394.5 | Tools \& Work Equip. -- Shop |
| 41 | 396 | Power Oper Equip |


| Plant <br> Less | Removal |  |
| :---: | :---: | :---: |
| Salvage | Cost | Total |
| 1.67\% | 0.00\% | 1.67\% |
| 1.81\% | 0.27\% | 2.08\% |
| 5.00\% | 0.00\% | 5.00\% |
| 20.00\% | 0.00\% | 20.00\% |
| 20.00\% | 0.00\% | 20.00\% |
| 20.00\% | 0.00\% | 20.00\% |
| 20.00\% | 0.00\% | 20.00\% |
| 20.00\% | 0.00\% | 20.00\% |
| 14.29\% | 0.00\% | 14.29\% |
| 10.00\% | 0.00\% | 10.00\% |
| 6.67\% | 0.00\% | 6.67\% |
| 5.00\% | 0.00\% | 5.00\% |
| 4.00\% | 0.00\% | 4.00\% |
| 5.00\% | 0.00\% | 5.00\% |
| 6.67\% | 0.00\% | 6.67\% |
| 5.00\% | 0.00\% | 5.00\% |
| 20.00\% | 0.00\% | 20.00\% |
| 14.29\% | 0.00\% | 14.29\% |
| 10.00\% | 0.00\% | 10.00\% |
| 6.67\% | 0.00\% | 6.67\% |
| 5.00\% | 0.00\% | 5.00\% |
| 4.00\% | 0.00\% | 4.00\% |
| 2.50\% | 0.00\% | 2.50\% |
| 14.29\% | 0.00\% | 14.29\% |
| 10.00\% | 0.00\% | 10.00\% |
| 10.00\% | 0.00\% | 10.00\% |
| 6.67\% | 0.00\% | 6.67\% |


|  | le Plant <br> FERC <br> Account | Description | Plant <br> Less <br> Salvage | Removal Cost | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 42 | 302 | Hydro Relicensing | 2.47\% | 0.00\% | 2.47\% |
| 43 | 303 | Radio Frequency | 2.50\% | 0.00\% | 2.50\% |
| 44 | 301 | Other Intangibles | 5.00\% | 0.00\% | 5.00\% |
| 45 | 303 | Cap Soft 5yr | 20.31\% | 0.00\% | 20.31\% |
| 46 | 303 | Cap Soft 7yr | 14.62\% | 0.00\% | 14.62\% |
| 47 | 303 | Cap Soft 10yr | 12.93\% | 0.00\% | 12.93\% |
| 48 | 303 | Cap Soft 15yr | 8.48\% | 0.00\% | 8.48\% |

Notes: 1) Depreciation rates may only be revised as approved by the Commission pursuant
to a Section 205 or 206 filing.

1) Determination of Adjusted Operations and Maintenance Expenses for each account (Note 1)


|  | Col 1Account/Work Activity Rev | $=\frac{\mathrm{Col} 2}{\mathrm{C} 3+\mathrm{C} 4}$ |  |  | Col 3 |  | Col 4 |  |  | $\frac{\text { Col 5 }}{\text { Note } 2}$ | $=\frac{\mathrm{Col} 6}{\mathrm{C} 7+\mathrm{C} 8}$ |  |  | Col 7 |  |  | Col 8 |  |  | $=\mathrm{C} 10+\mathrm{C} 11$ |  |  | $=\frac{\text { Col } 10}{C 3+C 7}$ |  |  | $=\frac{\text { Col } 11}{C 4+\mathrm{C} 8}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total Recorded O\&M Expenses |  |  |  |  |  |  |  | Adjustments |  |  |  |  |  |  |  |  |  | Adjusted Recorded O\&M Expenses |  |  |  |  |  |  |
|  |  |  | Total |  |  | Labor |  |  | Non-Labor | Reason |  | Total |  |  | Labor |  |  | Non-Labor |  |  | Total |  |  | Labor |  |  |
| Distribution Accounts |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35 | 582 - Station Expenses | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |
| 36 | 590 - Maintenance Supervision and Engineering | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |
| 37 | 591 - Maintenance of Structures | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  |  | \$ |
| 38 | 592 - Maintenance of Station Equipment | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  | - | \$ |
| 39 | Accounts with no ISO Distribution Costs | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  |  | \$ |
| 40 | Distribution NOIC (Note 3) |  |  |  |  | - |  |  | - |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |
| 41 | Total Distribution O\&M | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |
| 42 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4344 | Total Transmission and Distribution O\&M | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  |  | \$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45 | Total Transmission O\&M Expenses in FERC Form 1: | \$ |  | - |  | 321.112b |  |  | st equal Line | Column 2. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 46 | Total Distribution O\&M Expenses in FERC Form 1: | \$ |  | - |  | 322.156 b |  |  | st equal Line | Column 2. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 47 | Total TDBU NOIC | \$ |  |  |  | AandG, Not | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

2) Determination of ISO Operations and Maintenance Expenses for each account (Note 5).



Notes:

1) "Adjusted Operations and Maintenance Expenses for each account" are the total amounts of O M costs booked to each Transmission or Distribution account, less adjustments as noted
2) Reasons for excluded amounts:

A: Exclude entire amount, all attributable to CAISO costs recovered in Energy Resource Recovery Account.
B: Exclude amount related to MOGS Station Expense.
C: Exclude amount attributable to CAISO costs recovered in Energy Resource Recovery Account.
D: Exclude amount recovered through to Reliability Services Balancing Account, the Transmission Access Charge Balancing Account Adjustment,
E: Exclude amount of costs transfered to account from A\&G Account 920 pursuant to Order 668
F: Excludes shareholder funded costs
3) Total TDBU NOIC is allocated to Transmission and Distribution in proportion to labor in the respective functions. Transmission NOIC ("Non-Officer Incentive Compensation") equals Total TDBU NOIC times the Transmission NOIC Percentage calculated below. Distribution NOIC equals Total TDBU NOIC times the Distribution NOIC Percentage below.

Total TDBU NOIC is on Line:

```
Transmission NOIC Percentage:
Distribution NOIC Percentage
```

NOIC attributable to ISO Transmission (Column 7) is calculated utilizing a percentage equal to the ratio of total ISO O\&M Labor Expenses in column 7 (exclusive of NOIC) to
the total labor expenses in column 3 (exclusive of NOIC). That allocator, which is identified below, is then applied to the value in Column 3 to arrive at the NOIC attributable to ISO Transmission in Column 7 . Resulting Percentage is:
5) "ISO Operations and Maintenance Expenses" is the amount of costs in each Transmission or Distribution account related to ISO Transmission Facilities.
6) See Column 9 for references to source of each Percent ISO
7) SCE shall make no adjustments to recorded labor amounts related to non-labor labor and/or Indirect labor in Schedule 19


## Schedule 20

Administrative and General Expenses

## Note 2: Non-Officer Incentive Compensation ("NOIC") Adjustment

Adjust NOIC by excluding accrued NOIC Amount and replacing with the
actual non-capitalized A\&G NOIC payout.

|  |  | Amount |  | Source |
| ---: | :--- | :--- | :--- | :--- |
| Accrued NOIC Amount: | $\$ \underline{ }$ | SCE Records |  |  |



Trans. And Dist. Business Unit

SCE Records and Workpaper SCE Records and Workpapers Sum of $d$ to $f$

## Note 3: PBOPs Exclusion Calculation

|  |  |  | Amount | Note: |
| :---: | :---: | :---: | :---: | :---: |
| a | Current Authorized PBOPs Expense Amount: |  | \$18,219,000 | See instruction \#4 |
| b | Prior Year Authorized PBOPs Expense Amount | \$ | - | Authorized PBOPs Expense Amount during Prior Year |
| c | Prior Year FF1 PBOPs expense: | \$ | - | SCE Records |
| d | PBOPs Expense Exclusion: | \$ | - | c-b |

Amount in Line 31, column 2 equals amount in Line 8, column 1 because all Franchise Requirements Expenses are excluded
Franchise Fees Expenses component of the Prior Year TRR are based on Franchise Fee Factors.

## Instructions:

1) Enter amounts of A\&G expenses from FERC Form 1 in Lines 1 to 14.
2) Fill "II
is calculated in Note 2. The PBOPs exclusion in Column 4, Line 30 is calculated in Note 3.
a) Exclude amount of any Shareholder Adjustments, costs incurred on behalf of SCE shareholders, from relevant account in Column 1.
b) Include as an adjustment in Column 1 for Account 920 any amount excluded from Accounts 569.100, 569.200, and 569.300
in Schedule 19 (OandM) related to Order 668 costs transferred.
c) Exclude entire amount of account 927 "Franchise Requirements" in Column 2, as those costs are recovered
through the Franchise Fees Expense item.
d) Exclude any amount of Account 930.1 "General Advertising Expense" not related to advertising for safety,
siting, or informational purposes in column 1.
e) Exclude any amount of expense relating to secondary land use and audit expenses not directly benefitting utility customers
f) Exclude from account 930.2 :
3) Nuclear Power Research Expenses
4) Write Off of Abandoned Project Expenses.
5) Any advertising expenses within the Consultants/Professional Services category
g) Exclude the following costs included in any account 920-935
6) Any amount of "Provision for Doubtful Accounts" costs.
7) Any amount of "Accounting Suspense" costs.
8) Any penalties or fines.
9) Any amount of costs recovered $100 \%$ through California Public Utilities Commission ("CPUC") rates.
10) NOIC adjustment in Column 3, Line 24 is made by determining the difference between the total accrued NOIC amount included in the FERC Form 1 recorded cost amounts and the actual A\&G NOIC payout (see note 2).
NOIC adjustment in column 3, Line 26 is made by entering the amount of accrued NOIC that is capitalized.
11) Determine the PBOPs exclusion. The authorized amount of PBOPs expense (line a) may only be revised
pursuant to Commission acceptance of an SCE FPA Section 205 filing to revise the authorized PBOPs expense,
in accordance with the tariff protocols. Accordingly, any amount different than the authorized PBOPs expense
during the Prior Year is excluded from account 926 (see note 3). Docket or Decision approving authorized PBOPs amount:
12) SCE shall make no adjustments to recorded labor amounts related to non-labor labor and/or Indirect labor in Schedule 20.



## Schedule 21



## Schedule 21 Revenue Credits



44 Total Revenue Credits:
Notes:
$\begin{array}{ll}\text { 1- } & \text { CPUC Jurisdictional service related. } \\ \text { 2- } & \text { Subject }\end{array}$
once SCE obtains $\$ 16$ 1671 Gross Revenue Sharing Mechanism (GRSM), adopted in CPUC D.99-09-070. On an annual basis, Revenues) that SCE receives are shared between shareholders and ratepayers. For GRSM rategories (Incremental Gross Incremental Gross Revenues are shared 90/10 between shareholders and ratepayers. For those categories deemed Passive the Incremental Gross Revenues are shared $70 / 30$ between shareholders and ratepayers.
3- Generation related.
ISO transmission system related.
6- Subject to balancing account treatment
more than one allocator is in effect during the Prior Year.
ISO Allocator $=\quad-\%$
Source: --
ISO portion of Traditional OOR relates to monthly revenues received from customers for facilities that are part of the ISO
9- Edison ESI is a subsidiary company. Gross revenues are not reported in FF-1, only net earnings. Net Earnings for ESI are
reported on Acct 418.1, pg 225.5e.
10- The first $\$ 16,671,389$ million in gross revenues generated by GRSM activities are automatically classified as Threshold
11- Allocator is equal to the jurisdictional split of the Threshold Revenue, which is jurisdictionalized as $\$ 5.425 \mathrm{M}$ to FERC ratepayers and $\$ 11.246 \mathrm{M}$ to CPUC ratepayers per the 2009 CPUC General Rate Case (D. 09-03-025). The ISO ratepayers share of ratepayer revenue is $\$ 5.425 \mathrm{M} / \$ 16.671 \mathrm{M}=32.54 \%$.
12- Allocated based on the CPUC Base Revenue Requirement Balancing Account (BRRBA) allocator in effect during the Prior Year. The weighted average (by time) shall be used if more than one allocator is in effect during the Prior Year. ISO portion of revenue is treald as traditional 00
ISO Allocator $=\%$
Mono Power Company is a subsidiary company. Net Earnings are reported on Acct 418.1, pg 225.11e. Revenues and costs shall be non-ISO
14- SCE Capital Company is a subsidiary company. Net Earnings are reported on Acct 418.1, pg $225.23 e$. Revenues and costs shall be non-ISO
15- Southern States Realty is a subsidiary company. Gross revenues are not reported in FF-1, only net earnings. Net Earnings
for Southern States Realty are reported on Acct 418.1, pg 225.17e
16- For subsidiaries that are subject to $G R S M$, Column D contains gross revenues. Input on Line $30 D$ contains the associated expenses.
17-
Per GRC
Per GRC Decision D. $87-12$-066, for ratemaking purposes EMS financials are consolidated with SCE's. See FERC Form 1 page 123.3 under "Equity Investment Differences". Consequently, net income of EMS is not reported separately in FERC Form 1 and is not a part of FERC Account 418.1 totals. To ensure that ratepayers receive the net income from this subsidiary SCE includes EMS net income in the formula on line 28 . This amount is reversed as part
of line 30 to remain consistent with the totals reported in FERC Form 1 .

## NETWORK UPGRADE CREDIT AND INTEREST EXPENSE

## 1) Beginning of Year Balances: (Note 1)

Line
Outstanding Network Upgrade Credits Recorded in FERC Acct 252
Acct 252 Other
Total Acct 252 - Customer Advances for Construction
Prior Year:

-

|  | Balance |  |
| :--- | :--- | :--- |
| $\$$ |  | Notes |
| $\$$ |  | See Note 1 |
| $\$$ |  | Line 3-Line 1 |
|  |  | FF1 113.56d |

2) End of Year Balances: (Note 2)

4 Outstanding Network Upgrade Credits Recorded in FERC Acct 252
5 Acct 252 Other
6 Total Acct 252 - Customer Advances for Construction

7 Average Outstanding Network Upgrade Credits Beginning and End of Year

Interest On Network Upgrade Credits Recorded in FERC Acct 242
Acct 242 Other
10 Total Acct 242 - Miscellaneous Current and Accrued Liabilities

| $\$$ | - | See Note 3 |
| :--- | :--- | :--- |
| $\$$ | - | Line 6 - Line 4 |
| $\$$ | - | FF1 113.56c |
| $\$$ | - | $($ Line 1 + Line 4)/2 |


| $\$$ | - | See Note 4 |
| :--- | :--- | :--- |
| $\$$ | - | Line 10-Line 8 |
| $\$$ | - | FF1 113.48c |

Notes:
1 Beginning of Year Balances are from December of the year previous to the Prior Year.
2 End of Year Balances are from December of the Prior Year.
3 Only projects that are in Rate Base in the year reported are included.
4 Interest relates to refund of facility and one-time payments by generator. For facility costs, pre-in-service date interest is excluded. For one-time costs, pre-in-service and post-in-service interest is included.

# Schedule 23 <br> Regulatory Assets and Liabilities 

## Determination of Regulatory Assets/Liabilities and Associated Amortization and Regulatory Debits/Credits

| Line |
| :---: |
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |
| 6 |
| 7 |
| 8 |
| 9 |
| 10 |
| 11 |
| 12 |
| 13 |
| 14 |
| 15 |
| 16 |

Other Regulatory Assets/Liabilities are a component of Rate Base representing costs that are created resulting from the ratemaking actions of regulatory agencies. Pursuant to the Commission's Uniform System of Accounts, these items include amounts recorded in accounts 182.x and 254. This Schedule shall not include any costs recovered through Schedule 12.

SCE shall include a non-zero amount of Other Regulatory Assets/Liabilities only with Commission
approval received subsequent to an SCE Section 205 filing requesting such treatment.
Amortization and Regulatory Debits/Credits are amounts approved for recovery in this formula transmission rate representing the approved annual recovery of Other Regulatory Assets/Liabilities as an expense item in the Base TRR, consistent with a Commission Order.

|  | Prior Year Amount |  | Calculation or Source |
| :---: | :---: | :---: | :---: |
| Other Regulatory Assets/Liabilities (EOY): | \$ | - | Sum of Column 2 below |
| Other Regulatory Assets/Liabilities (BOY/EOY average): | \$ | - | Avg. of Sum of Cols. 1 and 2 below |
| Amortization and Regulatory Debits/Credits: | \$ | - | Sum of Column 3 below |

Col 3
Prior Year Amortization or

Regulatory
Debit/Credit
\$
\$
$\$$
\$

Col 2
Prior Year EOY
Other Reg

Col 1
Prior Year BOY
Other Reg Asset/Liability

| Asset/Liability |  |
| :--- | :--- |
| $\$$ |  |
| $\$$ | - |
| $\$$ | - |
| $\$$ |  |

Commission Order Granting Approval of Regulatory Liability
---
---
Sum of above

## Instructions:

1) Upon Commission approval of recovery of Other Regulatory Assets/Liabilities, Amortization and Regulatory Debits/Credits costs through this formula transmission rate:
a) Fill in Description for issue in above table
b) Enter costs in columns 1-3 in above table for the applicable Prior Year.
2) Add additional lines as necessary for additional issues.

## Calculation of the Contribution of CWIP to the Base TRR

1) CWIP Contribution to the Prior Year TRR and True Up TRR


| c) Income Taxes |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | EOY <br> Amount |  | Average Amount | Source |
| CWIP Amount: | \$ | - | \$ | - | Line 12 |
| Equity ROR w Preferred Stock ("ER"): |  | - \% |  | - \% | 1-BaseTRR, Line 55 |
| Composite Tax Rate: |  | - \% |  | - \% | 1-BaseTRR, Line 59 |
| Income Taxes: |  | - | \$ | - | Formula on Line 21 |

Income Taxes = [(RB *ER) * (CTR/(1 - CTR)], or [(L13 * L17) * (L18 / (1-L18)]
(No "Credits and Other" or "AFUDC" Terms, since these are not related to CWIP)
d) ROE Incentives:

Value Source
IREF $=\$$ - 15-IncentiveAdder, Line 3

1) Tehachapi

2) Devers to Colorado River


ROE Adder \$ = (Project CWIP Amount/\$1,000,000) * IREF * (ROE Adder \% / 1\%)
e) Total of Return, Income Taxes, and ROE Incentives contribution to PYTRR and True Up TRR


## f) Contribution from each Project to the Prior Year TRR and True Up TRR

| 1) Contribution to the Prior Year TRR |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Project |  | Col 1 | $\frac{\text { Col } 2}{\text { Income }}$ |  |  |  | Col 3 |  | Col 4 |  | Col 5 |  |  |  | Source |
|  |  | Cost of |  |  |  |  |  |  |  |  | = Sum C1 to C4 |  |  |  |  |
|  |  | Capital |  |  | Taxes |  |  | ROE Adder |  | FF\&U |  |  | Total |  |  |
| Tehachapi: | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 2 |
| Devers to Colorado River: | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 2 |
| South of Kramer: | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 2 |
| West of Devers: | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 2 |
| Red Bluff: | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 2 |
| Whirlwind Sub Expansion: | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 2 |
| Colorado River Sub Expansion: | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 2 |
|  | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 2 |
|  | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 2 |
|  | \$ |  | - | \$ |  | - | \$ |  |  |  | - | \$ |  | - | Note 2 |
|  | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 2 |
| Totals: | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Sum L 39 to L 49 |
| 2) Contribution to the True Up TRR |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Col 1 |  |  | Col 2 |  |  | Col 3 |  | Col 4 |  |  | Col 5 |  |  |
|  |  | Cost of |  |  | Income |  |  |  |  |  |  |  | C 1 to |  |  |
| Project |  | Capital |  |  | Taxes |  |  | ROE Adder |  | FF\&U |  |  | Total |  | Source |
| Tehachapi: | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 3 |
| Devers to Colorado River: | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 3 |
| South of Kramer: | \$ |  |  | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 3 |
| West of Devers: | \$ |  |  | \$ |  | - | \$ |  |  |  | - | \$ |  | - | Note 3 |
| Red Bluff: | \$ |  |  | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 3 |
| Whirlwind Sub Expansion: | \$ |  |  | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 3 |
| Colorado River Sub Expansion: | \$ |  |  | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 3 |
|  | \$ |  |  | \$ |  |  | \$ |  | \$ |  |  | \$ |  | - | Note 3 |
|  | \$ |  |  | \$ |  | - | \$ |  | \$ |  |  | \$ |  | - | Note 3 |
|  | \$ |  |  | \$ |  | - | \$ |  | \$ |  |  | \$ |  | - | Note 3 |
|  | \$ |  |  | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 3 |
| Totals: | \$ |  |  | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Sum of L 51 to 61 |

2) Contribution from the Incremental Forecast Period TRR

## a) Total of all CWIP projects


b) Individual Project Contribution


## 3) Total Contribution of CWIP to the Retail and Wholesale Base TRRs:

## a) Total of all CWIP projects



c) Individual CWIP Project Contribution to the Wholesale Base TRR

|  |  | $\begin{gathered} \frac{\text { Col } 1}{\text { PYTRR }} \\ \text { wo FF\&U } \end{gathered}$ |  |  | $\begin{gathered} \frac{\text { Col } 2}{} \\ \text { IFPTRR } \\ \text { wo FF\&U } \end{gathered}$ |  |  | Col 3 FF |  |  | Col 4 Total |  | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tehachapi: | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | Note 6 |
| Devers to Colorado River: | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | Note 6 |
| South of Kramer: | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | Note 6 |
| West of Devers: | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | Note 6 |
| Red Bluff: | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | Note 6 |
| Whirlwind Sub Expansion: | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | Note 6 |
| Colorado River Sub Expansion: | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | Note 6 |
|  | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | Note 6 |
|  | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | Note 6 |
|  | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | Note 6 |
|  | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | Note 6 |
| Totals: | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - |  |

## Notes:

1) (Sum Lines 33 to 36) * (FF + U Factors from 28-FFU) for Prior Year TRR
(Sum Lines 33 to 36) * (FF Factor from 28-FFU) for True Up TRR
2) Project Cost of capital is a fraction of total Cost of Capital on Line 15 based on fraction of project CWIP Balances on Lines 1 to 12 , Col 1 .

Project Income Taxes is a fraction of total Income on Line 19 based on fraction of project CWIP Balances on Lines 1 to 12, Col 1.
ROE Adder is from Lines 35 and 36. FF\&U Expenses are based on FF\&U Factors on 28-FFU.
3) Project Cost of capital is a fraction of total Cost of Capital on Line 15 based on fraction of project CWIP Balances on Lines 1 to 12, Col 2.

Project Income Taxes is a fraction of total Income on Line 19 based on fraction of project CWIP Balances on Lines 1 to 12, Col 2.
ROE Adder is from Lines 35 and 36. FF\&U Expenses are based on FF\&U Factors on 28-FFU.
4) Project contribution to total IFPTRR is based on fraction of Forecast Period CWIP Balances on Lines 1 to 12, Col 3.
5) Column 1 is from Lines 39 to 49, Sum of Column 1-3 (no FF\&U).

Column 2 is from Lines 68 to 78 (no FF\&U).
Column 3 is the product of ( $\mathrm{C} 1+\mathrm{C} 2$ ) and the sum of FF and $U$ factors ( 28 -FFU, L5)
6) Same as Note 5 except no Uncollectibles Expense in Column 3.

# Schedule 25 <br> Wholesale Differences to Base TRR 

Calculation of Wholesale Difference to the Base TRR
Inputs are shaded yellow
The Wholesale Difference to the Base TRR represents the amount by which the Wholesale Base TRR differs as compared to the Retail Base TRR. This difference is attributable to differences in the following six items, as approved by Commission Order 86 FERC $ๆ$ 63,014 in Docket No. ER97-2355.

These six items may affect the Base TRR by affecting Rate Base, or affecting an annual expense (amortization). If the annual amortization affects Income Taxes, there is an additional annual Income Tax Effect. The table summarizes these impacts for each item:

| Rate Base | Expense <br> (Amortization) <br> Difference | $\frac{\text { Difference }}{\text { Expense }}$ |
| :---: | :---: | :---: |
| Yes | Yes | $\frac{\text { Tax Impact }}{\text { Yos }}$ |
| Yes | Yes | Yes |
| Yes | Yes | Yes |
| Yes | Yes | No |
| No | Yes | No |
| No |  | No |

1) Calculation of Wholesale Rate Base Difference and Wholesale Rate Base Adjustment
a) Quantification of the Initial 2010 Wholesale Rate Base Difference and annual change The difference between Retail and Wholesale Rate Base is attributable to the following four items, with the Initial Prior Year 2010 Rate Base differences and annual changes as follows:

|  |  | $2010 \frac{\text { Col 1 }}{\text { Rate Base }} \quad \underline{\text { Col } 2}$ |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  | Difference | Annual |
| Data |  | (Wholesale | Change |
| Source |  | less Retail) | (Amortization) |
| Fixed values |  | \$31,556,000 | -\$2,176,300 |
| Fixed values |  | -\$35,044,000 | \$2,503,000 |
| Fixed values |  | -\$624,650 | \$43,100 |
| Fixed values |  | -\$7,410,000 | \$511,200 |
|  | Totals: | -\$11,522,650 | \$881,000 |

b) Quantification of the Wholesale Rate Base Adjustment

The Wholesale Rate Base Adjustment represents the impact on the Wholesale Base TRR relative to the Retail Base TRR of the Wholesale Rate Base Difference for the Prior Year.

|  | Data <br> Source |  | Value |  | Notes/Instructions |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fixed Charge Rate | 2-IFPTRR Line 16 |  |  | - \% | 1 |
| Prior Year |  |  | - |  | 2 |
| Wholesale Rate Base Difference for Prior Year |  | \$ |  | - | 3 |
| Wholesale Rate Base Adjustment | Line 14 * Line 12 | \$ |  | - |  |

## 2) Calculation of Wholesale Expense Difference

The annual Wholesale Expense Difference impact is the negative of amounts stated in Lines 7 to 10 above, Column 2. It represents the effect on expenses (Wholesale less Retail) of amortizing the associated balances each year. If an annual amortization amount affects Income Taxes, the expense difference must be grossed up for income taxes.
a) Calculation of the Wholesale South Georgia Income Tax Adjustment to the TRR

| 16 | South Georgia Amortization |
| :--- | :--- |
| 17 | Composite Tax Rate ("CTR") |
| 18 | Tax Gross Up Factor |
| 19 | Wholesale South Georgia |
| 20 | Income Tax Adjustment to the TRR: |


| Source | Value |  |
| :---: | :---: | :---: |
| Line 8 | \$ | - |
| 1-BaseTRR L 59 |  | - \% |
| (1/(1-CTR)) |  | --- |
| - Line 16 * Line 18 | \$ |  |

## b) Calculation of "Excess Deferred Taxes" Grossed Up for Income Taxes

|  | Source | Value |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{2 1}$ | Annual Amort. of "Excess Deferred Taxes": | Line 9 | \$ | - |
| $\mathbf{2 2}$ | Tax Gross Up Factor | Line 18 |  | - |
| $\mathbf{2 3}$ | Excess Deferred Taxes Grossed Up for Income Taxes: | - Line 21 * Line 22 | $\$$ | - |

Schedule 25
Wholesale Differences to Base TRR


## Notes/Instructions:

1) Fixed Charge Rate of capital and income tax costs associated with $\$ 1$ of Rate Base is defined elsewhere in this formula as "AFCRCWIP".
2) Input Prior Year for this Informational Filing in Line 13.
3) Calculation: (Line 11, Col 1) + ((Line 11, Col 2) * (Line 13-2010)).
4) Franchise Fee Exclusion is equal to the Franchise Fee Factor on the 28 -FFU Line 5 times Line $39+40$.
5) Only exclude if not already excluded in Schedule 20.
6) If appropriate, additional expenses may be excluded from the Wholesale Base TRR

## Income Tax Rates

|  | 1) Federal Income Tax rate |  | Inputs are shaded yellow |  |
| :---: | :---: | :---: | :---: | :---: |
| Line | $\frac{\text { Rate }}{\text { Year }}$ | Federal Income Tax Rate ("FITR") |  | Source |
| 1 | - | - \% | Note 1, Note 4 |  |
| 2 |  |  |  |  |
| 3 | 2) Composite State Income Tax Rate |  |  |  |
| 5 |  | State |  |  |
| 6 | Rate | Income Tax |  |  |
| 7 | Year | Rate ("SITR") |  | Source |
| 8 | - | - \% | Note 2 |  |

## 3) Capitalized Overhead portion of Electric Payroll Tax Expense

Total Electric Payroll Tax Expense (From 1-BaseTRR, Line 31)
Capitalization Rate (Note 3)
Capitalized Overhead portion of Electric Payroll Tax Expense (Line 14 * Line 15)
Non-Capitalized Overhead portion of Electric Payroll Tax Expense (Line 14 - Line 16)


Notes:

1) Federal Source Statute:
2) California State Source Statue:
3) Capitalization Rate approved in:

For the following Prior Years:
4) In the event that either the Federal or State Income Tax Rate applicable to the Rate Year differs from that in effect during the Prior Year, the True Up TRR for the Prior Year will be calculated utilizing the same Formula Rate Spreadsheet except for the Income Tax rate(s). The difference between the True Up TRR calculated in such workpaper using the Income Tax Rates that were in effect during the Prior Year and the True Up TRR otherwise calculated by this formula shall be entered as a One Time Adjustment on Schedule 3, ensuring that the Formula Spreadsheet correctly calculates the True Up TRR for the Prior Year to be based on the Income Tax Rate(s) that were in effect during that year. For the Prior Years of 2016 and 2017, both of which will have Income Tax Rates that differ between the Prior Year and the Rate Year due to the passage of the 2017 Tax Cuts and Jobs Act, this provision will be implemented as part of the Section 6 of the Formula Rate Protocols, which will calculate the True Up TRR for those years based on a Federal Income Tax Rate of 35\%.

