

Application No.: A.23-05-010  
Exhibit No.: SCE-17 Vol. 04  
Witnesses: K. Borngrebe  
J. Hasbrouck  
J. Kagan  
R. LeMoine  
L. Swanson  
J. Tran



(U 338-E)

**2025 General Rate Case  
Rebuttal Testimony**

***Environmental Services, Audit, Ethics &  
Compliance, and Safety Programs***

Before the

**Public Utilities Commission of the State of California**

Rosemead, California  
April 15, 2024

# SCE-17 Vol. 04: Environmental Services, Audit, Ethics & Compliance, and Safety Programs

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**SCE-17 Vol. 04: Environmental Services, Audit, Ethics & Compliance,  
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**I.**

**INTRODUCTION**

In this volume, Southern California Edison Company (SCE) responds to intervenors and provides additional support for its Test Year 2025 forecast of operations and maintenance (O&M) expenses and 2023-2025 capital expenditures forecast for Environmental Services, Safety Programs, Audits, and Ethics and Compliance Business Planning Elements (BPEs). If approved, SCE’s funding request will allow SCE to continue its efforts to provide Environmental Services, Safety Programs, Audit, and Ethics and Compliance activities. The following BPEs will be discussed within this volume:

Chapter II – Environmental Services

Chapter III – Safety Programs

Chapter IV – Audits, Ethics and Compliance

**A. Summary of Rebuttal Position**

The forecasts for Environmental Services, Safety Programs, Audits, and Ethics and Compliance Business Planning Elements O&M expenses and capital expenditures, made by SCE, Cal Advocates, and TURN, are provided in the following tables.

Table I-1 below provides a summary of the Environmental Services, Safety Programs, Audits, Ethics and Compliance 2025 O&M expense forecast for SCE, Cal Advocates, and TURN, along with the variances from SCE’s forecast. As seen in the table below, Cal Advocates proposed changes to SCE’s 2025 forecast for Environmental Services and Audits, Ethics and Compliance. Cal Advocates also challenged SCE’s 2025 forecast for Safety Programs in GRC activities Safety Strategy Transformation and Safety Activities – Transmission and Distribution, which SCE addresses in this exhibit. TURN also contested SCE’s forecast for Environmental Programs which is also addressed in this exhibit.<sup>1</sup>

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<sup>1</sup> Environmental Services BPE contains two GRC Activities, Environmental Management and Development and Environmental Programs. TURN contested SCE’s 2025 Test Year O&M forecast for Environmental Programs.

**Table I-1**  
**Environmental Services, Safety Program, Audits, Ethics & Compliance**  
**GRC Activities 2025 O&M Forecast**  
**Summary of SCE, Cal Advocates, and TURN Positions**  
**(2022 Constant \$000)**

Line No.	Business Planning Element	2025 Forecast					Variance from SCE		SCE Rebuttal Position
		SCE Application	SCE Adjustment	SCE Revised Forecast	Cal Advocates	TURN	Cal Advocates	TURN	
1	Environmental Services	43,035	(85)	42,950	34,828	N/A	(8,121)	N/A	42,934
2	Safety Programs	30,897	0	30,897	N/A	N/A	N/A	N/A	30,741
3	Audits, Ethics & Compliance	24,554	0	24,554	21,627	N/A	(2,927)	N/A	24,143
4	<b>Total</b>	98,486	(85)	98,400					97,818

1 Table I-2 below provides a summary of Environmental Services and Safety Programs 2023-2025  
2 capital expenditure forecast by SCE, Cal Advocates, and TURN, along with the variance from SCE's  
3 forecast. TURN did not submit intervenor testimony for the capital expenditure portion of this volume.

4 Cal Advocates proposed changes to SCE's capital forecasts for the Environmental Services BPE,  
5 which is reflected in the table below. Cal Advocates also recommended changes to SCE's 2023 recorded  
6 and 2024 forecast for Environmental Program within the Environmental Services BPE. Finally, Cal  
7 Advocates proposed changes to the capital forecast for Safety Programs. However, in its rebuttal  
8 position, SCE adopted Cal Advocates' proposal on capital for Safety Program, which is reflected in the  
9 table below.

**Table I-2**  
**Environmental Services and Safety Programs**  
**Capital Expenditures 2023-2025 Forecast**  
**Summary of SCE, Cal Advocates, and TURN Position**  
*(Nominal \$000)*

Line No.	Business Planning Element	2023-2025 Forecast			Variance from SCE		SCE Rebuttal Position
		SCE	Cal Advocates	TURN	Cal Advocates	TURN	
1	Environmental Services	13,887	3,570	N/A	(10,317)	N/A	10,536
2	Safety Programs	2,800	700	N/A	(2,100)	N/A	700
3	<b>Total</b>	16,687	4,270		(12,417)		11,236

**1. O&M Expenditure Summary and 2025 Forecast**

Table I-3 below provides SCE’s recorded O&M costs for 2018-2022 for Environmental Services, Safety Programs, Audits, and Ethics and Compliance, along with SCE’s 2025 rebuttal position for these BPEs.

**Table I-3**  
**Environmental Services, Safety Programs, Audits, and Ethics & Compliance**  
**2018-2022 O&M Recorded/2025 Forecast**  
**Summary of SCE Position**  
*(2022 Constant \$000)*

Line No.	Business Planning Element	SCE Recorded					SCE 2025 Rebuttal Position
		2018	2019	2020	2021	2022	
1	Environmental Services	39,574	37,361	34,122	30,359	31,376	42,934
2	Safety Programs	28,975	28,597	18,455	27,400	26,258	30,741
3	Audits, Ethics & Compliance	22,586	22,661	23,348	21,934	20,306	24,143
4	<b>Total</b>	91,135	88,619	75,925	79,692	77,939	97,818

**2. Capital Expenditure Summary and Forecast**

Table I-4 below provides the 2018-2022 recorded capital costs for the BPEs and SCE’s rebuttal position for 2023-2025, which includes 2023 recorded costs.

**Table I-4**  
**Environmental Services, Audit, Ethics & Compliance and Safety Programs**  
**2018-2023 Historical and 2024-2025 Forecast Table**  
**Summary of SCE Position**  
*(Nominal \$000)*

Line #	Business Planning Element	SCE Recorded					SCE Rebuttal Position			
		2018	2019	2020	2021	2022	2023 Recorded	2024 Forecast	2025 Forecast	Total 2023-2025
1	Environmental Services	706	680	365	429	839	1,185	4,628	4,722	10,536
2	Safety Programs	-	-	1,804	35	148	-	-	700	700
3	<b>Total</b>	706	680	2,169	464	987	1,185	4,628	5,422	11,236

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**II.**

**ENVIRONMENTAL SERVICES**

**A. O&M Expenses**

**1. SCE Application**

Environmental Services O&M forecast is based on Last Recorded Year plus adjustments for labor, non-labor and other expenses.

*Table II-5  
Environmental Services  
GRC Activities 2025 O&M Forecast  
Summary of SCE, Cal Advocates, and TURN Positions  
(2022 Constant \$000)*

Line No.	Environmental Services	2025 Forecast			Variance from SCE	
		SCE Rebuttal Position	Cal Advocates	TURN	Cal Advocates	TURN
1	Environmental Management and Development	20,245	17,971	N/A	(2,274)	N/A
2	Environmental Programs	22,689	16,857	14,845	(5,831)	(7,844)
3	<b>Total</b>	42,934	34,828		(8,105)	

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**2. Environmental Management and Development**

Environmental Management and Development (EMD) encompasses implementation of SCE’s Environmental Management System for developing, improving, and monitoring compliance programs to help ensure compliance with federal, state, and local environmental requirements. This activity also includes administrative and general activities such as training employees and supporting and maintaining the organization.

**Table II-6**  
**Environmental Management and Development**  
**2018-2022 Recorded/2025 Forecast**  
**Summary of SCE, Cal Advocates, and TURN Position**  
**(2022 Constant \$000)**

Line #	Environmental Management and Development	SCE Recorded					2025 Forecast			Variance from SCE	
		2018	2019	2020	2021	2022	SCE Rebuttal Position	Cal Advocates	TURN	Cal Advocates	TURN
1	Labor	9,840	9,838	10,153	10,081	12,483	17,678	15,405	N/A	(2,274)	N/A
2	Non-Labor	2,626	2,897	2,256	3,514	4,045	2,566	2,566	N/A	-	N/A
3	Other	7	2	2	2	2	-	-	N/A	-	N/A
4	<b>Total</b>	<b>12,472</b>	<b>12,737</b>	<b>12,411</b>	<b>13,597</b>	<b>16,531</b>	<b>20,245</b>	<b>17,971</b>		<b>(2,274)</b>	

1 SCE notes its labor forecast includes an adjustment related to the Employee  
2 Compensation Program proposal discussed in Exhibit SCE-06, Volume 4.<sup>2</sup> No intervenor disputed the  
3 general structure of this proposal or the respective forecast adjustment included in this GRC Activity.<sup>3</sup>  
4 To the extent the Commission adopts a forecast based on a different forecast methodology (e.g., 3-Year  
5 average) than recommended by SCE, this Employee Compensation Program adjustment should be  
6 added back to account for the incremental cost in the forecast period due to this undisputed proposal.  
7 See also SCE-17, Volume 3, Chapter III for additional discussion.

8 **a) Cal Advocates' Position**

9 As shown in Table II-6 above, Cal Advocates recommends a 2025 Test Year  
10 forecast of \$15.405 million for labor or a reduction of \$2.274 million from SCE's rebuttal forecast of  
11 \$17.678 million.<sup>4</sup> Cal Advocates recommends funding of \$2.138 million for 16 employees in the test  
12 year (which covers both the backfilling of 2022 vacancies and planned positions in EMD),<sup>5</sup> in contrast

<sup>2</sup> Ex. SCE-06, Vol. 06A, p. 14.

<sup>3</sup> TURN does dispute the minor corresponding increase in forecast 401(k) costs derivate of the STIP-to-base conversion.

<sup>4</sup> SCE notes that Cal Advocates' Table 21-5 on page 7 of Ex. CA-21 refers to SCE's 2025 labor forecast as \$17.774 million, which is from SCE's direct testimony (Figure II-6 on page 12 of Ex. SCE-06, Vol. 06A). SCE's updated forecast of \$17.678 million in Table II-6 in this Rebuttal testimony reflects two errata entries to correct this GRC Activity's Labor figure; one was submitted in December 2023, and another is being submitted along with the rebuttal testimony on April 15, 2024. SCE's updated forecast is consistent with Cal Advocates' recognition that there is a \$0.096 million reduction to SCE's 2025 labor forecast (i.e., \$17.774 million minus \$17.678 million). Ex. CA-21, p. 8 (referring to SCE's data request response to App. A, Data Requests, PubAdv-SCE-059-FNZ, Question 2 Follow Up).

<sup>5</sup> Ex. CA-21, p. 11.

1 to the 33 employees requested by SCE for the EMD.<sup>6</sup> Cal Advocates provides three contentions to  
2 support its opposition to SCE’s proposed increase of 33 employees. First, Cal Advocates believes that  
3 SCE’s proposed staff increase in 2025 is excessive and has not been adequately substantiated.<sup>7</sup> Second,  
4 Cal Advocates asserts a lack of compliance issues in prior years as support for its claims that SCE’s  
5 proposed increase in labor due to vacancies is unnecessary.<sup>8</sup> Third, Cal Advocates claims that SCE did  
6 not provide any documentation for review or evaluation regarding the need to establish a new  
7 department that would require new positions.<sup>9</sup> Cal Advocate does not contest SCE’s non-labor  
8 forecast.<sup>10</sup>

9 **b) SCE’s Rebuttal to Cal Advocates’ Position**

10 SCE’s EMD 2025 labor forecast of \$17.678 million<sup>11</sup> reflects an increase of  
11 \$4.411 million above the 2022 recorded amount of \$12.483 million excluding STIP adjustment of  
12 \$0.784 million. The \$4.411 million increase above the 2022 recorded amount primary consists of (1)  
13 \$2.109 million to backfill 16 FTEs due to 2022 vacancies, and (2) \$2.302 million to add 17 new  
14 headcount positions in 2025.<sup>12</sup> Combined, SCE is requesting funding for 33 FTEs and headcount  
15 (FTEs/Headcount) positions, although SCE emphasizes that its incremental request for headcount  
16 position is the 17 new headcount positions for \$2.302 million.

17 SCE addresses each of Cal Advocates’ three contentions below. However, the key  
18 issue that the Commission must decide is the first one, namely, whether SCE has substantiated its

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<sup>6</sup> Ex. CA-21, p. 11.

<sup>7</sup> Ex. CA-21, p. 10.

<sup>8</sup> Ex. CA-21, p. 10.

<sup>9</sup> Ex. CA-21, p. 10.

<sup>10</sup> Ex. CA-21, p. 2.

<sup>11</sup> In SCE’s direct testimony, SCE’s labor forecast for Environmental Management and Development was \$17.774 million. See Figure II-6 on page 12 of Ex. SCE-06, Vol. 06A. SCE’s labor forecast has been reduced by \$0.096 million to \$17.678 million due to an error in the Constant-Nominal dollar conversion, which is discussed in Cal Advocates’ testimony (Ex. CA-21, p. 8) and in SCE’s data request response to App. A, PubAdv-SCE-059-FNZ, Question 02 Follow Up.

<sup>12</sup> Regarding the backfilling of vacancies with 16 FTEs, as explained in SCE’s DR response to Cal Advocates, SCE’s labor O&M forecast is based on GRC activities and not headcount. As seen in SCE’s response to App. A, Data Requests, PubAdv-SCE-144-FNZ Question 02.f-h (2025 Labor Forecast, 2025 FTEs, 2022 FTEs), employees charge to EMD as well as other activities. Therefore, SCE’s labor forecast for the 16 FTEs reflects the work associated with EMD only.

request for funding to (1) backfill 16 FTEs due to 2022 vacancies, and (2) add 17 new headcount positions in 2025 (collectively, this amounts to 33 FTE/Headcount employees). As discussed below, SCE has met its burden of proof and demonstrated its need for funding for the 33 FTEs/Headcount through testimony, detailed analysis, and data request responses to Cal Advocates. Based on Cal Advocates’ testimony,<sup>13</sup> SCE is unclear of the basis for Cal Advocates’ selection of 16 additional FTEs/Headcount.

**Table II-7**  
**SCE vs. Cal Advocates’ Funding Proposals for EDM Labor**

SCE’s FUNDING PROPOSAL – EMD’s O&M Labor		CAL ADVOCATES’ FUNDING PROPOSAL – EMD’s O&M Labor	
FTEs/Headcount	Cost above 2022 recorded	FTEs/Headcount	Cost over 2022 recorded
<ul style="list-style-type: none"> <li>• 16 FTEs to backfill Vacancies.</li> <li>• 17 Headcount for new positions</li> </ul>	<ul style="list-style-type: none"> <li>• \$2.109 M for Vacancies</li> <li>• \$2.302 M for new positions</li> <li><b>TOTAL: \$4.411 million</b></li> </ul>	<ul style="list-style-type: none"> <li>• 16 employees to backfill Vacancies &amp; new positions.</li> </ul>	<ul style="list-style-type: none"> <li>\$2.138 M for Vacancies &amp; new positions</li> <li><b>TOTAL: \$2.138 million</b></li> </ul>
<i>Forecasting Methodology:</i> Last year recorded + Adjustments		<i>Forecasting Methodology:</i> None stated	
<i>Support Provided For 33 FTEs/Headcount:</i> Testimony, Detailed analysis, Data request responses.		<i>Support Provided for 16 employees:</i> None in testimony	

SCE understands that its request for funding for 33 additional FTEs/Headcount may appear large to Cal Advocates.<sup>14</sup> However, the Commission must consider the evidence SCE has presented, which demonstrates SCE’s need for funding for the FTEs/Headcounts in order to backfill vacancies and create a sustainable workforce and to accommodate an increase in SCE’s workload, address regulatory requirements, manage operational impacts, and implement EMD’s new operating model for a sustainable and effective environmental management system.<sup>15</sup> Since external factors, such as new environmental regulations, drive SCE’s staffing need, a large increase in EMD staffing is appropriate, and SCE’s request is not “excessive” as asserted by Cal Advocates.<sup>16</sup> SCE’s request for funding to backfill 16 FTEs and add 17 headcounts in 2025 is reasonable over the span of three years (i.e., 2022 to 2025).

Moreover, regarding SCE’s request for funding to backfill 16 FTEs from 2022 vacancies, SCE urges the Commission to be mindful that this request relates to existing workload, and

<sup>13</sup> Ex. CA-21, p. 11.

<sup>14</sup> Ex. CA-21, p. 9.

<sup>15</sup> See Section II.A.2.e.(1)(c) for SCE’s discussion of EMD’s new operating model.

<sup>16</sup> Ex. CA-21, p.10.

1 not the incremental work associated with SCE’s request for the 17 new incremental positions. Thus, Cal  
2 Advocates’ characterization of SCE increasing staffing levels by 33 FTEs<sup>17</sup> may leave an incorrect  
3 impression because it does not consider the artificially low 2022 recorded baseline due to the vacancies.  
4 As such, Cal Advocates’ proposal overlooks that the historical data is not representative of the  
5 operational needs accounted for in SCE’s 2025 labor forecast. First, due to a substantially higher than  
6 typical number of vacancies in 2022, SCE’s 2022 recorded labor represents an artificially low base,  
7 which comprises approximately half (or \$2.109 million) of the \$4.411 million requested increase above  
8 2022 recorded labor costs. The lower recorded labor costs, primarily driven by vacancies, continued into  
9 2023 due to a temporary pause in filling some positions,<sup>18</sup> as well as departmental turnovers. After  
10 accounting for the artificially low 2022 recorded baseline, SCE’s 2025 forecast reflects 17 additional  
11 new headcount positions (or \$2.302 million) to accommodate EMD’s needs.

12 **c) SCE has Substantiated its Need for Funding for 16 FTEs to Backfill**  
13 **Vacancies from 2022**

14 Cal Advocates’ claim that SCE has not adequately substantiated its 2025 labor  
15 request for EMD is incorrect.<sup>19</sup> With regard to SCE’s request for 16 FTEs to backfill the vacancies from  
16 2022, which represents \$2.109 million of SCE’s requested increase of \$4.411 million for EMD labor  
17 costs, SCE respectfully requests that the Commission examine SCE’s data request response and detailed  
18 attachment titled “PubAdv-SCE-144-FNZ Question 02.f-h (2025 Labor Forecast),”<sup>20</sup> which is included  
19 in Appendix A - Data Requests to this rebuttal testimony. In this attachment, SCE analyzed and  
20 provided data to Cal Advocates on over 150 employees, including their position titles, hiring dates,  
21 separation dates, duties/responsibilities, and salaries based on standard labor rates for labor  
22 classifications in order to support SCE’s request for funding for the 16 additional FTEs.<sup>21</sup>

23 As seen in SCE’s attachment to Cal Advocates’ data request, labor vacancies  
24 perform regulatory intake, risk assessments, control effectiveness monitoring, incident management,

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<sup>17</sup> Ex. CA-21, p. 9.

<sup>18</sup> SCE implemented the new operating model for EMD around November 2023.

<sup>19</sup> Ex. CA-21, p. 10.

<sup>20</sup> See App. A, SCE’s response to Data Requests PubAdv-SCE-144-FNZ Question 02.f-h “2025 forecast, 2025 FTEs, 2022 FTEs”.

<sup>21</sup> On p. 7 of the attachment, the 16 FTEs is calculated based on the 2025 FTE of 105 minus the 2022 FTEs of 86 and 3.

1 cause evaluation, and environmental performance communication. These positions, amongst other  
2 responsibilities, also support heightened efforts related to wildfire mitigation, vegetation management,  
3 and grid hardening programs and projects. In addition, a portion of the vacant positions perform  
4 transformer oil testing and analysis, as well as manage compliance with stormwater and waste disposal  
5 requirements associated with treated wood poles. In 2022, the underrun associated with some vacancies  
6 represent the transition of these activities previously performed by external consultants being onboarded  
7 to internal personnel aimed at achieving operational efficiencies. Because these functions are core and  
8 ongoing activities, they were necessarily included in SCE’s 2025 forecast.<sup>22</sup>

9 Furthermore, the \$2.109 million variance reflects a change in accounting practice  
10 driven by FERC Order Docket No. ER19-1553-000 issued in June 2022, which directed post-  
11 construction environmental restoration costs that were previously capitalized to be recorded as O&M  
12 expense. This accounting treatment is expected to carry forward in the future and is reflected as O&M in  
13 SCE’s 2025 labor forecast.<sup>23</sup>

14 Finally, a portion of the \$2.109 million variance associated with the 2022  
15 underrun should not be considered as “incremental.” This variance reflects the transfer of \$0.3 million of  
16 labor resources from the Environmental Programs GRC activity. Because a corresponding reduction is  
17 reflected in the Environmental Program’s 2025 forecast, this represents a net-zero increase to the  
18 Environmental Services BPE.<sup>24</sup>

19 **(1) Operational Impacts**

20 SCE faces challenges stemming from the impacts of environmental  
21 requirements on its operations. Schedule delays related to environmental resource protection  
22 requirements and other factors, including coordination with regulatory agencies for permitting  
23 requirements, impact SCE’s ability to promptly carry out critical work (e.g., vegetation management).

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<sup>22</sup> Please refer to Ex. SCE-02, Vol. 05, which includes SCE’s 2025 forecast for Substation, Construction and Maintenance (SC&M) GRC Activity Circuit Breaker Inspection and Maintenance. SCE included in the forecast process opportunities to reduce costs and create operational efficiencies through new business processes, including hiring in-house chemists to conduct Oil Circuit Breaker Analysis (OCBA) testing for circuit breakers.

<sup>23</sup> These costs did not record to Environmental Management and Development in 2021 and 2022.

<sup>24</sup> See App. A, SCE’s response to Data Requests PubAdv-SCE-200-FNZ Question 01.a-b Revised “Revised PubAdv-SCE-200-FNZ Question 01.a-b”.

1 Departmental vacancies contribute to the impact on SCE's operations.  
2 SCE estimates that there was a monthly average of approximately 20,000 trees on hold based on volume  
3 data from 2022.<sup>25</sup> Backfilling these vacancies can help mitigate these impacts, as this provides additional  
4 labor resources to facilitate management and oversight of consultants involved in vegetation  
5 management work. Additionally, filling vacancies enable the Environmental team to collaborate  
6 effectively with other organizational units (such as Vegetation Management) on permitting strategies,  
7 negotiations, prioritization for agency review, and expediting permitting applications with agencies (e.g.,  
8 CDFW).

9 Filling vacancies can also play a crucial role in addressing agency-related  
10 challenges within SCE's operations. For over a year, SCE engaged with CDFW to obtain issuance of the  
11 Santa Clara Lake and Streambed Alteration Agreement (LSAA) regional permit within the Santa Clara  
12 Watershed. In addition, SCE also conducted extensive wetlands analysis to obtain this permit. For  
13 approximately the last 6 months, SCE has been actively working with Sierra National Forest (SNF) to  
14 initiate consultation with the U.S. Fish and Wildlife Service (USFWS) for a significant number of tree  
15 removals within Pacific Fisher habitat on SNF.<sup>26</sup> The consultation is required by the U.S. Forest Service  
16 Fisher Programmatic Biological Opinion (PBO) due to potential impacts on the Pacific Fisher, an  
17 endangered species, from the proposed tree removals. Backfilling departmental vacancies can enhance  
18 SCE's programmatic consultation with agencies, facilitate agency engagement, and contribute to  
19 streamlining and expediting agency approvals for SCE's permits and work activities. This provides the  
20 department with sufficient resources to help address issues such as agency delays in obtaining critical  
21 permits for SCE's current work activities.

22 Departmental vacancies also result in overutilization of existing staff, as  
23 they must bear the additional workload caused by these vacant positions. This strain is necessary to  
24 provide essential project and program support, while ensuring environmental compliance for SCE's  
25 operations. Relying solely on overutilized staff is unsustainable in the long term, as it can lead to  
26 reduced productivity and other impacts.

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<sup>25</sup> This includes work on hold pending factors such as environmental review or agency approval.

<sup>26</sup> SCE estimates this amount includes approximately 3,000 tree removals.

1                   d)       **The Lack of Compliance Issues due to Vacant Positions is a Red Herring**

2                   Cal Advocates' contention that SCE's labor request for EMD is not reasonable  
3 given the lack of any compliance issues due to vacant positions<sup>27</sup> is a red herring. It is crucial to  
4 recognize that environmental compliance is not discretionary; it necessitates proactive investments.  
5 Further, the costs associated with non-compliance, such as substantial fines, penalties, and work  
6 stoppages, far outweigh the expenses of maintaining an appropriately sized environmental department.  
7 Failure to adhere to all relevant environmental laws and regulations may subject SCE to compliance  
8 violations, resulting in substantial fines and penalties. Agency directed work stoppages also have  
9 significant implications, including hindering SCE's ability to mitigate wildfire risks, increasing  
10 contractors' costs, and causing delays in project schedules. Given that compliance is mandatory, when  
11 EMD has vacancies (such as those experienced in 2022), EMD overutilizes existing staff, which is  
12 unsustainable.

13                   Rather than following a reactive model, addressing staffing needs after  
14 compliance events occur, SCE adopts a proactive approach, aiming to prevent issues before they arise.  
15 Effective compliance management demands robust controls and a comprehensive understanding of  
16 staffing requirements and future regulatory and operational drivers, and the Environmental Management  
17 System provides essential tools for proactive environmental compliance management.

18                   SCE's GRC forecast aligns with an enhanced operating model, which introduces  
19 new capabilities and places strong emphasis on environmental compliance. The forecast includes  
20 essential positions that enable SCE to implement necessary enhancements and systematic improvements  
21 to strengthen SCE's Environmental Management System. The positions also support a significant  
22 increase in construction and maintenance activities needed for wildfire resiliency, grid modernizations,  
23 and green energy transformation, combined with increasing applicable regulatory requirements to ensure  
24 compliance performance for operations of this complexity and size.

25                   e)       **SCE has Substantiated its Need for 17 New Headcount Positions in 2025**

26                   As indicated earlier, Cal Advocates' claim that SCE has not adequately  
27 substantiated its 2025 labor request for EMD is incorrect.<sup>28</sup> With regard to SCE's request for 17 new

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<sup>27</sup> Ex. CA-21, p. 10.

<sup>28</sup> Ex. CA-21, p. 10.

1 headcount positions in 2025, which represents \$2.302 million of SCE’s requested increase of \$4.411  
2 million for EMD labor costs, SCE respectfully requests that the Commission examine the following:

- 3 • **SCE’s data request response and detailed attachment titled “Revised**  
4 **PubAdv-SCE-008-FNZ Question 02.a-d,g-h (New Positions),”** which is  
5 found in Appendix A - Data Requests to this rebuttal. This attachment  
6 provides the title, function, duties, and forecast of the 17 new positions that  
7 are included in SCE’s 2025 forecast.
- 8 • **SCE’s description of its forecast labor request,** which is found in in Exhibit  
9 SCE-06, Vol. 6A.<sup>29</sup>
- 10 • **SCE’s data request attachment titled “Revised PubAdv-SCE-008-FNZ**  
11 **Question 02.a-d, g-h (ESD Org Design Target Operating Model),”** which  
12 is found in Appendix A - Data Requests to this rebuttal, and which describes  
13 EMD’s new operating model.

14 SCE’s forecast for the 17 new headcount positions is substantiated by SCE’s  
15 direct and rebuttal testimony, analysis, and data request responses and attachments to Cal Advocates.

16 SCE’s workload involves a significant increase in planned construction and  
17 maintenance activities, impacting environmental support. Simultaneously, SCE operates in an extremely  
18 complex environmental regulatory environment which triggers extensive federal, state, and local  
19 environmental regulations. Additionally, SCE must undertake critical operating model changes to  
20 establish a sustainable and effective environmental management system while ensuring compliance.

21 **(1) Drivers for the 17 new positions**

22 The 17 new positions are needed to address (a) growth in work, (b)  
23 regulatory requirements, (c) SCE’s Environmental Management System, and (d) environmental  
24 compliance, as described below.

25 **(a) Growth in work:**

26 These new positions are described under the Execution Support,  
27 Compliance, and Governance functions in Section II.A.2.e)(2).

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<sup>29</sup> Ex. SCE-06, Vol. 6A, pp. 14-16.

1 Examples of increases in SCE’s work impacting environmental  
2 support includes distribution infrastructure replacement, transmission projects, and load growth.<sup>30</sup>  
3 Distribution infrastructure replacement includes proactive replacement of distribution assets, and  
4 involves activities such as overhead conductor replacements, underground cable replacements, and  
5 capacitor bank replacements. Transmission projects encompass the work that SCE completes on its high  
6 voltage transmission system, including transmission lines, substations, and 500/220 kV transformers.  
7 Examples include renewable transmission projects, such as Pisgah Upgrade, Antelope Substation, and  
8 emerging Renewable Portfolio Standard (RPS) projects.<sup>31</sup> Load growth encompasses work needed to  
9 support customer load growth, including transportation electrification load and Distributed Energy  
10 Resources (DER)<sup>32</sup> growth throughout SCE’s electric grid. Examples of activities include new  
11 distribution circuits, distribution circuit upgrades, and substation expansion projects.

12 SCE’s 2025 forecast includes additional labor resources to enhance  
13 collaboration between the Environmental team, interfacing Operational Units, and regulatory agencies to  
14 help facilitate and/or mitigate environmental requirements associated with SCE’s construction and  
15 maintenance projects, as well as distribution and transmission programs and projects.<sup>33</sup> For example, the  
16 positions can engage in strategic agency consultations and perform any tasks needed to ensure  
17 compliance of these regulatory requirements for SCE’s work. Increases to SCE’s work scope and  
18 complexity necessitate additional use of contractor resources and in-turn require additional SCE labor  
19 resources to support contractor management across onboarding, implementation, quality assurance, and  
20 performance oversight. These positions can assist in increasing oversight of contractors performing

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<sup>30</sup> See Ex. SCE-02, Vol. 01, Part 2, Distribution Infrastructure Replacement and Ex. SCE-02, Vol. 07, Load Growth, Transmission Projects, and Engineering.

<sup>31</sup> Ex. SCE-02, Vol. 07, Load Growth, Transmission Projects, and Engineering (p. 114) includes the following: “Subsequently, in April 2023, CAISO issued a new draft TPP plan that, if adopted, would require SCE to spend significantly more on Renewable Transmission Projects during this GRC cycle than previously anticipated. Specifically, this plan would require SCE to sponsor multiple large Renewable Transmission Projects not previously contemplated, with total spend on these required projects during this GRC cycle estimated at around \$2 billion (total company). In addition to these required projects, this draft plan also includes three competitive projects within or adjacent to SCE service territory. At this time, SCE expects a final transmission plan to be adopted by CAISO in May 2023.” CAISO approved the 2022-2023 Transmission Plan and communicated this information in its May 18, 2023 news release.

<sup>32</sup> DERs can include energy efficiency, energy storage, demand response, electric vehicles, and distributed generation.

<sup>33</sup> Examples of environmental requirements include compliance with California Environmental Quality Act and General Order 131-D.

1 environmental reviews, creating requirement documents that effectively mitigate risks and minimize  
2 impacts related to SCE's work, assessing potential impacts on environmental resources, and taking  
3 necessary steps to ensure compliance before work commences. These steps may involve collaborating  
4 with subject matter experts, implementing avoidance and minimization measures, engaging with  
5 relevant agencies, and addressing permitting issues that lack established precedence.

6 SCE's 2025 forecast also includes additional labor resources to  
7 provide specialized support for non-project specific work activities. This includes managing compliance  
8 programs, establishing effective procedures, monitoring program implementation, supporting agency  
9 initiatives, driving program enhancements, and centralizing intake systems. For example, SCE currently  
10 utilizes a variety of work management systems for project intake and environmental assessments across  
11 all operating domains. These positions could enhance supervision, coordination, and streamline  
12 procedures to effectively manage the growing workload. Environmental assessments also encompass the  
13 development and implementation of compliance strategies for obtaining permits. These efforts are  
14 coordinated with technical experts, such as biologists, cultural resource specialists, and water quality  
15 specialists. The positions can facilitate solutions for challenges arising from the growing complexity of  
16 SCE's projects that lack programmatic permits. Additionally, they can establish internal procedures,  
17 including creating survey strategies, to effectively address new and emerging work types or increased  
18 workloads. For example, SCE is collaborating with the Bureau of Land Management (BLM) on the  
19 Master Operations and Maintenance and Consolidation (MOMAC) Right of Way (ROW) grant that will  
20 establish consistent environmental review and mitigation measures for work conducted on BLM  
21 managed rights of way held by SCE for electrical transmission and distribution facilities. The positions  
22 can help oversee the development and implementation of these types of new permits, ensuring  
23 compliance with environmental requirements.

24 As SCE's workload increases, accurate Geographic Information  
25 System (GIS) data becomes increasingly crucial for ensuring environmental compliance. This data is  
26 utilized in SCE's work management systems, such as EHSync. SCE's 2025 forecast includes additional  
27 resources to assist in managing GIS schema data across diverse environmental disciplines, including  
28 biology, archaeology, and water-related field. In addition, these resources can assist in maintaining the  
29 GIS schema and data utilized by Environmental Services across SCE's operations.

1 SCE's 2025 forecast also includes positions to help address  
2 heightened operational demands across various environmental programs due to an increase in SCE's  
3 workload. Examples include increased requirements in air quality and hazardous waste management,  
4 encompassing program coordination, contractor oversight, and administrative tasks. The workload  
5 increase is expected for permits, proper waste handling, asbestos surveys, climate-related disclosures,  
6 Sulfur hexafluoride (SF6) leak control, equipment phase-out planning, and other activities. These  
7 positions can provide essential support for activities related to program oversight for asbestos  
8 management, performing waste manifest tasks, and tracking hazardous material shipments.

9 As illustrated above, SCE's GRC forecast includes positions to  
10 assist in facilitating and effectively managing the anticipated growth in environmental support activities  
11 related to an increase in SCE's workload.

12 **(b) Regulatory Requirements:**

13 These new positions are described under the Compliance,  
14 Sustainability, and Governance functions in Section II.A.2.e)(2).

15 SCE operates in an extremely complex environmental regulatory  
16 environment. Its expansive work activities address, among other things, wildfire resiliency, grid  
17 modernizations, and green energy transformation, across a large and diverse service area triggering  
18 extensive federal, state, and local environmental regulations. In addition to existing environmental  
19 requirements, which SCE tracks, evaluates, and develops detailed compliance assessments and controls  
20 to implement, SCE also actively monitors new and proposed environmental regulations through its  
21 regulatory intake process. This critical function allows SCE to proactively align our work activities and  
22 controls with environmental requirements, rather than waiting for compliance incidents to prompt  
23 reactionary and inefficient changes. SCE's labor forecast and operational needs for 2025 are informed  
24 by its assessment of impending environmental regulations and other compliance drivers. For example,  
25 revisions to the Construction Stormwater General Permit, which govern many of our large ground-  
26 disturbing construction projects, will impose stricter regulations in comparison to previous versions. An  
27 example of stricter requirements in the Construction General Permit (ORDER WQ 2022-0057-DWQ  
28 NPDES NO. CAS000002) include incorporation of Total Maximum Daily Loads (TMDLs) that require  
29 additional Best Management Practices (BMPs), sampling, analysis, and reporting requirements.  
30 Additionally, the State Water Resources Control Board (SWRCB) is projected to issue a new General

1 Order to permit discharges of waste associated with operations and maintenance activities related to  
2 wildfire management by electric utility companies (e.g., vegetation management, system hardening, and  
3 site access) in the 2024 or 2025 timeframe. The current draft of the General Order proposes an  
4 expansion of covered activities subject to permitting requirements. This expansion is anticipated to  
5 encompass work performed outside of the SWRCB's existing jurisdiction with the potential to impact  
6 water quality, as well as work focused on riparian vegetation impacts that is currently not permitted.  
7 Additional labor resources can help provide support for the expansion of covered activities and facilitate  
8 permitting compliance submittal requirements for projects.

9  
10 New and/or updated regulations for protected biological resources  
11 will also impact SCE's environmental compliance obligations. The Whitebark pine was added to the  
12 Endangered Species Act (ESA) list in December 2022. In 2023, regulatory changes for CESA/ESA  
13 candidates and/or listed species were introduced, affecting the California spotted owl, Foothill yellow-  
14 legged frog, Greater sage grouse, Western pond turtle, and Western spadefoot. The Whitebark pine and  
15 the newly listed species are located in areas where SCE performs extensive wildfire mitigation work,  
16 specifically vegetation management and pole replacement activities. This requires SCE to perform  
17 additional analysis and/or screening, conduct subsequent surveys and reporting, and implement  
18 avoidance measures and monitoring. The activities require additional support from SCE's environmental  
19 department, including coordination with other organizational units and land management agencies such  
20 as the U.S. Forest Service. Additional regulations and restrictions on utility work are also impacting a  
21 number of plants listed under the California Endangered Species Act (CESA), including Big-leaf  
22 crownbeard, Laguna dudleya, Munz' onion, Striped adobe lily, Surf thistle, and Tree anemone. SCE's  
23 2025 forecast includes additional labor resources to help support the species assessment process and  
24 permitting strategies.

25 For drinking water, the State Division of Drinking Water adopted a  
26 new Cross Connection Control Policy Handbook in December 2023 with an effective date of July 2024.  
27 This replaces Title 17 cross connection regulations and introduces new requirements such as developing  
28 cross connection control plans at all of SCE's regulated water systems and performing ongoing hazard  
29 assessments at each systems' water service connections to determine risk to public health. In relation to  
30 Polyfluoroalkyl Substances (PFAS), the EPA is anticipated to finalize the regulations for maximum  
31 contaminant levels of PFAS in drinking water in 2024. This will necessitate additional water sampling  
and labor support for the regulated drinking water systems.

1 Upcoming new regulations for implementation of the  
2 Aboveground Petroleum Storage Act, expected in 2024, will require analysis at each of SCE's 876  
3 facilities which have Spill Prevention, Control, and Countermeasure Plans in order to assess additional  
4 risks to groundwater and corrosion.<sup>34</sup> Additionally, in 2024, the EPA finalized an expanded set of  
5 changes to Toxic Substance Control Act (TSCA) for Polychlorinated Biphenyl (PCB). Changes to the  
6 regulations include additional requirements for PCB impacted cleanups, changes to testing, agency  
7 notifications, and disposal requirements which directly impacts SCE's PCB program. These impacts  
8 require strategic assessment and additional support and resources to align with the additional changes to  
9 TSCA.

10 SCE is governed by air quality regulations at the federal and state  
11 levels, as well as by 11 California air districts and the Clark County Air Quality Management. The  
12 landscape of air quality regulations is evolving rapidly due to the severity of climate change and the  
13 poor air quality within SCE's operational territory. Currently, there are over 100 air quality rules and  
14 regulations at the federal, state, and regional levels (e.g., South Coast Air Quality Management District,  
15 California Air Resources Board, U.S. Environmental Protection Agency rules and/or regulations) that  
16 could impact SCE's operations and are under consideration for adoption or amendment. Additionally,  
17 new regulations require SCE to revise operational processes starting in 2023. These regulations  
18 encompass several key areas, including California Air Resources Board's sulfur hexafluoride (SF6)  
19 insulated electrical equipment, Advanced Clean Fleets, Clean Truck Check, and Off-Road Diesel  
20 Regulations, as well as U.S. Security and Exchange Commission's Climate-Related Disclosure Rule.<sup>35</sup>  
21 As a result of these regulatory changes, SCE needs to develop new work activities, enhance  
22 recordkeeping processes, and establish robust reporting mechanisms. SCE also anticipates the need for  
23 additional processes related to monitoring, recordkeeping, and reporting for SF6, fuel storage tank and  
24 dispensing, emergency generators, Advanced Clean Fleets, Clean Truck Check, and Off-Road Diesel  
25 Regulations, in response to newly adopted or amended regulations.

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<sup>34</sup> The number of permitted facilities is subject to change based on the amounts of chemicals stored or used on site.

<sup>35</sup> The U.S. Securities and Exchange Commission recently adopted new Environmental, Social, & Governance (ESG) and climate-related disclosure regulations.

1 (c) **Environmental Management System**

2 These new positions are described under the Governance and  
3 Assurance functions in Section II.A.2.e)(2).

4 SCE is implementing an International Organization for  
5 Standardization (ISO) 14001-aligned Environmental Management System (EMS) to effectively manage  
6 the increase in workload and address increases in compliance requirements. SCE's GRC forecast  
7 includes additional labor resources aligned with the department's new operating model, which adheres  
8 to industry standards and best practices, including the ISO 14001 EMS Standard. The operating model  
9 introduces new capabilities and streamlines core departmental functions, aligning them with an  
10 Environmental Management System approach. An example involves the governance function, which  
11 encompasses the development of digital compliance tools and the monitoring of compliance control  
12 effectiveness.

13 SCE's response to "PubAdv-SCE-008-FNZ Question 02.a-d,g-h  
14 Revised", attached in Appendix A - Data Requests of this volume, includes details of the new operating  
15 model. Notable components of the new model include:

- 16 • Advisory Services Formation: This involves dedicated  
17 Business Partners collaborating with frontline services,  
18 supported by both generalists and specialists.
- 19 • Assurance Function Independence: Compliance and Assurance  
20 activities are separated to form a new independent Assurance  
21 function.
- 22 • Governance Activities: This includes activities to align  
23 Environmental Services Department to Environmental  
24 Management System.
- 25 • Execution Services: This includes aligning Execution services  
26 to streamline service delivery.

27 Furthermore, the new operating model delineates a comprehensive  
28 list of essential work type priorities for each function. For example, Advisory function includes strategic  
29 and upfront early engagement with operations, while Assurance function encompasses conducting

1 facility, field, and project compliance assessments, along with documenting opportunities for process  
2 improvements.

3 SCE's implementation of an ISO 14001-aligned Environmental  
4 Management System adheres to industry standards. This system will aid SCE in ensuring compliance  
5 across all programs and work, preventing non-compliances, and managing the complexities of numerous  
6 compliance programs. SCE conducted an environmental benchmarking study, comparing our practices  
7 with those of other utilities and large petrochemical companies. Notably, these companies adhered to the  
8 ISO 14001 Environmental Management System.<sup>36</sup> As new programs and requirements emerge,  
9 proactive management becomes crucial to mitigate risks. By adopting an international standard followed  
10 by other companies, SCE aims to enhance its environmental performance and maintain effective  
11 controls over a substantial volume of compliance programs and requirements. The ISO 14001 EMS  
12 serves as a valuable framework, equipping SCE with the necessary tools to effectively manage  
13 environmental compliance across all aspects of SCE's work and activities.

14 (d) **Environmental Compliance:**

15 SCE addressed environmental compliance in Section II.A.2.d of  
16 this rebuttal testimony.

17 (2) **The 17 new incremental positions will support critical functions**

18 SCE provides the following additional details about the roles, duties, and  
19 responsibilities associated with the 17 new positions that are included in SCE's 2025 forecast. These  
20 functions are also identified and addressed in SCE's attachment "Revised PubAdv-SCE-008-FNZ  
21 Question 02.a-d,g-h (New Positions)," which was provided to Cal Advocates in discovery and is found  
22 in Appendix A - Data Requests to this rebuttal. In summary, the 17 new positions are broken down by  
23 the following functions: (a) 2 positions for the Execution Support function, (b) 5 positions for the  
24 Compliance function, (c) 1 position for the Sustainability function, (d) 5 positions for the Governance  
25 function, and (e) 4 positions for the Assurance function.

26 **Execution Support** SCE's GRC forecast included 2 positions for  
27 execution support related to the growth in work. These positions are responsible for overseeing the  
28 acquisition and implementation of permits and other compliance obligations for construction activities

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<sup>36</sup> See App. B, Environmental Benchmarking Report, p. 35.

1 supporting interconnection of utility-scale renewables, wildfire resiliency, and grid modernization.  
2 Responsibilities include obtaining project permits, land permits, and entitlements for renewable  
3 interconnections, as well as transmission line and substation construction. Other responsibilities involve  
4 managing the implementation of permit and other environmental compliance requirements during  
5 construction, and overseeing biological and archaeological monitors, construction stormwater  
6 compliance activities, and air quality inspection and testing requirements.

7 **Compliance** SCE's GRC forecast included a total of 5 compliance  
8 positions to address increasing regulatory requirements and support the growth in work. The forecast  
9 included 1 position dedicated to overseeing air quality compliance obligations for asbestos management  
10 and portable generator use programs. Responsibilities include asbestos removal testing and reporting  
11 and portable generator use permitting and reporting, due to the heightened work volume and additional  
12 regulatory requirements. The forecast comprised of 2 positions to support biological, archaeological, and  
13 cultural permitting, and compliance activities associated with the significant growth in construction  
14 activities and the increases in California's environmental regulations (e.g., new and proposed listings of  
15 threatened and endangered species). This includes development of survey strategies, guidance, and tools  
16 to identify, avoid, and minimize impacts to biological, archaeological, and cultural resources, as well as  
17 engaging and negotiating with state and federal wildlife protection agencies, and procuring and  
18 implementing permits and agreements to streamline operational requirements to comply with  
19 environmental laws and regulations. The forecast also included 2 positions to support National Pollutant  
20 Discharge Elimination System (NPDES) programs, Spill Prevention Control and Countermeasures  
21 (SPCC) improvements, and hazardous and non-hazardous waste activities. These activities include tasks  
22 such as waste manifest support, handling shipping documents, inputting data into software systems, and  
23 tracking the shipment of hazardous materials.

24 **Sustainability** SCE's GRC forecast included 1 sustainability position to  
25 address increasing regulatory requirements. This position is responsible for the development and  
26 implementation of environmental impact mitigation strategies to expand its data management and  
27 reporting capabilities to comply with the new Environmental, Social, & Governance (ESG) and climate-  
28 related disclosure regulations. Responsibilities encompass leading the development and implementation  
29 of sustainable business strategies in procurement, supply chain management, transportation, energy use,  
30 waste reduction, water conservation, biodiversity, and other climate-related issues, to help ensure  
31 regulatory compliance, reduce costs, and mitigate long-term risks.

1                                   **Governance** SCE’s GRC forecast included 5 governance positions  
2 primarily focused on supporting the implementation of an ISO 14001-aligned Environmental  
3 Management System (EMS), while also accommodating the growth in work and increasing regulatory  
4 requirements. The EMS efficiently and effectively manages the increasing environmental risks and  
5 compliance obligations associated with the significant growth in construction activities supporting  
6 interconnection of utility-scale renewables, wildfire resiliency, and grid modernization. Examples of  
7 increases in California’s environmental regulations include new and proposed listings of threatened and  
8 endangered species, air quality regulations, and water quality regulations. These positions encompass  
9 support for developing digital compliance tools, monitoring compliance control effectiveness,  
10 developing and tracking environmental communications and training, and managing and maintaining  
11 critical business records related to environmental compliance. In addition, responsibilities include  
12 leading remedial and corrective action programs, development and implementation of compliance  
13 performance metrics with leading indicators to prevent noncompliance, and providing Geographic  
14 Information System (GIS) schema support for environmental resources and compliance (e.g., biological,  
15 archaeological, wetlands and waters).

16                                   **Assurance** SCE’s GRC forecast included 4 assurance positions for  
17 supporting the implementation of an ISO 14001-aligned Environmental Management System (EMS).  
18 The second line of defense function for the EMS is necessary to assure implementation of permit  
19 requirements and compliance controls by field personnel. Compliance assurance programs involve  
20 observation of crews performing work to assess effectiveness of environmental controls, interviewing  
21 crews to ensure understanding of environmental requirements, and collecting and analyzing data on  
22 compliance performance to inform continuous improvement of environmental performance and risk  
23 reduction. The forecast comprised of 1 position for managing the development and implementation of  
24 environmental compliance oversight programs, and 3 positions for implementation of environmental  
25 compliance oversight programs to assure compliance with all applicable environmental laws and  
26 regulations.

27                                   **f)       The Absence of the Creation of a New Department is a Red Herring**

28                                   Cal Advocates claim that SCE “did not provide any documentation for review or  
29 evaluation regarding establishing a new department requiring new positions”<sup>37</sup> is a red herring. First,

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<sup>37</sup> Ex. CA-21, p. 10.

1 SCE does not believe that it matters whether SCE’s request for an additional 17 new positions relates to  
2 a new department or not. SCE has substantiated its need for these new positions, and it is immaterial  
3 whether these new positions will be included in EMD’s existing organization or a new department.

4 Second, although not a new department, around November 2023, EMD  
5 implemented a new operating model to adhere to industry standards and best practices, including the  
6 International Organization for Standardization (ISO) 1400 Environmental Management System  
7 Standard. SCE provided to Cal Advocates substantial detailed documentation in the data request  
8 response of its new operating model. This new operating model is based on an assessment of EMD’s  
9 organizational structure performed by Ernst & Young (EY), which concluded in July 2023.<sup>38</sup>

10 **g) Conclusion**

11 For the reasons discussed in Section II.A.2 above, SCE disagrees with Cal  
12 Advocates’ recommended 2025 labor forecast of \$15.405 million, which would only provide SCE with  
13 16 additional FTEs/Headcount that is void of any support from the record and which also fails to  
14 account for the evolving operational needs of EMD. Instead, SCE respectfully requests that the  
15 Commission approve SCE’s 2025 labor forecast of \$17.678 million, which is supported by the evidence.  
16 Collectively, with SCE’s 2025 nonlabor forecast of \$2.566 million (which is uncontested by Cal  
17 Advocates), SCE’s labor and non-labor forecast for EMD is \$20.245 million, which should be adopted  
18 by the Commission.

19 **3. Environmental Programs**

20 This GRC Activity involves environmental compliance programs and marine mitigation  
21 activities addressing environmental requirements. Examples include air quality compliance,  
22 Transmission Road and Right of Way (TROW) environmental support, hazardous materials and waste  
23 management, spill prevention control and countermeasures, and marine mitigation programs.

24 In addition to Cal Advocates, SDG&E also submitted testimony. SDG&E owns 20% of  
25 SONGS, and therefore seeks to recover this share of the costs<sup>39</sup> related to Marine Mitigation in this  
26 exhibit. As SDG&E is currently in the process of decoupling its cost recovery effort from SCE, if the  
27 Commission were to deny SDG&E’s request to forecast and seek recovery of SONGS costs in its own

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<sup>38</sup> See App. A, PubAdv-SCE-008-FNZ Question 02.a-d,g-h, “ESD Org Design Target Operating Model”.

<sup>39</sup> Ex. SDG&E-1, p. TMD-5.

1 GRC proceeding, SDG&E requests that the Commission approve Marine Mitigation amount outlined it  
 2 its testimony.<sup>40</sup> SDG&E also asks that if the Commission approves amounts for SCE that are different  
 3 from SCE’s original request, they request the Commission to approve SDG&E amounts resulting from  
 4 the application of SDG&E’s methodology outlined SDG&E-01 and in SDG&E-02 when applied to  
 5 SCE’s authorized Marine Mitigation amount. The amounts are detailed in SDG&E’s intervenor  
 6 testimony.

**Table II-8**  
**Environmental Programs**  
**2018-2022 Recorded/2025 Forecast**  
**Summary of SCE, Cal Advocates, and TURN Position**  
**(2022 Constant \$000)**

Line #	Environmental Programs	SCE Recorded					2025 Forecast			Variance from SCE	
		2018	2019	2020	2021	2022	SCE Rebuttal Position	Cal Advocates	TURN	Cal Advocates	TURN
1	Labor	4,468	4,408	4,590	4,415	1,553	1,329	1,329	1,553	-	224
2	Non-Labor	22,634	20,215	17,121	12,347	13,292	21,359	15,528	13,292	(5,831)	(8,068)
3	<b>Total</b>	27,102	24,624	21,711	16,761	14,845	22,689	16,857	14,845	(5,831)	(7,844)

7 SCE notes its forecast includes an adjustment related to the Employee Compensation  
 8 Program proposal discussed in Exhibit SCE-06, Volume 4. No intervenor disputed the general structure  
 9 of this proposal or the respective forecast adjustment included in this GRC Activity.<sup>41</sup> To the extent the  
 10 Commission adopts a forecast based on a different forecast methodology than recommended by SCE  
 11 (e.g., Last Year recorded, 3-Year average, etc.), this Employee Compensation Program adjustment  
 12 should be added back to account for the incremental cost in the forecast period due to this undisputed  
 13 proposal. See also SCE-17, Volume 3, Chapter III for additional discussion.

14 **a) Cal Advocates’ Position**

15 While Cal Advocates did not oppose SCE’s Environmental Programs labor costs  
 16 forecast of \$1.335 million for 2025,<sup>42</sup> Cal Advocates recommended reductions to SCE’s forecast of non-

<sup>40</sup> Ex. SDG&E-1, p. TMD-5

<sup>41</sup> TURN does dispute the minor corresponding increase in forecast 401(k) costs derivate of the STIP-to-base conversion.

<sup>42</sup> See Ex. SCE-06, Vol. 06 Errata 5, submitted alongside the Rebuttal. This amount was reduced from \$1.335 million to \$1.329 million included in Table II-8.

1 labor costs associated with three programs: Transmission Road and Right of Way (TROW), Hazardous  
2 and Nonhazardous Waste Transportation and Disposal, and Marine Mitigation.<sup>43</sup>

- 3 • For TROW, Cal Advocates recommends a forecast of \$0.882 million, a  
4 downward adjustment of \$4.349 million from SCE’s 2025 forecast of \$5.231  
5 million. Cal Advocates’ recommendation is based on SCE’s forecast of non-  
6 labor TROW costs of \$0.882 million during 2024 and the postponement of  
7 planned 2023 work and resulting in 2024 planned work being completed in  
8 2025.<sup>44</sup>
- 9 • For Hazardous and Nonhazardous Waste Transportation and Disposal, Cal  
10 Advocates contends that SCE’s 2025 forecast is miscalculated and  
11 recommends a downward adjustment of \$0.565 million to SCE’s 2025 non-  
12 labor forecast of \$2.039 million.<sup>45</sup>
- 13 • For Marine Mitigation, Cal Advocates recommends SCE’s 2025 non-labor  
14 forecast be reduced to the same amount forecast during 2023 (\$4.661 million)  
15 as more representative of a reasonable test year cost for this activity.<sup>46</sup>

16 **b) SCE’s Rebuttal to Cal Advocates’ Position**

17 **(1) Transmission Road and Right of Way (TROW)**

18 Cal Advocates’ recommended 2025 non-labor forecast of \$0.882 million  
19 for TROW expenses should be rejected. Cal Advocates incorrectly assumes that, because certain  
20 planned 2023 TROW work was suspended due to atmospheric storm events, SCE’s TROW work during  
21 2025 will be confined solely to activities planned for 2024. Such an assumption is incorrect and fails to  
22 consider the increase in TROW’s work scope included in SCE’s 2025 forecast and associated level of  
23 costs which were derived from the 2022 recorded non-labor costs for TROW work. SCE’s 2024 imputed  
24 attrition forecast of \$0.882 million aligns with the authorized amount established in the 2021 GRC  
25 decision for the program. However, SCE’s 2025 forecast includes a substantial increase in TROW’s

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<sup>43</sup> Ex. CA-21, pp. 13-15.

<sup>44</sup> Ex. CA-21, p. 14.

<sup>45</sup> Ex. CA-21, p. 15.

<sup>46</sup> Ex. CA-21, pp. 16-17.

1 routine road maintenance work scope, which necessitates additional environmental support, including  
2 compliance with agency permitting requirements.

3 In 2022, SCE completed 210 miles of road grading and recorded non-labor  
4 costs of \$1.435 million for TROW, including monitoring and surveying support. As the nature of  
5 TROW work planned for 2025 includes similar routine road maintenance, the level of non-labor costs  
6 recorded in 2022 provides a more accurate baseline for TROW's environmental support costs as  
7 compared to prior years. In 2023, in response to atmospheric storm events, SCE focused on road repairs  
8 to address the significant deterioration of transmission access roads leading to SCE's infrastructure. This  
9 work was recorded to the Catastrophic Emergency Memorandum Account (CEMA) in response to  
10 federal and state emergencies for road damages and separate from the routine road maintenance included  
11 in the TROW forecast for 2025.

12 SCE's 2025 forecast for TROW is based on routine road maintenance  
13 encompassing activities like road grading and blading, drainage structure maintenance and cleanouts,  
14 and roadside vegetation brushing. The planned routine road maintenance work for 2025 triggers  
15 mandatory permitting requirements due to addressing the impacts on water resources, including  
16 drainages and crossings, in compliance with environmental laws and regulations. SCE's 2025 forecast  
17 incorporates higher levels of environmental controls and permitting reviews for these TROW activities,  
18 which typically trigger permitting and compliance requirements administered by the State Water  
19 Resources Control Board, the U.S. Army Corps of Engineers, the U.S. Environmental Protection  
20 Agency, and the California Department of Fish and Wildlife. Throughout 2022 and 2023, SCE consulted  
21 with the regulatory agencies about a variety of TROW activities and determined that more TROW  
22 activities are triggering permitting requirements.<sup>47</sup> Non-compliance with these permitting requirements  
23 exposes SCE to potential fines, penalties, and permit revocation.

24 SCE's 2025 forecast of \$5.231 million was derived from an estimate of  
25 approximately 2,100 miles of routine road maintenance,<sup>48</sup> and supplemental environmental support in

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<sup>47</sup> For example, for Control Silver Peak and Control Inyokern circuits, SCE received guidance and direction from the agencies confirming the appropriateness of SCE's more robust controls and permitting approach.

<sup>48</sup> SCE's annual forecast of environmental support for TROW is dependent upon internal planning constraints (e.g., scheduling, crew availability, competing work priorities) and other factors (e.g., weather conditions, agency timeframes for issuance of permits). For example, 2023 TROW work and environmental support had primarily been focused upon CEMA repairs versus routine road maintenance.

1 support thereof,<sup>49</sup> including additional compliance controls and implementation of permit conditions and  
2 measures mandated by regulatory agencies, including adherence with regulatory permitting  
3 requirements tied to road maintenance work in waterways (e.g., CDFW Streambed Alteration  
4 Agreements).

5                   Although SCE’s 2025 forecast reflects a tenfold increase for TROW’s  
6 work scope (from 210 miles in 2022 to approximately 2,100 miles in 2025), the increase in non-labor  
7 costs associated therewith is substantially less (approximately three and a half times comparing 2022  
8 recorded costs of \$1.435 million to the 2025 forecast of \$5.231). SCE leveraged efficiencies and  
9 optimized processes to develop the 2025 forecast. In Exhibit SCE-06, Vol. 6A, Chapter 2, pg. 23-24,  
10 SCE noted that Environmental Services plans to perform seasonal avoidance of threatened and  
11 endangered species to help reduce environmental support costs. SCE also notes that Environmental  
12 Services is in the process of obtaining programmatic permits for some TROW work activities to increase  
13 efficiency and foster the development of more consistent permit conditions. Please refer to SCE’s  
14 responses to “PubAdv-SCE-144-FNZ Question 06.a-d”<sup>50</sup> and “PubAdv-SCE-200-FNZ Question 02.a-  
15 g”<sup>51</sup> which are attached in Appendix A - Data Requests of this volume. SCE provided detailed  
16 information for the calculations and cost assumptions utilized in the 2025 forecast of \$5.231 million.<sup>52</sup>

17                   The 2025 forecast by SCE reasonably reflects the expanded work scope,  
18 including adherence to agency permitting requirements. Cal Advocates’ recommended reduction to  
19 SCE’s 2025 forecast of TROW non-labor costs ignores the forecast scope of TROW work, including  
20 activities undertaken to comply with all applicable environmental laws and regulations and permit  
21 requirements, and should be rejected.

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<sup>49</sup> See Ex. SCE-02, Vol. 04, for TROW’s work scope and forecast for their new and enhanced Roads and Right of Way maintenance program. SCE’s 2025 forecast includes TROW primarily focusing on routine road maintenance. TROW’s 2022 work scope encompassed structure brushing and routine road maintenance, including clearances of about 1,400 structures and 210 miles of road grading.

<sup>50</sup> See App. A, PubAdv-SCE-144 Question 06.a-d - Titled “PubAdv-SCE-144-FNZ 06.a-d (EP TROW).”

<sup>51</sup> See App. A, PubAdv-SCE-200 Question 02.a-g.

<sup>52</sup> The 2025 TROW forecast is comprised of biological, waters, and cultural monitoring, nesting bird and pre-construction surveys, intake, project management and Geographic Information System (GIS) support.





1 inlet dredging instead of the previous biennial schedule. This adjustment is necessitated by new projects  
2 that are expected to escalate sediment accumulation within the inlet. Examples include the Caltrans W19  
3 Wetlands project, which shares the same inlet, and several U.S. Army Corps of Engineers beach  
4 replenishment projects. Data modeling has confirmed that these projects contribute to additional  
5 sediment loading. As a co-owner and operating agent, SCE is obligated to maintain the inlet.  
6 Consequently, starting in 2024, SCE anticipates more frequent dredging due to the heightened sediment  
7 deposition resulting from these projects.

8 SCE's 2025 forecast reasonably reflects the essential Marine Mitigation  
9 activities to be performed in 2025 and are crucial to support compliance with the CDP and other relevant  
10 agency regulations.

11 **c) TURN's Position**

12 TURN recommends that SCE's forecast of non-labor costs for Environmental  
13 Programs should be based solely upon recorded costs during 2022 based upon a trend of decreasing  
14 costs from 2018-2022.<sup>58</sup> TURN further contends that SCE's documentation provided in response to a  
15 data request was insufficient to meet its burden to justify SCE's 2025 forecast increase of \$8.07  
16 million.<sup>59</sup>

17 **d) SCE's Rebuttal to TURN's Position**

18 **(1) The Downward Trend from 2018-2022 Is Not Representative of**  
19 **Planned Activities during 2025**

20 TURN's reliance upon the downward trend in the 2018-2022 recorded  
21 costs for Environmental Programs to justify its proposed reduction is misplaced. During 2018, SCE  
22 recorded significant costs for repairs at the Ash Canyon landfill in the Mohave site, resulting from  
23 storms and adverse weather conditions. From 2019 to 2020, costs (including those for habitat restoration  
24 and site maintenance) decreased due to fires and weather conditions (including the Bobcat Fire) which  
25 hindered SCE's ability to conduct mitigation and restoration activities. SCE also did not perform inlet  
26 dredging for the San Dieguito Wetlands in 2020 because sand accumulation levels did not reach the  
27 threshold necessitating additional dredging. From 2020 to 2021, the decrease arose from accounting

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<sup>58</sup> Ex. TURN-11, p. 6.

<sup>59</sup> Ex. TURN-11, p. 5.

1 changes related to post-construction restoration costs resulting on those expenses being recorded to  
2 T&D's accounts in Exhibit SCE-02, Vol. 11. During 2021 to 2022, environmental costs experienced a  
3 net increase, excluding labor adjustments between the two GRC activities for Environmental Services.

