PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

February 14, 2020

Ms. Laura Genao
Managing Director, State Regulatory Affairs
Southern California Edison
1515 Walnut Grove Avenue, 3-B
Rosemead, California 91770

Dear Ms. Genao:

The California Public Utilities Commission (CPUC) received the 2016 and 2017 consolidated Interim Risk Spending Accountability Report (2016-17 RSAR) of Southern California Edison Company (SCE) that was filed in the utility's 2018 Risk Assessment and Mitigation Phase (RAMP) Proceeding, Investigation (I.) 18-11-006, on March 14, 2019. The CPUC's Energy Division prepared the enclosed review (Attachment) of this report and provides recommendations for SCE to consider for the 2019 report subject to the review of the 2018 report filed with the Energy Division on July 23, 2019 as Advice Letter 4042-E.

CONCLUSIONS

The Energy Division reviewed the utility's report and finds SCE to have complied with guidance provided in its letter dated January 3, 2019.

SCE presented authorized and actual spending for its reportable programs and provided explanations for those programs meeting the selection criteria. SCE correctly applied the selection criteria for its programs according to the *Energy Division Guidance for the Standardized Reporting and Outline of the Risk Spending Accountability Report* dated August 31, 2018 and filed in the consolidated 2015 Safety Model Assessment Proceeding, Application (A.) 15-05-002 et al. In April 2019, after SCE filed its 2016-17 RSAR, the CPUC issued Decision (D.) 19-04-020 that modified the selection criteria and revised the reporting guidance for utilities. SCE provided reference information and a list of emergent or canceled projects from the 2018 Test Year (TY) General Rate Case (GRC), A.16-09-001, along with regulatory account information affecting authorized spending.

Analysis of SCE's 2016-17 RSAR shows that the utility overspent its budget for wildfire risk mitigation programs by $73.1 million on operating costs and $383.5 million on capital expenditures over the 2015 TY GRC forecasting cycle.

RECOMMENDATIONS

The requirements of the utilities in preparing and submitting the RSARs from Ordering Paragraph 10 in D.19-04-020 apply to SCE starting with the 2021 TY GRC, A.19-08-013, filed on August 30, 2019. The Energy Division recommends that SCE submit an RSAR covering calendar year 2019 consistent with these new requirements no later than March 31, 2020. In the 2019 RSAR, SCE should include programs it identified in the 2018 TY GRC as mitigating wildfire risk.

The 2019 RSAR should be filed and served in the 2018 TY GRC, the 2021 TY GRC, and the 2018 RAMP Proceeding and made available to the CPUC's Safety and Enforcement Division, Safety Policy Division and the Public Advocates Office. SCE should also provide the 2019 RSAR to the Energy Division Tariff Unit by emailing the report to edtariffunit@cpuc.ca.gov.

If you have any questions or comments, please contact Michael Zelazo, Senior Utilities Engineer, at (916) 327-6797 or michael.zelazo@cpuc.ca.gov.

Sincerely,

FOR

Edward Randolph
Deputy Executive Director for Energy and Climate Policy/
Director, Energy Division

Attachment

cc: Dawn Anaiscourt, Director, Regulatory Policy and Affairs
Southern California Edison Company
1515 Walnut Grove Avenue, 3-B
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Douglas Snow, Director, 2021 GRC
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Lee Palmer, Director
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Market Structure, Costs and Natural Gas Branch

Franz Cheng, Supervisor
Natural Gas Section

Jenny Au
Senior Engineer
Electric Costs Section

Service Lists for A.13-11-003, A.16-09-001, A.19-08-013, and I.18-11-006

PUBLIC UTILITIES COMMISSION
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ATTACHMENT

Energy Division Review of the 2016 and 2017 Consolidated Interim Risk Spending Accountability Report of the Southern California Edison Company

The California Public Utilities Commission's (CPUC) Energy Division reviewed the 2016 and 2017 consolidated Interim Risk Spending Accountability Report (2016-17 RSAR) of Southern California Edison Company (SCE) that was filed in the utility's 2018 Risk Assessment and Mitigation Phase (RAMP) Proceeding, Investigation (I.) 18-11-006, on March 14, 2019. Energy Division staff conducted the review to provide the CPUC and parties to the SCE 2021 Test Year (TY) General Rate Case (GRC), Application (A.) 19-08-013, with information that may be useful in the proceeding. The review verifies compliance with the guidance provided by the Energy Division in its letter dated January 3, 2019 and serves as a precursor to the review of RSARs required by CPUC Decision (D.) 19-04-020.