Inputs are shaded yellow

1) Calculation of Transmission Wages and Salaries Allocation Factor


|  | Prior Year <br> Value |  |
| :--- | :--- | :--- |
| $\$ \$$ |  | - |
| $\$$ |  | - |
| $\$$ |  | - |
| $\$$ |  | - |
| $\$$ |  | - |
| $\$$ |  | - |
| $\$$ |  | - |
| $\$$ |  | - |
|  |  | - |
|  |  |  |
|  | Prior Year |  |
| $\$$ | Value |  |
| $\$$ |  | - |
| $\$$ |  | - |
| $\$$ |  | - |
| $\$$ |  | - |
| $\$$ |  | - |
| $\$$ |  | - |
|  |  | - |

Applied to Accounts
563 --Overhead Line Expenses - Allocated
567 - Line Rents - Allocated
571 - Maintenance of Overhead Lines - Allocated

Applied to Accounts
564 - Underground Line Expense
572 - Maintenance of Underground Transmission Lines

Applied to Accounts
All Other Non 0\% or 100\% Transmission O\&M Accounts

Applied to Accounts
582 - Station Expense
590 - Maintenance Supervision and Engineering
591 - Maintenance of Structures
592 - Maintenance of Station Equipment

## Franchise Fees and Uncollectibles Expense Factors

1) Approved Franchise Fee Factor(s) Inputs are shaded yellow

| Line | From | To | Days in Prior Year | FF Factor | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | --- | --- | --- | - \% | --- |
| 2 | --- | --- | --- | - \% | --- |

## 2) Approved Uncollectibles Expense Factor(s)

Days in

| From | To | Prior Year <br> ---- <br> --- |
| :---: | :---: | :---: |
| --- | -- |  |

Reference

3) FF and U Factors

5

Notes:

1) Franchise Fees represent payments that SCE makes to municipal entities for the right to locate facilities within the municipality.

## Instructions:

1) Enter Franchise Fee and Uncollectibles Factors as approved by the California Public Utilities Commission ("CPUC") in modules 1 and 2 above pursuant to Instruction 2. If approved factors changed during Prior Year, enter both, and note period of time for which each applies in "From" and "To" columns, and number of days each was in effect during the Prior Year in "Days in Prior Year" Column.
2) Franchise Fees Factor is calculated from CPUC Decision by dividing adopted Franchise Fees by Total Operating Revenues less Franchise Fees. Uncollectibles Factor is calculated by
dividing adopted Uncollectibles expense by Total Operating revenues less Uncollectibles Expense. Resulting FF \& U Factors represent factors that, when applied to TRR without FF and $U$ will correctly determine FF and $U$ expense.
3) Calculate in module 3 the weighted average FF and $U$ factors from the factors in modules 1 and 2 based on the number of days each FF and $U$ factor was in effect during the Prior Year at issue.

|  | Percent | Calculation |
| :---: | :---: | :---: |
| Prior Year FF Factor: | - \% | ((L1 FF Factor * L1 Days) + (L2 FF Factor * L2 Days))/(L1+L2 Days) |
| Prior Year U Factor: | - \% | ((L3 U Factor * L3 Days) + (L4 U Factor * L4 Days))/(L3+L4 Days) |

## Wholesale TRRs

## CALCULATION OF SCE WHOLESALE HIGH AND LOW VOLTAGE TRRS

| Line | TRR Values |  |  | Notes | Inputs are shaded yellow |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Source |
| 1 | \$ | - | = Wholesale Base TRR |  | 1-BaseTRR, Line 89 |
| 2 | \$ | - | = Total Wholesale TRBAA | Note 1 | --- |
| 3 | \$ | - | = HV Wholesale TRBAA |  | --- |
| 4 | \$ | - | = LV Wholesale TRBAA |  | --- |
| 5 | \$ | - | = Total Standby Transmission Revenues | Note 2 | SCE Retail Standby Rate Revenue |
| 6 |  | - \% | = HV Allocation Factor |  | 31-HVLV, Line 37 |
| 7 |  | - \% | = LV Allocation Factor |  | 31-HVLV, Line 37 |

## Calculation of Total High Voltage and Low Voltage components of Wholesale TRR



Notes:

1) TRBAA is "Transmission Revenue Balancing Account Adjustment". The TRBAA is determined pursuant to SCE's

Transmission Owner Tariff and may be revised each January 1, upon commission acceptance of a revised TRBAA
amount, or upon the date the Commission orders.
2) From 33-RetailRates. See Line:
3) Column 1 is from Line 1.

Column 2 equals Column 1 * Line 6.
Column 3 equals Column 1 * Line 7.
4) From 24-CWIPTRR, Line 88. All High Voltage.
5) Line 8 - Line 9
6) Column 1 is from Line 5.

Column 2 equals Column 1 * Line 6.
Column 3 equals Column 1 * Line 7.

## Wholesale Rates

## Calculation of SCE Wholesale Rates (See Note 1)

SCE's wholesale rates are as follows:

1) Low Voltage Access Charge
2) High Voltage Utility-Specific Rate
3) HV Existing Contracts Access Charge

## Calculation of Low Voltage Access Charge:

| Line |  |  | Source |
| :---: | :---: | :---: | :---: |
| 1 | LV TRR = \$ | - | 29-WholesaleTRRs, Line 13, C3 |
| 2 | Gross Load = | --- | 32-Gross Load, Line 4 |
| 3 | Low Voltage Access Charge = \$ |  | Line 1 / (Line 2 * 1000) |

## Calculation of High Voltage Utility Specific Rate:

 (used by ISO in billing of ISO TAC)
## Calculation of High Voltage Existing Contracts Access Charge:

## Source

| SCE HV TRR | $=\$$ | - |  | 29-WholesaleTRRs, Line 13, C2 |
| ---: | :--- | :--- | :--- | :--- |
| Gross Load $=$ | --- | MWh | 32-Gross Load, Line 4 |  |
| High Voltage Utility-Specific Rate | $=\$$ | - | per kWh | Line $4 /$ (Line 5 * 1000) |

## Source

29-WholesaleTRRs, Line 13, C2
--- MW 32-Gross Load, Line 5

- per kW Line 7 / (Line 8*1000)

Notes:

1) SCE's wholesale rates are subject to revision upon acceptance by the Commission of a revised TRBAA amount. See Note 1 on 29-WholesaleTRRs.

Derivation of High Voltage and Low Voltage Gross Plant Percentages
Determination of HV and LV Gross Plant Percentages for ISO Transmission Plant in accordance with ISO Tariff Appendix F, Schedule 3, Section $12 . \quad$ Input cells are shaded yellow


## Calculation of Forecast Gross Load

## Line

1 SCE Retail Sales at ISO Grid level:
2 Pump Load forecast:
3 Pump Load True-Up:
4 Forecast Gross Load:


## Calculation

## Source

Note 1
Note 2
Note 4
Line $1+$ Line $2+$ Line 3 Sum of above

Note 1

## Notes:

1) Latest SCE approved sales forecast as of April 15 of each year.
2) SCE pump load forecast as of April 15 of each year.
3) The load forecast used in Schedule 32 shall be for the calendar year in which the rates are to be in effect.
4) The Pump Load True-Up value is equal to actual recorded less forecast Pump Load for the Prior Year.

## Calculation of SCE Retail Transmission Rates

Retail Base TRR: \$

${ }_{1 \text {-BaseTRR }}$| Source, Line 86 |
| :---: |

Input cells are shaded yellow

1) Derivation of "Total Demand Rate" and "Total Energy Rate":


| 11 | 3) End-User Transmission Rates |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 12 |  | Col 1 | Col 2 | $\underline{\mathrm{Col} 3}$ |
| 13 |  | $=\mathrm{Col} 2+\mathrm{Col} 3$ | $=\text { Line1:Col2 - }$ | = Line16:Col7 * <br> Line1:Col7 * $10 \wedge 3$ |
| 1415 | Note 12 |  |  |  |
|  | CPUC Rate Group | Total Revenues | Revenue <br> associated with <br> Supplemental <br> Demand or <br> Energy |  |
| 16a | Domestic | S | S Energy |  |
| 16b | TOU-GS-1 | \$ | - \$ | - \$ - |
| 16 c | TC-1 | \$ | - \$ |  |
| 16d | TOU-GS-2 | \$ | - \$ - | - \$ - |
| 16e | TOU-GS-3 | \$ | - \$ - | - \$ - |
| 16 f | TOU-8-SEC | \$ | - \$ - |  |
| 16g | TOU-8-PRI | \$ | - \$ - |  |
| 16h | TOU-8-SUB | \$ | - \$ |  |
| 16 i | TOU-8-Standby-SEC | \$ | - \$ - | - \$ - |
| ${ }^{16 \mathrm{j}}$ | TOU-8-Standby-PRI | \$ | - \$ - | - \$ - |
| 16k | TOU-8-Standby-SUB | \$ | - \$ - | - \$ - |
| 161 | TOU-PA-2 | \$ | - \$ - | - \$ |
| 16 m | TOU-PA-3 | \$ | - \$ - | - \$ - |
| 16 n | Street Lighting | \$ | - \$ - |  |
| 17 |  |  |  | $\xrightarrow{-1}$ |
| 18 | Totals: | \$ | -18 |  |


19 Note

1) See Col 9 of Lines 35a 35b 35 c e
Sales forecast in total Giga-watt hours usage, represents the customers' total annual GWh usage. Based on same forecast as Gross Load forecast in Schedule 32 , Line 1 , but at customer meter level Does not include Backup GWh included in Column 4 (the sum of Column 3 and 4 equals total Sales Forecast).
)
2) Amount of energy included in the sales forecast that is not subject to transmission charges purs
3) Sales forecast pertaining to the sum of monthly maximum supplemental Mega-watt demand, applies to demand charge schedules
4) Net Forecast in total Giga-watt hours usage - represents the customers' annual Net GWh, applicable to Non-Demand Charge Schedules such as Residential or Small General Servic
Col11* population - use to set the total demand rate for the optional time-of-use schedules within the $\mathrm{GS}-1$ rate grou
5) Total demand rate for the optional time-of-use schedules within the GS-1 rate group, Line 1b2:Col10 $=$ Line 1b2:Col12 ( which $=$ Line 1b2:Col11 $/((L i n e 1 b: C o l 12+L$ Line1b:Col13) * 10^3 $)$
6) Sum of the TOU-8 Standby and TOU-8 Non-Standby billing determinants in Line 1:Col6
7) For TOU-8 Rates revenue $=$ Supplemental Demand Charge on Line 9 Column 8 * Maximum Demand on Lines 1 Column 6
8) For optional time-of-use schedules within the GS-1 rate group (Line16b:Col6), (Line $1 b_{2}$ :Col11 - Line 16 :Col3) / Line 1 b:Col12 $/ 10^{\wedge} 3$
9) For the non TOU-8-Standby rate group, it is the minimum of Line 16i:Col7, or the total demand rate in Line1:Col108
10) Rates associated with Rate Groups GS-2
11) Apolumn 2 (line 16 d and 16 e ) divided by the sum of the sum of the Billing Determinants in Column 8 (Line 1 d and 1 e ).
12) Applicable to the optional schedules that contain horse power charge such as PA-1
13) GWh for TOU-8-Standby-SEC, TOU-8-Standby-PRI, TOU-8-Standby-SUB Rate Groups are placed in TOU-8-SEC, TOU-8-PRI, TOU-8-SUB Rate Groups respectively

20
21
22

## 2 Rate Schedules in each CPUC Rate Group:

| 23 |
| :--- |
| 24 |



## Schedule 34

## Unfunded Reserves

## Determination of Unfunded Reserves

|  |  |  |
| :--- | :--- | :--- |

## (Line 17, Col 3)

Company Records - Input (Negative)
(27-Allocators, Line 9)

Company Records - Input (Negative)
27-Allocators, Line 9)

Company Records - Input (Negative)
Line $32 \times$ Line 33)

Line $34 \times$ Line 35)

\$

\$

$\qquad$

Notes:

1) Includes any Unfunded Reserves relating to accrued expenses included in Account 925 "Injuries and Damages",
reduced for any expected offsetting payments.

# RED-LINED VERSION OF <br> SCE'S TO TARIFF SHEETS REFLECTING THE PROPOSED FORMULA RATE 

## APPENDIX IX

## ATTACHMENT 1

## FORMULA RATE PROTOCOLS

## 1. INTRODUCTION

SCE shall calculate its Base Transmission Revenue Requirement ("Base TRR"), as defined in Section 3.6 of the main definitions section of this TO Tariff, using the formula rate that is presented in spreadsheet format in Attachment 2 to Appendix IX ("Formula Rate Spreadsheet"). ${ }^{1}$ The Formula Rate Spreadsheet contains fixed formulae that are only subject to change pursuant to Sections 205 and 206 of the Federal Power Act, and will be populated with data from SCE's annual Federal Energy Regulatory Commission ("FERC" or the "Commission") Form 1 filing or from other SCE records. The sources of the data used in the Formula Rate will be: (a) identified in the Formula Rate Spreadsheet by fixed references to specific locations in FERC Form 1, or (b) provided by SCE in accordance with Section 3 of these Protocols.

The Base TRR shall be calculated annually in accordance with the Formula Rate and shall be equal to the sum of the Prior Year TRR, the Incremental Forecast Period TRR, and the True Up Adjustment. Additionally, SCE shall include a Cost Adjustment in the Base TRR for the upcoming Rate Year in the event that a discrete cost of service item (e.g., individual O\&M expense, tax expense, or revenue credit) incurred anytime between the beginning of the Prior Year and the September 30 immediately preceding the Annual Update filing (i.e., a 21 month window) is a one-time item that will not recur in such Rate Year. Individual items shall not be aggregated for purpose of determining a discrete cost of service item. The discrete cost of service item must amount to at least $3 \%$ of the Base TRR in such Annual Update filing in order for a Cost Adjustment to be included as a component of the Base TRR. The Cost Adjustment shall be handled as follows:
a) If the discrete cost of service item occurred during the Prior Year, then the Cost Adjustment component of the Base TRR shall be an amount with the same magnitude but of the opposite sign as the discrete cost of service item. For example, if the discrete cost of service item is a $\$ 100$ million one-time property tax refund (a negative item) received during 2012 but which will not recur during $2014,+\$ 100$ million will be included as a Cost Adjustment component of the Base TRR in the Annual Update for the 2014 Rate Year. If the discrete cost of

[^32]service item is a $\$ 100$ million one-time O\&M cost (a positive item) incurred during 2012 that will not recur in 2014, - $\$ 100$ million will be included as a Cost Adjustment component of the Base TRR in the Annual Update for the 2014 Rate Year. Both examples assume the $3 \%$ threshold is met.
b) If the discrete cost of service item occurred between January 1 and September 30 of the year in which the Annual Update filing is submitted to FERC (i.e., the year before the upcoming Rate Year), then the Cost Adjustment component of the Base TRR shall be an amount with the same magnitude and the same sign as the discrete cost of service item. For example, if the discrete cost of service item is a $\$ 100$ million one-time property tax refund (a negative item) received during the first nine months of 2013 but which will not recur during 2014, - \$100 million will be included as a Cost Adjustment component of the Base TRR in the Annual Update for the 2014 Rate Year. If the discrete cost of service item is a $\$ 100$ million one-time O\&M cost (a positive item) incurred during the first nine months of 2013 that will not recur in 2014, + $\$ 100$ million will be included as a Cost Adjustment component of the Base TRR in the Annual Update for the 2014 Rate Year. Both examples assume the 3\% threshold is met.

If SCE includes a Cost Adjustment in its Base TRR, SCE shall include with its Annual Update an explanation of its belief that the discrete cost of service item that is the subject of such Cost Adjustment will not recur in the upcoming Rate Year.

The Wholesale Base TRR is equal to the Base TRR adjusted as follows (as set forth in Schedule 25): (1) Uncollectibles Expense is not included in the Wholesale Base TRR; (2) the Wholesale Rate Base Adjustment and associated Wholesale Expense Difference is included in the Wholesale TRR; (3) EEI dues and EPRI dues are excluded from the Wholesale Base TRR; and (4) Franchise Fees Expense included in the Wholesale Base TRR is lower than that included in the Base TRR due to the Franchise Fee Factor being applied to a lower Base TRR.

## 2. TERM OF THE FORMULA RATE

The Formula Rate shall become effective on the date the Commission determinesdanuary 1, 2018, and SCE's Base TRR shall be subject to true up beginning on that date in accordance with these Protocols. Retail and Wholesale transmission rates shall become effective on the date the Commission determinesdanuary 1, 2018, and shall be redetermined annually in accordance with these Protocols and the Formula Rate Spreadsheet. The Formula Rate will remain in effect without termination unless and until SCE files pursuant to Section 205 of the Federal Power Act to replace the Formula Rate with a successor transmission rate mechanism and the Commission accepts such successor transmission rate mechanism. This Formula Rate shall remain in effect until the date that the successor rate mechanism filing is made effective by the Commission.

## 3. PROCEDURES FOR UPDATING THE BASE TRR

For as long as this Formula Rate is in effect, SCE shall update its Base TRR for the upcoming Rate Year${ }^{2}$ according to the timeline and procedures described in this Section. A summary of the procedures for updating the Base TRR is set forth in the following table:

| Event | Date |
| :--- | :--- |
| Posting Date of Draft Annual Update | June 15 |
| Start of Information Requests | June 15 |
| Draft Annual Update Conference | June 15 - July 15 |
| End of Information Requests | November 1 |
| Annual Update filed with FERC | December 1 |
| Rate Goes into Effect | January 1 |

## a) Draft Annual Update

On or before June 15 of each year, SCE will post to its website (www.sce.com) its Draft Annual Update and will provide electronic notice of such posting to the Service List. ${ }^{3}$ The Draft Annual Update shall set forth the Base TRR for the upcoming Rate Year, and shall include populated versions of all Schedules comprising the Formula Rate in their native format with all formulas and links intact. In addition to the foregoing, the Draft Annual Update shall include the following:

1) All workpapers used in the calculation of the Base TRR. The workpapers shall be provided in their native format, with all formulas and links intact.
2) The Plant Study described in Section 9 of the Protocols in native format with all formulas and links intact, along with all workpapers prepared in support of the plant study, and a description of any changes in the methodology used to perform the Plant Study as compared with the Prior Year's Annual Update.

[^33]3) Workpapers supporting the inputs that appear in Schedule 27 in equivalent form to the workpapers provided in FERC Docket No. ER11-3697, Volume 4, Workpapers for Exhibit SCE-600, pages 1-268.
4) Workpapers that demonstrate the historical corporate overhead expenses recorded for ISO projects by Project Identification Number (PIN) that closed in the prior year and have accumulated ISO project costs greater than $\$ 5$ million.
5) Workpapers that demonstrate the derivation of the AFUDC rates applicable to all projects in the prior year.
6) Workpapers supporting the forecasted gross plant expenditures shown on Schedule 16.
7) A statement that identifies each ISO project (PIN) with total direct expenditures (recorded and forecast) greater than $\$ 5$ million projected to go into rate base during the forecast period. The statement will also include the monthly budgeted direct expenditures, to the extent such currently projected costs are shown on the most recent applicable SCE budget documents, and the total project cost of each project.
8) Workpapers showing the beginning of year and end of year outstanding network upgrade credits, as well as interest on network upgrade credits that is recorded in Account 252 listed by entity due those credits. The workpapers shall be provided in equivalent form to the workpapers entitled "Workpapers for Exhibit SCE-800" provided by SCE in FERC Docket No. ER11-3697.
9) Workpapers showing forecast period incentive Construction Work in Progress ("CWIP") projects by PIN and by month that support the values in Schedule 10 at lines 29-70 in equivalent form to the workpapers provided in FERC Docket No. ER11-3697, Volume 3, Workpapers for Exhibit SCE-500, pages 149-175.
10)A description of any Material Accounting Changes contained in the Draft Annual Update. ${ }^{4}$

[^34]11)A workpaper describing the nature and amount of each project/activity, the costs of which are booked to Account 930.2 and which are recovered under the Formula Rate. The workpaper shall include, for each account 930.2 line item cost shown in FERC Form 1, the following information: 1) Total FERC Form 1 cost; 2) Amount Included; 3) Amount Excluded; and 4) Formula rate reference to the reason for the exclusion(s).
12)A workpaper identifying each discrete $A \& G$ cost item that has been excluded from Schedule 20 of the Formula Rate (including both "positive exclusions" and "negative exclusions"), together with a summation of such items by account.
13)A description of any facilities SCE projects will change classification between CPUC and CAISO jurisdictions through the Rate Year. This description should include an estimated date for when the project will change classification, the reason for the classification change, and the proposed future rate recovery (i.e., whether through FERC or CPUC rates).
b) Draft Annual Update Conference

SCE will provide notice to parties on the Service List of a one-day meeting, to take place on or before July 15 of each year, to discuss the Draft Annual Update. By mutual agreement of SCE and the parties on the Service List, such a meeting may take place in-person, via telephone, or video-conference. SCE shall make appropriate personnel available for such meeting. Additional meetings to discuss the Draft Annual Update shall be scheduled as SCE and the parties on the Service List may mutually agree.
c) Information Requests

1) At any time from June 15 until November 1, parties on the Service List may submit reasonable information requests to SCE regarding the Draft Annual Update.
2) SCE shall make a good faith effort to respond to information requests in writing within ten (10) business days of receipt. Alternatively, if SCE in good faith believes that the information request is unreasonable, SCE may object to the request. SCE shall contemporaneously provide copies of all responses to all parties on the Service List that have indicated to SCE that they wish to receive such copies. If SCE objects to an information request, then SCE shall make a good faith effort to provide its objections within ten (10) business days of receipt of the information requests to the party serving the request. SCE shall include in its objection the basis for the objection. SCE and the party serving the information request on SCE will work cooperatively and in good
faith to resolve any questions, objections, or disputes relating to the information requests.
3) Responses to information requests shall not be designated as settlement communications or produced under the Commission's rules and regulations governing settlements, unless provided as a privileged settlement communication in a Commission proceeding being conducted under the Commission's settlement rules. SCE may mark materials provided in response to an information request as Protected Materials in accordance with Exhibit A to the Protocols. To the extent an information request response calls for the production of Protected Materials, SCE will only provide such materials to the parties with whom it has entered into a non-disclosure agreement that is included in Exhibit A.
4) To the extent SCE and any interested party(ies) are unable to resolve disputes related to information requests submitted in accordance with these Protocols, SCE or any interested party may petition the FERC to appoint an Administrative Law Judge as a discovery master. Neither SCE nor any interested party shall object to a request for a Discovery Master. The discovery master shall have the power to issue orders to resolve discovery disputes, as appropriate, in accordance with these Protocols and consistent with the FERC's discovery rules. The discovery master's orders shall be subject to appeal to the Commission and to the courts to the same extent and under the same rules as would be applicable to an Initial Decision issued under Rule 708 of the Commission's Rules of Practice and Procedure. In the event the Commission establishes hearing procedures for an Annual Update, the discovery master's responsibilities shall be transferred to the Presiding Judge for such hearing effective upon his or her appointment.
d) Annual Update
5) On or before December 1 of each year, SCE shall file with the Commission its Annual Update setting forth the Base TRR and associated rates for the upcoming Rate Year. It is expressly intended by these Protocols that the Commission will issue public notice of the Annual Update inviting public comment, and SCE shall request in its Annual Update filing that the Commission issue public notice of the Annual Update inviting public comment.
6) SCE shall identify in the Annual Update any corrections or other changes to the Draft Annual Update, and shall provide an explanation of the reason for the changes. SCE shall also include in the Annual Update any changes to the Draft Annual Update that it and any other party have agreed upon as of November 15.
7) The Annual Update shall not modify the Formula Rate or subject the Formula Rate to modification, and shall not constitute a rate change filing under Section 205 of the Federal Power Act. Any party may challenge the justness and reasonableness of SCE's implementation of its Formula Rate with respect to: (a) whether SCE has properly and reasonably applied the Formula Rate Spreadsheet and the procedures in these Protocols; (b) whether the costs to be recovered have been accurately stated, properly recorded and accounted for pursuant to applicable FERC accounting practices and procedures; (c) whether the costs to be recovered through the Base TRR and associated rates have been or will be prudently incurred; (d) whether SCE's projections have been reasonably made; (e) whether its calculation methodologies are consistent with the Formula Rate; (f) whether SCE has made the required filings under Section 8(a) of these Protocols to reflect any intervening change(s) to the Uniform System of Accounts or FERC Form 1; and (g) whether any Material Accounting Changes are reasonable and consistent with the Uniform System of Accounts.
8) The Base TRR set forth in the Annual Update and associated rates shall be effective on January 1 of the upcoming Rate Year.
9) Any party may comment on or protest the Annual Update. Any party may request that FERC establish hearing and/or settlement procedures regarding an Annual Update, and all parties reserve their rights to oppose such requests on their merits, but may not object to such requests on the basis that hearing and/or settlement procedures are prohibited by these Protocols or the Formula Rate Spreadsheet. Nothing in these Protocols shall act as a bar to a party raising an issue in comments or in protests to the Annual Update that it has not raised in a prior Annual Update proceeding (including pre-filing phases of such proceeding) or with respect to which it has not previously exercised its rights under the Federal Power Act. It is expressly intended by these Protocols that FERC issue an order taking action, assuming any action is requested, on the Annual Update if protests and/or comments on the Annual Update are filed.
10) In any Annual Update proceeding, SCE shall bear the burden, consistent with Section 205 of the Federal Power Act, of showing the justness and reasonableness of the implementation of its Formula Rate by demonstrating that: (a) it has properly and reasonably applied the Formula Rate Spreadsheet and the procedures in these Protocols; (b) the costs to be recovered have been accurately stated, properly recorded and accounted for pursuant to applicable FERC accounting practices and procedures; (c) its projections have been reasonably made; (d) its calculation methodologies are consistent with the Formula Rate; and (e) any Material Accounting Changes are reasonable and consistent with the Uniform System of Accounts; Nothing herein is intended to alter the burden of proof applied by the Commission with respect to prudence.
11) SCE will make any revisions to the Base TRR and associated rates that are required by a final ${ }^{5}$ Commission order with respect to each Annual Update. Unless otherwise ordered by the Commission, such revisions shall be effective as of the first day of the applicable Rate Year and shall be reflected, with interest calculated pursuant to the interest rate in Section 35.19a of the Commission's regulations, in the next subsequent Annual Update as a component of the True Up Adjustment. If the term of the Formula Rate is expiring so that there will be no future Annual Update, SCE shall include the TRR difference in the Final True Up Adjustment.
12) If SCE determines or concedes that a previously-filed Annual Update with a Prior Year not more than two years previous to the Prior Year of the current Annual Update contained errors that affected the True Up TRR calculated in that Annual Update, including but not limited to filed corrections to its FERC Form 1 that affect inputs to the Formula Rate, or errors in other input data used in determining the True Up TRR, SCE shall promptly serve notice to the Commission in the docket of the affected Annual Update that SCE intends to file an Amended Annual Update, with a brief description of the errors to be corrected in such filing. SCE shall additionally notify the entities that have participated in SCE's Annual Update filings of the errors and the upcoming Amended Annual Update. The Amended Annual Update shall:
i recalculate the True Up TRR for all affected Prior Years;
ii compare, on a monthly basis, the difference between the initial incorrect True Up TRR and the revised correct True Up TRR; and
iii determine the cumulative amount of the difference in (ii), including interest calculated pursuant to the interest rate in 18 C.F.R. § 35.19a.