4 As highlighted in SCE's response to "TURN-SCE-032 Question 05" and  
5 included in the appendix section of this volume,<sup>60</sup> the Environmental Services Department's labor costs  
6 decreased by \$2.861 million for Environmental Programs, going from \$4.4415 million in 2021 to \$1.553  
7 million in 2022. However, this reduction was offset by an increase of \$2.402 million in Environmental  
8 Management and Development's labor costs, rising from a 2021 spend of \$10.081 million to a 2022  
9 spend of \$12.483 million.<sup>61</sup> 2021 to 2022 recorded spend for Environmental Programs reflected an  
10 increase between these 2 years excluding the above-referenced labor adjustments.

11 Accordingly, the annual decreases from 2018-2022 are attributable to  
12 various factors, including adverse weather conditions (such as storms and fires) and operational  
13 adjustments (such as accounting changes and labor reallocation between GRC activities for  
14 Environmental Services). However, Environmental Programs' 2018-2022 annual costs would not show  
15 a downward trend in the absence of the factors and adjustments discussed above. Those elements are not  
16 anticipated during 2025 and beyond. In addition, the historical costs for the San Dieguito Wetlands do  
17 not fully capture the environmental costs related to inlet dredging. Dredging the inlet channel is a  
18 Coastal Development Permit (CDP) requirement to ensure that the wetland receives an adequate supply  
19 of saltwater. In years prior to 2024, SCE performed inlet dredging every other year, as sand  
20 accumulation levels did not necessitate annual dredging. Starting in 2024, SCE plans to conduct annual  
21 inlet dredging instead of the previous biennial schedule. This adjustment is necessitated by new projects  
22 that are expected to escalate sediment accumulation within the inlet. Other examples include the  
23 Caltrans W19 Wetlands project, which shares the same inlet, and several U.S. Army Corps of Engineers  
24 beach replenishment projects. Data modeling has confirmed that these projects contribute to additional  
25 sediment loading. As a co-owner and operating agent, SCE is obligated to maintain the inlet.

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<sup>60</sup> See App. A, SCE's responses to "TURN-SCE-032 Question 05."

<sup>61</sup> This was primarily due to employees allocating a higher percentage of labor costs to Environmental Management and Development instead of Environmental Programs. Environmental Services underwent a departmental reorganization and shifted labor costs from Environmental Programs to Environmental Management and Development to align with the organizational structure.

1 Consequently, starting in 2024, SCE anticipates more frequent dredging due to the heightened sediment  
2 deposition resulting from these projects.

3 **(2) Quotes, Invoices, and Contracts and Forecast Methodology**

4 Given the forecast relates to work *during 2025*, SCE does not rely on  
5 quotes, invoices, and contracts for future work. However, the 2025 forecast was developed using  
6 recorded 2022 costs and adjustments needed to account for expanded scope of activities in multiple  
7 areas, including those needed to address regulatory requirements. Given the context of Environmental  
8 Programs, the 2025 forecast properly considered historical spending patterns, including the 2022 base  
9 year. Environmental Programs' subject matter experts carefully assessed program requirements,  
10 encompassing both existing needs and anticipated future demands and leverage their understanding of  
11 vendors who contributed to the historical and continue to contribute to the ongoing workloads of these  
12 programs. SCE retains invoices and contracts documenting the recorded expenditures, which can be  
13 made available upon request. Program leads also collaborate with interfacing Operational Units to  
14 facilitate project work, as exemplified by the section below detailing TROW's increased costs in 2025.

15 By way of illustration, the 2025 TROW forecast was developed through  
16 rate negotiations for the proposed support with vendors. This approach is necessitated by the dynamic  
17 regulatory landscape and evolving project scope (including factors like construction plans and the  
18 identification of biological or cultural resources in the field). To create environmental forecasts, SCE  
19 leverages existing negotiated rates (when the proposed construction activities fall within the contract  
20 window) or applies a projected rate escalator based on market trends. Subsequently, SCE applies an  
21 environmental support model aligned with regulatory and permit requirements, pricing it against the  
22 proposed operation and maintenance work as well as the existing or projected rates.

23 Furthermore, SCE utilizes essential tools to manage environmental  
24 compliance, including the source citation log and the environmental requirements register. The  
25 environmental requirements register provides detailed information on requirements applicable to SCE.  
26 Additionally, SCE actively monitors new and proposed environmental regulations through its regulatory  
27 intake process. For instance, when changes are proposed, SCE documents and monitors the changes  
28 until completion and updates the source citation log accordingly. The information gathered is then used  
29 to align environmental requirements with compliance areas and programs and the necessary actions for  
30 compliance. Both the citation log and requirements register incorporate official regulations to establish

1 processes and controls to ensure SCE’s environmental programs comply with all applicable laws and  
2 regulations.

3 **(3) Adjustments above 2022 Recorded Spend**

4 In direct testimony and data request responses, SCE provided the detailed  
5 explanations and materials to support the \$7.844 million increase between the 2022 recorded costs of  
6 \$14.845 million and the 2025 forecast of \$22.689 million for Environmental Programs. This increase for  
7 Environmental Programs primarily results from an increase in non-labor costs of approximately \$8  
8 million, coupled with a labor reduction of \$0.2 million. In Exhibit SCE-06, Volume 6A, Chapter 2,  
9 pages 23-26, SCE provided detailed information on adjustments that contribute to the non-labor increase  
10 of approximately \$8 million. SCE’s data request responses further elucidate the basis for the non-labor  
11 cost increases.<sup>62</sup> SCE included additional details, calculations, and cost assumptions regarding the  
12 adjustments that led to this increase.

13 **(a) Transmission Road and Right of Way**

14 As highlighted in Section II.A.3.b.(1) and the supporting materials  
15 referenced therein, the increase of \$3.796 million in SCE’s 2025 TROW forecast of \$5.231 million  
16 compared to the 2022 recorded spend of \$1.435 million is based upon the higher scope of work for  
17 TROW planned during 2025.

18 **(b) New Programs and Activities**

19 As detailed in direct testimony, SCE’s 2025 forecast also includes  
20 \$1.016 million associated with new environmental programs and activities.

21 **(i) Pesticide Compliance Support**

22 SCE’s 2025 forecast includes an estimate of \$0.05 million  
23 for pesticide-related compliance support, specifically, compliance with Federal Insecticide, Fungicide,  
24 and Rodenticide Act (FIFRA) requirements.

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<sup>62</sup> See App. A, SCE’s responses to “TURN-SCE-032 Question 04”, “PubAdv-SCE-144-FNZ Question 06.a-d”,  
and “PubAdv-SCE-200-FNZ Questions 02.a-g, 03.a-c, 04.a-f, 05.a-f, 06.a-e”.

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**(ii) Protocol Surveys**

SCE's 2025 forecast includes an estimate of \$0.3 million for performing protocol surveys for listed species, candidate species for listing, and other sensitive species to determine their presence in specific areas within SCE's facilities. In prior years, SCE relied on a utility exemption for California Endangered Species Act (CESA) endangered and threatened plants species. CDFW clarified that the exemption did not apply to CESA threatened plants, thereby, resulting in the need for SCE to perform surveys for these species. Also, SCE obtained a Yosemite toad permit needed to perform critical wildfire mitigation work, and the permit includes requirements to conduct surveys to ensure SCE avoids species impacts. These protocol surveys can result in the reduction of future environmental costs by providing information on the species presence or absence in specific areas. SCE's 2025 forecast includes approximately 7 biologists performing surveys for a duration of about 6 weeks.

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**(iii) Environmental Support for T&D Projects**

SCE's 2025 forecast includes an estimate of \$0.57 million for environmental post-construction support for miscellaneous T&D projects. Certain T&D projects require multi-year erosion monitoring after completion of construction. ESD's 2025 forecast encompasses environmental support for T&D projects with these types of post-construction environmental requirements. SCE included support for identified projects with environmental requirements (e.g., Utah 12kV waters monitoring, Gould-Sylmar erosion monitoring, Lugo-Mohave Footing restoration). SCE included a forecast of \$0.32 million based on approximately \$45,000 per project for 7 known projects with these types of requirements. SCE also included support for other potential projects with post-construction environmental requirements. SCE included a forecast of \$0.25 million based on approximately \$40,000 per project for about 6 projects with these types of requirements.

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**(iv) Environmental Support for Oil Wells**

SCE's 2025 forecast includes an estimate of \$0.1 million for environmental support for oil wells. SCE has been required to address three historical oil wells that were identified by the California Department of Conservation Geologic Energy Management Division. The three historical wells were identified and subject to a determination if they are considered inaccessible or will require actions to secure and abandon them. Third-party consultants with expertise

1 in oil well abandonment will be required to ensure SCE meets all the regulatory requirements of the  
2 process.

3 **(c) Additional Environmental Support**

4 SCE's 2025 forecast includes additional costs of \$1.439 million in  
5 the 2025 forecast to support various environmental programs. SCE includes several programs which are  
6 primary drivers for the increase of \$1.439 million between 2022 recorded spend of \$3.953 million  
7 compared to 2025 forecast of \$5.392 million.<sup>63</sup>

8 **(i) Waste Transportation and Disposal**

9 Please refer to Section II.A.3.b.)(2) for a detailed  
10 discussion and reference to additional supporting materials regarding the increase of \$0.721 million to  
11 the 2025 forecast of \$2.039 million (as compared to 2022 recorded spend of \$1.318 million) for Waste  
12 Transportation and Disposal activities.

13 **(ii) Air Quality Compliance**

14 SCE's 2025 forecast is \$1.402 million compared to 2022  
15 recorded spend of \$1.028 million for this program, resulting in an increase of \$0.374 million.<sup>64</sup> The 2025  
16 forecast includes \$0.3 million for chemical compliance analysis, notifications, permitting, plan  
17 approvals, and ensuring compliance of Volatile Organic Compounds materials. The forecast also  
18 includes \$0.7 million for RECLAIM/Title V/Pebble Beach Health Risk Assessment (HRA), air quality  
19 reporting for facilities and project applications, emission trading credits, and generation facilities  
20 including Pebble Beach, Mountainview, and Five Peakers. In addition, \$0.4 million is included in the  
21 forecast for corporate sustainability report metrics, six indices and scorecards reporting, Scope 3  
22 expansion, Forest Greenhouse Gas project, SEC reporting, and other miscellaneous support. This  
23 program's costs have been increasing due to regulatory amendments and adoptions related to Catalina

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<sup>63</sup> Beyond the programs listed in this section, there are additional programs that demonstrated changes, both increases and decreases, between the 2025 forecast and the 2022 recorded spending. Collectively, these adjustments lead to a net increase of \$1.439 million.

<sup>64</sup> Please note 2022 recorded spend of \$1.03 million for Air Quality Compliance was included under GRC Activity Environmental Management and Development, with 2025 forecast of \$1.4 million included in GRC Activity Environmental Programs. This was due to accounting settlement issues for several programs. This is the reason 2022 recorded spend is \$0 for Air Quality Compliance for GRC Activity Environmental Programs. Please see App. A, Data Requests, PubAdv-SCE-144-FNZ Question 04.a-d.

1 Repower, fuel dispensing, refrigerant, portable generators, Sulfur Hexafluoride equipment, asbestos, and  
2 corporate greenhouse gas accounting. The 2025 forecast includes additional costs to account for  
3 anticipated new compliance requirements based on California’s clean air roadmaps, the Security  
4 Exchange Commission’s information disclosure requirements, and incorporation of regulation  
5 amendments and adoptions by agencies (i.e., Forest Greenhouse Gas project). Additional rules and  
6 regulations may also be amended and adopted by U.S. Environmental Protection Agency, California Air  
7 Resources Board, South Coast Air Quality Management District, and other local air districts. These  
8 updates can result in the issuance of additional compliance guidance on greenhouse gas mitigation,  
9 health risk assessment, and California Environmental Quality Act analyses. The 2025 forecast includes  
10 additional support for this work, as well as regulatory changes related to permitting, monitoring,  
11 recordkeeping, and reporting requirements.

12 **(iii) Accounting Settlement Issues**

13 SCE’s 2025 forecast for Environmental Programs includes  
14 an increase of approximately \$0.3 million non-labor costs for accounting settlement issues. This amount  
15 is offset by a decrease of approximately \$0.3 million non-labor for Environmental Management and  
16 Development. Please see SCE’s response to “PubAdv-SCE-059-FNZ Question 04.b”, which is attached  
17 in the appendix section of this volume.<sup>65</sup> In addition, please see SCE’s response to “PubAdv-SCE-144-  
18 FNZ Question 04.a-d”, which is attached in the appendix section of this volume.<sup>66</sup> There were several  
19 programs in which the 2022 recorded spend was included under Environmental Management and  
20 Development, and the 2025 forecast was included under Environmental Programs, and vice versa, in  
21 which the 2022 recorded spend was included under Environmental Programs, and the 2025 forecast was  
22 included under Environmental Management and Development. The adjustments resulted in an increase  
23 of about \$0.3 million to Environmental Programs, and a decrease of about \$0.3 million for  
24 Environmental Management and Development.

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<sup>65</sup> See App. A, SCE’s response to PubAdv-SCE-059-FNZ, Question 04.a-g. SCE’s response notes that the 2025 non-labor forecast for Environmental Management and Development included a reduction adjustment of \$1.5 million. This reduction is primarily due to removal of costs of approximately \$1.2 million for improvements to the Environmental Management System, which will be completed by 2025. The remaining part of this variance, calculated at \$0.3 million, is attributed to several environmental programs with accounting settlement updates, which resulted in these programs’ 2022 recorded spend included under Environmental Management and Development, and 2025 forecast included under Environmental Programs.

<sup>66</sup> See App. A, SCE’s response to PubAdv-SCE-144-FNZ Question 04.a-d.

1 (iv) **Drinking Water**

2 SCE's 2025 forecast is \$0.833 million compared to 2022  
3 recorded spend of \$0.748 million for this program, resulting in an increase of \$0.085 million. The 2025  
4 forecast includes additional costs to implement new regulated system procedures for SCE's drinking  
5 water systems, incorporate new State Water Resources Control Board requirements for sampling and  
6 pipe inventories, and support drought and water curtailment coverage and reporting. This program's  
7 activities encompass support for drinking water sampling, ensure drinking water standards meet  
8 compliance requirements, and provide support for well information data management. These activities  
9 help ensure safe and compliant drinking water at SCE's facilities and compliance with agency regulatory  
10 requirements.<sup>67</sup>

11 (d) **Marine Mitigation**

12 SCE's 2025 forecast is \$5.579 million compared to 2022 recorded  
13 spend of \$3.826 million for this program, resulting in an increase of \$1.753 million.

14 SCE's 2025 non-labor forecast for Marine Mitigation includes  
15 \$2.253 million for Reef Maintenance and encompasses additional costs for sonar surveys which are  
16 mandated to be conducted every 5 years under the Coastal Development Permit (CDP).<sup>68</sup> In 2022, the  
17 recorded expenditure of \$1.498 million included an agency credit related to the SONGS Mitigation  
18 Monitoring Program, resulting in a reduction in Reef Maintenance costs. SCE's 2025 forecast of \$2.253  
19 million includes costs for sonar surveys, agency required monitoring, and other fees.

20 SCE's 2025 non-labor forecast includes \$3.326 million for San  
21 Dieguito Wetlands, and encompasses costs for inlet dredging, restoration, and other activities, such as  
22 Sediment and Analysis Plan activities required by agencies as part of the Clean Water Act Section  
23 401/U.S. Army Corps of Engineers Clean Water Act Section 404 permit amendment. During 2025, SCE  
24 plans to conduct Sediment and Analysis Plan tests assessing sediments and contaminants within the  
25 wetlands pursuant to requirements mandated by the U.S. Army Corps of Engineers (USACE) and the  
26 Environmental Protection Agency (EPA). Additional costs to meet San Dieguito Wetlands' restoration

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<sup>67</sup> 2023 recorded spend for drinking water program amounted to approximately \$1.19 million, surpassing the 2025 forecast of \$0.83 million. Increased costs for this program are anticipated to continue in future years. See Ex. SCE-11, App. A, Environmental Programs GRC Activity.

<sup>68</sup> In 2020, SCE incurred approximately \$0.3 million for sonar surveys.

1 requirements include the purchase and installation of plants. This project is still in its initial phase and  
2 the requirements extend to a total of 32 years. In 2022, the recorded expenditure of \$2.328 million  
3 included an agency credit related to the SONGS Mitigation Monitoring Program, resulting in a reduction  
4 in San Dieguito Wetlands costs. The historic recorded non-labor costs for San Dieguito Wetlands also  
5 do not fully account for the environmental costs associated with inlet dredging. Dredging the inlet  
6 channel is a CDP requirement to ensure that the wetland receives an adequate supply of saltwater. Prior  
7 to 2024, SCE performed inlet dredging every other year, as sand accumulation levels did not necessitate  
8 annual dredging. Starting in 2024, SCE plans to conduct annual inlet dredging instead of the previous  
9 biennial schedule. This adjustment is necessitated by new projects that are expected to escalate sediment  
10 accumulation within the inlet. Examples include the Caltrans W19 Wetlands project, which shares the  
11 same inlet, and several U.S. Army Corps of Engineers beach replenishment projects. Data modeling has  
12 confirmed that these projects contribute to additional sediment loading. As a co-owner and operating  
13 agent, SCE is obligated to maintain the inlet. Consequently, starting in 2024, SCE anticipates more  
14 frequent dredging due to the heightened sediment deposition resulting from these projects.

15 SCE's 2025 forecast reasonably reflects the essential Marine  
16 Mitigation activities to be performed in 2025 and are crucial to support compliance with the CDP and  
17 other relevant agency regulations.

18 e) **Conclusion**

19 Based upon the foregoing, the reductions recommended by Cal Advocates and  
20 TURN should be rejected. SCE respectfully requests that the Commission approve SCE's 2025 labor  
21 and non-labor forecast of \$22.689 million for Environmental Programs.

22 SCE does not contest SDG&E's requests as listed in SDG&E-01 and SDG&E-02  
23 as relates to Marine Mitigation costs.

24 **B. Capital Expenditures**

25 1. **SCE Application**

26 Table II-9 below provides SCE's recorded amounts from 2018 through 2023 and SCE's  
27 forecast from 2024-2025 for Environmental Programs capital programs. SCE's rebuttal position  
28 incorporates the 2023 recorded expenditures of \$1.185 million in place of the 2023 forecast of \$4.537

1 million, a decrease of \$3.352 million.<sup>69</sup> As referenced in the Transmission Road and Right of Way  
2 Permits section below, the variance between recorded and forecast amounts arose from planned road  
3 maintenance work being redirected to support emergency road repair work due to atmospheric storm  
4 events during 2023. While TURN did not oppose SCE's capital forecast for Environmental Programs,  
5 Cal Advocates recommends reductions to multiple elements of the capital forecast from 2023-2025 for  
6 Environmental Programs as discussed below along with SCE's responses thereto. Table II-10 below  
7 shows the forecast for 2023-2025 for SCE and Cal Advocates, the variance from SCE's forecast and  
8 SCE's rebuttal position.

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<sup>69</sup> See Ex. SCE-18, Vol. 01, testimony of Russell Archer.

**Table II-9**  
**Environmental Services**  
**Detailed Capital 2023 Historical and 2024-2025 Forecast Table**  
**Summary of SCE, Cal Advocates and TURN Positions**  
(Nominal \$000)

Line #	Business Planning Element	SCE Recorded					SCE Rebuttal Position			
		2018	2019	2020	2021	2022	2023 Recorded	2024 Forecast	2025 Forecast	Total 2023-2025
1	Environmental Services	706	680	365	429	839	1,185	4,628	4,722	10,536
2	<b>Total</b>	706	680	365	429	839	1,185	4,628	4,722	10,536

**2. Environmental Programs**

**Table II-10<sup>70</sup>**  
**Environmental Programs**  
**GRC Activity Detailed Historical Table**  
(Nominal \$000)

Line No.	Environmental Services	SCE Rebuttal Position				Cal Advocates				Variance From SCE 2023-2025
		2023 Recorded	2024 Forecast	2025 Forecast	Total 2023-2025	2023 Forecast	2024 Forecast	2025 Forecast	Total 2023-2025	
1	Environmental Programs	\$ 1,185	\$ 4,628	\$ 4,722	\$ 10,536	\$ 540	\$ 1,500	\$ 1,530	\$ 3,570	\$ (6,966)
2		1,185	4,628	4,722	10,536	540	1,500	1,530	3,570	(6,966)

**a) Cal Advocates' Position**

**(1) Species Permits**

While Cal Advocates did not oppose SCE's 2024 and 2025 forecasts for Species Permits, Cal Advocates recommends \$0 for 2023 since SCE has not obtained any species permits as of December 31, 2023.<sup>71</sup> SCE recorded \$0.299 million for species permits in 2023.

**(2) General Waters Permits**

Cal Advocates notes that SCE has not obtained the general waters permits as of December 31, 2023. Cal Advocates recommends \$0 for 2023, \$0.128 million for 2024, and \$0.130 million for 2025. Cal Advocates recommends \$0 for 2023, 2024, and 2025 for the CDFW MSA based

<sup>70</sup> See App. B of Ex. SCE-11 for 2023 recorded capital expenditures and Ex. SCE-18, Vol. 01, Ch VI for SCE's proposal that the Commission authorize SCE's 2023 recorded expenditures in place of SCE's original 2023 forecast across the case.

<sup>71</sup> Ex. CA-21, p. 40.

1 on information regarding the process and complexity of obtaining the permit. Cal Advocates  
2 recommends \$0 for 2023, \$0.128 million for 2024, and \$0.130 million for 2025 for the SWRCB permit.  
3 For general waters permits, SCE recorded \$0.039 million in 2023, and forecasts \$0.255 million for 2024  
4 and \$0.260 million for 2025.

5 **(3) Transmission Road and Right of Way (TROW) Permits**

6 Cal Advocates recommends \$0.068 million for 2023 based on 1 permit  
7 SCE obtained in 2023. Cal Advocates recommends \$0.349 million for 2024 and \$0.356 million for 2025  
8 based on 5 permits SCE obtained in 2022. For TROW permits, SCE recorded \$0.185 million in 2023,  
9 and forecasts \$3.350 million for 2024 and \$3.417 million for 2025.

10 **b) SCE's Rebuttal to Cal Advocates' Position**

11 **(1) Species Permits**

12 As reflected in Table II-10 above, SCE has updated its 2023 forecast for  
13 the Species Programmatic Permitting program to \$0.299 million based on the expenditures recorded  
14 during 2023. While Cal Advocates noted that SCE has not obtained any species permits as of December  
15 31, 2023, SCE recorded expenditures of \$0.299 million for the Species Programmatic Permitting  
16 program. This program supports multiple permit types with varying development and issuance  
17 timeframes. Please see SCE's response to "PubAdv-SCE-095-FNZ Question 01.a-h", which is attached  
18 in the appendix section of this volume.<sup>72</sup> Permit issuance typically takes 3 to 5 years due to complexity  
19 and resource constraints. Permits are typically valid for 30 to 50 years and may cover multiple species,  
20 such as monarch butterfly, arroyo toad, desert tortoise, Mohave ground squirrel, Stephens' and San  
21 Bernardino kangaroo rat, and western Joshua trees. In SCE's response to "PubAdv-SCE-159-FNZ  
22 Question 04.a-d", which is attached in the appendix section of this volume,<sup>73</sup> SCE provided a table  
23 detailing the species permits that are in progress. These timeframes are SCE's estimates and are  
24 dependent on permitting entities like California Department of Fish and Wildlife (CDFW) and USFWS  
25 (U.S. Fish and Wildlife Service). For instance, SCE submitted the San Bernardino Valley Incidental  
26 Take Permit application to CDFW in Oct 2022 and encountered agency delays.

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<sup>72</sup> See App. A, SCE's response to PubAdv-SCE-095-FNZ Question 01.a-h.

<sup>73</sup> See App. A, SCE's response to PubAdv-SCE-159-FNZ Question 04.a-d.

1 In 2023, SCE recorded \$0.299 million and provided environmental  
2 support for six species permits. This included the San Bernardino Valley Habitat Conservation Plan  
3 (HCP), San Bernardino Valley Long-Term Incidental Take Permit (ITP), Western Riverside Multiple  
4 Species Habitat Conservation Plan (WRMSHCP), Coachella Valley Multiple Species Habitat  
5 Conservation Plan (CVMSHCP), Stephens' Kangaroo Rat HCP, and the North Coast HCP. Species  
6 permits involve activities such as background research, information gathering, development of operation  
7 and maintenance activity descriptions, impact assumptions, species coverage and habitat mapping,  
8 species effects analysis, species and habitat surveys, CEQA and NEPA reviews, and agency  
9 coordination. In 2023, SCE reached significant milestones in its pursuit of species permits. These  
10 achievements included substantial completion of the San Bernardino Valley HCP, initiating CEQA with  
11 the California Department of Fish and Wildlife (CDFW) for the San Bernardino Valley ITP,  
12 coordination with agencies regarding programmatic permitting through the WRMSHCP and  
13 CVMSHCP, and conducting surveys to confirm species presence.

14 Accordingly, Cal Advocates' recommendation of no recovery for SCE's  
15 recorded expenditures of \$0.299 million during 2023 for the Species Programmatic Permitting program  
16 should be rejected (in addition to the policy and ratemaking reasons set forth in Mr. Archer's rebuttal  
17 testimony at Exhibit SCE-18, Vol. 1).

18 **(2) General Waters Permits**

19 As reflected in Table II-10 above, SCE has updated its General Waters  
20 Permits capital forecast for 2023 to align with the actual recorded expenditures of \$0.039 million.

21 Cal Advocates' recommendation of complete disallowance of SCE's  
22 forecast for California Department of Fish and Wildlife (CDFW) Master Stream Alteration Agreement  
23 (MSAA) permits from 2023-2025 is based upon SCE not obtaining such permits as of the end of 2023  
24 and "the information regarding the process and complexity of obtaining the CDFW permits." The  
25 CDFW MSAA is a crucial general waters permit that enables SCE to obtain CEQA determination for  
26 water permits across multiple projects, rather than handling it individually for each project. The  
27 Environmental Impact Report (EIR) establishes a baseline and remains valid for 20 to 30 years, serving  
28 as a foundation for water permits. Without the CDFW MSAA permit, SCE would need to conduct  
29 project-specific EIRs or Mitigated Negative Declarations (MNDs), along with Lake Streambed

1 Alteration Agreements (LSAAs), for each project. This alternative approach is typically more time-  
2 consuming and costly.

3 SCE's 2023 recorded amount, and 2024 and 2025 forecasts for General  
4 Waters Permits encompass support for both the State Water Resources Control Board (SWRCB)  
5 General Order and the California Department of Fish and Wildlife (CDFW) Master Stream Alteration  
6 Agreement (MSAA). Please see SCE's response to "PubAdv-SCE-095-FNZ Question 01.a-h", which is  
7 attached in the appendix section of this volume.<sup>74</sup> The response notes that although SCE has not yet  
8 obtained any general waters permits, SCE has initiated work and both permits are in progress in 2023.

9 Moreover, SCE recorded \$0.039 million in 2023 and initiated the  
10 California Environmental Quality Act (CEQA) process with CDFW for the CDFW MSAA  
11 programmatic permit. In March 2023, SCE submitted an application to CDFW and CDFW responded in  
12 December of the same year. For the CDFW MSAA, SCE anticipates a significant increase in costs in  
13 2024, with development of the programmatic EIR and MSAA with CDFW. SCE is currently in  
14 negotiations for an agency agreement with CDFW, and payment to CDFW is expected in the first half of  
15 2024. During 2025, environmental support for the CDFW MSAA will be essential, involving CEQA  
16 documentation, addressing regulatory comments, incorporating necessary revisions, and providing  
17 overall assistance throughout the permitting process.

### 18 (3) Transmission Road and Right of Way (TROW) Permits

19 As reflected in Table II-10 above, SCE has updated its TROW Permits  
20 capital forecast for 2023 to align with the actual recorded expenditures of \$0.185 million. With respect  
21 to Cal Advocates' recommended reduction to SCE's 2024 and 2025 TROW Permits forecast, Cal  
22 Advocates primarily relies upon the number of TROW permits SCE obtained during 2022. However,  
23 such reliance fails to account for the scope of planned TROW-related work activities during 2024 and  
24 2025 upon which SCE's capital forecast was based at the time of the GRC Application's submission. As  
25 highlighted above, SCE plans a significant increase in routine road maintenance work scope  
26 necessitating the acquisition of a significantly higher volume of permits to facilitate this critical work.

27 In 2022, SCE completed 210 miles of routine road maintenance. SCE  
28 obtained 5 permits and recorded expenditures of \$0.482 million. TROW's 2022 work scope included

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<sup>74</sup> See App. A - SCE's response to PubAdv-SCE-095-FNZ Question 01.a-h.

1 structure brushing and routine road maintenance.<sup>75</sup> In 2023, SCE did not perform routine road  
2 maintenance due to the 2023 atmospheric storm events, focusing instead on CEMA Repairs to address  
3 the significant deterioration of transmission access roads leading to SCE’s infrastructure. While SCE  
4 obtained only one permit in 2023, SCE recorded expenditures of \$0.185 million which encompassed  
5 environmental support activities for additional permits that have not yet been acquired (such as Rio  
6 Hondo and Arrowhead). Environmental support costs associated with permits can extend over multiple  
7 years, depending on various factors such as agency issuance timeframes. Additionally, these costs may  
8 continue even after the initial permit issuance.<sup>76</sup>

9                   While SCE predominantly focused on CEMA repairs during 2023, SCE  
10 anticipates transitioning back to routine road maintenance during subsequent years. This maintenance  
11 will encompass activities including road grading, drainage structure maintenance and cleanouts, and  
12 roadside vegetation brushing, and these activities trigger permitting requirements due to their impact on  
13 water resources, including drainages and crossings. As highlighted in Section II.A.3.b.)(1) above, SCE  
14 projects a significant increase in TROW’s routine road maintenance work scope, and these activities  
15 trigger permitting and compliance requirements set forth by the State Water Resources Control Board,  
16 U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, and the California Department  
17 of Fish and Wildlife. During 2025 alone, the planned scope of TROW work includes 16 circuits  
18 requiring permits for routine road maintenance.<sup>77</sup>

19                   TROW permits play a crucial role in ensuring that SCE adheres to federal  
20 and state regulations, including the Clean Water Act (CWA), Fish and Game Code (F&GC), and the  
21 Porter-Cologne Water Quality Control Act. The permits are essential for various road work activities  
22 which SCE performs to comply with all applicable environmental laws and regulations and permit  
23 requirements. Failure to comply with environmental laws and regulations could expose SCE to  
24 compliance violations, and lead to significant fines, penalties, and risk of permit revocation.

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<sup>75</sup> In 2022, TROW’s work scope included clearances of about 1,400 structures and 210 miles of road grading.  
<sup>76</sup> For instance, there may be additional costs incorporating permit updates to address changes in field conditions  
and ensure ongoing coverage.  
<sup>77</sup> SCE’s annual forecast of environmental support for TROW permits include an estimated number of circuits  
per year for routine road maintenance. The forecast is also dependent upon internal planning constraints (e.g.,  
scheduling, crew availability, competing work priorities) and other factors (e.g., weather conditions, agency  
timeframes for issuance of permits). For example, 2023 TROW work had primarily been focused upon  
CEMA repairs. See also, Ex. SCE-02, Vol. 04, for TROW’s work scope and forecast for their new and  
enhanced Roads and Right of Way maintenance program.

1                   c)     **Conclusion**

2                             Based upon the foregoing arguments, SCE respectfully requests that the  
3 Commission approve the updated capital forecast from 2023-2025 for Environmental Programs of  
4 \$10.536 million, including 2023 recorded expenditures of \$1.185 million.

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**III.**

**SAFETY PROGRAMS**

**A. O&M Expenses**

**1. SCE Application**

The Safety Programs BPE consists of four GRC Activities as seen below in Table III-11. These activities focus on mitigating safety risks to our customers, the general public, and our workers concurrent with our mission to provide safe, reliable, affordable, and increasingly clean electricity across our 50,000 square mile service territory.

***Table III-11  
Safety Programs  
GRC Activities 2025 O&M Forecast  
Summary of SCE, Cal Advocates, and TURN Positions  
(2022 Constant \$000)***

Line No.	Safety Programs	2025 Forecast			Variance from SCE	
		SCE Rebuttal Position	Cal Advocates	TURN	Cal Advocates	TURN
1	Employee and Contractor Safety	8,352	8,352	N/A	-	N/A
2	Safety Strategy Transformation	4,271	4,039	N/A	(232)	N/A
3	Safety Activities – Transmission & Distribution	17,469	12,419	N/A	(5,050)	N/A
4	Public Safety	649	804	N/A	155	N/A
5	<b>Total</b>	30,741				

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**2. Employee and Contractor Safety**

SCE’s Employee and Contractor Safety team develops and maintains corporate safety standards and programs in areas such as electrical safety, industrial ergonomics, industrial hygiene, and oversight of contractors/subcontractors. These include field safety programs that are specific to various OU work activities. SCE is currently focused on anchoring our safety culture in personal safety leadership and ownership, a key lever in driving safety performance improvements and strengthening overall safety culture. The Employee and Contractor Safety team plays a critical role in planning and operationalizing the initiatives identified from various safety programs.

**Table III-12**  
**Employee and Contractor Safety**  
**2018-2022 Recorded/2025 Forecast**  
**Summary of SCE, Cal Advocates, and TURN Position**  
**(2022 Constant \$000)**

Line #	Employee and Contractor Safety	SCE Recorded					2025 Forecast			Variance from SCE	
		2018	2019	2020	2021	2022	SCE Rebuttal Position	Cal Advocates	TURN	Cal Advocates	TURN
1	Labor	4,528	5,555	4,570	5,114	3,711	4,019	4,019	N/A	-	N/A
2	Non-Labor	1,344	2,213	1,570	11,880	9,261	4,333	4,333	N/A	-	N/A
3	<b>Total</b>	<b>5,872</b>	<b>7,767</b>	<b>6,140</b>	<b>16,994</b>	<b>12,972</b>	<b>8,352</b>	<b>8,352</b>		<b>-</b>	

SCE notes its forecast includes an adjustment related to the Employee Compensation Program proposal discussed in Exhibit SCE-06, Volume 4. No intervenor disputed the general structure of this proposal or the respective forecast adjustment included in this GRC Activity.<sup>78</sup> To the extent the Commission adopts a forecast based on a different forecast methodology than recommended by SCE (e.g., Last Year recorded, 3-Year average, etc.), this Employee Compensation Program adjustment should be added back to account for the incremental cost in the forecast period due to this undisputed proposal. See also SCE-17, Volume 3, Chapter III for additional discussion.

**a) Cal Advocates' Position**

Cal Advocates does not oppose SCE's Employee and Contractor Safety forecast for 2025 of \$8.352 million.<sup>79</sup> However, Cal Advocates recommends that SCE's 2021 recorded non-labor expenses for Employee and Contractor Safety be adjusted downward by \$3.088 million for transactions that are one-time expenses for GRC forecasting purposes.<sup>80</sup>

**b) SCE's Rebuttal to Cal Advocates' Position**

While Cal Advocates does not oppose SCE's Test Year 2025 forecast for Employee and Contractor Safety, Cal Advocates nonetheless recommends that a downward adjustment be made to this activity's recorded 2021 non-labor costs by \$3.088 million associated with transactions

<sup>78</sup> TURN does dispute the minor corresponding increase in forecast 401(k) costs derivate of the STIP-to-base conversion.

<sup>79</sup> Ex. CA-21, p. 20.

<sup>80</sup> Ex. CA-21, p. 18.

1 that are “one-time expenses for GRC forecasting purposes.”<sup>81</sup> Notably, SCE’s Test Year 2025 forecast  
2 for Employee and Contract Safety is based on the last recorded year (2022) with certain adjustments.<sup>82</sup>  
3 Hence, the 2021 recorded non-labor costs do not form the basis for the forecast. As there is no dispute  
4 that these non-labor costs were recorded for this activity during 2021 and did not form the basis for the  
5 Test Year forecast, Cal Advocates’ recommended adjustment to the recorded 2021 non-labor costs  
6 should be rejected.

7 **c) TURN’s Position**

8 TURN’s testimony does not discuss SCE’s Test Year 2025 forecast for Employee  
9 and Contractor Safety.

10 **d) Conclusion**

11 As SCE’s Test Year 2025 forecast for Employee and Contractor Safety was not  
12 opposed by any party, SCE requests that the Commission approve the forecast of \$8.352 million.

13 **3. Safety Strategy Transformation**

14 Safety Strategy Transformation activities are managed by the Safety Programs,  
15 Compliance, and Initiatives group within SCE. SCE has been on a continuous journey of strengthening  
16 our safety culture. SCE’s progression through our Safety Culture Maturity Model is currently focused on  
17 evolving from Public Compliance, where workers follow rules primarily due to potential consequences,  
18 to Private Compliance, where workers are motivated to make safe choices to protect themselves for who  
19 and what they value. The Private Compliance mindset sets the foundation for using SCE’s safety  
20 programs, processes, and tools to systematically identify and mitigate risk. These programs drive  
21 improved work practices and risk identification and mitigation to holistically addresses safety risks for  
22 our workers and the public.

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<sup>81</sup> Ex. CA-21, p. 18.

<sup>82</sup> Ex. SCE-06, Vol. 6, p. 53.

**Table III-13**  
**Safety Strategy Transformation**  
**2018-2022 Recorded/2025 Forecast**  
**Summary of SCE, Cal Advocates, and TURN Position**  
**(2022 Constant \$000)**

Line #	Safety Strategy Transformation	SCE Recorded					2025 Forecast			Variance from SCE	
		2018	2019	2020	2021	2022	SCE Rebuttal Position	Cal Advocates	TURN	Cal Advocates	TURN
1	Labor	24	1,190	1,488	1,102	1,470	2,325	2,093	N/A	(232)	N/A
2	Non-Labor	1,355	533	519	650	846	1,946	1,946	N/A	-	N/A
3	Total	1,378	1,723	2,008	1,752	2,315	4,271	4,039		(232)	

SCE notes its forecast includes an adjustment related to the Employee Compensation Program proposal discussed in Exhibit SCE-06, Volume 4. No intervenor disputed the general structure of this proposal or the respective forecast adjustment included in this GRC Activity.<sup>83</sup> To the extent the Commission adopts a forecast based on a different forecast methodology than recommended by SCE (e.g., Last Year recorded, 3-Year average, etc.), this Employee Compensation Program adjustment should be added back to account for the incremental cost in the forecast period due to this undisputed proposal. See also SCE-17, Volume 3, Chapter III for additional discussion.

**a) Cal Advocates' Position**

Cal Advocates recommends reducing SCE's Test Year 2025 forecast of labor costs for Safety, Strategy Transformation from \$2.325 million to \$2.093 million. Cal Advocates contends that its recommendation is supported by: (1) existing staff's ability to meet operational and compliance requirements, (2) the absence of a new department warranting two new positions, and (3) SCE's failure to provide verifiable documentation justifying the creation of two new positions.<sup>84</sup> Cal Advocates does not oppose the Safety Strategy Transformation forecast of non-labor costs during 2025.

**b) SCE's Rebuttal to Cal Advocates' Position**

As detailed in direct testimony, SCE forecasts labor costs of \$2.325 million for Safety Strategy Transformation, an increase of \$0.855 million over 2022 recorded costs (\$1.470 million), during 2025. As detailed in direct testimony, the two new positions in the Safety Strategy

<sup>83</sup> TURN does dispute the minor corresponding increase in forecast 401(k) costs derivate of the STIP-to-base conversion.

<sup>84</sup> Ex. CA-21 p. 22.

1 Transformation activity are necessary to support the development of the Safety Management System  
2 (SMS).<sup>85</sup> At present, the existing positions are already assigned a wide range of duties and cannot be  
3 committed to performing the additional tasks needed for the SMS development. This includes the two  
4 vacant positions that are expected to be filled as those positions are committed toward managing a  
5 portfolio of targeted safety culture efforts driven by SCE, the Commission’s Safety Culture OIR and the  
6 Office of Energy Infrastructure Safety’s annual Wildfire Safety Culture Assessment.

7 The SMS conforms to the requirements of the ANSI Standard Z10.0 - 2019 which  
8 recognizes safety as a dynamic process to be managed instead of the historical view of safety being  
9 based solely on the absence of injury. The additional staff for the SMS will be responsible for leading  
10 and managing a systematic, cyclical approach to identify, assess, and mitigate risks most impactful to  
11 serious injuries and fatalities. The positions will work directly with frontline employees and subject  
12 matter experts to determine the greatest risks associated with performing their job and assess those risks  
13 for possible mitigations. The positions will track risks on risk registers, organize recommendations for  
14 executive and officer level decision-making, and coordinate project teams across the enterprise to  
15 implement mitigations. Additionally, the two SMS positions will develop metrics associated with the  
16 mitigations and track progress to determine mitigation effectiveness and risk reduction. These positions  
17 will play a critical role in standardizing a proactive approach that integrates key safety activities to  
18 reduce worker safety risks.

19 **c) TURN’s Position**

20 TURN’s testimony does not address SCE’s Test Year 2025 forecast for Safety  
21 Strategy Transformation.

22 **d) Conclusion**

23 As discussed above, the two additional positions for Safety Strategy  
24 Transformation are needed to fulfill essential roles for SCE’s Safety Management System and Cal  
25 Advocates’ proposed reduction to SCE’s Test Year 2025 forecast solely relates to those positions. As  
26 Cal Advocates did not otherwise oppose SCE’s Test Year 2025 forecast for Safety Strategy  
27 Transformation, the forecast of \$4.271 million is reasonable and should be adopted as requested.

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<sup>85</sup> SCE-06, Vol. 6, pp. 54-56, 62.

1           **4.     Safety Activities – Transmission & Distribution**

2           As detailed in direct testimony, SCE dedicates a wide range of safety activities specific to  
3 our population of T&D field workers to mitigate the risk of field injuries and other safety incidents.<sup>86</sup>  
4 Those activities include safety-focused events (including safety training related to new equipment and  
5 tool use) and leadership training, safety meetings, and stand-downs. T&D employees also engage in  
6 activities designed to support safety principles and reinforce safety as an essential goal at SCE. These  
7 activities also include safety congresses and teams, and safety forums. In addition, SCE developed the  
8 T&D Safety Work Plan focusing on three key priorities: (1) Driving leader safety ownership and  
9 accountability, (2) Reducing risk in activities most likely to cause serious injury or fatality, and (3)  
10 Reducing sprains and strains. The T&D Safety Work Plan encompasses eight workstreams that support  
11 the three key priorities described above.

***Table III-14***  
***Safety Activities – Transmission & Distribution***  
***2018-2022 Recorded/2025 Forecast***  
***Summary of SCE, Cal Advocates, and TURN Position***  
***(2022 Constant \$000)***

Line #	Safety Activities – Transmission & Distribution	SCE Recorded					2025 Forecast			Variance from SCE	
		2018	2019	2020	2021	2022	SCE Rebuttal Position	Cal Advocates	TURN	Cal Advocates	TURN
1	Labor	12,946	12,292	7,125	6,501	8,857	11,825	9,153	N/A	(2,671)	N/A
2	Non-Labor	8,450	5,470	2,479	1,664	1,694	5,644	3,266	N/A	(2,378)	N/A
3	<b>Total</b>	<b>21,396</b>	<b>17,763</b>	<b>9,604</b>	<b>8,164</b>	<b>10,551</b>	<b>17,469</b>	<b>12,419</b>		<b>(5,049)</b>	

12           SCE notes its forecast includes an adjustment related to the Employee Compensation  
13 Program proposal discussed in Exhibit SCE-06, Volume 4. No intervenor disputed the general structure  
14 of this proposal or the respective forecast adjustment included in this GRC Activity.<sup>87</sup> To the extent the  
15 Commission adopts a forecast based on a different forecast methodology than recommended by SCE  
16 (e.g., Last Year recorded, 3-Year average, etc.), this Employee Compensation Program adjustment  
17 should be added back to account for the incremental cost in the forecast period due to this undisputed  
18 proposal. See also SCE-17, Volume 3, Chapter III for additional discussion.

<sup>86</sup> SCE-06, Vol. 6, pp. 63-71.

<sup>87</sup> TURN does dispute the minor corresponding increase in forecast 401(k) costs derivate of the STIP-to-base conversion.

1                   a)       **Cal Advocates' Position**

2                   Cal Advocates recommends that a four-year average of recorded costs from 2019  
3 to 2022 be utilized as the basis for the Test Year 2025 forecast for T&D Safety Activities.<sup>88</sup> Cal  
4 Advocates objects to the exclusion of 2020 and 2021 and the inclusion of 2018 in the three-year average  
5 utilized to derive SCE's forecast for this GRC activity.<sup>89</sup> Cal Advocates contends that SCE's use of 2018  
6 and 2019 in its three-year average results "in an inflated TY 2025 forecast."<sup>90</sup> Beyond its use of a  
7 differing averaging methodology, Cal Advocates did not otherwise object to SCE's forecast for this  
8 GRC activity, including upward adjustments associated with additional workgroups being added to the  
9 scope of the T&D Safety Workplan.

10                   b)       **SCE's Rebuttal to Cal Advocates' Position**

11                   Cal Advocates' inclusion of 2020 and 2021 recorded labor and non-labor costs in  
12 its four-year average forecast should be rejected. As detailed in direct testimony<sup>91</sup> and as reflected in the  
13 abnormally low level of recorded costs during 2020 and 2021, the volume of expenses incurred for T&D  
14 Safety Activities during 2020 and 2021 were heavily impacted by the COVID-19 pandemic and  
15 associated state and local mandates. A significant portion of the costs recorded to this GRC activity  
16 involve the development of and attendance at Safety Meetings and Safety Congresses by SCE  
17 employees and contractor training services. During 2020 and 2021, SCE was largely unable to hold in-  
18 person events and, instead, transitioned to virtual events with resulting decreases in the duration of  
19 safety meetings and related travel times. Given the importance of the safety meetings and contractor  
20 training and greater effectiveness of in-person events, SCE transitioned back to more frequent in-person  
21 events as COVID-19 pandemic related restrictions eased with recorded costs increasing by \$2.386  
22 million between 2021 and 2022. This trend continued in 2023 as recorded costs increased by \$4.330  
23 million as compared to 2022.<sup>92</sup>

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<sup>88</sup> Ex. CA-21, p. 24.

<sup>89</sup> Ex. CA-21, p. 25-26.

<sup>90</sup> Ex. CA-21, p. 25-26

<sup>91</sup> Ex. SCE-06, Vol. 6, pp. 72-75.

<sup>92</sup> See Ex. SCE-11, 2023 Recorded Data , Safety Activities - Transmission & Distribution Total, p. A-9, lists this GRC Activity's Recorded 2023 (\$ Constant) as \$14.881 million. Table III-14 lists this GRC Activity's 2022 recorded as \$10.551 million (\$ Constant). Taking the difference between the figures yields \$4.330 million.

1 Cal Advocates' incorporation of 2020 and 2021 in its recommended forecast  
2 should be rejected. During this period, safety events were primarily confined to virtual settings and are  
3 not representative of the expenses associated with in-person safety events essential for enhancing the  
4 safety performance and culture of the organization. In-person safety events are more effective than  
5 virtual events for several reasons. For example, demonstrations of practices are more effectively  
6 performed with tools and equipment in person versus online. They also enable participants to learn and  
7 test new safety work methods and techniques in small groups exchanging ideas and feedback. In person  
8 events also enable managers and employees to more effectively communicate and collaborate on safety  
9 issues and action plans, and to address any concerns or questions. In-person events are also more  
10 conducive to enabling teams to bond and strengthening their safety culture through interactive  
11 experiences, including group simulations, activities, and challenges. These benefits are difficult to  
12 achieve through online or virtual events, which may have technical limitations, lower engagement, and  
13 less feedback. Finally, vendors attend in-person safety events showcasing their new, innovative, and  
14 safer equipment products and services in a live setting where SCE personnel can see and test them.

15 Moreover, Cal Advocates' claim that SCE's inclusion of 2018 and 2019 recorded  
16 costs in its three-year average results in an "inflated" forecast ignores the levels of recorded costs from  
17 the preceding years (2014-2017). As shown in Table III-15 below, SCE's Test Year 2025 forecast of  
18 \$17.469 million closely aligns with the levels of costs recorded from 2014-2019 and further reinforces  
19 how aberrant the level of spend for this GRC activity was during 2020 and 2021 due to the impact of the  
20 COVID-19 pandemic. In its testimony, Cal Advocates does not appear to dispute the abnormally low  
21 levels of spend during 2020 or 2021 were attributable to the COVID-19 pandemic and related  
22 restrictions and does not clearly explain why those years should be included in its five-year average.  
23 Based upon the foregoing, SCE's forecast utilizing the base year (2022) and the two years preceding the  
24 COVID-19 pandemic more reasonably estimates the level of costs during Test Year 2025 and should be  
25 adopted as requested.

**Table III-15**  
**Safety Activities – Transmission & Distribution**  
**2014-2018 Recorded/Multi-Year Averages**  
*(2022 Constant \$000)*

Line #	T&D Safety Activities (2022 Constant \$000)					Five-Year Average	Four-Year Average	Three-Year Average	
	Description	2014	2015	2016	2017	2018	(2014-2018)	(2015-2018)	(2016-2018)
1	Labor	12,972	11,717	13,399	13,231	12,946	12,853	12,823	13,192
2	Non-Labor	3,293	3,220	5,100	6,124	8,450	5,237	5,723	6,558
3	<b>Total</b>	<b>16,265</b>	<b>14,936</b>	<b>18,498</b>	<b>19,355</b>	<b>21,396</b>	<b>18,090</b>	<b>18,546</b>	<b>19,750</b>

**c) Conclusion**

Cal Advocates’ recommendation of a four-year average of 2019-2022 recorded costs, including the COVID-19 pandemic years (2020 and 2021), for the T&D Safety Activities’ forecast should be rejected. SCE’s forecast for this GRC activity is based upon a three-year average of 2018, 2019 and 2022 recorded costs and closely aligns with recorded costs seen for this activity in every year from 2014-2017. It also properly excludes the abnormally low level of 2020 and 2021 recorded costs. Unlike the years impacted by COVID-19 related restrictions, T&D Safety Activities will continue to primarily focus on in-person safety events that offer significant advantages over virtual events and contribute to a more effective and cohesive work safety environment for our personnel, including higher engagement and productivity, fewer distractions, stronger team building, better collaboration, and enhanced employee experiences. SCE’s forecast of \$17.469 million should be adopted as requested.

**5. Public Safety**

SCE’s Public Safety program is currently overseen by the Enterprise Risk Management (ERM) organization and supports the company’s efforts to reduce the risk of a serious injury and/or fatality to members of the public in relation to the company’s electric facilities, operations and/or services. Since the filing of the application, SCE identified additional operational efficiencies impacting the Public Safety GRC activity. As a result and as shown in Table III-16 below SCE’s Test Year 2025 forecast for the Public Safety GRC activity has been updated to \$0.649 million, reflecting a decrease of the labor costs portion of the forecast from \$0.606 million to \$0.451 million. No party submitted testimony opposing SCE’s forecast for this GRC activity. Based on the absence of opposition to SCE’s

2025 forecast, SCE requests that the Commission approve its rebuttal forecast of \$0.649 million for this GRC activity.

**Table III-16**  
**Public Safety**  
**2018-2022 Recorded/2025 Forecast**  
**Summary of SCE, Cal Advocates, and TURN Position**  
**(2022 Constant \$000)**

Line #	Public Safety	SCE Recorded					2025 Forecast			Variance from SCE	
		2018	2019	2020	2021	2022	SCE Rebuttal Position	Cal Advocates	TURN	Cal Advocates	TURN
1	Labor	274	307	619	445	292	451	606	N/A	155	N/A
2	Non-Labor	54	1,038	84	45	128	198	198	N/A	-	N/A
3	<b>Total</b>	328	1,344	703	490	420	649	804		155	

SCE notes its forecast includes an adjustment related to the Employee Compensation Program proposal discussed in Exhibit SCE-06, Volume 4. No intervenor disputed the general structure of this proposal or the respective forecast adjustment included in this GRC Activity.<sup>93</sup> To the extent the Commission adopts a forecast based on a different forecast methodology than recommended by SCE (e.g., Last Year recorded, 3-Year average, etc.), this Employee Compensation Program adjustment should be added back to account for the incremental cost in the forecast period due to this undisputed proposal. See also SCE-17, Volume 3, Chapter III for additional discussion regarding the Employee Compensation Program proposal.

**B. Capital Expenditures**

**1. SCE Application**

SCE forecast \$2.799 million of capital expenditures in 2025 for SCE’s Automated External Defibrillator (AED) Program that provides AEDs for early defibrillation to victims of sudden cardiac arrest at SCE facilities and field crew job locations. Other than Cal Advocates, no other party opposed SCE’s forecast for the AED Program.

<sup>93</sup> TURN does dispute the minor corresponding increase in forecast 401(k) costs derivate of the STIP-to-base conversion.

**Table III-17**  
**Safety Programs**  
**2023 Recorded and 2024-2025 Forecast Table**  
*(Nominal \$000)*

Line #	Business Planning Element	SCE Recorded					SCE Rebuttal Position			
		2018	2019	2020	2021	2022	2023 Recorded	2024 Forecast	2025 Forecast	Total 2023-2025
1	Safety Programs	-	-	1,804	35	148	-	-	700	700
2	<b>Total</b>	-	-	1,804	35	148	-	-	700	700

1      **2.      Safety Strategy Transformation**

**Table III-18**  
**Safety Strategy & Transformation**  
**Detailed Capital 2023 Historical and 2024-2025 Forecast Table**  
**Summary of SCE, Cal Advocates and TURN Positions**  
*(Nominal \$000)*

Line No.	Safety Programs	SCE Rebuttal Position				Cal Advocates				Variance From SCE 2023-2025
		2023 Recorded	2024 Forecast	2025 Forecast	Total 2023-2025	2023 Forecast*	2024	2025	Total 2023-2025	
1	Safety Strategy Transformation	\$ -	\$ -	\$ 700	\$ 700	\$ -	\$ -	\$ 700	\$ 700	\$ -
2		-	-	700	700	-	-	700	700	-

2                      **a)      Cal Advocates' Position**

3                      While Cal Advocates did not contest SCE plan to acquire AEDs under the AED  
4 Program, Cal Advocate did object to SCE's recovery of AED Program costs during a single year (2025)  
5 as "burdensome for the rate payers.<sup>94</sup>" Consequently, Cal Advocates recommends that SCE recover  
6 those costs over a multi-year period and that SCE's forecast for this program during 2025 be reduced to  
7 \$0.700 million.<sup>95</sup>

8                      **b)      SCE's Rebuttal to Cal Advocates' Position**

9                      Although SCE disagrees with several points raised by Cal Advocates, SCE agrees  
10 to reduce its 2025 forecast for the AED Program capital expenditures to \$0.700 million during 2025 and  
11 to normalize the forecast over the remaining years of the GRC cycle.

<sup>94</sup> Ex. CA-21, p. 45.

<sup>95</sup> Ex. CA-21, p. 45.

1                   c)     **Conclusion**

2                             Based upon SCE acceptance of Cal Advocates' recommendation to normalize this  
3 expenditure over four years (2025-2028), SCE requests that the Commission approve its 2025 forecast  
4 of \$0.700 million for the AED Program.

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**IV.**

**AUDIT, ETHICS & COMPLIANCE**

**A. O&M Expenses**

**1. SCE Application**

This chapter covers the Audits Services (Audits) and Ethics & Compliance (E&C) Business Planning Element (BPE), which was covered in SCE’s direct testimony Exhibit SCE-06, Vol. 6, Chapter IV. Ethics & Compliance (E&C) provides the framework and fosters a culture where acting ethically, obeying the law, and protecting the rights and interests of customers, co-workers and the public is the expected and everyday course of business, consistent with our corporate values (Safety, Integrity, Excellence, Respect, Continuous Improvement and Teamwork). Audits work activities provide reasonable assurance that business risks are appropriately identified, compliance with regulatory requirements occurs, management’s response to such risks and requirements is effective, and that senior management and the board of directors receive consistent information and proactive advice regarding risk mitigation.

As seen from the table below, Cal Advocates opposed SCE’s 2025 test year forecast for both Audits and E&C. TURN did not contest either.

***Table IV-19  
Audit, Ethics & Compliance  
GRC Activities 2025 O&M Forecast  
Summary of SCE, Cal Advocates, and TURN Positions  
(2022 Constant \$000)***

Line No.	Audit, Ethics & Compliance	2025 Forecast			Variance from SCE	
		SCE Rebuttal Position	Cal Advocates	TURN	Cal Advocates	TURN
1	Ethics and Compliance	15,935	14,020	N/A	(1,915)	N/A
2	Audits	8,208	7,607	N/A	(601)	N/A
3	<b>Total</b>	24,143	21,627		(2,515)	

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**2. Ethics and Compliance**

E&C is responsible for establishing and sustaining a rigorous forward-looking ethics and compliance program across SCE, using a Company-wide, integrated compliance management

1 framework based on the U.S. Federal Sentencing Guidelines for Organizations, Sarbanes Oxley Act of  
 2 2002, and FERC Standards of Conduct for Transmission Providers.<sup>96</sup> As stated by the Commission in  
 3 SCE’s 2015 general rate case decision, “[r]atepayers benefit from a strong culture of ethics and  
 4 compliance, and SCE has demonstrated success in making improvements in the department.”<sup>97</sup> To  
 5 maintain a strong culture of ethics and compliance, SCE seeks \$15.935 million for 2025 labor and non-  
 6 labor test year expenses.

7 As seen in the table below, Cal Advocates takes issue with SCE’s 2025 labor forecast,  
 8 while TURN did not contest SCE’s forecast for E&C’s GRC activity.

**Table IV-20**  
**Ethics and Compliance**  
**2018-2022 Recorded/2025 Forecast**  
**Summary of SCE, Cal Advocates, and TURN Position**  
**(2022 Constant \$000)**

Line #	Ethics and Compliance	SCE Recorded					2025 Forecast			Variance from SCE	
		2018	2019	2020	2021	2022	SCE Rebuttal Position	Cal Advocates	TURN	Cal Advocates	TURN
1	Labor	8,680	8,566	9,470	9,421	8,926	10,927	9,013	N/A	(1,915)	N/A
2	Non-Labor	5,471	6,032	5,432	4,189	4,584	5,007	5,007	N/A	-	N/A
3	<b>Total</b>	14,152	14,598	14,902	13,609	13,510	15,935	14,020		(1,915)	

9 SCE notes its labor forecast includes an adjustment related to the Employee  
 10 Compensation Program proposal discussed in Exhibit SCE-06, Volume 4. No intervenor disputed the  
 11 general structure of this proposal or the respective labor forecast adjustment included in this GRC  
 12 Activity.<sup>98</sup> To the extent the Commission adopts a labor forecast based on a different labor forecast  
 13 methodology (e.g., five-year average) than recommended by SCE, this Employee Compensation  
 14 Program adjustment should be added back to account for the incremental cost in the forecast period due  
 15 to this undisputed proposal. See also SCE-17, Volume 3, Chapter III for additional discussion.

16 **a) Cal Advocates’ Position**

17 **1. Labor**

<sup>96</sup> Ex. SCE-06, Vol. 6A, Chapter IV, p. 83.

<sup>97</sup> D. 15-11-021, p. 279.

<sup>98</sup> TURN does dispute the minor corresponding increase in forecast 401(k) costs derivative of the STIP-to-base conversion.

1 Cal Advocates proposes that SCE use a five-year average to forecast 2025  
2 labor expenses for E&C, as opposed to SCE's use of last-year recorded plus adjustments.<sup>99</sup> Cal  
3 Advocates states that SCE has been unresponsive to Cal Advocates' data requests seeking FTE  
4 headcount data.<sup>100</sup> Cal Advocates also notes that SCE has not experienced any compliance issues  
5 associated with vacancies and that SCE is not creating a new department requiring the new positions.<sup>101</sup>

## 6 2. Non-labor

7 Cal Advocates' Table 21-14 in Exhibit CA-21 indicates that SCE has a 2025  
8 nonlabor forecast of \$5.659 million and that Cal Advocates has a lower 2025 nonlabor forecast of  
9 \$5.007 million.<sup>102</sup> However, as clarified by Cal Advocates, SCE's current non-labor forecast is \$5.007  
10 million, which is not contested by Cal Advocates.<sup>103</sup>

### 11 b) SCE's Rebuttal to Cal Advocates' Position

12 In determining E&C's 2025 test year labor expenses, the issue before the  
13 Commission is whether the Commission should adopt (1) SCE's proposed forecasting methodology of  
14 using the last-year recorded (plus adjustments), or (2) Cal Advocates' proposed methodology to use a  
15 five-year average of recorded costs. For the reasons set forth below, the last-year recorded plus  
16 adjustment is the correct methodology for E&C, while an average is not only contrary to the  
17 Commission's most recent precedent and the Commission's forecasting guidelines, but also would result  
18 in a forecast that does not address E&C's vacancies and staffing needs or take into account the 2025  
19 change in SCE's employee compensation program.

20 In SCE's most recent GRC decision, the Commission adopted E&C's test year  
21 labor expenses based on SCE's forecasting methodology of last year recorded (plus adjustments)<sup>104</sup> and  
22 not an averaging methodology. Similarly, the Commission should do so here and reject Cal Advocates'  
23 proposed averaging methodology for a number of reasons. First, the reasons supporting the use of an

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<sup>99</sup> Ex. CA-21, p. 35.

<sup>100</sup> Ex. CA-21, p. 33.

<sup>101</sup> Ex. CA-21, p. 34.

<sup>102</sup> Ex. CA-21, p. 32.

<sup>103</sup> Ex. CA-21, p. 35.

<sup>104</sup> See D.21-08-036, p. 442, Sec. 34.

1 averaging methodology do not exist here. According to the Commission’s guidelines, the use of an  
2 average is appropriate when there are significant fluctuations in recorded expenses from year-to-year, or  
3 where the recorded cost is influenced by weather or other forces beyond the utility’s control,<sup>105</sup> none of  
4 which are present in E&C’s situation or its recorded labor expenses. Contrary to the use of the averaging  
5 methodology, E&C’s labor expenses are predictable and the type of expenses that can be forecasted  
6 based on recorded costs, trends, and anticipated adjustments. Consistent with the Commission’s  
7 guidelines that the last-year recorded is appropriate to use when recorded costs have been relatively  
8 stable for three or more years,<sup>106</sup> SCE has used its 2022 recorded labor expense to forecast 2025  
9 expenses and adjusted it taking into account the need to fill vacancies, increased staffing needs to meet  
10 the workload associated with new and changing compliance requirements, and the adjustment to SCE’s  
11 Employee Compensation Program.<sup>107</sup>

12                   Second, use of a five-year average would result in a forecast that is not  
13 representative of test-year expenses because none of the recorded years include the change in 2025 to  
14 SCE’s employee compensation program,<sup>108</sup> which was not addressed by Cal Advocates. As such, using  
15 a five-year average (2018-2022) methodology understates labor expenses in the test year, which are  
16 expected to be higher due to the movement of STIP target to base pay, which will result in an increase in  
17 employees’ base pay (and a corresponding reduction in incentive pay).

18                   Further, use of an average does not take into account E&C’s increased staffing to  
19 address the incremental increase in workload associated with areas of demand growth including  
20 Wildfire, Distribution Infrastructure Replacement, Load Growth, Transmission Projects, and  
21 Engineering,<sup>109</sup> as well as vacancies in E&C.<sup>110</sup> Cal Advocates does not address the merit of the

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<sup>105</sup> See D.04-07-022, pp. 15-17, Sec. 2.4.1.