BACKGROUND

In December 2014, the CPUC issued D.14-12-025, *Decision Incorporating a Risk-Based Decision-Making Framework into the Rate Case Plan and Modifying Appendix A of D.07-07-004*, and directed the investor-owned utilities under its jurisdiction to prepare and submit to the CPUC annual RSARs that would compare authorized and actual spending on risk mitigation projects. In April 2019, the CPUC issued D.19-04-020, *Phase Two Decision Adopting Risk Spending Accountability Report Requirements and Safety Performance Metrics for Investor-Owned Utilities and Adopting a Safety Model Approach for Small and Multi-Jurisdictional Utilities*, and provided the utilities with specific direction in complying with the reporting requirements of the new risk-based decision-making framework. SCE is scheduled to meet these requirements beginning with the 2021 TY GRC.

In a letter dated January 3, 2019, the Energy Division directed SCE to file and serve annual "interim" RSARs for 2016 through 2020 in the applicable RAMP or GRC proceeding. The reports were to meet specific requirements that were designed to prepare the utility for the new risk-based decision-making framework. On March 14, 2019, SCE filed its 2016-17 RSAR with a comparison of recorded and authorized amounts and provided it to the service list of its 2018 RAMP Proceeding.

REOPORTING REQUIREMENTS

SCE was directed to include the following information in the 2016-17 RSAR.

1) A list of all programs authorized or in effect during each record year that were identified as impacting safety or reliability within SCE's Risk Informed Planning Process and Risk Evaluation

Methodology filed as part of the 2018 TY GRC, A.16-09-001, as well as programs associated with a maintenance activity.[1][2][3]

2) The authorized and actual spending for the record year and the difference in dollars (actual less authorized) and in percent (actual less authorized, divided by authorized). Where it is necessary to fill in the details between a CPUC decision and the authorized amount provided in the report for a program, include a derivation of the authorized amount.

3) A detailed explanation of the difference for programs that satisfy the following criteria:
   - Expense: A difference of at least $10 million, or a percentage difference of at least 20 percent subject to a minimum difference of $5 million.
   - Capital: A difference of at least $20 million, or a percentage difference of at least 20 percent subject to a minimum difference of $10 million.

4) Along with the difference, please provide:
   a. A description of each program.
   b. The location in the 2015 TY GRC testimony where the program is described.
   c. The location in the 2018 TY GRC testimony where the program is described.
   d. A list of projects that were canceled or deferred within each program.
   e. A list of projects which were not presented in the 2015 TY GRC or 2018 TY GRC but were taken up.
   f. If applicable, the balancing or memorandum account where the spending for each program is recorded, the record year balances, and the disposition of any request for cost recovery.

5) The total company authorized spending for each record year categorized into expensed and capital programs.

STAFF ANALYSIS

Energy Division staff approached its review of the SCE 2016-17 RSAR with the objective of providing an analysis of spending variance in the context of the 2015 TY GRC, A.13-11-003, while also providing annual comparisons for the reported years consistent with the guidance provided in D.19-04-020 and the new risk-based decision-making framework. The review focused on transmission and distribution activities aimed at reducing catastrophic wildfires because (1) the utility identified wildfire as a top risk and (2) the CPUC's Safety and Enforcement Division, in its review of SCE's 2018 RAMP report, recommended wildfires to be classified as a Tier 1 risk. The intent is to provide a view of the utility's spending patterns to be used as a foundation for comparing the 2018 TY GRC cycle spending and for comparability in the open 2021 TY GRC and 2018 RAMP proceedings.

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[1] Programs are defined as GRC Activities for expense categories and as capital expenditures that combine Work Breakdown Structure elements.
[2] See Exhibit SCE-01 and associated workpapers.
[3] Recorded in Federal Energy Regulatory Commission Accounts 510-515, 528-532, 541-545, 551-554, 568-574, 576, 590-598, and 935 or associated with the preservation of utility property or equipment in good condition to prevent failure.

To begin the analysis, Energy Division staff selected SCE's Conductor Failure Risk and its mitigation programs from the 2015 TY GRC to model the utility's response to reducing the threat of catastrophic wildfires. This risk selection is appropriate since SCE listed "property damage from fires caused by energized conductor or cable" as a potential impact of the conductor failure risk event. Energy Division staff relied on Table III-2, "Summary of Activities to Mitigate Conductor Failure Risk," of Exhibit SCE-15 from the 2015 TY GRC to select transmission and distribution programs aimed at reducing the risk of injury or damage caused by wildfires. **Table 1** reproduces the capital and operations and maintenance (O&M) programs listed in Table III-2.