The difference in (iii) shall be included as an additional component to SCE's True Up Adjustment in the subsequent Annual Update as a One Time True Up Adjustment in accordance with the Formula Rate.

If the difference in (iii) would not result in an increase to the True-Up TRR of more than $\$ 1$ million, however, then SCE need not submit to the Commission an Amended Annual Update, as described above, but may include the difference in (iii) in its Draft Annual Update, or, if the error is discovered after the posting of a Draft Annual Update on June 15, in an amended Draft Annual Update posted on SCE's website no later than October 31.
${ }^{5}$ All references in these Protocols to Commission orders or actions refer to the final form of such orders or actions (in accordance with the Federal Power Act and applicable Commission regulations, including without limitation Commission regulations with respect to a stay of a Commission order upon rehearing and/or an appeal), including as they may be modified as a result of a request for rehearing or Court appeal.

In the event that SCE has identified multiple input errors, SCE shall identify each such error and its correction individually. The amount proposed to be included in an Amended Annual Update, a Draft Annual Update, or an amended Draft Annual Update as a One Time True Up Adjustment shall be subject to scrutiny through the information exchange process and annual update procedures described in this Section 3.

## 4. THE ANNUAL TRUE UP ADJUSTMENT AND THE FINAL TRUE UP ADJUSTMENT

The Annual True Up Adjustment component of the Base TRR ensures that during the time the Formula Rate is in effect, SCE will recover its actual costs of owning and operating its ISO transmission facilities, as defined by the True Up TRR. The Annual True Up Adjustment is calculated for each Annual Update for the previous calendar year (the "Prior Year"), if the Formula Rate, or a previous formula rate, was in effect during some or all of that year, through the following steps:
a) Calculate SCE's actual costs during the Prior Year, as measured by the "True Up TRR." The True Up TRR, as defined in the Formula Rate, is equal to the Prior Year TRR as defined in the Formula Rate, except that all of the Rate Base components used in the True Up TRR are based on 13-month average values or beginning-of-year and end-of-year average values.
b) Attribute the True Up TRR to each month of the Prior Year as specifically defined in the Formula Rate.
c) Determine SCE's actual retail base transmission revenues attributable to the Formula Rate on a monthly basis for each month of the Prior Year, in accordance with the Formula Rate.
d) Compare SCE's monthly True Up TRR to SCE's monthly actual retail base transmission revenues. Each monthly difference shall be cumulated, including interest calculated on a monthly basis using the interest rate specified in the regulations of the Commission at 18 C.F.R § 35.19a, through the end of the Prior Year, in accordance with the Formula Rate to determine a "Shortfall or Excess Revenue in the Prior Year". The "Shortfall or Excess Revenue in the Prior Year" shall also include the "Shortfall or Excess Revenue in the Prior Year" from the previous Annual Update, as specifically included in Schedule 3 of the Formula Rate Spreadsheet, Schedule 3, Line 11, and any applicable One Time Adjustments.
e) As stated in Section 6 below, the True Up Adjustment included in the Base TRR effective January 1, 2018 shall include the Final True Up Adjustment for the 2016 year calculated pursuant to the Original Formula Rate. The Final True Up Adjustment for the 2017 year calculated pursuant to the Original Formula Rate shall be included in the True Up Adjustment for the Annual Update submitted by December 1, 2018. The True Up Adjustment included in the Base TRR effective January 1, 2020 shall include the Final True Up Adjustment for the 2018 year calculated pursuant to the Second Formula Rate. The True Up Adjustment included in the Base TRR effective January 1, 2021 shall include the Final True Up Adjustment for the portion of the 2019 year for which the Second Formula

In the event that this Formula Rate terminates, SCE shall calculate a Final True Up Adjustment. The Final True Up Adjustment shall cover the period of time ending on the expiration of the Formula Rate and beginning on the day after the period covered by the most recent Annual True Up Adjustment that was included in the Base TRR. For example, if the Formula Rate terminates on December 31, 2030, SCE will determine a Final True Up Adjustment in 2031 for calendar year 2030. Except as otherwise stated in this paragraph, the Final True Up Adjustment shall be determined using the same calculation methodology as the Annual True Up Adjustment.

Interest included in the Final True Up Adjustment shall be calculated through the date of the termination of the Formula Rate (or, in the event of a partial determination of the Final True Up Adjustment, through the end of the period covered by that partial determination). The Final True Up Adjustment shall be subject to the procedures described in Section 3 of the Protocols. If the Final True Up Adjustment reflects an undercollection by SCE, then SCE shall be entitled and required to recover the amount of this Final True Up Adjustment in SCE's successor transmission rates to this Formula Rate. If the Final True Up Adjustment reflects an overcollection by SCE, then SCE shall be required to refund the amount of this Final True Up Adjustment to its customers.

## 5. THE INCREMENTAL FORECAST PERIOD TRR

The Incremental Forecast Period TRR ("IFPTRR"), calculated in Schedule 2 (Incremental Forecast Period TRR) of the Formula Rate Spreadsheet, is a component of SCE's Base TRR that represents the amount of transmission revenue requirement that SCE anticipates during the upcoming Rate Year that is incremental to that reflected in the Prior Year TRR as a result of additions of plant in service (identified in Schedule 16 (Plant Additions) of the Formula Rate) and/or CWIP expenditures (identified in Schedule 10 (CWIP) of the Formula Rate) to Rate Base. The IFPTRR shall be calculated in accordance with the Formula Rate.

## 6. TRANSITION OF THE ORIGINAL AND SECOND FORMULA RATES TO SUCCESSORTHE FORMULA RATES

Pursuant to Section 4 of the Formula Rate Protocols for the Original Formula Rate, SCE is entitled and required to reflect the amount of any Final True Up Adjustment from the Original Formula Rate for the 2016 and 2017 years in its successor transmission rates. This Section 6 ensures that this requirement from the Original Formula Rate is implemented accurately.

The Formula Rate Base TRR and associated rates for the Rate Years 2018 and 2019 shall reflect a True Up Adjustment that is based on a True Up TRR for the years 2016 and 2017 respectively calculated pursuant to the Original Formula Rate. This shall be implemented in the rate filing for the 2018 Rate Year and the Annual Update for the 2019 Rate Year by including as a "One Time Adjustment" any difference in the True Up TRR for the Prior Years of 2016 and 2017 calculated under this Formula Rate and the

True Up TRR amounts calculated pursuant to the Original Formula Rate in Column 4 of Schedule 3 of the Formula Rate Spreadsheet. The One Time Adjustment included in the 2018 Rate Year filing will reflect the difference between the 2016 year True Up TRR
calculated pursuant to theis Second Formula Rate and the Original Formula Rate. The Annual Update for the 2019 Rate Year will reflect the difference between the 2017 year True Up TRR calculated pursuant to theis Second Formula Rate and the Original Formula Rate. The 2017 True Up TRR calculated pursuant to the Original Formula Rate shall include an amount of Excess Deferred Income Taxes for year-end 2017 relating to the 2017 Tax Cuts and Jobs Act as a component of the calculation of Accumulated Deferred Income Taxes ("ADIT") in Schedule 9 of the Formula Rate Spreadsheet created as a result of the change in the Federal Income Tax Rate. Such amount shall be included along with Account 190, 282, and 283 amounts in the calculation of End-of-Year "Total Accumulated Deferred Income Taxes" on Line 4 of Schedule 9. In the event that this Formula Rate does not become effective until after January 1, 2018, so that the Original Formula Rate remained in effect throughout part or all of 2018, the calculation of the True Up TRR for 2018 shall be based on a weighted average of the True Up TRRs calculated pursuant to the Original Formula Rate and thisFormula Rate, with the weighting being based on the number of days during the 2018 year each was in effect (and any years after 2018 will be treated similarly). The One Time Adjustment for any such years with two formula rates in effect shall be calculated based on the difference between the weighted average True Up TRRs and the True UpTRR calculated pursuant to this Formula Rate. Additionally, the True Up Adjustment submitted in the filing for Rate Year 2018 shall include as a One Time Adjustment any "Cumulative Excess or Shortfall in Revenue with Interest" through the end of 2015 calculated pursuant to the Original Formula Rate, as reflected in SCE's Annual UpdateFiling submitted in ER11-3697 on November 30, 2016, Schedule 3, Line 34, Column 8. The 2018 Rate Year filing and the 2019 Annual Update shall include as a workpaper a ealculation of these One Time Adjustments.

Additionally, any transition from one formula rate to its successor formula rate shall ensure that the True Up TRRs for any years for which a previous formula rate or formula rates were in effect during all or part of that year are calculated utilizing the formula rate, or formula rates, that were in effect during the year being trued up. This shall be implemented through a "One Time Adjustment" reflecting the difference between the True Up TRR calculated using the Formula Rate in effect at the time of the Annual Update, and the True Up TRR calculated pursuant to the formula rate, or formula rates, that were in effect during the year being trued up. In the event that any year being trued up has two or more formulas in effect during that year, the True Up TRR for that year shall be based on a weighted average of the True Up TRRs calculated pursuant to the formula rates in effect that year, with the weighting being based on the number of days during the year that each was in effect. Any Annual Update which includes a Final True Up Adjustment for a previous year shall include a workpaper with a calculation of the associated One Time Adjustments.

## 7. DEPRECIATION RATES

Depreciation rates for Transmission Plant, Distribution Plant, General Plant, and Intangible Plant shall be as stated in the Formula Rate Spreadsheet.

## 8. REVISIONS TO CERTAIN FORMULA RATE PROVISIONS

SCE will be required to make single-issue Section 205 filings to change the Formula Rate as provided in Section 8, parts (a) through (e). In addition to the single-issue filings provided for in this Section 8 and subject to the limitations set forth in Section 11, SCE may make Section 205 filings that present only a single issue or limited discrete issues for consideration by the Commission, i.e., proposing to change any one or more elements of its Formula Rate. Such filings shall not be governed by the provisions of this Section 8, and the parties and SCE reserve their rights with respect to any such filing.

In a proceeding commenced by such a single-issue Section 205 filing under Section 8, parts (a) and (b), the sole issues that can or shall be addressed are whether the changes proposed by SCE are consistent with these Protocols and are just and reasonable.

In a proceeding commenced by a single-issue filing under Section 8, part (c), the sole issues that can or shall be addressed are whether the changes proposed by SCE are just and reasonable and correctly implement the applicable California Public Utilities Commission ("CPUC") order.

In a proceeding commenced by a single-issue filing under Section 8, parts (d) and (e), the sole issue that can or shall be addressed is whether the changes proposed by SCE correctly implement the applicable CPUC order.

The proceedings commenced in response to the filings described in this Section shall not include or allow for consideration or examination of any other aspects of the Formula Rate or other issues associated with the Formula Rate, except to the extent that the proposed changes directly impact other Formula Rate components that are not the subject of the single-issue filing. All parties will have all applicable rights under the Federal Power Act and FERC's regulations with respect to such single-issue Section 205 filings, except as limited by this Section 8.
a) SCE will make a single-issue Section 205 filing to update the references in the Formula to reflect any changes to the format and/or content of the FERC Form 1 or the Uniform System of Accounts that affect the calculations set forth in the Formula in the event that a Commission order revises the format and/or content of the FERC Form 1 or the Uniform System of Accounts. This filing shall be submitted within sixty days of the implementation of any FERC decision to revise the FERC Form 1 or the Uniform System of Accounts, and shall be effective on the date of the revisions to the FERC Form 1 or Uniform System of Accounts, as applicable.
b) With respect to Post-Retirement Benefits Other than Pensions ("PBOPs"), the Formula Rate identifies an Authorized PBOPs Expense Amount in Note 3 on Schedule 20 (Administrative and General Expenses), which is initially stated as $\$ 40,171,333$. Beginning in 2019, SCE shall make a single-issue Section 205 filing by April 1 of each year to revise the Authorized PBOPs Expense Amount, seeking an effective date of January 1 of the year of the filing.
c) SCE will make a single-issue Section 205 filing seeking Commission approval to put in effect conforming changes to Schedule 21 of the Formula Rate any time that the CPUC adopts revisions to the Gross Revenue Sharing Mechanism ("GRSM"). SCE will make its filing with the Commission, as set forth in this Section, between January 1 and March 1 of the year following the year that the CPUC order became effective.
d) SCE will make a single-issue Section 205 filing to revise Schedule 33 of the Formula Rate determination of retail transmission rates to reflect any change in Rate Groups, Rate Schedules, or the design of retail rates applicable to each Rate Schedule subsequent to any final CPUC order that affects these aspects of retail transmission rates. SCE will make such a filing only if and when the change in Rate Groups, Rate Schedules, or the design of retail rates cannot otherwise be reflected through the normal operation of the Formula Rate. In the single-issue Section 205 filing to the Commission, SCE will propose revisions to Schedule 33 of the Formula Rate that conform to the CPUC order. SCE will make a filing under this Section 8(d) by the later of either the filing date for the next Annual Update following the CPUC ruling or sixty days after the CPUC ruling.
e) SCE will make a single-issue Section 205 filing to change the depreciation rates for General, Intangible or Distribution plant in Schedule 18 upon approval by the CPUC of revised depreciation rates for these plant categories. SCE shall make a filing at the Commission, as set forth in this section, between January 1 and March 1 of the year following the year that the CPUC order became effective.

## 9. DETERMINATION OF AMOUNT OF TRANSMISSION PLANT - ISO AND DISTRIBUTION PLANT - ISO

SCE shall perform for the Prior Year a study ("Plant Study") to determine:

- The amount of plant classified as Transmission in SCE's annual FERC Form 1 filing that is under the Operational Control of the ISO. Such amount shall be called Transmission Plant - ISO; and
- The amount of plant classified as Distribution in SCE's annual FERC Form 1 filing that is under the Operational Control of the ISO. Such amount shall be called Distribution Plant - ISO.

The Plant Study determination of Transmission Plant - ISO and Distribution Plant - ISO will correspond to the end-of-year plant values for transmission and distribution published in SCE's FERC Form 1, and also shall be based on actual end-of-year ISO Operational Control of facilities. SCE will identify in the Plant Study major transmission facilities that have moved to or from ISO Operational Control in the Prior Year. Additionally, in submitting its future CPUC General Rate Case applications, SCE shall exclude from its CPUC-jurisdictional cost of service forecast, the cost of transmission and distribution facilities that SCE projects will be under the Operational Control of the ISO during the test year.

The methodology used in the Plant Study to determine Transmission Plant - ISO and Distribution Plant - ISO shall be as follows:
a) For each Transmission account 350-359 and Distribution account 360-362, identify the year-end recorded gross plant amount.
b) For Transmission accounts 350-359 and Distribution accounts 360-362, classify the assets by each location into one of the following categories:

1) All ISO: All Transmission or Distribution assets at the location are under the Operational Control of the ISO.
2) Non-ISO: No Transmission or Distribution assets at the location are under the Operational Control of the ISO.
3) Mixed ISO and Non-ISO Substation: The Transmission or Distribution substation location has a mixture of assets under the Operational Control of the ISO and assets that are not under the Operational Control of the ISO.
4) Mixed ISO and Non-ISO Line: Transmission line locations that have a mixture of assets under the Operational Control of the ISO and assets that are not under the Operational Control of the ISO that need to be analyzed using the Transmission Line methodology.
5) Other: Assets for which there is not sufficient data to categorize into one of the above categories.

For all plant costs classified as (1) "All ISO", classify all such plant costs as Transmission Plant - ISO or Distribution Plant - ISO, as appropriate. For all plant costs classified as (2) "Non-ISO", classify none of such plant costs as "Transmission Plant - ISO" or "Distribution Plant - ISO."

For all plant costs classified as (3) "Mixed ISO and Non-ISO Substation," perform an analysis of plant costs based on individual components of the substation. Component plant costs that are under the Operational Control of the ISO shall be attributed to either Transmission Plant - ISO or Distribution Plant - ISO, as appropriate. Component plant costs that are not under the Operational Control of the ISO shall not be attributed to either Transmission Plant - ISO or Distribution Plant - ISO. Dual Use assets (supporting both ISO and non-ISO plant) shall be allocated to Transmission Plant - ISO or Distribution Plant - ISO based on the percentage of ISO assets for the location.

For all plant costs classified as (4) "Mixed ISO and Non-ISO Line," apply the methodology set forth in Section 9(c) below to classify such costs.

For all plant costs classified as (5) "Other" in a location, classify such costs as Transmission Plant - ISO or Distribution Plant - ISO in proportion to the total percentage of Transmission Plant - ISO or Distribution Plant - ISO determined in parts (1) through (4) for that location.
c) Transmission line costs (including any amounts in accounts 350, 352, and 353) required to be analyzed under the Transmission Line methodology pursuant to (b) (4) above shall be attributed to Transmission Plant - ISO according to the following methodology:

1) For each location, determine the total line miles and total line miles that are under the Operational Control of the ISO. Determine the percent of total line miles under the Operational Control of the ISO to total line miles at that location. This calculation shall be done separately for overhead and underground facilities in the location.
2) Determine the amount of Transmission Plant - ISO by applying the percent determined in (1) to the appropriate plant costs by account at that location.

SCE shall present a summary of the Plant Study for the Prior Year in each annual Draft Annual Update, in accordance with the Formula Rate.

## 10. DETERMINATION OF AMOUNT OF ISO OPERATION AND MAINTENANCE EXPENSE

SCE shall annually determine the amount of recorded Transmission and Distribution Operation and Maintenance ("O\&M") expenses that is attributable to facilities under the Operational Control of the ISO ("ISO O\&M Expense"). The method used to determine ISO O\&M Expense shall be to allocate total recorded O\&M Expenses as stated in FERC Form 1 based on specific allocation factors applied to the expenses recorded to the O\&M accounts set forth in Schedule 19 of the Formula Rate Spreadsheet.

In the event that SCE experiences an extraordinary event, resulting in costs otherwise recoverable through the Formula Rate in a year to be recorded to Account 435 (Extraordinary Deductions) of the Uniform System of Accounts, SCE shall recover the full amount of such Account 435 costs, including any expenses or return on capital, in accordance with the Commission Order authorizing such recovery.

## 11. RESERVATION OF RIGHTS

a) Nothing in these Protocols shall be deemed to limit in any way the right of any party admitted as an intervenor to this Formula Rate proceeding or admitted as an intervenor to any future proceeding involving an Annual Update to file a request for relief under any applicable provision of the FPA and/or the Commission's regulations or participate in Annual Update proceedings.
b) Nothing in these Protocols shall be deemed to limit in any way SCE's right to file unilaterally, pursuant to Section 205 of the FPA and the regulations thereunder, to seek to change or cancel the Formula Rate, or to submit any other request for relief under any applicable provision of the FPA and/or the Commission's regulations.
c) The party filing a proposed change to the Formula Rate Spreadsheet or Formula

Rate Protocols under Section 205 or 206 of the FPA bears the standard burdens associated with such a filing.

## 12. USE OF INFORMATION

Information produced pursuant to these Protocols may be used in any proceeding concerning the Formula Rate Spreadsheet, the Protocols, or the Annual Update; provided, however, that to the extent that any information provided pursuant to these Protocols has been designated and provided as Protected Materials, subject to the provisions of Exhibit A to these Protocols, the use of such information shall be governed by Exhibit A.

This section shall not apply to any information produced in the course of Commissionestablished settlement proceedings pursuant to the Commission's rules and regulations governing settlement.

## EXHIBIT A

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

## PROTECTIVE ORDER APPLICABLE TO INFORMATION PRODUCED BY SOUTHERN CALIFORNIA EDISON COMPANY PURSUANT TO THE FORMULA RATE PROTOCOLS

1. This Exhibit (hereinafter referred to as the "Protective Order") shall govern the use of all Protected Materials produced by, or on behalf of, Southern California Edison Company ("SCE") pursuant to the SCE Formula Rate Protocols.
2. This Protective Order applies to the following two categories of materials: (A) A Participant may designate as protected those materials which customarily are treated by that Participant as sensitive or proprietary, which are not available to the public, and which, if disclosed freely, would subject that Participant or its customers to risk of competitive disadvantage or other business injury; and (B) A Participant shall designate as protected those materials which contain critical energy infrastructure information, as defined in 18 CFR§ 388.113(c)(1) ("Critical Energy Infrastructure Information").
3. Definitions -- For purposes of this Order:
(a) The term "Participant" shall mean a Participant as defined in 18 CFR § 385.102(b).
(b) (1) The term "Protected Materials" means (A) materials (including depositions) provided by a Participant in response to discovery requests and designated by such Participant as protected; (B) any information contained in or obtained from such designated materials; (C) any other materials which are made subject to this Protective Order by the Presiding Administrative Law Judge appointed upon the Annual Update being set for hearing and/or settlement procedures or by the Discovery Master appointed pursuant to the Formula Rate Protocols (both referred to herein as the "Presiding Judge"), by the Commission, by any court or other body having appropriate authority, or by agreement of the Participants; (D) notes of Protected Materials; and (E) copies of Protected Materials. The Participant producing the Protected Materials shall physically
mark them on each page as "PROTECTED MATERIALS" or with words of similar import as long as the term "Protected Materials" is included in that designation to indicate that they are Protected Materials. If the Protected Materials contain Critical Energy Infrastructure Information, the Participant producing such information shall additionally mark on each page containing such information the words "Contains Critical Energy Infrastructure Information B Do Not Release".
(2) The term "Notes of Protected Materials" means memoranda, handwritten notes, or any other form of information (including electronic form) which copies or discloses materials described in Paragraph 3(b)(1). Notes of Protected Materials are subject to the same restrictions provided in this order for Protected Materials except as specifically provided in this order.
(3) Protected Materials shall not include (A) any information or document that has been filed with and accepted into the public files of the Commission, or contained in the public files of any other federal or state agency, or any federal or state court, unless the information or document has been determined to be protected by such agency or court, or (B) information that is public knowledge, or which becomes public knowledge, other than through disclosure in violation of this Protective Order. Protected Materials do include any information or document contained in the files of the Commission that has been designated as Critical Energy Infrastructure Information.
(c) The term "Non-Disclosure Certificate" shall mean the certificate annexed hereto by which Participants who have been granted access to Protected Materials shall certify their understanding that such access to Protected Materials is provided pursuant to the terms and restrictions of this Protective Order, and that such Participants have read the Protective Order and agree to be bound by it. All Non-Disclosure Certificates shall be served on all parties on the Service List, as defined in the SCE Formula Rate Protocols.
(d) The term "Reviewing Representative" shall mean a person who has signed a Non-Disclosure Certificate and who is:
(1) Commission Trial Staff;
(2) an attorney who has made an appearance for a Participant;
(3) attorneys, paralegals, and other employees associated with an attorney described in Subparagraph (2);
(4) an expert or an employee of an expert retained by a Participant for the purpose of advising, preparing for or testifying in connection with the Annual Update for which the information was requested;
(5) a person designated as a Reviewing Representative by order of the Presiding Judge or the Commission; or
(6) employees or other representatives of Participants with significant responsibility for SCE's Formula Rate.
4. Protected Materials shall be made available under the terms of this Protective Order only to Participants and only through their Reviewing Representatives as provided in Paragraphs 7-9.
5. Protected Materials shall remain available to Participants until the date that any Commission proceeding relating to the Protected Material is concluded and no longer subject to judicial review. If requested to do so in writing after that date, the Participants shall, within fifteen days of such request, return the Protected Materials (excluding Notes of Protected Materials) to the Participant that produced them, or shall destroy the materials, except that copies of filings, official transcripts and exhibits in this proceeding that contain Protected Materials, and Notes of Protected Material may be retained, if they are maintained in accordance with Paragraph 6, below. Within such time period each Participant, if requested to do so, shall also submit to the producing Participant an affidavit stating that, to the best of its knowledge, all Protected Materials and all Notes of Protected Materials have been returned or have been destroyed or will be maintained in accordance with Paragraph 6. To the extent Protected Materials are not returned or destroyed, they shall remain subject to the Protective Order.
6. All Protected Materials shall be maintained by the Participant in a secure place. Access to those materials shall be limited to those Reviewing Representatives specifically authorized pursuant to Paragraphs 8-9. The Secretary shall place any Protected Materials filed with the Commission in a non-public file. By placing such documents in a nonpublic file, the Commission is not making a determination of any claim of privilege. The Commission retains the right to make determinations regarding any claim of privilege and the discretion to release information necessary to carry out its jurisdictional responsibilities. For documents submitted to Commission Trial Staff ("Staff"), Staff shall follow the notification procedures of 18 CFR § 388.112 before making public any Protected Materials.
7. Protected Materials shall be treated as confidential by each Participant and by the Reviewing Representative in accordance with the certificate executed pursuant to