<sup>106</sup> D.04-07-022, pp. 15-17, Sec. 2.4.1.

<sup>107</sup> Ex. SCE-06, Vol. 06A, pp. 90-91 and Errata SCE-06, Vol. 06AE3. (Note: SCE’s Errata SCE-06, Vol.06AE3 was inadvertently mislabeled as Errata SCE-06, Vol. 06E3.)

<sup>108</sup> Ex. SCE-06, Vol. 06A, p. 91 (referring to SCE’s Ex. SCE-06, Vol. 4).

<sup>109</sup> Exhibit SCE-06, Vol. 06A, p. 90.

<sup>110</sup> Ex. SCE-06, Vol. 06A, pp. 90-91 and Errata SCE-06, Vol. 06AE3. (Note: SCE’s Errata SCE-06, Vol.06AE3 was inadvertently mislabeled as Errata SCE-06, Vol. 06E3.)

1 additional positions needed by SCE in 2025, which is described in SCE’s Exhibit SCE-06, Vol. 06A, pp.  
2 90-91 and Errata SCE-06, Vol. 06AE3.<sup>111</sup>

3 In addition, Cal Advocates claim that SCE’s data request response indicates that  
4 SCE is not creating a new department that requires new positions.<sup>112</sup> This is a red herring. Whether the  
5 new positions are put under a new department or an existing department is immaterial.

6 Also, Cal Advocates’ observation that SCE has not experienced a compliance  
7 issue due to vacant positions<sup>113</sup> is a red herring. It is crucial to recognize that ethics and compliance is  
8 not discretionary. Further, the costs associated with non-compliance, such as substantial fines and  
9 penalties far outweigh the expenses of maintaining an appropriately sized ethics and compliance  
10 department. Failure to adhere to all relevant laws and regulations may subject SCE to compliance  
11 violations, resulting in substantial fines and penalties. Given that ethics and compliance is mandatory,  
12 when E&C has vacancies, we overutilize existing staff, which is unsustainable.<sup>114</sup>

13 Finally, Cal Advocates’ claim that SCE did not provide to Cal Advocates the data  
14 exactly as requested<sup>115</sup> does not provide sufficient justification for changing the methodology for  
15 determining the 2025 labor costs.

16 **c) Conclusion**

17 Cal Advocates’ proposed use of a five-year average to forecast 2025 labor costs  
18 for E&C is inappropriate under the Commission’s forecasting guidelines and inappropriate for E&C  
19 because it results in a forecast that not only ignores the change in 2025 to SCE’s employee  
20 compensation, but also the increased staffing needed by SCE to perform work related to areas of  
21 demand growth. In contrast, SCE’s use of the last year recorded (plus adjustments) is consistent with  
22 Commission precedent for E&C in our prior rate cases and the Commission’s forecasting guidelines. As  
23 supported by SCE’s testimony, SCE’s requested increase in 2025 is needed to fill existing vacancies,

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<sup>111</sup> Ex. SCE-06, Vol. 06A, pp. 90-91 and Errata SCE-06, Vol. 06AE3. (Note: SCE’s Errata SCE-06, Vol.06AE3 was inadvertently mislabeled as Errata SCE-06, Vol. 06E3.)

<sup>112</sup> Ex. CA-21, p. 33.

<sup>113</sup> Ex. CA-21, p. 34.

<sup>114</sup> See Appendix A - SCE’s response to PubAdv-SCE-238-FNZ, Q.02.h.

<sup>115</sup> Ex. CA-21, pp. 33-34.

1 address the large amount of incremental work, and to account for the change in SCE’s employee  
 2 compensation program scheduled for 2025.

3 **3. Audits**

4 Audits work activities provide reasonable assurance that business risks are appropriately  
 5 identified, compliance with regulatory requirements occurs, management’s response to such risks and  
 6 requirements is effective, and that senior management and the board of directors receive consistent  
 7 information and proactive advice regarding risk mitigation.

**Table IV-21**  
**Audits**  
**2018-2022 Recorded/2025 Forecast**  
**Summary of SCE, Cal Advocates, and TURN Position**  
*(2022 Constant \$000)<sup>116</sup>*

Line #	Audits	SCE Recorded					2025 Forecast			Variance from SCE	
		2018	2019	2020	2021	2022	SCE Rebuttal Position	Cal Advocates	TURN	Cal Advocates	TURN
1	Labor	4,745	4,238	4,961	4,699	4,512	5,357	4,756	N/A	(601)	N/A
2	Non-Labor	3,689	3,824	3,485	3,625	2,284	2,851	2,851	N/A	-	N/A
3	<b>Total</b>	8,434	8,063	8,446	8,324	6,796	8,208	7,607		(601)	

8 SCE notes its forecast includes an adjustment related to the Employee Compensation  
 9 Program proposal discussed in Exhibit SCE-06, Volume 4. No intervenor disputed the general structure  
 10 of this proposal or the respective forecast adjustment included in this GRC Activity.<sup>117</sup> To the extent the  
 11 Commission adopts a forecast based on a different forecast methodology than recommended by SCE  
 12 (e.g., Last Year recorded, 3-Year average, etc.), this Employee Compensation Program adjustment

<sup>116</sup> Regarding Cal Advocates’ proposed 2025 labor forecast for Audits, there is a relatively minor discrepancy (approximately \$13,000) with the forecasted amount Cal Advocates provided in Table 21-13 of Exhibit CA-21, which is \$4.743 million, as opposed to the figure of \$4.756 million provided by SCE in the table in the text accompanying this footnote. As discussed further in this rebuttal testimony, given that (1) there is no dispute between Cal Advocates and SCE over SCE’s 2025 nonlabor forecast, and (2) SCE agrees to the reduction of three additional auditors proposed by SCE and thus a reduced labor forecast of \$5.357 million for Audits, the outstanding dispute with Cal Advocates is its proposed disallowance of \$0.601 million related to privileged audits (as indicated as the “Variance from SCE” in this table). With these changes, SCE has indicated that Cal Advocates’ proposed 2025 forecast for labor is \$4.756 million, as indicated in the above table in the text accompanying this footnote.

<sup>117</sup> TURN does dispute the minor corresponding increase in forecast 401(k) costs derivate of the STIP-to-base conversion.

1 should be added back to account for the incremental cost in the forecast period due to this undisputed  
2 proposal. See also SCE-17, Volume 3, Chapter III for additional discussion.

3 **a) Cal Advocates' Position**

4 As seen in the above table, Cal Advocates does not oppose SCE's 2025 nonlabor  
5 forecast of \$2.851 million for Audits.

6 Regarding SCE's 2025 labor forecast for Audits, in its Direct Testimony, SCE  
7 initially requested funding for seven employees: two associated with vacancies and five associated with  
8 new positions (i.e., two additional IT cyber auditors and three additional auditors) due to increased  
9 workload.<sup>118</sup> Cal Advocates does not oppose SCE's request for four positions (i.e., two associated with  
10 backfilling vacant positions and two of the five new positions requested). However, Cal Advocates  
11 opposed three of the new positions because SCE was "not able to substantiate the need for hiring FTEs  
12 for new positions in 2025"<sup>119</sup> and thus recommends an adjustment of \$0.424<sup>120</sup> million to Audits-related  
13 labor costs. Although SCE believes it substantiated the need for hiring all five new positions,<sup>121</sup> Audits  
14 has examined our growth needs in light of efficiency gains designed to allow us to absorb the additional  
15 work with less growth. As described in Exhibit SCE-06, Volume 3, SCE committed to updating its  
16 financial forecast for incremental savings associated with SCE's Operational Excellence (OE) efforts  
17 that were not yet sufficiently operationalized or matured at the time SCE submitted opening  
18 testimony.<sup>122</sup> This includes increased focus on data analytics, strategic application and deployment of  
19 generative AI models and chatbots, and sophisticated modeling tools that allow for better prioritization  
20 of activities and enhanced efficiency and effectiveness of Audits' existing resources. Consistent with  
21 that commitment, Audits is no longer requesting hiring three of the additional auditors, and our new

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<sup>118</sup> Ex. SCE-06, Vol. 6A, pp. 96-97. The increased workload is for activities related to SEC Environmental, Social and Corporate Governance disclosures, climate adaptation, grid of the future including building and transportation electrification, SCE Commission-approved Wildfire Mitigation Plan processes, increased infrastructure replacement, and Advanced Metering 2.0. Id.

<sup>119</sup> Ex. CA-21, p. 31.

<sup>120</sup> Ex. CA-29, p. 31 Cal Advocates does not oppose \$0.832 million of SCE's original request of \$1.256 million for a difference of \$0.424 million.

<sup>121</sup> Audits asked for additional auditor headcount justified by the increasing workload coming from growth throughout the business areas like load growth from electrification, smart grid investments, increased infrastructure replacement activities, adaptation to climate change, and continuing wildfire mitigation. Audit activities generally scale with the volume of work. See Ex. SCE-06, Vol. 6A, pp. 92-97.

<sup>122</sup> See Exhibit SCE-06, Vol. 03, pp. 86-97.

1 labor request is \$5.357 million.<sup>123</sup> SCE has reviewed Cal Advocates’ recommendation to not fund three  
2 additional employees,<sup>124</sup> which is consistent with the reduction Audits has made. Therefore, SCE does  
3 not contest Cal Advocates’ recommendation opposing three of the five new positions, and there is no  
4 dispute between SCE and Cal Advocates over the forecasted staffing costs for Audits.

5 As seen in the table above, for SCE Audits’ labor expenses, Cal Advocates  
6 recommends removing \$601,000 in 2022 recorded costs, which is the estimated cost for conducting  
7 attorney-client privileged audits that year. Cal Advocates proposes similar adjustments for the 2018-  
8 2021 recorded years as well.<sup>125</sup> Cal Advocates states that these costs should be removed because Cal  
9 Advocates “could not verify that the costs to perform these audits were justifiably assigned to ratepayers  
10 and that any significant control weaknesses have been remedied.”<sup>126</sup> Because SCE’s 2025 labor forecast  
11 is based on the last year recorded (2022) with adjustments, Cal Advocates’ 2025 labor forecast for  
12 Audits is \$601,000 lower million than SCE’s proposal. SCE provides the following rebuttal to Cal  
13 Advocates on this issue.

14 **b) SCE’s Rebuttal to Cal Advocates’ Position**

15 SCE opposes Cal Advocates’ adjustment of \$601,000 in 2022 recorded costs (as  
16 well as Cal Advocates’ proposed adjustment for costs in 2018-2021)<sup>127</sup> because the Commission and  
17 courts have long upheld the attorney-client privilege, and the Commission has authorized funding to  
18 utilities notwithstanding privileged audits.

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<sup>123</sup> As seen in Figure IV-23 of Exhibit SCE-06, Vol. 6A, p. 92, SCE’s 2025 labor forecast for Audits was \$5.768 million. As seen in the above table in the associated text of this rebuttal testimony, SCE’s 2025 labor forecast is now \$5.357 million, which is a \$.845 million decrease from the 2025 labor forecast in Figure IV-23.

<sup>124</sup> Ex. CA-21, p. 31.

<sup>125</sup> Cal Advocates also recommends removal of \$731,000 from 2018 recorded costs, \$2.257 million from 2019 recorded costs, \$587,000 from 2020 recorded costs, and \$219,000 from 2021 recorded costs. See Table 21-13 in Ex. CA-21, p. 29.

<sup>126</sup> Ex. CA-29, p. 7.

<sup>127</sup> Cal Advocates also recommends removal of \$731,000 from 2018 recorded costs, \$2.257 million from 2019 recorded costs, \$587,000 from 2020 recorded costs, and \$219,000 from 2021 recorded costs. See Table 21-13 in Ex. CA-21, p. 29.

1                                   **(1)     Recent Commission GRC Decisions Reject Cal Advocates’ Position,**  
2                                   **and Cal Advocates Does Not Address These Precedents**

3                                   Cal Advocates does not challenge the legitimacy of SCE’s assertion of the  
4 privilege. That is, Cal Advocates does not suggest that the audit reports at issue should not have had the  
5 privilege attach to them.<sup>128</sup> Instead, Cal Advocates asserts that because they could not actually review  
6 the audit reports in question, they cannot determine if the audits provided reasonable value to customers.  
7 On that basis, Cal Advocates recommends the associated cost of performing the privileged audits should  
8 be removed from recorded costs and the 2025 forecast.

9                                   These costs should not be removed. The privileged audit reports represent  
10 less than 13 percent of the audit reports for 2022. In other words, SCE produced more than 87 percent of  
11 the audit reports for that year. Similarly, the privileged reports represented less than 9 percent of the  
12 audit reports for 2021, less than 14 percent of the audit reports for 2020, 25 percent of the audit reports  
13 for 2019, and less than 13 percent of the audit reports for 2018.<sup>129</sup> Cal Advocates received the  
14 overwhelming majority of the audit reports, which constituted more than sufficient material to verify  
15 whether the activities and efforts of the Audits team in connection with audits were generally reasonable  
16 and useful on behalf of customers.

17                                   Perhaps more importantly, if the Commission reduces the forecast based  
18 on removal of these historical audit costs simply because privilege was asserted, it is essentially denying  
19 SCE the full rights of privilege. SCE is then left with a Hobson’s choice – it either must waive or never  
20 assert privilege (even though the actual claim of privilege is lawful) or it must reasonably assert the  
21 privilege and thereby force shareholders to pay for the work regardless of benefits to customers. In  
22 essence, the choice as Cal Advocates presents it would punish SCE for legitimately and reasonably  
23 asserting the privilege.<sup>130</sup>

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<sup>128</sup> Ex. CA-29, p. 7 (“Cal Advocates does not challenge SCE’s assertion of attorney-client privilege . . .”).

<sup>129</sup> See Appendix B - Workpaper titled “Percentage of Privileged Audits 2018-2022”.

<sup>130</sup> It is worth noting that even though the substantial majority of the SCE attorneys’ work is privileged, Cal Advocates and other parties are able to examine the recorded costs and forecasts for SCE’s Law Department and make recommendations.

1                                   The California Supreme Court’s opinion in *Southern Cal. Gas Co. v.*  
2 *Public Utilities Commission* is instructive here. In the case, Cal Advocates<sup>131</sup> sought production of  
3 several memoranda that the utility had asserted were privileged; the dispute occurred in connection with  
4 the utility’s request for a Commission determination that certain costs were just and reasonable. The  
5 Commission “ordered [the utility] to submit the memos in question to an administrative judge other than  
6 the one presiding in the matter for an in camera review or to withdraw its application to recover the cost  
7 of its expenditures.”<sup>132</sup>

8                                   The California Supreme Court vacated the Commission’s order. The State  
9 Supreme Court noted that:

10                                   [i]f a lawyer could not promise to maintain the confidentiality of his client’s secrets, the  
11 only advice he or she could provide would be, “Don’t talk to me.” Application of the  
12 privilege will occasionally shield relevant information which may very well create  
13 obstacles for the party seeking the privileged information; however, the Legislature and the  
14 courts of this state have determined that the party’s concern is “outweighed by the  
15 importance of preserving confidentiality in the attorney-client relationship.”<sup>133</sup>

16 The Court went on to state: “While it is true that the commission, in fundamental fairness to SoCalGas’s  
17 ratepayers, must make a careful effort to ascertain whether SoCalGas’s expenses are reasonable, this  
18 effort does not have to come at the unnecessary expense of trampling on SoCalGas’s attorney-client  
19 privilege.”<sup>134</sup>

20                                   In the current GRC, Cal Advocates asserts that its recommendation is  
21 consistent with Commission precedent, and cites to D.09-03-025, which is SCE’s Test Year 2009 GRC  
22 decision.<sup>135</sup> However, Cal Advocates makes no mention of two much more recent Commission GRC  
23 decisions that reversed the Commission’s position from 2009 *and specifically found against Cal*  
24 *Advocates on this issue.*

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<sup>131</sup> Cal Advocates was known as the Division of Ratepayer Advocates at the time.

<sup>132</sup> *Southern Cal. Gas Co. v. Public Utilities Com’n* (1990) 50 Cal. 3d 31, 36.

<sup>133</sup> *Id.* at 37 (internal citations omitted).

<sup>134</sup> *Id.* at 44. The Court found that “there is no evidence to indicate that the information SoCalGas claims is privileged is vital to a fair adjudication in this proceeding.” *Id.* at 43.

<sup>135</sup> *See* Ex. CA-29, pp. 7-8.

1 The first Commission GRC decision that contravenes Cal Advocates’  
2 position from SCE’s last GRC. In that GRC, Cal Advocates similarly sought removal of historical  
3 expenses for privileged internal audits that SCE’s Audits organization had carried out. Cal Advocates  
4 similarly relied on the Commission’s decision in SCE’s 2009 GRC.<sup>136</sup> Cal Advocates similarly failed to  
5 address or even mention other, more recent precedent. Specifically, Cal Advocates did not mention that  
6 the Commission had specifically found against Cal Advocates on this very issue in the Sempra Utilities’  
7 Test Year 2019 GRC decision. (That precedent is discussed in detail below).

8 In SCE’s last GRC, SCE cited to and relied upon the more recent authority  
9 from the 2019 Sempra GRC.<sup>137</sup> The Commission found in favor of SCE, as set forth in the SCE Test  
10 Year 2021 GRC Phase I decision.<sup>138</sup> The Commission stated that “[b]ased on our review of the privilege  
11 log, we find that the expenses for conducting the audits appear to be reasonable business expenses.”<sup>139</sup>

12 Thus, in again seeking reductions based on SCE’s assertion of privilege  
13 for certain specific audits in the current GRC, Cal Advocates never addresses the express and contrary  
14 precedent on this issue from SCE’s last GRC. Cal Advocates’ recommendation fails on this ground  
15 alone.

16 As mentioned above, the second recent Commission GRC decision that  
17 contravenes Cal Advocates’ position is from the Sempra Utilities’ 2019 GRC. In that proceeding, Cal  
18 Advocates sought a reduction to historical costs in connection with 20 internal audit reports for which  
19 Sempra had asserted the privilege.<sup>140</sup> The Commission found as follows:

20 “ORA’s recommended exclusion pertains to costs for 20 audits to which  
21 ORA was not granted access. Applicants however, explained that access to these audits was withheld  
22 from ORA because the documents are confidential in nature *pursuant to the attorney-client privilege*.  
23 *We found Applicants’ explanation to be reasonable and agree that these audits were legitimate expenses*

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<sup>136</sup> See SCE 2021 GRC, A.19-08-013, Ex. PAO-18, pp. 6-7.

<sup>137</sup> See, e.g., SCE 2021 GRC, A.19-08-013, Ex. SCE-21, p. 4.

<sup>138</sup> See D.21-08-036, pp. 439-442.

<sup>139</sup> D.21-08-036, p. 441.

<sup>140</sup> D.19-09-051, pp. 717-718.

1 *for necessary audits and should not be excluded. We reiterate this finding here that these costs should*  
2 *not be excluded.”<sup>141</sup>*

3                   Accordingly, the Commission’s most recent pronouncements on this  
4 precise issue in GRCs are exactly in line with SCE’s position and exactly the opposite of Cal Advocates’  
5 position. Audits are an established and necessary business practice for any large and complex business  
6 enterprise, not just utilities. An audits organization or department is a commonplace part of large  
7 companies. Moreover, the Commission has specifically confirmed that the cost of an audit should not be  
8 excluded from the utility’s historical record simply because the utility has continued to protect the  
9 privileged nature of the audit.

10                   To summarize, no party has challenged the legitimacy of SCE asserting  
11 the privilege with respect to the audit reports at issue. SCE should not be punished for its lawful and  
12 reasonable protection of privileged material. Here, just as in the last SCE GRC, SCE has provided Cal  
13 Advocates with unfettered access to the substantial majority of audit materials. Thus, in the California  
14 Supreme Court’s words, “there is no evidence to indicate that the information [the utility] claims is  
15 privileged is vital to a fair adjudication in this proceeding.” Recent Commission precedent expressly  
16 supports SCE’s position, and rejects Cal Advocates’ position. Cal Advocates’ recommended removal of  
17 expenses for privileged audits should not find favor with the Commission.

18                   **(2) SCE’s Forecast for Audits Is Based on an Annual Audit Plan**

19                   While Cal Advocates’ recommendation must fail for the substantive  
20 reasons set forth above, as a separate ground Cal Advocates’ position does not serve as a valid basis to  
21 reduce SCE’s forecast, because the 2025 GRC forecast is not directly derived from the referenced  
22 historical costs.

23                   Cal Advocates asserts that “*for the purposes of test year GRC forecasting,*  
24 *Cal Advocates recommends removing the estimated 2018 to 2022 recorded costs to perform the internal*  
25 *audits asserted as attorney-client privilege from SCE’s Audit recorded historical costs.”<sup>142</sup>*

26                   However, SCE’s 2025 GRC forecast is not rigidly tethered to historical  
27 costs but instead is also based on the estimated hours needed to complete SCE’s going-forward Annual

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<sup>141</sup> *Id.* at p. 718 (emphasis added). The Commission refers to Cal Advocates by its prior nomenclature of ORA.

<sup>142</sup> Ex. CA-29, p. 7 (emphasis added).

1 Audit Plans. The Annual Audit Plan is developed as a result of Audits' annual risk assessment. That risk  
2 assessment is informed by, among other things, Enterprise Risk Management's key enterprise risks,  
3 information provided by Ethics & Compliance, interviews with business leaders throughout SCE, risk  
4 data collected from wildfire and cybersecurity risk assessments, Sarbanes-Oxley testing, and previous  
5 audit testing. The Audits organization also examines mandated compliance activities related to rulings,  
6 decisions, and orders issued by various regulatory and governing bodies, including but not limited to the  
7 CPUC, FERC, the North American Electric Reliability Corporation (NERC), and the U.S. Securities and  
8 Exchange Commission (SEC). Audit projects are then designed to provide reasonable assurance that  
9 risks are appropriately identified and addressed, and compliance with regulatory requirements occurs.

10 In developing the Annual Audit Plan, which SCE's forecast is based on,  
11 the Audits organization does not draw any distinctions based on privilege. The Audits organization  
12 independently determines areas and programs that should be audited, from a company risk perspective.  
13 Then, through later consultations with the SCE Law Department, a determination is made whether to  
14 proceed under privilege for a given audit prior to the commencement of the actual work on that  
15 particular audit. Thus, the forecast reductions that Cal Advocates seeks are erroneous on this ground as  
16 well.

17 **c) Conclusion**

18 There is no dispute between Cal Advocates and SCE regarding the 2025 nonlabor  
19 forecast for Audits. With SCE's reduced request in this rebuttal testimony for 2025 labor increases, there  
20 is also no dispute between Cal Advocates and SCE regarding the 2025 labor forecast for staffing for  
21 Audits. Regarding Cal Advocates' proposed labor adjustment associated with attorney-client privileged  
22 audits, as the Commission has done in the past, the Commission should continue to uphold the attorney-  
23 client privilege and not penalize SCE for exercising its right. The number of privileged audit reports  
24 represents a small portion of the audit reports for 2022, which SCE has produced to Cal Advocates the  
25 overwhelming majority of its audits to Cal Advocates. The Commission should continue to follow its  
26 precedent, as well as the precedent of judicial courts, and deny Cal Advocates proposed adjustment for  
27 attorney-client privileged audits.

**Appendix A**

**SCE-17 Vol. 04 Environmental Services, Audit, Ethics & Compliance, and Safety Programs**

**Data Request Responses**

**SCE-17, Vol. 04: Rebuttal Testimony on Environmental Services, Audit, Ethics & Compliance, and Safety Programs**  
**Appendix A Index of Data Request Responses**

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PubAdv-SCE-059-FNZ  
Question 02 Follow Up

*Southern California Edison*  
*A.23-05-010 – SCE 2025 GRC*

**DATA REQUEST SET P u b A d v - S C E - 0 5 9 - F N Z**

**To: Public Advocates Office**  
**Prepared by: Jason Zarraga**  
**Job Title: Reg Affairs & Compl, Advisor**  
**Received Date: 8/7/2023**

**Response Date: 8/21/2023**

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**Question 02 Follow Up:**

For Q.01.f. Cal Advocates requested that SCE provide the formulas and calculations in the attached excel file “PubAdv-SCE-059-FNZ.” In response SCE referenced specific pages of SCE-06 Vol. 06., that talk about the methodology and do not provide the requested formulas and calculations.

**Response to Question 02 Follow Up:**

In order to assist Cal Advocates, SCE developed and attached a spreadsheet (“PubAdv-SCE-059-FNZ Q2 Follow Up”) to help summarize the arithmetic done by SCE for SCE-06 Vol. 06.

Southern California Edison - 2025 GRC  
 PubAdv-SCE-059-FNZ Q2 (Follow Up)  
 Figures are in (\$ Constant 2022)

GRC Activity: Environmental Management and Development (Labor)		Constant 2022 \$	Reference
Environmental Management and Development (2022 Recorded - Labor)	\$	12,483,343	SCE Exhibit 6 Volume 6 Testimony p. 12, Figure II-6
<b>Adjustment 1:</b> Labor Support for Planned/Existing Positions in ESD's Work Force (Includes Backfill of 2022 Vacancies)	\$	2,109,579	SCE Exhibit 6 Volume 6 Testimony p. 14 II.C.1.c)(2)(a) lines 21-28 and attachment "04-a-g_PubAdv-SCE-059-FNZ Attachment-04d-g.xlsx", "04-d-g Summary" tab
<b>Adjustment 2:</b> Labor Support for New Positions in ESD's Work Force	\$	2,301,995	SCE Exhibit 6 Volume 6 Testimony p. 14 II.C.1.c)(2)(a) lines 21-28 and attachment "04-a-g_PubAdv-SCE-059-FNZ Attachment-04d-g.xlsx", "04-d-g Summary" tab
<b>Adjustment 3:</b> Changes to the employee compensation program	\$	783,487	SCE Exhibit 6 Volume 6 Testimony p. 14 II.C.1.c)(2)(a) lines 28-29 and attachment the response to PubAdv-SCE-008-FNZ Question 2.e-f
<b>Adjustment 4:</b> SCE identified an error due to Constant-Nominal dollar conversion (amount in excess of the proposed changes to the employee compensation program)	\$	95,599	SCE initially had \$879,087 as the amount attributable to <b>Adjustment 3</b> . This is incorrect. The correct amount as stated in PubAdv-SCE-008-FNZ Question 2.e-f is \$783,487 (Adjustment 3). This amount is the difference between the correct amount and the initial amount. This will be submitted as a correction in a future errata.
<b>Total 2025 Forecast (2022 Recorded + Adjustment 1 + Adjustment 2 + Adjustment 3 + Adjustment 4)</b>	\$	<b>17,774,004</b>	SCE Exhibit 6 Volume 6 Testimony p. 12, Figure II-6
Errata 3 Adjustment	\$	(95,599)	Negation of <b>Adjustment 4</b>
<b>Total 2025 Forecast (After Errata)</b>	\$	<b>17,678,404</b>	This is the amount SCE will request for Test Year 2025 to be reflected in a future Errata
<b>GRC Activity: Environmental Management and Development (Non-Labor)</b>			
Environmental Management and Development (2022 Recorded - Non-Labor)	\$	4,045,021	SCE Exhibit 6 Volume 6 Testimony p. 12, Figure II-6
<b>Adjustment 1:</b> Completion of improvements to Environmental Management System. (Approx. -\$1.2 million)	\$	(1,478,761)	SCE Exhibit 6 Volume 6 Testimony II.C.1.c)(2)(a) p. 16 lines 15-19 and attachment "04-a-g_PubAdv-SCE-059-FNZ Attachment-04d-g.xlsx", "O&M and A&G Expenses" tab cell O8
Remaining variance of (Approx. -\$0.3) million is primarily due to accounting settlement updates	\$		
<b>Total 2025 Forecast (2022 Recorded + Adjustment 1)</b>	\$	<b>2,566,260</b>	SCE Exhibit 6 Volume 6 Testimony p. 12, Figure II-6
<b>GRC Activity: Environmental Management and Development (Other)</b>			
Environmental Management and Development (2022 Recorded - Other)	\$	2,280	SCE Exhibit 6 Volume 6 Testimony p. 12, Figure II-6
<b>Adjustment 1:</b> Removal of other miscellaneous costs	\$	(2,280)	
<b>Total 2025 Forecast (2022 Recorded + Adjustment 1)</b>	\$	-	SCE Exhibit 6 Volume 6 Testimony p. 12, Figure II-6
<b>GRC Activity: Environmental Programs (Labor)</b>			
Environmental Programs (2022 Recorded - Labor)	\$	1,353,479	SCE Exhibit 6 Volume 6 Testimony p. 20, Figure II-7
<b>Adjustment 1:</b> Changes to the employee compensation program	\$	91,449	Please see attachment the response to PubAdv-SCE-008-FNZ Question 2.e-f
<b>Adjustment 2:</b> Labor allocation adjustment	\$	(309,958)	SCE Exhibit 6 Volume 6 Testimony II.C.2.c)(2)(a) p. 22 lines 23-25
<b>Total 2025 Forecast (2022 Recorded + Adjustment 1 + Adjustment 2)</b>	\$	<b>1,334,970</b>	SCE Exhibit 6 Volume 6 Testimony p. 20, Figure II-7
<b>GRC Activity: Environmental Programs (Non-Labor)</b>			
Environmental Programs (2022 Recorded - Non-Labor)	\$	13,291,685	Testimony p. 20, Figure II-7
<b>Adjustment 1:</b> Additional environmental support of Transmission Road and Right of Way (TROW) work	\$	3,796,428	SCE Exhibit 6 Volume 6 Testimony II.C.2.c)(2)(b) p. 23 lines 4-26 and p. 24 lines 1-4
<b>Adjustment 2:</b> New environmental programs/activities	\$	1,016,183	SCE Exhibit 6 Volume 6 Testimony II.C.2.c)(2)(b) p. 24 lines 5-21
<b>Adjustment 3:</b> Additional environmental support for various programs (e.g., waste disposal, air quality, Hazardous Material Business Plan/Spill Prevention Control and Countermeasures (HMBP/SPCC), etc.)	\$	1,439,472	SCE Exhibit 6 Volume 6 Testimony II.C.2.c)(2)(b) p. 24 lines 22-29 and p. 25 lines 1-22
<b>Adjustment 4:</b> Marine Mitigation Programs	\$	1,752,206	SCE Exhibit 6 Volume 6 Testimony II.C.2.c)(2)(b) p. 25 lines 23-29 and p. 26 lines 1-7
<b>Adjustment 5:</b> Miscellaneous costs and adjustments	\$	63,519	Other miscellaneous costs and adjustments
<b>Total 2025 Forecast (2022 Recorded + Adjustment 1 + Adjustment 2 + Adjustment 3 + Adjustment 4 + Adjustment 5)</b>	\$	<b>21,359,492</b>	Testimony p. 20, Figure II-7

PubAdv-SCE-144-FNZ, Question 02.a-i

*Southern California Edison*  
*A.23-05-010 – SCE 2025 GRC*

**DATA REQUEST SET P u b A d v - S C E - 1 4 4 - F N Z**

**To: Public Advocates Office**  
**Prepared by: Katie Wong ESD**  
**Job Title: Advisor**  
**Received Date: 8/31/2023**

**Response Date: 9/15/2023**

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**Question 02.a-i:**

Referring to Excel file PubAdv-SCE-059-FNZ Q2 Follow Up, for GRC activity Environmental Management and Development labor, Adjustment 1, SCE is requesting labor support for planned/existing positions in ESD's work force (includes backfill of 2022 vacancies) in the amount of \$2.1 million for TY2025. Please provide to the following:

- a. Provide detailed explanation for the reason SCE is backfilling the positions.
- b. Are these Covid or retirement related vacancies?
- c. Provide information if SCE is in the process of reorganization, or creating a new department that requires the new positions?
- d. Did SCE lay off employees that resulted in the vacant positions? If the vacancies are a result of layoffs, please provide the job titles, duties, and salaries.
- e. If the positions vacated as a result of layoffs, provide SCE's savings for laying off employees and hiring new employees in those positions?
- f. Provide the past five years (2018-2022) of records that clearly demonstrate the position titles, hiring dates, separation dates, duties/responsibilities, and salaries of the FTEs.
- g. Provide documents that clearly demonstrates the position titles, hiring dates, separation dates, duties/responsibilities, and salaries of the backfilled positions.
- h. Provide documents that clearly demonstrates the position titles, duties, responsibilities, and salaries of the new FTEs for TY2025.
- i. Please provide the requested information in an Excel spreadsheet.

**Response to Question 02.a-i:**

- a. SCE is backfilling these positions due to vacancies in 2022 generated from utilizing existing employees to backfill new positions, and due to turnovers of the department's existing staff (e.g., departure from SCE or Environmental Services Department (ESD), internal transfer/backfill of vacancies).
- b. These are not Covid vacancies. Some vacancies are due to retirement.
- c. SCE made organizational changes in 2021 and 2022, including a reorganization and insourcing of positions as outlined below. In 2021, SCE's reorganization included twelve new positions to support updated processes for regulatory intake, risk assessments, monitoring and assessing control effectiveness, incident management, cause evaluation, and training and communications related to environmental performance, and aligns environmental staff to support work related to growing wildfire mitigation, vegetation management, and grid hardening programs and projects. In 2022, SCE incorporated four new positions to pursue efficiencies and cost savings whenever possible through utilization

of internal staff versus consultants to support environmental activities. These positions support transformer oil testing and analysis, and helps ensure compliance with the Consent Decree for storm water and disposal of solid wastes from SCE's storage of treated wood poles. SCE experienced multiple vacancies due to backfills for new positions and turn-over of existing positions which continued throughout 2022.

- d. SCE did not lay off employees that resulted in the vacant positions. 2022 vacancies primarily consisted of utilizing internal backfills for new positions and turnovers of existing staff.
- e. The positions were not vacated as a result of layoffs (please see 02.d above).
- f. Please see Excel file "PubAdv-SCE-144-FNZ 02.f-h", which includes a list of positions for ESD during the 2022 timeframe. Please see "2025 Labor Forecast" tab. This information was incorporated into SCE's 2025 GRC labor forecast of \$14.6 million, and encompasses labor support for planned and existing positions. The variance is primarily due to vacancies throughout 2022 as described in above 02.d. In addition to the number and duration of vacancies that occur, 2022 labor spend is also dependent on the percentage of work that can be capitalized, charged directly to other Operating Units (OUs) or GRC activities (i.e., Environmental Programs), and changes in the number of positions necessary to maintain compliance with increasing Operations and Maintenance (O&M) work.

SCE included information for all departmental staff personnel's hiring date and departure date, which SCE interpreted as the date for when the personnel transferred into ESD, and the date for when the personnel transferred out of ESD. Please note for internal transfers/backfills, the hiring date is the start date for when the employee transferred into ESD, and not the date the employee started the position created by either a new position or turnover within ESD, which occurred in the 2021 and 2022 timeframe. Similarly, the departure date is not available for internal transfers/backfills for new positions and turnovers if the personnel is still with ESD, as the personnel transferred positions within ESD but did not transfer out of ESD.

SCE included columns identifying positions newly established in the 2021 and 2022 timeframe (as part of SCE's reorganization or utilization of internal staff versus consultants to pursue efficiencies and cost savings), or due to turnovers of existing departmental staff. Due to a large volume of turnovers, SCE tried to identify to the best extent possible this information related to positions associated with turnovers. SCE included whether the turnovers were due to departure from ESD (e.g., transfer out of ESD) or due to internal transfer/backfill. SCE included general duties and responsibilities for all divisions and departments for ESD's work force. SCE included additional information for duties and responsibilities for new positions and the majority of positions associated with turnovers.

SCE values our employees' privacy and data and takes great effort to ensure it is not compromised. SCE utilized standard labor rates for labor classifications to calculate the 2025 GRC forecast of \$14.6 million, and has removed reference to individual employees' names and replaced them with unique identifiers.

SCE excluded 2018 through 2021 data, as the variance of \$2.1 million is between 2025 forecast of \$14.6 million and 2022 recorded spend of \$12.5 million for these positions. SCE's historical labor spend for ESD for both GRC activities Environmental Management and Development and Environmental Programs averaged approximately \$14.4 million spend per year from 2018 through 2022, and included a yearly variance of approximately 2% to 3% between years. Please see Figure II-5 of Exhibit SCE-06, Vol. 6A, Chapter 2, page 10.

- g. Please see Excel file "PubAdv-SCE-144-FNZ 02.f-h". Please see "2025 Labor Forecast" tab. SCE included information for position titles, hiring dates, separation dates, duties/responsibilities, and salaries associated with the backfilled positions.
- h. Please see Excel file "PubAdv-SCE-144-FNZ 02.f-h". Please see "2025 Labor Forecast" tab. SCE included information for position titles, hiring dates, separation dates, duties/responsibilities, and salaries associated with the new positions.
- i. Please see Excel file "PubAdv-SCE-144-FNZ 02.f-h".

PubAdv-SCE-144-FNZ 02.f-h (2025 Labor Forecast, 2025 FTEs, 2022 FTEs)

Division	Department	Current Employee Unique ID	Labor Classification**	2022 FTE*	2023 FTE	Standard Labor Rate***	2025 Forecast	2022 Year End Status of Position	Hiring Date**** (Transfer into ESD Department)	Separate Date**** (Transfer out of ESD Department)	Category (New Position, Turnover)	Category Details	Methodology of Filling New Position or Turnover	Prior Employee Unique ID	2022 FTE*	Prior Employee Separate Date (Transfer out of ESD)	Duties and Responsibilities
ESD	ESD	2025-1	Env. Environmental Services	1.0	1.0	\$ 222,695	\$ 216,273		09/30/15								Please refer to "General Duties and Responsibilities" tab included for ESD for general duties and responsibilities associated with this division and department.
ESD	ESD	2025-2	Executive Assistant 1	1.0	1.0	\$ 83,841	\$ 81,438		09/21/15								Please refer to "General Duties and Responsibilities" tab included for ESD for general duties and responsibilities associated with this division and department.
EMS	EMS	2025-3	Envir. Prin Mgr	1.0	1.0	\$ 192,977	\$ 187,445		09/30/15		New Position	Reorganization	Internal Transfer(Backfill)				This position leads the Environmental Management System (EMS) division, and manages updated processes for regulatory intake, risk assessments, monitoring and assessing control effectiveness, incident management, cause evaluation, and training and communications related to environmental performance.
EMS	EMS Operations	2025-4	Envir. Sr Mgr	1.0	1.0	\$ 174,701	\$ 168,692		09/21/15								Please refer to "General Duties and Responsibilities" tab included for EMS Division for general duties and responsibilities associated with this division and department.
EMS	EMS Operations	2025-5	Envir Science, Sr Advisor	0.6	1.0	\$ 151,171	\$ 146,837		06/06/22		Turnover	Turnover (Departure from ESD, not SCE)	New Personnel	2025-159	0.2	09/13/22	The position coordinates with environmental program managers and leads cross-functional teams to ensure the effective integration of the EMS through communication strategy, organizational change management plan, and culture change initiatives. This position also interacts regularly with SCE senior management and executives to provide one EMS voice, share performance metrics, innovative strategies, and recommendations for ensuring environmental compliance integration into operations and helping to create a culture of continuous improvement. Responsibilities include development and implementation of the EMS Integration Strategy and Plan, leading the development and implementation of a culture change assessment and improvement plan, supporting implementation of the management of change process to effectively communicate and embed environmental requirements into operations, leading the development of presentation material for the EMS and Environmental Performance Metrics vital for discussions with various audiences including executive leaders, supporting cross-functional teams to achieve outcomes by providing focused support, presenting progress of communication and culture change plans to executive leaders, and partnering Environmental Service personnel and business partners to fully embed environmental stewardship into SCE's operational process.
EMS	EMS Operations	2025-6	Pj Mgr	0.4	1.0	\$ 130,464	\$ 126,724		08/09/22		Turnover	Turnover (Departure from SCE)	New Personnel	2025-160	0.4	06/04/22	This position is primarily responsible for managing high risk, complex, and long range projects. This position leads the development of presentation materials, creates plans for transformational activities, facilitates meetings with management and senior executives, and serves as a liaison between Environmental Services, Audit Services, Law, and Ethics and Compliance. This position is responsible for the development and implementation of the Management of Change process to effectively communicate and embed environmental requirements into operations, acts as a subject matter expert to provide training, documentation, and oversight to support the growth of the Environmental Management System. This position also supports cross-functional teams to achieve outcomes by providing focused support, presenting EMS impacts and operational material changes to management, develops, implements, and reports material changes to key stakeholders impacted by change, and partners with Environmental Services personnel and business partners to fully embed material changes into SCE operational process.
EMS	EMS Operations	2025-7	Envir Science, Advisor	0.9	1.0	\$ 131,870	\$ 128,090		03/14/22		Turnover	Turnover (Departure from ESD, not SCE)	New Personnel	2025-161	0.0	01/18/21	This position is responsible for building, implementing, communicating, and maintaining SCE's environmental management system (EMS). This position leads cross-functional teams to ensure the effective evaluation of environmental risk and regulations and coordinate the development of regulatory changes to environmental programs and process to ensure that the company maintains a strong environmental compliance posture, and acts as an expert in regulatory requirements intake, regulatory catalog management, and management of change. This position interacts regularly with SCE's senior management and executives to provide innovative strategies and recommendations for ensuring environmental compliance and helping to create a culture of continuous improvement. This position is responsible for the development, implementation, and operation of the regulatory requirements intake process and management of the regulatory requirements catalog and the ESD Document Management procedure. This position is also responsible for building a Compliance Obligations Matrix to identify responsible parties to review and approve compliance requirements and related controls and changes, and partners with compliance leads to conduct a preliminary risk assessment of new and/or proposed regulations to evaluate the potential compliance impacts, and to develop effective controls. This position also works with EMC Quality Assurance (QA) and technical SMEs within EMC to conduct the annual Government Reporting Standard (GRS) to ensure ESD compliance with GRS Standard and partners with IG and CBR teams to conduct records management activities for ESD in compliance with SCE's Records Management Policy.
EMS	EMS Operations	2025-8	Bus Ops Anlys, Sr Spec	1.0	1.0	\$ 112,598	\$ 109,370		09/30/15								Please refer to "General Duties and Responsibilities" tab included for EMS Division for general duties and responsibilities associated with this division and department.
EMS	EMS Operations	2025-9	Bus Ops Anlys, Sr Spec	0.3	0.4	\$ 112,598	\$ 49,217		09/30/15								Please refer to "General Duties and Responsibilities" tab included for EMS Division for general duties and responsibilities associated with this division and department.
EMS	EMS Monitoring and Continuous Improvement	2025-10	Envir. Sr Mgr	1.0	1.0	\$ 174,701	\$ 168,692		09/30/15								Please refer to "General Duties and Responsibilities" tab included for EMS Division for general duties and responsibilities associated with this division and department.
EMS	EMS Monitoring and Continuous Improvement	2025-11	Envir Science, Sr Advisor	1.0	1.0	\$ 151,171	\$ 146,837		12/05/16								Please refer to "General Duties and Responsibilities" tab included for EMS Division for general duties and responsibilities associated with this division and department.
EMS	EMS Monitoring and Continuous Improvement	2025-12	Envir Science, Sr Advisor	1.0	1.0	\$ 151,171	\$ 146,837		11/29/16		New Position	Reorganization	Internal Transfer(Backfill)				This position leads the implementation of a corrective and preventative action program and provides support for cause evaluation.
EMS	EMS Monitoring and Continuous Improvement	2025-13	Envir Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		08/20/18		Turnover	Turnover (Departure from SCE)	Internal Transfer(Backfill)	2025-162		07/13/21	This position supports the administration and management of the Environmental, Health and Safety Compliance Management System to help achieve company-wide EHS compliance, provides consistent technical focus to support compliance implementation and system maintenance to reflect process changes and requirements, system assessments, creation of standard and ad-hoc reports, and technical support and communication to end users, performs compliance system assessments by providing technical analysis and recommendations for deficiency resolution impacting multiple compliance areas and all organizational units; works with EHS and IT Subject Matter Experts to ensure resolution of system defects, facilitates necessary user acceptance, and communicates status to stakeholders.
EMS	EMS Monitoring and Continuous Improvement	2025-14	Envir Science, Sr Spec	1.0	1.0	\$ 106,691	\$ 103,632		09/30/15								Please refer to "General Duties and Responsibilities" tab included for EMS Division for general duties and responsibilities associated with this division and department.
EMS	EMS Monitoring and Continuous Improvement	2025-15	Envir Science, Sr Spec	1.0	1.0	\$ 106,691	\$ 103,632		09/30/15								Please refer to "General Duties and Responsibilities" tab included for EMS Division for general duties and responsibilities associated with this division and department.
EMS	EMS Monitoring and Continuous Improvement	2025-16	Envir Science, Sr Spec	0.0	1.0	\$ 106,691	\$ 103,632	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Turnover	Turnover (Internal Transfer(Backfill))	Vacant as of 2022 Year End	2025-13		Internal Transfer/Backfill	This position leads the extraction, management, and interpretation of compliance data to support the continuous improvement of SCE's environmental management system; manages the development, implementation, and routine improvement of dashboards; monitors the quality of data sets and flag issues for follow-up and resolution; works and manages daily aspects of analyzing, monitoring/tracking, and reporting all environmental compliance data; supports and maintains existing data calculation and preparation methods and develop new methods to adapt to program needs using different programming languages and analytical software; seeds and identifies innovative ways to do work, utilizes resources effectively; improves efficiency and effectiveness of the environmental management system; and supports occasional cross-functional projects in support of operational and critical initiatives to improve performance and streamline work practices.
EMS	EMS Support	2025-17	Envir. Sr Mgr	0.9	1.0	\$ 174,701	\$ 168,692		09/30/15								Please refer to "General Duties and Responsibilities" tab included for EMS Division for general duties and responsibilities associated with this division and department.
EMS	EMS Support	2025-18	Bus Ops Anlys, Sr Spec	1.0	1.0	\$ 112,598	\$ 109,370		09/30/15								Please refer to "General Duties and Responsibilities" tab included for EMS Division for general duties and responsibilities associated with this division and department.
EMS	EMS Support	2025-19	Envir Science, Sr Spec	1.0	1.0	\$ 106,691	\$ 103,632		09/30/15								Please refer to "General Duties and Responsibilities" tab included for EMS Division for general duties and responsibilities associated with this division and department.
EMS	EMS Support	2025-20	Envir Science, Sr Spec	1.0	1.0	\$ 106,691	\$ 103,632		09/30/15								Please refer to "General Duties and Responsibilities" tab included for EMS Division for general duties and responsibilities associated with this division and department.
EMS	EMS Support	2025-21	Bus Ops Anlys, Specialist	1.0	1.0	\$ 83,465	\$ 81,072		09/30/15								Please refer to "General Duties and Responsibilities" tab included for EMS Division for general duties and responsibilities associated with this division and department.

PubAdv-SCE-144-FNZ 02-f-h (2025 Labor Forecast, 2025 FTEs, 2022 FTEs)

Division	Department	Current Employee Unique ID	Labor Classification**	2022 FTE*	2023 FTE	Standard Labor Rate**	2025 Forecast	2022 Year End Status of Position	Hiring Date*** (Transfer into ESD Department)	Separate Date**** (Transfer out of ESD Department)	Category (New Position, Turnover)	Category Details	Methodology of Filling New Position or Turnover	Prior Employee Unique ID	Prior Employee Separate Date (Transfer out of ESD)	Duties and Responsibilities	
EMS	EMS Support	2025-22	Envir. Science, Sr Spec	0.1	0.3	\$ 106,691	\$ 32,748		07/01/19							Please refer to "General Duties and Responsibilities" tab included for EMS Division for general duties and responsibilities associated with this division and department.	
EMS	EMS Support	2025-23	Envir. Science, Sr Spec	0.3	0.3	\$ 106,691	\$ 32,859		09/30/15							Please refer to "General Duties and Responsibilities" tab included for EMS Division for general duties and responsibilities associated with this division and department.	
PEM	PEM	2025-24	Envir. Prin Mgr	1.0	1.0	\$ 192,977	\$ 187,445		07/09/18							Please refer to "General Duties and Responsibilities" tab included for PEM Division for general duties and responsibilities associated with this division and department.	
PEM	Licensed Projects	2025-25	Envir. Sr Mgr	0.7	0.4	\$ 174,701	\$ 67,877		09/30/15		Turnover	Turnover (Departure from SCE)	Internal Transfer/Backfill	2025-163	0.2	06/18/22	This position is a manager of a group of Environmental Project Managers responsible for ensuring regulatory compliance with all applicable environmental requirements for assigned projects that require a regulatory permit/licensing from a state agency such as California Public Utility Commission (CPUC) and/or federal regulatory agencies.
PEM	Licensed Projects	2025-26	Envir. Science, Sr Advisor	1.0	1.0	\$ 131,870	\$ 128,090		09/30/15								Please refer to "General Duties and Responsibilities" tab included for PEM Division for general duties and responsibilities associated with this division and department.
PEM	Licensed Projects	2025-27	Envir. Science, Sr Advisor	0.0	0.2	\$ 151,171	\$ 36,709		09/30/15								Please refer to "General Duties and Responsibilities" tab included for PEM Division for general duties and responsibilities associated with this division and department.
PEM	Licensed Projects	2025-28	Envir. Science, Sr Advisor	0.1	0.1	\$ 151,171	\$ 14,684		09/30/15								Please refer to "General Duties and Responsibilities" tab included for PEM Division for general duties and responsibilities associated with this division and department.
PEM	Licensed Projects	2025-29	Envir. Science, Sr Advisor	0.0	0.1	\$ 131,870	\$ 12,809		09/30/15								Please refer to "General Duties and Responsibilities" tab included for PEM Division for general duties and responsibilities associated with this division and department.
PEM	Licensed Projects	2025-30	Envir. Science, Sr Advisor	0.2	0.1	\$ 131,870	\$ 12,809		04/25/22		Turnover	Turnover (Internal Transfer/Backfill)	New Personnel	2025-42		Internal Transfer/Backfill	The position is responsible for ensuring regulatory compliance with all applicable environmental requirements for assigned projects that require a regulatory permit/licensing from a state agency such as California Public Utility Commission (CPUC) and/or federal regulatory agencies. Responsibilities included management of environmental budget, resources, and deliverables such as Proponent's Environmental Assessment (PEA), Petition for Modification (PFM), Plan of Development (POD) data request responses, notice to proceed requests, mitigation plans, jurisdictional waters permits, biological permits, and ensuring compliance of all environmental mitigation measures during construction. Current assigned projects include Eldorado-Piegan-Lugo and Del Valle.
PEM	Licensed Projects	2025-31	Envir. Science, Sr Advisor	0.0	0.1	\$ 131,870	\$ 12,809	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Turnover	Turnover (Internal Transfer/Backfill)	Vacant as of 2022 Year End	2025-41		Internal Transfer/Backfill	The position is responsible for ensuring regulatory compliance with all applicable environmental requirements for assigned projects that require a regulatory permit/licensing from a state agency such as California Public Utility Commission (CPUC) and/or federal regulatory agencies. Responsibilities included management of environmental budget, resources, and deliverables such as Proponent's Environmental Assessment (PEA), Petition for Modification (PFM), Plan of Development (POD) data request responses, notice to proceed requests, mitigation plans, jurisdictional waters permits, biological permits, and ensuring compliance of all environmental mitigation measures during construction. Current assigned projects include Gorman Kern and the CEQA lead for a programmatic jurisdictional waters permit.
PEM	Vegetation Management	2025-32	Envir. Sr Mgr	0.5	0.5	\$ 174,701	\$ 84,846		09/30/15								Please refer to "General Duties and Responsibilities" tab included for PEM Division for general duties and responsibilities associated with this division and department.
PEM	Vegetation Management	2025-33	Envir. Science, Sr Advisor	0.1	0.2	\$ 151,171	\$ 29,367		09/30/15		New Position	Reorganization	Internal Transfer/Backfill				The position manages and provides oversight of vegetation management programs and ensures compliance. The position leads cross-functional teams to ensure the effective implementation of the environmental process in collaboration with program stakeholders. The position addresses issues and solves problems to advance programs and provides on-time and on budget program delivery while maintaining environmental compliance.
PEM	Vegetation Management	2025-34	Envir. Science, Sr Advisor	0.2	0.4	\$ 131,870	\$ 51,236		07/01/19		New Position	Reorganization	Internal Transfer/Backfill				The position is responsible for ensuring regulatory compliance with all applicable environmental requirements for vegetation management structure breaking, dead and dying trees, and hazardous tree removal program.
PEM	Vegetation Management	2025-35	Envir. Science, Sr Advisor	0.6	0.4	\$ 131,870	\$ 51,236		1/29/21		Turnover	Turnover (Internal Transfer/Backfill)	New Personnel	2025-33		Internal Transfer/Backfill	The position is responsible for ensuring regulatory compliance with all applicable environmental requirements for vegetation management weed abatement program.
PEM	Vegetation Management	2025-36	Envir. Science, Sr Spec	0.0	0.2	\$ 106,691	\$ 20,726	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Turnover	Turnover (Internal Transfer/Backfill)	Vacant as of 2022 Year End	2025-68		Internal Transfer/Backfill	Position performs technical evaluations and resource area management for vegetation management projects to drive environmental compliance. This position supports vegetation management program managers with compliance analysis and reporting.
PEM	Vegetation Management	2025-37	Bus Ops Anlys. Specialist	0.2	0.2	\$ 83,465	\$ 16,214		05/16/22		Turnover	Turnover (Internal Transfer/Backfill)	Internal Transfer/Backfill	2025-34		Internal Transfer/Backfill	Please refer to "General Duties and Responsibilities" tab included for EMS Division for general duties and responsibilities associated with this division and department.
PEM	Vegetation Management	2025-38	Bus Ops Anlys. Specialist	0.5	0.2	\$ 83,465	\$ 16,214		07/11/22		Turnover	Turnover (Internal Transfer/Backfill)	Internal Transfer/Backfill	2025-37		Internal Transfer/Backfill	Position performs technical evaluations and resource area management for vegetation management projects to drive environmental compliance. This position supports vegetation management program managers with compliance analysis and reporting.
PEM	Vegetation Management	2025-39	Envir. Science, Sr Spec	0.1	0.2	\$ 106,691	\$ 20,726		06/18/18		New Position	Reorganization	Internal Transfer/Backfill				Position performs technical evaluations and resource area management for vegetation management projects to drive environmental compliance. This position supports vegetation management program managers with compliance analysis and reporting.
PEM	Transmission Projects	2025-40	Envir. Sr Mgr	0.5	0.6	\$ 174,701	\$ 101,815		09/30/15								Please refer to "General Duties and Responsibilities" tab included for PEM Division for general duties and responsibilities associated with this division and department.
PEM	Transmission Projects	2025-41	Envir. Science, Sr Advisor	0.0	0.2	\$ 151,171	\$ 36,709		09/30/15		Turnover	Turnover (Internal Transfer/Backfill)	Internal Transfer/Backfill	2025-49		Internal Transfer/Backfill	The position manages the General Order (GO) 131-D Program. The California Public Utilities Commission's (CPUC) GO 131-D outlines the rules relating to the planning and construction of electric generation, transmission/power distribution line facilities, and substations located in California. This position reviews projects and issues an exemption/exception in collaboration with our Regulatory Affairs group and provide guidance for additional reviews that may require GO 131-D Committee approval.
PEM	Transmission Projects	2025-42	Envir. Science, Sr Advisor	0.0	0.2	\$ 151,171	\$ 29,367		09/30/15		New Position	Reorganization	Internal Transfer/Backfill				The position manages and provides oversight of environmental programs and ensure compliance. In addition to program management, this position manages more complex projects which includes collaboration with subject matter experts, issuance of avoidance and minimization measures, agency engagement, and/or emergent permitting challenges. The position leads cross-functional teams to ensure the effective implementation of the environmental process in collaboration with program stakeholders. The position addresses issues and solves problems to advance programs and provides on-time and on budget program delivery while maintaining environmental compliance.
PEM	Transmission Projects	2025-43	Envir. Science, Sr Spec	0.0	0.2	\$ 106,691	\$ 20,726	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Vacant as of 2022 Year End	New Position	Reorganization	Vacant as of 2022 Year End				Position performs technical evaluations and resource area management for transmission projects to drive environmental compliance. This position supports SCE's Environmental Program and Project Managers with compliance analysis and reporting. The position also provides project management for smaller scale programs that require environmental analysis and oversight.
PEM	Transmission Projects	2025-44	Envir. Science, Sr Advisor	0.0	0.9	\$ 131,870	\$ 115,281		12/12/22		Turnover	Turnover (Departure from SCE)	New Personnel	2025-164		09/23/22	This position supports Transmission Right-of-Way projects, oversees environmental analysis and provide oversight and leadership to meet client need dates. The position addresses issues and solves problems to advance projects and provides on-time and on budget project delivery while maintaining environmental compliance. Please note GRC Activity Environmental Programs reflected a labor under-run of \$0.3 million in the 2025 forecast compared to 2022 spend. This information is included in the excel attachment with SCE's response to PubAdv-SCE-059-FNZ Q2 (Follow Up), Cell B32. There was a reallocation of labor from GRC Activity Environmental Programs to GRC Activity Environmental Management and Development in the 2025 forecast, which increased 2025 labor for Environmental Management and Development, and reduced 2025 labor for Environmental Programs for this personnel. Part of the FTE variance for this personnel is driven by this update. The FTE % also incorporates an estimated percentage of chargeback to ESD versus other OUs for programs and projects supported.
PEM	Transmission Projects	2025-45	Envir. Science, Sr Advisor	0.0	0.2	\$ 131,870	\$ 25,618		09/30/15								Please refer to "General Duties and Responsibilities" tab included for PEM Division for general duties and responsibilities associated with this division and department.
PEM	Transmission Projects	2025-46	Envir. Science, Sr Advisor	0.0	0.1	\$ 131,870	\$ 12,809		09/30/15								Please refer to "General Duties and Responsibilities" tab included for PEM Division for general duties and responsibilities associated with this division and department.
PEM	Distribution Projects	2025-47	Envir. Sr Mgr	0.3	0.4	\$ 174,701	\$ 67,877		04/04/22		New Position	Reorganization	New Personnel				The position manages a group of Environmental Project Managers who oversee the development of multi-disciplinary environmental analysis necessary to obtain government agency permits for SCE Distribution projects. Responsible and accountable for ensuring that all applicable construction and maintenance projects are run through SCE's work management system and within the guidelines of our internal processes to evaluate potential impacts on environmental resources and confirm appropriate steps are taken to ensure project environmental compliance.