Table 1: SCE 2015 TY GRC Summary of Wildfire Risk Mitigation Programs

Capital	O&M
Worst Circuit Rehabilitation/Cable Replacement	Overhead Conductor Program
Cable-in-Conduit (CIC) Replacement	Vegetation Management
Cable Life Extension	Transmission Line Rating Study and Remediation
Vegetation Management Software Initiative	Insulator Washing
Transmission Line Rating Remediation	Public Safety Education Outreach and Programs
	Underground Locating Service

Some of the programs listed correspond to either GRC Activities or Work Breakdown Structure (WBS) elements – reportable programs under the risk-based decision-making framework. Others listed are components of those programs. These types of components are not identified within the overall program spending. While the guidance provided to SCE requested the utility to report on *programs* that impact safety, reliability or maintenance within the 2018 TY GRC risk analysis, use of the listed programs and program components (hereafter, risk mitigation programs) provides a way to evaluate risk spending behavior within the 2015 TY GRC cycle to cover the years subject to the utility's report.

For continuity with the 2018 TY GRC, Energy Division staff used SCE's mapping of risk "activities" shown in the workpapers to Exhibit SCE-01 from the 2018 TY GRC to identify the risk impact category associated with the risk mitigation programs listed in Table III-2 and found all of the programs to be identified as impacting safety or reliability.

Information on total company authorized and recorded spending for some of the risk mitigation programs was not readily available from the utility's RSAR. To obtain authorized information and to verify the utility's data, staff reviewed the 2015 TY GRC decision (D.15-11-021) to identify adopted quantities for 2014 (for capital programs only) and 2015 and applied the post-test year escalation mechanism to arrive at 2016 and 2017 figures. For O&M programs, staff applied the updated labor and non-labor escalation factors that were approved in the advice letter filings setting the consolidated revenue requirements for 2016 and 2017. For capital programs, staff relied on SCE's use of the adopted 2 percent escalation of capital additions as a proxy for estimating capital expenditures. It is important to note that capital additions include other plant items such as corporate overheads, customer contributions, costs of removal of assets and an allowance for funds used during construction. Recorded spending information, where available, was obtained from testimony in the 2021 TY GRC.

Staff applied the jurisdictional allocation factors appropriate to O&M programs under the shared jurisdiction of the CPUC and the Federal Energy Regulatory Commission (FERC) to show CPUC-

jurisdictional spending information. Costs of capital programs subject to FERC jurisdiction are allocated based on an annual jurisdictional study. Only the Transmission Line Rating Remediation capital program is affected by this allocation. Information on this program was not available in the report. SCE provided the information in response to a data request. Most of the costs for this program are subject to FERC jurisdiction. Authorized and recorded spending (along with the utility's forecasts for comparison purposes) for the listed risk mitigation capital and O&M programs is shown in **Table A-1** and **Table A-2**, respectively, of the attachment.

WILDFIRE RISK MITIGATION CAPITAL PROGRAMS

From 2014 through 2017, SCE spent $384 million, or 43 percent, over the authorized budget for capital wildfire mitigation programs. The overspend for 2016 and 2017 is $111 million, or 46 percent, and $217 million, or 87 percent, respectively. Several programs were subject to the Safety and Reliability Investment Incentive Mechanism (SRIIM); however, the authorized expenditures were not affected by the SRIIM over the four-year period.

The total company spending variances for the wildfire mitigation capital programs from 2014 through 2017 are shown in **Table 2**. All dollars are in nominal thousands. Spending variance is calculated by subtracting authorized spending from recorded spending. The spending variance is divided by the authorized spending to express the variance as a percent of the authorized spending. A negative variance means the utility spent less than authorized.