Paragraph 9. Protected Materials shall not be used except as necessary under SCE's Formula Rate Protocols, nor shall they be disclosed in any manner to any person except a Reviewing Representative who is engaged in working on SCE's Annual Update for which the information was requested and who needs to know the information in order to carry out such responsibilities. Reviewing Representatives may make copies of Protected Materials, but such copies become Protected Materials. Reviewing Representatives may make notes of Protected Materials, which shall be treated as Notes of Protected Materials if they disclose the contents of Protected Materials.
8. (a) If a Reviewing Representative's scope of employment includes the marketing of energy, the direct supervision of any employee or employees whose duties include the marketing of energy, the provision of consulting services to any person whose duties include the marketing of energy, or the direct supervision of any employee or employees whose duties include the marketing of energy, such Reviewing Representative may not use information contained in any Protected Materials obtained under SCE's Formula Rate Protocols to give any Participant or any competitor of any Participant a commercial advantage.
(b) In the event that a Participant wishes to designate as a Reviewing Representative a person not described in Paragraph 3 (d) above, the Participant shall seek agreement from the Participant providing the Protected Materials. If an agreement is reached that person shall be a Reviewing Representative pursuant to Paragraphs 3(d) above with respect to those materials. If no agreement is reached, the Participant shall submit the disputed designation to the Presiding Judge for resolution.
9. (a) A Reviewing Representative shall not be permitted to inspect, participate in discussions regarding, or otherwise be permitted access to Protected Materials pursuant to this Protective Order unless that Reviewing Representative has first executed a NonDisclosure Certificate; provided, that if an attorney qualified as a Reviewing Representative has executed such a certificate, the paralegals, secretarial and clerical personnel under the attorney's instruction, supervision or control need not do so. A copy of each Non-Disclosure Certificate shall be provided to counsel for the Participant asserting confidentiality prior to disclosure of any Protected Material to that Reviewing Representative.
(b) Attorneys qualified as Reviewing Representatives are responsible for ensuring that persons under their supervision or control comply with this order.
10. Any Reviewing Representative may disclose Protected Materials to any other Reviewing Representative as long as the disclosing Reviewing Representative and the receiving Reviewing Representative both have executed a Non-Disclosure Certificate. In the event that any Reviewing Representative to whom the Protected Materials are disclosed ceases to be engaged in working on the Annual Update, as set forth above, or is employed or retained for a position whose occupant is not qualified to be a Reviewing Representative under Paragraph 3(d), access to Protected Materials by that person shall be terminated. Even if no longer engaged in this proceeding, every person who has executed a NonDisclosure Certificate shall continue to be bound by the provisions of this Protective Order and the certification.
11. Subject to Paragraph 18, the Presiding Administrative Law Judge shall resolve any disputes arising under this Protective Order. Prior to presenting any dispute under this Protective Order to the Presiding Administrative Law Judge, the parties to the dispute shall use their best efforts to resolve it. Any participant that contests the designation of materials as protected shall notify the party that provided the protected materials by specifying in writing the materials the designation of which is contested. This Protective Order shall automatically cease to apply to such materials five (5) business days after the notification is made unless the designator, within said 5-day period, files a motion with the Presiding Administrative Law Judge, with supporting affidavits, demonstrating that the materials should continue to be protected. In any challenge to the designation of materials as protected, the burden of proof shall be on the participant seeking protection. If the Presiding Administrative Law Judge finds that the materials at issue are not entitled to protection, the procedures of Paragraph 18 shall apply. The procedures described above shall not apply to protected materials designated by a Participant as Critical Energy Infrastructure Information. Materials so designated shall remain protected and subject to the provisions of this Protective Order, unless a Participant requests and obtains a determination from the Commission's Critical Energy Infrastructure Information Coordinator that such materials need not remain protected.
12. All copies of all documents reflecting Protected Materials, including the portion of the hearing testimony, exhibits, transcripts, briefs and other documents which refer to Protected Materials, shall be filed and served in sealed envelopes or other appropriate containers endorsed to the effect that they are sealed pursuant to this Protective Order. Such documents shall be marked "PROTECTED MATERIALS" and shall be filed under seal and served under seal upon the Presiding Judge and all Reviewing Representatives who are on the service list. Such documents containing Critical Energy Infrastructure Information shall be additionally marked "Contains Critical Energy Infrastructure Information - Do Not Release". For anything filed under seal, redacted versions or, where an entire
document is protected, a letter indicating such, will also be filed with the Commission and served on all parties on the service list and the Presiding Judge. Counsel for the producing Participant shall provide to all Participants who request the same, a list of Reviewing Representatives who are entitled to receive such material. Counsel shall take all reasonable precautions necessary to assure that Protected Materials are not distributed to unauthorized persons.
13. If any Participant desires to include, utilize or refer to any Protected Materials or information derived therefrom in testimony or exhibits during a hearing under the SCE Formula Rate Protocols in such a manner that might require disclosure of such material to persons other than reviewing representatives, such participant shall first notify both counsel for the disclosing participant and the Presiding Judge of such desire, identifying with particularity each of the Protected Materials. Thereafter, use of such Protected Material will be governed by procedures determined by the Presiding Judge.
14. Nothing in this Protective Order shall be construed as precluding any Participant from objecting to the use of Protected Materials on any legal grounds.
15. Nothing in this Protective Order shall preclude any Participant from requesting the Presiding Judge, the Commission, or any other body having appropriate authority, to find that this Protective Order should not apply to all or any materials previously designated as Protected Materials pursuant to this Protective Order. The Presiding Judge may alter or amend this Protective Order as circumstances warrant at any time during the course of this proceeding.
16. Each party governed by this Protective Order has the right to seek changes in it as appropriate from the Presiding Judge or the Commission.
17. All Protected Materials filed with the Commission, the Presiding Judge, or any other judicial or administrative body, in support of, or as a part of, a motion, other pleading, brief, or other document, shall be filed and served in sealed envelopes or other appropriate containers bearing prominent markings indicating that the contents include Protected Materials subject to this Protective Order. Such documents containing Critical Energy Infrastructure Information shall be additionally marked "Contains Critical Energy Infrastructure Information - Do Not Release."
18. If the Presiding Judge finds at any time in the course of a proceeding that all or part of the Protected Materials need not be protected, those materials shall, nevertheless, be subject to the protection afforded by this Protective Order for three (3) business days from the date of issuance of the Presiding Judge's determination, and if the Participant seeking protection files an interlocutory
appeal or requests that the issue be certified to the Commission, for an additional seven (7) business days. None of the Participants waives its rights to seek additional administrative or judicial remedies after the Presiding Judge's decision respecting Protected Materials or Reviewing Representatives, or the Commission's denial of any appeal thereof. The provisions of 18 CFR §§ 388.112 and 388.113 shall apply to any requests under the Freedom of Information Act. (5 U.S.C. § 552) for Protected Materials in the files of the Commission.
19. Nothing in this Protective Order shall be deemed to preclude any Participant from independently seeking through discovery in any other administrative or judicial proceeding information or materials produced under the SCE Formula Rate Protocols under this Protective Order.
20. None of the Participants waives the right to pursue any other legal or equitable remedies that may be available in the event of actual or anticipated disclosure of Protected Materials.
21. The contents of Protected Materials or any other form of information that copies or discloses Protected Materials shall not be disclosed to anyone other than in accordance with this Protective Order and shall be used only in connection with this (these) proceeding(s). Any violation of this Protective Order and of any NonDisclosure Certificate executed hereunder shall constitute a violation of an order of the Commission.

## UNITED STATES OF AMERICA <br> FEDERAL ENERGY REGULATORY COMMISSION


#### Abstract

NON-DISCLOSURECERTIFICATE I hereby certify my understanding that access to Protected Materials is provided to me pursuant to the terms and restrictions of the Protective Order under the Southern California Edison Formula Rate Protocols, that I have been given a copy of and have read the Protective Order, and that I agree to be bound by it. I understand that the contents of the Protected Materials, any notes or other memoranda, or any other form of information that copies or discloses Protected Materials shall not be disclosed to anyone other than in accordance with that Protective Order. I acknowledge that a violation of this certificate constitutes a violation of an order of the Federal Energy Regulatory Commission.


By:
Printed Name: $\qquad$
Title: $\qquad$
Representing: $\qquad$
Date: $\qquad$

## Attachment 2 to Appendix IX

Formula Rate Spreadsheet

Table of Contents

| Worksheet Name | Schedule | Purpose |
| :---: | :---: | :---: |
| Overview |  | Base TRR Components. |
| BaseTRR | 1 | Full Development of Retail and Wholesale Base TRRs |
| IFPTRR | 2 | Calculation of the Incremental Forecast Period TRR |
| TrueUpAdjust | 3 | Calculation of the True Up Adjustment |
| TUTRR | 4 | Calculation of the True Up TRR |
| ROR | 5 | Determination of Capital Structure |
| PlantInService | 6 | Determination of Plant In Service balances |
| PlantStudy | 7 | Summary of Split of T\&D Plant into ISO and Non-ISO |
| AccDep | 8 | Calculation of Accumulated Depreciation |
| ADIT | 9 | Calculation of Accumulated Deferred Income Taxes |
| CWIP | 10 | Presentation of Prior Year CWIP and Forecast Period Incremental CWIP |
| PHFU | 11 | Calculation of Plant Held for Future Use |
| AbandonedPlant | 12 | Calculation of Abandoned Plant |
| WorkCap | 13 | Calculation of Materials and Supplies and Prepayments |
| IncentivePlant | 14 | Summary of Incentive Plant balances in the Prior Year |
| IncentiveAdder | 15 | Calculation of Incentive Adder component of the Prior Year TRR |
| PlantAdditions | 16 | Forecast Additions to Net Plant |
| Depreciation | 17 | Calculation of Depreciation Expense |
| DepRates | 18 | Presentation of Depreciation Rates |
| OandM | 19 | Calculation of Operations and Maintenance Expense |
| AandG | 20 | Calculation of Administrative and General Expense |
| RevenueCredits | 21 | Calculation of Revenue Credits |
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| RegAssets | 23 | Calculation of Regulatory Assets/Liabilities and Regulatory Debits |
| CWIPTRR | 24 | Calculation of Contribution of CWIP to TRRs |
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| TaxRates | 26 | Calculation of Composite Tax Rate |
| Allocators | 27 | Calculation of Allocation Factors |
| FFU | 28 | Calculation of Franchise Fees Factor and Uncollectibles Expense Factor |
| WholesaleTRRs | 29 | Calculation of components of SCE's Wholesale TRR |
| Wholesale Rates | 30 | Calculation of SCE's Wholesale transmission rates |
| HVLV | 31 | Calculation of High and Low Voltage percentages of Gross Plant |
| GrossLoad | 32 | Presentation of forecast Gross Load for wholesale rate calculations |
| RetailRates | 33 | Calculation of retail transmission rates |
| Unfunded Reserves | 34 | Calculation of Unfunded Reserves |

## Overview

## Overview of SCE Retail Base TRR

SCE's retail Base Transmission Revenue Requirement is the sum of the following components:

## TRR Component

Prior Year TRR
Incremental Forecast Period TRR
True-Up Adjustment
Cost Adjustment
Base TRR (retail)

Amount

| $\$$ | - |
| :--- | :--- |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ |  |

These components represent the following costs that SCE incurs:

1) The Prior Year TRR component is the TRR associated with the Prior Year (most recent calendar year). The Prior Year TRR is calculated using End-of-Year Rate Base values, as set forth in the "1-BaseTRR" Worksheet
2) The Incremental Forecast Period TRR is the component of Base TRR associated with forecast additions to in-service plant or CWIP, as set forth in the "2-IFPTRR" Worksheet.
3) The True Up Adjustment is a component of the Base TRR that reflects the difference between projected and actual costs, as set forth in the "3-TrueUpAdjust" Worksheet.
4) The Cost Adjustment component may be included as provided in the Tariff protocols

Southern California Edison Company

| Formula Transmission Rate |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | FERC Form 1 Reference |  |  |  |
| Line |  | Notes | or Instruction |  | Value |  |
| RETURN AND CAPITALIZATION CALCULATIONS |  |  |  |  |  |  |
| Debt |  |  |  |  |  |  |
| 37 | Long Term Debt Amount |  | 5-ROR-1, Line 1312 | \$ |  | - |
| 38 | Cost of Long Term Debt |  | Line 37 * Line 39 | \$ |  | - |
| 39 | Long Term Debt Cost Percentage |  | 5-ROR-3, Line 1210 |  |  | \% |
| Preferred Stock |  |  |  |  |  |  |
| 40 | Preferred Stock Amount |  | 5-ROR-1, Line 1716 | \$ |  | - |
|  | Cost of Preferred Stock |  | Line 40 * Line 42 | \$ |  | - |
|  | Preferred Stock Cost Percentage |  | 5-ROR-4, Line 9 - \% |  |  |  |
| Equity |  |  |  |  |  |  |
| 43 | Common Stock Equity Amount |  | 5-ROR-1, Line 2321 | \$ |  | - |
| 44 | Total Capital |  | Line 37 + Line 40 + Line 43 | \$ |  | - |
|  | Capital Percentages |  |  |  |  |  |
| 45 | Long Term Debt Capital Percentage |  | Line 37 / Line 44 |  |  | \% |
| 46 | Preferred Stock Capital Percentage |  | Line 40 / Line 44 |  |  | \% |
| 47 | Common Stock Capital Percentage |  | Line 43 / Line 44 |  |  | \% |
|  |  |  | Line 45 + Line 46+ Line 47 |  |  | \% |
|  | Annual Cost of Capital Components |  |  |  |  |  |
| 48 | Long Term Debt Cost Percentage |  | Line 39 |  |  | \% |
| 49 | Preferred Stock Cost Percentage |  | Line 42 |  |  | \% |
| 50 | Return on Common Equity | Note 2 | SCE Return on Equity |  | 17.62 |  |
|  | Calculation of Cost of Capital Rate |  |  |  |  |  |
| 51 | Weighted Cost of Long Term Debt |  | Line 39 * Line 45 |  |  | \% |
| 52 | Weighted Cost of Preferred Stock |  | Line 42 * Line 46 |  |  | \% |
| 53 | Weighted Cost of Common Stock |  | Line 47 * Line 50 |  |  | - \% |
| 54 | Cost of Capital Rate |  | Line 51 + Line 52 + Line 53 |  |  | \% |
| 55 | Equity Rate of Return Including Common and Preferred Stock | Used for Tax calculation | Line $52+$ Line 53 |  |  | \% |
|  | Return on Capital: Rate Base times Cost of Capital Rate |  | Line 18 * Line 54 | \$ |  | - |

## INCOME TAXES

57 Federal Income Tax Rate
58 State Income Tax Rate
59 Composite Tax Rate

60 Amortization of Excess Deferred Tax Liability
Note 3
61 Investment Tax Credit Flowed Through
N 3
62 South Georgia Income Tax Adjustment Credits and Other

Income Taxes
Income Taxes $=[((R B * E R)+D) *(C T R /(1-C T R))]+C O /(1-C T R)$

[^35]26-Tax Rates, Line 1
26-Tax Rates, Line 8
(L57 + L58) - (L57 * L58

|  | $\$$ | - |
| :--- | :--- | ---: |
| Line 60 + Line 61+ Line 62 | $\$$ | - |
| Formula on Line 65 | $\$$ | - |

Line 18
Line 55
Line 59
Line 63
SCE Records

Southern California Edison Company
Cells shaded yellow are input cells


## TOTAL BASE TRANSMISSION REVENUE REQUIREMENT

Calculation of Base Transmission Revenue Requirement
82 Prior Year TRR
83 Incremental Forecast Period TRR
84 True Up Adjustment
85 Cost Adjustment

Note 4

For Retail Purposes

## Line 81

2-IFPTRR, Line 82
3-TrueUpAdjust, Line 30
$L 82+L 83+L 84+L 85$

Line 86
25-WholesaleDifference, Line 45
Line 87 + Line 88

\$

Wholesale Base Transmission Revenue Requirement
87 Base TRR (Retail)
88 Wholesale Difference to the Base TRR
89 Wholesale Base Transmission Revenue Requirement

## Notes:

1) Any amount of "Sub-Total Local Taxes" or "Payroll Taxes Expense" may be excluded if appropriate with the provision of a workpaper showing the reason for the exclusion and the amount of the exclusion.
2) No change in Return on Common Equity will be made absent a Section 205 filing at the Commission.

Does not include any project-specific ROE adders.
In the event that the Return on Common Equity is revised from the initial value, enter cite to Commission Order approving the revised ROE on following line. Order approving revised ROE:
3) No change in the South Georgia Income Tax Adjustment "Credits and Other" term will be made absent a filing at the Commission. Investment Tax Credit Flowed Through amount shall be negative $\$ 520,000$ through the Prior Year of 2018, negative $\$ 183,000$ for the Prior Year of 2019, and $\$ 0$ thereafter.
4) Cost Adjustment may be included as provided in the Tariff protocols.

Schedule 2
Incremental Forecast Period TRR

## Calculation of Incremental Forecast Period TRR ("IFPTRR")

The IFP TRR is equal to the sum of:

1) Forecast Plant Additions * AFCR
2) Forecast Period Incremental CWIP * AFCR for CWIP
3) Calculation of Annual Fixed Charge Rates:
```
a) Annual Fixed Charge Rate for CWIP ("AFCRCWIP")
    AFCRCWIP represents the return and income tax costs associated with $1 of CWIP,
    expressed as a percent.
    AFCRCWIP = CLTD + (COS * (1/(1-CTR)))
    where:
    CLTD = Weighted Cost of Long Term Debt
    COS = Weighted Cost of Common and Preferred Stock
    CTR = Composite Tax Rate
Reference
Wtd. Cost of Long Term Debt: - \% 1-BaseTRR, Line 51
Wtd. Cost of Common + Pref. Stock: \(\quad-\% \quad\) 1-BaseTRR, Line 55
Composite Tax Rate: \(\quad-\% \quad\) 1-BaseTRR, Line 59
AFCRCWIP \(=\quad-\% \quad\) Line \(12+(\) Line 13 * (1/(1-Line 14) \())\)
```

b) Annual Fixed Charge Rate ("AFCR")

The AFCR is calculated by dividing the Prior Year TRR (without CWIP related costs) by Net Plant:

AFCR $=($ Prior Year TRR - CWIP-related costs) $/$ Net Plant

Determination of Net Plant:
Reference
Transmission Plant-ISO: \$ - 6-PlantInService, Line 13
Distribution Plant - ISO: \$ - 6-PlantInService, Line 16
Transmission Dep. Reserve - ISO: \$ - 8-AccDep, Line 13
Distribution Dep. Reserve - ISO: \$ - 8-AccDep, Line 16
Net Plant: \$ $\quad$ (L27 + L28) - (L29 + L30)

## Determination of Prior Year TRR without CWIP related costs:

a) Determination of CWIP-Related Costs

1) Direct (without ROE adder) CWIP costs

CWIP Plant - Prior Year: \$ AFCRCWIP:
Direct CWIP Related Costs: \$

- 10-CWIP, L 13 C1
- \% Line 16
- Line 37 * Line 38


## 2) CWIP ROE Adder costs:

IREF: \$ - 15-IncentiveAdder, Line 3

Tehachapi CWIP Amount: \$ - 10-CWIP, Line 13
Tehachapi ROE Adder \%: - \% 15-IncentiveAdder, Line 5
Tehachapi ROE Adder \$: \$ - Formula on Line 52

DCR CWIP Amount: \$ - 10-CWIP, Line 13
DCR ROE Adder \%: - \% 15-IncentiveAdder, Line 6
DCR ROE Adder \$: \$ - Formula on Line 52

ROE Adder \$ = (CWIP/\$1,000,000) * IREF * (ROE Adder/1\%)
CWIP Related Costs wo FF\&U: \$ - Line 39 + Line 46 + Line 50
FF\&U Expenses: \$ - (28-FFU, L5 FF Factor + U Factor) * L54
CWIP Related Costs with FF\&U: \$ - Line 54 + Line 55

Schedule 2
Incremental Forecast Period TRR
b) Determination of AFCR:

CWIP Related Costs wo FF\&U: \$
Prior Year TRR wo FF\&U: \$ Prior Year TRR wo CWIP Related Costs: \$
$75 \%$ of O\&M and A\&G in Prior Year TRR: \$ AFCR:
2) Calculation of IFP TRR

Forecast Plant Additions: \$ AFCR:
AFCR * Forecast Plant Additions: \$
Forecast Period Incremental CWIP: \$ AFCRCWIP:
AFCRCWIP * FP Incremental CWIP: \$
IFPTRR without FF\&U: \$
Franchise Fees Expense: \$ Uncollectibles Expense: \$

Incremental Forecast Period TRR: \$

- Line 54
- 1-BaseTRR, Line 78
- Line 61 - Line 60
- (1-BaseTRR, Line 66 + Line 67) *. 75
- \% (Line 62 - Line 63) / Line 31


## Reference

- 16-PlantAdditions, L 25, C10
- \% Line 64
- Line 69 * Line 70
- 10-CWIP, L 54, C8
- \% Line 16
- Line 73 * Line 74
- $\quad$ Line $71+$ Line 75
- Line 77 * FF (from 28-FFU, L 5)
- Line 77 * U (from 28-FFU, L 5)
- Line 77 + Line 79 + Line 80


## Calculation of True Up Adjustment Component of TRR

1) Summary of True Up Adjustment calculation:
a) Attribute True Up TRR to months in the Prior Year (see Note \#1) to determine "Monthly True Up TRR" for each month (see Note \#2).
b) Determine monthly retail transmission revenues attributable to this formula transmission rate received during Prior Year.
c) Compare costs in (a) to revenues in (b) on a monthly basis and determine "Cumulative Excess (-) or Shortfall (+) in Revenue with Interest".
d) Include previous Annual Update Cumulative Excess or Shortfall in Prior Year (from Previous Annual Update Line 23)
and any One-Time Adjustments in Column 4 (Lines 11 and 12 respectively).
e) Continue interest calculation through the end of the Prior Year (Line 23) to determine Cumulative Excess or Shortfall for this Annual Update.

## 2) Comparison of True Up TRR and Actual Retail Transmission Revenues received during the Prior Year,

 Including previous Annual Update Cumulative Excess or Shortfall in Revenue.| Line |
| :---: |
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |
| 6 |
| 7 |
| 8 |
| 9 |
| 10 |
| 11 |
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| 20 |
| 21 |
| 22 |
| 23 |
| 24 |


| 38 |  | Partial Year |  |
| :---: | :---: | :---: | :---: |
| 39 | Month | TRR AAF | Note: |
| 40 | January | 6.376\% | See Note 2. |
| 41 | February | 5.655\% |  |
| 42 | March | 7.183\% |  |
| 43 | April | 8.224\% |  |
| 44 | May | 8.018\% |  |
| 45 | June | 8.945\% |  |
| 46 | July | 9.891\% |  |
| 47 | August | 10.141\% |  |
| 48 | September | 10.218\% |  |
| 49 | October | 9.179\% |  |
| 50 | November | 7.530\% |  |
| 51 | December | 8.640\% |  |
| 52 | Total: | 100.000\% |  |


"Total Sales to Ultimate Consumers" from FERC Form 1 Page 300, Line 10, Column b:

## Schedule 3

## True Up Adjustmen

## Instructions

Enter applicable years on Column 1, Lines 11-23 (Prior Year and December of the year previous to the Prior Year)
2) Enter Previous Annual Update True Up Adjustment (if any) on Line 27.

Enter with the same sign as in previous Annual Update. If there is no Previous Annual Update True Up Adjustment, then enter $\$ 0$.
3) Enter monthly interest rates in accordance with interest rate specified in the regulations of FERC at

18 C.F.R. $\$ 35.19$ a on lines 12 to 23, Column 6
4) Enter any One Time Adjustments on Column 4, Line 12 (or other appropriate). If SCE is owed enter as positive, if SCE is to return to customers enter as negative. One Time Adjustments include
a) In the event that a Commission Order revises SCE's True Up TRR for a previous Prior Year

SCE shall include that difference in the True Up Adjustment, including interest, at the first opportunity, in accordance with tariff protocols.
Entering on Line 12 (or other appropriate) ensures these One Time Adjustments are recovered from or returned to customers.
b) Any refunds attributable to SCE's previous CWIP TRR cases (Docket Nos. ER08-375, ER09-187, ER10-160, and ER11-1952), not previously returned to customers
c) Amounts resulting from input errors impacting the True Up TRR in a previous Formula Rate Annual Update pursuant to Protocol Section 3(d)(8).
5) Fill in matrix of all retail revenues from Prior Year in table on lines 63 to 74
6) Enter Total Sales to Ultimate Consumers on line 77 and verify that it equals the total on line 75
7) If true up period is less than entire calendar year, then adjust calculation accordingly by including $\$ 0$ Monthly True Up TRR and $\$ 0$ Actual Retail Base Transmission Revenues for any months not included in True Up Period.

## Notes:

1) The true up period is the portion (all or part) of the Prior Year for which the Formula Transmission Rate was in effect.
2) The Monthly True Up TRR is derived by multiplying the annual True Up TRR on Line 1 by $1 / 12$, if formula was in effect. In the event of a Partial Year True Up, use the Partial Year TRR Attribution Allocation Factors on Lines 40 to 51 for each month of Partial Year True Up. Only enter in the Prior Year, Lines 12 to 23, or portion of year formula was in effect in case of Partial Year True Up.
Partial Year True Up Allocation Factors calculated based on three years (2008-2010) of monthly SCE retail base transmission revenues
3) "Actual Retail Base Transmission Revenues" are SCE retail transmission revenues attributable to this formula transmission rate
as shown on Lines 63 to 74, Column 1.
4) Enter "Shortfall or Excess Revenue in Previous Annual Update" on Line 11, or other appropriate (from Previous Annual Update, Line 23, Column 9).
5) Monthly Interest Rates in accordance with interest rate specified in the regulations of FERC (See Instruction \#3).
6) "Cumulative Excess (-) or Shortfall (+) in Revenue wo Interest for Current Month" is, beginning for the January month,
the amount in Column 9 for previous month plus the current month amount in Column 5. For the first December, it is the amount in Column 5
7) Interest for Current Month is calculated on average of beginning and ending balances (Column 9 previous month and Column 7 current month) No interest is applied for the first December.
8) Only provide if formula was in effect during Prior Year
9) Only include Base Transmission Revenue attributable to this formula transmission rate

Any other Base Transmission Revenue or refunds is included in "Other"
The Base Transmission Revenues shown in Column 1 shall be reduced to reflect any retail customer refunds provided by SCE associated with the formula transmission rate that are made through a CPUC-authorized mechanism.
10) Other Transmission Revenue includes the following:
a) Transmission Revenue Balancing Account Adjustment revenue.
b) Transmission Access Charge Balancing Account Adjustment.
c) Reliability Services Revenue.
d) Any Base Transmission Revenue not attributable to this formula

## Calculation of True Up TRR

A) Rate Base for True Up TRR

| Line |
| :---: |
| 1 |
| 2 |
| 3 |
| 4 |
|  |
|  |
| 5 |
| 6 |
| 7 |
| 8 |


| Rate Base Item |
| :--- |
| ISO Transmission Plant |
| General + Elec. Misc. Intangible Plant |
| Transmission Plant Held for Future Use |
| Abandoned Plant |
| Working Capital Amounts |
| Materials and Supplies |
| Prepayments |
| Cash Working Capital |
| Working Capital |
| Accumulated Depreciation Reserve Amounts |
| Transmission Depreciation Reserve - ISO |
| Distribution Depreciation Reserve - ISO |
| G + Depreciation Reserve |
| Accumulated Depreciation Reserve |
| Accumulated Deferred Income Taxes |
| CWIP Plant |
| Network Upgrade Credits |
| Unfunded Reserves |
| Other Regulatory Assets/Liabilities |
| Rate Base |

## B) Return on Capital

19 Cost of Capital Rate

| Calculation |
| :--- |
| Method |
| 13-Month Avg. |

BOY/EOY Avg.
BOY/EOY Avg.
BOY/EOY Avg.