PubAdv-SCE-144-FNZ 02.f-h (2025 Labor Forecast, 2025 FTEs, 2022 FTEs)

Division	Department	Current Employee Unique ID	Labor Classification**	2022 FTE*	2025 FTE	Standard Labor Rate**	2025 Forecast	2022 Year End Status of Position	Hiring Date**** (Transfer into ESD Department)	Separate Date**** (Transfer out of ESD Department)	Category (New Position, Turnover)	Category Details	Methodology of Filling New Position or Turnover	Prior Employee Unique ID	Prior Employee Separate Date (Transfer out of ESD)	Duties and Responsibilities	
PEM	Distribution Projects	2025-48	Envir Science, Sr Advisor	0.4	0.3	\$ 151,171	\$ 44,051		11/08/21		New Position	Reorganization	New Personnel			The position manages and provides oversight of environmental programs and ensure compliance. In addition to program management, this position manages more complex projects which includes collaboration with subject matter experts, issuance of avoidance and minimization measures, agency engagement, and/or emergent permitting challenges. The position leads cross-functional teams to ensure the effective implementation of the environmental process in collaboration with program stakeholders. The position addresses issues and solves problems to advance programs and provides on-time and on budget program delivery while maintaining environmental compliance.	
PEM	Distribution Projects	2025-49	Envir Science, Sr Advisor	0.3	0.3	\$ 151,171	\$ 44,051		09/30/15		Turnover	Turnover (Internal Transfer/Backfill)	Internal Transfer/Backfill	2025-166	01/01/22	Please refer to "General Duties and Responsibilities" tab included for PEM Division for general duties and responsibilities associated with this division and department.	
PEM	Distribution Projects	2025-50	Envir Science, Advisor	0.3	0.2	\$ 131,870	\$ 25,618		09/30/15							Please refer to "General Duties and Responsibilities" tab included for PEM Division for general duties and responsibilities associated with this division and department.	
PEM	Distribution Projects	2025-51	Envir Science, Advisor	0.1	0.2	\$ 131,870	\$ 25,618		09/30/15		New Position	Reorganization	Internal Transfer/Backfill			The position manages and provides oversight of environmental programs and ensure compliance. In addition to program management, this position collaborates with subject matter experts, issuance of avoidance and minimization measures, agency engagement, and/or emergent permitting challenges. The position leads cross-functional teams to ensure the effective implementation of the environmental process in collaboration with program stakeholders. The position addresses issues and solves problems to advance programs and provides on-time and on budget program delivery while maintaining environmental compliance.	
PEM	Distribution Projects	2025-52	Envir Science, Sr Spec	0.4	0.2	\$ 106,691	\$ 20,726		02/21/22		Turnover	Turnover (Internal Transfer/Backfill)	New Personnel	2025-51		This position oversees environmental analysis and provide oversight and leadership for Distribution projects. The position addresses issues and solves problems to advance projects and provide on-time and on budget project delivery while maintaining environmental compliance.	
PEM	Distribution Projects	2025-53	Envir Science, Advisor	0.0	0.2	\$ 131,870	\$ 25,618	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Turnover	Turnover (Internal Transfer/Backfill)		2025-31		The position manages and provides oversight of environmental programs and ensure compliance. In addition to program management, this position collaborates with subject matter experts, issuance of avoidance and minimization measures, agency engagement, and/or emergent permitting challenges. The position leads cross-functional teams to ensure the effective implementation of the environmental process in collaboration with program stakeholders. The position addresses issues and solves problems to advance programs and provides on-time and on budget program delivery while maintaining environmental compliance.	
PEM	OU Projects	2025-54	Envir, Sr Mgr	0.7	0.7	\$ 174,701	\$ 127,269		09/30/15		Turnover	Turnover (Departure from SCE)	Internal Transfer/Backfill	2025-166	06/12/21	This position manages a team of six Environmental Project Managers who facilitate environmental review, analysis, document preparation, and compliance guidance to operations and external customers/business interconnections in the following program areas: Renewable Generation Interconnection requests, Catalina water/gas/electric projects, Corporate Real Estate (facilities), and other SCE projects requiring Coastal permitting and California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) reviews.	
PEM	OU Projects	2025-55	Envir Science, Sr Advisor	0.3	0.7	\$ 151,171	\$ 102,786		06/18/18		Turnover	Turnover (Internal Transfer/Backfill)	Internal Transfer/Backfill	2025-54		This position is responsible for providing centralized environmental services to SCE's Generation organizational unit, as the Environmental Services Generation Program lead. This role interfaces with Generation to understand organization's strategic direction and provide environmental compliance and permitting guidance as well as serving as an environmental project manager on Generation-sponsored operations & maintenance, FERC and DDCU-inspection-driven compliance, and vegetation management projects. This position evaluates project scope, identifies potential environmental impacts as well as avoidance and minimization measures, prepares permit packages and environmental documents, coordinates with agencies during project permitting, and communicates environmental requirements to Generation sponsors performing the work.	
PEM	OU Projects	2025-56	Envir Science, Sr Advisor	0.0	0.1	\$ 151,171	\$ 14,684		09/30/15							Please refer to "General Duties and Responsibilities" tab included for PEM Division for general duties and responsibilities associated with this division and department.	
PEM	OU Projects	2025-57	Envir Science, Advisor	0.0	0.2	\$ 131,870	\$ 25,618		09/30/15							Please refer to "General Duties and Responsibilities" tab included for PEM Division for general duties and responsibilities associated with this division and department.	
PEM	OU Projects	2025-58	Envir Science, Advisor	0.1	0.2	\$ 131,870	\$ 25,618		04/08/19							Please refer to "General Duties and Responsibilities" tab included for PEM Division for general duties and responsibilities associated with this division and department.	
PEM	OU Projects	2025-59	Envir Science, Advisor	0.6	0.2	\$ 131,870	\$ 25,618		11/01/21							Please refer to "General Duties and Responsibilities" tab included for PEM Division for general duties and responsibilities associated with this division and department.	
PEM	OU Projects	2025-60	Envir Science, Advisor	0.0	0.2	\$ 131,870	\$ 25,618	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Turnover	Turnover (Departure from SCE)		2025-167	0.1	12/07/22	This position is responsible for providing environmental project management and CEQA and state and federal environmental permitting support to projects, primarily focused on Generation-sponsored projects on Catalina Island. This role interfaces with SCE operating units, including Generation, to understand project scope, identify potential environmental impacts as well as avoidance and minimization measures, prepare permit packages and environmental documents, coordinate with agencies during project permitting, and communicate environmental requirements to operating units executing the projects.
ER	Env Resources	2025-61	Envir, Pm Mgr	1.0	1.0	\$ 192,977	\$ 187,445		09/30/15							Please refer to "General Duties and Responsibilities" tab included for ER Division for general duties and responsibilities associated with this division and department.	
ER	Env Resources	2025-62	Administrative Assistant, Senior	1.0	1.0	\$ 72,704	\$ 70,620		10/23/17							Please refer to "General Duties and Responsibilities" tab included for ER Division for general duties and responsibilities associated with this division and department.	
ER	Wetlands & Waters	2025-63	Envir, Sr Mgr	0.3	0.6	\$ 174,701	\$ 110,300		09/30/15							Please refer to "General Duties and Responsibilities" tab included for ER Division for general duties and responsibilities associated with this division and department.	
ER	Wetlands & Waters	2025-64	Envir Science, Sr Advisor	0.0	0.0	\$ 151,171	\$ 7,342		09/30/15							Please refer to "General Duties and Responsibilities" tab included for ER Division for general duties and responsibilities associated with this division and department.	
ER	Wetlands & Waters	2025-65	Envir Science, Sr Advisor	0.1	0.0	\$ 151,171	\$ 7,342		06/10/19		Turnover	Turnover (Internal Transfer/Backfill)	Internal Transfer/Backfill	2025-55		This position serves as Wetlands Section Program Manager and leads Vegetation Management (VM) workstream and the T&D-Operation and Maintenance programs and their associated workstream. Within these workstreams, this position manages workflow and personnel assignments, resource planning, short and long term planning. This position acts as the agency lead with CDFW. This position is the project manager for programmatic permitting development. This position provides project-level wetlands analysis, such as waters resource jurisdictional determinations and permitting. This position leads engagement, communications, and coordination with state and federal wetlands/waters agencies for project-specific permits and represents SCE's interests. This position leads wetlands response to environmental incident analysis, corrective actions and resolutions (internal and external), agency enforcement actions, developing root cause analysis. This position participates in SCE Emergency response. This position identifies, provides recommendations or alternatives, mitigation opportunities, and operational opportunities for increased environmental compliance.	
ER	Wetlands & Waters	2025-66	Envir Science, Advisor	0.0	0.1	\$ 131,870	\$ 19,213	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Turnover	Turnover (Departure from SCE)		2025-168	0.3	06/03/22	This position supports wetland workstreams for T&D Operations and Maintenance, Vegetation Management, and Transmission Road and Right of Way. For each of these programs, this position is responsible for oversight and execution of technical project review and permitting, constraints analysis, strategy development, and impact avoidance and minimization. This position also facilitates engagement, communications, and coordination with state and federal wetlands/waters agencies for project-specific permits. This position participates in SCE Emergency response. This position identifies, provides recommendations or alternatives, mitigation opportunities, and operational opportunities for increased environmental compliance.
ER	Wetlands & Waters	2025-67	Envir Science, Advisor	0.0	0.0	\$ 131,870	\$ 6,404		09/30/15							Please refer to "General Duties and Responsibilities" tab included for ER Division for general duties and responsibilities associated with this division and department.	
ER	Wetlands & Waters	2025-68	Envir Science, Advisor	0.2	0.0	\$ 131,870	\$ 6,404		12/28/20		New Position	Reorganization	Internal Transfer/Backfill			This position serves as T&D-Operation and Maintenance Wetlands workstream support and as the Project level lead. In this space, this position leads technical project review and permitting, constraints analysis, strategy development, and impact avoidance and minimization. This position provides project-level wetlands analysis, such as waters resource jurisdictional determinations and permitting. This position leads engagement, communications, and coordination with state and federal wetlands/waters agencies for project-specific permits and represents SCE's interests. This position leads wetlands response to environmental incident analysis, corrective actions and resolutions (internal and external), agency enforcement actions, developing root cause analysis. This position participates in SCE Emergency response. This position identifies, provides recommendations or alternatives, mitigation opportunities, and operational opportunities for increased environmental compliance.	

PubAdv-SCE-144-FNZ 02.f-h (2025 Labor Forecast, 2025 FTEs, 2022 FTEs)

Division	Department	Current Employee Unique ID	Labor Classification**	2022 FTE*	2025 FTE	Standard Labor Rate***	2025 Forecast	2022 Year End Status of Position	Hiring Date**** (Transfer into ESD Department)	Separate Date**** (Transfer out of ESD Department)	Category (New Position, Turnover)	Category Details	Methodology of Filling New Position or Turnover	Prior Employee Unique ID	Prior Employee Separate Date (Transfer out of ESD)	Duties and Responsibilities	
ER	Wetlands & Waters	2025-69	Envir. Science, Advisor	0.2	0.1	\$ 131,870	\$ 12,809		09/13/21		New Position	Reorganization	New Personnel			This position serves as Transmission Road and Right of Way and Generation Wetlands workstream support and as the Project level lead. In this space, this position leads technical project review and permitting, constraints analysis, strategy development, and impact avoidance and minimization. This position provides project-level wetlands analysis, such as waters resource jurisdictional determinations and permitting. This position leads engagement, communications, and coordination with state and federal wetlands/waters agencies for project-specific permits and represents SCE's interests. This position leads wetlands response to environmental incident analysis, corrective actions and resolutions (internal and external), agency enforcement actions, developing root cause analysis. This position participates in SCE Emergency response. This position identifies, provides recommendations or alternatives, mitigation opportunities, and operational opportunities for increased environmental compliance.	
ER	Wetlands & Waters	2025-70	Envir. Science, Advisor	0.2	0.1	\$ 131,870	\$ 12,809		09/06/22		Turnover	Turnover (Internal Transfer/Backfill)	New Personnel	2025-65	Internal Transfer/Backfill	This position serves as Vegetation Management Wetlands workstream support and as the Project level lead. In this space, this position leads technical project review and permitting, constraints analysis, strategy development, and impact avoidance and minimization. This position provides project-level wetlands analysis, such as waters resource jurisdictional determinations and permitting. This position leads engagement, communications, and coordination with state and federal wetlands/waters agencies for project-specific permits and represents SCE's interests. This position leads wetlands response to environmental incident analysis, corrective actions and resolutions (internal and external), agency enforcement actions, developing root cause analysis. This position participates in SCE Emergency response. This position identifies, provides recommendations or alternatives, mitigation opportunities, and operational opportunities for increased environmental compliance.	
ER	Construction Storm Water	2025-71	Envir. Sr Mgr	0.1	0.1	\$ 174,701	\$ 16,969		09/30/15							Please refer to "General Duties and Responsibilities" tab included for ER Division for general duties and responsibilities associated with this division and department.	
ER	Construction Storm Water	2025-72	Envir. Science, Advisor	0.1	0.1	\$ 131,870	\$ 12,809		04/17/17							Please refer to "General Duties and Responsibilities" tab included for ER Division for general duties and responsibilities associated with this division and department.	
ER	Construction Storm Water	2025-73	Envir. Science, Advisor	0.1	0.1	\$ 131,870	\$ 12,809		09/30/15							Please refer to "General Duties and Responsibilities" tab included for ER Division for general duties and responsibilities associated with this division and department.	
ER	Construction Storm Water	2025-74	Envir. Science, Advisor	0.1	0.1	\$ 131,870	\$ 12,809		09/30/15							Please refer to "General Duties and Responsibilities" tab included for ER Division for general duties and responsibilities associated with this division and department.	
ER	Construction Storm Water	2025-75	Envir. Science, Sr Spec.	0.2	0.1	\$ 106,681	\$ 10,363		11/18/19							Please refer to "General Duties and Responsibilities" tab included for ER Division for general duties and responsibilities associated with this division and department.	
ER	Biological & Archaeological Resources	2025-76	Envir. Sr Mgr	1.0	1.0	\$ 174,701	\$ 169,692		01/06/20							Please refer to "General Duties and Responsibilities" tab included for ER Division for general duties and responsibilities associated with this division and department.	
ER	Biological & Archaeological Resources	2025-77	Envir. Science, Sr Advisor	0.0	1.0	\$ 151,171	\$ 146,837		09/30/15							Please refer to "General Duties and Responsibilities" tab included for ER Division for general duties and responsibilities associated with this division and department. Please note GRC Activity Environmental Programs reflected a labor under-run of \$0.3 million in the 2025 forecast compared to 2022 spend. This information is included in the excel attachment with SCE's response to PubAdv-SCE-059-FNZ Q2 (Follow Up), Cell B32. There was a reallocation of labor from GRC Activity Environmental Programs to GRC Activity Environmental Management and Development in the 2025 forecast, which increased 2025 labor for Environmental Management and Development, and reduced 2025 labor for Environmental programs for this personnel. Part of the FTE variance for this personnel is driven by this update. The FTE % also incorporates an estimated percentage of chargeback to ESD versus other OUs for programs and projects supported.	
ER	Biological & Archaeological Resources	2025-78	Envir. Science, Sr Advisor	0.0	1.0	\$ 151,171	\$ 146,837		09/25/15							Please refer to "General Duties and Responsibilities" tab included for ER Division for general duties and responsibilities associated with this division and department. Please note GRC Activity Environmental Programs reflected a labor under-run of \$0.3 million in the 2025 forecast compared to 2022 spend. This information is included in the excel attachment with SCE's response to PubAdv-SCE-059-FNZ Q2 (Follow Up), Cell B32. There was a reallocation of labor from GRC Activity Environmental Programs to GRC Activity Environmental Management and Development in the 2025 forecast, which increased 2025 labor for Environmental Management and Development, and reduced 2025 labor for Environmental programs for this personnel. Part of the FTE variance for this personnel is driven by this update. The FTE % also incorporates an estimated percentage of chargeback to ESD versus other OUs for programs and projects supported.	
ER	Biological & Archaeological Resources	2025-79	Envir. Science, Sr Advisor	0.0	0.5	\$ 151,171	\$ 73,419		09/30/15							Please refer to "General Duties and Responsibilities" tab included for ER Division for general duties and responsibilities associated with this division and department. Please note GRC Activity Environmental Programs reflected a labor under-run of \$0.3 million in the 2025 forecast compared to 2022 spend. This information is included in the excel attachment with SCE's response to PubAdv-SCE-059-FNZ Q2 (Follow Up), Cell B32. There was a reallocation of labor from GRC Activity Environmental Programs to GRC Activity Environmental Management and Development in the 2025 forecast, which increased 2025 labor for Environmental Management and Development, and reduced 2025 labor for Environmental programs for this personnel. Part of the FTE variance for this personnel is driven by this update. The FTE % also incorporates an estimated percentage of chargeback to ESD versus other OUs for programs and projects supported.	
ER	Biological & Archaeological Resources	2025-80	Envir. Science, Sr Advisor	0.0	0.2	\$ 151,171	\$ 36,709		09/30/15							Please refer to "General Duties and Responsibilities" tab included for ER Division for general duties and responsibilities associated with this division and department.	
ER	Biological & Archaeological Resources	2025-82	Envir. Science, Advisor	0.0	0.5	\$ 131,870	\$ 64,045		07/05/22		Turnover	Turnover (Departure from SCE)	New Personnel	2025-169	01/01/22	This position manages and negotiates the cultural requirements for politically sensitive and technically complex projects on behalf of SCE. The position provides subject matter expertise and develops company-wide archaeological compliance guidance to support utility projects and programs. This position also works collaboratively with internal and external stakeholders to develop balanced solutions that will allow SCE to complete its projects in a timely and cost-effective way while minimizing impacts to archaeological and historic resources.	
ER	Coastal & Mitigation Projects	2025-84	Envir. Sr Mgr	0.0	1.0	\$ 174,701	\$ 169,692	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Turnover	Turnover (Internal Transfer/Backfill)	Vacant as of 2022 Year End	2025-25	Internal Transfer/Backfill	This position is a manager of a group of advisors responsible for habitat mitigation, restoration, and the coastal permitting program for the company.	
ER	Coastal & Mitigation Projects	2025-85	Envir. Science, Sr Advisor	0.0	0.3	\$ 151,171	\$ 44,051		09/30/15							Please refer to "General Duties and Responsibilities" tab included for ER Division for general duties and responsibilities associated with this division and department.	
ER	Coastal & Mitigation Projects	2025-86	Envir. Science, Sr Advisor	0.9	0.8	\$ 151,171	\$ 117,470		09/30/15							Please refer to "General Duties and Responsibilities" tab included for ER Division for general duties and responsibilities associated with this division and department.	
ER	Coastal & Mitigation Projects	2025-87	Envir. Science, Advisor	0.4	0.6	\$ 131,870	\$ 76,854		09/30/15							Please refer to "General Duties and Responsibilities" tab included for ER Division for general duties and responsibilities associated with this division and department.	
ER	Coastal & Mitigation Projects	2025-88	Envir. Science, Advisor	0.0	0.7	\$ 131,870	\$ 96,067	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Turnover	Turnover (Departure from ESD, not SCE)	Vacant as of 2022 Year End	2025-171	0.5	11/07/22	This position manages environmental compliance mitigation requirements supporting SCE's infrastructure projects. This position establishes habitat restoration project objectives and manages timelines, risk analysis, project milestones, and budgets. This position represents the Company through interaction with federal, state, and local environmental regulatory agencies to negotiate habitat restoration sign-off. This position develops habitat restoration regulatory analysis and compliance guidance, oversees restoration for multiple projects and Programs, and serve as an SCE Representative for Tier 1 contracting.
ER	Coastal & Mitigation Projects	2025-89	Envir. Science, Advisor	0.1	0.5	\$ 131,870	\$ 64,045		09/30/15							Please refer to "General Duties and Responsibilities" tab included for ER Division for general duties and responsibilities associated with this division and department.	
ER	Coastal & Mitigation Projects	2025-90	Envir. Science, Advisor	0.2	0.3	\$ 131,870	\$ 44,831		09/30/15							Please refer to "General Duties and Responsibilities" tab included for ER Division for general duties and responsibilities associated with this division and department.	
FEP	FEP	2025-91	Envir. Pim Mgr	1.0	1.0	\$ 192,977	\$ 187,445		09/13/21		Turnover	Turnover (Internal Transfer/Backfill)	New Personnel	2025-3	Internal Transfer/Backfill	The position is responsible for overseeing the Facility Environmental Program (FEP) Division that develops and implements environmental compliance and risk management strategies through environmental programs, policies, procedures that are aligned with ESD's environmental management system that helps ensure company-wide facility compliance with federal, state and local environmental laws and regulations. The FEP Division is responsible for developing and implementing facility-based compliance programs in the areas of air quality, industrial wastewater/effluent, drinking water, SPCC, PCBs, DDT, release reporting, hazardous waste and hazardous materials. In addition, the Division is responsible for successfully leading regulatory agency inspections across the entire utility service area.	

PubAdv-SCE-144-FNZ 02.f-h (2025 Labor Forecast, 2025 FTEs, 2022 FTEs)

Division	Department	Current Employee Unique ID	Labor Classification**	2022 FTE*	2023 FTE	Standard Labor Rate**	2025 Forecast	2022 Year End Status of Position	Hiring Date*** (Transfer into ESD Department)	Separate Date**** (Transfer out of ESD Department)	Category (New Position, Turnover)	Category Details	Methodology of Filling New Position or Turnover	Prior Employee Unique ID	Prior Employee Separate Date (Transfer out of ESD)	Duties and Responsibilities	
FEP	FEP	2025-92	Administrative Assistant, Senior	1.0	1.0	\$ 72,704	\$ 70,620		09/30/15							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Air Quality	2025-93	Envir. Sr Mgr	1.0	1.0	\$ 174,701	\$ 169,692		04/24/17							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Air Quality	2025-94	Envir Science, Sr Advisor	1.0	1.0	\$ 151,171	\$ 146,837		08/27/18							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Air Quality	2025-95	Envir Science, Sr Advisor	1.0	1.0	\$ 151,171	\$ 146,837		09/30/15							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Air Quality	2025-96	Envir Science, Sr Advisor	1.0	1.0	\$ 151,171	\$ 146,837		05/11/20							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Air Quality	2025-97	Envir Science, Sr Spec	0.0	1.0	\$ 106,691	\$ 103,632	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Turnover	Turnover (Internal Transfer/Backfill)	Vacant as of 2022 Year End	2025-98		Internal Transfer/Backfill This position serves as a subject matter expert (SME) for Air Quality Area Source compliance. This compliance area includes emissions monitoring, recordkeeping, and reporting related to dust from construction, chemical use, and asbestos compliance as required by the federal, state, and air districts' regulations.	
FEP	Air Quality	2025-98	Envir Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		09/30/15		Turnover	Turnover (Departure from ESD, not SCE)	Internal Transfer/Backfill	2025-172	06/21/21	This position serves as a subject matter expert (SME) for Climate Change and Sustainability compliance, including corporate greenhouse gas accounting, regulatory compliance related to refrigerant and halon, and Low Carbon Fuel Standard (LCFS) reporting. The greenhouse gas accounting is crucial in transparency and accurately disclosing emissions from SCE's operation in the Corporate Sustainability Reports. The California Resources Board (CARB) regulates LCFS, which is designed to reduce the average carbon intensity of transportation fuels and support transportation electrification. SCE is required to file quarterly and annual reports to CARB. SCE is subject to various refrigeration rules and regulations at federal, state, and local district levels. The SME is responsible for recordkeeping and reporting as required by the LCFS and refrigeration regulations.	
FEP	Air Quality	2025-99	Envir Science, Sr Advisor	0.3	1.0	\$ 151,171	\$ 146,837		09/26/22		Turnover	Turnover (Departure from ESD, not SCE)	New Personnel	2025-173	0.4	05/28/22	This position serves as a subject matter expert (SME) for Air Quality Mobile Source compliance. This compliance area includes emissions monitoring, recordkeeping, and reporting related to dust from construction, chemical use, and asbestos compliance as required by the federal, state, and air districts' regulations.
FEP	Facility Programs	2025-100	Envir. Sr Mgr	1.0	1.0	\$ 174,701	\$ 169,692		11/28/16							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Facility Programs	2025-101	Envir Science, Sr Advisor	1.0	1.0	\$ 151,171	\$ 146,837		09/30/15							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Facility Programs	2025-102	Envir Science, Sr Advisor	0.4	1.0	\$ 151,171	\$ 146,837		08/08/22		Turnover	Turnover (Departure from SCE)	New Personnel	2025-174	0.7	09/10/22	This position manages both the state and federal reporting requirements to meet hazardous materials and spill prevention control and counter measurement plans for SCE facilities that meets regulatory requirements. This includes ensuring accurate chemical inventory reporting, facility site maps, and emergency response notifications.
FEP	Facility Programs	2025-103	Envir Science, Sr Advisor	0.9	1.0	\$ 151,171	\$ 146,837		09/30/15							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Facility Programs	2025-104	Envir Science, Sr Advisor	0.7	0.8	\$ 151,171	\$ 117,470		09/30/15							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Facility Programs	2025-105	Envir Science, Sr Advisor	1.0	1.0	\$ 151,171	\$ 146,837		11/28/16							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Facility Programs	2025-106	Envir Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		06/24/19		New Position	Utilization of internal staff versus consultants to pursue efficiencies and cost savings	Internal Transfer/Backfill			This position helps SCE ensure compliance with the Consent Decree, which includes meeting numerous new and complex requirements at SCE facilities. The Consent Decree requires implementation of new measures including: i) development of detailed storm water maps and keep new housekeeping logs, ii) development and roll out training to employees and contractors, iii) construct Best Management Practices (BMPs) such as roofs over pole areas or biofiltration well systems, iv) implementation of BMPs such as mechanical sweeping, storm inlet maintenance, and covered/leaded wood waste bins, v) conduct monthly and annual inspections, and vi) conduct storm water sampling at biofiltration areas to meet Dioxin and Penta limits. In addition, this position supports the SCE Pesticide Program and facility stormwater and waste discharge requirements.	
FEP	Facility Programs	2025-107	Sr Engineer 1	1.0	1.0	\$ 156,951	\$ 152,063		09/30/15							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Facilities North	2025-108	Envir. Sr Mgr	1.0	1.0	\$ 174,701	\$ 169,692		07/25/16							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Facilities North	2025-109	Envir Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		07/25/16							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Facilities North	2025-110	Envir Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		03/19/18							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Facilities North	2025-111	Envir Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		12/05/16							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Facilities North	2025-112	Envir Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		07/25/16							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Facilities North	2025-113	Envir Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		07/25/16							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Facilities North	2025-114	Envir Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		03/22/21							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Facilities North	2025-115	Envir Science, Advisor	0.4	1.0	\$ 131,870	\$ 128,090		08/15/22		Turnover	Turnover (Departure from SCE)	New Personnel	2025-175	0.3	05/07/22	This position is primarily responsible for environmental compliance of facilities (e.g. Bishop/Mammoth). This includes performing weekly inspections, monthly inspections, and facilitating agency inspections. This position is responsible for all environmental compliance programs associated with environmental operations of these facilities.
FEP	Facilities South	2025-116	Envir. Sr Mgr	1.0	1.0	\$ 174,701	\$ 169,692		09/30/15							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Facilities South	2025-117	Envir Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		09/30/15							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Facilities South	2025-118	Envir Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		04/22/19							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Facilities South	2025-119	Envir Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		09/30/15							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Facilities South	2025-120	Envir Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		10/30/17							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Facilities South	2025-121	Envir Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		06/24/19							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Facilities South	2025-122	Envir Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		09/16/19							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Facilities South	2025-123	Envir Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		09/30/15							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Major Facilities	2025-124	Envir. Sr Mgr	1.0	1.0	\$ 174,701	\$ 169,692		07/25/16							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Major Facilities	2025-125	Envir Science, Advisor	0.9	1.0	\$ 131,870	\$ 128,090		02/14/22		Turnover	Turnover (Departure from SCE)	New Personnel	2025-176	09/24/21	The position executes the company's compliance responsibilities for numerous environmental disciplines (e.g., air quality, hazardous waste, hazardous materials, facility inspection, water quality). This position escorts regulatory agency personnel in conducting environmental inspections and resolves compliance issues. This position routinely make decisions regarding implementation of regulatory requirements as delineated in air permits for five natural-gas-fired peaker electricity generating stations (Peakers) and SCE's environmental standards and manuals. This position is responsible for assuring compliance with regulatory requirements at facility and field locations and appropriately raising non-compliance issues through the management structure. This position also serves as a primary point of contact on environmental issues for operating personnel and perform other duties and responsibilities as assigned.	

PubAdv-SCE-144-FNZ 02.f-h (2025 Labor Forecast, 2025 FTEs, 2022 FTEs)

Division	Department	Current Employee Unique ID	Labor Classification**	2022 FTE*	2023 FTE	Standard Labor Rate**	2025 Forecast	2022 Year End Status of Position	Hiring Date**** (Transfer into ESD Department)	Separate Date**** (Transfer out of ESD Department)	Category (New Position, Turnover)	Category Details	Methodology of Filling New Position or Turnover	Prior Employee Unique ID	Prior Employee Separate Date (Transfer out of ESD)	Duties and Responsibilities	
FEP	Major Facilities	2025-126	Envir. Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		11/29/16							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Major Facilities	2025-127	Envir. Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		04/11/16							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Major Facilities	2025-128	Envir. Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		09/14/15							Please refer to "General Duties and Responsibilities" tab included for FEP Division for general duties and responsibilities associated with this division and department.	
FEP	Major Facilities	2025-129	Envir. Science, Advisor	0.0	1.0	\$ 131,870	\$ 128,090	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Turnover	Turnover (Internal Transfer/Backfill)	Vacant as of 2022 Year End	2025-148	Internal Transfer/Backfill	The position executes the company's compliance responsibilities for numerous environmental disciplines (e.g., air quality, hazardous waste, hazardous materials, facility response, water quality). This position escorts regulatory agency personnel in conducting environmental inspections and resolves compliance issues. This position routinely makes decisions regarding implementation of regulatory requirements for various facilities (e.g., General Offices, Westminster Combined Facility, Alhambra Combined Facility, Battery Energy Storage Systems Facilities) and SCE's environmental standards and manuals. This position is responsible for assuring compliance with regulatory requirements at facility and field locations and appropriately raising non-compliance issues through the management structure. This position also serves as a primary point of contact on environmental issues for operating personnel and performs other duties and responsibilities as assigned.	
EFO	EFO	2025-130	Envir. Pm Mgr	1.0	1.0	\$ 192,977	\$ 187,445		09/30/15	12/31/22						Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Field Operations	2025-131	Envir. Sr Mgr	1.0	1.0	\$ 174,701	\$ 169,692		07/25/16							Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Field Operations	2025-132	Envir. Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		07/25/16							Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Field Operations	2025-133	Envir. Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		11/29/16							Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Field Operations	2025-134	Envir. Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		07/25/16							Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Field Operations	2025-135	Envir. Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		07/25/16							Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Field Operations	2025-136	Envir. Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		07/25/16							Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Field Operations	2025-137	Envir. Science, Advisor	1.0	1.0	\$ 131,870	\$ 128,090		07/25/16							Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Field Operations	2025-138	Envir. Science, Advisor	0.3	1.0	\$ 131,870	\$ 128,090		09/12/22		Turnover	Turnover (Internal Transfer/Backfill)	New Personnel	2025-113	Internal Transfer/Backfill	This position is primarily responsible for responding to release reporting, spill response, and providing project support for field operations.	
EFO	Program & Project Support	2025-139	Envir. Sr Mgr	1.0	1.0	\$ 174,701	\$ 169,692		09/30/15							Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Program & Project Support	2025-140	Envir. Science, Advisor	0.7	0.7	\$ 131,870	\$ 96,067		03/13/17							Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Program & Project Support	2025-141	Envir. Science, Advisor	0.3	0.6	\$ 131,870	\$ 76,854		05/19/17							Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Program & Project Support	2025-142	Envir. Science, Sr Spec	1.0	1.0	\$ 106,691	\$ 103,632		01/07/19							Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Program & Project Support	2025-143	Envir. Science, Sr Spec	0.4	0.6	\$ 106,691	\$ 62,179		01/31/22							Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Program & Project Support	2025-144	Envir. Science, Sr Spec	0.9	0.9	\$ 106,691	\$ 93,269		08/29/17							Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Program & Project Support	2025-145	Envir. Science, Sr Spec	0.0	1.0	\$ 106,691	\$ 103,632	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Turnover	Turnover (Internal Transfer/Backfill)	Vacant as of 2022 Year End	2025-106	Internal Transfer/Backfill	This position is primarily responsible for supporting asbestos surveys and abatement activities.	
EFO	Remediation	2025-146	Envir. Sr Mgr	0.0	1.0	\$ 174,701	\$ 169,692	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Vacant as of 2022 Year End	Turnover	Turnover (Departure from SCE)	Vacant as of 2022 Year End			Employee departed from SCE prior to 2022. This position develops objectives, goals, metrics and budget for the Remediation Section that covers all activity within the area of responsibility of the section, provides leadership and strategic direction for the decommissioning of 4 KV substations, provides leadership and strategic direction to the Environmental Site Assessment program for the acquisition and divestiture of properties consistent with SCE's Environmental Remediation Liability Program/Standard, represents the company in negotiating terms and conditions with environmental regulatory agencies, and leads all aspects of site investigation and remediation activities. This position manages contracts with vendors performing site investigation and cleanup activities, performs all administrative and oversight duties of the direct reports including employee performance evaluations, collaborates with environmental analytical laboratories, develops and implements remedial strategies that will minimize the company's long-term liability, represents the company's interests by participating in working groups that coordinate the cleanup of Superfund sites, coordinates and provides strategic direction for the monitoring, tracking and reporting of activities for sites included in the Environmental Remediation Liability Program, and provides consulting regarding types of environmental site assessments to be performed for persons in Land Management, Corporate Real Estate, Project Management and in other sections of the Environmental Services Department. This position also provides project management and consultation in support of the remediation of a water pipeline on Catalina Island with coatings containing asbestos, PAHs and PCBs and approves all reports submitted to agencies under SCE's government reporting standard.	
EFO	Remediation	2025-147	Envir. Science, Sr Advisor	1.0	1.0	\$ 151,171	\$ 146,837		09/30/15							Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Remediation	2025-148	Envir. Science, Sr Advisor	1.0	0.8	\$ 151,171	\$ 117,470		07/25/16		Turnover	Turnover (Departure from SCE)	Internal Transfer/Backfill	2025-177	0.4	09/03/22	This position directs the investigation and cleanup of former electrical substation properties. This position manages the Environmental Site Assessment program for the acquisition and divestiture of properties consistent with SCE's Environmental Remediation Liability Standard, represents the company in negotiating terms and conditions with environmental regulatory agencies overseeing site investigation and remediation activities, manages contracts with vendors performing site investigation and cleanup activities, interface with environmental analytical laboratories, develops and implements remedial strategies that will minimize the company's long term liability, represents the company's interests by participating in working groups that oversee the cleanup of Superfund sites, monitors, tracks and reports on activities for sites included in the Environmental Remediation Liability Program, and provides consulting regarding types of environmental site assessments to be performed for persons in Land Management, Corporate Real Estate, Project Management and in other sections of the Environmental Services Department.
EFO	Remediation	2025-149	Envir. Science, Advisor	0.8	0.8	\$ 131,870	\$ 102,472		06/05/17							Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Material Test Lab	2025-150	Envir. Sr Sup	1.0	1.0	\$ 133,966	\$ 125,737		07/25/16							Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Material Test Lab	2025-151	Chemistry Tech Spec, Sr Spec	0.0	0.8	\$ 113,048	\$ 93,335		07/25/16							Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Material Test Lab	2025-152	Chemistry Tech Spec, Spec	0.0	0.8	\$ 87,835	\$ 72,519		07/25/16							Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Material Test Lab	2025-153	Chemistry Tech Spec, Spec	0.0	0.8	\$ 87,835	\$ 72,519		07/25/16							Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Material Test Lab	2025-154	Chemistry Tech Spec, Spec	0.0	0.8	\$ 87,835	\$ 72,519		07/25/16							Please refer to "General Duties and Responsibilities" tab included for EFO Division for general duties and responsibilities associated with this division and department.	
EFO	Material Test Lab	2025-155	Chemistry Tech Spec, Spec	0.0	0.8	\$ 87,835	\$ 72,519		06/27/22		Turnover	Turnover (Departure from ESD, not SCE)	New Personnel	2025-178	0.0	03/14/22	This position is primarily responsible for oil sample analysis that includes Polychlorinated biphenyls (PCBs) and substation transformers.

PubAdv-SCE-144-FNZ 02.f-h (2025 Labor Forecast, 2025 FTEs, 2022 FTEs)

Division	Department	Current Employee Unique ID	Labor Classification**	2022 FTE*	2025 FTE	Standard Labor Rate***	2025 Forecast	2022 Year End Status of Position	Hiring Date**** (Transfer into ESD Department)	Separate Date**** (Transfer out of ESD Department)	Category (New Position, Turnover)	Category Details	Methodology of Filling New Position or Turnover	Prior Employee Unique ID	2022 FTE*	Prior Employee Separate Date (Transfer out of ESD)	Duties and Responsibilities
EFO	Material Test Lab	2025-156	Chemistry Tech Spec, Spec	0.0	0.1	\$ 87,835	\$ 8,532		06/27/22		New Position	Utilization of internal staff versus consultants to pursue efficiencies and cost savings	New Personnel				This position includes a laboratory chemist to help perform oil analysis on substation equipment. The work was outsourced to vendors who have a slow turnaround timeframe on analytical results. Adding an internal laboratory chemist personnel at SCE's Material Test Lab department expedites turn-around timeframe on testing and analytical results and helps reduce operating costs. This position facilitates providing timely data to properly maintain transformers and early detection of transformer health. This position also helps improve reliability and provides a higher level of service over third-party vendors.
EFO	Material Test Lab	2025-157	Chemistry Tech Spec, Spec	0.0	0.1	\$ 87,835	\$ 8,532		09/28/22		New Position	Utilization of internal staff versus consultants to pursue efficiencies and cost savings	New Personnel				This position includes a laboratory chemist to help perform oil analysis on substation equipment. The work was outsourced to vendors who have a slow turnaround timeframe on analytical results. Adding an internal laboratory chemist personnel at SCE's Material Test Lab department expedites turn-around timeframe on testing and analytical results and helps reduce operating costs. This position facilitates providing timely data to properly maintain transformers and early detection of transformer health. This position also helps improve reliability and provides a higher level of service over third-party vendors.
EFO	Material Test Lab	2025-158	Chemistry Tech Spec, Spec	0.0	0.1	\$ 87,835	\$ 8,532		10/17/22		New Position	Utilization of internal staff versus consultants to pursue efficiencies and cost savings	New Personnel				This position includes a laboratory chemist to help perform oil analysis on substation equipment. The work was outsourced to vendors who have a slow turnaround timeframe on analytical results. Adding an internal laboratory chemist personnel at SCE's Material Test Lab department expedites turn-around timeframe on testing and analytical results and helps reduce operating costs. This position facilitates providing timely data to properly maintain transformers and early detection of transformer health. This position also helps improve reliability and provides a higher level of service over third-party vendors.
ESD	ESD		Intern	0.2	0.0	\$ -	\$ -										
ESD	ESD		Intern	0.2	0.0	\$ -	\$ -										
				96	105		\$ 14,892,922								3		

\*2022 recorded labor spend encompasses an amount for overhead paid absence costs. 2022 FTE incorporates an estimate of overhead paid absence hours included for each personnel.

\*\*Labor classification includes the personnel's position aligned with the position utilized in the 2025 forecast.

\*\*\*SCE utilized standard labor rates for labor classifications to calculate the 2025 GRC forecast of \$14.6 million

\*\*\*\*The date for the hiring date was pulled effective with the creation of ESD as a new department in September 2015. All employees show a transfer in as of that date. Some employees may have more than one record as they entered and left the department multiple times

For Internal Transfers/Backfills, please note the Hiring Date is the start date for when the employee transferred into Environmental Services Department. The Hiring Date does not reflect the date the employee started the position created by the Category of New Position or Turnover for ESD, which occurred during the 2021 and 2022 timeframe.

Similarly, the departure date is not available for internal transfers/backfills for new positions and turnovers if the personnel is still with ESD, as the personnel transferred positions within ESD but did not transfer out of ESD.

PubAdv-SCE-200-FNZ, Question 01.a-b

*Southern California Edison*  
*A.23-05-010 – SCE 2025 GRC*

**DATA REQUEST SET P u b A d v - S C E - 2 0 0 - F N Z**

**To: Public Advocates Office**  
**Prepared by: Katie Wong ESD**  
**Job Title: Advisor**  
**Received Date: 1/4/2024**

**Response Date: 1/8/2024**

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**Question 01.a-b Revised:**

Please provide (a) past five years (2018-2022) of recorded costs and the number of FTEs allocated to each of the following GRC sub-activities, (b) TY2025 forecasted amounts and number of FTEs for each GRC sub-activity:

- a. Environmental Management and Development
- b. Environmental Programs

**Response to Question 01.a-b Revised:**

SCE notes the categories referenced in this data request (e.g. Environmental Management and Development GRC Activity, Environmental Programs GRC Activity, etc.) are GRC activities vs. “GRC sub-activities” as stated in the question.

- a) SCE notes its O&M forecasts are developed at the GRC Activity level by Labor and Non-Labor expense standard GRC estimating methodologies that are based on historical recorded costs (e.g., Last Recorded Year (LRY), 5-Year average, etc.) More specifically, Test Year O&M labor forecasts are not solely developed using SCE’s departmental FTE headcounts, which fluctuate depending on the time of the year data is pulled and may vary in some cases from the presentation of SCE’s GRC which is activity-based. SCE does not have fully dedicated SCE personnel for this GRC activity. Rather, the employees that charge to this activity support and charge to multiple activities. To quantify SCE’s forecast in expected work, SCE used calculated dollar amounts correlating to forecast full-time equivalents to quantify the necessary funding required to Test Year 2025. Please see excel file “PubAdv-SCE-200-FNZ 01.a-b”.
  - SCE included information for the past five years (2018-2022) of recorded costs for Environmental Management and Development.
  - SCE calculated the number of FTEs equivalents charging to Environmental Management and Development for 2018-2022, and included information for methodology and assumptions utilized in calculation of the yearly FTEs equivalents in the excel attachment “PubAdv-SCE-200-FNZ 01.a-b”.
  - SCE included information for TY2025 forecasted amounts and the number of FTEs equivalents for Environmental Management and Development.
  - The number of FTEs equivalents are included for GRC activity Environmental Management and Development and not for each GRC sub-activity. The number of FTEs equivalents are associated with the labor spend and labor forecast.
  - Tab “ES Total Summary” includes 2018-2022 yearly spend and TY2025 forecast for

labor and non-labor. The number of FTEs equivalents are included under labor for Environmental Management and Development.

- Tab “ES Labor Summary” includes additional details and information for labor and number of FTEs equivalents. SCE included justification for the labor increase for the number of FTEs equivalents and spend between 2022 actuals and 2025 forecast. SCE also incorporated information for assumptions and calculations used for the number of FTEs equivalents for 2018-2022.
- b) SCE notes its O&M forecasts are developed at the GRC Activity level by Labor and Non-Labor expense standard GRC estimating methodologies that are based on historical recorded costs (e.g., Last Recorded Year (LRY), 5-Year average, etc.) More specifically, Test Year O&M labor forecasts are not developed using SCE’s departmental FTE headcounts, which fluctuate depending on the time of the year data is pulled and may vary in some cases from the presentation of SCE’s GRC which is activity-based. SCE does not have fully dedicated SCE personnel for this GRC activity. Rather, the employees that charge to this activity support and charge to multiple activities. To quantify SCE forecast in expected work, SCE used calculated full-time equivalents to quantify the necessary funding required to Test Year 2025. Please see excel file “PubAdv-SCE-200-FNZ 01.a-b”.
- SCE included information for the past five years (2018-2022) of recorded costs for Environmental Programs.
  - SCE calculated the number of FTEs equivalents charging to Environmental Programs for 2018-2022, and included information for methodology and assumptions utilized in calculation of the yearly FTEs equivalents in the excel attachment “PubAdv-SCE-200-FNZ 01.a-b”.
  - SCE included information for TY2025 forecasted amounts and number of FTEs equivalents for Environmental Programs.
  - The number of FTEs equivalents for 2022 and TY2025 forecast are included for GRC activity Environmental Programs and not for each GRC sub-activity. The number of FTEs equivalents are associated with the labor spend and labor forecast.
  - Tab “ES Total Summary” includes 2018-2022 yearly spend and TY2025 forecast for labor and non-labor. The number of FTEs equivalents are included under labor for Environmental Programs.
  - Tab “ES Labor Summary” includes additional details and information for labor and number of FTEs equivalents. SCE included justification for the labor decrease for the number of FTEs equivalents and spend between 2022 actuals and 2025 forecast. SCE also incorporated information for assumptions and calculations used for the number of FTEs equivalents for 2018-2022.

**Addendum as of 1/8/2024 for Environmental Management and Development (part a) and Environmental Programs (part b):**

- In SCE’s response to Cal Advocates PubAdv-SCE-200-FNZ 01.a-b, SCE previously was unable to impute historical 2018-2021 FTEs equivalents as SCE did not yet have a calculation methodology during that timeframe.
- SCE’s revised response provides an approximate and imputed FTE count for 2018-2021, utilizing a similar methodology as calculation of 2022 FTEs equivalents.

- Excel attachment “ES Labor Summary” tab has been updated to include Columns J, K, L, and M with information included for 2018-2021 FTEs equivalents. SCE also included information for the methodology and assumptions utilized in calculation of the yearly FTEs equivalents. No further changes were made to the original excel file titled “PubAdv-SCE-200-FNZ 01.a-b.xlsx”.

Revised PubAdv-SCE-200-FNZ Question 01.a-b

GRC Activity	Type	Category	2018 Actuals	2019 Actuals	2020 Actuals	2021 Actuals	2022 Actuals	2023 Forecast	2018 FTEs	2019 FTEs	2020 FTEs	2021 FTEs	2022 FTEs	2023 FTEs	2022 and 2023 Variance #	2022 and 2023 Variance FTEs	Notes (includes justification of increase between 2022 spend and 2023 forecast)
Environmental Management and Development	Labor	Labor Support for Planned/Existing Positions in ESD's Work Force	\$ 9,839,812	\$ 9,837,569	\$ 10,152,959	\$ 10,081,165	\$ 12,483,343	\$ 14,592,622	70	70	68	69	89	105	\$ 2,109,879	16	In SCE's response to PubAdv-SCE-144-FNZ Question 02.a-i, SCE included information about organizational changes made in 2021 and 2022, which included 16 new positions as part of a departmental reorganization and reassigning of positions. SCE's reorganization included twelve new positions to support updated processes for regulatory intake, risk assessments, monitoring and assessing control effectiveness, incident management, cause evaluation, and training and communications related to environmental performance, and aligns environmental staff to support work related to growing wildfire mitigation, vegetation management, and grid hardening programs and projects. In 2022, SCE incorporated four new positions to pursue efficiencies and cost savings whenever possible through utilization of internal staff versus consultants to support environmental activities. These positions support transformer oil testing and analysis, and helps ensure compliance with the Consent Decree for storm water and disposal of solid wastes from SCE's storage of treated wood poles. These positions included an allocation of labor to Environmental Services O&M and other Operating Units (OUs). SCE also noted in this response that there was a high volume of vacancies in 2022, which were primarily due to backfills for new positions and turnovers of existing positions for Environmental Management and Development. SCE included additional information and details in the excel file "PubAdv-SCE-144-FNZ 02.1a" included with the response for the positions and vacancies in 2022. SCE also incorporated additional details for each position by division, department, and duties and responsibilities. SCE anticipates filling these positions in the 2025 forecast. In addition to the number and duration of vacancies that occur, 2022 labor spend is also dependent on the percentage of work that can be capitalized, charged directly to other Operating Units (OUs) or GRC activities (i.e., Environmental Programs), and changes in the number of positions necessary to maintain compliance with increasing Operations and Maintenance (O&M) work. As noted in row 8, GRC Activity Environmental Programs included a labor reduction of about 2 FTEs equivalents due to the FTEs and forecast being reallocated to GRC Activity Environmental Management and Development to align with the organizational structure. Another example includes FERC's disallowance for capitalization of long term post-construction restoration costs. FERC issued this order in June 2022. The 2025 forecast incorporates a higher percentage of labor to Environmental Management and Development (ESD O&M) for staff supporting this work due to this order.
Environmental Management and Development	Labor	Labor Support for New Positions in ESD's Work Force	\$ -	\$ -	\$ -	\$ -	\$ 2,301,995	\$ -	0	0	0	0	0	17	\$ 2,301,995	17	SCE estimates an increase of 17 FTEs totaling about \$2.3 million between 2022 actuals and 2025 forecast for new positions in ESD's work force. SCE included the justification for the labor increase of the new positions in SCE's response to PubAdv-SCE-099-FNZ Question 04.a-g. The justification for the new 17 positions are included in the excel file "PubAdv-SCE-099-FNZ Attachment 04.a-g" (04.a-g New Positions tab) included with the response.
Environmental Management and Development	Labor	STIP Adjustment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 879,087	0	0	0	0	0	0	\$ 879,087	0	SCE initially had \$979,087 as the amount attributable to Adjustment 3. This is incorrect. The correct amount as stated in PubAdv-SCE-008-FNZ Question 2.e is \$793,457. As noted in PubAdv-SCE-008-FNZ Q2 (Follow Up) response, this will be submitted as a correction in a future errata.
Environmental Management and Development Labor Total			\$ 9,839,812	\$ 9,837,569	\$ 10,152,959	\$ 10,081,165	\$ 12,483,343	\$ 17,774,903	70	70	68	69	89	122	\$ 5,290,660	33	
Environmental Programs	Labor	Labor Support for Planned/Existing Positions in ESD's Work Force	\$ 4,467,790	\$ 4,408,163	\$ 4,589,918	\$ 4,414,738	\$ 1,553,479	\$ 1,243,521	32	31	31	30	10	8.5	\$ (309,958)	-2	SCE included a decrease of about 2 FTEs equivalents for Environmental Programs in the 2025 forecast compared with 2022 actuals. This decrease incorporates an adjustment of labor allocation across Environmental Programs and Environmental Management and Development to align with the organizational structure.
Environmental Programs	Labor	STIP Adjustment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 91,449	0	0	0	0	0	0.0	\$ 91,449	0	
Environmental Programs Labor Total			\$ 4,467,790	\$ 4,408,163	\$ 4,589,918	\$ 4,414,738	\$ 1,553,479	\$ 1,334,970	32	31	31	30	10	8.5	\$ (218,509)	-2	
Environmental Services Labor Total			\$ 14,307,611	\$ 14,245,732	\$ 14,742,877	\$ 14,495,903	\$ 14,036,822	\$ 19,108,973	102	101	99	99	99	131	\$ 5,072,151	31	

Labor Support for Planned/Existing Positions in ESD's Work Force

SCE estimates an increase of 14 FTEs equivalents totaling about \$1.8 million between 2022 actuals and 2025 forecast for planned and/or existing positions in ESD's work force. This increase incorporates both GRC activities for Environmental Management and Development and Environmental Programs (Row 2 and Row 6) in SCE's response to PubAdv-SCE-144-FNZ Question 02.a-i. SCE included information about organizational changes made in 2021 and 2022, which included 16 new positions as part of a departmental reorganization and reassigning of positions. SCE's reorganization included twelve new positions to support updated processes for regulatory intake, risk assessments, monitoring and assessing control effectiveness, incident management, cause evaluation, and training and communications related to environmental performance, and aligns environmental staff to support work related to growing wildfire mitigation, vegetation management, and grid hardening programs and projects. In 2022, SCE incorporated four new positions to pursue efficiencies and cost savings whenever possible through utilization of internal staff versus consultants to support environmental activities. These positions support transformer oil testing and analysis, and helps ensure compliance with the Consent Decree for storm water and disposal of solid wastes from SCE's storage of treated wood poles. These positions included an allocation of labor to Environmental Services O&M and other Operating Units (OUs). SCE also noted in this response that there was a high volume of vacancies in 2022, which were primarily due to backfills for new positions and turnovers of existing positions for Environmental Management and Development. SCE included additional information and details in the excel file "PubAdv-SCE-144-FNZ 02.1a" included with the response for the positions and vacancies in 2022. SCE also incorporated additional details for each position by division, department, and duties and responsibilities. SCE anticipates filling these positions in the 2025 forecast. In addition to the number and duration of vacancies that occur, 2022 labor spend is also dependent on the percentage of work that can be capitalized, charged directly to other Operating Units (OUs) or GRC activities (i.e., Environmental Programs), and changes in the number of positions necessary to maintain compliance with increasing Operations and Maintenance work. An example includes FERC's disallowance for capitalization of long term post-construction restoration costs. FERC issued this order in June 2022. The 2025 forecast incorporates a higher percentage of labor to Environmental Management and Development (ESD O&M) for staff supporting this work due to this order. The increase of 14 FTEs equivalents is comprised of an increase of about 16 FTEs equivalents for Environmental Management and Development and a decrease of about 2 FTEs equivalents for Environmental Programs.

Labor Support for New Positions in ESD's Work Force

SCE estimates an increase of 17 FTEs totaling about \$2.3 million between 2022 actuals and 2025 forecast for new positions in ESD's work force (Row 3). SCE included the justification for the labor increase of the new positions in SCE's response to PubAdv-SCE-099-FNZ Question 04.a-g. The justification for the new 17 positions are included in the excel file "PubAdv-SCE-099-FNZ Attachment 04.a-g" (04.a-g New Positions tab) included with the response.

Total Labor Support for ESD's Work Force

SCE estimates an overall increase of 31 FTEs equivalents totaling approximately \$4.1 million between 2022 actuals and 2025 forecast for planned/existing positions and new positions in ESD's work force (Row 2, Row 3, and Row 6). This increase incorporates both GRC activities for Environmental Management and Development and Environmental Programs. This increase excludes 2025 STIP adjustments of approximately \$1 million (Row 4, Row 7).

Environmental Services Department includes staff who changes to multiple GRC activities in addition to the GRC activities for Environmental Management and Development and Environmental Programs.

SCE performed the below analysis to quantify FTEs equivalents in Year 2022 for Environmental Management and Development and Environmental Programs.

2022 FTEs Equivalents Notes

SCE utilized the below assumptions to obtain the number of estimated FTEs equivalents in 2022. For each GRC activity, SCE included the Environmental Services O&M cost centers with 2022 labor spend to obtain the number of hours charged to the cost centers. SCE incorporated an estimated number of paid absence overhead hours to the number of labor hours charged by personnel. This total number of labor hours is divided by 2080 hours to obtain FTE percentage for each personnel. SCE followed a similar process to calculate FTE percentages for labor costs charged to internal orders which settle to the Environmental Services O&M cost centers. In SCE's response to PubAdv-SCE-008-FNZ Question 02.a-d, SCE estimated about 91 FTEs equivalents for 2022 labor for Environmental Management and Development. SCE refined this estimate to about 89 FTEs equivalents for 2022 labor for Environmental Management and Development using the above calculations and assumptions. The estimate of about 89 FTEs equivalents was included in SCE's response to PubAdv-SCE-144-FNZ Question 02.a-i. Excel file "PubAdv-SCE-144-FNZ 02.1a", Tab "2025 Labor Forecast"

2018 through 2021 FTEs Equivalents Notes

SCE utilized the below assumptions to obtain the number of estimated FTEs equivalents from 2018 through 2021. SCE followed a similar process as calculation of 2022 FTEs. SCE also included the calculated paid absence overhead hours for labor charges allocated to the cost centers and internal orders. Prior years included a higher volume of internal orders and split percentage settlements of internal orders for cost centers which included both GRC activities for Environmental Management and Development and Environmental Programs. SCE included all Environmental Services O&M cost centers for both GRC activities with 2018 through 2021 labor spend. SCE utilized the primary internal orders for Environmental Services to calculate FTEs for labor costs charged directly to internal orders. SCE divided the total number of labor hours generally by 2080 hours to obtain FTE percentage. Majority of staff included 2080 hours for FTE % calculation. SCE incorporated some minor adjustments to reconcile total yearly labor spend for internal orders and cost centers. The FTE % was calculated for Environmental Services Department which included both GRC activities. SCE aligned the FTE percentage across Environmental Management and Development and Environmental Programs with the yearly spend for each GRC activity. SCE performed these same steps for calculation of 2022 FTEs and this number was closely aligned with the count of 2022 FTEs by each GRC activity calculated using the steps included under 2022 FTEs Equivalents Notes.

Revised PubAdv-SCE-200-FNZ Question 01.a-b

GRC Activity	Type	Category	2018 Actuals	2019 Actuals	2020 Actuals	2021 Actuals	2022 Actuals	2025 Forecast	2022 and 2025 Variance \$	2022 FTEs	2025 FTEs	2022 and 2025 Variance FTEs	Notes
Environmental Management and Development	Labor	Labor Support for Planned/Existing Positions in ESD's Work Force	\$ 9,839,812	\$ 9,837,569	\$ 10,152,959	\$ 10,081,165	\$ 12,483,343	\$ 14,592,922	\$ 2,109,579	89	105	16	Please see Tab "ES Labor Summary" for additional details and explanations for labor variance between 2022 spend and 2025 forecast.
Environmental Management and Development	Labor	Labor Support for New Positions in ESD's Work Force	\$ -	\$ -	\$ -		\$ -	\$ 2,301,995	\$ 2,301,995	0	17	17	Please see Tab "ES Labor Summary" for additional details and explanations for labor variance between 2022 spend and 2025 forecast.
Environmental Management and Development	Labor	STIP Adjustment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 879,087	\$ 879,087				
Environmental Management and Development	Non-Labor	Non-Labor Support	\$ 2,632,346	\$ 2,899,650	\$ 2,258,247	\$ 3,516,041	\$ 4,047,301	\$ 2,566,260	\$ (1,481,041)				The non-labor variance between 2022 spend and 2025 forecast is primarily due to ESD anticipating that costs for improvements to the Environmental Management System will not be needed in 2025 due to completion of this work.
<b>Environmental Management and Development Total</b>			<b>\$ 12,472,157</b>	<b>\$ 12,737,218</b>	<b>\$ 12,411,206</b>	<b>\$ 13,597,205</b>	<b>\$ 16,530,644</b>	<b>\$ 20,340,263</b>	<b>\$ 3,809,619</b>	<b>89</b>	<b>122</b>	<b>33</b>	
Environmental Programs	Labor	Labor Support for Planned/Existing Positions in ESD's Work Force	\$ 4,467,799	\$ 4,408,163	\$ 4,589,918	\$ 4,414,738	\$ 1,553,479	\$ 1,243,521	\$ (309,958)	10	8.5	-2	Please see Tab "ES Labor Summary" for additional details and explanations for labor variance between 2022 spend and 2025 forecast.
Environmental Programs	Labor	STIP Adjustment	\$ -	\$ -	\$ -		\$ -	\$ 91,449	\$ 91,449				
Environmental Programs	Non-Labor	Non-Labor Support	\$ 22,633,983	\$ 20,215,437	\$ 17,120,838	\$ 12,346,706	\$ 13,291,685	\$ 21,359,493	\$ 8,067,808				SCE included additional details and explanations for the non-labor variance between 2022 spend and 2025 forecast in the following responses: PubAdv-SCE-200-FNZ - 02.a-g PubAdv-SCE-200-FNZ - 03.a-c PubAdv-SCE-200-FNZ - 04.a-f PubAdv-SCE-200-FNZ - 05.a-f PubAdv-SCE-200-FNZ - 06.a-e The justification of increase between 2022 spend and 2025 forecast is included in excel attachment "PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06", Tab "2018-2025 (Summary)"
<b>Environmental Programs Total</b>			<b>\$ 27,101,782</b>	<b>\$ 24,623,600</b>	<b>\$ 21,710,756</b>	<b>\$ 16,761,445</b>	<b>\$ 14,845,164</b>	<b>\$ 22,694,463</b>	<b>\$ 7,849,299</b>	<b>10</b>	<b>8.5</b>	<b>-2</b>	
<b>Environmental Services Total</b>			<b>\$ 39,573,940</b>	<b>\$ 37,360,818</b>	<b>\$ 34,121,962</b>	<b>\$ 30,358,650</b>	<b>\$ 31,375,808</b>	<b>\$ 43,034,726</b>	<b>\$ 11,658,918</b>	<b>99</b>	<b>131</b>	<b>31</b>	

Type	GRC Activity	2018 Actuals	2019 Actuals	2020 Actuals	2021 Actuals	2022 Actuals	2025 Forecast	2022 and 2025 Variance \$
Labor	Environmental Management and Development	\$ 9,839,812	\$ 9,837,569	\$ 10,152,959	\$ 10,081,165	\$ 12,483,343	\$ 17,774,003	\$ 5,290,660
Labor	Environmental Programs	\$ 4,467,799	\$ 4,408,163	\$ 4,589,918	\$ 4,414,738	\$ 1,553,479	\$ 1,334,970	\$ (218,509)
<b>Labor Total</b>		<b>\$ 14,307,611</b>	<b>\$ 14,245,732</b>	<b>\$ 14,742,877</b>	<b>\$ 14,495,903</b>	<b>\$ 14,036,822</b>	<b>\$ 19,108,973</b>	<b>\$ 5,072,151</b>

Type	GRC Activity	2018 Actuals	2019 Actuals	2020 Actuals	2021 Actuals	2022 Actuals	2025 Forecast	2022 and 2025 Variance \$
Non-Labor	Environmental Management and Development	\$ 2,632,346	\$ 2,899,650	\$ 2,258,247	\$ 3,516,041	\$ 4,047,301	\$ 2,566,260	\$ (1,481,041)
Non-Labor	Environmental Programs	\$ 22,633,983	\$ 20,215,437	\$ 17,120,838	\$ 12,346,706	\$ 13,291,685	\$ 21,359,493	\$ 8,067,808
<b>Non-Labor Total</b>		<b>\$ 25,266,329</b>	<b>\$ 23,115,086</b>	<b>\$ 19,379,085</b>	<b>\$ 15,862,747</b>	<b>\$ 17,338,986</b>	<b>\$ 23,925,753</b>	<b>\$ 6,586,767</b>

Type	GRC Activity	2018 Actuals	2019 Actuals	2020 Actuals	2021 Actuals	2022 Actuals	2025 Forecast	2022 and 2025 Variance \$
Labor, Non-Labor	Environmental Management and Development	\$ 12,472,157	\$ 12,737,218	\$ 12,411,206	\$ 13,597,205	\$ 16,530,644	\$ 20,340,263	\$ 3,809,619
Labor, Non-Labor	Environmental Programs	\$ 27,101,782	\$ 24,623,600	\$ 21,710,756	\$ 16,761,445	\$ 14,845,164	\$ 22,694,463	\$ 7,849,299
<b>Total</b>		<b>\$ 39,573,940</b>	<b>\$ 37,360,818</b>	<b>\$ 34,121,962</b>	<b>\$ 30,358,650</b>	<b>\$ 31,375,808</b>	<b>\$ 43,034,726</b>	<b>\$ 11,658,918</b>

Revised PubAdv-SCE-008-FNZ, Question 02.a-d,g-h  
(New Positions)

*Southern California Edison*  
*A.23-05-010 – SCE 2025 GRC*

**DATA REQUEST SET P u b A d v - S C E - 0 0 8 - F N Z**

**To: Public Advocates Office**  
**Prepared by: Katie Wong ESD**  
**Job Title: Advisor**  
**Received Date: 1/4/2024**

**Response Date: 1/8/2024**

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**Question 02.a-d,g-h Revised:**

Referring to Exhibit SCE-06, Vol. 06, p. 14, lines 21-29, SCE states that for Environmental Services forecast for Test Year (TY) 2025, there is an increase of \$5.29 million in labor costs over the recorded base year 2022. \$4.4 million is due to new internal positions, and the remainder of the increase is attributable to an adjustment to reflect certain changes made to SCE's employee compensation program. Please provide the following information:

- a. Title of each new position along with the breakdown of the \$4.4 million for the new positions SCE is requesting.
- b. Duties associated with the new positions, and the justification to hire for the new positions.
- c. Provide a copy of the study/assessment SCE has performed to determine the benefits of hiring new employees. If SCE has not conducted a study/assessment to determine the need and benefits of hiring new employees, please explain why not.
- d. A copy of all calculations and documentation used to support the forecast of the new positions.
- g. FERC account numbers to which the expenses are assigned.
- h. Provide all of the requested information in an Excel sheet.

**Response to Question 02.a-d,g-h Revised:**

- a. SCE would also like to clarify that SCE's reference to the "new internal positions" on lines 21-22 on page of Exhibit SCE-06, Vol. 06A refers to both new positions forecasted for 2025 that did not exist in 2022, as well as positions were vacant in 2022 and not fully accounted for in SCE's 2022 recorded labor amount.

Please see excel attachment PubAdv-SCE-008-FNZ - 02.a-d.xlsx. In the excel attachment, the tab referring to "New Positions" refers to those new positions that SCE forecasted in its May 2023 GRC Application would be necessary in 2025 that did not exist in 2022, while the tab referring to "Planned Positions" includes positions that had been vacant in 2022.

- b. Please see excel attachment PubAdv-SCE-008-FNZ - 02.a-d.xlsx
- c. SCE's 2025 GRC forecast, as prepared during the early part of 2023 and filed in May of 2023, reflects an increase in anticipated labor needs in 2025 as compared to 2022, to support increased workload expected in 2025. However, as with all forward-looking forecasts like this, the specific timing and number of positions filled may be impacted by various factors over the next few years such as emergent business needs, increased or changed regulatory requirements or legislative directives, or changes in operational circumstances or needs that were not reasonably anticipated or known at the time that SCE developed its 2025 GRC

forecasts for direct testimony. The Environmental Services' 2025 GRC forecast utilized information from a preliminary organizational assessment initiated in 2022 (performed by Ernst & Young) to determine the duties and classifications of the positions that were projected to be necessary in 2025. The new positions listed in PubAdv-SCE-008-FNZ - 02.a-d.xlsx (02.b New Positions tab) were based on information from SCE's evaluation of the preliminary study and our overall assessment of ESD's current and anticipated work. The Ernst & Young organizational assessment is included with this response submittal.

- d. Please see excel attachment PubAdv-SCE-008-FNZ - 02.a-d.xlsx
- g. SCE assumes the question is referring to what GRC activities the FERC accounts to which the expenses are assigned are 920/921.
- h. Please see Excel file referenced above.

**Addendum as of 1/8/2024 for 02.c:**

SCE includes the below information as a follow-up submittal for Cal Advocates Data Request PubAdv-SCE-008-FNZ 02.c:

- Attached, please find Ernst & Young's (EY) organizational assessment with this response. Please see PDF attachment "ESD Org Design Target Operating Model".
- EY's organizational assessment helps determine the number of additional positions needed to fulfill the new operating model's requirements. The new positions will allow SCE to implement the necessary enhancements and systematic improvements to strengthen SCE's Environmental Management System and support a significant increase in construction and maintenance activities needed for wildfire resiliency, grid modernizations, and green energy transformation, combined with increasing applicable regulatory requirements to ensure compliance performance for operations of this complexity and size.
- EY's organizational assessment provides the framework for a new operating model to align with industry standards and best practices including ISO 14001 Environmental Management System Standard. The new operating model includes new capabilities and streamlines core functions of the department to align with an Environmental Management System approach through:
  - Formation of Advisory services with dedicated Business Partners and frontline services supported by generalists and specialists
  - Separation of Compliance and Assurance activities to form a new independent Assurance function
  - Governance activities to align Environmental Services Department to Environmental Management System
  - Aligning Execution services to streamline service delivery
- The new operating model also delineates a comprehensive list of essential work type priorities within each function (e.g., Advisory includes strategic and upfront early engagement with operations, assurance includes conducting facility, field, and project compliance assessments and documenting opportunities for process improvements).