Table 2: Wildfire Risk Mitigation Capital Programs

Program	2014 ($000)	2015 ($000)	2016 ($000)	2017 ($000)	Total ($000)	Total (%)	2016 (%)	2017 (%)
Worst Circuit Rehabilitation/ Cable Replacement	67,927	13,401	36,805	26,802	144,935	36	35	25
CIC Replacement	-19,186	-21,368	-43,493	-36,137	-120,184	-44	-57	-46
Cable Life Extension	77	-15,227	-4,572	4,054	-15,668	-16	-17	14
Overhead Conductor Program	0	60,654	97,330	138,714	296,698	--	--	--
Vegetation Management Software Initiative	-900	-4,000	-4,080	-4,162	-13,142	-100	-100	-100
Transmission Line Rating Remediation	-13,689	-12,221	29,084	87,708	90,882	81	100	295
Total	**34,229**	**21,239**	**111,074**	**216,979**	**383,521**	**43**	**46**	**87**

SCE did not present a capital overhead conductor program in the 2015 TY GRC. In its explanation for the spending variance for this program, SCE states it first requested this program in the 2018 TY GRC to address public safety concerns associated with wire-down events. SCE does not explain the reasons for taking up this specific program in the 2015 TY GRC cycle. The utility provides general comments on the CPUC's recognition that new programs may arise and that utilities have been allowed the flexibility to make spending decisions.

SCE did not provide explanations of the spending variance of the other capital programs. It should provide explanations for the Worst Circuit Rehabilitation/Cable Replacement program and the CIC Replacement program in the 2021 TY GRC.

WILDFIRE RISK MITIGATION O&M PROGRAMS

From 2015 through 2017, SCE spent $73 million, or 24 percent, over the authorized budget for expensed wildfire mitigation programs. The overspend for 2016 and 2017 is $24 million, or 23 percent, and $48 million, or 47 percent, respectively. The total company spending variances for the wildfire mitigation expensed programs are shown in **Table 3**. All dollars are in nominal thousands. Spending variance is calculated by subtracting authorized spending from recorded spending. The spending variance is divided by the authorized spending to express the variance as a percent of the authorized spending. A negative variance means the utility spent less than authorized.

Table 3: Wildfire Risk Mitigation O&M Programs

Program	2015 ($000)	2016 ($000)	2017 ($000)	Total ($000)	Total (%)	2016 (%)	2017 (%)
Overhead Conductor Program	-4,674	-4,793	-4,903	-14,370	-100	-100	-100
Vegetation Management	24,759	45,815	72,096	142,670	70	67	105
Transmission Line Rating Study and Remediation	-4,847	-3,239	-3,561	-11,647	-78	-65	-70
Insulator Washing	-5,464	-5,250	-5,311	-16,025	-88	-87	-87
Public Safety Education Outreach and Programs	-6,943	-7,024	-7,104	-21,070	-100	-100	-100
Underground Locating Service	-1,731	-1,929	-2,782	-6,442	-20	-18	-26
Total	**1,101**	**23,579**	**48,435**	**73,115**	**24**	**23**	**47**

Insulator Washing, Vegetation Management (transmission) and parts of Transmission Line Rating Study and Remediation are components of GRC Activity 571.150 – Transmission Line, Structure, Road, and Right-of-Way Maintenance. SCE explains the 2016 variance for this activity program as being caused by a change in the insulator wash program. There is no mention of other components that could contribute to the variances for 2016 and 2017.

The Overhead Conductor Program and Vegetation Management (distribution) are components of GRC Activity 593.120 – Planned Maintenance of Distribution Overhead & Underground Lines/Equipment, Vegetation Management, Apparatus Inspection and Maintenance. SCE explains the 2016 and 2017 variance for this activity program as being caused by an overspend in vegetation management due to historic drought conditions that is partially offset by cost-savings in distribution maintenance programs.

SCE did not provide explanations of the spending variance of the other expensed programs. SCE should provide explanations for the Overhead Conductor, Vegetation Management (transmission and distribution), Transmission Line Rating Study and Remediation, and Insulator Washing programs in the 2021 TY GRC.

In sum, SCE overspent on its wildfire mitigation programs over the course of the 2014 to 2017 period. It is not clear whether the funds to cover the overspend were redirected from other customer-funded safety, reliability or maintenance programs or were funded by other means. Beginning with the report covering the 2018 calendar year, SCE should explain if any funds for authorized programs were redirected to other purposes. Examples of this instance include, but are not limited to, situations where actual spending on a program exceeded authorized (i.e. a positive

variance) if the source of the additional funding was another safety, reliability, or maintenance program, and where the actual spending on a program was less than authorized (i.e. a negative variance) if the variance was not caused by a reduction in the authorized unit cost within the program.