FERC Form 1 Reference or Instruction

Amount 6-PlantInService, Line 18 6-PlantInService, Line 24
11-PHFU, Line 9
12-AbandonedPlant Line 4

13-WorkCap, Line 17
13-WorkCap, Line 33
1-Base TRR Line 7
Line $5+$ Line $6+$ Line 7
13-Month Avg.
13-Month Avg.
1/8 (O\&M + A\&G)

| 13-Month Avg. | Negative amount | 8-AccDep, Line 14, Col. 12 |
| :--- | :--- | :--- |
| BOY/EOY Avg. | Negative amount | 8-AccDep, Line 17, Col. 5 |
| BOY/EOY Avg. | Negative amount | 8 -AccDep, Line 23 |

8-AccDep, Line 17, Col. 5
, Line 23
ine 9 + Line 10 + Line 11
$\qquad$

9-ADIT, Line 15
14-IncentivePlant, L 12, C2
22-NUCs, Line 7
34-UnfundedReserves, Line 7
23-RegAssets, Line 15

L1+L2+L3+L4+L8+L12+
L13+L14+L15+L16+L17

See Instruction 1 Instruction 1, Line j
Line 18 * Line 19

## C) Income Taxes

Income Taxes = [((RB * ER) + D) * (CTR/(1-CTR))] + CO/(1-CTR)
\$

## Where:

RB = Rate Base
$E R=$ Equity ROR inc. Com. and Pref. Stock Instruction 1
CTR = Composite Tax Rate
$\mathrm{CO}=$ Credits and Other
$D=$ Book Depreciation of AFUDC Equity Book Basis

Line 18
nstruction 1, Line k
1-Base TRR L 59
1-Base TRR L 63
1-Base TRR L 65

- \%
- \%

23
25
D) True Up TRR Calculation

O\&M Expense
A\&G Expense
Network Upgrade Interest Expense
Depreciation Expense
Abandoned Plant Amortization Expense
Other Taxes
Revenue Credits
Return on Capital
Income Taxes
Gains and Losses on Transmission Plant Held for Future Use -- Land Amortization and Regulatory Debits/Credits
Total without True Up Incentive Adder
True Up Incentive Adder

True Up TRR without Franchise Fees and Uncollectibles Expense included:
E) Calculation of final True Up TRR with Franchise Fees and Uncollectibles Expenses

| True Up TRR wo FF: | $\$$ |  | Reference: |
| ---: | :--- | :--- | :--- |
| Franchise Fee Factor: | - | Line 40 |  |
| Franchise Fee Expense: | $\$$ | $-\%$ | $28-F F U$, L 5 |
| Uncollectibles Expense Factor: |  | - | Line 41 * Line 42 |
| Uncollectibles Expense: | $\$$ | $-\%$ | $28-F F U$, L 5 |
| True Up TRR: | $\$$ | - | Line 41 * Line 44 |
| U | - | L 41 + L 43 + L 45 |  |

1-Base TRR L 66
1-Base TRR L 67
1-Base TRR L 68
1-Base TRR L 69
1-Base TRR L 70
1-Base TRR L 71
1-Base TRR L 72
ine 20
Line 21
1-Base TRR L 75
1-Base TRR L 76
Sum Line 27 to Line 37

| $\$$ | - |
| :--- | :--- |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |
| $\$$ | - |

Line 40
28-FFU, L 5
Line 41 * Line 42
Line 41 * Line 44
L 41 + L 43 + L 45

## Schedule 4 <br> True Up TRR

## Instructions:

1) Use weighted average (by time) of the Return on Equity in effect during the Prior Year in determining the "Cost of Capital Rate" on Line 19
and the "Equity Rate of Return Including Preferred Stock" on Line 23 in the event that the ROE is revised during the Prior Year. In this event, the ROE used in Schedule 1 will differ from the ROE used in this Schedule 4, because the Schedule 1 ROE will be the most recent ROE,
whereas the Schedule 4 Cost of Capital Rate and Equity Rate of Return including Com. + Pref. Stock will be based on the weighted-average ROE

## Calculation of weighted average Cost of Capital Rate in Prior Year:

If ROE does not change during year, then attribute all days to Line a "ROE at end of Prior Year" and none to "ROE at start of PY"
a ROE at end of Prior Year
b ROE start of Prior Year
c
d Wtd. Avg. ROE in Prior Year

| Percentage | Reference: | From | To |
| :---: | :---: | :---: | :---: |
| $-\%$ See Line e below | --- | --- | Days ROE <br> In Effect |
| $-\%$ See Line f below | --- | --- |  |

Total days in year:

- \% ((Line a ROE * Line a days) + (Line b ROE * Line b days)) / Total Days in Year

Commission Decisions approving ROE:
e End of Prior Year
f Beginning of Prior Year
g Wtd. Cost of Long Term Debt
h Wtd.Cost of Preferred Stock
i Wtd.Cost of Common Stock
j Cost of Capital Rate

## Reference:

$\square$

Percentage Reference:

> | $-\%$ 1-Base TRR L 51 |
| :--- |
| $-\%$ 1-Base TRR L 52 |
| $-\%$ 1-Base TRR L 47 * Line d |
| $-\%$ Sum of Lines g to i |

Calculation of Equity Rate of Return Including Common and Preferred Stock

| Line | Calculation of Long Term Debt Amount |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Bonds -- Account 221 | 13-month avg. | 5-ROR-2, Line 1 | \$ |  |
| 2 | Less Reacquired Bonds -- Account 222 | 13-month avg. | 5-ROR-2, Line 2 | \$ |  |
| 3 | Long Term Debt Advances from Associated Companies -- Account 223 | 13-month avg. | 5-ROR-2, Line 3 | \$ | - |
| 4 | Other Long Term Debt -- Account 224 | 13-month avg. | 5 -ROR-2, Line 4 | \$ | - |
| $\underline{5}$ | Unamortized Premium on Long Term Debt - Account 225 | 13-month avg. | 5-ROR-2, Line 5 | \$ | - |
| $\underline{6} 5$ | Less Unamortized Discount on Long Term Debt -- Account 226 | 13-month avg.; enter negative | 5-ROR-2, Line 6 | \$ | - |
| $\underline{7}$ | Unamortized Debt Expenses -- Account 181 | 13-month avg.; enter negative | 5 -ROR-2, Line 7 | \$ |  |
| 87 | Unamortized Loss on Reacquired Debt -- Account 189 | 13-month avg.; enter negative | 5-ROR-2, Line 8 | \$ |  |
| $\underline{9}$ | Composite Tax Rate |  | 1-BaseTRR, Line 59 |  | - \% |
| 109 | After tax amount of Unamortized Loss on Reacquired Debt |  | Line $\underline{8} 7$ * (1-Line 9 8) | \$ | - |
| 1110 | Removal of Long Term Debt Related to Fuel Inventories | 13-month avg.; enter negative | 5 -ROR-2, Line 9 | \$ | - |
| 1211 | Adjustments related to "LT Debt Related to Fuel Inventories" |  | 5-ROR-2, Line 10 | \$ | - |
| $\underline{1312}$ | Long Term Debt Amount |  | Sum of Lines 1 to $\underline{\underline{6}}$ and 109 to $\underline{1211}$ | \$ |  |
|  | Calculation of Preferred Stock Amount |  |  |  |  |
| 1413 | Preferred Stock Amount -- Account 204 | 13-month avg. | 5-ROR-2, Line 11 | \$ | - |
| 1514 | Unamortized Issuance Costs | 13-month avg. | 5-ROR-2, Line 12 | \$ | - |
| 1615 | Net Gain (Loss) From Purchase and Tender Offers | 13-month avg. | 5-ROR-2, Line 13 | \$ | - |
| $\underline{17} 16$ | Preferred Stock Amount |  | Sum of Lines $\underline{14} 43$ to $\underline{16} 15$ | \$ | - |
|  | Calculation of Common Stock Equity Amount |  |  |  |  |
| 1817 | Total Proprietary Capital | 13-month avg. | 5-ROR-2, Lines $14+14 \mathrm{a}$ | \$ | - |
| 1918 | Less Preferred Stock Amount -- Account 204 | Same as L 14 13, but negative | 5-ROR-2, Line 11 | \$ | - |
| $\underline{20} 19$ | Minus Net Gain (Loss) From Purchase and Tender Offers | Same as L 16 15, but reverse sign | 5-ROR-2, Line 13 | \$ | - |
| 2120 | Less Unappropriated Undist. Sub. Earnings -- Acct. 216.1 | 13-month avg. | 5-ROR-2, Line 15 | \$ | - |
| $\underline{22}$ | Less Accumulated Other Comprehensive Loss -- Account 219 | 13 -month avg. | 5-ROR-2, Line 16 | \$ | - |
| $\underline{23} 21$ | Common Stock Equity Amount |  | Sum of Lines $\underline{1817 \text { to } \underline{22} 21}$ | \$ | - |

Calculation of 13 -Month Average Capitailization Balances
Year


Instructions: 1) Enter 13 months of balances for capital structure for Prior Year and December previous to Prior Year in Columns 2-14.
Beginning and End of year amounts in Columns 2 and 14 are from FERC Form 1, as referenced in below notes.

## Notes:

1) Amount in Column 2 from FF1 112.18d, amount in Column 14 from FF1 112.18c, amounts in columns 3-13 from SCE internal records 3) Amount in Column 2 from FF1 112.19d, amount in Column 14 from FF1 112.19c, amounts in columns 3 -13 from SCE internal records, 4) Amount in Column 2 from FF1 112.21d, amount in Column 14 from FF1 112.21c, amounts in columns 3-13 from SCE internal records. 5) Amount in Column 2 from FF1 112.22 dc , amount in Column 14 from FF1 112.22 cd , amounts in columns 3 - 13 from SCE internal records. 6) Amount in Column 2 from FF1 112.23 de , amount in Column 14 from FF 112.23 cd , amounts in columns 3 - 13 from SCE internal records. 7) Amount in Column 2 from FF1 111.69 dc , amount in Column 14 from FF1 111.69 cd , amounts in columns $3-13$ from SCE internal records. ) Amount in Column 2 from FF1 $111.81 \mathrm{~d} \epsilon$, amount in Column 14 from FF1 111.81 cd , amounts in columns 3 - 13 from SCE internal record. 9) Amounts in Columns 2-14 are from SCE internal records.
2) Amount in Column 2 from FF1 112.3d, amount in Column 14 from FF1 112.3c, amounts in columns 3 -13 from SCE internal records
3) Amounts in Columns 2-14 are from SCE internal records.
4) Amounts in Columns 2-14 are from SCE internal records.
5) Amount in Column 2 from FF1 112.16 de, amount in Column 14 from FF1 112.16 cd , amounts in columns 3 - 13 from SCE internal records.

14a) Represents Capital disclosed by SCE related to Wildfire Related Capital, not yet paid on a cash basis. Amounts in Columns $2-14$ are from SCE internal records
16) Amount in Column 2 from FF1 112.15 d , amount in Column 14 from FF1 112.15 cd , amounts in columns 3 - 13 from SCE internal records.

```
) Calculation of "Long Term Debt Cost Percentage"
5
6
7
Total Annual Cost of Outstanding Series Debt: Total Annual Amortized Loss on Reacquired Debt. Total Annual Cost of Debt: \(\$\)
``` \(\qquad\)
``` Reference Total Annual Cost of Debt: \$
```



``` Line 200, Col 10
\begin{tabular}{|c|c|c|c|}
\hline Total "Principal Amount Outstanding" Debt: & \$ & & Line 200, Col 5 \\
\hline Total Reacquired Debt: & \$ & & Line 205, Col 5 \\
\hline Total Unamortized Loss on Reacquired Debt: & \$ & - & 5-ROR-2, Line 8, C \\
\hline Composite Tax Rate: & & -\% & 1-BaseTRR, Line 5 \\
\hline After-Tax Total Unamortized Loss on Reacquired Debt: & \$ & & 三L7* (1-L8) \\
\hline Total Debt Balance: & \$ & & \(=\mathrm{L} 5+\mathrm{L} 6+\mathrm{L} 97\) \\
\hline
\end{tabular}
```

$\frac{\text { Line }}{}{ }^{1}$
2
3
4
8
9
9
108
$\frac{10}{119}$
$\underline{12} 10$
2) Long Term Debt Information for each Outstanding Series


| Line | Series | Date of Offering | Maturity Date | Coupon Rate | Principal Amount Oustanding (\$000s) | Amort- <br> ization <br> Period <br> (Years) | Net Discount \& Issuance Cost (\$000s) | $\begin{array}{\|c} \hline \begin{array}{c} \text { Net Proceed: } \\ \text { (\$000s) } \end{array} \\ \hline \end{array}$ | Cost of Money | Annual Cost | (\$000s) | Comments: See below |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 101 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 102 |  |  |  |  |  | --- | \$ |  | - \% | \$ | - |  |
| 103 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 104 |  |  |  |  |  | --- | \$ | ${ }^{\text {c }}$ | - \% | \$ | - |  |
| 105 |  |  |  |  |  | --- | \$ Add yellow | hading since | - \% | \$ | - |  |
| 106 |  |  |  |  |  | --- | \$ this column | input now | - \% | \$ | - |  |
| 107 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 108 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 109 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 110 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 111 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 112 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 113 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 114 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 115 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 116 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 117 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 118 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 119 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 120 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 121 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 122 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 123 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 124 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 125 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 126 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 127 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 128 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 129 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 130 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 131 |  |  |  |  |  | --- | \$ | \$ | - \% | \$ | - |  |
| 132 |  |  |  |  |  | --- | \$ - | \$ | - \% | \$ | - |  |
| 133 |  |  |  |  |  |  |  |  |  |  |  |  |

## Comments for Section 2 "Long Term Debt Information for each Outstanding Series":

Comment \#:
Comment

Total Principal Amount Outstanding (sum of above * 1,000): \$
3) Long Term Debt Information for each Reacquired Series


Comments for Section 3 "Long Term Debt Information for each Reacquired Series":
4) Debt Issuance Cost and Discount Details for each Outstanding Series

Coll Col 2 Col 3

| Line | Series | Unamortzed Debt Issuance Cost (Dec of Prior Year) | Fotat Unamortized DebtDiscounts (Dec of PY) |
| :---: | :---: | :---: | :---: |

.

Loss on Reacquired Debt Cost Details
Col 1
$\mathrm{COH} \quad \mathrm{Col} 3$

| Series | Unamortized <br> Loss (Dec of <br> PY) ('OOOs) | Amortized <br> Loss ('OOOs) |
| :--- | :--- | :--- |

401
402
403
404
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439


## Preferred Stock Cost Percentage

At End of Year ("EOY") for Prior Year

## Add yellow shading since <br> this is an input now

1) Calculation of "Preferred Stock Cost Percentage"

| Line |
| :---: |
| 12 |
| 2 |
| 3 |
| 4 |
| 5 |
|  |
| 6 |
| 7 |
| 8 |
| 9 |



Reference $\frac{\text { Reference }}{\text { Line 112, Col }}$ Line 312, Col 6 $=\mathrm{L} 1+\mathrm{L} 2$

Total Preferred Stock Amount Outstanding: Net Gain (Loss) from Purchase and Tender Offers: $\qquad$ FF1 112.3c Line-112, Col4 Line 312, Col 4

Total Unamortized Issuance costs. Total Preferred Balance: \$ - = L5-L6

Preferred Stock Cost Percentage:
2) Preferred Stock Information for each Outstanding Series

3) Preferred Stock Issuance Cost Details for each Outstanding Series
Same list Col 1 Col 2 $\quad$ Col 3 $\quad$ Col 34
Col 45
SCE Records SCE Records SCERO

| Line | Total <br> Issuance <br> Cost ( $\left.\mathbf{\$}^{\prime} 000 \mathrm{~s}\right)$ | Unamortized- <br> Issuance- <br> Cost ('000s) | Full <br> Amortization <br> Period | Notes |
| :--- | :---: | :---: | :---: | :---: |

4) Reacquired Preferred Stock Information


Schedule 6

## Plant In Service

Inputs are shaded yellow

1) Transmission Plant - ISO

Balances for Transmission Plant - ISO during the Prior Year, including December of previous year (See Note 1):

2) Distribution Plant - ISO

Balances for Distribution Plant - ISO for December of Prior Year and year before Prior Year (See Note 2)


ISO Transmission Plant is the sum of "Transmission Plant - ISO" and "Distribution Plant - ISO"

|  | Amount <br> Average value: <br> EOY Value: <br> $\$$$\quad-\quad$ Sum of Line 14, Col 12 and Line 17, Col 5 |
| ---: | :--- |
| $\$$ | $-\quad$ Sum of Line 13, Col 12 and Line 16, Col 5 |

4) General Plant + Electric Miscellaneous Intangible Plant ("G\&I Plant")
General and Intangible Plant is an allocated portion of Total G\&I Plant based on the Trans. W\&S Allocation Factor


## Transmission Activity Used to Determine Monthly Transmission Plant - ISO Balances


2) Total Transmission Activity by Account (See Note 4):

|  | Col 1 |  | Col 2 |  |  | Col 3 |  |  | Col 4 |  |  | Col 5 |  |  | Col 6 |  |  | Col 7 |  |  | Col 8 |  |  | Col 9 |  |  | Col 10 |  |  | Col 11 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Mo/YR |  | 350.1 |  |  | 350.2 |  |  | 352 |  |  | 353 |  |  | 354 |  |  | 355 |  |  | 356 |  |  | 357 |  |  | 358 |  |  | 359 |  |  |  |
| 41 | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 42 | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 43 | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 44 | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 45 | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 46 | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 47 | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ | - |
| 48 | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 49 | - | \$ |  |  |  |  | - | \$ |  |  |  |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 50 | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ | - |
| 51 | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ | - |
| 52 | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 53 | Total: | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |

## 3) ISO Incentive Plant Balances (See Note 5)



## 4) ISO Incentive Plant Activity (See Note 6)



Schedule 6
Plant In Service
5) Total Transmission Activity Not Including Incentive Plant Activity (See Note 7)

|  | Col 1 |  | Col 2 |  |  | Col 3 |  |  | Col 4 |  |  | Col 5 |  |  | Col 6 |  |  | Col 7 |  |  | Col 8 |  |  | Col 9 |  |  | Col 10 |  |  | Col 11 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Mo/YR |  | 350.1 |  |  | 350.2 |  |  | 352 |  |  | 353 |  |  | 354 |  |  | 355 |  |  | 356 |  |  | 357 |  |  | 358 |  |  | 359 |  |  |  |
| 80 | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 81 | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 82 | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 83 | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 84 | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 85 | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 86 | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ | - |
| 87 | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ | - |
| 88 | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ | - |
| 89 | - | \$ |  |  |  |  | - | \$ |  |  |  |  |  | \$ |  |  | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ | - |
| 90 | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ | - |
| 91 | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ | - |
| 92 | Total: | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ | - |

6) Total Monthly Transmission Activity as a Percent of Annual Transmission Activity (See Note 8


## Schedule 6

## Plant In Service

|  | ther I |  | miss |  | ctivity with |  | e | ive Pl | Ac | ctiv | (See | ote |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Col 1 |  | Col 2 |  | Col 3 |  |  | Col 4 |  |  | Col 5 |  |  | Col 6 |  |  | Col 7 |  |  | Col 8 |  |  | Col 9 |  |  | Col 10 |  |  | Col 11 |  | Col 12 |
|  | Mo/YR |  | 350.1 |  | 350.2 |  |  | 352 |  |  | 353 |  |  | 354 |  |  | 355 |  |  | 356 |  |  | 357 |  |  | 358 |  |  | 359 |  | Sum C2-C11 Total |
| 108 | - | \$ |  | - | \$ | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ - |
| 109 | - | \$ |  | - |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |
| 110 | - | \$ |  | - | \$ | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |
| 111 | - | \$ |  |  | \$ | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |
| 112 | - | \$ |  | - |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |
| 113 | - | \$ |  | - |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |
| 114 | - | \$ |  | - |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |
| 115 | - | \$ |  | - | \$ | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |
| 116 | - | \$ |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |
| 117 | - | \$ |  |  |  |  | \$ |  |  | \$ |  |  |  |  |  | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |
| 118 | - | \$ |  | - |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |
| 119 | - | \$ |  | - |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |
| 120 | tal: | \$ |  |  | \$ |  | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  |  | \$ |  |  |  |  |  |  |

Notes:
Amounts on Line 13 from corresponding account Schedule 7, column 2
Amounts on Line 1 must match corresponding account Schedule 7, Column 2 for previous year
The amounts for each month on the remaining lines are calculated by summing the following values:
a) Other ISO Transmission Activity without Incentive Plant Activity on Lines 108-119 for the same month;

ISO Incentive Plant Activity on Lines 67 to 78 for the same month; and
The previous month balance of the Transmission Plant - ISO amounts on Lines 1-13
For instance, the amount for May of the Prior Year (on Line 6) for Account 353 (Column 5) is the sum of the following values:
a) the "Other ISO Transmission Activity without Incentive Plant Activity" for May of the Prior Year (on Line 112, Column 5);
b) the "ISO Incentive Plant Activity" for May of the Prior Year (on Line 71, Column 5),
) and the "Transmission Plant - ISO" amount for April of the Prior Year (on Line 5, Column 5)
2) Amounts on Line 15 must match 6-Plant Study amounts for Distribution Plant - ISO for previous year

Amounts on Line 16 must match amounts on 6-PlantStudy for Distribution Plant - ISO
) Reconciles to BOY and EOY FERC Form 1 (FF1 207, Lines 48-56, Column g)
Includes recorded Transmission Plant-In-Service additions, retirements, transfers and adjustments. From SCE internal acounting records
5) Includes balances for SCE Incentive Projects.
6) Monthly differences from previous matrix. Other columns from SCE internal accounting records
) Amount in matrix on lines 41 to 52 minus amount in matrix on lines 67 to 78
8) Amount in "Total Transmission Activity Not Including Incentive Plant Activity" matrix divided by Total on Line 92 for each account/month.
9) Amount on Line 13 less amount on Line 1 for each account
0) Line 79
11) Amount on Line 105 less amount on Line 106 for each account.
12) For each column (FERC Account) divide Line 107 by Line 92 to arrive at a ratio for each column.

Apply the ratio of each column to each monthly value from Lines 80-91 to calculate the values for
the corresponsing months listed in Lines 108-119.
A) Plant Classified as Transmission in FERC Form 1 for Prior Year:

B) Plant Classified as Distribution in FERC Form 1:

| $\frac{\text { Line }}{22}$ | Account |  | Total Plant |  | Data Source | Distribution <br> Plant-ISO |  | $\begin{aligned} & \text { ISO \% } \\ & \text { of Total } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23 | Land: |  |  |  |  |  |  |  |
| 24 | 360 | \$ |  | - | FF1 207.60g | \$ | - | - \% |
| 25 | Structures: |  |  |  |  |  |  |  |
| 26 | 361 | \$ |  | - | FF1 207.61g | \$ | - | - \% |
| 27 | 362 | \$ |  | - | FF1 207.62g | \$ | - | - \% |
| 28 | Total Structures | \$ |  | - | L 26 + L 27 | \$ | - | - \% |
| 29 |  |  |  |  |  |  |  |  |
| 30 | Total Distribution | \$ |  | - | L 24 + L 28 | \$ | - | - \% |

## Notes:

1) Total transmission does not include account 359.1 "Asset Retirement Costs for Transmission Plant" Total on this line is also equal to FF1 207.58g (Total Transmission Plant) less FF1 207.57g (Asset Retirement Costs for Transmission Plant).
2) Only accounts 360-362 included as there is no ISO plant in any other Distribution accounts.

## Instructions:

1) Perform annual Transmission Study pursuant to instructions in tariff.
2) Enter total amounts of plant from FERC Form 1 in Column 1, "Total Plant".
3) Enter ISO portion of plant in Column 2, "Transmission Plant - ISO, or "Distribution Plant - ISO".

Schedule 8

## Accumulated Depreciation Reserve

Input cells are shaded yellow

1) Transmission Depreciation Reserve - ISO

Prior Year:
Balances for Transmission Depreciation Reserve - ISO during the Prior Year, including December of previous year (See Note 1):

2) Distribution Depreciation Reserve - ISO (See Note 2)

15
16
17


Col 5
=Sum C2 to C4
Total
Notes
S0 Beginning of Year ("BOY") amount
\$0 End of Year ("EOY") amount
\$0 Average of Line 15 and Line 16
3) General and Intangible Depreciation Reserve


Transmission Activity Used to Determine Monthly Transmission Depreciation Reserve - ISO Balances

1) ISO Depreciation Expense (See Note 3)

| Col 1 |  | Col 2 |  |  | Col 3 |  | Col 4 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mo/YR |  | 350.1 |  |  | 350.2 |  |  | 352 |  |
| - | \$ |  | - | \$ |  | - | \$ |  | - |
| - | \$ |  | - | \$ |  | - | \$ |  | - |
| - | \$ |  | - | \$ |  | - | \$ |  | - |
| - | \$ |  | - | \$ |  | - | \$ |  | - |
| - | \$ |  | - | \$ |  | - | \$ |  | - |
| - | \$ |  | - | \$ |  | - | \$ |  | - |
| - | \$ |  | - | \$ |  | - | \$ |  | - |
| - | \$ |  | - | \$ |  | - | \$ |  | - |
| - | \$ |  |  | \$ |  | - | \$ |  | - |
| - | \$ |  |  | \$ |  | - | \$ |  | - |
| - | \$ |  | - | \$ |  | - | \$ |  | - |
| - | \$ |  | - | \$ |  | - | \$ |  | - |
| Total: | \$ |  | - | \$ |  | - | \$ |  | - |


| Col 5 | Col 6 |
| :---: | :---: |
| 353 | 354 |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |
| \$ | - \$ |





2) Total Transmission Allocation Factors (See Note 4)

| Col 1 | Col 2 | Col 3 | Col 4 | Col 5 | Col 6 | Col 7 | Col 8 | Col 9 | Col 10 | Col 11 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mo/YR | 350.1 | 350.2 | 352 | 353 | 354 | 355 | 356 | 357 | 358 | 359 |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |
| - | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% | -\% |

## 3) Calculation of Non-Incentive ISO Reserve


4) Other Transmission Activity (See Note 8)


## Notes:

1) Amounts on Line 13 based on current year Plant Study. Amounts on Line 1 shall be based on previous year Plant Study, and
shall match amounts on Line 13 in previous year Annual Update.
The amounts for each month on the remaining lines are calculated by summing the following values:
a) Depreciation Expense (on Lines 27 to 38) for the same month;
b) Other Transmission Activity (on Lines 55 to 66) for the same month; and
c) Balances for Transmission Depreciation Reserve (on Lines 1 to 13) for the previous month

For instance, the amount for May of the Prior Year (on Line 6) for Account 353 (Column 5) is the sum of the following values
a) Depreciation Expense for May of the Prior Year (on Line 44, Column 5)
b) Other Transmission Activity for May of the Prior Year (on Line 59, Column 5); and
) The balances for Transmission Depreciation Reserve for April of the Prior Year (on Line 5, column 5),
) Amounts on Line 15 derived from Plant Study for previous year Prior Year
Amounts on Line 16 derived from Plant Study for Prior Year
From 17-Depreciation, Lines 24 to 35
4) From 6-PlantInService, Lines 93 to 104
) Line 13 - Line 1
6) Line 39 .
) Line 52 - Line 53
8) Multiply the montly "Total Transmission Allocation Factors" ratios found in Lines 40-51 by the "Other Activity" on Line 54

## Accumulated Deferred Income Taxes and Net Excess Deferred Tax Liabilities

1) Summary of Accumulated Deferred Income Taxes and Net Excess Deferred Tax Liabilities
a) End of Year Accumulated Deferred Income Taxes and Net Excess Deferred Tax Liabilities

| Line | Account | Total Balance ADIT | Source |
| :---: | :---: | :---: | :---: |
| 1 | Account 190 | \$ | Line 353, Col. 2 |
| 2 | Account 282 | \$ | Line 452, Col. 2 |
| 3 | Account 283 | \$ | Line 803, Col. 2 |
| 4 | Net Excess/Deficient Deferred Tax Liability/Asset-2017 TCAJA | \$ | FF1 278, see Notes 4 and 5 |
| 5 | Total Accumulated Deferred Income Taxes | \$ | Sum of Lines 1 to 4 |
| 6 | and Net Excess Deferred Tax Liabilities |  |  |
| 7 | b) Beginning of Year Accumulated Deferred Income Taxes and Net Excess Deferred Tax Liabilities |  |  |
| 8 | BOY |  |  |
| 9 |  | Balance ADII | Source |
| 10 | Total Accumulated Deferred Income Taxes | \$ | Previous Year Informational Filing, Line 5, Col. 2 |
| 11 |  |  |  |
| 12 | c) Prorata Average of Beginning and End of Year Accumulated Deferred Income Taxes and Net Excess Deferred Tax Liabilities |  |  |
| 13 | Average |  |  |
| 14 | Prorata Average Balance ADIT: \$ |  |  |
| 15 |  |  |  |






Total Account 283 Gas and Other
Total Account 283
Allocation Factors (Plant and Wages) Total Account 283 ADIT
(Sum of amounts in Columns 4 to 6)
FERC Form 1 Account 283

Number of Days
Left in Period
Col $5 \frac{\text { Col } 6}{}$ / Tot. Prorata
$=\mathrm{Col} \frac{\mathrm{Col} 7}{2 * \mathrm{C}}$ Monthly Left in Period Percentages Prorata Amounts Col 8
See Note 3
$\begin{gathered}\text { Annual Accumulated } \\ \text { Prorata Calculation }\end{gathered}$


Source Sum of Above Lines beginning on Line 700

Line 650 + Line 800
27-Allocators Lines 22 and 9 respectively. Line 801 * Line 802 for Cols 5 and 6. Col. $4100 \%$ ISO

FF1 277.19k

| - | $\$$ |
| ---: | :--- |
| - | $\$$ |
| - | $\$$ |
| - | $\$$ |
| - | $\$$ |
| - | $\$$ |
| - | $\$$ |
| - | $\$$ |
| - | $\$$ |
| - | $\$$ |
| - | $\$$ |

品 $\stackrel{\sim}{v}_{\sim}^{\infty}$

Col 1

Future Test Period

March
April
May
July
Augus
September

Ending Balance (Line 5, Col. 2)
with a leading "C."
struction 2: For any Company Wide ADIT balance items, include a portion of the total Column 2 balance in Column 3
Gas, Generation, or Other Related" based on the following percentages.
) For Line items allocated based on the Wages and Salaries Allocation Factor:
RC Form 1 Referen
or Instruction
or Instruction
FF1 355.62 b
FF1 355.64b

| $\mathrm{A}+\mathrm{B}+\mathrm{C}$ |
| :--- |
| $(\mathrm{B}+\mathrm{C})$ |

B:Gas Wages and Salaries
C: Water Wages and Salaries
D:Total Electric, Gas, and Water Wages and Salaries
or Other"
(B+C)/D

## FERC Form 1 Reference

FF1 207.104 g
F:Total Electric Plant In Service
FF1 201.8 d
ior Year
$\square$


## Prior Year

Value

## $\$$ $\$$

 $\$$$\$$
$\$$

FF1 201.8d
FF1 201.8e
FF1 201
F+G+H
$(\mathrm{G}+\mathrm{H}) / \mathrm{I}$
G:Total Gas Plant In Service
H:Total Water Plant in Service
1:Total Electric, Gas, and Water Plant In Service
$\mathrm{J}:$ Plant Percentage "Gas, Generation, or Other"
otes

1) The monthly deferred tax amounts are equal to the ending Accumulated Deferred Income Taxes and Net Excess Deferred Tax Liabilities ADIT
balance minus the beginning Accumulated Deferred Income Taxes and Net Excess Deferred Tax Liabilities ADIT balance, divided by 12 months.
2) For January through December = previous month balance plus amount in Column 2.
3) The average Accumulated Deferred Income Taxes and Net Excess Deferred Tax Liabilities ADIT Balance is equal to the amount on Line 817, Column 8 .