Southern California Edison - 2025 GRC  
 Data Request PubAdv-SCE-008-FNZ-02.b  
 O&M Expenses  
 2022 Constant \$

**2025 Labor Forecast for New Positions**

GRC Activity	Function	Labor Classification	Description	FTE	2025 Forecast
Environmental Management and Development	Sustainability	Envir, Sr Mgr	Sustainability position (1 FTE) is needed to develop and implement environmental impact mitigation strategies. Effective sustainability strategies that reduce environmental impacts and optimize operational processes lead to improved operational outcomes, including improving health and safety, reducing costs, mitigating compliance risks, and better serving our customers and communities. In addition to reducing emissions in support of the Governor's 2045 Net-Zero goal, SCE must expand its data management and reporting capabilities to comply with the new Environmental, Social, & Governance (ESG) and climate-related disclosure regulations proposed by the Securities and Exchange Commission (SEC), the Department of Defense (DoD), and the General Services Administration (GSA). This additional FTE will lead the development and implementation of sustainable business strategies in the areas of procurement, supply chain management, transportation, energy use, waste reduction, water use reduction, biodiversity, and other climate-related issues, to ensure regulatory compliance, reduce costs, and mitigate long-term risks.	1	\$ 174,701
Environmental Management and Development	Governance	Envir Science, Advisor	Governance positions (5 FTEs) will be responsible for implementation of a company-wide Environmental Management System (EMS). The EMS will help SCE efficiently and effectively manage increasing environmental risks and compliance obligations associated with the significant growth in construction activities to support interconnection of utility-scale renewables, wildfire resiliency, and grid modernization, as well as the increase in California's environmental regulations (e.g. new and proposed threatened and endangered species listings, water quality regulations, and air quality regulations). These positions will develop digital compliance tools, monitor compliance control effectiveness, develop and track environmental communications and training, manage and maintain critical business records related to environmental compliance, lead remedial and corrective action programs, develop and implement compliance performance metrics including leading indicators to prevent noncompliance, and insource Geographic Information System (GIS) schema support for environmental resources and compliance (e.g., biological, archaeological, wetlands and waters).	5	\$ 659,350
Environmental Management and Development	Assurance	Envir Science, Mgr	Assurance position (1 FTE) is needed to manage the development and implementation of environmental compliance oversight programs to assure compliance with all applicable environmental laws and regulations. This second line of defense function is necessary to assure implementation of permit requirements and compliance controls by field personnel. Compliance assurance programs involve observation of crews performing work to assess effectiveness of environmental controls, interviewing crews to ensure understanding of environmental requirements, and collecting and analyzing data on compliance performance to inform continuous improvement of environmental performance and risk reduction.	1	\$ 136,785
Environmental Management and Development	Assurance	Envir Science, Sr Advisor	Assurance positions (3 FTEs) are needed to implement environmental compliance oversight programs to assure compliance with all applicable environmental laws and regulations. This second line of defense function is necessary to assure implementation of permit requirements and compliance controls by field personnel. Compliance assurance programs involve observation of crews performing work to assess effectiveness of environmental controls, interviewing crews to ensure understanding of environmental requirements, and collecting and analyzing data on compliance performance to inform continuous improvement of environmental performance and risk reduction.	3	\$ 453,512
Environmental Management and Development	Execution Support	Envir Science, Advisor	Execution support positions (2 FTEs) are needed to oversee acquisition and implementation of permit and other compliance obligations for construction activities, including interconnection of utility-scale renewables, wildfire resiliency, and grid modernization. These positions would be responsible for obtaining project permits, land permits, and entitlements for renewable interconnections, transmission line and substation construction. In addition, these positions will manage implementation of permit and other environmental compliance requirements during construction, including overseeing biological and archaeological monitors, construction stormwater compliance activities, and air quality inspection and testing requirements.	2	\$ 263,740
Environmental Management and Development	Compliance	Envir Science, Mgr	Compliance position (1 FTE) is needed to provide oversight of air quality compliance obligations for asbestos management and portable generator use programs. SCE has experienced an increase in work volume and additional regulatory requirements for testing and reporting on removal of asbestos containing material and for portable generator use permitting and reporting requirements, resulting in the need for this position.	1	\$ 136,785
Environmental Management and Development	Compliance	Envir Science, Advisor	Compliance positions (2 FTEs) are needed to provide biological, archaeological, and cultural permitting and compliance activities associated with the significant growth in construction activities to support interconnection of utility-scale renewables, wildfire resiliency, and grid modernization, as well as the increase in California's environmental regulations (e.g. new and proposed threatened and endangered species listings, water quality regulations, and air quality regulations). Support includes developing survey strategies, guidance, and tools to identify, avoid, and minimize impacts to biological, archaeological, and cultural resources; engaging and negotiating with state and Federal wildlife protection agencies; and procuring and implementing permits and agreements to streamline operational requirements to comply with environmental laws and regulations.	2	\$ 263,740
Environmental Management and Development	Compliance	Envir Science, Sr Spec	Compliance positions (2 FTEs) are needed to support National Pollutant Discharge Elimination System programs, Spill Prevention Control and Countermeasures improvements, and hazardous and non-hazardous waste activities (i.e., waste activities include support for manifest, shipping documents, inputting into software, and tracking shipment of hazardous materials).	2	\$ 213,382
<b>Total</b>				<b>17</b>	<b>\$ 2,301,995</b>

**New ESD Positions in 2025 Forecast**

2025 labor forecast encompasses support for 17 new positions comprised of technical expertise to support implementation of Environmental Management System, as well as supporting the significant increase in construction and maintenance activities needed for wildfire resiliency, grid modernizations, and green energy transformation, combined with increasing applicable regulatory requirements to ensure compliance performance for operations of this complexity and size.

A photograph of a bird, possibly a flycatcher, perched on a branch of a plant with small, reddish-brown flowers. The background is a soft-focus natural setting.

# ESD Org Design Phase 2

*Finalized Target Operating Model  
& Definitions*

Energy for What's Ahead®



SOUTHERN CALIFORNIA  
**EDISON**®

Environmental  
Services Department

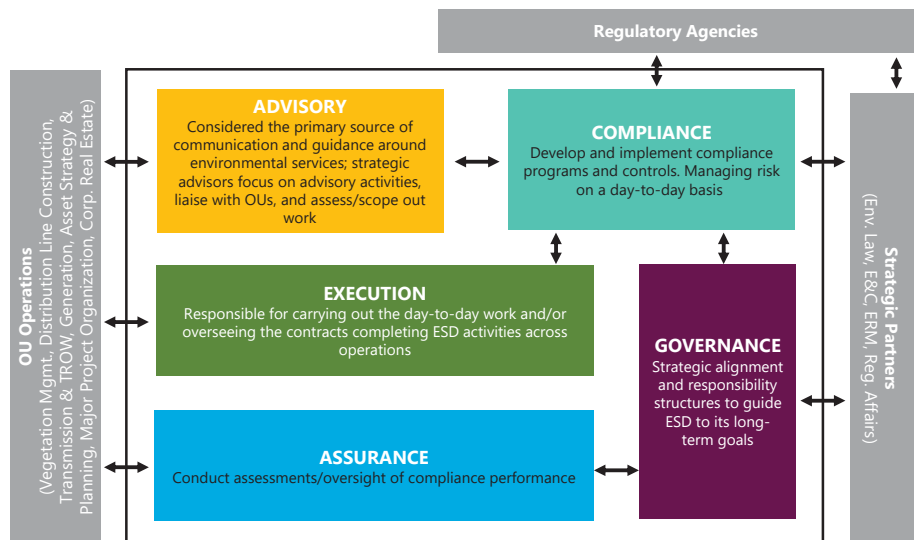
Integrate environmental stewardship into the company's culture

# ESD Target Operating Model

## Fostering Environmental Compliance and Stewardship to Drive Environmental Performance

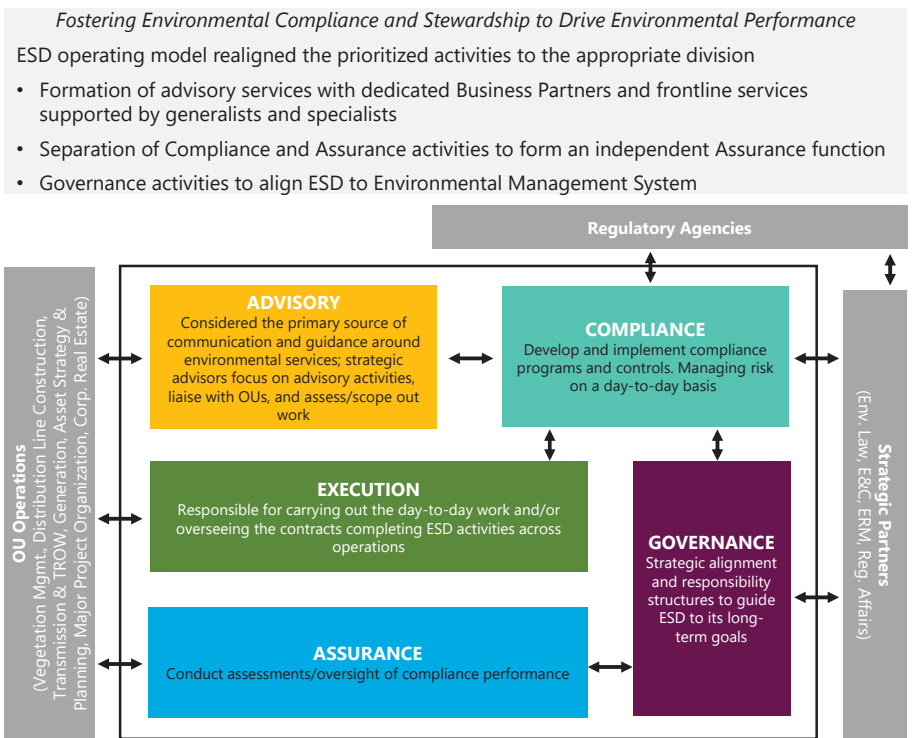
ESD operating model realigned the prioritized activities to the appropriate division

- Formation of advisory services with dedicated Business Partners and frontline services supported by generalists and specialists
- Separation of Compliance and Assurance activities to form an independent Assurance function
- Governance activities to align ESD to Environmental Management System



# ESD Target Operating Model

#	Relationship		Definition
1	ADVISORY	COMPLIANCE	Advisory to have knowledge of all Core Compliance Areas and Processes Therein
2	EXECUTION	COMPLIANCE	Compliance to create/update company-wide process & procedures based on regulatory requirements
3	GOVERNANCE	COMPLIANCE	Compliance to provide updates on any regulatory changes that impact ESD and its ways of working
4	ASSURANCE	GOVERNANCE	Assurance to provide field/facility/project assessment findings
5	GOVERNANCE	STRATEGIC PARTNERS	Collaboration focused on strategy, budgets, & capacity planning
6	COMPLIANCE	REGULATORY AGENCIES	Compliance as a main relationship owner and SCE advocate
7	COMPLIANCE	STRATEGIC PARTNERS	Coordination with Law, ERM, E&C for compliance related work
8	ADVISORY	OU OPERATIONS	Advisory to serve as a single point of contact for strategic planning and collaboration with OU operations including ASP, MPO, and Capital Projects & Programs
9	EXECUTION	OU OPERATIONS	Execution to respond to emergencies and manage scheduled work
10	ASSURANCE	OU OPERATIONS	Assurance to perform risk-based assessments of compliance performance in operations
11	REGULATORY AGENCIES	STRATEGIC PARTNERS	Regulatory Affairs team to be part of the relationship with External Environmental Agencies in coordination with ESD








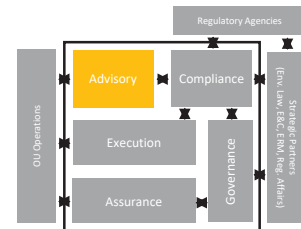
# ESD Target Operating Model Work Type Priorities

<p><b>ADVISORY</b> (General Contractor)</p> <ol style="list-style-type: none"> <li>1. Relationship Building with OU Operations (excludes Law, ERM, E&amp;C)</li> <li>2. Generalists with the Knowledge of all Core Compliance Areas and Processes Therein (What? Where? When? Why?)</li> <li>3. Strategic and Upfront Early Engagement with OU Operations to Understand OU Operations and Strategy, Anticipate Work and Provide Environmental Requirements for OU Operations &amp; Stakeholders</li> <li>4. Monitor, communicate, and facilitate solutions (when needed) for ESD service level agreements and OU environmental (incident) performance</li> <li>5. Identify opportunities for continuous improvement of service delivery</li> </ol>	<p><b>ASSURANCE</b> (Checker)</p> <ol style="list-style-type: none"> <li>1. Conduct facility compliance assessments</li> <li>2. Conduct field compliance assessments</li> <li>3. Conduct project compliance assessments</li> <li>4. Conduct compliance assessments as a first line for ESD execution work type to complete compliance activities (spill response checks etc.)</li> <li>5. Coordinate, attend and document results of agency compliance inspections</li> <li>6. Document compliance findings and make recommendation (where appropriate) to Ensure Timely Resolution of Nonconforming Conditions</li> <li>7. Identify opportunities for continuous improvement and share it with Governance</li> <li>8. MTL Lab QA/QC and independent assessments</li> </ol>
<p><b>COMPLIANCE</b> (Trade Specialists)</p> <ol style="list-style-type: none"> <li>1. Analysis, advocacy and change management for new or changing regulations</li> <li>2. Coordination with Law, ERM, E&amp;C for compliance issues</li> <li>3. Development, implementation and continuous improvement of compliance program documentation (Standards, Manuals, Policies &amp; Procedure, Compliance Controls &amp; Control Points, Provide Content For Training)</li> <li>4. Develop Controls Compliance Programs to Ensure Performance is Monitored via Metrics</li> <li>5. Agency permitting and reporting for assigned compliance areas:</li> <li>6. Risk rank incidents, assist in development of corrective actions and monitor compliance program effectiveness</li> <li>7. Respond to agency compliance actions (I.E. NTC/NOV, Compliance Order, Settlement Order)</li> <li>8. Provide Compliance SME Input to Select and Guide Contractors (i.e., identify technical profiles, verify qualifications, score etc.)</li> <li>9. Provide technical guidance to environmental project managers when requested</li> <li>10. Project Planning and Communication with External Agencies</li> </ol>	<p><b>EXECUTION</b></p> <ol style="list-style-type: none"> <li>1. Oversees the Project / Site Specific Development of Work Plans (remediation, WCI, asbestos, etc.)</li> <li>2. Respond to Spills, Coordinate Bee Abatements, Implement WCIs.</li> <li>3. Manage and Dispose of Hazardous Waste</li> <li>4. Perform regulatory required inspections (weekly hazardous storage area, SPCC inspections and constructions storm water BMP inspections)</li> <li>5. Oversee/coordinate/manage Natural Resource Monitoring and/or Nesting Bird Surveys</li> <li>6. Oversee/coordinate/manage Construction Stormwater Plans, construct BMPs and perform regulatory required inspections</li> <li>7. Facility compliance tasks or other execution activities (sign manifests, replace NFPA signs, verify inventories, etc.)</li> <li>8. Provide field oversight and direction to Execution Contractors</li> <li>9. Coordinate with external agencies related to execution work (on-site activities)</li> </ol>
<p><b>GOVERNANCE</b> (Eye)</p> <ol style="list-style-type: none"> <li>1. Environmental Management System administration, implementation, and continuous improvement <ul style="list-style-type: none"> <li>Compliance risk assessments</li> <li>Organizational and operational change management</li> <li>Maintain Central Processes for Regulatory Intake/Register, Controls Development/Register, Incident Management and Corrective Actions</li> <li>Develop and Deliver Training to OU Operations, OU Contractors, ESD Contractors, ESD Consultants.</li> </ul> </li> <li>2. Corporate, operational, and department performance reporting (KPM's, SLAs, Metrics, Dashboards, PowerBI.)</li> <li>3. Budget, GRC, goal development and monitoring</li> <li>4. Administration of P.O.'s, C.O.'s, invoices and permit payments</li> <li>5. Maintain Operating Model</li> <li>6. Lead the Development and Distribution of Communications within ESD and to OU Operations</li> <li>7. Develop the Environmental Program for SCE Contractors (e.g. Environmental Handbook for Contractors and Process/Procedure)</li> <li>8. Digital System Administration EHSync, Survey123, GIS, FRED, SmartSheet</li> </ol>	

# ESD Target Operating Model - Advisory Priorities


## ADVISORY (General Contractor)

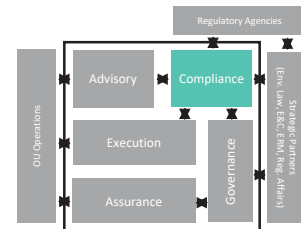
-  Relationship Building with OU Operations (excludes Law, ERM, E&C)
-  Generalists with the knowledge of all core compliance areas and processes therein as well as strong business acumen (What? Where? When? Why?)
-  Strategic and Upfront Early Engagement with OU Operations to Understand OU Operations and Strategy, Anticipate Work and Provide Environmental Requirements for OU Operations & Stakeholders
-  Monitor, communicate, and facilitate solutions (when needed) for ESD service level agreements and OU environmental (incident) performance
-  Identify opportunities for continuous improvement of service delivery



# ESD Target Operating Model - Compliance Priorities

## COMPLIANCE (Trade Specialists)

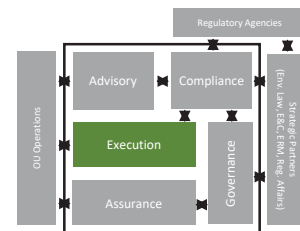
-  Analysis, advocacy and change management for new or changing regulations
-  Coordination with Law, ERM, E&C for compliance issues
-  Development, implementation and continuous improvement of compliance program documentation (Standards, Manuals, Policies & Procedure, Compliance Controls & Control Points, Provide Content For Training)
-  Develop Controls Compliance Programs to Ensure Performance is Monitored via Metrics
-  Agency permitting and reporting for assigned compliance areas
-  Risk rank incidents, assist in development of corrective actions and monitor compliance program effectiveness
-  Respond to agency compliance actions (I.E. NTC/NOV, Compliance Order, Settlement Order)
-  Provide Compliance SME Input to Select and Guide Contractors (i.e., identify technical profiles, verify qualifications, score etc.)
-  Provide technical guidance to environmental project managers when requested
-  Project Planning and Communication with External Agencies



## ESD Target Operating Model - Execution Priorities









### EXECUTION

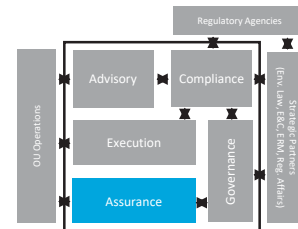
-  Oversees the Project / Site Specific Development of Work Plans (remediation, WCI, asbestos, etc.)
-  Respond to Spills, Coordinate Bee Abatements, Implement WCIs.
-  Manage and Dispose of Hazardous Waste
-  Perform regulatory required inspections (weekly hazardous storage area, SPCC inspections and constructions storm water BMP inspections)
-  Oversee/coordinate/manage Natural Resource Monitoring and/or Nesting Bird Surveys
-  Oversee/coordinate/manage Construction Stormwater Plans, construct BMPs and perform regulatory required inspections
-  Facility compliance tasks or other execution activities (sign manifests, replace NFPA signs, verify inventories, etc.)
-  Provide field oversight and direction to Execution Contractors
-  Coordinate with external agencies related to execution work (on-site activities)



# ESD Target Operating Model - Assurance Priorities









## ASSURANCE (Checker)

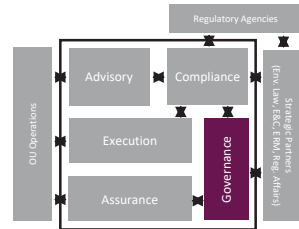
-  Conduct facility compliance assessments
-  Conduct field compliance assessments
-  Conduct project compliance assessments
-  Conduct compliance assessments as a first line for ESD execution work type to complete compliance activities (spill response checks etc.)
-  Coordinate, attend and document results of agency compliance inspections
-  Document compliance findings and make recommendation (where appropriate) to Ensure Timely Resolution of Nonconforming Conditions
-  Identify opportunities for continuous improvement and share it with Governance
-  MTL Lab QA/QC and independent assessments



# ESD Target Operating Model - Governance Priorities

## GOVERNANCE (Eye)

- 
 Environmental Management System administration, implementation, and continuous improvement:
  - a. Compliance risk assessments
  - b. Organizational and operational change management
  - c. Maintain Central Processes for Regulatory Intake/Register, Controls Development/Register, Incident Management and Corrective Actions
  - d. Develop and Deliver Training to OU Operations, OU Contractors, ESD Contractors, ESD Consultants.
- 
 Corporate, operational, and department performance reporting (KPM's, SLAs, Metrics, Dashboards, PowerBI)
- 
 Budget, GRC, goal development and monitoring
- 
 Administration of P.O.'s, C.O.'s, invoices and permit payments
- 
 Maintain Operating Model
- 
 Lead the Development and Distribution of Communications within ESD and to OU Operations
- 
 Develop the Environmental Program for SCE Contractors (e.g. Environmental Handbook for Contractors and Process/Procedure)
- 
 Digital System Administration EHSync, Survey123, GIS, FRED, SmartSheet



PubAdv-SCE-144-FNZ, Question 06.a-d

*Southern California Edison*  
*A.23-05-010 – SCE 2025 GRC*

**DATA REQUEST SET P u b A d v - S C E - 1 4 4 - F N Z**

**To: Public Advocates Office**  
**Prepared by: Katie Wong ESD**  
**Job Title: Advisor**  
**Received Date: 8/31/2023**

**Response Date: 9/15/2023**

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**Question 06.a-d:**

Referring to data request “PubAdv-SCE-059-FNZ Q2 Follow Up” SCE provides TY2025 forecast for the Environmental Programs non-labor costs as follows:

- Adjustment 1: \$3,796,428 for additional environmental support of Transmission Road and Right of Way (TROW) work ;
- Adjustment 2: \$1,016,183 for New environmental programs/activities;
- Adjustment 3: \$1,439,472 for additional environmental support for various programs (e.g., waste disposal, air quality, Hazardous Material Business Plan/Spill Prevention Control and Countermeasures (HMBP/SPCC), etc.);
- Adjustment 4: \$1,752,206 for Marine Mitigation Programs;
- Adjustment 5: \$63,519 for Miscellaneous costs and adjustments.

Please provide the following information:

- a. Identify the above mentioned amounts in the data request response “PubAdv-SCE-059-FNZ” provided to Cal Advocates on 8.21.2023.
- b. Identify the corresponding historical amounts for five years from 2018 through 2022.
- c. Provide cost analysis prepared by SCE that justify these costs over the recorded 2022 costs.
- d. Provide the activities included in the miscellaneous cost and adjustment category.

**Response to Question 06.a-d:**

- a) On 8/21/2023, SCE provided two spreadsheets, one addressing Q.01 Follow Up ("01 Follow Up\_PubAdv-SCE-059-FNZ Q.01 Follow Up Attachment.xlsx") and the other addressing Q.02 Follow Up ("02 Follow Up\_PubAdv-SCE-059-FNZ Q2 Follow Up.xlsx").

SCE would like to clarify that in this context, “Adjustment” does not refer to a Ratemaking Adjustment; rather, it refers to incremental costs to 2022 recorded costs. As such, these "Adjustment(s)" would not show up historically.

Adjustments 1 through 5 listed above (obtained from "02 Follow Up\_PubAdv-SCE-059-FNZ Q2 Follow Up.xlsx") are not going to be individually identifiable in "01 Follow Up\_PubAdv-SCE-059-FNZ Q.01 Follow Up Attachment.xlsx" as that spreadsheet contains SCE's 2022 recorded costs and our 2025 forecasted costs. The adjustments are increases/decreases from our 2022 recorded costs to our 2025 forecasted costs. For Historical Ratemaking Adjustment, please refer to WP SCE-07, Vol. 01, Book D, pp. 153-166

SCE included additional information and details for identification of the above adjustments. Please see excel attachment “PubAdv-SCE-144-FNZ 06.a-d”.

- b) SCE included the recorded 2022 spend for all of the above adjustments. SCE excluded 2018 through 2021 data as these adjustments were between 2022 recorded spend and 2025 forecast. Please see excel attachment “PubAdv-SCE-144-FNZ 06.a-d”.
- c) SCE included the information for the cost analysis prepared by SCE for the variance in costs between 2022 recorded spend and 2025 forecast. Please see excel attachment “PubAdv-SCE-144-FNZ 06.a-d”.
- d) SCE provided the activities included in the miscellaneous cost and adjustment category. Please see excel attachment “PubAdv-SCE-144-FNZ 06.a-d”.

PubAdv-SCE-144-FNZ 06.a-d (Summary)

GRC Activity: Environmental Programs (Non-Labor)	Constant 2022 \$	Notes
Environmental Programs (2022 Recorded - Non-Labor)	\$ 13,291,685	Testimony p. 20, Figure II-7
Adjustment 1: Additional environmental support of Transmission Road and Right of Way (TROW) work	\$ 3,796,428	SCE Exhibit 6 Volume 6 Testimony II.C.2.c)(2)(b) p. 23 lines 4-26 and p. 24 lines 1-4 and "EP TROW" tab This adjustment amount is for expenses for environmental support of Transmission Road and Right of Way activities. Environmental support costs include intake support, setup and execution support, nesting bird surveys, pre-construction surveys, and biological, waters, and cultural monitoring. Please see "EP TROW" tab. SCE included details for this information on this tab.
Adjustment 2: New environmental programs/activities	\$ 1,016,183	SCE Exhibit 6 Volume 6 Testimony II.C.2.c)(2)(b) p. 24 lines 5-21 and "EP New Programs" tab This adjustment amount is for expenses for pesticide compliance support, protocol surveys, environmental post-construction support for miscellaneous T&D projects, and environmental support for oil wells. Please see "EP New Programs" tab. SCE included details for this information on this tab.
Adjustment 3: Additional environmental support for various programs (e.g., waste disposal, Hazardous Material Business Plan/Spill Prevention Control and Countermeasures (HMBP/SPCC), etc.)	\$ 1,439,472	SCE Exhibit 6 Volume 6 Testimony II.C.2.c)(2)(b) p. 24 lines 22-29 and p. 25 lines 1-22 and "EP Additional Support" tab This adjustment amount is for expenses for Air Quality Compliance, Biological and Archaeological Programs (Avian Protection, GIS Support, Archaeology, Herpetology), National Pollutants Discharge Elimination System (NPDES) programs, Permitting Support, Generation Program, Hazardous and Non-Hazardous Waste Transportation and Disposal, Hazardous Material Business Plan/Spill Prevention Control and Countermeasures (HMBP/SPCC), Drinking Water, and Spill Response programs. Please see "EP Additional Support" tab. SCE included details for this information on this tab.
Adjustment 4: Marine Mitigation Programs	\$ 1,752,206	SCE Exhibit 6 Volume 6 Testimony II.C.2.c)(2)(b) p. 25 lines 23-29 and p. 26 lines 1-7 and "EP Marine Mitigation" tab This adjustment amount is for expenses for Reef Maintenance and San Diego Wetlands. Please see "EP Marine Mitigation" tab. SCE included details for this information on this tab.
Adjustment 5: Miscellaneous costs and adjustments	\$ 63,519	Other miscellaneous costs and adjustments. This adjustment amount is for expenses related to miscellaneous costs and adjustments. Please see "EP Misc Costs and Adjustments" tab. SCE included details for this information on this tab.
<b>Total 2025 Forecast (2022 Recorded + Adjustment 1 + Adjustment 2 + Adjustment 3 + Adjustment 4 + Adjustment 5)</b>	<b>\$ 21,359,493</b>	Testimony p. 20, Figure II-7

**PubAdv-SCE-144-FNZ 06.a-d (EP TROW)**

Environmental Support for TROW	Amount
2025 Forecast (2022 Constant)	\$ 5,231,191
2022 Recorded (2022 Constant)	\$ 1,434,763
<b>Variance</b>	<b>\$ 3,796,428</b>

Category	Biological/ Waters Monitor	Cultural Monitor	Intake	Nesting Bird Surveys	Pre-Construction Surveys	Setup and Execution	Project Management	Geographic Information System (GIS)	Total
<b>Total</b>	<b>\$ 2,332,330</b>	<b>\$ 940,940</b>	<b>\$ 441,480</b>	<b>\$ 505,700</b>	<b>\$ 345,000</b>	<b>\$ 193,370</b>	<b>\$ 377,897</b>	<b>\$ 94,474</b>	<b>\$ 5,231,191</b>

Biological/Waters Monitor	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Lead Monitor	0	1	1	1	1	3	1	3	1	1	1	0	14
Monitor	0	0	8	6	2	4	3	4	2	6	4	0	39
<b>Total</b>	<b>\$ -</b>	<b>\$ 47,450</b>	<b>\$ 389,610</b>	<b>\$ 304,070</b>	<b>\$ 132,990</b>	<b>\$ 313,430</b>	<b>\$ 175,760</b>	<b>\$ 313,430</b>	<b>\$ 132,990</b>	<b>\$ 304,070</b>	<b>\$ 218,530</b>	<b>\$ -</b>	<b>\$ 2,332,330</b>

Cultural Monitor	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Lead Monitor	0	0	0	0	0	0	0	0	0	0	0	0	0
Monitor	0	0	4	4	1	2	2	1	1	4	3	0	22
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 171,080</b>	<b>\$ 171,080</b>	<b>\$ 42,770</b>	<b>\$ 85,540</b>	<b>\$ 85,540</b>	<b>\$ 42,770</b>	<b>\$ 42,770</b>	<b>\$ 171,080</b>	<b>\$ 128,310</b>	<b>\$ -</b>	<b>\$ 940,940</b>

Biological/Waters Monitor and Cultural Monitor	
Hours per day	12
Days per month	26
Rate (Lead Monitor)	\$ 125
Rate (Monitor)	\$ 110
Per Diem	\$ 325

Intake	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Large Projects	\$ 10,100	\$ 10,100	\$ 10,100	\$ 10,100	\$ 10,100	\$ 10,100	\$ 10,100	\$ 10,100	\$ 10,100	\$ 10,100	\$ 10,100	\$ 10,100	\$ 121,200
Medium Projects	\$ 15,630	\$ 15,630	\$ 15,630	\$ 15,630	\$ 15,630	\$ 15,630	\$ 15,630	\$ 15,630	\$ 15,630	\$ 15,630	\$ 15,630	\$ 15,630	\$ 187,560
Small Projects	\$ 11,060	\$ 11,060	\$ 11,060	\$ 11,060	\$ 11,060	\$ 11,060	\$ 11,060	\$ 11,060	\$ 11,060	\$ 11,060	\$ 11,060	\$ 11,060	\$ 132,720
<b>Total</b>	<b>\$ 36,790</b>	<b>\$ 36,790</b>	<b>\$ 36,790</b>	<b>\$ 36,790</b>	<b>\$ 36,790</b>	<b>\$ 36,790</b>	<b>\$ 36,790</b>	<b>\$ 36,790</b>	<b>\$ 36,790</b>	<b>\$ 36,790</b>	<b>\$ 36,790</b>	<b>\$ 36,790</b>	<b>\$ 441,480</b>

Intake Details	
Large Projects (Number of Projects)	1
Medium Projects (Number of Projects)	2
Small Projects (Number of Projects)	2
Project Manager (PM) Rate	\$ 165
Subject Matter Expert (SME) Rate	\$ 135
Geographical Information System (GIS) Rate	\$ 125
Support Rate	\$ 95

Intake Calculations	PM	SME	GIS	Support
Large Projects	12	38	20	8
Medium Projects	8	30	15	6
Small Projects	4	24	10	4

Nesting Bird Surveys	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Nesting Bird Lead (NBL)	0	1	1	1	1	1	1	0	0	0	0	0	6
Surveyor	0	1	2	2	1	1	1	0	0	0	0	0	8
<b>Total</b>	<b>\$ -</b>	<b>\$ 72,800</b>	<b>\$ 107,250</b>	<b>\$ 107,250</b>	<b>\$ 72,800</b>	<b>\$ 72,800</b>	<b>\$ 72,800</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 505,700</b>

Nesting Bird Surveys Details	
Hours per day	10
Days per month	26
Rate (NBL)	\$ 115
Rate (Survey)	\$ 100
Per Diem	\$ 325

**PubAdv-SCE-144-FNZ 06.a-d (EP TROW)**

Pre-Construction Surveys	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Surveyor Days	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 300,000
Nesting Bird Lead/Task Lead	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 30,000
Field Reporting Environmental Database Admin	\$ 625	\$ 625	\$ 625	\$ 625	\$ 625	\$ 625	\$ 625	\$ 625	\$ 625	\$ 625	\$ 625	\$ 625	\$ 7,500
Geographical Information System	\$ 625	\$ 625	\$ 625	\$ 625	\$ 625	\$ 625	\$ 625	\$ 625	\$ 625	\$ 625	\$ 625	\$ 625	\$ 7,500
<b>Total</b>	<b>\$ 28,750</b>	<b>\$ 28,750</b>	<b>\$ 28,750</b>	<b>\$ 28,750</b>	<b>\$ 28,750</b>	<b>\$ 28,750</b>	<b>\$ 28,750</b>	<b>\$ 28,750</b>	<b>\$ 28,750</b>	<b>\$ 28,750</b>	<b>\$ 28,750</b>	<b>\$ 28,750</b>	<b>\$ 345,000</b>

Pre-Construction Surveys Details		
Rate (Survey)	\$ 100	100%
Rate (Task)	\$ 115	10%
Rate (Admin)	\$ 95	2.5%
Rate (GIS)	\$ 125	2.5%
Per Diem	\$ 325	
Hours/Day	10	

Setup and Execution	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Total	\$ 16,114	\$ 16,114	\$ 16,114	\$ 16,114	\$ 16,114	\$ 16,114	\$ 16,114	\$ 16,114	\$ 16,114	\$ 16,114	\$ 16,114	\$ 16,114	\$ 193,370

Setup and Execution Details	Sr Mgr	Sr Adv	Adv	SME
Hours Per Month	8	30	80	100
Rate	\$ 85	\$ 73	\$ 64	\$ 73

**Notes**

Environmental Service Department's (ESD) forecast is based upon projection of environmental O&M support for an annual estimate of approximately 2,100 miles of road work for TROW circuits. The estimate is dependent on the number of crew and when the work will occur. Number of crews equate to 2 teams of 3 operators (grader, water truck, crew truck). Separate crews require more monitors and crews working in close proximity can reduce monitoring. To support the number of TROW crews, standard ESD loading is 2 biologists and 1 cultural (based on execution methodology for supporting other SCE work) unless SCE knows resource deficiencies when it will drop to 1 biologist and 1 cultural monitor. Assume 6 days week, 12 hours days, 26 days per month, \$325 daily per diem. Monitor ranges from \$110/hr to \$125/hr for regular and lead monitor. Monitor calculation: # Monitor x rate/hr x hours/day x days/month + daily per diem. Assume each circuit work will require biological and cultural desktop and field verification along with supporting documentation. Incorporated setup and execution support for TROW circuits. Surveyor days assume 25 miles per month, 1 per day per mile. Pre-Construction surveys include relocation activities. Project Management is estimated at 10% of Monitoring and Nesting Bird Surveys. GIS is estimated at 2.5% of Monitoring and Nesting Bird Surveys. SCE's annual forecast includes an estimated number of miles for TROW work and is also dependent upon other internal planning constraints, such as scheduling, crew availability and competing work priorities.

PubAdv-SCE-144-FNZ 06.a-d (EP New Programs)

Environmental Support for New Programs/Activities	Amount
2025 Forecast (2022 Constant)	\$ 1,016,183
2022 Recorded (2022 Constant)	\$ -
<b>Variance</b>	<b>\$ 1,016,183</b>

New Environmental Programs/Activities	2025 Forecast	Notes
Pesticide Compliance Support	\$ 49,020	<u>Pesticide Compliance Support</u> : ESD included an estimate of \$0.05 million for pesticide compliance support. This program is to ensure environmental compliance with Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requirements.
Protocol Surveys	\$ 294,118	<u>Protocol Surveys</u> : ESD included an estimate of \$0.3 million for performing protocol surveys for listed species, candidate species for listing, and other sensitive species to determine their presence in specific areas within SCE's facilities. In prior years, SCE relied on a utility exemption for California Endangered Species Act (CESA) endangered and threatened plants species. CDFW clarified that the exemption did not apply to CESA threatened plants, thereby, resulting in the need for SCE to perform surveys for these species. Also, SCE obtained a Yosemite toad permit needed to perform critical wildfire mitigation work, and the permit includes requirements to conduct surveys to ensure SCE avoids species impacts. These protocol surveys can result in the reduction of future environmental costs by providing information on the species presence or absence in specific areas. ESD's 2025 forecast includes approximately 7 biologists performing surveys for a duration of about 6 weeks.
Environmental post-construction support for miscellaneous T&D projects	\$ 570,105	<u>Environmental Post-Construction Support for Miscellaneous T&amp;D Projects</u> : ESD included an estimate of \$0.57 million for environmental post-construction support for miscellaneous T&D projects. Some T&D projects require multi-year erosion monitoring after completion of construction. ESD's 2025 forecast encompasses environmental support for T&D projects with these types of post-construction environmental requirements. ESD included support for identified projects with environmental requirements (e.g., Utah 12kV waters monitoring, Gould-Sylmar erosion monitoring, Lugo-Mohave Footing restoration). ESD included a forecast of \$0.32 million based on approximately \$45,000 per project for 7 known projects with these types of requirements. ESD also included support for other potential projects with post-construction environmental requirements. ESD included a forecast of \$0.25 million based on approximately \$40,000 per project for about 6 projects with these types of requirements
Environmental support for oil wells	\$ 102,941	<u>Environmental Support for Oil Wells</u> : ESD included an estimate of \$0.1 million for environmental support for oil wells. ESD has been required to address three historical oil wells that were identified by the California Department of Conservation Geologic Energy Management Division. The three historical wells were identified and subject to a determination if they are considered inaccessible or will require actions to secure and abandon them. Third party consultants with expertise in oil well abandonment will be required to ensure SCE meets all the regulatory requirements of the process.
<b>Total</b>	<b>\$ 1,016,183</b>	

**PubAdv-SCE-144-FNZ 06.a-d (EP Additional Support)**

Additional Environmental Support for Programs/Activities	Amount
2025 Forecast (2022 Constant)	\$ 5,392,720
2022 Recorded (2022 Constant)	\$ 3,953,249
Variance	\$ 1,439,472

Additional Environmental Support for Programs/Activities	2025 Forecast	2022 Recorded	Variance	Notes
Air Quality Compliance	\$ 1,402,524	\$ -	\$ 1,402,524	<p><u>Air Quality Compliance:</u> 2025 forecast = \$1.4 million, 2022 recorded spend = \$1.03 million, Increase = \$0.37 million</p> <p>2025 forecast assumptions of \$1.4 million:</p> <ul style="list-style-type: none"> <li>i) \$0.3 million (includes chemical compliance analysis, notifications, permitting, plan approvals, ensure compliance of Volatile Organic Compounds materials, etc.)</li> <li>ii) \$0.7 million (includes RECLAIM/Tile V/Pebble Beach HRA, air quality reporting for facilities and project applications, emission trading credits, generation facilities including Pebble Beach, Mountainview, Five Peakers).</li> <li>iii) \$0.4 million (includes corporate sustainability report metrics, six indices and scorecards reporting, Scope 3 expansion, Forest GHG project, SEC reporting, other miscellaneous support)</li> <li>iv) Costs have been increasing due to regulatory amendments and adoptions related to Catalina Repower, fuel dispensing, refrigerant, portable generators, Sulfur Hexafluoride equipment, asbestos, and corporate greenhouse gas accounting. The 2025 forecast includes additional costs to account for anticipated new compliance requirements based on California's clean air roadmaps, the Security Exchange Commission's information disclosure requirements, and incorporation of regulation amendments and adoptions by agencies (i.e., Forest Greenhouse Gas project). Additional rules and regulations may also be amended and adopted by U.S. Environmental Protection Agency, California Air Resources Board, South Coast Air Quality Management District, and other local air districts. These updates can result in the issuance of additional compliance guidance on greenhouse gas mitigation, health risk assessment, and California Environmental Quality Act analyses. The 2025 forecast includes additional support for this work, as well as regulatory changes related to permitting, monitoring, recordkeeping, and reporting requirements. ESD's 2025 forecast incorporates support for chemical compliance analysis, notifications, permitting, plan approvals, ensures compliance of Volatile Organic Compounds materials, and provides support for additional compliance framework developments for asbestos, fugitive dust, chemical compliance, and Low Carbon Fuel Standard (LCFS). The 2025 forecast also includes support for RECLAIM/Tile V/Pebble Beach Health Risk Assessment (HRA), air quality reporting for facilities and project applications, emission trading credits, generation facilities (e.g., Pebble Beach, Mountainview, Five Peakers), Corporate Sustainability Report metrics, six indices and scorecards reporting, Scope 3 expansion, Forest Greenhouse Gas project, and Securities and Exchange Commission (SEC) report, and other miscellaneous program support.</li> <li>v) Please note 2022 recorded spend of \$1.03 million for Air Quality Compliance was included under GRC Activity Environmental Management and Development, with 2025 forecast of \$1.4 million included in GRC Activity Environmental Programs. This was due to accounting settlement issues for several programs. This is the reason 2022 recorded spend is \$0 for Air Quality Compliance for GRC Activity Environmental Programs. Please see SCE's response to data request "PubAdv-SCE-144-FNZ 04.a-d".</li> </ul>
Biological and Archaeological Programs (Avian Protection, GIS Support, Archaeology, Herpetology)	\$ -	\$ 316,585	\$ (316,585)	<p><u>Biological and Archaeological Programs (Avian Protection, GIS Support, Archaeology, Herpetology):</u></p> <p>2025 forecast = \$0.38 million, 2022 recorded spend = \$0.32 million, Increase = \$0.06 million</p> <p>2025 forecast assumptions of \$0.38 million:</p> <ul style="list-style-type: none"> <li>i) \$0.12 million for Avian Protection (Provides support for responses to avian emergencies, nest removals, etc.)</li> <li>ii) \$0.12 million for Geographic Information System (GIS) (Provides support for data management, schema updates and maintenance, online map viewing tool support, etc.)</li> <li>iii) \$0.06 million for Archaeology Program (Provides support for archaeology program initiatives for SCE's work (e.g., Master Special Use Permit)</li> <li>iv) \$0.08 million for Herpetology Program (Desert Tortoise training program exploring resource management strategies around desert tortoise or other protected species)</li> <li>v) Please note 2025 forecast of \$0.38 million was included under GRC Activity Environmental Management and Development, with 2022 recorded spend of \$0.32 million included in GRC Activity Environmental Programs. This was due to accounting settlement issues for several programs. This is the reason 2025 forecast is \$0 for these programs for GRC Activity Environmental Programs. Please see SCE's response to data request "PubAdv-SCE-144-FNZ 04.a-d".</li> </ul>
National Pollutant Discharge Elimination Systems (NPDES) Programs	\$ -	\$ 469,169	\$ (469,169)	<p><u>National Pollutant Discharge Elimination Systems (NPDES) Programs:</u></p> <p>2025 forecast = \$0.35 million, 2022 recorded spend = \$0.47 million, Decrease = \$0.12 million</p> <p>2025 forecast assumptions of \$0.35 million:</p> <ul style="list-style-type: none"> <li>i) \$0.16 million for NPDES (General) (This program is for general NPDES support to ensure program compliance. 2025 forecast includes costs for various activities (e.g., reporting, installation of sea wells, permit renewals at Pebble Beach)</li> <li>ii) \$0.05 million for Industrial Storm Water (This program is for support of treated wood and facility storm water program. SCE estimated \$0.3 million annually for support of facility storm water program and consent decrees. A new position was added to the Environmental Services Department to pursue efficiencies and cost savings whenever possible through utilization of internal staff versus consultants to support environmental activities. This new internal position reduced consultant support in 2025 forecast).</li> <li>iii) \$0.06 million for Industrial Waste Water (This program is for support of industrial waste water program to comply with permit and/or ordinance requirements and includes consultant support and permitting costs)</li> <li>iv) \$0.08 million for Vault (This program is for compliance support with state regulated vault discharge requirements (e.g., permit renewal, sampling, monitoring, annual reports)</li> <li>v) Please note 2025 forecast of \$0.35 million was included under GRC Activity Environmental Management and Development, with 2022 recorded spend of \$0.47 million included in GRC Activity Environmental Programs. This was due to accounting settlement issues for several programs. This is the reason 2025 forecast is \$0 for NPDES for GRC Activity Environmental Programs. Please see SCE's response to data request "PubAdv-SCE-144-FNZ 04.a-d".</li> </ul>
Permitting Support	\$ 112,745	\$ 349,128	\$ (236,383)	<p><u>Permitting Support:</u></p> <p>2025 forecast = \$0.11 million, 2022 recorded spend = \$0.35 million, Decrease = \$0.24 million</p> <p>2025 forecast assumptions of \$0.11 million:</p> <ul style="list-style-type: none"> <li>i) \$0.11 million (includes permitting support of Bureau of Land Management (BLM) and Mohave National Preserve Desert Tortoise and non project specific work.</li> <li>2022 included additional costs for agency payment for U.S. Fish and Wildlife Services (USFWS) General Conservation plan (GCP). These costs were excluded from the 2025 forecast)</li> </ul>
Generation Program	\$ 73,529	\$ 79,528	\$ (5,999)	<p><u>Generation Program:</u></p> <p>2025 forecast = \$0.07 million, 2022 recorded spend = \$0.08 million, Decrease = \$0.01 million</p> <p>2025 forecast assumptions of \$0.07 million:</p> <ul style="list-style-type: none"> <li>i) \$0.07 million for Generation FERC license's ongoing requirements for environmental studies (e.g., invasive mussels, eagle surveys)</li> </ul>

PubAdv-SCE-144-FNZ 06.a-d (EP Additional Support)

Additional Environmental Support for Programs/Activities	2025 Forecast	2022 Recorded	Variance	Notes
Hazardous and Nonhazardous Waste Transportation and Disposal	\$ 2,039,216	\$ 1,318,013	\$ 721,203	<p><u>Hazardous and Nonhazardous Waste Transportation and Disposal</u>                      2025 forecast = \$2.04 million, 2022 recorded spend = \$1.3 million, Increase = \$0.72 million                      2025 forecast assumptions of \$2.04 million:                      ESD's 2022 recorded spend was \$1.32 million. ESD estimated 2023 environmental support will be \$1.62 million (project \$0.3 million increase above 2022 recorded spend). In the 2025 forecast, ESD incorporated an additional increase of approximately 25% above 2023 estimate of \$1.62 million. Waste management regulations require hazardous waste to be managed only by facilities that are approved and authorized to receive and process such waste. Environmental Services experienced issues with the availability of incinerators and other supply chain backlogs in 2022. The 2023 estimate and 2025 forecast includes additional costs to account for incinerator shortages, increased contractor rates, transportation fuel charges, and facility operations. This program's costs include disposal of federal and state regulated hazardous wastes from SCE operations include transformers, bushings, switches, used motor oil, lightbulbs, electronics, clarifier waste management, etc. Activities encompass drum disposal, bulk oil disposal, clarifier clean-out, hauling hazardous waste, performing inspections, and maintaining inventory. This program is driven by compliance and regulatory requirements to characterize, transport, and dispose of hazardous and nonhazardous waste properly and within the required time limits. Failure to comply with agency requirements may result in potential fines and penalties.</p>
Hazardous Material Business Plan/Spill Prevention Control and Countermeasures (HMBP/SPCC)	\$ 784,314	\$ 603,997	\$ 180,316	<p><u>Hazardous Material Business Plan/Spill Prevention Control and Countermeasures (HMBP/SPCC)</u>                      2025 forecast = \$0.78 million, 2022 recorded spend = \$0.6 million, Increase = \$0.18 million                      2025 forecast assumptions of \$0.78 million:                      ESD's 2022 recorded spend was approximately \$0.6 million. In the 2025 forecast, ESD included an estimate of \$0.78 million. The 2025 forecast encompasses an increase of \$0.18 million. The increase in 2025 forecast includes providing support for incoming backup generator deployments as well as any emerging activities. This program's activities encompass preparation of plans and performing updates and modifications to plans as needed. Updates are required by agencies on an annual basis, and modifications are required whenever there are changes to facilities, such as installation of new transformer. Failure to comply with agency requirements may result in potential fines and penalties.</p>
Drinking Water	\$ 833,333	\$ 748,233	\$ 85,100	<p><u>Drinking Water</u>                      2025 forecast = \$0.83 million, 2022 recorded spend = \$0.75 million, Increase = \$0.085 million                      2025 forecast assumptions of \$0.83 million:                      ESD's 2022 recorded spend was \$0.75 million. In the 2025 forecast, ESD included an estimate of \$0.83 million. The 2025 forecast encompasses an increase of \$0.085 million. ESD's 2025 forecast includes additional costs to implement regulated system procedures for SCE's regulated and unregulated drinking water systems, incorporate new State Water Resources Control Board requirements for sampling and pipe inventories, and support drought and water curtailment coverage and reporting. This program's activities encompass support for drinking water sampling, ensure drinking water standards meet compliance level, and provide support for well information data management, technical support for well issues, and database associated with wells. These activities help ensure safe and compliant drinking water at SCE's facilities and compliance with agency and regulatory requirements.</p>
Spill Response	\$ 147,059	\$ 68,595	\$ 78,463	<p><u>Spill Response</u>                      2025 forecast = \$0.15 million, 2022 recorded spend = \$0.07 million, Increase = \$0.08 million                      2025 forecast assumptions of \$0.15 million:                      ESD's 2022 recorded spend for this program was \$0.07 million. In the 2025 forecast, ESD included an estimate of \$0.15 million. The 2025 forecast encompasses an increase of \$0.08 million. ESD's 2025 forecast includes additional costs to support California Accidental Release Prevention facilities (CalARP) and Department of Transportation (DOT) requirements for prevention of chemical spills. ESD's 2025 forecast of \$0.15 million includes environmental management for CalARP support (includes regulatory inspections for CalARP facilities, tank reports, etc.), marine oil spill support, DOT support for safe transportation as spill prevention activity, and Polychlorinated Biphenyls (PCB) training for regulatory compliance purposes.</p>
<b>Total</b>	<b>\$ 5,392,720</b>	<b>\$ 3,953,249</b>	<b>\$ 1,439,472</b>	

PubAdv-SCE-144-FNZ 06.a-d (EP Marine Mitigation)

Environmental Support for Marine Mitigation	Amount
2025 Forecast (2022 Constant)	\$ 5,578,969
2022 Recorded (2022 Constant)	\$ 3,826,763
<b>Variance</b>	<b>\$ 1,752,206</b>

Environmental Support for Marine Mitigation	2025 Forecast	2022 Recorded	Variance	Notes
Reef Maintenance	\$ 2,253,254	\$ 1,498,454	\$ 754,800	<p><u>Reef Maintenance</u>: 2025 forecast = \$2.25 million, 2022 recorded spend = \$1.5 million, Increase = \$0.75 million 2025 forecast assumptions of \$2.25 million: The 2025 forecast includes a higher yearly escalation rate for the SONGS Mitigation Monitoring Program, based on historical trends of these agency payments to the California Coastal Commission. The 2022 recorded spend included an agency credit for these payments, which reduced 2022 recorded spend for Reef Maintenance, however such credits are not expected in future years. The 2025 forecast includes additional costs for sonar surveys for Reef Maintenance, which are required to be performed under the Coastal Development Permit (CDP) for Reef Maintenance. ESD's 2025 forecast of \$2.25 million for SCE's share of costs at 78.21% include approximately i) \$1.66 million for California Coastal Commission Mitigation Monitoring Program, ii) \$0.25 million for State Lands Commission lease fee, and iii) \$0.34 million for sonar surveys.</p>
San Dieguito Wetlands	\$ 3,325,715	\$ 2,328,309	\$ 997,406	<p><u>San Dieguito Wetlands</u>: 2025 forecast = \$3.3 million, 2022 recorded spend = \$2.3 million, Increase = \$1 million 2025 forecast assumptions of \$3.3 million: The 2025 forecast includes a higher yearly escalation rate for the SONGS Mitigation Monitoring Program, based on historical trends of these agency payments to the California Coastal Commission. The 2022 recorded spend included an agency credit for these payments, which reduced 2022 recorded spend for San Dieguito Wetlands, however such credits are not expected in future years. The 2025 forecast also includes additional costs for San Dieguito Wetlands restoration activities. Environmental Services will conduct Sediment and Analysis Plan (SAP) tests, as part of new agency requirements from U.S. Army Corps of Engineers (USACE) and Environmental Protection Agency (EPA) to check for sediments and contaminants. Environmental Services will also purchase and install plants each year, as required, to help meet restoration requirements. ESD's 2025 forecast of \$3.32 million for SCE's share of costs at 78.21% include approximately i) \$1.52 million for California Coastal Commission Mitigation Monitoring Program, ii) \$0.31 million for JPA payment, iii) \$0.64 million for inlet dredging, iv) \$0.56 million for restoration activities (includes purchase and installation of plants), v) \$0.19 million for beach profile surveys, and vi) \$0.1 million for permitting, reporting, berm inspections and coordination, and other miscellaneous support.</p>
<b>Total</b>	<b>\$ 5,578,969</b>	<b>\$ 3,826,763</b>	<b>\$ 1,752,206</b>	

PubAdv-SCE-144-FNZ 06.a-d (EP Misc Costs and Adjustments)

Miscellaneous Costs and Adjustments	Amount
2025 Forecast (2022 Constant)	\$ 4,140,429
2022 Recorded (2022 Constant)	\$ 4,076,909
<b>Variance</b>	<b>\$ 63,519</b>

Miscellaneous Costs and Adjustments	2025 Forecast	2022 Recorded	Variance	Notes
Weed Abatement	\$ -	\$ 879,622	\$ (879,622)	<u>Weed Abatement:</u> 2025 forecast = \$1.18 million, 2022 recorded spend = \$0.9 million, Increase = \$0.28 million Environmental support for weed abatement includes performing environmental reviews and providing field support (e.g., surveys, monitoring) for T&D's abatement of parcels. 2025 forecast for environmental support for Vegetation Management programs (including weed abatement) are included in Exhibit SCE-02_Vol. 10.
Biology Program, Biological GIS	\$ 573,529	\$ 165,291	\$ 408,238	<u>Biology Program and Biological GIS:</u> 2025 forecast = \$0.57 million, 2022 recorded spend = \$0.17 million, Increase = \$0.4 million 2025 forecast assumptions of \$0.57 million: In the 2025 forecast, SCE included additional costs to support various activities. SCE included i) \$0.24 million for biological program manager support to revamp standard clearance measures and associated crosswalk, perform updates to guidance documents, develop botany Master Special Use Permit (MSUP) guidance, provide project management support to initiatives, coordinate with stakeholders, and facilitate processes, ii) \$0.17 million for tracking impacts, annual report preparation, Geographic Information System (GIS) development, permit implementation, reviewing biological water permitting habitat assessment, providing subject matter expert level support for addressing small mammals and invertebrates, and iii) \$0.17 million for improving biological range maps for species, including biological field surveys with ground truthing GIS data to improve range maps and support botany/biological programs for species (e.g., Amargosa vole, Mohave ground squirrel, Buena Vista lake ornate shrew, San Bernardino Kangaroo Rat in Riverside County, Coachella Valley fringe-toad lizard, Kern primrose sphinx moth, etc.) and guide development of measures to comply with permits/agency requirements. Ground truthing can help confirm whether species habitat are present and result in reduction of preconstruction surveys and monitoring costs.
Wetlands, Storm Water Pollution Prevention Plan (SWPPP)	\$ 727,680	\$ 414,472	\$ 313,208	<u>Wetlands and Storm Water Pollution Prevention Plan (SWPPP):</u> 2025 forecast = \$0.72 million, 2022 recorded spend = \$0.41 million, Increase = \$0.31 million i) Wetlands Program: 2025 forecast = \$0.54 million, 2022 recorded spend = \$0.38 million, Increase = \$0.16 million 2025 forecast assumptions of \$0.54 million: In the 2025 forecast, SCE included additional costs for Wetlands consultant support for Transmission Road and Right of Way work. SCE estimated approximately \$0.25 million for a full time consultant FTE support based on \$120 per hour x 2080 hours. SCE also included approximately \$0.3 million in the 2025 forecast for other Wetlands compliance program activities to ensure compliance with Clean Water Act (Section 401, 404) and Fish and Game Code (Section 1602) requirements. The program also includes support for regulatory changes, California Environmental Quality Environmental Act (CEQA), and programmatic agreements. ii) Storm Water Pollution Prevention Plan (SWPPP): 2025 forecast = \$0.19 million, 2022 recorded spend = \$0.04 million, Increase = \$0.15 million 2025 forecast assumptions of \$0.19 million: In the 2025 forecast, SCE included additional costs for Storm Water Pollution Prevention Plan (SWPPP) due to regulatory changes in State Water Resources Control Board (SWRCB) construction storm water permit requirements and regulations. 2025 forecast includes program compliance support for municipal construction storm water regulations, Construction Storm Water General Permit (CGP) support, applicable permit fees, membership costs, etc.
Cleanup of Dumps, Encampments, Pest Abatement Activities	\$ 882,353	\$ 764,736	\$ 117,617	<u>Cleanup of Dumps, Encampments, Pest Abatement Activities:</u> 2025 forecast = \$0.88 million, 2022 recorded spend = \$0.76 million, Increase = \$0.12 million 2025 forecast assumptions of \$0.88 million: In the 2025 forecast, SCE included additional costs for environmental support for T&D substation work and lab expenses. SCE retains specialized contractors to perform waste management activities such as testing, spill clean-up, and disposal based on the hazard level of each material. Yearly spend can fluctuate based upon the volume of waste activities (e.g., encampments, bee hive removals) for the year.
Permit Renewal Fees	\$ 1,242,157	\$ 1,174,443	\$ 67,714	<u>Permit Renewal Fees:</u> 2025 forecast = \$1.24 million, 2022 recorded spend = \$1.17 million, Increase = \$0.07 million 2025 forecast assumptions of \$1.24 million: In the 2025 forecast, SCE included additional costs for permit renewal fees for surcharges for Certified Unified Program Agencies (CUPA) permits. The 2025 forecast also incorporated an increase in the volume of permitted facilities. Permit Fees are needed to operate SCE's facilities under the jurisdiction of state and federal environmental agencies, Air Quality Management District (AQMD), CUPA, and Environmental Protection Agency (EPA).
Mohave Site Maintenance	\$ 216,734	\$ 181,292	\$ 35,442	<u>Mohave Site Maintenance:</u> 2025 forecast = \$0.22 million, 2022 recorded spend = \$0.18 million, Increase = \$0.04 million 2025 forecast assumptions of \$0.22 million: In the 2025 forecast, SCE included additional costs for Mohave site maintenance. ESD's 2025 forecast of \$0.22 million for SCE's share of costs at 56% include site maintenance and annual sampling and reporting. This program is required for compliance with agency and regulatory requirements for Mohave site. Activities encompass annual groundwater monitoring and reporting, field management, site maintenance, security, and project management. Forecast excludes landfill repairs driven by weather conditions.
Other Program Support (Tank Management, Raven Management, etc.)	\$ 497,975	\$ 497,054	\$ 921	<u>Other Program Support (Tank Management, Raven Management, etc.):</u> 2025 forecast = \$0.498 million, 2022 recorded spend = \$0.497 million, Increase = \$0.001 million Tank Management includes support for monitoring certification, vapor recovery, and formal tank inspections. This program includes support for scheduled tank inspections which are compliance requirements. Raven Management includes support for post-construction raven surveys and other requirements Other program support includes conducting environmental reviews, providing OU outreach, process development, process documents, program manuals, etc.
<b>Total</b>	<b>\$ 4,140,429</b>	<b>\$ 4,076,909</b>	<b>\$ 63,519</b>	

PubAdv-SCE-200-FNZ  
Questions 02.a-g, 03.a-c, 04.a-f, 05.a-f, 06.a-e

*Southern California Edison*  
*A.23-05-010 – SCE 2025 GRC*

**DATA REQUEST SET P u b A d v - S C E - 2 0 0 - F N Z**

**To: Public Advocates Office**  
**Prepared by: Katie Wong ESD**  
**Job Title: Advisor**  
**Received Date: 9/29/2023**

**Response Date: 10/13/2023**

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**Question 02.a-g:**

Referring to Excel file PubAdv-SCE-144-FNZ, Q06.a-d, Tab EP TROW SCE states that the recorded spend for 2022 is \$1,434,763. Please provide the following information:

- a. Identify the amount of \$1.4 million in the Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
- b. Provide the breakdown of the \$1.4 million spent in 2022, in the same manner as the corresponding TY 2025 forecast provided in Excel file PubAdv-SCE-144-FNZ, Q06.a-d, Tab “EP TROW.”
- c. Identify and provide a breakdown for the corresponding recorded costs from 2018 through 2021 in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
- d. Provide the corresponding forecasted amounts for 2023 and 2024 in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
- e. What percentage of work has been completed by SCE for this activity as of September 30, 2023.
- f. Provide the cost incurred by SCE as of September 30, 2023, for the Environmental Support for TROW.
- g. Provide justification for the \$3.8 million increase between the 2022 recorded cost and TY2025 forecast."

**Response to Question 02.a-g:**

- a) Please see Excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, which identifies the amount of \$1.4 million in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
  - Tab “2018-2022 Spend (Details)” includes a detailed breakout and mapping of environmental programs’ costs from 2018 through 2022 to the information on the Tab “Environmental Services”. SCE included these costs in nominal dollars and 2022 Constant dollars.
    - Row 52 includes 2022 recorded spend of \$1.4 million for “EP TROW”.
  - Tab “2018-2022 Spend (Summary)” includes a pivot table summary for the above detailed spend for each program.
    - Row 5 includes 2022 recorded spend of \$1.4 million for “EP TROW”.
- b) SCE included a breakout of the \$1.4 million spent in 2022, in the same manner as the corresponding TY 2025 forecast provided in Excel file PubAdv-SCE-144-FNZ, Q06.a-d, Tab “EP TROW.” Please see Excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, Tab “2022 TROW Spend”. SCE included the assumptions used to categorize the costs by tasks for 2022 recorded spend of \$1.4 million for “EP TROW”.