ATTACHMENT

Wildfire Risk Mitigation Program Spending

Table A-1: Wildfire Risk Mitigation Capital Program Spending

Program	Forecast – Total Company ($000)				Authorized – Total Company ($000)				Recorded – Total Company ($000)			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Worst Circuit Rehabilitation/Cable Replacement	85,086	112,961	115,486	118,607	85,086	104,272	106,357	108,484	153,013	117,673	143,162	135,286
CIC Replacement	65,451	93,577	95,669	98,254	42,228	75,452	76,961	78,500	23,042	54,084	33,468	42,363
Cable Life Extension	13,167	26,892	27,494	28,237	13,167	26,892	27,430	27,979	13,244	11,665	22,858	32,033
Overhead Conductor Program	0	0	0	0	0	0	0	0	0	60,654	97,330	138,714
Vegetation Management Software Initiative	900	4,000	4,800	0	900	4,000	4,080	4,162	0	0	0	0
Transmission Line Rating Remediation	24,183	28,575	31,494	46,157	24,183	28,575	29,147	29,730	10,494	16,354	58,231	117,438
Total	**188,787**	**266,005**	**274,943**	**291,255**	**165,564**	**239,191**	**243,975**	**248,855**	**199,793**	**260,430**	**355,049**	**465,834**

Program	Forecast – CPUC ($000)				Authorized – CPUC ($000)				Recorded – CPUC ($000)			
	2014	2015	2016	2017	2014	2015	2016	2017	2014	2015	2016	2017
Worst Circuit Rehabilitation/Cable Replacement	85,086	112,961	115,486	118,607	85,086	104,272	106,357	108,484	153,013	117,673	143,162	135,286
CIC Replacement	65,451	93,577	95,669	98,254	42,228	75,452	76,961	78,500	23,042	54,084	33,468	42,363
Cable Life Extension	13,167	26,892	27,494	28,237	13,167	26,892	27,430	27,979	13,244	11,665	22,858	32,033
Overhead Conductor Program	0	0	0	0	0	0	0	0	0	60,654	97,330	138,714
Vegetation Management Software Initiative	900	4,000	4,800	0	900	4,000	4,080	4,162	0	0	0	0
Transmission Line Rating Remediation	1,368	2,371	2,530	1,121	1,368	2,371	2,419	2,467	1,020	1,124	2,317	15,841
Total	**165,972**	**239,801**	**245,979**	**246,219**	**142,749**	**212,987**	**218,078**	**216,084**	**190,319**	**245,200**	**299,135**	**364,237**

ATTACHMENT (continued)

Wildfire Risk Mitigation Program Spending

Table A-2: Wildfire Risk Mitigation O&M Program Spending

Program	Forecast – Total Company ($000)			Authorized – Total Company ($000)			Recorded – Total Company ($000)		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
Overhead Conductor Program	4,674	4,803	4,941	4,674	4,793	4,903	0	0	0
Vegetation Management	68,819	70,060	71,530	67,715	68,446	68,447	92,474	114,261	140,543
Transmission Line Rating Study and Remediation	4,887	4,998	5,118	4,887	4,984	5,074	40	1,745	1,513
Insulator Washing	5,952	6,069	6,199	5,952	6,048	6,134	488	798	823
Public Safety Education Outreach and Programs	8,583	8,716	8,852	6,943	7,024	7,104	0	0	0
Underground Locating Service	10,813	11,007	11,238	10,480	10,583	10,557	8,749	8,654	7,775
Total	**103,728**	**105,652**	**107,877**	**100,650**	**101,879**	**102,219**	**101,751**	**125,458**	**150,654**

Program	Forecast – CPUC ($000)			Authorized – CPUC ($000)			Recorded – CPUC ($000)		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
Overhead Conductor Program	4,674	4,803	4,941	4,674	4,793	4,903	0	0	0
Vegetation Management	65,749	66,954	68,380	65,154	65,870	65,862	87,512	110,112	134,584
Transmission Line Rating Study and Remediation	2,652	2,711	2,776	2,509	2,652	2,704	22	941	816
Insulator Washing	3,208	3,271	3,341	3,208	3,260	3,306	263	430	444
Public Safety Education Outreach and Programs	8,583	8,716	8,852	6,943	7,024	7,104	0	0	0
Underground Locating Service	10,813	11,007	11,238	10,480	10,583	10,557	8,749	8,654	7,775
Total	**95,680**	**97,462**	**99,529**	**92,968**	**94,182**	**94,436**	**96,545**	**120,137**	**143,618**