Line 805 is equal to Line 10, Column 2. Lines 806 through 817 equal previous amount in Column 8, plus amount in Column 7 .
4) The net excess/deficiency is derived from the deficiency arising in Account 190 offset by excesses in Accounts 282 and 283.

SCE must submit a Federal Power Act Section 205 filing to obtain Commission approval prior to reflecting in rates any regulatory assets
and liabilities arising from future tax changes.

Prior Year CWIP and Forecast Period Incremental CWIP by Project
Prior Year CWIP is the amount of Construction Work In Progress for projects that have received Commission approval to include CWIP in Rate Base.


3) Forecast Period CWIP Expenditures by Project (see Note 1) 3a) Project:







13-Month Averages:
Notes:

1) Forecast Period is the calendar year two years after the Prior Year (i.e., PY+2).
2) Sum of project specific values from lines 55-79, 81-105, 107-131, 133-157, 159-183, 185-209, 211-235, 237-261, 263-287, 289-313,...

## Instructions:

1) Enter recorded amounts of CWIP during Prior Year on Lines 1-13, 15-27 (including December of year previous to Prior Year).
) Enter forecast project specific values on lines 55-79, 81-105, 107-131, 133-157, 159-183, 185-209, 211-235, 237-261, 263-287, 289-313,
2) If Commission approval is granted to include CWIP in Rate Base for additional projects, include additional tables for each of those additional projects.

Transmission Plant Held for Future Use shall be amounts of Electric Plant Held for Future Use (account 105) intended to be placed under the Operational Control of the ISO, plus an allocated amount of any General Electric Plant Held for Future Use, with the allocation factor being the Transmission Wages and Salaries AF.

| Line |  | Beginning of Year Balance |  | End of Year Balance | Source |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Total Electric PHFU | \$ | \$ | - - | FF1 page 214.47d |
| Plant intended to be placed under the Operational Control of the ISO: |  |  |  |  |  |
|  | Col $1 \quad$ Col 2 | Col 3 |  | Col 4 | Col 5 |
|  | Description $\begin{gathered}\text { Type } \\ \text { of Plant }\end{gathered}$ | Beginning of Year Balance |  | End of Year Balance | Source |
| 2a |  | \$ - | \$ | End - |  |
| 2b |  | \$ | \$ | - |  |
| 2c |  | \$ | \$ | - |  |
| 2d |  | \$ | \$ | - |  |
| 2e |  | \$ | \$ | - |  |
| 2 f |  | \$ | \$ | - |  |
| 2 g |  | \$ | \$ | - |  |
| 2h |  | \$ - | \$ | - |  |
|  | ... |  |  |  |  |
| 3 | Total: | \$ - | \$ | - | Sum of above lines |
|  |  | Beginning of Year Balance |  | End of Year Balance | Source |
| 4 | General Plant Held for Future Use | \$ - | \$ |  | FF1 page 214 |
| 5 | Wages and Salaries AF: | - \% |  | - \% | 27-Allocators, L 9 |
| 6 | Portion for Transmission PHFU: | \$ - | \$ | - | L 4 * L 5 |

All other Electric Plant Held for Future Use not intended to be placed under the Operational Control of the ISO:

| Beginning of Year Balance |  |  |
| :--- | :--- | :--- |
| $\$$ | End of Year Balance | Source |

Transmission PHFU: $\quad$ Beginning of Year Balance $\quad$ End of Year Balance $\quad-\quad$ Source

Average of BOY and EOY
9 Transmission PHFU:
\$
Sum of Line 8 / 2

## Calculation of Gain or Loss on Transmission Plant Held for Future Use -- Land

10 Gain or Loss on Transmission Plant Held for Future Use --- Land $\quad \$ \quad$ Source $\quad$ - SCE Records

## Instructions:

1) For any Electric Plant Held for Future Use intended to be placed under the Operational Control of the ISO, list on lines $2 \mathrm{a}, 2 \mathrm{~b}$, etc. Provide description in Column 1. Note type of plant (land or other) in Column 2. Under "Source" (Column 5), state the line number on FERC Form 1 page 214 from which the amount is derived. BOY amount will be EOY value from previous year FERC Form 1, EOY amount will be in current year FF1.
2) For any Electric Plant Held for Future Use classified as General note amount on Line 4.
3) Add additional lines $2 \mathrm{i}, \mathrm{j}, \mathrm{k}$, etc. as necessary to include additional projects intended to be placed under the Operational Control of the ISO.
4) Gains and Losses on Transmission Plant Held for Future Use - Land is treated in accordance with Commission policy. Any gain or loss on non-land portions of Transmission Plant Held for Future Use is not included.

Notes:

1) Amount of Line 1 not intended to be placed under the Operational Control of the ISO.

Initially Abandoned Plant Amortization Expense and Abandoned Plant are both zero.

Upon Commission approval of recovery of abandoned plant costs for a specific project or projects, SCE will complete this worksheet in accordance with that Order

Orders Providing for Abandoned Plant Cost Recovery:


Abandoned Plant for each project represents the amount of costs that the Order approves for inclusion in Rate Base.

Abandoned Plant Amortization Expense for each project represents the annual amortization of abandoned costs that the Order approves as an annual expense.

Amount for

|  | Prior Year |  |
| ---: | :--- | ---: |
| Abandoned Plant Amortization Expense: | $\$$ | - |
| Abandoned Plant (BOY): | $\$$ | - |
| Abandoned Plant (EOY): | $\$$ | - |
| Abandoned Plant (BOY/EOY Average): | $\$$ | - |

Note:
Sum of projects below for PY.
Sum of projects below for PY.
Sum of projects below for PY.
Average of Lines 2 and 3.
Sum of projects below for PY.

|  | First Project: Fill in Name |  |  |  | Abandoned Plant Amort. Expense |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year |  |  |  |  |  |  |
| 2015 | \$ | - | \$ | - | \$ | - |
| 2016 | \$ | - | \$ | - | \$ | - |
| 2017 | \$ | - | \$ | - | \$ | - |
| 2018 | \$ | - | \$ | - | \$ | - |
| 2019 | \$ | - | \$ | - | \$ | - |
| 2020 | \$ | - | \$ | - | \$ | - |
| 2021 | \$ | - | \$ | - | \$ | - |
| 2022 | \$ | - | \$ | - | \$ | - |
| 2023 | \$ | - | \$ | - | \$ | - |
| 2024 | \$ | - | \$ | - | \$ | - |
| 2025 | \$ | - | \$ | - | \$ | - |



## Notes:

1) "EOY HV Abandoned Plant" is amount of "EOY Abandoned Plant" that would have been High Voltage (>= 200 kV ).

## Instructions:

1) Upon Commission approval of recovery of abandoned plant costs for a project:
a) Fill in the name the project in order (First Project, Second Project, etc.).
b) Fill in the table with annual End of Year ("EOY") Abandoned Plant, EOY HV Abandoned Plant, and Abandoned Plant Amortization Expense amounts in Accordance with the Order.
If table can not be filled out completely, fill out at least through the Prior Year at issue.
c) Sum project-specific amounts for each project and enter in lines 1, 2, and 3 for the Prior Year at issue.
(BOY value is EOY value from previous year)
2) Add additional projects if necessary in same format.
3) Add additional years past 2025 if necessary.

## Calculation of Components of Working Capital

1) Calculation of Materials and Supplies

Materials and Supplies is the amount of total Account 154 Materials and Supplies
times the Transmission Wages and Salaries AF

2) Calculation of Prepayments

Prepayments is an allocated portion of Total Prepayments based on the Transmission Wages and Salaries Allocation Factor.

Plant Balances For Incentive Projects Receiving either ROE Incentives ("Transmission Incentive Plant") or CWIP ("CWIP Plant")

Input data is shaded yellow
A) Summary of Incentive Project plant balances receiving ROE incentives
("Transmission Incentive Plant") and/or CWIP ("CWIP Plant") and calculation
of balances needed to determine the following:

1) Rate Base in Prior Year
2) Prior Year Incentive Rate Base - End of Year
3) Prior Year Incentive Rate Base - 13-Month Average

Transmission Incentive Project plant balances and CWIP Plant may affect the following:
a) CWIP Plant during the Prior Year is included in Rate Base (used in Prior Year TRR and True Up TRR).
b) Forecast Period Incremental CWIP contributes to Incremental Forecast Period TRR
c) CWIP Plant receiving an ROE adder contributes to Prior Year Incentive Rate Base - EOY, or Prior Year Incentive Rate Base - 13 Month Average as appropriate.
d) "TIP Net Plant In Service" at EOY Prior Year is used to calculate the PY Incentive Rate Base (on EOY basis).
e) "TIP Net Plant In Service" in PY is used to calculate the Prior Year Incentive Rate Base (on 13-month average basis).

1) Summary of CWIP Plant in Prior Year and Forecast Period

2) Summary of Prior Year Incentive Rate Base amounts (EOY Values)

3) Summary of Prior Year Incentive Rate Base amounts (13-Month Average values)



## 6) Calculation of Prior Year Net Plant in Service amounts for each Incentive Project






6) Summary of Incentive Projects and incentives granted


## Instructions:

1) Upon Commission approval of any incentives for additional projects, add additional projects and provide cite to the Commission decision.

## Schedule 15

Incentive Adders

Determination of Incentive Adders Components of the TRR
Input data is shaded yellow
Two Incentive Adders are calculated:
a) The Prior Year Incentive Adder is a component of the Prior Year TRR.
b) The True Up Incentive Adder is a component of the True Up TRR.

1) Calculation of Incremental Return on Equity Factor

The Incremental Return on Equity Factor is the incremental Prior Year TRR expressed per 100 basis points of ROE incentive, for each million dollars of Incentive Net Plant. It is calculated according to the following formula:
$\operatorname{IREF}=\operatorname{CSCP} * 0.01^{*}(1 /(1-\operatorname{CTR})) * \$ 1,000,000$
3) Calculation of Prior Year Incentive Adder (EOY)

1) Determine Prior Year Incentive Adder for each Incentive Project by multiplying the IREF, the Multiplicative Factor, and the million \$ of Prior Year Incentive Rate Base.
2) Sum project-specific Incentive Adders to yield the total Prior Year Incentive Adder.

|  |  | Prior Year Incentive Rate Base |  | Multiplicative Factor |  | Prior Year Incentive Adder |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1) Rancho Vista | \$ |  | - | -- | \$ |  |
| 2) Tehachapi | \$ |  | - | -- | \$ |  |
| 3) Devers to Col. River | \$ |  | - | -- | \$ |  |

## Source

14-IncentivePlant, L 184
14-IncentivePlant, L 187
14-IncentivePlant, L 190

## 4) Calculation of True-Up Incentive Adder

1) Determine True Up Incentive Adder for each Incentive Project by multiplying the

IREF, the Multiplicative Factor, and the million \$ of True Up Incentive Net Plant.
2) Sum project-specific Incentive Adders to yield the total True Up Incentive Adder.

|  | True-Up <br> Incentive | Multiplicative <br> Net Plant | True-Up <br> Incentive |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1) Rancho Vista | $\$$ |  | - | -- | $\$$ |
| Factor |  |  |  |  |  |

True-Up Incentive Adder = \$

- Sum of above PY Incentive Adders for each individual project

5) Calculation of Total ROE for Plant-In Service in the True Up TRR
a) Transmission Incentive Plant Net Plant In Service

| Incentive <br> Project | 13-Month Avg. <br> TIP Net Plant |  |
| :--- | :--- | :--- |
| In Service | Source <br> Rancho Vista | $\$$ |
| 2) Tehachapi | $\$$ | - |
| 14-IncentivePlant, L 19, Col. 3 |  |  |
| 3) Devers to Col. River | $\$$ | - |
| 14-IncentivePlant, L 20, Col. 3 |  |  |
|  | $\$$ | - |
| 14-IncentivePlant, L 21, Col. 3 |  |  |

b) Calculation of ROE Adders on TIP Net Plant In Service


Total: \$
c) Equity Portion of Plant In Service Rate Base

d) Total ROE for Plant In Service in the True Up TRR

| Plant In Service ROE Adder Percentage: | $-\%$ | Line $30 /$ Line 35 |
| ---: | ---: | :--- |
| Base ROE (Including 50 basis point |  |  |
| CAISO Participation Adder): | $-\frac{-\%}{}$ | 1-BaseTRR, Line 50 |
| Total ROE for Plant In Service in True Up TRR: | $-\%$ | Line $36+$ Line 38 |

Instructions:

1) If additional projects receive ROE adders, add to end of lists, and include in calculation of each Incentive Adder.

## Notes:

1) Column 1: The True Up Incentive Adder for each Incentive Project equals the IREF on Line 3, times the applicable Multiplicative Factor on Lines 15 to 18, times the million \$ of TIP Net Plant In Service on Lines 21 to 24.
Column 2: The After Tax True Up Incentive Adder is derived by multiplying the amounts in Column 1 by ( $1-$ CTR) (Where the CTR is on Line 2).

Forecast Plant Additions for in-Service ISO Transmission Plan
Yellow shaded cells are Input Data
Forecast Plant Additions represents the total increase in ISO Transmission Net Plant, not including CWIP
during the Rate Year, incremental to the year-end Prior Year amount.
It is calculated on a 13 -Month Average Basis during the Rate Year.



| ) Non-Incentive Plant Forecast (See Note 1) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Col 1 |  | Col 2 | Col 3 |  | Col 4 |  | Col 5 |  | Col 6 |  | Col 7 |  | Col 8 |  | Col 9 |  | Col 10 |  | Col 11 |  | $=C 11^{*} 12(1-\mathrm{L} 75)$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | = Prior Month C2 |  | Prior Month C7 |  | $=$ Prior Month C9 |  |  |  |  |  | $=C 11^{*}(1-L 75)$ |
|  |  |  |  |  |  | $=(\mathrm{C} 1-\mathrm{C} 2)^{*} \mathrm{~L} 74$ |  | $=(C 1-C 2+C 3) *$ L75 |  | =C1-C2+C3-C4 |  | =C5*L76 |  | +C2+C5+C6 |  | * L91/12 |  | + C 4 + C 8 |  | =C7-C9 |  |  |  | *(1+L74+L76) |
|  | Forecast |  | Unloaded |  |  |  |  |  |  | AFUDC |  |  |  |  |  |  |  |  |  |  |  | Unloaded |  | Loaded |
|  | Period |  | Total |  | Prior Period | Over Heads |  | Cost of |  | Eligible Plant |  |  |  | Incremental |  | Depreciation |  | Incremental |  |  |  | Low Voltage |  | Low Voltage |
| Line | Mont | Year | Plant Adds |  | CWIP Closed | Closed to PIS |  | Removal |  | Additions |  | AFUDC |  | Gross Plant |  | Accrual |  | Reserve |  | Net Plant |  | Additions |  | Additions |
| 50 | January |  | \$ | \$ |  | \$ | \$ |  | \$ |  | \$ |  | \$ |  | \$ |  |  |  | \$ |  | - \$ |  | \$ |  |
| 51 | February | - | \$ | \$ |  | \$ | \$ |  | \$ |  | \$ |  | \$ |  |  |  | \$ |  | - \$ |  | - \$ |  | - \$ |  |
| 52 | March | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | \$ |  | \$ |  | \$ |  | \$ |  | - \$ |  |  |  |
| 53 | April | - | \$ | \$ |  | \$ | \$ |  | \$ |  | \$ |  | - \$ |  |  |  | \$ |  | - \$ |  | - \$ |  | - |  |
| 54 | May | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | - \$ |  |  |  | \$ |  | - |  | - \$ |  | - |  |
| 55 | June | - | \$ | \$ |  | \$ | \$ |  | \$ |  | \$ |  | \$ |  | \$ |  | \$ |  | - \$ |  | \$ |  | - |  |
| 56 | July | - | s | \$ | - | \$ | \$ |  | \$ |  | \$ |  | \$ |  |  | - | \$ |  | - \$ |  | - \$ |  | - |  |
| 57 | August | - | \$ | \$ |  | \$ | \$ |  | \$ |  | \$ |  | \$ |  |  | - | \$ |  | - \$ |  | - \$ |  | - |  |
| 58 | September | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | \$ |  |  | - | \$ |  | - \$ |  | - \$ |  | - \$ |  |
| 59 | October | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | - \$ |  |  |  | \$ |  | - \$ |  | \$ |  |  |  |
| 60 | November | - | \$ | \$ |  | \$ | \$ |  | \$ |  | \$ |  | - \$ |  |  | - | \$ |  | - \$ |  | \$ |  | - \$ |  |
| 61 | December | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | \$ | - |  | - | \$ |  | - |  |  |  |  |  |
| 62 | January | - | \$ | \$ |  | \$ | \$ |  | \$ |  | \$ |  | \$ |  |  | - | \$ |  | - |  | - \$ |  | - \$ |  |
| 63 | February | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | \$ |  |  | - | \$ |  | - |  |  |  |  |  |
| 64 | March | - | \$ | \$ |  | \$ | \$ |  | \$ |  | \$ |  | \$ |  |  |  | \$ |  | - \$ |  | - \$ |  |  |  |
| 65 | April | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | \$ |  |  | - |  |  | - \$ |  | \$ |  | - \$ |  |
| 66 | May | - | \$ | \$ |  | \$ | \$ |  | \$ |  | \$ |  | - \$ |  |  |  | \$ |  | - \$ |  | - \$ |  | - \$ |  |
| 67 | June | - | \$ | \$ |  | \$ | \$ |  | \$ |  | \$ |  | - \$ |  |  | - | \$ |  | - \$ |  | - |  | - |  |
| 68 | July | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | - \$ |  |  |  | \$ |  | - \$ |  | - \$ |  |  |  |
| 69 | August | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | - \$ |  |  | - | \$ |  | - \$ |  | - \$ |  | - |  |
| 70 | September | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | \$ |  |  | - | \$ |  | - \$ |  | - \$ |  | - |  |
| 71 | October | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | - \$ |  |  | - | \$ |  | - \$ |  | - \$ |  | - |  |
| 72 | November | - | \$ | \$ | - | \$ | \$ |  | \$ |  | \$ |  | - \$ |  |  | - | \$ |  | - \$ |  | \$ |  | - |  |
| 73 | December | - | \$ | \$ | - | \$ | \$ |  | \$ | - | \$ |  | - \$ |  |  | - | \$ |  | - |  | \$ |  | - \$ |  |

## I) ISO Corporate Overhead Loader

| Line |  |  |
| :---: | :---: | :---: |
| 74 | ISO Corp OH Rate | 7.50\% |
| 5) ISO Cost of Removal Percent |  |  |
| Line |  |  |
| 75 | Cost of Removal Rate | 8.00\% |


| ${ }^{\text {Line }}$ |  |
| :--- | :--- | :--- |
| $\frac{\text { 6) AFUDC Loader Rate }}{}$ |  |
| ISO AFUDC Rate | $3.00 \%$ |



1) Calculation of Depreciation Expense for Transmission Plant - ISO

Balances for Transmission Plant - ISO during the Prior Year, including December of previous year:


for Distribution Plant - ISO on Line 53 utilizing the weighted-average (by time) of the annual depreciation rates in effect in the Prior Year.

Schedule 18
Depreciation Rates

## Depreciation Rates

| Line | ssion Plan <br> FERC <br> Account | ISO Description | Plant <br> Less <br> Salvage | $\begin{gathered} \text { Removal } \\ \text { Cost } \end{gathered}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 350.1 | Fee Land | 0.00\% | 0.00\% | 0.00\% |
| 2 | 350.2 | Easements | 1.67\% | 0.00\% | 1.67\% |
| 3 | 352 | Structures and Improvements | 1.79\% | 0.62\% | 2.41\% |
| 4 | 353 | Station Equipment | 2.39\% | 0.45\% | 2.84\% |
| 5 | 354 | Towers and Fixtures | 1.20\% | 1.53\% | 2.73\% |
| 6 | 355 | Poles and Fixtures | 1.06\% | 1.78\% | 2.84\% |
| 7 | 356 | Overhead Conductors and Devices | 0.78\% | 2.46\% | 3.24\% |
| 8 | 357 | Underground Conduit | 1.73\% | 0.00\% | 1.73\% |
| 9 | 358 | Underground Conductors and Devices | 1.62\% | 0.79\% | 2.41\% |
| 10 | 359 | Roads and Trails | 1.65\% | 0.00\% | 1.65\% |

2) Distribution Plant - ISO

| FERC |
| ---: | :--- |
| Account |


| 360 | Land and Land Rights |
| ---: | :--- |
| 361 | Structures and Improvements |
| 362 | Station Equipment |


| Plant <br> Less | Removal <br> Salvage |  |
| :---: | :---: | :---: |
| $1.67 \%$ | Cost | Total |
| $1.75 \%$ | $0.00 \%$ | $1.67 \%$ |
| $1.32 \%$ | $0.69 \%$ | $2.39 \%$ |
|  |  | $2.01 \%$ |


|  | Plant <br> FERC <br> Account | Description |
| :---: | :---: | :---: |
| 15 | 389 | Land and Land Rights |
| 16 | 390 | Structures and Improvements |
| 17 | 391.1 | Office Furniture |
| 18 | 391.5 | Office Equipment |
| 19 | 391.6 | Duplicating Equipment |
| 20 | 391.2 | Personal Computers |
| 21 | 391.3 | Mainframe Computers |
| 22 | 391.7 | PC Software |
| 23 | 391.4 | DDSMS - CPU \& Processing |
| 24 | 391.4 | DDSMS - Controllers, Receivers, Comm. |
| 25 | 391.4 | DDSMS - Telemetering \& System |
| 26 | 391.4 | DDSMS - Miscellaneous |
| 27 | 391.4 | DDSMS - Map Board |
| 28 | 393 | Stores Equipment |
| 29 | 395 | Laboratory Equipment |
| 30 | 398 | Misc Power Plant Equipment |
| 31 | 397 | Data Network Systems |
| 32 | 397 | Telecom System Equipment |
| 33 | 397 | Netcomm Radio Assembly |
| 34 | 397 | Microwave Equip. \& Antenna Assembly |
| 35 | 397 | Telecom Power Systems |
| 36 | 397 | Fiber Optic Communication Cables |
| 37 | 397 | Telecom Infrastructure |
| 38 | 392 | Transportation Equip. |
| 39 | 394.4 | Garage \& Shop -- Equip. |
| 40 | 394.5 | Tools \& Work Equip. -- Shop |
| 41 | 396 | Power Oper Equip |


| Plant <br> Less | Removal |  |
| :---: | :---: | :---: |
| Salvage | Cost | Total |
| 1.67\% | 0.00\% | 1.67\% |
| 1.81\% | 0.27\% | 2.08\% |
| 5.00\% | 0.00\% | 5.00\% |
| 20.00\% | 0.00\% | 20.00\% |
| 20.00\% | 0.00\% | 20.00\% |
| 20.00\% | 0.00\% | 20.00\% |
| 20.00\% | 0.00\% | 20.00\% |
| 20.00\% | 0.00\% | 20.00\% |
| 14.29\% | 0.00\% | 14.29\% |
| 10.00\% | 0.00\% | 10.00\% |
| 6.67\% | 0.00\% | 6.67\% |
| 5.00\% | 0.00\% | 5.00\% |
| 4.00\% | 0.00\% | 4.00\% |
| 5.00\% | 0.00\% | 5.00\% |
| 6.67\% | 0.00\% | 6.67\% |
| 5.00\% | 0.00\% | 5.00\% |
| 20.00\% | 0.00\% | 20.00\% |
| 14.29\% | 0.00\% | 14.29\% |
| 10.00\% | 0.00\% | 10.00\% |
| 6.67\% | 0.00\% | 6.67\% |
| 5.00\% | 0.00\% | 5.00\% |
| 4.00\% | 0.00\% | 4.00\% |
| 2.50\% | 0.00\% | 2.50\% |
| 14.29\% | 0.00\% | 14.29\% |
| 10.00\% | 0.00\% | 10.00\% |
| 10.00\% | 0.00\% | 10.00\% |
| 6.67\% | 0.00\% | 6.67\% |


|  | le Plant <br> FERC <br> Account | Description | Plant <br> Less <br> Salvage | Removal Cost | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 42 | 302 | Hydro Relicensing | 2.47\% | 0.00\% | 2.47\% |
| 43 | 303 | Radio Frequency | 2.50\% | 0.00\% | 2.50\% |
| 44 | 301 | Other Intangibles | 5.00\% | 0.00\% | 5.00\% |
| 45 | 303 | Cap Soft 5yr | 20.31\% | 0.00\% | 20.31\% |
| 46 | 303 | Cap Soft 7yr | 14.62\% | 0.00\% | 14.62\% |
| 47 | 303 | Cap Soft 10yr | 12.93\% | 0.00\% | 12.93\% |
| 48 | 303 | Cap Soft 15yr | 8.48\% | 0.00\% | 8.48\% |

Notes: 1) Depreciation rates may only be revised as approved by the Commission pursuant
to a Section 205 or 206 filing.

1) Determination of Adjusted Operations and Maintenance Expenses for each account (Note 1)


|  | Col 1Account/Work Activity Rev | $=\frac{\mathrm{Col} 2}{\mathrm{C} 3+\mathrm{C} 4}$ |  |  | Col 3 |  | Col 4 |  |  | $\frac{\text { Col 5 }}{\text { Note } 2}$ | $=\frac{\mathrm{Col} 6}{\mathrm{C} 7+\mathrm{C} 8}$ |  |  | Col 7 |  |  | Col 8 |  |  | $=\mathrm{C} 10+\mathrm{C} 11$ |  |  | $=\frac{\text { Col } 10}{C 3+C 7}$ |  |  | $=\frac{\text { Col } 11}{C 4+\mathrm{C} 8}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total Recorded O\&M Expenses |  |  |  |  |  |  |  | Adjustments |  |  |  |  |  |  |  |  |  | Adjusted Recorded O\&M Expenses |  |  |  |  |  |  |
|  |  |  | Total |  |  | Labor |  |  | Non-Labor | Reason |  | Total |  |  | Labor |  |  | Non-Labor |  |  | Total |  |  | Labor |  |  |
| Distribution Accounts |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35 | 582 - Station Expenses | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |
| 36 | 590 - Maintenance Supervision and Engineering | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |
| 37 | 591 - Maintenance of Structures | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  |  | \$ |
| 38 | 592 - Maintenance of Station Equipment | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  | - | \$ |
| 39 | Accounts with no ISO Distribution Costs | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  |  | \$ |  | - | \$ |  |  | \$ |
| 40 | Distribution NOIC (Note 3) |  |  |  |  | - |  |  | - |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |  | - | \$ |
| 41 | Total Distribution O\&M | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  | - | \$ |
| 42 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4344 | Total Transmission and Distribution O\&M | \$ |  | - | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  |  | \$ |  | - | \$ |  | - | \$ |  |  | \$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45 | Total Transmission O\&M Expenses in FERC Form 1: | \$ |  | - |  | 321.112b |  |  | st equal Line | Column 2. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 46 | Total Distribution O\&M Expenses in FERC Form 1: | \$ |  | - |  | 322.156 b |  |  | st equal Line | Column 2. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 47 | Total TDBU NOIC | \$ |  |  |  | AandG, Not | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

2) Determination of ISO Operations and Maintenance Expenses for each account (Note 5).