- c) Please see Excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, which identifies the corresponding recorded costs from 2018 through 2021 in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
- Tab “2018-2022 Spend (Details)” includes a detailed breakout and mapping of environmental programs’ costs from 2018 through 2022 to the information on Tab “Environmental Services”. SCE included these costs in nominal dollars and 2022 Constant dollars.
    - Row 32 and Row 52 include 2018 through 2021 recorded spend for “EP TROW”.
  - Tab “2018-2022 Spend (Summary)” includes a pivot table summary for the above detailed spend for each program.
    - Row 5 includes a summary of 2018 through 2021 recorded spend for “EP TROW”.
  - SCE did not track 2018 through 2021 spend by the tasks included in TY 2025 forecast provided in Excel file PubAdv-SCE-144-FNZ, Q06.a-d, Tab “EP TROW.”
- d) Please see excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06.xlsx”, which includes the corresponding forecasted amounts for 2023 and 2024 in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services”.
- Tab “2023-2025 Forecast (Details)” includes a detailed breakout and mapping of environmental programs’ forecast from 2023 through 2025 to the information on the “Environmental Services” tab.
    - Row 30 includes 2023 and 2024 forecast for “EP TROW”.
  - Tab “2023-2025 Forecast (Summary)” includes a pivot table summary for the above detailed spend for each program.
    - Row 3 includes 2023 and 2024 forecast for “EP TROW”.
- e) For percentage of work that has been completed by SCE for this activity as of September 30, 2023, please see excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, Tab “2018-2025 (Summary)”. SCE included this information on row 3 under the “September 2023% Completion” column. The planned O&M work for Transmission Road and Right of Way (TROW) is on hold in 2023 while SCE responds to atmospheric river emergency.
- f) For costs incurred by SCE as of September 30, 2023 for Environmental Support for TROW, SCE does not have final, adjusted recorded cost data available for 2023. SCE will provide preliminary 2023 recorded data to parties once that data is final and appropriately adjusted for accuracy, which is anticipated in March 2024. This is consistent with the September 5, 2023 Assigned Commissioner’s Scoping Memo which is provided below.

“SCE supports providing 2023 recorded data in this proceeding but requests a due date of March 11, 2024. SCE states that the 2023 data is not available until mid-February 2024 and that SCE requires some additional time to review, analyze, and adjust the data to ensure accuracy. SCE’s proposed due date is reasonable and will still allow for the timely consideration of the 2023 recorded data in this proceeding. Therefore, SCE’s proposed due date is adopted and incorporated into the proceeding schedule.” September 5, 2023 Assigned Commissioner’s Scoping Memo and Ruling at p. 9

- g) For justification for the \$3.8 million increase between the 2022 recorded cost and TY2025 forecast, please see page 23 of Exhibit SCE-06, Vol. 6A, Chapter 2. In addition, please see

Excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, Tab “2018-2025 (Summary)”.

- Row 3 includes 2018 through 2022 spend and 2023 through 2025 forecast for TROW.
- SCE included additional information for justification of the \$3.8 million increase between 2022 recorded spend and TY 2025 forecast under the “Notes” column.

PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06 (2018-2025 Summary)

Category	Cost Object Description	2018 Constant	2019 Constant	2020 Constant	2021 Constant	2022 Constant	2023 Constant	2024 Constant	2025 Constant	September 2023 % Completion	Notes (Includes Justification of Increase for 2022 spend vs 2025 Forecast)
TROW	Transmission Road and Right of Way (TROW)	\$ 529,214	\$ 730,621	\$ 417,519	\$ 550,745	\$ 1,434,763	\$ 882,353	\$ 882,353	\$ 5,231,191	Planned O&M work for TROW is on hold in 2023 while SCE responds to atmospheric river emergency.	2022 Spend = \$1,434,763, 2025 Forecast = \$5,231,191, Increase of \$3,796,428 The increase in costs from 2022 to 2025 is driven by environmental support for TROW's proposed work scope, strengthened compliance controls, and implementation of permit conditions and measures from regulatory agencies. TROW's proposed work scope is greater than previous years and is directly correlated to an increased work volume for environmental support. SCE initiated stronger environmental controls to address feedback from environmental and land management regulatory agencies and to improve compliance. Lastly, regulatory changes have increased permitting requirements (like California Department of Fish and Wildlife Streambed Alteration Agreements) to perform road maintenance work in waterways and encompass activities such as implementation of permits' requirements (e.g., surveys, monitoring).
<b>TROW Total</b>		<b>\$ 529,214</b>	<b>\$ 730,621</b>	<b>\$ 417,519</b>	<b>\$ 550,745</b>	<b>\$ 1,434,763</b>	<b>\$ 882,353</b>	<b>\$ 882,353</b>	<b>\$ 5,231,191</b>		
New Programs	Pesticide Compliance Support	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 49,020	\$ 49,020	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	This is a new program for pesticide compliance support for 2025 forecast. This program's 2025 forecast is to ensure environmental compliance with Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requirements.
New Programs	Protocol Surveys	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 294,118	\$ 294,118	SCE provides ongoing support for these foundational programs to ensure compliance with federal, state, and/or local regulations.	This is a new program for protocol surveys support for 2025 forecast. In 2020 and 2023, the California Department of Fish and Wildlife changed its interpretation of a law that previously provided a permit exemption to SCE for California Endangered Species Act (CESA) endangered and threatened plants species, resulting in SCE needing to obtain incidental take coverage for impacts to state-listed botanical species on all future projects where those species occur. Protocol surveys will assist SCE in being able to better manage the state-listed resource and result in long-term cost reductions (i.e., reduction in surveying and/or monitoring costs) in instances where it can be confirmed the species are not present.
New Programs	Environmental Post-Construction Support for Miscellaneous T&D projects	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 517,109	\$ 570,105	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	This is a new program for environmental post-construction support of miscellaneous T&D projects for 2025 forecast. For example, some T&D projects require multi-year erosion control monitoring after completion of construction. The program's 2025 forecast encompasses environmental support for T&D projects with these types of post-construction environmental requirements.
New Programs	Environmental Support for Oil Wells	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 93,627	\$ 102,941	\$ 102,941	SCE provides ongoing support for program which may include monitoring and/or other requirements associated with environmental support of oil wells.	This is a new program for environmental post-construction support for legacy oil wells for 2025 forecast. ESD has been required to address three historical oil wells that were identified by the California Department of Conservation Geologic Energy Management Division. The three historical wells were identified and subject to a management and monitoring plan.
<b>New Programs Total</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 93,627</b>	<b>\$ 963,167</b>	<b>\$ 1,016,183</b>		
Additional Support	Air Quality Compliance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 626,961	\$ 1,336,866	\$ 1,402,524	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	2018 through 2022 spend for Air Quality compliance were included under GRC Activity Environmental Management and Development. SCE incurred the below amounts for 2018, 2019, 2020, 2021, and 2022 spend for Air Quality Compliance under GRC Activity Environmental Management and Development. 2018 spend = \$292,538, 2019 spend = \$408,169, 2020 spend = \$418,056, 2021 spend = \$715,939, 2022 spend = \$1,028,469 2022 Spend = \$1,028,469, 2025 Forecast = \$1,402,524, Increase of \$374,055 Costs have increased due to regulatory amendments and additions related to California Repower, power generation, fuel dispensing, refrigerant, portable generators and equipment, sulfur hexafluoride equipment, asbestos, and corporate greenhouse gas accounting. The 2025 forecast includes additional costs for anticipated new compliance requirements based on local air districts' and California's clean air and carbon neutrality goals. Additional rules and regulations may also be amended and adopted by the US Environmental Protection Agency, California Air Resources Board, South Coast Air Quality Management District, and other local air districts. These updates will likely result in the issuance of additional compliance guidance on emissions mitigation, health risk assessment, and California Environmental Quality Act analyses. The 2025 forecast includes additional support for this work and regulatory changes related to permitting, monitoring, recordkeeping, and reporting requirements. The 2025 forecast incorporates support for chemical compliance analysis, notifications, permitting, and plan approvals, ensures volatile organic compounds materials compliance, and supports additional compliance framework developments for asbestos, fugitive dust, chemical compliance, and Low Carbon Fuel Standard (LCFS). The 2025 forecast also includes support for RECLAIMTitle V/Pebble Beach Health Risk Assessment (HRA), air quality reporting for facilities and project applications, emission trading credits, generation facilities (e.g., Pebble Beach, Mountainview, Five Peakers), Corporate Sustainability Report metrics, indices and scorecards reporting, Scope 3 expansion, Forest Greenhouse Gas project, and other miscellaneous program support.
Additional Support	Biological and Archaeological Programs (Avian Protection)	\$ 45,893	\$ 117,400	\$ 108,059	\$ 155,717	\$ 69,448	\$ -	\$ -	\$ -	SCE provides ongoing support for these foundational programs to ensure compliance with federal, state, and/or local regulations.	2023 through 2025 forecast are included under GRC Activity Environmental Management and Development. SCE included the below amounts for 2023, 2024, and 2025 forecast for Avian Protection under GRC Activity Environmental Management and Development. 2023 forecast = \$117,647, 2024 forecast = \$117,647, 2025 forecast = \$117,647 2022 Spend = \$69,448, 2025 Forecast = \$117,647, Increase of \$48,199 This program provides support for responses to avian emergencies and nest removals which include cost fluctuations between years. Increases in incident weather have resulted in an increase to avian emergencies and removals.
Additional Support	Biological and Archaeological Programs (GIS Support)	\$ 28,538	\$ 43,491	\$ 74,393	\$ 93,629	\$ 85,807	\$ -	\$ -	\$ -	SCE provides ongoing support for these foundational programs to ensure compliance with federal, state, and/or local regulations.	2023 through 2025 forecast are included under GRC Activity Environmental Management and Development. SCE included the below amounts for 2023, 2024, and 2025 forecast for GIS Support under GRC Activity Environmental Management and Development. 2023 forecast = \$117,647, 2024 forecast = \$117,647, 2025 forecast = \$117,647 2022 Spend = \$85,807, 2025 Forecast = \$117,647, Increase of \$31,840 2025 forecast includes monthly estimate of approximately \$10,000 per month to support Environmental Services' GIS data management activities across its programs, which include QA/QC and data management, schema updates and maintenance, training support, incorporating third party data into SCE mapping tools, interfacing and resolving IT compatibility issues with data, managing SCE's enterprise ESRI GIS updates and improvements for the department, and providing online map viewing tool coordination and support.
Additional Support	Biological and Archaeological Programs (Archaeology)	\$ 14,662	\$ 14,523	\$ 1,957	\$ 92,682	\$ 61,802	\$ -	\$ -	\$ -	SCE provides ongoing support for these foundational programs to ensure compliance with federal, state, and/or local regulations.	2023 through 2025 forecast are included under GRC Activity Environmental Management and Development. SCE included the below amounts for 2023, 2024, and 2025 forecast for Archaeology under GRC Activity Environmental Management and Development. 2023 forecast = \$58,824, 2024 forecast = \$58,824, 2025 forecast = \$58,824 2022 Spend = \$61,802, 2025 Forecast = \$58,824, Decrease of \$2,978 This program provides support for archaeology program initiatives for SCE's work.
Additional Support	Biological and Archaeological Programs (Herpetology)	\$ 13,677	\$ 28,401	\$ 10,594	\$ 30,875	\$ 99,528	\$ -	\$ -	\$ -	SCE provides ongoing support for these foundational programs to ensure compliance with federal, state, and/or local regulations.	2023 through 2025 forecast are included under GRC Activity Environmental Management and Development. SCE included the below amounts for 2023, 2024, and 2025 forecast for Herpetology Program under GRC Activity Environmental Management and Development. 2023 forecast = \$88,235, 2024 forecast = \$88,235, 2025 forecast = \$88,235 2022 Spend = \$99,528, 2025 Forecast = \$88,235, Decrease of \$11,293 This program provides support for training programs exploring resource management strategies around desert tortoise and/or other protected herpetological species.
Additional Support	National Pollutant Discharge Elimination Systems (NPDES)	\$ 667,893	\$ 613,650	\$ 569,490	\$ 501,723	\$ 469,169	\$ -	\$ -	\$ -	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	2023 through 2025 forecast are included under GRC Activity Environmental Management and Development. SCE included the below amounts for 2023, 2024, and 2025 forecast for NPDES programs under GRC Activity Environmental Management and Development. 2023 forecast = \$441,176, 2024 forecast = \$441,176, 2025 forecast = \$441,176 2022 Spend = \$469,169, 2025 Forecast = \$349,703, Decrease of \$119,464 This program includes support to ensure compliance with NPDES requirements, including general program support, treated water and facility storm water program, industrial waste water program, and compliance support with state regulated vault discharge requirements. A new position was added to Environmental Services Department to pursue efficiencies and cost savings whenever possible through utilization of internal staff versus consultants to support environmental activities. This new internal position reduced consultant support in 2025 forecast.

PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06 (2018-2025 Summary)

Category	Cost Object Description	2018 Constant	2019 Constant	2020 Constant	2021 Constant	2022 Constant	2023 Constant	2024 Constant	2025 Constant	September 2023 % Completion	Notes (Includes Justification of Increase for 2022 spend vs 2025 Forecast)
Additional Support	Permitting Support	\$ 97,996	\$ (1,055)	\$ -	\$ 115,633	\$ 348,128	\$ 112,745	\$ 112,745	\$ 112,745	SCE provides ongoing support for these foundational programs to ensure compliance with federal, state, and/or local regulations.	2022 Spend = \$349,128, 2025 Forecast = \$112,745, Decrease of \$236,383 Program includes permitting support for Bureau of Land Management (BLM) Mohave National Preserve Desert Tortoise and other non project specific work. 2022 included costs for an agency payment for U.S. Fish and Wildlife Services (USFWS) to develop a General Conservation plan (GCP) for biological species protection on non-public lands. These costs were excluded from the 2025 forecast.
Additional Support	Generation Program	\$ 75,111	\$ 83,667	\$ 95,604	\$ 127,553	\$ 79,528	\$ 73,529	\$ 73,529	\$ 73,529	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	2022 Spend = \$79,628, 2025 Forecast = \$73,529, Decrease of \$6,099 This program provides support for FERC license ongoing requirements for environmental studies (e.g. invasive mussels, eagle surveys).
Additional Support	Hazardous and Nonhazardous Waste Transportation and Disposal	\$ 1,354,096	\$ 1,591,808	\$ 1,500,523	\$ 1,252,654	\$ 1,318,013	\$ 1,179,368	\$ 2,039,216	\$ 2,039,216	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	2022 Spend = \$1,318,013, 2025 Forecast = \$2,039,216, Increase of \$721,203 2022 spend was \$1.32 million. ESD projected 2023 forecast will be \$1.62 million, which included an increase of \$0.3 million above 2022 spend. SCE incorporated an additional increase of approximately 25% above 2023 estimate of \$1.62 million in the program's 2025 forecast of \$2 million. Waste management regulations require hazardous waste to be managed only by facilities that are approved and authorized to receive and process such waste. SCE experienced issues with the availability of incinerators and other supply chain backlogs in 2022. The 2023 estimate and 2025 forecast includes additional costs to account for incinerator shortages, increased contractor rates, transportation fuel charges, and facility operations. This program's costs include disposal of federal and state regulated hazardous wastes from SCE operations include used motor oil, lightbulbs, electronics, clarifier waste management, etc. Activities encompass drum disposal, bulk oil disposal, clarifier clean-out, hauling hazardous waste, performing inspections, and maintaining inventory. This program is driven by compliance and regulatory requirements to characterize, transport, and dispose of hazardous and nonhazardous waste properly and within the required time limits. Failure to comply with agency requirements may result in potential fines and penalties.
Additional Support	Hazardous Material Business Plan/Spill Prevention Control and Countermeasures (HMBP/SPCC)	\$ -	\$ -	\$ -	\$ 436,960	\$ 603,997	\$ 784,314	\$ 784,314	\$ 784,314	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	2018, 2019, 2020, and first half of 2021 spend for HMBP/SPCC program were included under GRG Activity Environmental Management and Development. SCE included the below amounts for 2018, 2019, 2020, and first half of 2021 spend for HMBP/SPCC program under GRG Activity Environmental Management and Development. 2018 spend = \$613,021, 2019 spend = \$727,794, 2020 spend = \$663,863, 2021 spend = \$600,335 (\$436,960 + \$463,375) 2022 Spend = \$603,997, 2025 Forecast = \$784,314, Increase of \$180,317 The increase in 2025 forecast includes providing support for incoming backup generator deployments, emerging activities, and company initiatives. This program's activities encompass preparation of plans and performing updates and modifications to plans as needed. Updates are required by agencies on an annual basis, and modifications are required whenever there are changes to facilities, such as installation of new transformer. Failure to comply with agency requirements may result in potential fines and penalties.
Additional Support	Drinking Water	\$ 21,344	\$ 10,616	\$ 412,193	\$ 506,518	\$ 748,233	\$ 833,333	\$ 833,333	\$ 833,333	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	2022 Spend = \$748,233, 2025 Forecast = \$833,333, Increase of \$85,100 2025 forecast includes additional costs to implement new regulated system procedures for SCE's drinking water systems, incorporate new State Water Resources Control Board requirements for sampling and pipe inventories, and support drought and water conservation coverage and reporting. This program's activities encompass support for drinking water sampling, ensure drinking water standards meet compliance requirements, and provide support for well information data management. These activities help ensure safe and compliant drinking water at SCE's facilities and compliance with agency regulatory requirements.
Additional Support	Spill Response	\$ 17,920	\$ 77,759	\$ 44,653	\$ 33,948	\$ 68,595	\$ 147,059	\$ 147,059	\$ 147,059	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	2022 Spend = \$68,595, 2025 Forecast = \$147,059, Increase of \$78,464 2025 forecast includes additional costs to support California Accidental Release Prevention facilities (CalARP) and Department of Transportation (DOT) requirements for prevention of chemical spills. 2025 forecast includes environmental management for CalARP support (includes regulatory inspections for CalARP facilities, tank reports, etc.), marine oil spill contingency plan support, DOT support for safe transportation as spill prevention activity, and Polychlorinated Biphenyls (PCB) training for regulatory compliance purposes.
<b>Additional Support Total</b>		<b>\$ 2,337,134</b>	<b>\$ 2,680,269</b>	<b>\$ 2,817,466</b>	<b>\$ 3,347,892</b>	<b>\$ 3,963,249</b>	<b>\$ 3,757,309</b>	<b>\$ 5,327,182</b>	<b>\$ 5,392,720</b>		
Marine Mitigation	Reef Maintenance	\$ 1,049,119	\$ 1,817,568	\$ 2,206,249	\$ 1,709,607	\$ 1,498,453	\$ 1,744,778	\$ 1,826,574	\$ 2,253,254	SCE estimates 4% complete in absolute kelp area standard of 4800 acres, 11% complete for fish standing stock standard of 880 tons, and 12.5% complete for relative performance standard requirement of 32 years. Coastal Development Permit requires a Reef Maintenance Performance Standard of 32 years of mitigation credit for relative standards (comparison to other natural reefs) and cumulative 4,800 acres of giant kelp and 890 tons of fish standing stock performance standards. SCE started meeting compliance in 2019 and has earned 4 years of credit to date. SCE has 28 remaining years for Reef relative standards as long as compliance is met each year, and 4,838 acres of giant kelp and 892 tons of fish standing stock of mitigation credit before the mitigation requirements for the respective performance standards are met.	2022 Spend = \$1,498,453, 2025 Forecast = \$2,253,254, Increase of \$754,800 2025 forecast includes additional costs for sonar surveys which were not required to be performed in 2022. Sonar surveys are required to be performed every 5 years under Coastal Development Permit (CDP) for Reef Maintenance. 2022 recorded spend included an agency credit for California Coastal Commission payments for the SONGS Mitigation and Monitoring Program which are not expected in future years. 2025 forecast includes environmental support for sonar surveys, California Coastal Commission Mitigation and Monitoring Program administration fees, and State Lands Commission lease payments.
Marine Mitigation	San Dieguito Wetlands	\$ 2,136,480	\$ 2,951,768	\$ 2,602,157	\$ 3,107,275	\$ 2,327,387	\$ 2,916,592	\$ 3,105,503	\$ 3,325,715	SCE estimates 0% completion. Coastal Development Permit includes performance standard requirement of 32 years. SCE has not yet met compliance for San Dieguito Wetlands.	2022 Spend = \$2,327,387, 2025 Forecast = \$3,325,715, Increase of \$998,328 2025 forecast includes additional costs for conducting Sediment and Analysis Plan tests as part of new agency requirements from U.S. Army Corps of Engineers (USACE) and Environmental Protection Agency (EPA) to check for sediments and contaminants. SCE included additional costs in the 2025 forecast for purchase and installation of plants each year, as required, to help meet restoration requirements. 2022 recorded spend also included an agency credit for California Coastal Commission payments for the SONGS Mitigation and Monitoring Program which are not expected in future years. 2025 forecast includes environmental support for surveys, inlet dredging, restoration activities, permitting, reporting, berm inspections and coordination, and other miscellaneous support. 2025 forecast also includes California Coastal Commission Mitigation and Monitoring Program administration fees, and San Dieguito River Park Joint Powers Authority payments.
<b>Marine Mitigation Total</b>		<b>\$ 3,188,699</b>	<b>\$ 4,769,336</b>	<b>\$ 4,808,407</b>	<b>\$ 4,816,882</b>	<b>\$ 3,825,840</b>	<b>\$ 4,661,370</b>	<b>\$ 4,932,077</b>	<b>\$ 5,678,969</b>		
Misc Costs and Adjustments	Weed Abatement	\$ 287,886	\$ 190,577	\$ 196,035	\$ 494,433	\$ 879,622	\$ 1,176,471	\$ 1,176,471	\$ -	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	2025 forecast for environmental support for Vegetation Management programs (including weed abatement) are included in Exhibit SCE-02, Vol. 10.
Misc Costs and Adjustments	Routine Line Clearing	\$ 666,400	\$ 614,322	\$ 273,045	\$ (188,939)	\$ 25,292	\$ -	\$ -	\$ -	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	2025 forecast for environmental support for Vegetation Management programs (including routine line clearing) are included in Exhibit SCE-02, Vol. 10.

PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06 (2018-2025 Summary)

Category	Cost Object Description	2018 Constant	2019 Constant	2020 Constant	2021 Constant	2022 Constant	2023 Constant	2024 Constant	2025 Constant	September 2023 % Completion	Notes (Includes Justification of Increase for 2022 spend vs 2025 Forecast)
Misc Costs and Adjustments	Biology Program, Biological GIS	\$ 88,863	\$ 55,072	\$ 41,488	\$ 79,896	\$ 165,291	\$ 112,206	\$ 573,529	\$ 573,529		2022 Spend = \$165,291, 2025 Forecast = \$573,529, Increase of \$408,238 SCE included additional costs in the 2025 forecast for development of measures to comply with permitting and agency requirements. California is experiencing a significant increase in biological species being listed as state and/or federally threatened and endangered. Additionally, project work at SCE is becoming more voluminous and complex. This is resulting in a growth in the Biology Program to effectively manage resources and ensure compliance with environmental laws and regulations. 2025 forecast accounts for this growth by including i) \$0.24 million for biological program manager support to reevaluate SCE's standard avoidance and minimization measures and associated crosswalks for O&M projects, perform updates to biological resources guidance documents that ensures compliance, develop new biology Master Special Use Permit (MSUP) guidance, provide project management support to initiatives, coordinate regulations with agencies and stakeholders, and facilitate/improve other related essential biological processes/procedures, ii) \$0.17 million for tracking impacts to biological resources, preparing annual reports, and developing better mean to manage biological resources using Geographic Information System (GIS), reviewing biological water permitting habitat assessments, providing subject matter expert level support for addressing small mammals and invertebrates, and iii) \$0.17 million for improving biological range maps for species, including biological field surveys with ground truthing GIS data to improve range maps and support botany/biological programs for species (e.g., Amargosa vole, Mohave ground squirrel, Buena Vista lake ornate shrew, San Bernardino Kangaroo Rat in Riverside County, Coachella Valley fringe-load lizard, Kern primrose sphinx moth, etc.) and guide development of measures to comply with permit/biology requirements. Ground truthing can also help confirm whether species habitat are present and result in reduction of preconstruction surveys and monitoring costs.
Misc Costs and Adjustments	Wetlands Program	\$ 73,040	\$ 137,138	\$ 59,198	\$ 220,251	\$ 378,802	\$ 539,216	\$ 539,216	\$ 539,216		2022 Spend = \$378,802, 2025 Forecast = \$539,216, Increase of \$160,414 In the 2025 forecast, SCE included additional costs for Wetlands consultant support for Transmission Road and Right of Way (TROW) work. TROW's proposed work scope is greater than previous years. SCE estimated approximately \$0.25 million for a full time consultant FTE support based on \$120 per hour x 2000 hours. SCE also included approximately \$0.3 million in the 2025 forecast for other Wetlands compliance program activities to ensure compliance with Clean Water Act (Section 401, 404) and Fish and Game Code (Section 1602) requirements. The program also includes support for regulatory changes, California Environmental Quality Environmental Act (CEQA), and programmatic agreements.
Misc Costs and Adjustments	Storm Water Pollution Prevention Plan (SWPPP)	\$ 119,996	\$ 176,468	\$ 80,281	\$ 118,625	\$ 35,670	\$ 96,039	\$ 144,175	\$ 188,464		2022 Spend = \$36,670, 2025 Forecast = \$188,464, Increase of \$152,794 In the 2025 forecast, SCE included additional costs for Storm Water Pollution Prevention Plan (SWPPP) due to regulatory changes in State Water Resources Control Board (SWRCB) construction storm water permit requirements and regulations. 2025 forecast includes program compliance support for municipal construction storm water regulations, Construction Storm Water General Permit (CGP) support, applicable permit fees, and other miscellaneous costs.
Misc Costs and Adjustments	Cleanup of Dumps, Encampments, Pest Abatement Activities	\$ 1,230,678	\$ 1,059,234	\$ 776,285	\$ 601,470	\$ 785,175	\$ 886,275	\$ 882,353	\$ 882,353		2022 Spend = \$785,175, 2025 Forecast = \$882,353, Increase of \$97,178 In the 2025 forecast, SCE included additional costs for environmental support for cleanup of dumps, encampments, pest management, and other waste management activities. SCE retains specialized contractors to perform waste management activities such as testing, spill cleanup, and disposal based on the hazard level of each material. Yearly spend can fluctuate based upon the volume of waste activities (e.g., encampments, bee hive removals) for each year.
Misc Costs and Adjustments	Permit Renewal Fees	\$ 1,347,745	\$ 1,430,744	\$ 1,342,437	\$ 1,309,625	\$ 1,174,443	\$ 1,228,411	\$ 1,242,157	\$ 1,242,157		2022 Spend = \$1,174,443, 2025 Forecast = \$1,242,157, Increase of \$67,714 SCE included additional costs in the 2025 forecast for permit renewal fees for surcharges for Certified Unified Program Agencies (CUPA) permits. The 2025 forecast also incorporated an increase in the volume of permitted facilities. Permit fees are needed to operate SCE's facilities under the jurisdiction of state and federal environmental agencies, Air Quality Management District (AQMD), CUPA, and Environmental Protection Agency (EPA).
Misc Costs and Adjustments	Mohave Site Maintenance	\$ 2,300,543	\$ 244,670	\$ 203,221	\$ 388,914	\$ 214,778	\$ 225,490	\$ 221,069	\$ 216,734		2022 Spend = \$214,778, 2025 Forecast = \$216,734, Increase of \$1,956 2022 spend of \$214,778 is closely aligned with 2025 forecast of \$216,734 for Mohave Site Maintenance. This program includes site maintenance and annual sampling and reporting. This program is required for compliance with agency and regulatory requirements for Mohave site. Activities encompass annual groundwater monitoring and reporting, field management, site maintenance, security, and project management. Forecast excludes landfill repairs driven by weather conditions. 2018 spend included significant costs for repairs at Ash Canyon landfill at Mohave site stemming from storms and other weather conditions.
Misc Costs and Adjustments	Other Program Support (Tank Management)	\$ 248,920	\$ 253,382	\$ 224,135	\$ 196,670	\$ 223,986	\$ 229,412	\$ 229,412	\$ 229,412		2022 Spend = \$223,986, 2025 Forecast = \$229,412, Increase of \$5,426 2022 spend of \$223,986 is closely aligned with 2025 forecast of \$229,412 for Tank Management program. Program includes environmental support for monitoring, certification, vapor recovery, and tank inspections.
Misc Costs and Adjustments	Other Program Support (Miscellaneous)	\$ 62,134	\$ 142,076	\$ 228,546	\$ 170,568	\$ 132,255	\$ 24,510	\$ 24,510	\$ 209,740		2022 Spend = \$132,255, 2025 Forecast = \$209,740, Increase of \$77,485 Program includes miscellaneous support with cost fluctuations between years. Activities encompass conducting environmental reviews, providing OU outreach, and process development. Program also includes environmental support for preparation of training material, processing documents, program manuals, etc.
Misc Costs and Adjustments	Well Management	\$ 120,161	\$ 60,735	\$ 78,796	\$ 159,936	\$ 4,665	\$ -	\$ -	\$ -		2022 Spend = \$4,665, 2025 Forecast = \$0, Decrease of \$4,665 Well Management program includes environmental support for well information data management, technical support needed for well issues, and database associated with wells. 2022 included minimal spend as the majority of costs were incorporated under Drinking Water program. 2025 forecast for Well Management has also been incorporated under the Drinking Water program.
Misc Costs and Adjustments	Other Program Support (Restoration, Raven Management Plan)	\$ 1,229,085	\$ 138,868	\$ 63,716	\$ 25,374	\$ 58,721	\$ 58,824	\$ 58,824	\$ 58,824		2022 Spend = \$58,721, 2025 Forecast = \$58,824, Increase of \$1,103 2022 spend of \$58,721 is closely aligned with 2025 forecast of \$58,824 for this program. 2025 forecast includes restoration support for post-construction survey requirements for various projects (e.g., Devers Colorado River, Red Bluff Substation). 2018 included restoration support activities for these projects which have been completed.
Misc Costs and Adjustments	Post-Construction Environmental Restoration Activities (e.g., TRTP, ELDS)	\$ 8,806,584	\$ 7,631,935	\$ 5,510,263	\$ 60,301	\$ 1,133	\$ -	\$ -	\$ -		2025 forecast for environmental post-construction restoration costs (e.g., Tehachapi Renewable Transmission Project, El Dorado Line Swap) are included in Exhibit SCE-02, Vol. 11
Misc Costs and Adjustments	Total	\$ 16,682,036	\$ 12,135,229	\$ 9,077,446	\$ 3,631,127	\$ 4,077,833	\$ 4,378,852	\$ 5,091,715	\$ 4,140,429		
Grand Total		\$ 22,633,983	\$ 20,215,437	\$ 17,120,838	\$ 12,346,706	\$ 13,291,685	\$ 13,773,511	\$ 17,196,514	\$ 21,359,493		

GRC Activity Environmental Programs Non-Labor Summary

Environmental Services lab	\$ 22,633,983	\$ 20,215,437	\$ 17,120,838	\$ 12,346,706	\$ 13,291,685	\$ 13,773,511	\$ 17,196,514	\$ 21,359,493
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**PubAdv-SCE-200-FNZ 02.b (2022 TROW Spend)**

Environmental Support for TROW	Amount
2025 Forecast (2022 Constant)	\$ 5,231,191
2022 Recorded (2022 Constant)	\$ 1,434,763
<b>Variance</b>	<b>\$ 3,796,428</b>

Category	Biological/ Waters Monitor	Cultural Monitor	Intake	Nesting Bird Surveys	Pre-Construction Surveys	Setup and Execution	Project Management	Geographic Information System (GIS)	Total
2025 Forecast	\$ 2,332,330	\$ 940,940	\$ 441,480	\$ 505,700	\$ 345,000	\$ 193,370	\$ 377,897	\$ 94,474	\$ 5,231,191
2022 Spend	\$ 452,520	\$ 56,497	\$ 393,796	\$ -	\$ 355,618	\$ -	\$ 86,486	\$ 89,845	\$ 1,434,763
<b>Variance</b>	<b>\$ 1,879,810</b>	<b>\$ 884,443</b>	<b>\$ 47,684</b>	<b>\$ 505,700</b>	<b>\$ (10,618)</b>	<b>\$ 193,370</b>	<b>\$ 291,411</b>	<b>\$ 4,629</b>	<b>\$ 3,796,428</b>

**2022 TROW spend included the below assumptions for categorization of costs by tasks:**

For biological field activities, assume 50% of costs were for surveying and 50% of costs were for biological monitoring.

Consultant often utilized sweeping during same day monitoring.

Surveying costs were grouped under pre-construction surveys as no nesting bird surveys were conducted

Intake includes all desktop reviews for biological, archaeological, and waters

Project Management category includes costs for project administration and other miscellaneous support tasks

*Southern California Edison*  
*A.23-05-010 – SCE 2025 GRC*

**DATA REQUEST SET P u b A d v - S C E - 2 0 0 - F N Z**

**To: Public Advocates Office**  
**Prepared by: Katie Wong ESD**  
**Job Title: Advisor**  
**Received Date: 9/29/2023**

**Response Date: 10/13/2023**

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**Question 03.a-c:**

Referring to Excel file PubAdv-SCE-144-FNZ, Q06.a-d, Tab “EP New Programs” SCE is requesting \$1.02 million for Environmental Support for New Programs/Activities for TY2025. Please respond to the following:

- a. Identify SCE’s corresponding forecasted cost for 2023 and 2024 in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
- b. What percentage of work has been completed by SCE for this activity as of September 30, 2023.
- c. Provide the amount SCE has incurred for this activity as of September 30, 2023.

**Response to Question 03.a-c:**

- a) Please see excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, which identifies SCE’s corresponding forecasted cost for 2023 and 2024 in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
  - Tab “2023-2025 Forecast (Details)” includes a detailed breakout and mapping of environmental programs’ forecast from 2023 through 2025 to the information on the “Environmental Services” tab.
    - Row 31, Row 32, Row 33, and Row 49 include 2023 and 2024 forecast for “EP New Programs”.
  - Tab “2023-2025 Forecast (Summary)” includes a pivot table summary for the above detailed spend for each program.
    - Rows 5 through 9 include a summary of 2023 and 2024 forecast for “EP New Programs”.
- b) For percentage of work that has been completed by SCE for these activities as of September 30, 2023, please see excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, Tab “2018-2025 (Summary)”.
  - Rows 5 through 9 include 2018 through 2022 spend and 2023 through 2025 forecast for “EP New Programs”.
  - SCE included this information under the column titled “September 2023% Completion”.
- c) For the amount SCE has incurred for “EP New Programs” as of September 30, 2023, SCE does not have final, adjusted recorded cost data available for 2023. SCE will provide preliminary 2023 recorded data to parties once that data is final and appropriately adjusted for accuracy, which is anticipated in March 2024. This is consistent with the. September 5, 2023 Assigned Commissioner’s Scoping Memo which is provided below.

“SCE supports providing 2023 recorded data in this proceeding but requests a due date of March 11, 2024. SCE states that the 2023 data is not available until mid-February 2024 and that SCE requires some additional time to review, analyze, and adjust the data to ensure accuracy. SCE’s proposed due date is reasonable and will still allow for the timely consideration of the 2023 recorded data in this proceeding. Therefore, SCE’s proposed due date is adopted and incorporated into the proceeding schedule.” September 5, 2023 Assigned Commissioner’s Scoping Memo and Ruling at p. 9

*Southern California Edison*  
*A.23-05-010 – SCE 2025 GRC*

**DATA REQUEST SET P u b A d v - S C E - 2 0 0 - F N Z**

**To: Public Advocates Office**  
**Prepared by: Katie Wong ESD**  
**Job Title: Advisor**  
**Received Date: 9/29/2023**

**Response Date: 10/13/2023**

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**Question 04.a-f:**

Referring to Excel file PubAdv-SCE-144-FNZ, Q06.a-d, Tab “EP Additional Support” SCE recorded \$3.95 million in 2022 and requests \$5.39 million for TY2025. Please respond to the following:

- a. Identify recorded \$3.95 million for 2022, and TY2025 request of \$5.39 million in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
- b. Identify, and provide a breakdown for the corresponding recorded costs from 2018 through 2021 in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
- c. Provide the corresponding forecasted amounts for 2023 and 2024 in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
- d. Provide justification for the \$1.44 million increase between the 2022 recorded cost and TY2025 forecast.
- e. What percentage of work has been completed by SCE for this activity as of September 30, 2023.
- f. Provide the amount SCE has incurred for this activity as of September 30, 2023.

**Response to Question 04.a-f:**

- a) Please see excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, which identifies recorded \$3.95 million for 2022 and TY2025 request of \$5.39 million in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
  - Tab “2018-2022 Spend (Details)” includes a detailed breakout and mapping of environmental programs’ costs from 2018 through 2022 to the information on the “Environmental Services” tab. SCE included these costs in nominal dollars and 2022 Constant dollars.
    - Rows 33 through 40, Row 53, Row 58, and Row 66 include 2022 recorded spend of \$3.95 million for “EP Additional Support” programs.
  - Tab “2018-2022 Spend (Summary)” includes a pivot table summary for the above detailed spend for each program.
    - Rows 7 through 18 include a summary of 2022 recorded spend of \$3.95 million for “EP Additional Support” programs.
  - Tab “2023-2025 Forecast (Details)” includes a detailed breakout and mapping of environmental programs’ forecast from 2023 through 2025 to the information on the “Environmental Services” tab.
    - Row 19, Row 20, Row 21, Row 26, Row 34, Row 43, Row 50, and Row 51 include 2025 forecast for “EP Additional Support” programs.
  - Tab “2023-2025 Forecast (Summary)” includes a pivot table summary for the above

- detailed spend for each program.
- Rows 10 through 17 include a summary of 2025 forecast of \$5.39 million for “EP Additional Support” programs.
- b) Please see excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, which identifies and provides a breakdown for the corresponding recorded costs from 2018 through 2021 in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
- Tab “2018-2022 Spend (Details)” includes a detailed breakout and mapping of environmental programs’ costs from 2018 through 2022 to the information on Tab “Environmental Services”. SCE included these costs in nominal dollars and 2022 Constant dollars.
    - Rows 33 through 40, Row 53, Row 58, and Row 66 include 2018 through 2021 recorded spend for “EP Additional Support” programs.
  - Tab “2018-2022 Spend (Summary)” includes a pivot table summary for the above detailed spend for each program.
    - Rows 7 through 18 include a summary of 2018 through 2021 recorded spend for “EP Additional Support” programs.
- c) Please see excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, which includes the corresponding forecasted amounts for 2023 and 2024 in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services”.
- Tab “2023-2025 Forecast (Details)” includes a detailed breakout and mapping of environmental programs’ forecast from 2023 through 2025 to the information on Tab “Environmental Services”.
    - Row 19, Row 20, Row 21, Row 26, Row 34, Row 43, Row 50, and Row 51 includes 2023 and 2024 forecast for “EP Additional Support” programs.
  - Tab “2023-2025 Forecast (Summary)” includes a pivot table summary for the above detailed spend for each program.
    - Rows 10 through 17 include a summary of 2023 and 2024 forecast for “EP Additional Support” programs
- d) For justification for the \$1.44 million increase between the 2022 recorded cost and TY2025 forecast, please see pages 24 and 25 of Exhibit SCE-06, Vol. 6A, Chapter 2. In addition, please see Excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, Tab “2018-2025 (Summary)”.
- Rows 10 through 22 include 2018 through 2022 spend and 2023 through 2025 forecast for “EP Additional Support” programs.
  - SCE included additional information for justification of the \$1.44 million increase between 2022 recorded spend and TY 2025 forecast under the “Notes” column.
- e) For percentage of work that has been completed by SCE for these activities as of September 30, 2023, please see excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, Tab “2018-2025 (Summary)”.
- SCE included this information for rows 10 through 22 under the column titled “September 2023% Completion” for “EP Additional Support” programs.
- f) For the amount SCE has incurred for the “EP Additional Support” programs as of

September 30, 2023, SCE does not have final, adjusted recorded cost data available for 2023. SCE will provide preliminary 2023 recorded data to parties once that data is final and appropriately adjusted for accuracy, which is anticipated in March 2024. This is consistent with the September 5, 2023 Assigned Commissioner's Scoping Memo which is provided below.

“SCE supports providing 2023 recorded data in this proceeding but requests a due date of March 11, 2024. SCE states that the 2023 data is not available until mid-February 2024 and that SCE requires some additional time to review, analyze, and adjust the data to ensure accuracy. SCE's proposed due date is reasonable and will still allow for the timely consideration of the 2023 recorded data in this proceeding. Therefore, SCE's proposed due date is adopted and incorporated into the proceeding schedule.” September 5, 2023 Assigned Commissioner's Scoping Memo and Ruling at p. 9

*Southern California Edison*  
*A.23-05-010 – SCE 2025 GRC*

**DATA REQUEST SET P u b A d v - S C E - 2 0 0 - F N Z**

**To: Public Advocates Office**  
**Prepared by: Katie Wong ESD**  
**Job Title: Advisor**  
**Received Date: 9/29/2023**

**Response Date: 10/13/2023**

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**Question 05.a-f:**

Referring to Excel file PubAdv-SCE-144-FNZ, Q06.a-d, Tab “EP Marine Mitigation” SCE recorded \$3.83 million in 2022 and requests \$5.58 million for TY2025. Please respond to the following:

- a. Identify recorded \$3.83 million for 2022, and TY2025 request of \$5.58 million in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
- b. Identify, and provide a breakdown for the corresponding recorded costs from 2018 through 2021 in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
- c. Provide the corresponding forecasted amounts for 2023 and 2024 in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
- d. Provide justification for the \$1.75 million increase between the 2022 recorded cost and TY2025 forecast.
- e. What percentage of work has been completed by SCE for this activity as of September 30, 2023.
- f. Provide the amount SCE has incurred for this activity as of September 30, 2023.

**Response to Question 05.a-f:**

- a) Please see excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, which identifies recorded \$3.83 million for 2022 and TY2025 request of \$5.58 million in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
  - Tab “2018-2022 Spend (Details)” includes a detailed breakout and mapping of environmental programs’ costs from 2018 through 2022 to the information on the “Environmental Services” tab. SCE included these costs in nominal dollars and 2022 Constant dollars.
    - Rows 72 through 85 include 2022 recorded spend of \$3.83 million for “EP Marine Mitigation”.
  - Tab “2018-2022 Spend (Summary)” includes a pivot table summary for the above detailed spend for each program.
    - Rows 19 through 25 include a summary of 2022 recorded spend of \$3.83 million for “EP Marine Mitigation”.
  - Tab “2023-2025 Forecast (Details)” includes a detailed breakout and mapping of environmental programs’ forecast from 2023 through 2025 to the information on the “Environmental Services” tab.
    - Rows 53 through 60 include 2025 forecast of \$5.58 million for “EP Marine Mitigation”.
  - Tab “2023-2025 Forecast (Summary)” includes a pivot table summary for the above detailed spend for each program.

- Rows 18 through 24 include a summary of 2025 forecast of \$5.58 million for “EP Marine Mitigation”.
- b) Please see excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, which identifies and provides a breakdown for the corresponding recorded costs from 2018 through 2021 in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
- Tab “2018-2022 Spend (Details)” includes a detailed breakout and mapping of environmental programs’ costs from 2018 through 2022 to the information on the “Environmental Services” tab. SCE included these costs in nominal dollars and 2022 Constant dollars.
    - Rows 72 through 85 include 2018 through 2021 recorded spend for “EP Marine Mitigation”.
  - Tab “2018-2022 Spend (Summary)” includes a pivot table summary for the above detailed spend for each program.
    - Rows 19 through 25 include a summary of 2018 through 2021 spend for “EP Marine Mitigation”.
- c) Please see excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, which includes the corresponding forecasted amounts for 2023 and 2024 in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services”.
- Tab “2023-2025 Forecast (Details)” includes a detailed breakout and mapping of environmental programs’ forecast from 2023 through 2025 to the information on the “Environmental Services” tab.
    - Rows 53 through 60 include 2023 and 2024 forecast for “EP Marine Mitigation”.
  - Tab “2023-2025 Forecast (Summary)” includes a pivot table summary for the above detailed spend for each program.
    - Rows 18 through 24 include a summary of 2023 and 2024 forecast for “EP Marine Mitigation”.
- d) For justification for the \$1.75 million increase between the 2022 recorded cost and TY2025 forecast, please see pages 25 and 26 of Exhibit SCE-06, Vol. 6A, Chapter 2. In addition, please see Excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, Tab “2018-2025 (Summary)”.
- Rows 23 through 25 include 2018 through 2022 spend and 2023 through 2025 forecast for “EP Marine Mitigation”.
  - SCE included additional information for justification of the \$1.75 million increase between 2022 recorded spend and TY 2025 forecast under the “Notes” column.
- e) For percentage of work that has been completed by SCE for these activities as of September 30, 2023, please see excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, Tab “2018-2025 (Summary)”.
- For rows 23 and 24, SCE included this information under the column titled “September 2023% Completion” for “EP Marine Mitigation”.
- f) For the amount SCE has incurred for “EP Marine Mitigation” as of September 30, 2023, SCE does not have final, adjusted recorded cost data available for 2023. SCE will provide preliminary 2023 recorded data to parties once that data is final and appropriately adjusted

for accuracy, which is anticipated in March 2024. This is consistent with the September 5, 2023 Assigned Commissioner's Scoping Memo which is provided below.

“SCE supports providing 2023 recorded data in this proceeding but requests a due date of March 11, 2024. SCE states that the 2023 data is not available until mid-February 2024 and that SCE requires some additional time to review, analyze, and adjust the data to ensure accuracy. SCE's proposed due date is reasonable and will still allow for the timely consideration of the 2023 recorded data in this proceeding. Therefore, SCE's proposed due date is adopted and incorporated into the proceeding schedule.” September 5, 2023 Assigned Commissioner's Scoping Memo and Ruling at p. 9

*Southern California Edison*  
*A.23-05-010 – SCE 2025 GRC*

**DATA REQUEST SET P u b A d v - S C E - 2 0 0 - F N Z**

**To: Public Advocates Office**  
**Prepared by: Katie Wong ESD**  
**Job Title: Advisor**  
**Received Date: 9/29/2023**

**Response Date: 10/13/2023**

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**Question 06.a-e:**

Referring to Excel file PubAdv-SCE-144-FNZ, Q06.a-d, Tab “EP Marine Mitigation” SCE recorded \$4.08 million in 2022 and requests \$4.14 million for TY2025. Please respond to the following:

- a. Identify recorded \$4.08 million for 2022, and TY2025 request of \$4.14 million in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
- b. Identify, and provide a breakdown for the corresponding recorded costs from 2018 through 2021 in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
- c. Provide the corresponding forecasted amounts for 2023 and 2024 in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
- d. What percentage of work has been completed by SCE for this activity as of September 30, 2023.
- e. Provide the amount SCE has incurred for this activity as of September 30, 2023.

**Response to Question 06.a-e:**

For Question 06.a-e, SCE included the below information for “EP Misc. Costs and Adjustments”, which included 2022 recorded spend of \$4.08 million and TY 2025 forecast of \$4.14 million. The information for “EP Marine Mitigation” was included in SCE’s response to PubAdv-SCE-200-FNZ Question 05.a-f.

- a) Please see excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, which identifies recorded \$4.08 million in 2022 and TY2025 request of \$4.14 million in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
  - Tab “2018-2022 Spend (Details)” includes a detailed breakout and mapping of environmental programs’ costs from 2018 through 2022 to the information on the “Environmental Services” tab. SCE included these costs in nominal dollars and 2022 Constant dollars.
    - Rows 41 through 50, Rows 54 through 56, Rows 59 through 60, Rows 62 through 64, Rows 67 through 71, and Rows 87 through 90 include 2022 recorded spend of \$4.08 million for “EP Misc. Costs and Adjustments”.
  - Tab “2018-2022 Spend (Summary)” includes a pivot table summary for the above detailed spend for each program.
    - Rows 26 through 41 include a summary of 2022 recorded spend of \$4.08 million for “EP Misc. Costs and Adjustments”.
  - Tab “2023-2025 Forecast (Details)” includes a detailed breakout and mapping of environmental programs’ forecast from 2023 through 2025 to the information on the

- “Environmental Services” tab.
- Row 22, Row 24, Row 28, Rows 35 through 41, Row 44, Row 46, Row 47, and Row 52 include 2025 forecast for “EP Misc. Costs and Adjustments”.
  - Tab “2023-2025 Forecast (Summary)” includes a pivot table summary for the above detailed spend for each program.
    - Rows 25 through 38 include a summary of 2025 forecast of \$4.14 million for “EP Misc. Costs and Adjustments”.
- b) Please see excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, which identifies and provides a breakdown for the corresponding recorded costs from 2018 through 2021 in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services.”
- Tab “2018-2022 Spend (Details)” includes a detailed breakout and mapping of environmental programs’ costs from 2018 through 2022 to the information on the “Environmental Services” tab. SCE included these costs in nominal dollars and 2022 Constant dollars.
    - Rows 41 through 50, Rows 54 through 56, Rows 59 through 60, Rows 62 through 64, Rows 67 through 71, and Rows 87 through 90 include 2018 through 2021 recorded spend for “EP Misc. Costs and Adjustments”.
  - Tab “2018-2022 Spend (Summary)” includes a pivot table summary for the above detailed spend for each program.
    - Rows 26 through 41 include a summary of 2018 through 2021 recorded spend for “EP Misc. Costs and Adjustments”.
- c) Please see excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, which includes the corresponding forecasted amounts for 2023 and 2024 in Excel sheet “PubAdv-SCE-059-FNZ Attachment” Tab “Environmental Services”.
- Tab “2023-2025 Forecast (Details)” includes a detailed breakout and mapping of environmental programs’ forecast from 2023 through 2025 to the information on the “Environmental Services” tab.
    - Row 22, Row 24, Row 28, Rows 35 through 41, Row 44, Row 46, Row 47, and Row 52 include 2023 and 2024 forecast for “EP Misc. Costs and Adjustments”.
  - Tab “2023-2025 Forecast (Summary)” includes a pivot table summary for the above detailed spend for each program.
    - Rows 25 through 38 include a summary of 2023 and 2024 forecast for “EP Misc. Costs and Adjustments”.
- d) For percentage of work that has been completed by SCE for these activities as of September 30, 2023, please see excel attachment “PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06”, Tab “2018-2025 (Summary)”.
- Rows 26 through 39 include 2018 through 2022 spend and 2023 through 2025 forecast for “EP Misc. Costs and Adjustments”.
  - SCE included this information under the column titled “September 2023% Completion” for “EP Misc. Costs and Adjustments”.
- e) For the amount SCE has incurred for “EP Misc. Costs and Adjustments” as of September 30, 2023, SCE does not have final, adjusted recorded cost data available for 2023. SCE will provide preliminary 2023 recorded data to parties once that data is final and appropriately

adjusted for accuracy, which is anticipated in March 2024. This is consistent with the September 5, 2023 Assigned Commissioner's Scoping Memo which is provided below.

“SCE supports providing 2023 recorded data in this proceeding but requests a due date of March 11, 2024. SCE states that the 2023 data is not available until mid-February 2024 and that SCE requires some additional time to review, analyze, and adjust the data to ensure accuracy. SCE's proposed due date is reasonable and will still allow for the timely consideration of the 2023 recorded data in this proceeding. Therefore, SCE's proposed due date is adopted and incorporated into the proceeding schedule.” September 5, 2023 Assigned Commissioner's Scoping Memo and Ruling at p. 9

PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06 (2018-2025 Summary)

Category	Cost Object Description	2018 Constant	2019 Constant	2020 Constant	2021 Constant	2022 Constant	2023 Constant	2024 Constant	2025 Constant	September 2023 % Completion	Notes (Includes Justification of Increase for 2022 spend vs 2025 Forecast)
TROW	Transmission Road and Right of Way (TROW)	\$ 529,214	\$ 730,621	\$ 417,519	\$ 550,745	\$ 1,434,763	\$ 882,353	\$ 882,353	\$ 5,231,191	Planned O&M work for TROW is on hold in 2023 while SCE responds to atmospheric river emergency.	2022 Spend = \$1,434,763, 2025 Forecast = \$5,231,191, Increase of \$3,796,428 The increase in costs from 2022 to 2025 is driven by environmental support for TROW's proposed work scope, strengthened compliance controls, and implementation of permit conditions and measures from regulatory agencies. TROW's proposed work scope is greater than previous years and is directly correlated to an increased work volume for environmental support. SCE initiated stronger environmental controls to address feedback from environmental and land management regulatory agencies and to improve compliance. Lastly, regulatory changes have increased permitting requirements (like California Department of Fish and Wildlife Streambed Alteration Agreements) to perform road maintenance work in waterways and encompass activities such as implementation of permits' requirements (e.g., surveys, monitoring).
<b>TROW Total</b>		<b>\$ 529,214</b>	<b>\$ 730,621</b>	<b>\$ 417,519</b>	<b>\$ 550,745</b>	<b>\$ 1,434,763</b>	<b>\$ 882,353</b>	<b>\$ 882,353</b>	<b>\$ 5,231,191</b>		
New Programs	Pesticide Compliance Support	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 49,020	\$ 49,020	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	This is a new program for pesticide compliance support for 2025 forecast. This program's 2025 forecast is to ensure environmental compliance with Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requirements.
New Programs	Protocol Surveys	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 294,118	\$ 294,118	SCE provides ongoing support for these foundational programs to ensure compliance with federal, state, and/or local regulations.	This is a new program for protocol surveys support for 2025 forecast. In 2020 and 2023, the California Department of Fish and Wildlife changed its interpretation of a law that previously provided a permit exemption to SCE for California Endangered Species Act (CESA) endangered and threatened plants species, resulting in SCE needing to obtain incidental take coverage for impacts to state-listed botanical species on all future projects where those species occur. Protocol surveys will assist SCE in being able to better manage the state-listed resource and result in long-term cost reductions (i.e., reduction in surveying and/or monitoring costs) in instances where it can be confirmed the species are not present.
New Programs	Environmental Post-Construction Support for Miscellaneous T&D projects	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 517,109	\$ 570,105	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	This is a new program for environmental post-construction support of miscellaneous T&D projects for 2025 forecast. For example, some T&D projects require multi-year erosion control monitoring after completion of construction. The program's 2025 forecast encompasses environmental support for T&D projects with these types of post-construction environmental requirements.
New Programs	Environmental Support for Oil Wells	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 93,627	\$ 102,941	\$ 102,941	SCE provides ongoing support for program which may include monitoring and/or other requirements associated with environmental support of oil wells.	This is a new program for environmental post-construction support for legacy oil wells for 2025 forecast. ESD has been required to address three historical oil wells that were identified by the California Department of Conservation Geologic Energy Management Division. The three historical wells were identified and subject to a management and monitoring plan.
<b>New Programs Total</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 93,627</b>	<b>\$ 963,167</b>	<b>\$ 1,016,183</b>		
Additional Support	Air Quality Compliance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 626,961	\$ 1,336,866	\$ 1,402,524	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	2018 through 2022 spend for Air Quality compliance were included under GRC Activity Environmental Management and Development. SCE incurred the below amounts for 2018, 2019, 2020, 2021, and 2022 spend for Air Quality Compliance under GRC Activity Environmental Management and Development. 2018 spend = \$292,538, 2019 spend = \$408,169, 2020 spend = \$418,056, 2021 spend = \$715,939, 2022 spend = \$1,028,469 2022 Spend = \$1,028,469, 2025 Forecast = \$1,402,524, Increase of \$374,055 Costs have increased due to regulatory amendments and additions related to Catalina Reservoir, power generation, fuel dispensing, refrigerant, portable generators and equipment, sulfur hexafluoride equipment, asbestos, and corporate greenhouse gas accounting. The 2025 forecast includes additional costs for anticipated new compliance requirements based on local air districts' and California's clean air and carbon neutrality goals. Additional rules and regulations may also be amended and adopted by the US Environmental Protection Agency, California Air Resources Board, South Coast Air Quality Management District, and other local air districts. These updates will likely result in the issuance of additional compliance guidance on emissions mitigation, health risk assessment, and California Environmental Quality Act analyses. The 2025 forecast includes additional support for this work and regulatory changes related to permitting, monitoring, recordkeeping, and reporting requirements. The 2025 forecast incorporates support for chemical compliance analysis, notifications, permitting, and plan approvals, ensures volatile organic compounds materials compliance, and supports additional compliance framework developments for asbestos, fugitive dust, chemical compliance, and Low Carbon Fuel Standard (LCFS). The 2025 forecast also includes support for RECLAIMTitle V/Pebble Beach Health Risk Assessment (HRA), air quality reporting for facilities and project applications, emission trading credits, generation facilities (e.g., Pebble Beach, Mountainview, Five Peakers), Corporate Sustainability Report metrics, indices and scorecards reporting, Scope 3 expansion, Forest Greenhouse Gas project, and other miscellaneous program support.
Additional Support	Biological and Archaeological Programs (Avian Protection)	\$ 45,893	\$ 117,400	\$ 108,059	\$ 155,717	\$ 69,448	\$ -	\$ -	\$ -	SCE provides ongoing support for these foundational programs to ensure compliance with federal, state, and/or local regulations.	2023 through 2025 forecast are included under GRC Activity Environmental Management and Development. SCE included the below amounts for 2023, 2024, and 2025 forecast for Avian Protection under GRC Activity Environmental Management and Development. 2023 forecast = \$117,647, 2024 forecast = \$117,647, 2025 forecast = \$117,647 2022 Spend = \$69,448, 2025 Forecast = \$117,647, Increase of \$48,199 This program provides support for responses to avian emergencies and nest removals which include cost fluctuations between years. Increases in incident weather have resulted in an increase to avian emergencies and removals.
Additional Support	Biological and Archaeological Programs (GIS Support)	\$ 28,538	\$ 43,491	\$ 74,393	\$ 93,629	\$ 85,807	\$ -	\$ -	\$ -	SCE provides ongoing support for these foundational programs to ensure compliance with federal, state, and/or local regulations.	2023 through 2025 forecast are included under GRC Activity Environmental Management and Development. SCE included the below amounts for 2023, 2024, and 2025 forecast for GIS Support under GRC Activity Environmental Management and Development. 2023 forecast = \$117,647, 2024 forecast = \$117,647, 2025 forecast = \$117,647 2022 Spend = \$85,807, 2025 Forecast = \$117,647, Increase of \$31,840 2025 forecast includes monthly estimate of approximately \$10,000 per month to support Environmental Services' GIS data management activities across its programs, which include QA/QC and data management, schema updates and maintenance, training support, incorporating third party data into SCE mapping tools, interfacing and resolving IT compatibility issues with data, managing SCE's enterprise ESRI GIS updates and improvements for the department, and providing online map viewing tool coordination and support.
Additional Support	Biological and Archaeological Programs (Archaeology)	\$ 14,662	\$ 14,523	\$ 1,957	\$ 92,682	\$ 61,802	\$ -	\$ -	\$ -	SCE provides ongoing support for these foundational programs to ensure compliance with federal, state, and/or local regulations.	2023 through 2025 forecast are included under GRC Activity Environmental Management and Development. SCE included the below amounts for 2023, 2024, and 2025 forecast for Archaeology under GRC Activity Environmental Management and Development. 2023 forecast = \$58,824, 2024 forecast = \$58,824, 2025 forecast = \$58,824 2022 Spend = \$61,802, 2025 Forecast = \$58,824, Decrease of \$2,978 This program provides support for archaeology program initiatives for SCE's work.
Additional Support	Biological and Archaeological Programs (Herpetology)	\$ 13,677	\$ 28,401	\$ 10,594	\$ 30,875	\$ 99,528	\$ -	\$ -	\$ -	SCE provides ongoing support for these foundational programs to ensure compliance with federal, state, and/or local regulations.	2023 through 2025 forecast are included under GRC Activity Environmental Management and Development. SCE included the below amounts for 2023, 2024, and 2025 forecast for Herpetology Program under GRC Activity Environmental Management and Development. 2023 forecast = \$88,235, 2024 forecast = \$88,235, 2025 forecast = \$88,235 2022 Spend = \$99,528, 2025 Forecast = \$88,235, Decrease of \$11,293 This program provides support for training programs exploring resource management strategies around desert tortoise and/or other protected herpetological species.
Additional Support	National Pollutant Discharge Elimination Systems (NPDES)	\$ 667,893	\$ 613,650	\$ 569,490	\$ 501,723	\$ 469,169	\$ -	\$ -	\$ -	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	2023 through 2025 forecast are included under GRC Activity Environmental Management and Development. SCE included the below amounts for 2023, 2024, and 2025 forecast for NPDES programs under GRC Activity Environmental Management and Development. 2023 forecast = \$441,176, 2024 forecast = \$441,176, 2025 forecast = \$441,176 2022 Spend = \$469,169, 2025 Forecast = \$349,703, Decrease of \$119,464 This program includes support to ensure compliance with NPDES requirements, including general program support, treated water and facility storm water program, industrial waste water program, and compliance support with state regulated vault discharge requirements. A new position was added to Environmental Services Department to pursue efficiencies and cost savings whenever possible through utilization of internal staff versus consultants to support environmental activities. This new internal position reduced consultant support in 2025 forecast.

PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06 (2018-2025 Summary)

Category	Cost Object Description	2018 Constant	2019 Constant	2020 Constant	2021 Constant	2022 Constant	2023 Constant	2024 Constant	2025 Constant	September 2023 % Completion	Notes (Includes Justification of Increase for 2022 spend vs 2025 Forecast)
Additional Support	Permitting Support	\$ 97,996	\$ (1,055)	\$ -	\$ 115,633	\$ 348,128	\$ 112,745	\$ 112,745	\$ 112,745	SCE provides ongoing support for these foundational programs to ensure compliance with federal, state, and/or local regulations.	2022 Spend = \$349,128, 2025 Forecast = \$112,745, Decrease of \$236,383 Program includes permitting support for Bureau of Land Management (BLM) Mohave National Preserve Desert Tortoise and other non project specific work. 2022 included costs for an agency payment for U.S. Fish and Wildlife Services (USFWS) to develop a General Conservation plan (GCP) for biological species protection on non-public lands. These costs were excluded from the 2025 forecast.
Additional Support	Generation Program	\$ 75,111	\$ 83,667	\$ 95,604	\$ 127,553	\$ 79,528	\$ 73,529	\$ 73,529	\$ 73,529	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	2022 Spend = \$79,628, 2025 Forecast = \$73,529, Decrease of \$6,099 This program provides support for FERC license ongoing requirements for environmental studies (e.g. invasive mussels, eagle surveys).
Additional Support	Hazardous and Nonhazardous Waste Transportation and Disposal	\$ 1,354,096	\$ 1,591,808	\$ 1,500,523	\$ 1,252,654	\$ 1,318,013	\$ 1,179,368	\$ 2,039,216	\$ 2,039,216	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	2022 Spend = \$1,318,013, 2025 Forecast = \$2,039,216, Increase of \$721,203 2022 spend was \$1.32 million, ESD projected 2023 forecast will be \$1.62 million, which included an increase of \$0.3 million above 2022 spend. SCE incorporated an additional increase of approximately 25% above 2023 estimate of \$1.62 million in the program's 2025 forecast of \$2 million. Waste management regulations require hazardous waste to be managed only by facilities that are approved and authorized to receive and process such waste. SCE experienced issues with the availability of incinerators and other supply chain backlogs in 2022. The 2023 estimate and 2025 forecast includes additional costs to account for incinerator shortages, increased contractor rates, transportation fuel charges, and facility operations. This program's costs include disposal of federal and state regulated hazardous wastes from SCE operations include used motor oil, lightbulbs, electronics, clarifier waste management, etc. Activities encompass drum disposal, bulk oil disposal, clarifier clean-out, hauling hazardous waste, performing inspections, and maintaining inventory. This program is driven by compliance and regulatory requirements to characterize, transport, and dispose of hazardous and nonhazardous waste properly and within the required time limits. Failure to comply with agency requirements may result in potential fines and penalties.
Additional Support	Hazardous Material Business Plan/Spill Prevention Control and Countermeasures (HMBP/SPCC)	\$ -	\$ -	\$ -	\$ 436,960	\$ 603,997	\$ 784,314	\$ 784,314	\$ 784,314	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	2018, 2019, 2020, and first half of 2021 spend for HMBP/SPCC program were included under GRG Activity Environmental Management and Development. SCE included the below amounts for 2018, 2019, 2020, and first half of 2021 spend for HMBP/SPCC program under GRG Activity Environmental Management and Development. 2018 spend = \$613,021, 2019 spend = \$727,794, 2020 spend = \$663,863, 2021 spend = \$600,335 (\$436,960 + \$463,375) 2022 Spend = \$603,997, 2025 Forecast = \$784,314, Increase of \$180,317 The increase in 2025 forecast includes providing support for incoming backup generator deployments, emerging activities, and company initiatives. This program's activities encompass preparation of plans and performing updates and modifications to plans as needed. Updates are required by agencies on an annual basis, and modifications are required whenever there are changes to facilities, such as installation of new transformer. Failure to comply with agency requirements may result in potential fines and penalties.
Additional Support	Drinking Water	\$ 21,344	\$ 10,616	\$ 412,193	\$ 506,518	\$ 748,233	\$ 833,333	\$ 833,333	\$ 833,333	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	2022 Spend = \$748,233, 2025 Forecast = \$833,333, Increase of \$85,100 2025 forecast includes additional costs to implement new regulated system procedures for SCE's drinking water systems, incorporate new State Water Resources Control Board requirements for sampling and pipe inventories, and support drought and water conservation coverage and reporting. This program's activities encompass support for drinking water sampling, ensure drinking water standards meet compliance requirements, and provide support for well information data management. These activities help ensure safe and compliant drinking water at SCE's facilities and compliance with agency regulatory requirements.
Additional Support	Spill Response	\$ 17,920	\$ 77,759	\$ 44,653	\$ 33,948	\$ 68,595	\$ 147,059	\$ 147,059	\$ 147,059	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	2022 Spend = \$68,595, 2025 Forecast = \$147,059, Increase of \$78,464 2025 forecast includes additional costs to support California Accidental Release Prevention facilities (CalARP) and Department of Transportation (DOT) requirements for prevention of chemical spills. 2025 forecast includes environmental management for CalARP support (includes regulatory inspections for CalARP facilities, tank reports, etc.), marine oil spill contingency plan support, DOT support for safe transportation as spill prevention activity, and Polychlorinated Biphenyls (PCB) training for regulatory compliance purposes.
<b>Additional Support Total</b>		<b>\$ 2,337,134</b>	<b>\$ 2,680,269</b>	<b>\$ 2,817,466</b>	<b>\$ 3,347,892</b>	<b>\$ 3,963,249</b>	<b>\$ 3,757,309</b>	<b>\$ 5,327,182</b>	<b>\$ 5,392,720</b>		
Marine Mitigation	Reef Maintenance	\$ 1,049,119	\$ 1,817,568	\$ 2,206,249	\$ 1,709,607	\$ 1,498,453	\$ 1,744,778	\$ 1,826,574	\$ 2,253,254	SCE estimates 4% complete in absolute kelp area standard of 4800 acres, 11% complete for fish standing stock standard of 880 tons, and 12.5% complete for relative performance standard requirement of 32 years. Coastal Development Permit requires a Reef Maintenance Performance Standard of 32 years of mitigation credit for relative standards (comparison to other natural reefs) and cumulative 4,800 acres of giant kelp and 890 tons of fish standing stock performance standards. SCE started meeting compliance in 2019 and has earned 4 years of credit to date. SCE has 28 remaining years for Reef relative standards as long as compliance is met each year, and 4,838 acres of giant kelp and 892 tons of fish standing stock of mitigation credit before the mitigation requirements for the respective performance standards are met.	2022 Spend = \$1,498,453, 2025 Forecast = \$2,253,254, Increase of \$754,800 2025 forecast includes additional costs for sonar surveys which were not required to be performed in 2022. Sonar surveys are required to be performed every 5 years under Coastal Development Permit (CDP) for Reef Maintenance. 2022 recorded spend included an agency credit for California Coastal Commission payments for the SONGS Mitigation and Monitoring Program which are not expected in future years. 2025 forecast includes environmental support for sonar surveys, California Coastal Commission Mitigation and Monitoring Program administration fees, and State Lands Commission lease payments.
Marine Mitigation	San Dieguito Wetlands	\$ 2,136,480	\$ 2,951,768	\$ 2,602,157	\$ 3,107,275	\$ 2,327,387	\$ 2,916,592	\$ 3,105,503	\$ 3,325,715	SCE estimates 0% completion. Coastal Development Permit includes performance standard requirement of 32 years. SCE has not yet met compliance for San Dieguito Wetlands.	2022 Spend = \$2,327,387, 2025 Forecast = \$3,325,715, Increase of \$998,328 2025 forecast includes additional costs for conducting Sediment and Analysis Plan tests as part of new agency requirements from U.S. Army Corps of Engineers (USACE) and Environmental Protection Agency (EPA) to check for sediments and contaminants. SCE included additional costs in the 2025 forecast for purchase and installation of plants each year, as required, to help meet restoration requirements. 2022 recorded spend also included an agency credit for California Coastal Commission payments for the SONGS Mitigation and Monitoring Program which are not expected in future years. 2025 forecast includes environmental support for surveys, inlet dredging, restoration activities, permitting, reporting, berm inspections and coordination, and other miscellaneous support. 2025 forecast also includes California Coastal Commission Mitigation and Monitoring Program administration fees, and San Dieguito River Park Joint Powers Authority payments.
<b>Marine Mitigation Total</b>		<b>\$ 3,188,699</b>	<b>\$ 4,769,336</b>	<b>\$ 4,808,407</b>	<b>\$ 4,816,882</b>	<b>\$ 3,825,840</b>	<b>\$ 4,661,370</b>	<b>\$ 4,932,077</b>	<b>\$ 5,678,969</b>		
Misc Costs and Adjustments	Weed Abatement	\$ 287,886	\$ 190,577	\$ 196,035	\$ 494,433	\$ 879,622	\$ 1,176,471	\$ 1,176,471	\$ -	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	2025 forecast for environmental support for Vegetation Management programs (including weed abatement) are included in Exhibit SCE-02, Vol. 10.
Misc Costs and Adjustments	Routine Line Clearing	\$ 666,400	\$ 614,322	\$ 273,045	\$ (188,939)	\$ 25,292	\$ -	\$ -	\$ -	SCE provides ongoing support for program required for environmental compliance with federal, state, and/or local regulations.	2025 forecast for environmental support for Vegetation Management programs (including routine line clearing) are included in Exhibit SCE-02, Vol. 10.

PubAdv-SCE-200-FNZ 02, 03, 04, 05, 06 (2018-2025 Summary)

Category	Cost Object Description	2018 Constant	2019 Constant	2020 Constant	2021 Constant	2022 Constant	2023 Constant	2024 Constant	2025 Constant	September 2023 % Completion	Notes (Includes Justification of Increase for 2022 spend vs 2025 Forecast)
Misc Costs and Adjustments	Biology Program, Biological GIS	\$ 88,863	\$ 55,072	\$ 41,488	\$ 79,896	\$ 165,291	\$ 112,206	\$ 573,529	\$ 573,529		<p><b>2022 Spend = \$165,291, 2025 Forecast = \$573,529, Increase of \$408,238</b></p> <p>SCE included additional costs in the 2025 forecast for development of measures to comply with permitting and agency requirements. California is experiencing a significant increase in biological species being listed as state and/or federally threatened and endangered. Additionally, project work at SCE is becoming more voluminous and complex. This is resulting in a growth in the Biology Program to effectively manage resources and ensure compliance with environmental laws and regulations. 2025 forecast accounts for this growth by including i) \$0.24 million for biological program manager support to reevaluate SCE's standard avoidance and minimization measures and associated crosswalks for O&amp;M projects, perform updates to biological resources guidance documents that ensures compliance, develop new biology Master Special Use Permit (MSUP) guidance, provide project management support to initiatives, coordinate regulations with agencies and stakeholders, and facilitate/improve other related essential biological processes/procedures, ii) \$0.17 million for tracking impacts to biological resources, preparing annual reports, and developing better mean to manage biological resources using Geographic Information System (GIS), reviewing biological water permitting habitat assessments, providing subject matter expert level support for addressing small mammals and invertebrates, and iii) \$0.17 million for improving biological range maps for species, including biological field surveys with ground truthing GIS data to improve range maps and support botany/biological programs for species (e.g., Amargosa vole, Mohave ground squirrel, Buena Vista lake ornate shrew, San Bernardino Kangaroo Rat in Riverside County, Coachella Valley fringe-load lizard, Kern primrose sphinx moth, etc.) and guide development of measures to comply with permit/biology requirements. Ground truthing can also help confirm whether species habitat are present and result in reduction of preconstruction surveys and monitoring costs.</p>
Misc Costs and Adjustments	Wetlands Program	\$ 73,040	\$ 137,138	\$ 59,198	\$ 220,251	\$ 378,802	\$ 539,216	\$ 539,216	\$ 539,216		<p><b>2022 Spend = \$378,802, 2025 Forecast = \$539,216, Increase of \$160,414</b></p> <p>In the 2025 forecast, SCE included additional costs for Wetlands consultant support for Transmission Road and Right of Way (TROW) work. TROW's proposed work scope is greater than previous years. SCE estimated approximately \$0.25 million for a full time consultant FTE support based on \$120 per hour x 2000 hours. SCE also included approximately \$0.3 million in the 2025 forecast for other Wetlands compliance program activities to ensure compliance with Clean Water Act (Section 401, 404) and Fish and Game Code (Section 1602) requirements. The program also includes support for regulatory changes, California Environmental Quality Environmental Act (CEQA), and programmatic agreements.</p>
Misc Costs and Adjustments	Storm Water Pollution Prevention Plan (SWPPP)	\$ 119,996	\$ 176,468	\$ 80,281	\$ 118,625	\$ 35,670	\$ 96,039	\$ 144,175	\$ 188,464		<p><b>2022 Spend = \$36,670, 2025 Forecast = \$188,464, Increase of \$152,794</b></p> <p>In the 2025 forecast, SCE included additional costs for Storm Water Pollution Prevention Plan (SWPPP) due to regulatory changes in State Water Resources Control Board (SWRCB) construction storm water permit requirements and regulations. 2025 forecast includes program compliance support for municipal construction storm water regulations, Construction Storm Water General Permit (CGP) support, applicable permit fees, and other miscellaneous costs.</p>
Misc Costs and Adjustments	Cleanup of Dumps, Encampments, Pest Abatement Activities	\$ 1,230,678	\$ 1,059,234	\$ 776,285	\$ 601,470	\$ 785,175	\$ 886,275	\$ 882,353	\$ 882,353		<p><b>2022 Spend = \$785,175, 2025 Forecast = \$882,353, Increase of \$97,178</b></p> <p>In the 2025 forecast, SCE included additional costs for environmental support for cleanup of dumps, encampments, pest management, and other waste management activities. SCE retains specialized contractors to perform waste management activities such as testing, spill cleanup, and disposal based on the hazard level of each material. Yearly spend can fluctuate based upon the volume of waste activities (e.g., encampments, bee hive removals) for each year.</p>
Misc Costs and Adjustments	Permit Renewal Fees	\$ 1,347,745	\$ 1,430,744	\$ 1,342,437	\$ 1,309,625	\$ 1,174,443	\$ 1,228,411	\$ 1,242,157	\$ 1,242,157		<p><b>2022 Spend = \$1,174,443, 2025 Forecast = \$1,242,157, Increase of \$67,714</b></p> <p>SCE included additional costs in the 2025 forecast for permit renewal fees for surcharges for Certified Unified Program Agencies (CUPA) permits. The 2025 forecast also incorporated an increase in the volume of permitted facilities. Permit fees are needed to operate SCE's facilities under the jurisdiction of state and federal environmental agencies, Air Quality Management District (AQMD), CUPA, and Environmental Protection Agency (EPA).</p>
Misc Costs and Adjustments	Mohave Site Maintenance	\$ 2,300,543	\$ 244,670	\$ 203,221	\$ 388,914	\$ 214,778	\$ 225,490	\$ 221,069	\$ 216,734		<p><b>2022 Spend = \$214,778, 2025 Forecast = \$216,734, Increase of \$1,956</b></p> <p>2022 spend of \$214,778 is closely aligned with 2025 forecast of \$216,734 for Mohave Site Maintenance. This program includes site maintenance and annual sampling and reporting. This program is required for compliance with agency and regulatory requirements for Mohave site. Activities encompass annual groundwater monitoring and reporting, field management, site maintenance, security, and project management. Forecast excludes landfill repairs driven by weather conditions. 2018 spend included significant costs for repairs at Ash Canyon landfill at Mohave site stemming from storms and other weather conditions.</p>
Misc Costs and Adjustments	Other Program Support (Tank Management)	\$ 248,920	\$ 253,382	\$ 224,135	\$ 196,670	\$ 223,986	\$ 229,412	\$ 229,412	\$ 229,412		<p><b>2022 Spend = \$223,986, 2025 Forecast = \$229,412, Increase of \$5,426</b></p> <p>2022 spend of \$223,986 is closely aligned with 2025 forecast of \$229,412 for Tank Management program. Program includes environmental support for monitoring, certification, vapor recovery, and tank inspections.</p>
Misc Costs and Adjustments	Other Program Support (Miscellaneous)	\$ 62,134	\$ 142,076	\$ 228,546	\$ 170,568	\$ 132,255	\$ 24,510	\$ 24,510	\$ 209,740		<p><b>2022 Spend = \$132,255, 2025 Forecast = \$209,740, Increase of \$77,485</b></p> <p>Program includes miscellaneous support with cost fluctuations between years. Activities encompass conducting environmental reviews, providing OU outreach, and process development. Program also includes environmental support for preparation of training material, processing documents, program manuals, etc.</p>
Misc Costs and Adjustments	Well Management	\$ 120,161	\$ 60,735	\$ 78,796	\$ 159,936	\$ 4,665	\$ -	\$ -	\$ -		<p><b>2022 Spend = \$4,665, 2025 Forecast = \$0, Decrease of \$4,665</b></p> <p>Well Management program includes environmental support for well information data management, technical support needed for well issues, and database associated with wells. 2022 included minimal spend as the majority of costs were incorporated under Drinking Water program. 2025 forecast for Well Management has also been incorporated under the Drinking Water program.</p>
Misc Costs and Adjustments	Other Program Support (Restoration, Raven Management Plan)	\$ 1,229,085	\$ 138,868	\$ 63,716	\$ 25,374	\$ 58,721	\$ 58,824	\$ 58,824	\$ 58,824		<p><b>2022 Spend = \$58,721, 2025 Forecast = \$58,824, Increase of \$1,103</b></p> <p>2022 spend of \$58,721 is closely aligned with 2025 forecast of \$58,824 for this program. 2025 forecast includes restoration support for post-construction survey requirements for various projects (e.g., Devers Colorado River, Red Bluff Substation). 2018 included restoration support activities for these projects which have been completed.</p>
Misc Costs and Adjustments	Post-Construction Environmental Restoration Activities (e.g., TRTP, ELDS)	\$ 8,806,584	\$ 7,631,935	\$ 5,510,263	\$ 60,301	\$ 1,133	\$ -	\$ -	\$ -		<p><b>2025 Forecast = \$58,824, 2025 Forecast = \$58,824, Increase of \$0</b></p> <p>2025 forecast for environmental post-construction restoration costs (e.g., Tehachapi Renewable Transmission Project, El Dorado Line Swap) are included in Exhibit SCE-02, Vol. 11</p>
Misc Costs and Adjustments	Total	\$ 16,682,036	\$ 12,135,229	\$ 9,077,446	\$ 3,631,127	\$ 4,077,833	\$ 4,378,852	\$ 5,091,715	\$ 4,140,429		
Grand Total		\$ 22,633,983	\$ 20,215,437	\$ 17,120,838	\$ 12,346,706	\$ 13,291,685	\$ 13,773,511	\$ 17,196,514	\$ 21,359,493		

GRC Activity Environmental Programs Non-Labor Summary

Environmental Services lab	\$ 22,633,983	\$ 20,215,437	\$ 17,120,838	\$ 12,346,706	\$ 13,291,685	\$ 13,773,511	\$ 17,196,514	\$ 21,359,493
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## TURN-SCE-032, Question 5

*Southern California Edison*  
*A.23-05-010 – SCE 2025 GRC*

**DATA REQUEST SET T U R N - S C E - 0 3 2**

**To: TURN**  
**Prepared by: Katie Wong ESD**  
**Job Title: Advisor**  
**Received Date: 12/11/2023**

**Response Date: 1/2/2024**

**Question 05:**

Environmental Programs. Refer to Workpapers Exhibit No. SCE-06 Vol. 06, page 10. Explain the reason for the decrease in labor expense in 2022 over the prior years shown.

**Response to Question 05:**

SCE included the below information for the reason for the decrease in labor expense in 2022 over the prior years shown for GRC Activity Environmental Programs.

- Environmental Services BPE includes two GRC activities for Environmental Management and Development and Environmental Programs.
- Labor costs from 2018 to 2021 remained flat for both GRC activities Environmental Management and Development and Environmental Programs. From 2021 to 2022, labor for Environmental Management and Development increased by \$2.402 million and labor for Environmental Programs decreased by \$2.861 million. This was primarily due to employees allocating a higher percentage of labor costs to Environmental Management and Development instead of Environmental Programs. Environmental Services underwent a departmental reorganization and shifted labor costs from Environmental Programs to Environmental Management and Development to align with the organizational structure.
- SCE included the below table for 2018 to 2022 labor spend for both GRC activities. Overall, labor costs from 2021 to 2022 remained flat including both Environmental Management and Development and Environmental Programs, as there was an increase of \$2.402 million in 2022 labor spend for Environmental Management and Development, and a corresponding decrease of \$2.861 million in 2022 labor spend for Environmental Programs. Labor allocation percentage between Environmental Management and Development and Environmental programs for future years are anticipated to be aligned with 2022 recorded spend.

GRC Activity Labor Only	2018 Actuals	2019 Actuals	2020 Actuals	2021 Actuals	2022 Actuals
Environmental Management and Development Labor	\$ 9,839,812	\$ 9,837,569	\$ 10,152,959	\$ 10,081,165	\$ 12,483,343
Environmental Programs Labor	\$ 4,467,799	\$ 4,408,163	\$ 4,589,918	\$ 4,414,738	\$ 1,553,479
<b>Environmental Services BPE Total Labor</b>	<b>\$ 14,307,611</b>	<b>\$ 14,245,732</b>	<b>\$ 14,742,877</b>	<b>\$ 14,495,903</b>	<b>\$ 14,036,822</b>

## TURN-SCE-032, Question 4

*Southern California Edison*  
*A.23-05-010 – SCE 2025 GRC*

**DATA REQUEST SET T U R N - S C E - 0 3 2**

**To: TURN**  
**Prepared by: Katie Wong ESD**  
**Job Title: Advisor**  
**Received Date: 12/11/2023**

**Response Date: 1/2/2024**

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**Question 04:**

Environmental Programs. Refer to Workpapers Exhibit No. SCE-06 Vol. 06, page 10. Provide documentation (quotes, invoices, contracts, etc.) supporting the TY forecasted increase to non-labor.

**Response to Question 04:**

Workpapers Exhibit No. SCE-06 Vol. 06, page 10 included a total non-labor increase of \$6.6 million for Environmental Services BPE, with 2022 recorded spend of \$17.3 million and 2025 forecast of \$23.9 million. Environmental Services BPE includes 2 GRC activities for Environmental Management and Development and Environmental Programs.

- GRC Activity Environmental Management and Development included a non-labor decrease of \$1.5 million between 2022 recorded of \$4.05 million and 2025 forecast of \$2.57 million. This reduction is primarily due to removal of costs of approximately \$1.2 million for improvements to the Environmental Management System, which will be completed by 2025. The remaining part of this variance is primarily attributed to several environmental programs with accounting settlement updates, which resulted in these programs' 2022 recorded spend included under Environmental Management and Development, and 2025 forecast included under Environmental Programs.
- GRC Activity Environmental Programs included a non-labor increase of \$8.07 million between 2022 recorded of \$13.29 million and 2025 forecast of \$21.36 million. SCE included the below information and documentation to support the TY forecasted increase to non-labor for GRC Activity Environmental Programs.
  - SCE used methodology of last year recorded spend + adjustments for the 2025 forecast.
  - SCE did not utilize quotes and bids. SCE utilized an internal forecast methodology encompassing Subject Matter Experts' knowledge and expertise in the development of the environmental programs' 2025 forecasts, including analysis of historical spend, 2025 work scope, and applicable program and regulatory requirements.
  - Please see excel attachment "TURN-SCE-032 Question 04" for additional information and details included for non-labor spend and forecast:
    - *Summary* tab - SCE included 2022 recorded non-labor spend of \$13.29 million and various adjustments, which calculated to an increase of \$8.07 million in the 2025 forecast of \$21.36 million.
    - *EP Non-Labor* tab - SCE included additional details for the increased costs between 2022 recorded spend and 2025 forecast related to the various adjustments.

TURN-SCE-032 Question 04

GRC Activity: Environmental Programs (Non-Labor)	Constant 2022 \$	Reference
<b>Environmental Programs 2022 Recorded Non-Labor</b>	<b>\$ 13,291,685</b>	<b>SCE Exhibit 6 Volume 6 Testimony p. 20, Figure II-7</b>
<b>Adjustment 1:</b> Additional environmental support of Transmission Road and Right of Way (TROW) work	\$ 3,796,428	SCE Exhibit 6 Volume 6 Testimony II.C.2.c)(2)(b) p. 23 lines 4-26 and p. 24 lines 1-4
<b>Adjustment 2:</b> New environmental programs/activities	\$ 1,016,183	SCE Exhibit 6 Volume 6 Testimony II.C.2.c)(2)(b) p. 24 lines 5-21
<b>Adjustment 3:</b> Additional environmental support for various programs (e.g., waste disposal, air quality, Hazardous Material Business Plan/Spill Prevention Control and Countermeasures, etc.)	\$ 1,439,472	SCE Exhibit 6 Volume 6 Testimony II.C.2.c)(2)(b) p. 24 lines 22-29 and p. 25 lines 1-22
<b>Adjustment 4:</b> Marine Mitigation Programs	\$ 1,753,130	SCE Exhibit 6 Volume 6 Testimony II.C.2.c)(2)(b) p. 25 lines 23-29 and p. 26 lines 1-7
<b>Adjustment 5:</b> Miscellaneous costs and adjustments	\$ 62,596	Other miscellaneous costs and adjustments
<b>Environmental Programs 2025 Forecast Non-Labor (2022 Recorded + Adjustment 1 + Adjustment 2 + Adjustment 3 + Adjustment 4 + Adjustment 5)</b>	<b>\$ 21,359,492</b>	<b>SCE Exhibit 6 Volume 6 Testimony p. 20, Figure II-7</b>
<b>Variance between 2022 Actuals vs 2025 Forecast</b>	<b>\$ 8,067,808</b>	

TURN-SCE-032 Question 04 (Details)

GRC Activity Environmental Programs Non-Labor

Category	Program Description	2022 Actuals	2025 Forecast	2022 Actuals vs 2025 Forecast	Notes (Includes Justification of Increase for 2025 forecast vs 2022 spend)
TROW	Transmission Road and Right of Way (TROW)	\$ 1,434,763	\$ 5,231,191	\$ 3,796,428	<b>2022 Spend = \$1,434,763, 2025 Forecast = \$5,231,191, Increase of \$3,796,428</b> The increase in costs from 2022 to 2025 is driven by environmental support for TROW's proposed work scope, strengthened compliance controls, and implementation of permit conditions and measures from regulatory agencies. TROW's proposed work scope is greater than previous years and is directly correlated to an increased work volume for environmental support. SCE initiated stronger environmental controls to address feedback from environmental and land management regulatory agencies and to improve compliance. Lastly, regulatory changes have increased permitting requirements (like California Department of Fish and Wildlife Streambed Alteration Agreements) to perform road maintenance work in waterways and encompass activities such as implementation of permits' requirements (e.g., surveys, monitoring).
<b>TROW Total</b>		<b>\$ 1,434,763</b>	<b>\$ 5,231,191</b>	<b>\$ 3,796,428</b>	
New Programs	Pesticide Compliance Support	\$ -	\$ 49,020	\$ 49,020	This is a new program for pesticide compliance support for 2025 forecast. This program's 2025 forecast is to ensure environmental compliance with Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requirements.
New Programs	Protocol Surveys	\$ -	\$ 294,118	\$ 294,118	This is a new program for protocol surveys support for 2025 forecast. In 2020 and 2023, the California Department of Fish and Wildlife changed its interpretation of a law that previously provided a permit exemption to SCE for California Endangered Species Act (CESA) endangered and threatened plants species, resulting in SCE needing to obtain incidental take coverage for impacts to state-listed botanical species on all future projects where those species occur. Protocol surveys will assist SCE in being able to better manage the state-listed resource and result in long-term cost reductions (i.e., reduction in surveying and/or monitoring costs) in instances where it can be confirmed the species are not present.
New Programs	Environmental Post-Construction Support for Miscellaneous T&D projects	\$ -	\$ 570,105	\$ 570,105	This is a new program for environmental post-construction support of miscellaneous T&D projects for 2025 forecast. For example, some T&D projects require multi-year erosion control monitoring after completion of construction. The program's 2025 forecast encompasses environmental support for T&D projects with these types of post-construction environmental requirements.
New Programs	Environmental Support for Oil Wells	\$ -	\$ 102,941	\$ 102,941	This is a new program for environmental post-construction support for legacy oil wells for 2025 forecast. ESD has been required to address three historical oil wells that were identified by the California Department of Conservation Geologic Energy Management Division. The three historical wells were identified and subject to a management and monitoring plan.
<b>New Programs Total</b>		<b>\$ -</b>	<b>\$ 1,016,183</b>	<b>\$ 1,016,183</b>	
Additional Support	Air Quality Compliance	\$ -	\$ 1,402,524	\$ 1,402,524	2022 spend for Air Quality compliance was included under GRC Activity Environmental Management and Development. SCE incurred the below amount for 2022 spend for Air Quality Compliance under GRC Activity Environmental Management and Development. <b>2022 Spend = \$1,028,469, 2025 Forecast = \$1,402,524, Increase of \$374,055</b> Costs have increased due to regulatory amendments and adoptions related to Catalina Repower, power generation, fuel dispensing, refrigerant, portable generators and equipment, sulfur hexafluoride equipment, asbestos, and corporate greenhouse gas accounting. The 2025 forecast includes additional costs for anticipated new compliance requirements based on local air districts' and California's clean air and carbon neutrality goals. Additional rules and regulations may also be amended and adopted by the US Environmental Protection Agency, California Air Resources Board, South Coast Air Quality Management District, and other local air districts. These updates will likely result in the issuance of additional compliance guidance on emissions mitigation, health risk assessment, and California Environmental Quality Act analyses. The 2025 forecast includes additional support for this work and regulatory changes related to permitting, monitoring, recordkeeping, and reporting requirements. The 2025 forecast incorporates support for chemical compliance analysis, notifications, permitting, and plan approvals; ensures volatile organic compounds materials compliance, and supports additional compliance framework developments for asbestos, fugitive dust, chemical compliance, and Low Carbon Fuel Standard (LCFS). The 2025 forecast also includes support for RECLAIM/Title V/Peabody Beach Health Risk Assessment (HRA), air quality reporting for facilities and project applications, emission trading credits, generation facilities (e.g., Peabody Beach, Mountairview, Five Peakers), Corporate Sustainability Report metrics, indices and scorecards reporting, Scope 3 expansion, Forest Greenhouse Gas project, and other miscellaneous program support. (Please note 2022 recorded spend of \$1,028,469 for Air Quality Compliance was included under GRC Activity Environmental Management and Development, with 2025 forecast of \$1,402,524 included in GRC Activity Environmental Programs. This was due to accounting settlement issues for several programs. This is the reason 2022 recorded spend is \$0 for Air Quality Compliance for GRC Activity Environmental Programs. Please see SCE's response to data request "PubAdv-SCE-144-FNZ 04-a-d".)
Additional Support	Biological and Archaeological Programs (Avian Protection, GIS Support, Archaeology, Herpetology)	\$ 316,585	\$ -	\$ (316,585)	2025 forecast for Biological and Archaeological Programs (Avian Protection, GIS Support, Archaeology, Herpetology) was included under GRC Activity Environmental Management and Development. SCE included the below amount for 2025 forecast for Biological and Archaeological Programs (Avian Protection, GIS Support, Archaeology, Herpetology) under GRC Activity Environmental Management and Development. <b>2022 Spend = \$316,585, 2025 Forecast = \$382,353, Increase of \$65,768</b> 2025 forecast assumptions of \$382,353: i) \$17,847 for Avian Protection (Provides support for responses to avian emergencies, nest removals, etc.) ii) \$117,647 for GIS Support (Provides support for Geographic Information System (GIS) data management, schema updates and maintenance, online map viewing tool support, etc.) iii) \$58,804 for Archaeology Program (Provides support for archaeology program initiatives for SCE's work (e.g., Master Special Use Permit)) iv) \$88,235 for Herpetology Program (Desert Tortoise training program exploring resource management strategies around desert tortoise or other protected species) (Please note 2025 forecast of \$382,353 was included under GRC Activity Environmental Management and Development, with 2022 recorded spend of \$316,585 included in GRC Activity Environmental Programs. This was due to accounting settlement issues for several programs. This is the reason 2025 forecast is \$0 for these programs for GRC Activity Environmental Programs. Please see SCE's response to data request "PubAdv-SCE-144-FNZ 04-a-d".)
Additional Support	National Pollutant Discharge Elimination Systems (NPDES)	\$ 469,169	\$ -	\$ (469,169)	2025 forecast for NPDES programs was included under GRC Activity Environmental Management and Development. SCE included the below amount for 2025 forecast for NPDES programs under GRC Activity Environmental Management and Development. <b>2022 Spend = \$469,169, 2025 Forecast = \$349,705, Decrease of \$119,464</b> This program includes support to ensure compliance with NPDES requirements, including general program support, treated wood and facility storm water program, industrial waste water program, and compliance support with state regulated vault discharge requirements. A new position was added to Environmental Services Department to pursue efficiencies and cost savings whenever possible through utilization of internal staff versus consultants to support environmental activities. This new internal position reduced consultant support in 2025 forecast. (Please note 2025 forecast of \$349,705 was included under GRC Activity Environmental Management and Development, with 2022 recorded spend of \$469,169 included in GRC Activity Environmental Programs. This was due to accounting settlement issues for several programs. This is the reason 2025 forecast is \$0 for NPDES for GRC Activity Environmental Programs. Please see SCE's response to data request "PubAdv-SCE-144-FNZ 04-a-d".)
Additional Support	Permitting Support	\$ 349,128	\$ 112,745	\$ (236,383)	<b>2022 Spend = \$349,128, 2025 Forecast = \$112,745, Decrease of \$236,383</b> Program includes permitting support for Bureau of Land Management (BLM) Mohave National Preserve Desert Tortoise and other non project specific work. 2022 included costs for an agency payment for U.S. Fish and Wildlife Services (USFWS) to develop a General Conservation plan (GCP) for biological species protection on non-public lands. These costs were excluded from the 2025 forecast.
Additional Support	Generation Program	\$ 79,528	\$ 73,529	\$ (5,999)	<b>2022 Spend = \$79,528, 2025 Forecast = \$73,529, Decrease of \$5,999</b> This program provides support for requirements for environmental studies (e.g., invasive mussels, eagle surveys).
Additional Support	Hazardous and Nonhazardous Waste Transportation and Disposal	\$ 1,318,013	\$ 2,039,216	\$ 721,203	<b>2022 Spend = \$1,318,013, 2025 Forecast = \$2,039,216, Increase of \$721,203</b> 2022 spend was \$1.32 million. ESD projected 2023 forecast will be \$1.62 million, which included an increase of \$0.3 million above 2022 spend. SCE incorporated an additional increase of approximately 25% above 2023 estimate of \$1.62 million in the program's 2025 forecast of \$2 million. Waste management regulations require hazardous waste to be managed only by facilities that are approved and authorized to receive and process such waste. SCE experienced issues with the availability of incinerators and other supply chain backlogs in 2022. The 2023 estimate and 2025 forecast includes additional costs to account for incinerator shortages, increased contractor rates, transportation fuel charges, and facility operations. This program's costs include disposal of federal and state regulated hazardous wastes from SCE operations include used motor oil, lightbulbs, electronics, clarifier waste management, etc. Activities encompass drum disposal, bulk oil disposal, clarifier clean-out, hauling hazardous waste, performing inspections, and maintaining inventory. This program is driven by compliance and regulatory requirements to characterize, transport, and dispose of hazardous and nonhazardous waste properly and within the required time limits. Failure to comply with agency requirements may result in potential fines and penalties.
Additional Support	Hazardous Material Business Plan/Spill Prevention Control and Countermeasures (HMBP/SPCC)	\$ 603,997	\$ 784,314	\$ 180,316	<b>2022 Spend = \$603,997, 2025 Forecast = \$784,314, Increase of \$180,317</b> The increase in 2025 forecast includes providing support for incoming backup generator deployments, emerging activities, and company initiatives. This program's activities encompass preparation of plans and performing updates and modifications to plans as needed. Updates are required by agencies on an annual basis, and modifications are required wherever there are changes to facilities, such as installation of new transformer. Failure to comply with agency requirements may result in potential fines and penalties.
Additional Support	Drinking Water	\$ 748,233	\$ 833,333	\$ 85,100	<b>2022 Spend = \$748,233, 2025 Forecast = \$833,333, Increase of \$85,100</b> 2025 forecast includes additional costs to implement new regulated system procedures for SCE's drinking water systems, incorporate new State Water Resources Control Board requirements for sampling and pipe inventories, and support drought and water curtailment coverage and reporting. This program's activities encompass support for drinking water sampling, ensure drinking water standards meet compliance requirements, and provide support for well information data management. These activities help ensure safe and compliant drinking water at SCE's facilities and compliance with agency regulatory requirements.
Additional Support	Spill Response	\$ 68,595	\$ 147,059	\$ 78,463	<b>2022 Spend = \$68,595, 2025 Forecast = \$147,059, Increase of \$78,464</b> 2025 forecast includes additional costs to support California Accidental Release Prevention facilities (CalARP) and Department of Transportation (DOT) requirements for prevention of chemical spills. 2025 forecast includes environmental management for CalARP support (includes regulatory inspections for CalARP facilities, tank reports, etc.), marine oil spill contingency plan support, DOT support for safe transportation of spill prevention activity, and Polychlorinated Biphenyls (PCB) training for regulatory compliance purposes.

Category	Program Description	2022 Actuals	2025 Forecast	2022 Actuals vs 2025 Forecast	Notes (includes justification of increase for 2025 forecast vs 2022 spend)
<b>Additional Support Total</b>		<b>\$ 3,953,249</b>	<b>\$ 5,392,720</b>	<b>\$ 1,439,472</b>	
Marine Mitigation	Reef Maintenance	\$ 1,498,453	\$ 2,253,254	\$ 754,801	<b>2022 Spend = \$1,498,453, 2025 Forecast = \$2,253,254, Increase of \$754,801</b> 2025 forecast includes additional costs for sonar surveys which were not required to be performed in 2022. Sonar surveys are required to be performed every 5 years under Coastal Development Permit (CDP) for Reef Maintenance. 2022 recorded spend included an agency credit for California Coastal Commission payments for the SONGS Mitigation and Monitoring Program which are not expected in future years. 2025 forecast includes environmental support for sonar surveys, California Coastal Commission Mitigation and Monitoring Program administration fees, and State Lands Commission lease payments.
Marine Mitigation	San Dieguito Wetlands	\$ 2,327,387	\$ 3,325,715	\$ 998,328	<b>2022 Spend = \$2,327,387, 2025 Forecast = \$3,325,715, Increase of \$998,328</b> 2025 forecast includes additional costs for conducting Sediment and Analysis Plan tests as part of new agency requirements from U.S. Army Corps of Engineers (USACE) and Environmental Protection Agency (EPA) to check for sediments and contaminants. SCE included additional costs in the 2025 forecast for purchase and installation of plants each year, as required, to help meet restoration requirements. 2022 recorded spend also included an agency credit for California Coastal Commission payments for the SONGS Mitigation and Monitoring Program which are not expected in future years. 2025 forecast includes environmental support for surveys, inlet dredging, restoration activities, permitting, reporting, beam inspections and coordination, and other miscellaneous support. 2025 forecast also includes California Coastal Commission Mitigation and Monitoring Program administration fees, and San Dieguito River Park Joint Powers Authority payments.
<b>Marine Mitigation Total</b>		<b>\$ 3,825,840</b>	<b>\$ 5,578,969</b>	<b>\$ 1,753,130</b>	
Misc Costs and Adjustments	Weed Abatement	\$ 879,622	\$ -	\$ (879,622)	2025 forecast for environmental support for Vegetation Management programs (including weed abatement) are included in Exhibit SCE-02, Vol. 10.
Misc Costs and Adjustments	Routine Line Clearing	\$ 25,292	\$ -	\$ (25,292)	2025 forecast for environmental support for Vegetation Management programs (including routine line clearing) are included in Exhibit SCE-02, Vol. 10.
Misc Costs and Adjustments	Biology Program, Biological GIS	\$ 165,291	\$ 573,529	\$ 408,238	<b>2022 Spend = \$165,291, 2025 Forecast = \$573,529, Increase of \$408,238</b> SCE included additional costs in the 2025 forecast for development of measures to comply with permitting and agency requirements. California is experiencing a significant increase in biological species being listed as state and/or federally threatened and endangered. Additionally, project work at SCE is becoming more voluminous and complex. This is resulting in a growth in the Biology Program to effectively manage resources and ensure compliance with environmental laws and regulations. 2025 forecast accounts for this growth by including 1) \$0.24 million for biological program manager support to revamp/update SCE's standard avoidance and minimization measures and associated crosswalks for O&M projects, perform updates to biological resources guidance documents that ensures compliance, develop new botany Master Special Use Permit (MSUP) guidance, provide project management support to initiatives, coordinate negotiations with agencies and stakeholders, and facilitate/improve other related essential biological processes/procedures, 2) \$0.17 million for tracking impacts to biological resources, preparing annual reports, and developing better mean to manage biological resources using Geographic Information System (GIS), reviewing biological water permitting habitat assessments, providing subject matter expert level support for addressing small mammals and invertebrates, and 3) \$0.17 million for improving biological range maps for species, including biological field surveys with ground truthing GIS data to improve range maps and support botanical/biological programs for species (e.g., Amargosa vole, Mohave ground squirrel, Buena Vista lake orrante shrew, San Bernardino Kangaroo Rat in Riverside County, Coachella Valley fringe-load lizard, Kern primrose sphinx moth, etc.) and guide development of measures to comply with permits/agency requirements. Ground truthing can also help confirm whether species habitat are present and result in reduction of preconstruction surveys and monitoring costs.
Misc Costs and Adjustments	Wetlands Program	\$ 378,802	\$ 539,216	\$ 160,414	<b>2022 Spend = \$378,802, 2025 Forecast = \$539,216, Increase of \$160,414</b> In the 2025 forecast, SCE included additional costs for Wetlands consultant support for Transmission Road and Right of Way (TROW) work. TROW's proposed work scope is greater than previous years. SCE estimated approximately \$0.25 million for a full time consultant FTE support based on 150 per hour x 2080 hours. SCE also included approximately \$0.3 million in the 2025 forecast for other Wetlands compliance program activities to ensure compliance with Clean Water Act (Section 401, 404) and Fish and Game Code (Section 1602) requirements. The program also includes support for regulatory changes, California Environmental Quality Environmental Act (CEQA), and programmatic agreements.
Misc Costs and Adjustments	Storm Water Pollution Prevention Plan (SWPPP)	\$ 35,670	\$ 188,464	\$ 152,794	<b>2022 Spend = \$35,670, 2025 Forecast = \$188,464, Increase of \$152,794</b> In the 2025 forecast, SCE included additional costs for Storm Water Pollution Prevention Plan (SWPPP) due to regulatory changes in State Water Resources Control Board (SWRCB) construction storm water permit requirements and regulations. 2025 forecast includes program compliance support for municipal construction storm water regulations, Construction Storm Water General Permit (CGP) support, applicable permit fees, and other miscellaneous costs.
Misc Costs and Adjustments	Cleanup of Dumps, Encampments, Pest Abatement Activities	\$ 785,175	\$ 882,353	\$ 97,178	<b>2022 Spend = \$785,175, 2025 Forecast = \$882,353, Increase of \$97,178</b> In the 2025 forecast, SCE included additional costs for environmental support for cleanup of dumps, encampments, pest management, and other waste management activities. SCE retains specialized contractors to perform waste management activities such as testing, spill clean-up, and disposal based on the hazard level of each material. Yearly spend can fluctuate based upon the volume of waste activities (e.g., encampments, bee hive removals) for each year.
Misc Costs and Adjustments	Permit Renewal Fees	\$ 1,174,443	\$ 1,242,157	\$ 67,714	<b>2022 Spend = \$1,174,443, 2025 Forecast = \$1,242,157, Increase of \$67,714</b> SCE included additional costs in the 2025 forecast for permit renewal fees for surcharges for Certified Unified Program Agencies (CUPA) permits. The 2025 forecast also incorporated an increase in the volume of permitted facilities. Permit fees are needed to operate SCE's facilities under the jurisdiction of state and federal environmental agencies, Air Quality Management District (AQMD), CUPA, and Environmental Protection Agency (EPA).
Misc Costs and Adjustments	Mohave Site Maintenance	\$ 214,778	\$ 216,734	\$ 1,956	<b>2022 Spend = \$214,778, 2025 Forecast = \$216,734, Increase of \$1,956</b> 2022 spend of \$214,778 is closely aligned with 2025 forecast of \$216,734 for Mohave Site Maintenance. This program includes site maintenance and annual sampling and reporting. This program is required for compliance with agency and regulatory requirements for Mohave site. Activities encompass annual groundwater monitoring and reporting, field management, site maintenance, security, and project management. Forecast excludes landfill repairs driven by weather conditions.
Misc Costs and Adjustments	Other Program Support (Tank Management)	\$ 223,986	\$ 229,412	\$ 5,426	<b>2022 Spend = \$223,986, 2025 Forecast = \$229,412, Increase of \$5,426</b> 2022 spend of \$223,986 is closely aligned with 2025 forecast of \$229,412 for Tank Management program. Program includes environmental support for monitoring certification, vapor recovery, and tank inspections.
Misc Costs and Adjustments	Other Program Support (Miscellaneous)	\$ 132,255	\$ 209,740	\$ 77,485	<b>2022 Spend = \$132,255, 2025 Forecast = \$209,740, Increase of \$77,485</b> Program includes miscellaneous support. Activities encompass conducting environmental reviews, providing OU outreach, and process development. Program also includes environmental support for preparation of training material, processing documents, program manuals, etc.
Misc Costs and Adjustments	Well Management	\$ 4,665	\$ -	\$ (4,665)	<b>2022 Spend = \$4,665, 2025 Forecast = \$0, Decrease of \$4,665</b> Well Management program includes environmental support for well information data management, technical support needed for well issues, and database associated with wells. 2022 included minimal spend as the majority of costs were incorporated under Drinking Water program. 2025 forecast for Well Management has also been incorporated under the Drinking Water program.
Misc Costs and Adjustments	Other Program Support (Restoration, Raven Management Plan)	\$ 56,721	\$ 58,824	\$ 2,103	<b>2022 Spend = \$56,721, 2025 Forecast = \$58,824, Increase of \$2,103</b> 2022 spend of \$56,721 is closely aligned with 2025 forecast of \$58,824 for this program. 2025 forecast includes support for post-construction survey requirements for various projects (e.g., Devers Colorado River, Red Bluff Substation).
Misc Costs and Adjustments	Post-Construction Environmental Restoration Activities (e.g., TRTP, ELDS)	\$ 1,133	\$ -	\$ (1,133)	2025 forecast for environmental post-construction restoration costs (e.g., Tehachapi Renewable Transmission Project, El Dorado Line Swap) are included in Exhibit SCE-02, Vol. 11
<b>Misc Costs and Adjustments Total</b>		<b>\$ 4,077,833</b>	<b>\$ 4,140,429</b>	<b>\$ 62,596</b>	
<b>Grand Total</b>		<b>\$ 15,291,688</b>	<b>\$ 21,389,493</b>	<b>\$ 6,097,805</b>	

PubAdv-SCE-144-FNZ, Question 04.a-d

**DATA REQUEST SET P u b A d v - S C E - 1 4 4 - F N Z**

**To: Public Advocates Office**  
**Prepared by: Katie Wong ESD**  
**Job Title: Advisor**  
**Received Date: 8/31/2023**

**Response Date: 9/15/2023**

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**Question 04.a-d:**

Referring to Exhibit SCE-06, Vol.06, pg.16, lines 16-19, SCE states, “\$1.2 million of this variance is due to removal of costs for improvements to the Environmental Management System, which will be completed by 2025. The remaining part of this variance is attributed to several environmental programs with accounting settlement updates, which resulted in these programs.” Please respond to the following:

- a. What does SCE mean by accounting settlement?
- b. Provide detailed information regarding what type of accounting settlement is referred to for the following environmental program sub activities: Air Quality Compliance, Biological, Archaeological, and National Pollutant Discharge Elimination System programs.
- c. Provide the reason for accounting settlement for each sub activity.
- d. Provide expense breakdown for each accounting settlement according to the sub activity.

**Response to Question 04.a-d:**

- a. SCE utilizes internal orders for allocation of charges and in the forecast methodology for environmental activities. An internal order number settles to a cost center, which includes information for the FERC account number to which the expenses are assigned. The FERC account number helps determine the GRC activity (e.g., Environmental Management and Development, Environmental Programs) of the recorded spend and forecast.
- b. There were several programs in which the 2022 recorded spend was included under Environmental Management and Development, and the 2025 forecast was included under Environmental Programs, and vice versa, in which the 2022 recorded spend was included under Environmental Programs, and the 2025 forecast was included under Environmental Management and Development.
  - For Air Quality Compliance, SCE utilized an internal order to record spend for 2022, and 2022 recorded spend was included under GRC Activity Environmental Management and Development. Although SCE utilized the same internal order in the 2025 forecast for Air Quality Compliance, the 2025 forecast was included under GRC Activity Environmental Programs. The internal order encompassed several updates to the settlement cost center throughout the years, which could be due to reorganization and other changes. 2022 recorded spend for the internal order utilized the internal order’s most recent settlement cost center, which included a FERC account number for GRC Activity Environmental Management and Development. 2025 forecast for the same internal order utilized a previous settlement cost center, which included a FERC account number for GRC Activity Environmental Programs.
  - For Biological, Archaeological, and National Pollutant Discharge Elimination System (NPDES) programs, SCE utilized internal orders to record spend for 2022, and 2022 recorded spend for these programs were included under GRC Activity Environmental Programs. Although SCE utilized the same internal orders in the 2025 forecast for these programs, the 2025 forecast for these programs were included under GRC Activity Environmental Management and Development. The internal orders encompassed several updates to the settlement cost centers throughout the years, which could be due to reorganization and other changes. 2022 recorded spend for the internal orders utilized the internal orders’ most recent

settlement cost centers, which included FERC account numbers for GRC Activity Environmental Programs. 2025 forecast for the same internal orders utilized previous settlement cost centers, which included FERC account numbers for GRC Activity Environmental Management and Development.

- c. The reason for the accounting settlement for each sub activity is to align the sub activity with the appropriate GRC activity. Air Quality Compliance, and Biological, Archaeological, and National Pollutant Discharge Elimination System (NPDES) programs should be included under GRC Activity Environmental Programs. SCE has incorporated updates for the programs' accounting settlements to ensure recorded spend and forecast are included within the same GRC activity for future planning purposes. For example, for Air Quality Compliance, the internal order's settlement cost center has been updated to reflect a cost center for GRC Activity Environmental Programs. This will enable the program's spend to record to Environmental Programs. For forecast of Air Quality Compliance program's spend, SCE will utilize this program's cost center versus the internal order to ensure the forecasted amount is also included under Environmental Programs. SCE will also forecast the other programs at the cost center level versus the internal order level to ensure the programs' recorded spend and forecasts are included within the same GRC activity.
- d. SCE included the expense breakdown for each accounting settlement according to the sub activity. The adjustment for GRC activity Environmental Management and Development included a reduction of approximately \$0.3 million between 2022 recorded spend and 2025 forecast. The adjustment for GRC Activity Environmental Programs included an increase of approximately \$0.6 million between 2022 recorded spend and 2025 forecast. In SCE's response to PubAdv-SCE-144-FNZ 06.a-d, an excel attachment is included titled "PubAdv-SCE-144-FNZ 06.a-d". The adjustment for an increase of \$0.6 million for GRC Activity Environmental Programs is included on "EP Additional Support" tab. The below table's amount is in millions.

GRC Activity	Program (Sub Activity)	2022 Spend	2025 Forecast	Variance
Environmental Management and Development	Air Quality Compliance	1.03	0.00	-1.03
Environmental Management and Development	Biological and Archaeological Programs (Avian Protection, GIS Support, Archaeology, Herpetology)	0.00	0.38	0.38
Environmental Management and Development	National Pollutant Discharge Elimination System (NPDES) Programs	0.00	0.35	0.35
<b>Environmental Management and Development Total</b>		<b>1.03</b>	<b>0.73</b>	<b>-0.30</b>
Environmental Programs	Air Quality Compliance	0.00	1.40	1.40
Environmental Programs	Biological and Archaeological Programs (Avian Protection, GIS Support, Archaeology, Herpetology)	0.32	0.00	-0.32
Environmental Programs	National Pollutant Discharge Elimination System (NPDES) Programs	0.47	0.00	-0.47
<b>Environmental Programs Total</b>		<b>0.79</b>	<b>1.40</b>	<b>0.62</b>

PubAdv-SCE-059-FNZ, Question 04.a-g

*Southern California Edison*  
*A.23-05-010 – SCE 2025 GRC*

**DATA REQUEST SET P u b A d v - S C E - 0 5 9 - F N Z**

**To: Public Advocates Office**  
**Prepared by: Katie Wong ESD**  
**Job Title: Advisor**  
**Received Date: 7/19/2023**

**Response Date: 8/1/2023**

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**Question 04.a-g:**

In response to data request PubAdv-SCE-008-FNZ, Q.01.g., SCE states, “SCE’s 2025 test year forecast for Environmental Service Department’s (ESD) Environmental Management and Development is based on last year recorded (i.e., 2022 recorded costs) plus adjustments. Provide the following information:

- a. Exact location in the testimony and workpapers for the adjustments applied to the expenses.
- b. Explanation of the type of adjustments.
- c. Are the adjustments industry based or developed by SCE.
- d. If the adjustments are developed by SCE, then provide the criteria used to develop these adjustments.
- e. Any other information that will be helpful to understand what these adjustments are.
- f. Provide the requested information in the attached Excel file “PubAdv-SCE-059-FNZ Attachment,” tab “O&M and A&G Expenses”.
- g. Provide all amounts in “Real or Actual Dollars,” before adjusting for inflation.

**Response to Question 04.a-g:**

- a. SCE would like to clarify that on June 2, 2023, SCE submitted Exhibit SCE-06, Vol. 06A to include Appendix A (which does not relate to the Environmental Services Department). SCE’s 2025 test year forecast for Environmental Service Department’s (ESD) Environmental Management and Development is based on last year recorded (i.e., 2022 recorded costs) plus adjustments. For Environmental Management and Development, please see pages 14-16 of Exhibit SCE-06, Vol. 6A, Chapter 2, which provides SCE’s calculations for the \$5.3 million adjustment in labor costs and the \$1.5 million adjustment in non-labor costs. For the labor adjustments of \$5.3 million, SCE would also like to clarify that SCE’s reference to the “new internal positions” on lines 21-22 on page of Exhibit SCE-06, Vol. 06A refers to both new positions forecasted for 2025 that did not exist in 2022, as well as positions that have been vacant in 2022.
- b. The type of adjustments include labor and non-labor adjustments. The 2025 labor forecast included an adjustment of \$5.3 million. This increase is comprised of approximately \$4.4 million primarily due to new positions forecasted for 2025 that did not exist in 2022, as well as positions that have been vacant in 2022. These positions are necessary to support a significant increase in O&M work to support strategic grid resiliency and green energy transformation initiatives, combined with increasing applicable regulatory requirements and

improvements to the Environmental Management System to ensure compliance performance for operations of this complexity and size. These positions are comprised of technical expertise to support increasing regulatory requirements, field positions to provide greater assurance of compliance performance in the field, and governance positions to improve the Environmental Management System. The remainder of the labor increase is primarily attributable to an adjustment to reflect certain changes made to SCE's employee compensation program. Please refer to SCE's response to Pub Adv-SCE-008 FNZ 02.e-f. The 2025 non-labor forecast included a reduction adjustment of \$1.5 million. This reduction is primarily due to removal of costs of approximately \$1.2 million for improvements to the Environmental Management System, which will be completed by 2025. The remaining part of this variance is attributed to several environmental programs with accounting settlement updates, which resulted in these programs' 2022 recorded spend included under Environmental Management and Development, and 2025 forecast included under Environmental Programs.

- c. The adjustments are developed by SCE.
- d. For the labor adjustments, Environmental Services Department (ESD) evaluated information from a preliminary organizational assessment initiated in 2022 (performed by Ernst & Young) to determine the duties and classifications of the positions necessary in 2025. The new positions listed in PubAdv-SCE-059-FNZ Attachment - 04.d-g.xlsx (04.d-g New Positions tab) are based on information from SCE's evaluation of the preliminary study and our overall assessment of ESD's current and anticipated work. SCE will provide to Cal Advocates the Ernst & Young assessment when it is completed, which is expected in Sept-October 2023. For the non-labor adjustments, ESD anticipates that costs for improvements to the Environmental Management System will not be needed in 2025 due to completion of this work.
- e. ESD included details for labor and non-labor adjustments in the attached Excel file "PubAdv-SCE-059-FNZ Attachment 04d-g".
- f. Please see Excel file "PubAdv-SCE-059-FNZ Attachment 04d-g," tab "O&M and A&G Expenses". ESD also incorporated other tabs into this excel file to provide additional details for this response.
- g. Please see Excel file "PubAdv-SCE-059-FNZ Attachment 04d-g," tab "O&M and A&G Expenses". 2022 recorded spend is in real or actual dollars, and 2025 test year forecast is in 2022 dollars without escalation.

PubAdv-SCE-059-FNZ Q.04.a-g

Operating & Maintenance (O&M) and Administrative and General (A&G) Expenses (\$ Actual)

GRC Activity	Sub Activity	Regulatory Cost Element Group	FERC Account	2022 Recorded	2025 Forecast	Variance	Notes
Environmental Management and Development	Environmental Management, Development, Training, and Travel	Labor	920/921	\$ 12,463,343	\$ 10,894,916	\$ 4,411,573	Please see 04.d-g summary tab, 04.d-g New Positions tab, and 04.d-g Planned Positions tab.
Environmental Management and Development	Environmental Management, Development, Training, and Travel	Labor	920/921	\$ -	\$ 879,087	\$ 879,087	Please refer to SCE's response to Pub Adv-SCE-008 FNZ 02.e-f
Environmental Management and Development	Environmental Management, Development, Training, and Travel	Non-Labor	920/921	\$ 4,045,021	\$ 2,566,260	\$ (1,478,761)	For Non-Labor, ESD included 2025 forecast of \$2.6 million versus 2022 recorded spend of \$4.1 million. The reduction of approximately \$1.5 million was primarily due to the below adjustments: 2022 recorded spend included approximately \$1.2 million for improvements to Environmental Management System. 2025 forecast included these costs as ESD anticipates that costs will not be needed in 2025 due to completion of this work. Remaining variance of approximately \$0.3 million is attributed to several environmental programs (e.g. Air Quality Compliance, Biological, Archaeological, and National Pollutant Discharge Elimination System programs) with accounting settlement updates. This resulted in the programs' 2022 recorded spend included under Environmental Management and Development and 2025 forecast included under Environmental Programs (and vice versa). The accounting settlement for these programs have been updated to align spend and forecast within the same GRC activity for future years.
Environmental Management and Development	Environmental Management, Development, Training, and Travel	Other	931	\$ 2,280	\$ -	\$ (2,280)	Other miscellaneous costs
				<b>\$ 16,530,644</b>	<b>\$ 20,340,263</b>	<b>\$ 3,809,618</b>	

PubAdv-SCE-095-FNZ, Question 01.a-h

*Southern California Edison*  
*A.23-05-010 – SCE 2025 GRC*

**DATA REQUEST SET P u b A d v - S C E - 0 9 5 - F N Z**

**To: Public Advocates Office**  
**Prepared by: Katie Wong ESD**  
**Job Title: Advisor**  
**Received Date: 8/11/2023**

**Response Date: 8/25/2023**

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**Question 01.a-h:**

Referring to Exhibit SCE-06, Vol. 06, for Environmental Services related capital expenditure projects, please provide the requested information below:

a. Provide copies of all the permits related to the Waters Permits for Transmission Road and Right of Way (TROW) that SCE has acquired as of July 30, 2023.

b. For Environmental Services has SCE acquired the General Waters Permits to cover multiple projects and activities (e.g., pole replacements and repairs, road repair projects and improvements, vegetation management trims and removal)? If so, please provide copies of the permits related to the General Waters Permits as of July 30, 2023.

c. Has SCE started incurring expenses for the Species Permit program? If so, provide costs incurred by SCE, and copies of all the permits related to the Species Permit projects that SCE has acquired as of July 30, 2023.

d. Has SCE started incurring expenses for the Coastal Permit program? If so, provide costs incurred by SCE, and copies of all the permits related to the Coastal Permit projects that SCE has acquired as of July 30, 2023.

e. Has SCE started incurring expenses for the Waters Permit program? If so, provide costs incurred by SCE, and copies of all the permits related to the Waters Permit projects that SCE has acquired as of July 30, 2023.

f. What percentage of work has been done for each of the projects, provide amounts spent and percentages completed as of July 30, 2023:

i. Waters Permits project for TROW

ii. Species Permit projects, and

iii. Coastal Permit projects.

g. When were the projects started? When does SCE expect the projects to be completed and useful?

h. How are these projects beneficial for the ratepayers?

**Response to Question 01.a-h:**

- a. SCE included copies of all the permits related to the Transmission Road and Right of Way (TROW) Waters Permits that SCE has acquired as of July 30, 2023. Please see excel file PubAdv-SCE-095-FNZ.xlsx, tab 01.a,d, which includes the list of Waters Permits for TROW. Please see PubAdv-SCE-095-FNZ.zip folder for the PDF copies of these permits.

- b. SCE has not acquired the General Waters Permits to cover multiple projects and activities (e.g., pole replacements and repairs, road repair projects and improvements, vegetation management trims and removal).
- c. SCE has started incurring expenses for the Species Permits program. Please see excel file “PubAdv-SCE-095-FNZ.xlsx, tab 01.c,d,e,f,g”, which includes costs incurred by SCE for capital permits for Species Permit program through 2022. Please see additional information included below for 2023 costs. SCE has not acquired any permits related to the Species Permits as of July 30, 2023. Recorded spend from 2020 to 2022 included development and support of programmatic permitting strategy and permits' long-term coverage for operations and maintenance activities (e.g., pole replacements, structure brushing, road grading) for existing facilities. Issuance of these permits will average about 3 to 5 years after the initial stage of permit development due to the complexity of permitting efforts and agency resource constraints. The permits are typically, good for 30 to 50 years and coverage may include multiple species (e.g., monarch butterfly, arroyo toad, desert tortoise, Mohave ground squirrel, Stephens' and San Bernardino kangaroo rats, western Joshua tree). SCE is currently working with agencies on the development of five programmatic permits for this program.
- d. SCE has started incurring expenses for the Coastal Permits program. Please see excel file “PubAdv-SCE-095-FNZ.xlsx, tab 01.c,d,e,f,g”, which includes costs incurred by SCE for capital permits for Coastal Permits program through 2022. Please see additional information included below for 2023 costs. SCE included copies of all the coastal development permits and permit exemptions related to the Coastal Permits that SCE has acquired as of July 30, 2023. Please see PubAdv-SCE-095-FNZ.xlsx, tab 01.a,d, which includes the list of coastal development permits and permit exemptions. Please see PubAdv-SCE-095-FNZ.zip folder for the PDF copies of the coastal development permits and permit exemptions.
- e. SCE has started incurring expenses for the General Waters Permits program. Please see excel file “PubAdv-SCE-095-FNZ.xlsx, tab 01.c,d,e,f,g”, which includes costs incurred by SCE for capital permits for General Waters Permits program through 2022. Please see additional information included below for 2023 costs. SCE has not acquired any permits related to the general waters permits as of July 30, 2023.
- f. Please see excel file “PubAdv-SCE-095-FNZ.xlsx, tab 01.c,d,e,f,g” for information included for i) TROW Waters Permits, ii) Species Permits, iii) Coastal Permits, and iv) General Waters Permits. SCE provided the amounts spent through 2022. Please see additional information included below for 2023 costs. SCE included an estimated percentage complete based on permits obtained. SCE included the number of permits obtained in 2022, the number of permits obtained from January through July 2023, and the number of permits in progress. SCE also included the number of permits planned in the 2023 through 2028 forecast.
- g. Please see excel file “PubAdv-SCE-095-FNZ.xlsx, tab 01.c,d,e,f,g” for when the projects were started. SCE expects the projects to be completed and useful once the permits are obtained and the intended coverages are in effect for support of SCE's operations and maintenance activities (e.g., pole replacements, road repairs, vegetation management). For example, SCE obtained a coastal development permit exemption for pole brushing activities in Grid 10 within Santa Monica Mountains Local Coastal Program (SMMLCP). This permit exemption allows SCE to

perform vegetation management pole brushing activities at eighty-three (83) utility pole sites at least once per year within the Santa Monica Mountains Coastal Zone from 2/1/2022 to 2/1/2025.

- h. The projects are beneficial for the ratepayers as outlined below.