Notes:

1) "Adjusted Operations and Maintenance Expenses for each account" are the total amounts of O M costs booked to each Transmission or Distribution account, less adjustments as noted
2) Reasons for excluded amounts:

A: Exclude entire amount, all attributable to CAISO costs recovered in Energy Resource Recovery Account.
B: Exclude amount related to MOGS Station Expense.
C: Exclude amount attributable to CAISO costs recovered in Energy Resource Recovery Account.
D: Exclude amount recovered through to Reliability Services Balancing Account, the Transmission Access Charge Balancing Account Adjustment,
E: Exclude amount of costs transfered to account from A\&G Account 920 pursuant to Order 668
F: Excludes shareholder funded costs
3) Total TDBU NOIC is allocated to Transmission and Distribution in proportion to labor in the respective functions. Transmission NOIC ("Non-Officer Incentive Compensation") equals Total TDBU NOIC times the Transmission NOIC Percentage calculated below. Distribution NOIC equals Total TDBU NOIC times the Distribution NOIC Percentage below.

Total TDBU NOIC is on Line:

```
Transmission NOIC Percentage:
Distribution NOIC Percentage
```

NOIC attributable to ISO Transmission (Column 7) is calculated utilizing a percentage equal to the ratio of total ISO O\&M Labor Expenses in column 7 (exclusive of NOIC) to
the total labor expenses in column 3 (exclusive of NOIC). That allocator, which is identified below, is then applied to the value in Column 3 to arrive at the NOIC attributable to ISO Transmission in Column 7 . Resulting Percentage is:
5) "ISO Operations and Maintenance Expenses" is the amount of costs in each Transmission or Distribution account related to ISO Transmission Facilities.
6) See Column 9 for references to source of each Percent ISO
7) SCE shall make no adjustments to recorded labor amounts related to non-labor labor and/or Indirect labor in Schedule 19


## Schedule 20

Administrative and General Expenses

## Note 2: Non-Officer Incentive Compensation ("NOIC") Adjustment

Adjust NOIC by excluding accrued NOIC Amount and replacing with the
actual non-capitalized A\&G NOIC payout.

|  |  | Amount |  | Source |
| ---: | :--- | :--- | :--- | :--- |
| Accrued NOIC Amount: | $\$ \underline{ }$ | SCE Records |  |  |



Trans. And Dist. Business Unit

SCE Records and Workpaper SCE Records and Workpapers Sum of $d$ to $f$

## Note 3: PBOPs Exclusion Calculation

|  |  |  | Amount | Note: |
| :---: | :---: | :---: | :---: | :---: |
| a | Current Authorized PBOPs Expense Amount: |  | \$18,219,000 | See instruction \#4 |
| b | Prior Year Authorized PBOPs Expense Amount | \$ | - | Authorized PBOPs Expense Amount during Prior Year |
| c | Prior Year FF1 PBOPs expense: | \$ | - | SCE Records |
| d | PBOPs Expense Exclusion: | \$ | - | c-b |

Amount in Line 31, column 2 equals amount in Line 8, column 1 because all Franchise Requirements Expenses are excluded
Franchise Fees Expenses component of the Prior Year TRR are based on Franchise Fee Factors.

## Instructions:

1) Enter amounts of A\&G expenses from FERC Form 1 in Lines 1 to 14.
2) Fill "II
is calculated in Note 2. The PBOPs exclusion in Column 4, Line 30 is calculated in Note 3.
a) Exclude amount of any Shareholder Adjustments, costs incurred on behalf of SCE shareholders, from relevant account in Column 1.
b) Include as an adjustment in Column 1 for Account 920 any amount excluded from Accounts 569.100, 569.200, and 569.300
in Schedule 19 (OandM) related to Order 668 costs transferred.
c) Exclude entire amount of account 927 "Franchise Requirements" in Column 2, as those costs are recovered
through the Franchise Fees Expense item.
d) Exclude any amount of Account 930.1 "General Advertising Expense" not related to advertising for safety,
siting, or informational purposes in column 1.
e) Exclude any amount of expense relating to secondary land use and audit expenses not directly benefitting utility customers
f) Exclude from account 930.2 :
3) Nuclear Power Research Expenses
4) Write Off of Abandoned Project Expenses.
5) Any advertising expenses within the Consultants/Professional Services category
g) Exclude the following costs included in any account 920-935
6) Any amount of "Provision for Doubtful Accounts" costs.
7) Any amount of "Accounting Suspense" costs.
8) Any penalties or fines.
9) Any amount of costs recovered $100 \%$ through California Public Utilities Commission ("CPUC") rates.
10) NOIC adjustment in Column 3, Line 24 is made by determining the difference between the total accrued NOIC amount included in the FERC Form 1 recorded cost amounts and the actual A\&G NOIC payout (see note 2).
NOIC adjustment in column 3, Line 26 is made by entering the amount of accrued NOIC that is capitalized.
11) Determine the PBOPs exclusion. The authorized amount of PBOPs expense (line a) may only be revised
pursuant to Commission acceptance of an SCE FPA Section 205 filing to revise the authorized PBOPs expense,
in accordance with the tariff protocols. Accordingly, any amount different than the authorized PBOPs expense
during the Prior Year is excluded from account 926 (see note 3). Docket or Decision approving authorized PBOPs amount:
12) SCE shall make no adjustments to recorded labor amounts related to non-labor labor and/or Indirect labor in Schedule 20.



## Schedule 21



## Schedule 21 Revenue Credits



44 Total Revenue Credits:
Notes:
$\begin{array}{ll}\text { 1- } & \text { CPUC Jurisdictional service related. } \\ \text { 2- } & \text { Subject }\end{array}$
once SCE obtains $\$ 16$ 1671 Gross Revenue Sharing Mechanism (GRSM), adopted in CPUC D.99-09-070. On an annual basis, Revenues) that SCE receives are shared between shareholders and ratepayers. For GRSM rategories (Incremental Gross Incremental Gross Revenues are shared 90/10 between shareholders and ratepayers. For those categories deemed Passive the Incremental Gross Revenues are shared $70 / 30$ between shareholders and ratepayers.
3- Generation related.
ISO transmission system related.
6- Subject to balancing account treatment
more than one allocator is in effect during the Prior Year.
ISO Allocator $=\quad-\%$
Source: --
ISO portion of Traditional OOR relates to monthly revenues received from customers for facilities that are part of the ISO
9- Edison ESI is a subsidiary company. Gross revenues are not reported in FF-1, only net earnings. Net Earnings for ESI are
reported on Acct 418.1, pg 225.5e.
10- The first $\$ 16,671,389$ million in gross revenues generated by GRSM activities are automatically classified as Threshold
11- Allocator is equal to the jurisdictional split of the Threshold Revenue, which is jurisdictionalized as $\$ 5.425 \mathrm{M}$ to FERC ratepayers and $\$ 11.246 \mathrm{M}$ to CPUC ratepayers per the 2009 CPUC General Rate Case (D. 09-03-025). The ISO ratepayers share of ratepayer revenue is $\$ 5.425 \mathrm{M} / \$ 16.671 \mathrm{M}=32.54 \%$.
12- Allocated based on the CPUC Base Revenue Requirement Balancing Account (BRRBA) allocator in effect during the Prior Year. The weighted average (by time) shall be used if more than one allocator is in effect during the Prior Year. ISO portion of revenue is treald as traditional 00
ISO Allocator $=\%$
Mono Power Company is a subsidiary company. Net Earnings are reported on Acct 418.1, pg 225.11e. Revenues and costs shall be non-ISO
14- SCE Capital Company is a subsidiary company. Net Earnings are reported on Acct 418.1, pg $225.23 e$. Revenues and costs shall be non-ISO
15- Southern States Realty is a subsidiary company. Gross revenues are not reported in FF-1, only net earnings. Net Earnings
for Southern States Realty are reported on Acct 418.1, pg 225.17e
16- For subsidiaries that are subject to $G R S M$, Column D contains gross revenues. Input on Line $30 D$ contains the associated expenses.
17-
Per GRC
Per GRC Decision D. $87-12$-066, for ratemaking purposes EMS financials are consolidated with SCE's. See FERC Form 1 page 123.3 under "Equity Investment Differences". Consequently, net income of EMS is not reported separately in FERC Form 1 and is not a part of FERC Account 418.1 totals. To ensure that ratepayers receive the net income from this subsidiary SCE includes EMS net income in the formula on line 28 . This amount is reversed as part
of line 30 to remain consistent with the totals reported in FERC Form 1 .

## NETWORK UPGRADE CREDIT AND INTEREST EXPENSE

## 1) Beginning of Year Balances: (Note 1)

Line
Outstanding Network Upgrade Credits Recorded in FERC Acct 252
Acct 252 Other
Total Acct 252 - Customer Advances for Construction
Prior Year:

-

|  | Balance |  |
| :--- | :--- | :--- |
| $\$$ |  | Notes |
| $\$$ |  | See Note 1 |
| $\$$ |  | Line 3-Line 1 |
|  |  | FF1 113.56d |

2) End of Year Balances: (Note 2)

4 Outstanding Network Upgrade Credits Recorded in FERC Acct 252
5 Acct 252 Other
6 Total Acct 252 - Customer Advances for Construction

7 Average Outstanding Network Upgrade Credits Beginning and End of Year

Interest On Network Upgrade Credits Recorded in FERC Acct 242
Acct 242 Other
10 Total Acct 242 - Miscellaneous Current and Accrued Liabilities

| $\$$ | - | See Note 3 |
| :--- | :--- | :--- |
| $\$$ | - | Line 6 - Line 4 |
| $\$$ | - | FF1 113.56c |
| $\$$ | - | $($ Line 1 + Line 4)/2 |


| $\$$ | - | See Note 4 |
| :--- | :--- | :--- |
| $\$$ | - | Line 10-Line 8 |
| $\$$ | - | FF1 113.48c |

Notes:
1 Beginning of Year Balances are from December of the year previous to the Prior Year.
2 End of Year Balances are from December of the Prior Year.
3 Only projects that are in Rate Base in the year reported are included.
4 Interest relates to refund of facility and one-time payments by generator. For facility costs, pre-in-service date interest is excluded. For one-time costs, pre-in-service and post-in-service interest is included.

# Schedule 23 <br> Regulatory Assets and Liabilities 

## Determination of Regulatory Assets/Liabilities and Associated Amortization and Regulatory Debits/Credits

| Line |
| :---: |
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |
| 6 |
| 7 |
| 8 |
| 9 |
| 10 |
| 11 |
| 12 |
| 13 |
| 14 |
| 15 |
| 16 |

Other Regulatory Assets/Liabilities are a component of Rate Base representing costs that are created resulting from the ratemaking actions of regulatory agencies. Pursuant to the Commission's Uniform System of Accounts, these items include amounts recorded in accounts 182.x and 254. This Schedule shall not include any costs recovered through Schedule 12.

SCE shall include a non-zero amount of Other Regulatory Assets/Liabilities only with Commission
approval received subsequent to an SCE Section 205 filing requesting such treatment.
Amortization and Regulatory Debits/Credits are amounts approved for recovery in this formula transmission rate representing the approved annual recovery of Other Regulatory Assets/Liabilities as an expense item in the Base TRR, consistent with a Commission Order.

|  | Prior Year Amount |  | Calculation or Source |
| :---: | :---: | :---: | :---: |
| Other Regulatory Assets/Liabilities (EOY): | \$ | - | Sum of Column 2 below |
| Other Regulatory Assets/Liabilities (BOY/EOY average): | \$ | - | Avg. of Sum of Cols. 1 and 2 below |
| Amortization and Regulatory Debits/Credits: | \$ | - | Sum of Column 3 below |

Col 3
Prior Year Amortization or

Regulatory
Debit/Credit
\$
\$
$\$$
\$

Col 2
Prior Year EOY
Other Reg

Col 1
Prior Year BOY
Other Reg Asset/Liability

| Asset/Liability |  |
| :--- | :--- |
| $\$$ |  |
| $\$$ | - |
| $\$$ | - |
| $\$$ |  |

Commission Order Granting Approval of Regulatory Liability
---
---
Sum of above

## Instructions:

1) Upon Commission approval of recovery of Other Regulatory Assets/Liabilities, Amortization and Regulatory Debits/Credits costs through this formula transmission rate:
a) Fill in Description for issue in above table
b) Enter costs in columns 1-3 in above table for the applicable Prior Year.
2) Add additional lines as necessary for additional issues.

## Calculation of the Contribution of CWIP to the Base TRR

1) CWIP Contribution to the Prior Year TRR and True Up TRR


| c) Income Taxes |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | EOY <br> Amount |  | Average Amount | Source |
| CWIP Amount: | \$ | - | \$ | - | Line 12 |
| Equity ROR w Preferred Stock ("ER"): |  | - \% |  | - \% | 1-BaseTRR, Line 55 |
| Composite Tax Rate: |  | - \% |  | - \% | 1-BaseTRR, Line 59 |
| Income Taxes: |  | - | \$ | - | Formula on Line 21 |

Income Taxes = [(RB *ER) * (CTR/(1 - CTR)], or [(L13 * L17) * (L18 / (1-L18)]
(No "Credits and Other" or "AFUDC" Terms, since these are not related to CWIP)
d) ROE Incentives:

Value Source
IREF $=\$$ - 15-IncentiveAdder, Line 3

1) Tehachapi

2) Devers to Colorado River


ROE Adder \$ = (Project CWIP Amount/\$1,000,000) * IREF * (ROE Adder \% / 1\%)
e) Total of Return, Income Taxes, and ROE Incentives contribution to PYTRR and True Up TRR


## f) Contribution from each Project to the Prior Year TRR and True Up TRR

| 1) Contribution to the Prior Year TRR |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Project |  | Col 1 | $\frac{\text { Col } 2}{\text { Income }}$ |  |  |  | Col 3 |  | Col 4 |  | Col 5 |  |  |  | Source |
|  |  | Cost of |  |  |  |  |  |  |  |  | = Sum C1 to C4 |  |  |  |  |
|  |  | Capital |  |  | Taxes |  |  | ROE Adder |  | FF\&U |  |  | Total |  |  |
| Tehachapi: | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 2 |
| Devers to Colorado River: | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 2 |
| South of Kramer: | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 2 |
| West of Devers: | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 2 |
| Red Bluff: | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 2 |
| Whirlwind Sub Expansion: | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 2 |
| Colorado River Sub Expansion: | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 2 |
|  | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 2 |
|  | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 2 |
|  | \$ |  | - | \$ |  | - | \$ |  |  |  | - | \$ |  | - | Note 2 |
|  | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 2 |
| Totals: | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Sum L 39 to L 49 |
| 2) Contribution to the True Up TRR |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Col 1 |  |  | Col 2 |  |  | Col 3 |  | Col 4 |  |  | Col 5 |  |  |
|  |  | Cost of |  |  | Income |  |  |  |  |  |  |  | C 1 to |  |  |
| Project |  | Capital |  |  | Taxes |  |  | ROE Adder |  | FF\&U |  |  | Total |  | Source |
| Tehachapi: | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 3 |
| Devers to Colorado River: | \$ |  | - | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 3 |
| South of Kramer: | \$ |  |  | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 3 |
| West of Devers: | \$ |  |  | \$ |  | - | \$ |  |  |  | - | \$ |  | - | Note 3 |
| Red Bluff: | \$ |  |  | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 3 |
| Whirlwind Sub Expansion: | \$ |  |  | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 3 |
| Colorado River Sub Expansion: | \$ |  |  | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 3 |
|  | \$ |  |  | \$ |  |  | \$ |  | \$ |  |  | \$ |  | - | Note 3 |
|  | \$ |  |  | \$ |  | - | \$ |  | \$ |  |  | \$ |  | - | Note 3 |
|  | \$ |  |  | \$ |  | - | \$ |  | \$ |  |  | \$ |  | - | Note 3 |
|  | \$ |  |  | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Note 3 |
| Totals: | \$ |  |  | \$ |  | - | \$ |  | \$ |  | - | \$ |  | - | Sum of L 51 to 61 |

2) Contribution from the Incremental Forecast Period TRR

## a) Total of all CWIP projects


b) Individual Project Contribution


## 3) Total Contribution of CWIP to the Retail and Wholesale Base TRRs:

## a) Total of all CWIP projects



Value

|  | Source |
| :---: | :---: |
| - | Sum Line 33 to 36 |
| - | Line 65 |
|  | Line 80 + Line 81 |
| - \% | 28-FFU, Line 5 |
| - \% | 28-FFU, Line 5 |
| - | Line 82 * Line 83 |
| - | Line 82 * Line 84 |
| - | Line 82 + Line 85 + Line 86 |
|  | Line $82+$ Line 85 |

b) Individual CWIP Project Contribution to the Retail Base TRR

c) Individual CWIP Project Contribution to the Wholesale Base TRR


## Notes:

1) (Sum Lines 33 to 36 ) * (FF + U Factors from 28-FFU) for Prior Year TRR
(Sum Lines $3 \underline{3} 4$ to $3 \underline{6} 7$ ) * (FF Factor from 28-FFU) for True Up TRR
2) Project Cost of capital is a fraction of total Cost of Capital on Line 15 based on fraction of project CWIP Balances on Lines 1 to 12 , Col 1 .

Project Income Taxes is a fraction of total Income on Line 19 based on fraction of project CWIP Balances on Lines 1 to 12, Col 1.
ROE Adder is from Lines 35 and 36. FF\&U Expenses are based on FF\&U Factors on 28-FFU.
3) Project Cost of capital is a fraction of total Cost of Capital on Line 15 based on fraction of project CWIP Balances on Lines 1 to 12, Col 2.

Project Income Taxes is a fraction of total Income on Line 19 based on fraction of project CWIP Balances on Lines 1 to 12, Col 2.
ROE Adder is from Lines 35 and 36. FF\&U Expenses are based on FF\&U Factors on 28-FFU.
4) Project contribution to total IFPTRR is based on fraction of Forecast Period CWIP Balances on Lines 1 to 12, Col 3.
5) Column 1 is from Lines 39 to 49, Sum of Column 1-3 (no FF\&U).

Column 2 is from Lines 68 to 78 (no FF\&U).
Column 3 is the product of (C1 + C2) and the sum of FF and $U$ factors ( $28-\mathrm{FFU}, \mathrm{L} 5$ )
6) Same as Note 5 except no Uncollectibles Expense in Column 3.

# Schedule 25 <br> Wholesale Differences to Base TRR 

Calculation of Wholesale Difference to the Base TRR
Inputs are shaded yellow
The Wholesale Difference to the Base TRR represents the amount by which the Wholesale Base TRR differs as compared to the Retail Base TRR. This difference is attributable to differences in the following six items, as approved by Commission Order 86 FERC $ๆ$ 63,014 in Docket No. ER97-2355.

These six items may affect the Base TRR by affecting Rate Base, or affecting an annual expense (amortization). If the annual amortization affects Income Taxes, there is an additional annual Income Tax Effect. The table summarizes these impacts for each item:

| Rate Base | Expense <br> (Amortization) <br> Difference | $\frac{\text { Difference }}{\text { Expense }}$ |
| :---: | :---: | :---: |
| Yes | Yes | $\frac{\text { Tax Impact }}{\text { Yos }}$ |
| Yes | Yes | Yes |
| Yes | Yes | Yes |
| Yes | Yes | No |
| No | Yes | No |
| No |  | No |

1) Calculation of Wholesale Rate Base Difference and Wholesale Rate Base Adjustment
a) Quantification of the Initial 2010 Wholesale Rate Base Difference and annual change The difference between Retail and Wholesale Rate Base is attributable to the following four items, with the Initial Prior Year 2010 Rate Base differences and annual changes as follows:

|  |  | $2010 \frac{\text { Col 1 }}{\text { Rate Base }} \quad \underline{\text { Col } 2}$ |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  | Difference | Annual |
| Data |  | (Wholesale | Change |
| Source |  | less Retail) | (Amortization) |
| Fixed values |  | \$31,556,000 | -\$2,176,300 |
| Fixed values |  | -\$35,044,000 | \$2,503,000 |
| Fixed values |  | -\$624,650 | \$43,100 |
| Fixed values |  | -\$7,410,000 | \$511,200 |
|  | Totals: | -\$11,522,650 | \$881,000 |

b) Quantification of the Wholesale Rate Base Adjustment

The Wholesale Rate Base Adjustment represents the impact on the Wholesale Base TRR relative to the Retail Base TRR of the Wholesale Rate Base Difference for the Prior Year.

|  | Data <br> Source |  | Value |  | Notes/Instructions |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fixed Charge Rate | 2-IFPTRR Line 16 |  |  | - \% | 1 |
| Prior Year |  |  | - |  | 2 |
| Wholesale Rate Base Difference for Prior Year |  | \$ |  | - | 3 |
| Wholesale Rate Base Adjustment | Line 14 * Line 12 | \$ |  | - |  |

## 2) Calculation of Wholesale Expense Difference

The annual Wholesale Expense Difference impact is the negative of amounts stated in Lines 7 to 10 above, Column 2. It represents the effect on expenses (Wholesale less Retail) of amortizing the associated balances each year. If an annual amortization amount affects Income Taxes, the expense difference must be grossed up for income taxes.
a) Calculation of the Wholesale South Georgia Income Tax Adjustment to the TRR

| 16 | South Georgia Amortization |
| :--- | :--- |
| 17 | Composite Tax Rate ("CTR") |
| 18 | Tax Gross Up Factor |
| 19 | Wholesale South Georgia |
| 20 | Income Tax Adjustment to the TRR: |


| Source | Value |  |
| :---: | :---: | :---: |
| Line 8 | \$ | - |
| 1-BaseTRR L 59 |  | - \% |
| (1/(1-CTR)) |  | --- |
| - Line 16 * Line 18 | \$ |  |

## b) Calculation of "Excess Deferred Taxes" Grossed Up for Income Taxes

|  | Source | Value |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{2 1}$ | Annual Amort. of "Excess Deferred Taxes": | Line 9 | \$ | - |
| $\mathbf{2 2}$ | Tax Gross Up Factor | Line 18 |  | - |
| $\mathbf{2 3}$ | Excess Deferred Taxes Grossed Up for Income Taxes: | - Line 21 * Line 22 | $\$$ | - |

Schedule 25
Wholesale Differences to Base TRR


## Notes/Instructions:

1) Fixed Charge Rate of capital and income tax costs associated with $\$ 1$ of Rate Base is defined elsewhere in this formula as "AFCRCWIP".
2) Input Prior Year for this Informational Filing in Line 13.
3) Calculation: (Line 11, Col 1) + ((Line 11, Col 2) * (Line 13-2010)).
4) Franchise Fee Exclusion is equal to the Franchise Fee Factor on the 28 -FFU Line 5 times Line $39+40$.
5) Only exclude if not already excluded in Schedule 20.
6) If appropriate, additional expenses may be excluded from the Wholesale Base TRR

## Income Tax Rates

|  | 1) Federal Income Tax rate |  | Inputs are shaded yellow |  |
| :---: | :---: | :---: | :---: | :---: |
| Line | $\frac{\text { Rate }}{\text { Year }}$ | Federal Income Tax Rate ("FITR") |  | Source |
| 1 | - | - \% | Note 1, Note 4 |  |
| 2 |  |  |  |  |
| 3 | 2) Composite State Income Tax Rate |  |  |  |
| 5 |  | State |  |  |
| 6 | Rate | Income Tax |  |  |
| 7 | Year | Rate ("SITR") |  | Source |
| 8 | - | - \% | Note 2 |  |

## 3) Capitalized Overhead portion of Electric Payroll Tax Expense

Total Electric Payroll Tax Expense (From 1-BaseTRR, Line 31)
Capitalization Rate (Note 3)
Capitalized Overhead portion of Electric Payroll Tax Expense (Line 14 * Line 15)
Non-Capitalized Overhead portion of Electric Payroll Tax Expense (Line 14 - Line 16)


Notes:

1) Federal Source Statute:
2) California State Source Statue:
3) Capitalization Rate approved in:

For the following Prior Years:
4) In the event that either the Federal or State Income Tax Rate applicable to the Rate Year differs from that in effect during the Prior Year, the True Up TRR for the Prior Year will be calculated utilizing the same Formula Rate Spreadsheet except for the Income Tax rate(s). The difference between the True Up TRR calculated in such workpaper using the Income Tax Rates that were in effect during the Prior Year and the True Up TRR otherwise calculated by this formula shall be entered as a One Time Adjustment on Schedule 3, ensuring that the Formula Spreadsheet correctly calculates the True Up TRR for the Prior Year to be based on the Income Tax Rate(s) that were in effect during that year. For the Prior Years of 2016 and 2017, both of which will have Income Tax Rates that differ between the Prior Year and the Rate Year due to the passage of the 2017 Tax Cuts and Jobs Act, this provision will be implemented as part of the Section 6 of the Formula Rate Protocols, which will calculate the True Up TRR for those years based on a Federal Income Tax Rate of 35\%.

Inputs are shaded yellow

1) Calculation of Transmission Wages and Salaries Allocation Factor


|  | Prior Year <br> Value |  |
| :--- | :--- | :--- |
| $\$ \$$ |  | - |
| $\$$ |  | - |
| $\$$ |  | - |
| $\$$ |  | - |
| $\$$ |  | - |
| $\$$ |  | - |
| $\$$ |  | - |
| $\$$ |  | - |
|  |  | - |
|  |  |  |
|  | Prior Year |  |
| $\$$ | Value |  |
| $\$$ |  | - |
| $\$$ |  | - |
| $\$$ |  | - |
| $\$$ |  | - |
| $\$$ |  | - |
| $\$$ |  | - |
|  |  | - |

Applied to Accounts
563 --Overhead Line Expenses - Allocated
567 - Line Rents - Allocated
571 - Maintenance of Overhead Lines - Allocated

Applied to Accounts
564 - Underground Line Expense
572 - Maintenance of Underground Transmission Lines

Applied to Accounts
All Other Non 0\% or 100\% Transmission O\&M Accounts

Applied to Accounts
582 - Station Expense
590 - Maintenance Supervision and Engineering
591 - Maintenance of Structures
592 - Maintenance of Station Equipment

## Franchise Fees and Uncollectibles Expense Factors

1) Approved Franchise Fee Factor(s) Inputs are shaded yellow

| Line | From | To | Days in Prior Year | FF Factor | Reference |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | --- | --- | --- | - \% | --- |
| 2 | --- | --- | --- | - \% | --- |

## 2) Approved Uncollectibles Expense Factor(s)

Days in

| From | To | Prior Year <br> ---- <br> --- |
| :---: | :---: | :---: |
| --- | -- |  |

Reference

3) FF and U Factors

5

Notes:

1) Franchise Fees represent payments that SCE makes to municipal entities for the right to locate facilities within the municipality.

## Instructions:

1) Enter Franchise Fee and Uncollectibles Factors as approved by the California Public Utilities Commission ("CPUC") in modules 1 and 2 above pursuant to Instruction 2. If approved factors changed during Prior Year, enter both, and note period of time for which each applies in "From" and "To" columns, and number of days each was in effect during the Prior Year in "Days in Prior Year" Column.
2) Franchise Fees Factor is calculated from CPUC Decision by dividing adopted Franchise Fees by Total Operating Revenues less Franchise Fees. Uncollectibles Factor is calculated by
dividing adopted Uncollectibles expense by Total Operating revenues less Uncollectibles Expense. Resulting FF \& U Factors represent factors that, when applied to TRR without FF and $U$ will correctly determine FF and $U$ expense.
3) Calculate in module 3 the weighted average FF and $U$ factors from the factors in modules 1 and 2 based on the number of days each FF and $U$ factor was in effect during the Prior Year at issue.

|  | Percent | Calculation |
| :---: | :---: | :---: |
| Prior Year FF Factor: | - \% | ((L1 FF Factor * L1 Days) + (L2 FF Factor * L2 Days))/(L1+L2 Days) |
| Prior Year U Factor: | - \% | ((L3 U Factor * L3 Days) + (L4 U Factor * L4 Days))/(L3+L4 Days) |

## Wholesale TRRs

## CALCULATION OF SCE WHOLESALE HIGH AND LOW VOLTAGE TRRS

| Line | TRR Values |  |  | Notes | Inputs are shaded yellow |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Source |
| 1 | \$ | - | = Wholesale Base TRR |  | 1-BaseTRR, Line 89 |
| 2 | \$ | - | = Total Wholesale TRBAA | Note 1 | --- |
| 3 | \$ | - | = HV Wholesale TRBAA |  | --- |
| 4 | \$ | - | = LV Wholesale TRBAA |  | --- |
| 5 | \$ | - | = Total Standby Transmission Revenues | Note 2 | SCE Retail Standby Rate Revenue |
| 6 |  | - \% | = HV Allocation Factor |  | 31-HVLV, Line 37 |
| 7 |  | - \% | = LV Allocation Factor |  | 31-HVLV, Line 37 |

## Calculation of Total High Voltage and Low Voltage components of Wholesale TRR



Notes:

1) TRBAA is "Transmission Revenue Balancing Account Adjustment". The TRBAA is determined pursuant to SCE's

Transmission Owner Tariff and may be revised each January 1, upon commission acceptance of a revised TRBAA
amount, or upon the date the Commission orders.
2) From 33-RetailRates. See Line:
3) Column 1 is from Line 1.

Column 2 equals Column 1 * Line 6.
Column 3 equals Column 1 * Line 7.
4) From 24-CWIPTRR, Line 88. All High Voltage.
5) Line 8 - Line 9
6) Column 1 is from Line 5.

Column 2 equals Column 1 * Line 6.
Column 3 equals Column 1 * Line 7.

## Wholesale Rates

## Calculation of SCE Wholesale Rates (See Note 1)

SCE's wholesale rates are as follows:

1) Low Voltage Access Charge
2) High Voltage Utility-Specific Rate
3) HV Existing Contracts Access Charge

## Calculation of Low Voltage Access Charge:

## Calculation of High Voltage Utility Specific Rate:

 (used by ISO in billing of ISO TAC)| LV TRR | $=\$$ |
| ---: | :--- |
| Gross Load | $=$ |
| Low Voltage Access Charge | $=\$$ |

Source

Low Voltage Access Charge = \$

|  |  | Source |
| :--- | :--- | :--- |
| - |  | 29-WholesaleTRRs, Line 13, C3 |
| --- | MWh | 32-Gross Load, Line 43 |
| - | per kWh | Line 1 / (Line 2 * 1000) |


| SCE HV TRR $=\$$ | - |  | 29-WholesaleTRRs, Line 13, C2 |
| :--- | :--- | :--- | :--- |
| Gross Load $=$ | --- | MWh | 32-Gross Load, Line 43 |

## Calculation of High Voltage Existing Contracts Access Charge:

## Source

29-WholesaleTRRs, Line 13, C2
--- MW 32-Gross Load, Line 54

- per kW Line 7 / (Line 8 * 1000)

Notes:

1) SCE's wholesale rates are subject to revision upon acceptance by the Commission of a revised TRBAA amount. See Note 1 on 29-WholesaleTRRs.

Derivation of High Voltage and Low Voltage Gross Plant Percentages
Determination of HV and LV Gross Plant Percentages for ISO Transmission Plant in accordance with ISO Tariff Appendix F, Schedule 3, Section $12 . \quad$ Input cells are shaded yellow


## Calculation of Forecast Gross Load

| Line |  | MWh | Calculation | Source |
| :---: | :---: | :---: | :---: | :---: |
| 1 | SCE Retail Sales at ISO Grid level: | --- |  | Note 1 |
| 2 | Pump Load forecast: | --- |  | Note 2 |
| 3 | Pump Load True-Up: | --- |  | Note 4 |
| 43 | Forecast Gross Load: | --- | Line $1+$ Line $2+$ Line 3 | Sum of above |
| 54 | Forecast 12-CP Retail Load: | --- |  | Note 1 |

## Notes:

1) Latest SCE approved sales forecast as of April 15 of each year.
2) SCE pump load forecast as of April 15 of each year.
3) The load forecast used in Schedule 32 shall be for the calendar year in which the rates are to be in effect.
4) The Pump Load True-Up value is equal to actual recorded less forecast Pump Load for the Prior Year.

## Calculation of SCE Retail Transmission Rates

Retail Base TRR: \$

${ }_{1 \text {-BaseTRR }}$| Source, Line 86 |
| :---: |

Input cells are shaded yellow

1) Derivation of "Total Demand Rate" and "Total Energy Rate":


| 11 | 3) End-User Transmission Rates |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 12 |  | Col 1 | Col 2 | $\underline{\mathrm{Col} 3}$ |
| 13 |  | $=\mathrm{Col} 2+\mathrm{Col} 3$ | $=\text { Line1:Col2 - }$ | = Line16:Col7 * <br> Line1:Col7 * $10 \wedge 3$ |
| 1415 | Note 12 |  |  |  |
|  | CPUC Rate Group | Total Revenues | Revenue <br> associated with <br> Supplemental <br> Demand or <br> Energy |  |
| 16a | Domestic | S | S Energy |  |
| 16b | TOU-GS-1 | \$ | - \$ | - \$ - |
| 16 c | TC-1 | \$ | - \$ |  |
| 16d | TOU-GS-2 | \$ | - \$ - | - \$ - |
| 16e | TOU-GS-3 | \$ | - \$ - | - \$ - |
| 16 f | TOU-8-SEC | \$ | - \$ - |  |
| 16g | TOU-8-PRI | \$ | - \$ - |  |
| 16h | TOU-8-SUB | \$ | - \$ |  |
| 16 i | TOU-8-Standby-SEC | \$ | - \$ - | - \$ - |
| ${ }^{16 \mathrm{j}}$ | TOU-8-Standby-PRI | \$ | - \$ - | - \$ - |
| 16k | TOU-8-Standby-SUB | \$ | - \$ - | - \$ - |
| 161 | TOU-PA-2 | \$ | - \$ - | - \$ |
| 16 m | TOU-PA-3 | \$ | - \$ - | - \$ - |
| 16 n | Street Lighting | \$ | - \$ - |  |
| 17 |  |  |  | $\xrightarrow{-1}$ |
| 18 | Totals: | \$ | -18 |  |


19 Note

1) See Col 9 of Lines 35a 35b 35 c e
Sales forecast in total Giga-watt hours usage, represents the customers' total annual GWh usage. Based on same forecast as Gross Load forecast in Schedule 32 , Line 1 , but at customer meter level Does not include Backup GWh included in Column 4 (the sum of Column 3 and 4 equals total Sales Forecast).
)
2) Amount of energy included in the sales forecast that is not subject to transmission charges purs
3) Sales forecast pertaining to the sum of monthly maximum supplemental Mega-watt demand, applies to demand charge schedules
4) Net Forecast in total Giga-watt hours usage - represents the customers' annual Net GWh, applicable to Non-Demand Charge Schedules such as Residential or Small General Servic
Col11* population - use to set the total demand rate for the optional time-of-use schedules within the $\mathrm{GS}-1$ rate grou
5) Total demand rate for the optional time-of-use schedules within the GS-1 rate group, Line 1b2:Col10 $=$ Line 1b2:Col12 ( which $=$ Line 1b2:Col11 $/((L i n e 1 b: C o l 12+L$ Line1b:Col13) * 10^3 $)$
6) Sum of the TOU-8 Standby and TOU-8 Non-Standby billing determinants in Line 1:Col6
7) For TOU-8 Rates revenue $=$ Supplemental Demand Charge on Line 9 Column 8 * Maximum Demand on Lines 1 Column 6
8) For optional time-of-use schedules within the GS-1 rate group (Line16b:Col6), (Line $1 b_{2}$ :Col11 - Line 16 :Col3) / Line 1 b:Col12 $/ 10^{\wedge} 3$
9) For the non TOU-8-Standby rate group, it is the minimum of Line 16i:Col7, or the total demand rate in Line1:Col108
10) Rates associated with Rate Groups GS-2
11) Apolumn 2 (line 16 d and 16 e ) divided by the sum of the sum of the Billing Determinants in Column 8 (Line 1 d and 1 e ).
12) Applicable to the optional schedules that contain horse power charge such as PA-1
13) GWh for TOU-8-Standby-SEC, TOU-8-Standby-PRI, TOU-8-Standby-SUB Rate Groups are placed in TOU-8-SEC, TOU-8-PRI, TOU-8-SUB Rate Groups respectively

20
21
22

## 2 Rate Schedules in each CPUC Rate Group:

| 23 |
| :--- |
| 24 |



## Schedule 34

## Unfunded Reserves

## Determination of Unfunded Reserves




## Notes:

1) Includes any Unfunded Reserves relating to accrued expenses included in Account 925 "Injuries and Damages",
reduced for any expected offsetting payments.

[^0]:    1 On October 27, 2017, SCE filed its Second Formula Rate ("Second Formula Rate") in Docket No. ER18-169. On December 29, 2017, the Commission accepted the Second Formula Rate and related 2018 base Transmission Revenue Requirement, established that is effective January 1, 2018 subject to refund and established hearing and settlement judge procedures

[^1]:    and instituted a Section 206 proceeding. Southern California Edison Co., 161 FERC 61,309 (2017). As of the date of this filing, it remains in settlement proceedings.

    2 CPUC Decision (D.)17-11-033, Decision Denying Application (issued December 6, 2017); reh'g denied, D.18-07-025 Order Denying Rehearing of D.17-11-033 (July 12, 2018).
    The CPUC's standard of review is not the same as this Commission's standard of review. See Midwest Indep. Transmission Sys. Operator, Inc., 143 FERC § 61,149 at P 121 (2013).
    3 EIX and SCE 2018 Annual Report on Form 10-K, as required by the U.S. Securities and Exchange Commission ("SEC"), which includes financial statements covering the period Jan. 1, 2018 - Dec. 31, 2018 ("2018 10-K").

[^2]:    4 Moody's Investors Service, Rating Action: Moody's downgrades Edison International to Baa3 and Southern California Edison to Baa2; outlooks negative (March 5, 2019). Moody's explained that California has unique wildfire risks because "wildfires are on average much more destructive because of its higher population density compared to other western states" and because of the doctrine of inverse condemnation, which "holds electric utilities to a strict liability standard on third-party property damages caused by the wildfire, regardless of fault" when utility equipment is a substantial cause of the wildfire. Moody's also referenced the "significant amount of uncertainty associated with the cost recovery process because in 2017 the CPUC disallowed the entire $\$ 379$ million wildfire cost request for wildfires that occurred on San Diego Gas \& Electric's territory in 2007."

[^3]:    5 The Base TRR reflects SCE's costs of owning and operating its transmission facilities that are under the CAISO's Operational Control.

[^4]:    6 SCE made five stated rate TRR filings to recover its Base TRR for the period April 1, 1998 through December 31, 2011 in Dockets No. ER97-2355, ER02-925, ER06-186, ER08-1343, and ER09-1534. SCE refers to these filings as TO1 through TO5 (for "Transmission Owner Base TRR filing No. 1", etc.). Additionally, SCE also had a complementary formula mechanism to recover Commission-approved Construction Work In Progress ("CWIP") Base TRR costs from the period March 1, 2008 through December 31, 2011 (see Docket Nos. ER08-375 and EL07-62). The separate CWIP formula mechanism was terminated upon the establishment of the Original Formula Rate, since CWIP costs are included in the Formula Rate.

[^5]:    7 Southern California Edison Co., 161 FERC 61,309.

[^6]:    8 Such risks include climate conditions, vegetation and forest management activities beyond what SCE performs surrounding its grid infrastructure, density of structures in close proximity or within the wildfire-urban interface within SCE's territory, fire agency resources and suppression response capabilities, along with fire ignitions caused by other sources. Mr. Brian Chen discusses these risks as well as the actions SCE is taking to mitigate wildfire ignition risk in Exhibit No. SCE-20.
    9 CPUC Decision (D.)17-11-033, Decision Denying Application (issued December 6, 2017); reh'g denied, D.18-07-025 Order Denying Rehearing of D.17-11-033 (July 12, 2018).

[^7]:    ${ }^{10} 165$ FERC II 61,030.
    ${ }^{11}$ Dr. Bente Villadsen provides testimony to support SCE's proposed base ROE, in Exhibit SCE-25. Dr. Villadsen's testimony includes application of the multiple-model methodology proposed by the Commission in the NETO Briefing Order, with certain refinements to the proposed methodology. Dr. Gary Stern provides testimony that outlines the unique and significant non-wildfire regulatory and legislative risks that SCE faces as a public electric utility operating in California, in Exhibit SCE-21.
    12 See, e.g., NETO Briefing Order at PP 21, 24.

[^8]:    ${ }^{15}$ This value does not include the requested CAISO $0.5 \%$ incentive adder or SCE's specific project incentive adders.
    ${ }^{16}$ The conventional ROE is supported by the analysis and testimony of Dr. Bente Villadsen in Exhibit Nos. SCE-25. Mr. Frank Graves provides testimony and analysis on the unique wildfire risk in Exhibit Nos. SCE-22 and SCE-24. The testimony of Mr. Daniel Wood relies upon the testimony and analysis of Dr. Villadsen and Mr. Graves and concludes that a base ROE of $17.12 \%$ is just and reasonable and will allow SCE to attract capital on reasonable terms, at Exhibit SCE-19.
    ${ }^{17}$ See Exhibit No. SCE-25 at pp. 3-5.

[^9]:    ${ }^{19}$ Exhibit SCE-22.

[^10]:    ${ }^{20}$ See, e.g., NETO Briefing Order at P 21 (concluding, based on guidance from cases involving FPA Section 205, that a "company's risk profile" is the chief factor in determining whether an ROE is just and reasonable).

[^11]:    ${ }^{21}$ Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944) (Hope); Bluefield Water Works and Improvement Co. v. Public Service Commission of the State of West Virginia, 262 U.S. 679 (1923) (Bluefield).

[^12]:    ${ }^{27}$ Under certain conditions, as set forth Section 1 of the Formula Protocols, SCE may also include a "Cost Adjustment" as a fourth component of the Base TRR. The purpose of the Cost Adjustment provision is to allow an adjustment to the Base TRR to reflect known unusual one-time changes to costs. Mr. Hansen fully explains the Cost Adjustment feature of the Formula Rate in his testimony, Exhibit No. SCE-3. Although permitted, SCE has not had a need to include a Cost Adjustment in any of its Annual Update filings under the Original Formula Rate.
    ${ }^{28}$ The "Prior Year" is the calendar year previous to the year that the Annual Update is submitted. The Annual Update sets the Base TRR for the "Rate Year," which is the calendar year following the year the Annual Update is submitted. There is thus a two-year difference between the Prior Year and the Rate Year.

[^13]:    ${ }^{29}$ See Section 4 of the Original Formula Rate protocols: "If the Final True Up Adjustment reflects an undercollection by SCE, then SCE shall be entitled and required to recover the amount of this Final True Up Adjustment in SCE's successor transmission rates to the Formula Rate. If the Final True Up Adjustment reflects an overcollection by SCE, then SCE shall be required to refund the amount of this Final True Up Adjustment to its customers."

[^14]:    ${ }^{30}$ S. Cal. Edison Co., 166 FERC II 61,006 (2019).
    ${ }^{31}$ This submission was made pursuant to the Commission's Order on Paper Hearing, issued on December 20, 2018. S. Cal. Edison Co., 165 FERC II 61,241 (2018).

[^15]:    ${ }^{32}$ SCE requests waiver of Section 385.203(b)(3) of the Commission's Regulations to allow three people to be on this list.
    ${ }^{33} 18$ C.F.R. § 35.13.
    ${ }^{34}$ Southern California Edison Co., 136 FERC I[ 61,074 at P 29 (2011)( granting waiver of request for waiver of the requirements under section 35.13 regarding the filing of a full Period I and Period II study); Pub. Serv. Elec. and Gas Co., 124 FERC $\mathbb{T}$ 61,303 at PP 23-24

[^16]:    ${ }^{1}$ Southern California Edison Co., 121 FERC $\mathbb{1} 61,168$ (2007); Southern California Edison Co., 133 FERC $\mathbb{1}$ 61,108 (2010); Southern California Edison Co., 133 FERC $\mathbb{1}$ 61,107 (2010); Southern California Edison Co., 134 FERC $\mathbb{1}$ 61,181 (2011); and Southern California Edison Co., 161 FERC $\mathbb{1}$ 61,107 (2017).

[^17]:    ${ }^{2}$ See CAISO Board of Governors Approval, SCE Application in Docket No. EL07-62, filed May 18, 2007, at Exhibit I.
    ${ }^{3}$ See CPUC Decision 07-03-012, March 1, 2007.
    ${ }^{4}$ See CPUC Decision 07-03-045, March 15, 2007.
    ${ }^{5}$ See CPUC Decision 09-12-044, December 17, 2009.

[^18]:    ${ }^{6}$ See CPUC Segment 1 Approval, at p. 22, and CPUC Segments 2-3 Approval, at pp. 2021.
    ${ }^{7}$ See CPUC Decision 09-12-044, Finding of Fact \#18, page 93.
    ${ }^{8}$ Southern California Edison Co., 134 FERC $\mathbb{1} 61,059$ (2011). The LGIA was conditionally accepted subject to the subject to the Commission decision regarding SCE's requested abandoned plant approval incentive in Docket No. EL11-10-000, which was approved on March 11, 2011. Southern California Edison Co., 134 FERC ๆ 61,181 (2011).

[^19]:    ${ }^{9}$ Southern California Edison Co., 134 FERC $\mathbb{1}$ 61,032 (2011). The LGIA was conditionally accepted subject to the subject to the Commission decision regarding SCE's requested abandoned plant approval incentive in Docket No. EL11-10-000, which was approved on March 11, 2011. Southern California Edison Co., 134 FERC $\mathbb{9}$ 61,181 (2011).
    ${ }^{10}$ RETI is a statewide initiative intended to help identify the transmission projects needed to accommodate California's renewable energy goals. Background information about the purpose and formation of RETI, its mission statement, membership information, and all RETI documents are available at www.energy.ca.gov/reti.
    ${ }^{11}$ CTPG is a forum for conducting joint transmission planning and coordination in transmission activities in California. Background information on CTPG and all CTPG documents are available at ctpg.us/public/index.php.

[^20]:    ${ }^{12}$ See CPUC Decision 15-05-040, May 21, 2015.
    ${ }^{13}$ See Docket No. ER16-1025.
    ${ }^{14}$ Southern California Edison Co., 158 FERC 9 63,006 (2017).
    ${ }^{15}$ S. Cal. Edison Co., 159 FERC 9 62,038 (2017).

[^21]:    ${ }^{16}$ S. Cal. Edison Co., 134 FERC $\mathbb{1} 61,087$ (2011). The LGIA was conditionally accepted subject to the subject to the Commission decision regarding SCE's requested abandoned plant approval incentive in Docket No. EL11-10-000, which was approved on March 11, 2011. Southern California Edison Co., 134 FERC $\mathbb{1}$ 61,181 (2011).
    ${ }^{17}$ See CPUC Decision 16-08-017, August 18, 2016.
    ${ }^{18}$ See BLM Decision DOI-BLM-CA-060-0015-0021, CACA-055285

[^22]:    ${ }^{19}$ Southern California Edison Co., 134 FERC $\mathbb{1} 61,107$ (2011). The LGIA was conditionally accepted subject to the subject to the Commission decision regarding SCE's requested abandoned plant approval incentive in Docket No. EL11-10-000, which was approved on March 11, 2011. Southern California Edison Co., 134 FERC $\mathbb{1}$ 61,181 (2011).

[^23]:    ${ }^{20}$ See CPUC Decision 11-07-011, July 14, 2011.
    ${ }^{21}$ OTC facilities are generating plants that take in ocean or estuarine water to cool their turbines and return the water back to the source. California State Water Resource Control Board's (SWRCB) OTC Policy outlines a state-wide compliance schedule to reduce the environmental impact of these facilities, which involves the planned retirement of specific OTC plants within the Los Angeles Basin by the end of 2020. For more information see
    http://www.swrcb.ca.gov/water_issues/programs/ocean/cwa316/policy.shtml 2013-2014 ISO Transmission Plan (July 16, 2014), available at http://www.caiso.com/Documents/Board-
    Approved2013-2014TransmissionPlan_July162014.pdf; at p. 6.

[^24]:    ${ }^{22}$ See CPUC Decision 17-02-015, February 9, 2017.
    ${ }^{23}$ See CAISO Memorandum to ISO Board of Governors regarding the decision on Alberhill Substation Project, December 9, 2009.

[^25]:    ${ }^{24}$ See CPUC Decision 10-08-009, August 12, 2010.
    ${ }^{25}$ See CPUC Decision 18-08-026, August 23, 2018.

[^26]:    ${ }^{26}$ See CPUC Ruling on Application 18-05-007, January 9, 2019.

[^27]:    ${ }^{1}$ Attachment 2 consists of thirty-four (34) individual Schedules. All references in the Formula Rate Protocols ("Protocols") to Schedules refer to Schedules in the Formula Rate Spreadsheet. The Formula Rate Spreadsheet and Formula Rate Protocols together comprise the "Formula Rate." The formula rate that was in effect from January 1, 2012 through December 31, 2017 pursuant to Docket No. ER11-3697 shall be referred to herein as the "Original Formula Rate", and the formula rate that went into effect on January 1, 2018 pursuant to Docket No. ER18-169, through the effective date of this Formula Rate shall be referred to herein as the "Second Formula Rate".

[^28]:    2 "Rate Year" shall mean the twelve consecutive month period of January 1 through December 31 that corresponds to the year for which charges are assessed under the Formula Rate.
    ${ }^{3}$ The "Service List" includes (1) any state regulatory agency with jurisdiction over the rates, charges or services of SCE; (2) any person or entity admitted as a party to this Formula Rate proceeding; and (3) any person or entity admitted as a party in any Annual Update proceeding filed by SCE in accordance with these Protocols. For purposes of communications with parties on the Service List, SCE will include the individuals on the service list in the Docket in which this Formula Rate is filed, and parties that are admitted in future FERC proceedings involving Formula Rate Annual Updates. Any references to a "party" in these Protocols shall mean any party to the Docket in which this Formula Rate is filed and any party admitted to future FERC proceedings involving Formula Rate Annual Updates.

[^29]:    4 "Material Accounting Changes" shall mean any material change that affects SCE's transmission rates as follows: (i) accounting policies and practices from those in effect for the Prior Year upon which the immediately preceding Annual Update was based, including those resulting from any new or revised accounting guidance from the Financial Accounting Standards Board; or (ii) internal corporate cost allocation policies or practices in effect for the Prior Year upon which the immediately preceding Annual Update was based; or (iii) income tax elections from those in effect for the Prior Year upon which the immediately preceding Annual Update was based; or (iv) cost allocation policies between EIX, SCE, and subsidiaries of either, from those in effect for the Prior Year upon which the immediately preceding Annual Update was based. Additionally, a Material Accounting Change shall also include any: (i) initial implementation of an accounting standard; or (ii) initial implementation of accounting practices for unusual or unconventional items where the Commission has not provided specific accounting direction.

[^30]:    Where:
    RB = Rate Base
    ER = Equity Rate of Return Including Common and Preferred Stock
    CTR = Composite Tax Rate
    CO = Credits and Other
    D = Book Depreciation of AFUDC Equity Book Basis

[^31]:    Notes:

    1) Amount in Column 2 from FF1 112.18d, amount in Column 14 from FF1 112.18c, amounts in columns 3-13 from SCE internal records 2) Amount in Column 2 from FF1 111.19d, amount in Column 14 from FF1 112.19c, amounts in columns 3 -13 from SCE internal records, 4) Amount in Column 2 from FF1 112.21d, amount in Column 14 from FF1 112.21c, amounts in columns 3-13 from SCE internal records. 5) Amount in Column 2 from FF1 112.22d, amount in Column 14 from FF1 112.22c, amounts in columns 3-13 from SCE internal records. 6) Amount in Column 2 from FF1 112.23d, amount in Column 14 from FF1 12.23c, amounts in columns 3-13 rrom SCE internal records. 7) Amount in Column 2 from FF1 111.69d, amount in Column 14 from FF1 111.69c, amounts in columns 3 -13 from SCE internal records. 8) Amount in Column 2 from FF1 111.81d, amount in Column 14 from FF1 111.81c, amounts in columns 3 - 13 from SCE internal record 10) Amounts in Columns 2-14 are from SCE internal records.
    2) Amount in Column 2 from FF1 112.3d, amount in Column 14 from FF1 112.3c, amounts in columns 3-13 from SCE internal records. 12) Amounts in Columns 2-14 are from SCE internal records.
    3) Amounts in Columns 2-14 are from SCE internal records.
    4) Amount in Column 2 from FF1 112.16d, amount in Column 14 from FF1 112.16c, amounts in columns $3-13$ from SCE internal records

    14a) Represents Capital disclosed by SCE related to Wildfire Related Capital, not yet paid on a cash basis. Amounts in Columns $2-14$ are from SCE internal record
    16) Amount in Column 2 from FF1 112.15d, amount in Column 14 from FF1 112.15c, amounts in columns 3-13 from SCE internal records.

[^32]:    ${ }^{1}$ Attachment 2 consists of thirty-four (34) individual Schedules. All references in the Formula Rate Protocols ("Protocols") to Schedules refer to Schedules in the Formula Rate Spreadsheet. The Formula Rate Spreadsheet and Formula Rate Protocols together comprise the "Formula Rate." The formula rate that was in effect from January 1, 2012 through December 31, 2017 pursuant to Docket No. ER11-3697 shall be referred to herein as the "Original Formula Rate", and the formula rate that went into effect on January 1, 2018 pursuant to Docket No. ER18-169, through the effective date of this Formula Rate shall be referred to herein as the "Second Formula Rate".

[^33]:    2 "Rate Year" shall mean the twelve consecutive month period of January 1 through December 31 that corresponds to the year for which charges are assessed under the Formula Rate.
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[^34]:    4 "Material Accounting Changes" shall mean any material change that affects SCE's transmission rates as follows: in SCE's (i) accounting policies and practices from those in effect for the Prior Year upon which the immediately preceding Annual Update was based, including those resulting from any new or revised accounting guidance from the Financial Accounting Standards Board;-; or (ii) internal corporate cost allocation policies or practices in effect for the Prior Year from those policies and/or practices in effect for the Prior Year upon which the immediately preceding Annual Update was based; or (iii) income tax elections from those in effect for the Prior Year upon which the immediately preceding Annual Update was based; or (iv) cost allocation policies between EIX, SCE, and subsidiaries of either, from those in effect for the Prior Year upon which the immediately preceding Annual Update was based. Additionally, a Material Accounting Change shall also include any: (i) initial implementation of an accounting standard; or (ii) initial implementation of accounting practices for unusual or unconventional items where the Commission has not provided specific accounting direction.

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    RB = Rate Base
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    CO = Credits and Other
    D = Book Depreciation of AFUDC Equity Book Basis