#### Regulatory Drivers

- For SCE's operations and maintenance activities (e.g., pole replacements, anchor replacements, road repairs, vegetation management), compliance with environmental laws and regulations is required, including the federal Endangered Species Act (ESA) and California Endangered Species Act (CESA). The species permits program allows SCE to develop and obtain long term incidental take permits in compliance with the federal and state ESAs for field activities.
- For SCE's operations and maintenance activities (e.g., pole replacements, vegetation management) located within the coastal zones, SCE is required to obtain Coastal Development Permit (CDP) and/or permit exemption for compliance with environmental laws and regulations, including the Coastal Act. The coastal permits program allows SCE to develop and obtain long term coastal development permits and exemptions in compliance with the Coastal Act for work located within the coastal zones.
- For SCE's operations and maintenance activities (e.g., pole replacements, anchor replacements, road repairs, vegetation management) that involve ground disturbing impacts, including discharges of dredge and fill material and grading, and vegetation impacts within agency jurisdictional waters of the U.S./waters of the State and/or jurisdictional streambed/bank or associated riparian habitats, SCE is required to obtain waters permits for compliance with environmental laws and regulations, including California Department of Fish and Wildlife (CDFW) Fish and Game Code (F&GC) Section 1600, U.S. Army Corps of Engineers (USACE) Clean Water Act (CWA) Section 404 authorization, State Water Resources Control Board (SWRCB)/Regional Water Quality Control Board (RWQCB) CWA Section 401 Certification, and the Porter-Cologne Water Quality Control Act (Porter-Cologne). The general waters permits program allows SCE to develop and obtain long term general waters permits in compliance with these federal and state regulations (e.g., CWA, F&GC, and Porter-Cologne). The TROW waters permits help ensure SCE is in compliance with these federal and state regulations (e.g., CWA, F&GC, and Porter-Cologne) for road work activities, which encompass grading and blading, water bar restoration and repair, and culvert clean-outs, and are subject to these federal and state regulations and requirements.
- SCE is required to obtain permits for these activities and to comply with all conditions and requirements outlined in the permits per state and federal regulations. Failure to comply with environmental laws and regulations could expose SCE to compliance violations, and lead to significant fines, penalties, and risk of permit revocation.

#### Description of Programmatic Permits

- The Species Permits program supports development and acquisition of programmatic incidental take permits throughout SCE's service territory. The program provides take coverage for operations and maintenance activities for the species and habitat areas included in the permits, allowing SCE to carry out projects in full compliance with the ESA/CESA for a defined period ranging from approximately 30 to 50 years. The programmatic approach enhances efficiency of the ESA/CESA permitting process because

SCE would have take coverage in advance of covered operations and maintenance activities, and would no longer need to obtain take permits on a project-by-project basis.

- The Coastal Permits program supports development and acquisition of Coastal Development Permits (CDPs) and permit exemptions for operations and maintenance work (e.g., vegetation management, pole replacements) located within the coastal zones. CDPs and permit exemptions help ensure SCE's operations and maintenance activities are in compliance with the Coastal Act. The programmatic CDP's duration would last for a period of 5 to 20 years and would provide predictable agency coordination requirements and permit conditions. The exemptions' duration would last for a period ranging from 3 to 20 years, and enables SCE to perform exempt work (i.e., vegetation management structure brushing) located within the coastal zone without the requirement to obtain a CDP.
- The General Waters Permits program supports development and acquisition of long-term general waters permits, and will provide a streamlined process to obtain coverage for SCE's activities in compliance with these federal and state regulations (e.g., CWA, F&GC, and Porter-Cologne). The general waters permits will eliminate the need for SCE to obtain individual or standard waters permits for a large percentage of operations and maintenance activities, including pole and infrastructure projects, vegetation management activities, and road maintenance work. The permits will establish shortened agency review timeframes, define standardized permit conditions, and eliminate the need to complete individual CEQA reviews on each activity covered by the general waters permits. This will result in faster agency authorizations, enhanced efficiencies for the waters permitting process, and reduced level of effort and costs due to obtaining fewer standard permits. Coverage will include CDFW F&GC Section 1602 - Master Streambed Alteration Agreement (MSAA) and SWRCB CWA Section 401/Porter-Cologne - General Order for Electric Utility Operations and Maintenance Activities. The duration of the MSAA would last for a period ranging from 20 to 30 years, and the General Order would provide long term authorization with periodic reissuance.

#### Description of TROW Waters Permits

- The TROW Waters Permits support development and acquisition of waters permits for individual TROW circuits, and include coverage for various types of road work activities (e.g., grading and blading, water bar restoration and repair, culvert clean-out). The waters permits for TROW work and improvements provide ongoing rights over a period of five years. The duration of the TROW waters permits is for five years, and will help ensure SCE is in compliance with these federal and state regulations (e.g., CWA, F&GC, and Porter-Cologne).

Programmatic permits will allow SCE to complete work without the delays associated with obtaining take permits for individual activities. Acquiring long-term programmatic permits is the most cost-effective and streamlined option to allow the company to complete its high priority work in a timely manner while complying with state and federal environmental laws and regulations. As the volume, complexity, and applicability of agency requirements to SCE projects have increased (i.e., listing of additional species as threatened or endangered within SCE's territory), and are forecasted to further increase, it is much more difficult (and impossible in certain scenarios) for SCE to implement an avoidance approach, thus increasing the number of individual permits required. The programmatic permits encompass a streamlined process that provides predictability, consistency, and clarity by standardizing the activities covered, environmental compliance requirements, and processes for agency notifications and

reporting. Without this program, SCE will need to acquire permits for this work on a project-by-project basis, which are generally more time consuming and costly, and can result in significant impacts to operational budgets and schedules.

TROW Waters Permits are needed to help ensure SCE is in compliance with federal and state regulations. Road work activities for TROW's linear circuit road miles encompass grading and blading, water bar restoration and repair, and culvert clean-outs, which are subject to these federal and state regulations (e.g., CWA, F&GC, and Porter-Cologne). SCE included TROW Waters Permits under this capital permits program due to applying similar capital accounting treatment for this work. Waters permits for Transmission Road and Right of Way (TROW) work and improvements provide ongoing rights over a period of five years and will be capitalized as intangible assets.

Additional information included below for 2023 costs for Question 01.c,d,e,f,g

SCE does not have final, adjusted recorded cost data available for 2023. SCE will provide preliminary 2023 recorded data to parties once that data is final and appropriately adjusted for accuracy, which is anticipated in March 2024. This is consistent with SCE's proposal in reply to Protests and based on Prehearing Conference (PHC) comments, which are both provided below.

SCE Reply to Protests: "SCE needs sufficient time to review, analyze, and adjust this data so that it is accurate and on a comparable basis to the 2018-2022 historical recorded data in SCE's 2025 GRC. A date of March 11, 2024 would provide that sufficient time..." Southern California Edison Company's (U 338-E) Reply to Protests and Responses to its Test Year 2025 General Rate Case Application page 7.

PHC Commentary: ALJ Park: "I will say, at this time, you know, it's likely, since there's no dispute about the [2023] recorded data, that date will likely be March 11th [2024], as proposed by Edison." Prehearing Conference July 12, 2023 Transcript pp. 43-44.

PubAdv-SCE-095-FNZ 01.c,d,e,f,g

GRC Activity (Categorization)	GRC Activity (Details)	Start Date	2020 Actuals	2021 Actuals	2022 Actuals	2020-2022 Actuals	2023 Forecast	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast	Number of Permits Planned in 2023-2028 Forecast	Number of Permits Obtained in 2022	Number of Permits Obtained from Jan-July 2023	Total Number of Permits Obtained thru July 2023	Number of Permits (in Progress)	Estimated Percentage Complete (based on permits obtained)	Notes
<b>Capital Permits</b>			\$ 43,399	\$ 167,281	\$ 69,882	\$ 809,562	\$ 4,265,778	\$ 4,361,495	\$ 4,428,787	\$ 4,527,884	\$ 4,618,263	\$ 4,711,489	\$ 4,814,057	444	9	8	17	27	18%		
<b>Programmatic Permits*</b>	<b>Programmatic Permits</b>		\$ 43,399	\$ 167,281	\$ 207,890	\$ 418,670	\$ 961,278	\$ 1,001,216	\$ 1,021,563	\$ 1,042,326	\$ 1,063,514	\$ 1,085,137	\$ 1,106,634	166	4	7	11	28	4%		
Programmatic Permits	Species Permits Program	August 2020	\$ 43,399	\$ 164,783	\$ 168,118	\$ 376,300	\$ 531,278	\$ 542,216	\$ 553,383	\$ 564,782	\$ 576,420	\$ 588,300	\$ 3,356,379	12	0	0	0	5	0%	Although percent complete for permits obtained show 0%, SCE is working with agencies on development of 5 permits, with issuance of these permits averaging about 3 to 5 years after initial stage of development (additional details are included below under Species Permits Program).	
Programmatic Permits	Coastal Permits Program	May 2021	\$ -	\$ 2,498	\$ 33,059	\$ 35,557	\$ 200,000	\$ 204,000	\$ 208,080	\$ 212,242	\$ 216,486	\$ 220,816	\$ 1,281,624	142	4	7	11	21	5%		
Programmatic Permits	General Waters Permits Program	June 2022	\$ -	\$ -	\$ 6,713	\$ 6,713	\$ 250,000	\$ 255,000	\$ 260,100	\$ 265,302	\$ 270,608	\$ 276,020	\$ 1,577,030	2	0	0	0	2	0%	Although percent complete for permits obtained show 0%, SCE has initiated work on these 2 permits (additional details are included below under General Waters Permits Program).	
<b>TROW Waters Permits**</b>	<b>TROW Waters Permits</b>	<b>January 2022</b>	\$ -	\$ -	\$ 481,992	\$ 481,992	\$ 3,284,900	\$ 3,350,190	\$ 3,417,194	\$ 3,485,538	\$ 3,555,248	\$ 3,626,393	\$ 20,719,023	288	5	1	6	9	0.3%	Although percent complete for permits obtained show 0.3%, there are about 8 permits in progress (additional details are included below under TROW Waters Permits).	

**Notes**  
 \*Programmatic Permits program includes environmental support for species, coastal, and general waters permits. 2021 GRC authorized capital funding of approximately \$1.1 million per year for the Programmatic Permits program.  
 \*\* TROW Waters Permits is a new category of work under the capital permits program. SCE included yearly forecasts for Transmission Road and Right of Way (TROW) waters permits under ESD's capital permits program due to applying similar capital accounting treatment for this work.  
 Waters permits for Transmission Road and Right of Way (TROW) work provides ongoing rights over a period of five years and will be capitalized as intangible assets.

**Programmatic Permits**  
**Species Permits Program**  
 SCE estimates support for a total of approximately 12 permits from 2023 through 2028, which encompasses about 10 to 15 multi-year permitting initiatives across SCE's territory for this duration. Issuance of each permit will average about 3 to 5 years after the initial stage of permit development, due to the complexity of permitting efforts and agency resource constraints. The permits are typically good for 30 to 50 years. SCE estimates about \$0.53 million per year starting in 2023 to obtain state and federal incidental take permits. Species covered may include monarch butterfly, arroyo load, desert tortoise, Mohave ground squirrel, Stephens' and San Bernardino kangaroo rats, western Joshua tree, etc. Although SCE has not yet obtained any species permits, SCE is working with agencies on development of 5 programmatic permits for this program. Recurred spend from 2020 to 2022 included development and support of programmatic permitting strategy and specific permits' long term coverage for operations and maintenance activities (e.g., pole replacements, structure brushing, road grading) for existing facilities.

**Coastal Permits Program**  
 SCE estimates support for a total of approximately 142 coastal development permits, renewals, and exemptions from 2023 through 2028. SCE estimates about \$0.2 million per year starting in 2023 for obtaining coastal development permits and permit exemptions within various local coastal plans including Santa Monica Mountains Local Coastal Program (SMMCLCP), Catalina LCP, and Santa Barbara County LCP. SCE obtained 4 coastal development permits and/or permit exemptions in 2022, and obtained 7 coastal development permits and/or permit exemptions from January 2023 through July 2023. There are about 21 coastal development permits and/or permit exemptions in progress.

**General Waters Permits Program**  
 SCE estimates support for a total of 2 general waters permits from 2023 through 2028. SCE estimates \$0.25 million per year starting in 2023 for agency support and coordination to obtain general waters permits to cover operations and maintenance activities (e.g., pole replacements and repairs, vegetation management). The two general waters permits include CDFW Fish and Game Code Section 1602 - Master Streambed Alteration Agreement and SWRCB Clean Water Act (CWA) Section 401/Porter-Cologne Water Quality Control Act - General Order for Electric Utility Operations and Maintenance Activities. Although SCE has not yet obtained any general waters permits, SCE has initiated work and both of these permits are in progress.

**TROW Waters Permits**  
 SCE estimates support for approximately 288 permits for TROW from 2023 through 2028. SCE projects support for about 16 circuits per year for 6 years, with 3 agency permits required for each circuit for U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and State Water Resources Control Board. SCE estimates about \$3.3 million per year starting in 2023 for support of 16 circuits, which includes about \$0.2 million per circuit for 16 circuits for agency fees and consultant support costs. 2023 forecast of \$3.3 million includes agency fees estimated at approximately \$1.2 million and consultant support costs estimated at approximately \$2.1 million. Agency Fees: \$1.2 million. SCE estimated agency fees averaging about \$72,000 per circuit for 16 circuits (\$72,000 per circuit x 16 circuits = \$1.2 million). In 2022, agency fees (e.g., CDFW 1602, Regional Board 401) for Central Silver Peak circuit were approximately \$100,000. Consultant Support: \$2.1 million. SCE estimated consultant support costs averaging about \$133,000 per circuit for 16 circuits (\$133,000 per circuit x 16 circuits = \$2.1 million). In 2022, consultant support costs (e.g., surveys, jurisdictional determinations, preparation of permit application packages) for Central Silver Peak circuit were estimated at approximately \$160,000. SCE's annual forecast includes an estimated number of circuits and miles for TROW work, and the forecast is also dependent upon other internal planning constraints, such as scheduling, crew availability, and competing work priorities. SCE's volume of 16 circuits in 2023 was based on TROW's 2023 schedule (developed in 2022 timeframe) for the planned circuits and miles of work. SCE applied escalation to subsequent years after 2023 to calculate estimates from 2024 through 2028. SCE obtained 5 TROW waters permits in 2022, and obtained 1 TROW waters permit from January 2023 through July 2023. There are about 9 TROW waters permits in progress.

PubAdv-SCE-159-FNZ, Question 04.a-d

*Southern California Edison*  
*A.23-05-010 – SCE 2025 GRC*

**DATA REQUEST SET P u b A d v - S C E - 1 5 9 - F N Z**

**To: Public Advocates Office**  
**Prepared by: Katie Wong ESD**  
**Job Title: Advisor**  
**Received Date: 9/8/2023**

**Response Date: 9/22/2023**

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**Question 04.a-d:**

Referring to Excel file PubAdv-SCE-095-FNZ, tab “01.c,d,e,f,g” SCE states that for the Species Permits Program it is working with agencies on development of 5 permits, with issuance of these permits averaging about 3 to 5 years after initial stage of development. Please respond to the following:

- a. Provide documentation that explains when the work for the development of the 5 permits was initiated by SCE. Provide documentation to verify the dates.
- b. Provide documentation that explains when SCE expects to obtain the permits in progress.
- c. Provide the expected cost per permit, and calculations made to develop those cost estimates.
- d. Provide documentation that explains if the costs constitute only permit costs or includes other related costs. Please provide a breakdown of all associated costs.

**Response to Question 04.a-d:**

- a. Prior to 2020, SCE began assessing the need for long term species programmatic permits to cover operation and maintenance activities, due to increased permitting requirements and the increased volume and complexity of this work. In 2020, SCE initiated programmatic permitting activities, which included engaging with agencies and utilizing consultant support for these permits. Please see excel attachment, “PubAdv-SCE-159-FNZ 04” (04.a-d and 04.a tabs). SCE included a table for the 5 permits, which includes documentation for when the work was initiated by SCE and documentation for this timeframe. Please see “PubAdv-SCE-159-FNZ 04.zip” folder. SCE included meetings and emails as documentation for when work was initiated on several permits. SCE redacted information from these documents that included items such as agenda topics not related to SCE, etc.
- b. Please see excel attachment, “PubAdv-SCE-159-FNZ 04” (04.a-d tab). SCE included a table for the 5 permits, which includes documentation for when SCE expects to obtain the permits in progress. Please note these timeframes reflect only SCE's estimates. Dates are dependent on the permitting entities, including California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Services (USFWS). For example, SCE submitted the San Bernardino Valley Incidental Take Permit application to CDFW in Oct 2022, and encountered agency delays (e.g., onboarding California Environmental Quality Act (CEQA) consultant) with the permit for over 10 months. SCE also encountered similar types of delays with USFWS for the San Bernardino Valley Habitat Conservation Plan.
- c. Please see excel attachment, “PubAdv-SCE-159-FNZ 04” (04.c tab). SCE included a cost

estimate table with a yearly forecast of approximately \$0.53 million starting in 2023. SCE utilized escalation for yearly forecasts from 2024 through 2028. As noted in the above 04.b response, SCE is uncertain of the timeframe as to when these permits will be issued by the agencies. The table includes estimated costs per year to support work for all species programmatic permits (including the 5 permits in progress). SCE anticipates obtaining these permits over the course of several years for each permit. Activities includes support for application and document development, field surveys, and agency costs.

- d. The cost estimates included in the above table in 0.4.c response encompasses costs to support the development and acquisition of these permits over the course of several years for each permit. Activities for these permits include support for background research and gathering of information, development of project description, development of species coverage and habitat mapping, conducting species and habitat surveys, support for resource management plans, development, draft, and submittal of applications to agencies, performing CEQA and National Environmental Protection Act (NEPA) reviews, and agency coordination support.

Species Permit	Activities	Timeframe for Initiation of Work on Permit	Documentation	Documentation File Name and Notes	Timeframe to Obtain Permit (SCE's Estimate)	Timeframe of Permit's Activities
San Bernardino Valley Habitat Conservation Plan	Activities include support for background research and information gathering, development of O&M activity descriptions and impact assumptions, development of species coverage and habitat mapping, species effects analysis, conducting species and habitat surveys, performing NEPA review, coordination with agency, and development and submittal of HCP and application documents to USFWS	Second Half of 2020	Documentation of SCE's 2020 costs for labor and consultant support	Please see excel tab 04.a. SCE included documentation of Year 2020 costs. SCE labor costs started to record in August 2020 and consultant costs started to record in 4th qtr 2020 for support of the species permit.	Year 2024 (Please note timeframe is dependent on USFWS completion of NEPA review).	SCE initiated consultant support for permit work and agency discussions in 2020. SCE conducts regular meetings with USFWS on HCP development. SCE also completed descriptions of covered activity, first administrative draft of HCP, and field work to confirm species habitat mapping in 2021 and submitted HCP application to agency in 2022. In 2023, SCE is coordinating with USFWS on HCP, and anticipates to obtain final version of HCP by end of year.
San Bernardino Valley Long-Term Incidental Take Permit	Activities include support for background research and information gathering, development of O&M activity descriptions and impact assumptions, development of species coverage and habitat mapping, species effects analysis, conducting species and habitat surveys, performing CEQA review, coordination with agency, and development and submittal of ITP application documents to CDFW	Second Half of 2020	Documentation of SCE's 2020 costs for labor and consultant support	Please see excel tab 04.a. SCE included documentation of Year 2020 costs. SCE labor costs started to record in August 2020 and consultant costs started to record in 4th qtr 2020 for support of the species permit.	Year 2025 (Please note timeframe is dependent on CDFW completion of CEQA review)	SCE initiated consultant support for permit work and agency discussions in 2020. SCE conducts regular meetings with CDFW on ITP development. SCE also completed descriptions of covered activity and field work to confirm species habitat mapping in 2021 and submitted ITP application to agency in 2022. In 2023, CDFW is initiating the CEQA process and review of the ITP application.
Western Riverside Multiple Species Habitat Conservation Plan	Activities include support for background research and gathering of information, development of project description, species and habitat surveys, application documentation, resource management plans, agency coordination, etc.	June 2023	Meeting for Agency Coordination	SCE included 2 PDF documents for June 15, 2023 Teams Meeting and Meeting Agenda with RCA, CDFW, and USFWS: i) SCE RCA-CDFW-USFWS Programmatic Permitting Agenda 20230615 ii) SCE RCA-CDFW-USFWS Programmatic Permitting Meeting 20230615	SCE is uncertain of the estimated timeframe to obtain permit due to the complex analysis and documentation needed to obtain a permit under the Western Riverside MSCHP. SCE needs to complete critical project-specific permitting process before starting Phase 1 process with Regional Conservation Authority (RCA). SCE expects to work through significant technical details during this phase which will be used to support Phase 2 permitting.	In 2023, SCE is coordinating with RCA, CDFW, and USFWS on this process. SCE included 3 phases for this permit: Phase 1: 2024 to 2025 (pilot project for select conservation parcels) Phase 2: 12 to 18 months after Phase 1 Completion (Expand coverage to additional conservation lands) Phase 3: Cover remaining areas in plan boundary
Coachella Valley Multiple Species Habitat Conservation Plan	Activities include support for background research and gathering of information, development of project description, application documentation, resource management plans, agency coordination, etc.	May 2023	Meeting for Agency Coordination	SCE included 1 PDF document for May 16, 2023 Teams Meeting with Description and Topic with CVCC: i) SCE CVCC Programmatic Permitting Meeting 20230516	Year 2024 (SCE is preparing Participating Special Entity (PSE) application information. This is a new approach for Coachella Valley Conservation Commission (CVCC) to provide PSE coverage for Operations and Maintenance activities)	In 2023, SCE started coordinating with CVCC on the PSE application information, and will continue this process of agency engagement. In 2024, SCE plans to prepare and submit PSE application to CVCC and anticipates permit issuance in 2024.
Stephens' Kangaroo Rat Habitat Conservation Plan	Activities include support for background research and gathering of information, development of project description, analysis of applicable utility corridors or rights of way, agency coordination, HCP agreement development, etc.	April 2023	Email and Meeting for Agency Coordination	SCE included 2 PDF Documents for 1 email on April 18, 2023 which included engagement with RCHCA, and 1 meeting on April 26, 2023 with RCHCA during which this permit was discussed with agency: i) SCE RCHCA Programmatic Permitting Email 20230418 ii) SCE RCHCA Programmatic Permitting Meeting 20230426	SCE is uncertain of the estimated timeframe to obtain permit, due to discussions with Riverside County Habitat Conservation Agency (RCHCA) on utilizing the appropriate mechanism to obtain coverage for SCE's Operations and Maintenance activities under the Stephens' Kangaroo Rat Habitat Conservation Plan.	In 2023, SCE started coordinating with RCHCA. SCE will continue to proceed with agency engagements and discussions to identify a permitting mechanism for SCE's Operations and Maintenance activities.

PubAdv-SCE-238-FNZ, Question 02

*Southern California Edison*  
*A.23-05-010 – SCE 2025 GRC*

**DATA REQUEST SET P u b A d v - S C E - 2 3 8 - F N Z**

**To: Public Advocates Office**  
**Prepared by: Peter Lee**  
**Job Title: Compliance Advisor**  
**Received Date: 10/19/2023**

**Response Date: 10/31/2023**

**Question 02.a-i.EC:**

Referring to the hiring of FTEs, and the back filling of vacant positions for the following GRC activities:

- Ethics & Compliance

Please provide the following information:

- a. Total number of new positions SCE planned to hire for 2023 and 2024.
- b. Number of FTEs hired for the new positions as of September 30, 2023.
- c. Number of vacant positions SCE planned to backfill in 2023 and 2024.
- d. Total vacant positions backfilled as of September 30, 2023.
- e. For Safety Strategy Transformation Activity, provide the past five years (2018-2022) of records that clearly demonstrate the position titles, hiring dates, separation dates, duties/responsibilities, and salaries of the FTEs.
- f. Reason why SCE is forecasting to hire FTEs for new positions in 2025, and not in 2023 or 2024.
- g. Reason why SCE is forecasting to backfill vacant positions in 2025 and not in 2023 or 2024.
- h. Considering that SCE has several vacant positions and plans to hire FTEs for new positions, is SCE still in compliance to perform the duties related to the GRC activities listed above?
- i. If SCE is not in compliance, did SCE face any fines or penalties for not having completed the tasks for the above mentioned activities?

**Response to Question 02.a-i.EC:**

	<b>2023</b>	<b>2024</b>
a. Planned New Positions	5	3
b. New Positions Hired	2	0
c. Planned Backfill Positions	2	0
d. Backfill Positions Hired	1	0

- a. SCE E&C had planned to hire 5 new positions in 2023 and 3 new position in 2024.
- b. From January 1, 2023, through September 30, 2023, there were 2 FTEs hired for new positions.
- c. SCE E&C had planned to backfill 2 positions in 2023 and 0 positions in 2024.
- d. From January 1, 2023, through September 30, 2023. there was 1 FTEs hired for backfill positions.

- e. This question is not applicable to this section as this question only pertains to Safety Strategy Transformation GRC Activity.
- f. SCE's 2021 GRC, D.21-08-036, authorized a revenue requirement for the years 2021-2023. SCE has not received a decision for its 2021 GRC Track 4 application that will set the revenue requirement for 2024. Under forecast ratemaking principles, SCE generally manages within the overall authorized revenue requirement between GRC cycles on a total-company basis (with certain exceptions). Given that GRC forecasts are developed years before the next GRC-authorized period, business needs, cost structures, etc. can change between GRCs, which requires SCE to manage within overall authorized revenues.
- g. SCE's 2021 GRC, D.21-08-036, authorized a revenue requirement for the years 2021-2023. SCE has not received a decision for its 2021 GRC Track 4 application that will set the revenue requirement for 2024. Under forecast ratemaking principles, SCE generally manages within the overall authorized revenue requirement between GRC cycles on a total-company basis (with certain exceptions). Given that GRC forecasts are developed years before the next GRC-authorized period, business needs, cost structures, etc. can change between GRCs, which requires SCE to manage within overall authorized revenues.
- h. SCE objects to this data request question on the grounds that the term "in compliance" in the question is overly broad, vague, and ambiguous. Further, Cal Advocates has not defined the timeframe for when it is seeking to determine whether SCE is, or was, "in compliance." Notwithstanding these objections, SCE provides the following response: SCE endeavors to be in compliance with all laws and regulations to which it is bound. Notwithstanding the vacancies experienced by Ethics & Compliance, SCE believes it has been able to perform its duties relating to the GRC activities described in its testimony. However, if SCE is unable to fill vacant positions and/or hire additional FTEs for new positions, as outlined in SCE's testimony for Ethics & Compliance, it would make compliance more difficult and create an unsustainable work environment. In addition, SCE's ability to continuously improve, which allows SCE to gain efficiencies and reduce costs, etc., would be substantially curtailed if SCE is unable to fill the vacant positions and/or hire additional FTEs for new positions. Regarding the GRC recorded period of 2018 through October 2023, SCE has not identified any compliance matters for Ethics & Compliance.
- i. SCE objects to this data request question on the grounds that the term "in compliance" in the question is overly broad, vague, and ambiguous. Further, Cal Advocates has not defined the timeframe for when it is seeking to determine whether SCE is, or was, "in compliance." Notwithstanding these objections, SCE provides the following response: As indicated in SCE's response to Question 02.h, regarding the GRC recorded period of 2018 through October 2023, SCE is unaware of any fines or penalties associated with any compliance matters for Ethics & Compliance.

**SCE-17, Vol. 04: Rebuttal Testimony on Environmental Services, Audit, Ethics & Compliance, and Safety Programs**  
**Appendix A Index of Data Request Responses**

**Appendix B**

**Supporting Documents**

**SCE-17, Vol. 04: Rebuttal Testimony on Environmental Services, Audit, Ethics & Compliance, and Safety Programs**  
**Appendix A Index of Data Request Responses**

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# Environmental Benchmarking Report



# Environmental Benchmarking Report

October 21, 2021

Energy for What's Ahead®



SOUTHERN CALIFORNIA  
**EDISON**

Environmental  
Management System

Integrate environmental stewardship into the company's culture



# Objectives and outline

## Objectives

- Identify peers and leaders in environmental management for benchmarking
- Determine industry environmental management trends
- Summarize peer interview responses
- Analyze industry practices from public reporting of peers
- Incorporate recommendations into the EMS strategy to help inform SCE's publicly shared environmental material and future EMS development plans

## Table of contents

- Executive summary
- Industry trends in environmental management benchmarking
- Individual peer interview responses
- Public benchmarking results summary and analysis
- Appendix
  - *Organization contacts*
  - *Additional tables/charts*

Our work has been limited in scope and time and we stress that more detailed procedures may reveal issues that this engagement has not. The procedures summarized in our Benchmarking report do not constitute an audit, a review or other form of assurance in accordance with any generally accepted auditing, review or other assurance standards, and accordingly we do not express any form of assurance.

Consistent with our engagement agreement, the Benchmarking report is intended solely for the information and use of the management of Southern California Edison and is not intended to be and should not be used by anyone other than these specified parties.

# Executive summary

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B4



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# Benchmarking process

## ① Identification of peers and leaders

Based on the SCE Environmental Transformation objectives and industry insight, EY and SCE identified the following set of major power utilities and industry leaders with EMS and corporate sustainability programs: Pacific Gas and Electric (PG&E), American Electric Power (AEP), San Diego Gas and Electric (SDG&E), British Petroleum (BP), Dow Chemical, Xcel Energy, Chevron, Exelon, Con Edison, Duke Energy, Florida Power and Light (FPL), Enbridge, and Burlington Northern Santa Fe (BNSF) Railway.

## ② Determination of research topics

EY worked with SCE to determine benchmarking topics informed by SCE Environmental Transformation objectives and strategic goals. These focus areas were chosen to provide SCE with knowledge and insight on EMS development, common industry practices and effective processes. Information for this effort was found through publicly available data, reports, internet tools, etc.

## ③ Review of publicly reported information

EY identified and consolidated publicly available environmental information from sources including (1) ESG reports (including standalone Sustainability Accounting Standards Board (SASB), Task Force for Climate-related Financial Disclosures (TCFD), Global Reporting Initiative (GRI) and Edison Electric Institute (EEI) disclosures, (2) Carbon Disclosure Project (CDP) climate questionnaire responses and (3) website disclosures. Note that disclosures taken into consideration for the research were obtained from the most recently published reports.

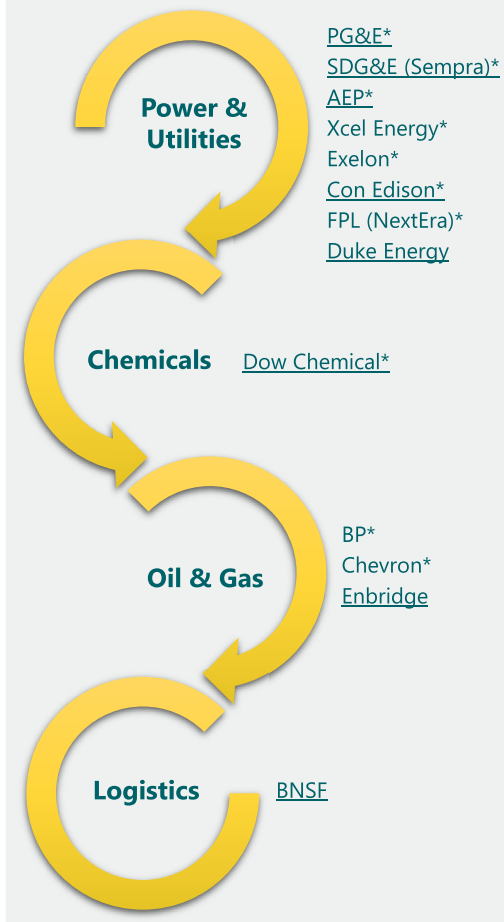
## ④ Peer interview discussions and insight

SCE and EY consolidated a detailed list of Environmental Transformation workstream specific questions to highlight 10 main categories for discussion during one hour long sessions for each peer interview. The questions were used to guide an open dialogue with each company about their programs and processes pertaining to management systems, governance, risk and compliance management, metrics and use of digital solutions, leading practices and lessons learned.

## ⑤ Analysis and report

The public benchmarking results and peer interview responses were gathered, analyzed and summarized in the following report to compare key elements and trends, and support SCE in its overall EMS strategy design, implementation, and optimization. The report identifies trends based on public information, and interview discussions.

*In order to provide an extensive perspective, multiple industries were used for comparison, with power and utilities being the most predominant.*



\* = Publicly benchmarked  
 — = Peer interviewed

# Key takeaways

-  **Environmental management systems (EMS):** Majority of companies (12 of 13) use an EMS approach to drive effective and efficient environmental risk management and continuous improvement at the corporate level, that is usually aligned with ISO 14001 but not certified.
-  **Environmental policy:** All benchmarked peers have an outward facing environmental policy outlining its business commitment to environmental stewardship and compliance.
-  **Organization and resources:** Environmental resources and structures varied across companies, but generally environmental is managed centrally to support operations with 100-250 environmental focused specialists to drive environmental governance and program execution.
-  **Environmental programs and standards:** Companies were consistently found to have a set of environmental programs typically documented in standards with requirements for individual business units or operating units to implement. Leading companies implement this in operational focused controls (e.g., risk register, standard operational controls, work management tasks, field digital solutions) and further communicate this through a handbook and training.
-  **Risk assessments and registries:** Companies identified using risk assessments and registers that collectively identify environmental risks and compliance requirements at multiple levels (corporate, business/operations units, facilities/locations) and map risk levels based on potential impacts then assign controls which are systematically and regularly reviewed. Leading companies implement corporate level risk registers into ERM and include relevant sustainability risks. These are reviewed and updated through multiple levels of checks with management review and audits.
-  **Regulatory change management process:** Some companies, such as Dow, Con Edison and Enbridge, monitor regulatory updates through law and regulatory affairs then make use of the operational Management of Change (MOC) process to effectively and efficiently implement changes in regulations to operations and vice-versa. SDG&E tracks incoming regulations through individual environmental SMEs.
-  **Environmental metrics and KPIs:** The majority of benchmarked companies measure environmental reportables, violations and fines from non-compliances and tie this to incentive compensation packages for employees, especially top management. Most companies had other internal KPIs focused on leading metrics to drive continuous improvement around non-reportable events, training, corrective action closure, risk assessment, observations, and audit completion. Leaders use digital solutions to track and monitor data in more real time.
-  **Culture:** To effectively support cultural development and awareness, companies sometimes have campaigns focused on “zero harm” or “event-free operations” which are driven through leadership commitment and effective use of communication, simplified training, and documentation that are tailored for the operational user’s understanding.
-  **Digital technologies:** Use and capabilities of digital solutions varied across companies, with most interviewed using Enviance or Sphera, however, many companies interviewed remarked they are still on their environmental digital journey.
-  **Incident management and investigations:** Environmental incident investigations and corrective action processes are formalized programs based on severity of incident or near miss to identify management system and other failures, with leaders driving response based on potential, not actual, impacts.
-  **Contractors:** Companies are focusing on environmental and sustainability performance of their contractors initially through qualification and bidding, then setting clear requirements and closely monitoring performance with use of tools like scorecards, metrics, audits and monitors.
-  **Sustainability:** Companies are moving focus from just compliance to more environmental performance based on metrics being publicly reported and scrutinized by stakeholders in sustainability reports (e.g., air emissions, water discharge), which is driven through environmental programs.

***SCE has many programs consistent with the industry; however, we found examples of leading practices to consider from benchmarked peers and leaders. This report highlights these practices for SCE to consider in their environmental transformation to “best in class”.***

# Strategic roadmap recommendations informed by benchmarking

EMS Element	SCE Effort	SCE EMS Recommendations
4. Context	Environmental Management System	Develop EMS aligned with ISO 14001 EMS that focuses on effective risk management.
	Organization Structure	Conduct organizational assessment then design and assign clear roles and responsibilities to achieve Environmental Transformation objectives.
5. Leadership	Environmental Policy	Publish a public facing corporate environmental policy that specifies continuous improvement of EMS and defines leadership commitment.
	Leadership Commitment	Support leadership commitment with training, guidance and goals to achieve a “tone from the top” that drives environmental stewardship.
6. Planning	Risk Management	Risk management program should identify and monitor environmental risks at the highest level, but analysis and responsibility for mitigating and managing operational risk by the OU and front-line workforce. Enable this with worker engagement in risk assessment processes.
	Goals and Objectives	Set environmental goals and objectives organization-wide and within each OU that hold all workers accountable for EMS performance.
7. Support	Training	Develop centralized structures and teams for maintaining and tracking training and documentation to help keep systems functioning effectively. Design training to be consumable and speak to audience in their roles (e.g., understandable for operational worker).
8. Operations	Operational Controls	Map process controls to key requirements based on work activities to ensure compliance and build system of checks around these controls (audit program, management system reviews, etc.). Develop and implement an MOC process.
9. Performance Evaluation	Environmental Goals and KPIs	Leading (along with lagging) indicators should be established to enhance environmental performance and proactively identify risks.
	Internal Audit	Corporate environmental auditing program needs to be designed in a way that allows evaluation of improvement opportunities routinely, while ensuring compliance with environmental regulations. Consider incorporating a risk profile to this process.
	Contractors	Consider requiring an EMS for contractors and implementing a broader field observations program of contractor work with robust checklists.
10. Improvement	Incident Management	Develop an incident management process that fosters a culture of self-reporting by employees and contractors as environmental issues and events arise, with a fully formed RC/CAPA program.

# Environmental management trends

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# 1.

## Environmental Management Systems

### Is environmental managed through use of an EMS?

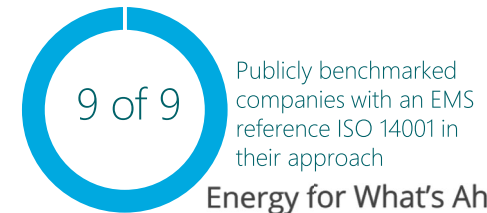
- What industry standards is it modeled after (e.g., ISO 14001)?
- Is the EMS at the corporate or facility level?
- How long has it been implemented?
- Describe your leadership commitment and how it aligns with the environmental policy and environmental goals

#### Company highlights

- **Duke's** EMS conforms with ISO 14001, but is not certified because lack of value in third-party accreditation from their perspective. Their corporate-level EMS, which lays out expectations and guidance, is pushed out to all the businesses through the change management team to ensure alignment.
- **ConEd** is the only benchmarked company with a certified corporate ISO 14001 EMS. They view environmental management as a journey in which systems are constantly evolving and improving, and value the feedback from certification to support that.
- **AEP** implemented an EMS at the corporate level and created their own internal procedures based on ISO 14001 guidance.
- **SDGE&E** has an internal EMS and are currently considering ISO 14001 certification as ESG stakeholders push for it.
- **Dow** has created their own EMS framework and standard to set up their environmental program. To ensure effectiveness, the EMS is integrated into a company-wide management system for EH&S, Operations, Quality and Human Resources.

#### Industry trends

- Most companies (9 of 10) publicly benchmarked have created their own environmental management system that works for their specific company structure/organization using ISO 14001 as a guide, but do not pursue certification. [See summary analysis slide in Public Benchmarking.](#)
- Advanced companies in the oil & gas and chemicals sectors have their environmental management system as part of a broader operational management or excellence management system that supports the "Plan, Do, Check, Act" for a collection of operational risks including environment, health, safety, process safety, quality, security, asset management, and efficiency.
- For these peer leaders, their policies and management systems help to meet environmental commitments and laws/regulations in which their global operations are subjected to.
- Leadership commitment from the corporate level helps drive environmental objectives across the organization, especially when defined through a corporate environmental policy aligned to the EMS. Companies have seen greater success with their EMS when a strong leadership commitment is voiced.



## 2.

## Environmental Organization Structure

Please provide an overview of the structure of your organization.

- Approximate number of internal environmental focused employees and consultants
- What is the highest governing body for environmental and who are the members?
- Who does the senior environmental employee report to and how many levels are between them and the President/CEO?
- Do you have employees aligned solely to your environmental group or does operations have dedicated environmental professionals?
- How many FTEs are assigned by high-level environmental function, EMS support structure, and/or environmental systems/tools administrators?

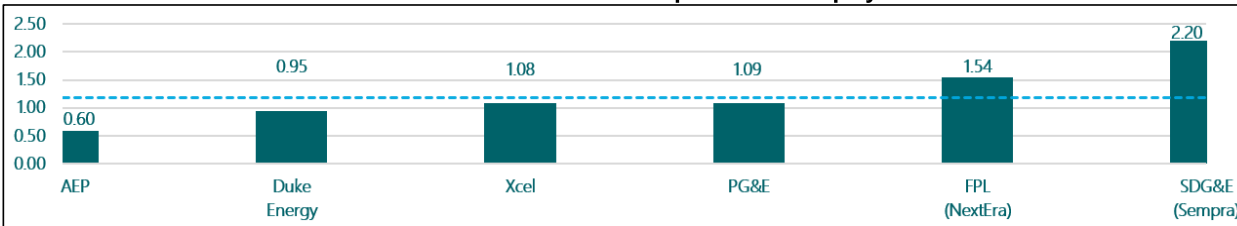
### Company highlights

- At **Dow**, there are two core environmental groups that support the EMS, both which report directly to the CSO (Chief Sustainability Officer). Environmental operations, consisting of plant technicians and specialists, ensure day-to-day compliance, while the corporate environmental expertise team focuses on continuous improvement and regulations.
- **FPL (NextEra)** has more than 140 corporate environmental professionals and numerous others embedded in the operating business units.
- **Duke Energy** has a centralized environmental group (versus decentralized for health and safety) made up of approximately 275 employees. There are field support teams by region, and a corporate EHS program consisting of centralized SMEs for each environmental media (air, water, waste, etc.).
- **PG&E** has approximately 250 employees or contractors that fall under the environmental and permitting team, which is then broken down by LOB (Line of Business) and environmental media.
- **SDG&E's (Sempra)** environmental services group, totaling 88 employees and consultants, is very centralized – all employees work out of only a few offices and are responsible for all service areas.
- **Xcel** environmental services is comprised of environmental compliance, chemistry, and water resources. It is comprised of 130 employees lead by a Senior Director.

### Industry trends

- Benchmarked companies' environmental structure is a mixture of both centralized and decentralized formats – environmental employees either report directly to an operations facility/business unit or to the corporate environmental services organization (and sometimes both).
- Half of companies benchmarked and interviewed had a combined environmental, health and safety program and most companies have sustainability included in their department. [See 2020 NAEM staffing, structure, and budget report](#) for additional data on structures.
- Environmental services typically have focused teams for each environmental media or functional area (air quality, clean water act, hazardous waste, site remediation, etc.)

Number of Environmental FTEs per 100 FTE Employees



— Number of Environmental FTEs per 100 SCE FTE Employees (1.18)

[2020 NAEM staffing, structure, and budget report](#)

EHS Full-Time Equivalents (FTEs) per 100 total company employees

EHS Staff by Industry

Figure 47

Industry	Median	Average
Utilities (N=9)	0.48	0.73

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### 3.

## Applicable Environmental Programs

### What environmental programs are applicable to your facilities and how are they categorized?

- How are your environmental programs structurally aligned and communicated to operations?

#### Company highlights

- **FPL (NextEra)** environmental experts in air emissions, water use and quality, remediation, wildlife and their habitat, oil and hazardous substances, archaeology and cultural resources, and environmental policy are critical to the responsible development and ongoing operation and compliance of their facilities.
- **Duke** has over 30 environmental programs in which it has Corporate level standards that set requirements for each operating unit. These are summarized in their EHS handbook, which is made available to all front line workers including employees and contractors.
- **SDG&E's** standards are program based and tiered down from the federal to local level. They have 70 programs that are grouped by functional area (hazardous waste, site remediation, etc.) and aligned to operations.
- **AEP** structure their programs by environmental media – air, water, waste, land, etc. currently, but as their operations reduce risk in the future, they will likely have more general support due to less complex environmental aspects.

#### Industry trends

- Leading companies support environmental program and requirements awareness with handbooks and training that are customized to be digestible for workers.
- Individual environmental programs have their own standards and procedures typically with SMEs dedicated to specific environmental media or aspects.
- Companies distribute environmental programs normally through standards for individual business units or operating units to implement.
- These standards are translated into operational or business level controls (e.g., risk assessments, standard operating procedures, work management tasks) that support responsible personnel

#### Duke environmental programs

Environmental program requirements are governed by Duke's [EHS Management System](#) and distributed to front-line workers in a handbook and through training:

- Aerosol can management
- Air permitting
- Containment systems
- Cultural resources
- Decommissioning/decontamination activities
- Drinking water
- Environmental requirements review checklist
- Environmental Acceptable Lubricants (EALs)
- Fugitive dust
- Hazardous material transport
- Land disturbing activities
- Maintenance tasks located over or near water
- Migratory birds
- Operating and Maintaining Mobile Equipment
- Open-Burning
- Polychlorinated Biphenyl (PCB) Management
- Pesticide and Herbicide Application
- Refrigerants
- Reciprocating Internal Combustion Engines (RICE)
- Spill Prevention Control & Countermeasure (SPCC)
- Plans and Requirements
- Spills
- Storage Tanks/Underground Storage Tanks
- Stormwater
- Threatened and Endangered Animals, Plants and their Habitats
- Used Oil
- Vehicle Washing/Washout
- Waste Management and Disposal
- Wastewater
- Well Drilling and Closure Requirements
- Wildlife Management

## 4.

### Assessment of Environmental Risk

What method(s) are used to assess the level of risk of your environmental programs?

- Do you track compliance at the centralized or decentralized levels?
- Does ERM incorporate environmental risk into their risk assessment and planning process?

#### Company highlights

- **Con Edison** enhanced their ERM framework in 2019 to include the identification and monitoring of emerging issues and trends, such as climate change's impact to the company's operations.
- **Duke** identified significant environmental aspects at both the corporate and business levels. Each business has its own risk register in which it is responsible for tracking risks and controls, including potential impacts to support identifying whether adequate resources (e.g., personnel, digital technology) are used for monitoring. There are 2 focused risk professionals that serve as consultants to the business units for supporting their risk evaluations.
- **FPL (NextEra)** programs include employee and contractor training, daily site inspections, remote satellite monitoring, routine self-assessments, compliance tracking systems, environmental audits, quarterly business unit reviews and due diligence reporting. They also work closely with environmental organizations to ensure responsible development and operations that goes beyond compliance.
- **Dow** consistently applies globally defined leading indicators, such as internal EH&S management system audit results, to strengthen EH&S outcomes. Corporate-level identification and management of risk is systematically accomplished using an integrated ERM approach.
- **AEP's** Enterprise Risk Oversight (ERO) function defines and oversees the consistent application of AEP's risk management process in conjunction with business units and operating companies. Risks, such as operational or regulatory, are assessed, mitigated and monitored, and reported by business units or operating companies to ERO.
- **SDG&E's (Sempra)** EMS is critical to assessing and mitigating environmental risks associated with operations. These systems identify compliance requirements and procedures, training opportunities for employees, and audits their performance. Ongoing assessments include environmental audits at their facilities to identify areas of potential improvement.

#### Industry trends

- All peers cited a risk management program specific to their organization and operations, in which various risks and their impacts are evaluated and assessed routinely using systematic risk assessments that identify potential impacts and controls.
- Responsibility for mitigating and managing those risks is driven down to the facility level, with support from the organization and ERM committee.
- Most companies have established some variation of a corporate environmental auditing program or review process to ensure compliance with environmental regulations and evaluate opportunities for improvement on a regular basis.
- Environmental risks, including climate-related, regulatory and compliance are consistently considered, and becoming increasingly integrated into a company's overall approach to risk.

[Duke Environmental Event Matrix](#)

[Suncor Risk Matrix](#)

## 5.

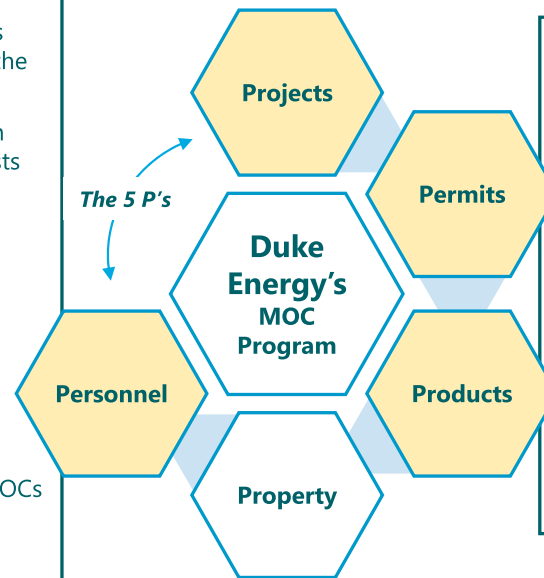
### Regulatory Change Management Process

#### What does the change management process look like for regulatory and operational changes?

- What is the method for incorporating regulatory changes into operational controls?
- What method(s) do you use to monitor changes in local, state and federal laws/regulations and who is responsible at your organization for tracking these changes?
- Who is responsible at your organization for ensuring and enforcing environmental compliance in the field and how is this process performed?
- How do you verify and document compliance is being met/not met for applicable requirements, and at what frequency?

#### Company highlights

- At **SDG&E (Sempra)**, specialized teams for new construction or major projects support environmental compliance from planning to project completion with the aim of being responsible stewards of natural resources.
- **Duke's** sophisticated MOC program covers five main categories, each of which contains implementation procedures and environmental requirements checklists enterprise-wide.
  - Projects: Engage environmental organization in terms of planning to manage risks and compliance obligations for a project
  - Permits: Modifications to permits and regulatory review. Filtering down to roles responsible for implementation.
  - Products: Management of chemicals that come on site and their disposal
  - Property: M&A
  - Personnel: Onboarding of employees to bring them up to speed on environmental requirements
- **AEP** has a formal regulatory review process that begins with the legal team. MOCs cover changes to permits, facilities, environmental aspects, etc.
- **Dow** uses an internal MOC tool to formally document and communicate regulatory impacts from Regulatory Affairs to their manufacturing facilities and operating units.



#### Industry trends

- Many peers manage changes to laws and regulations through initial vetting by Legal and/or Regulatory Affairs, and then push down the new requirements to environmental services and operations for implementation.
- Most referenced use of their operational MOC process for implementing regulatory or other changes to programs into operations. It supports operations in identifying operational changes that need to be assessed for regulatory requirements. It also clearly defines roles and responsibilities to manage and drive the process needed for changes.

## 6. Environmental Documentation, Communications and Training Programs

### What has enabled your organization to achieve optimal performance of your environmental documentation, communications and training programs?

- How are your environmental training modules assigned and delivered to employees?
- How do you track completion of assigned training and how do you verify training effectiveness?

#### Company highlights

- **ConEd** requires a 15 minute onboarding (which was recently revised) for all new workers that covers leadership’s commitment and message that there is nothing more important than safety and environmental stewardship, which is supported by its “zero harm” program and that every worker must implement “stop work”. It also identifies that any environmental program/procedure and specialist contact can be found two clicks from the main ConEd homepage. The organization overall emphasizes the importance of transparent reporting and no retaliation for identifying risks or incidents.
- **Xcel’s** Environmental Services staff conduct regular site visits and develop job aids to help employees understand their environmental responsibilities. Individuals working in the field or at facilities routinely receive training on the company’s environmental programs, such as waste management.
- **SDG&E (Sempra)** conducts employee and contractor education and training along with periodic performance reviews as part of their efforts to manage and reduce environmental impacts. They have worked to reduce the number of individual courses assigned, and condensed trainings into different functional groups (facility, field or office based).
- **AEP’s** document control management team lead the effort for proper and approved maintenance of procedures and plans through a centralized system.
- At **Dow**, optimal performance of their environmental programs has been achieved through integration, partnership, structure, and adherence to structure. The EMS and ODMS (Operating Discipline Management System) frameworks are key to keeping all the systems together and functioning effectively. Dow is constantly evaluating and re-evaluation in a way that pushes the status quo.

#### Industry trends

- Benchmarked companies communicated the effectiveness of tracking incomplete/completed training and generating reports for leadership visibility to ensure compliance of their teams. Some organizations, such as PG&E and Dow, assess the effectiveness of their environmental training modules.
- Many peers have dedicated positions/roles responsible for maintaining and tracking these programs through centralized structures and teams (e.g., PG&E, AEP and Dow).
- Facility documents tend to be stored in libraries or offices on site, but at AEP, for example, an increasing shift toward WFH is driving electronic record retention.

PG&E Training Effectiveness

	2016	2017	2018	2019	2020
<b>Goal</b>	4.45	4.52	4.52	4.28	4.45
<b>Result</b>	4.48	4.52	4.63	4.57	4.61

To measure success, **PG&E** surveys and requests feedback from employees on how much training has increased their knowledge, or they require post-training assessments. Annual goals and results are based on a new five-point scale survey which asks employees to rate their ability to use training on the job.

## 7.

### Environmental KPIs, Metrics and Goals

What KPIs, metrics and goals do you have in place to measure environmental performance across the company?

- What are your leading and lagging indicators?
- Do you have any corporate environmental goals?

#### Company highlights

- **Con Edison** reports more on their metrics than environmental goals or commitments, limiting their transparency of environmental performance against set targets.
- **FPL (NextEra)** reports significant spills resulting in a notice of violation (NOV), penalty or fine, and significant violations resulting in a fine > \$100,000.
- **Chevron** reports environmental performance metrics that include accidental release prevention and response, as well as fines and settlements:
  - Petroleum spills to land and water (number of spills and volume)
  - EH&S fines paid and settlements entered into (number of fines and cost)
- **Xcel's** environmental compliance metrics being tracked include: compliance actions/NOVs, training, internal audits and SME assessments.
- **PG&E, Sempra** and **Exelon** track and report a range of annual environmental compliance performance indicators (see examples below).
- **BNSF** tracks spills that cost \$7500 or 75 gal lost.

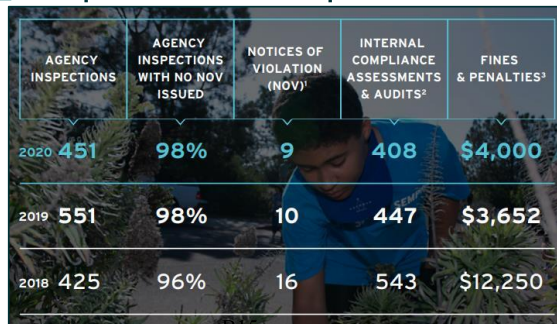
#### Industry trends

- The most consistent metric captured and tracked is NOVs as companies want to minimize fines/violations due to environmental non-compliances.
- It is more common to report significant spills/releases that exceed permit limits, but minor leaks or containment events and potential near misses are sometimes reported as leading indicators. Companies, like Dow, set goals for even the lower level incidents.
- Sustainability goals are on extended cycles and many times are aligned to a global framework or reporting standard, such as the UN's SDG.
- Reporting ESG disclosures in alignment with various sustainability standards is becoming more common, and in some cases, replacing annual corporate sustainability reports (e.g., Dow, NextEra, etc.).
- Many companies tie employee compensation, especially at the executive level, to environmental performance of the company in reaching their goals (e.g., Dow, FPL, Xcel, BP, etc.).
- Freshwater usage, waste generation and GHG emissions were the most popular data metrics tracked as far as environmental impacts.
- Industry leaders are publicly transparent in certain reporting areas, as seen in the charts below.

#### PG&E Environmental Compliance

	2017	2018	2016
Critical Enforcement Actions <sup>1</sup>	—	—	9
Percentage of Inspections Without a Written Enforcement Action	93%	93%	91%
Releases/Exceedances	164	166	37
Penalties Paid	\$28,350	\$93,000	\$47,033
Agency Inspections	539	552	570
Audits Performed <sup>2</sup>	53	8	11
Self-Assessments Performed	2,609	3,101	4,294

#### Sempra Environmental Compliance Performance



#### Exelon Environmental Compliance Performance



## 8.

## EMIS Digital Tools/Systems

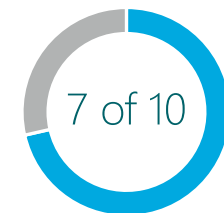
## What digital tools/systems do you use internally to support EMIS (environmental management information solutions)?

- Which are shared with safety or the broader EH&S organization, if any?

Company	Digital applications used by peer organizations <sup>1</sup>
<b>PG&amp;E</b>	<ul style="list-style-type: none"> <li>• Enviance for Greenhouse Gas Reporting and Compliance Management</li> <li>• Salesforce for management systems and other environmental processes</li> <li>• SAP across LOBs</li> </ul>
<b>AEP</b>	<ul style="list-style-type: none"> <li>• Enviance for Greenhouse Gas Reporting and Compliance Management</li> <li>• SharePoint used to build custom reporting apps</li> </ul>
<b>SDG&amp;E (Sempra)</b>	<ul style="list-style-type: none"> <li>• Intelix used as an aggregation tool for sustainability/carbon emissions reporting</li> <li>• Enviance for HAZMAT and GHG programs</li> <li>• SAP is foundational enterprise-wide and used by both environmental and safety</li> <li>• SharePoint across company</li> </ul>
<b>BP</b>	<ul style="list-style-type: none"> <li>• Business units and individual assets within BP tend to operate independently when it comes to digital applications</li> <li>• SAP for Incident Management</li> <li>• Homegrown solutions to calculate carbon emissions</li> </ul>
<b>Dow</b>	<ul style="list-style-type: none"> <li>• Sphera Essential (Air Emissions, Chemical Inventory, Waste Management and Water Discharge) for multi-media environmental reporting</li> <li>• Sphera GaBi LCI Database for LCA</li> <li>• Homegrown solutions for CAPA, MOC and Compliance Task Management</li> <li>• SAP for Incident Management</li> </ul>
<b>Xcel Energy</b>	<ul style="list-style-type: none"> <li>• Sphera in some capacity</li> </ul>
<b>Chevron</b>	<ul style="list-style-type: none"> <li>• Sphera Essential (Air, Waste and Compliance modules for Air emissions reporting, Waste tracking and Compliance tasking, respectively)</li> <li>• Sphera Stature for Risk Management</li> <li>• Sphera IMPACT for Incident Analysis and Reporting</li> <li>• Sphera CyberRegs for Regulatory Compliance Catalog</li> </ul>
<b>Con Edison</b>	<ul style="list-style-type: none"> <li>• Homegrown solutions</li> <li>• Archer used for auditing and CAPA</li> </ul>
<b>FPL (NextEra)</b>	<ul style="list-style-type: none"> <li>• regAction in some capacity</li> </ul>
<b>Duke Energy</b>	<ul style="list-style-type: none"> <li>• Sphera Essential (Incident Management, Compliance Manager, Task Manager, Air, Water, Waste, Chemical Inventory, MSDS Manager, Audit) for multi-media environmental reporting and compliance</li> </ul>

### Digital solutions evolving

Most organizations benchmarked were making changes to their digital solutions in some form or another.



Benchmarked companies use Sphera or Enviance software in some capacity for environmental management

<sup>1</sup>The benchmarking conducted related to digital applications was based on publicly available information and/or information obtained from conversations with individuals outside of IT organizations and therefore should not be considered comprehensive

## 9. Environmental Incident Root Cause Analysis

What types of environmental incidents/events trigger a root cause investigation at your company and how do you decide on appropriate corrective actions?

- Do you have thresholds in place and how were they decided?

### Company highlights

- **AEP's** triggers for an RCI (Root Cause Investigations) include: NOVs resulting in a fine, reportable spills, opacity exceedances, reportable releases, overdue report submittal, etc.
- **Duke** uses a risk based matrix to assign point values for each event, which are then grouped into 3 distinct tiers. Tier 1 events require an RCI.
- **SDG&E (Sempra)** performs RCIs for oil and waste spills that reach public U.S. waterways, air emission events, habitat impact, etc.
- **ConEd** uses a similar incident management approach for safety and environmental events. Root causes are tiered based on incident impact, but there aren't specific level distinctions. For smaller issues, local groups will conduct RCIs on incidents within their departments. For larger, more complicated issues, an environmental representative for each group is assigned and there is more involvement.

### Industry trends

- Some organizations, like Con Edison, reported processes that encourage employees to come forward to report environmental issues and incidents, and do not necessitate disciplinary action based on RCI results. This helps foster a culture of self-reporting without fear of disciplinary action.
- Most benchmarked companies mention some form of a formalized incident management and CAPA process in place, where root cause analysis is based on severity, but the procedural steps vary between organizations.
- Most drive root cause analysis and follow-up programs to find management system failures.
- Leaders take follow-up actions based on severity of potential, not actual, impacts of both incidents and near misses.

## 10. Contractor Environmental Compliance Performance

How do you evaluate ongoing environmental compliance performance of contractors?

- What mechanisms or disciplinary actions are in place for positive or poor environmental contractor performance?

### Company highlights

- **Duke** revised its approach to contractor management that required a lot of metrics reporting to put the environmental requirements on the contractor, including their own oversight. Changed to a risk based oversight approach and monitor through management review meetings for contracts >\$25M with a contractor scorecard.
- **SDG&E (Sempra)** requires pre-activity surveys and post-construction impact assessments be completed by field and contract workers for every project and O&M activity. Monitors observe workers in the field before, during and after project completion. KPIs and performance expectations are included in MSAs.
- **ConEd's** contractor oversight program helps to ensure workers are environmentally responsible and have reviewed environmental procedures and expectations. Con Edison's strong contractor compliance program requires contractors to submit their processes to EH&S for review, where they are judged against their programs to confirm it satisfies environmental obligations. If a non-compliance is observed, a line item is issued to the contractor, which can impact future business with Con Edison.

### Industry trends

- It is common industry practice to establish contractor expectations in the field as it relates to environmental obligations, and to measure performance based on metrics, KPIs, training, etc.
- Some organizations, such as PG&E, require contractors to have an Environmental Management System.

### Duke Energy Contractor Expectations

1. EHS performance, programs and issues are factored into the selection of contractors on a risk basis, taking into account the nature of their activities or services and previous EHS performance.
2. Contracts are established and enforced that address potential EHS liability and responsibility for contractors, including consequences for failing to comply with contract or regulatory obligations.
3. Contractors, including their employees and associated subcontractors, are made aware of EHS risks and associated controls, procedures and standards relevant to their work.
4. EHS aspects of contractor activities and performance are monitored on a periodic basis.
5. Contractors provide information on the hazards associated with their equipment, products and services prior to delivery or commencement of works, and whenever changes occur.

In **Duke Energy's** EMS Manual, contractor expectations are clearly stated via 5 key points, as seen to the right. Environmental risks are factored into the selection and management of contractors.

# Individual peer interview summaries

Energy for What's Ahead®

B18



SOUTHERN CALIFORNIA  
**EDISON**®

Environmental  
Management System

Integrate environmental stewardship into the company's culture

# American Electric Power (AEP)

Industry: Power & utility with generation and T&D  
 Regulatory complexity: OH, IN, WV, KY, VA, AR, LA, OK, TX  
 Revenue: 14.9B

## EMS Model

AEP began evaluating ISO 14001 in 2006 and performed a gap analysis. They now have a team within Environmental Services specifically dedicated to developing, maintaining and implementing environmental management systems across the organization.

ISO 14001 is used as a guideline to add clarity, but AEP has created their own internal procedures.

### Leadership commitment

- Strong buy-in and support from upper management has been crucial in the success of their EMS

## Organizational Structure

AEP restructured their EH&S organization in 2019 and separated environmental from health and safety. The Environmental Services department supports the entire company.

- 15-20 environmental coordinators for plants that report to Generation organization (do not report to environmental Services corporate function, but this is in on-going discussions)
- 3<sup>rd</sup> party contractors inspect projects (stormwater, compliance, etc.) in the field
- EMS Manager reports to VP of Environmental Services
- Environmental Services reports to executive VP over Generation, who reports to COO
- Regional environmental coordinators report directly to Environmental Services and support service centers and field work
  - Provide training, field inspections and oversight
  - When they observe issues, engage leadership to get behavior changed

## Environmental Programs

To avoid plants creating their own environmental aspect evaluations and management systems, corporate-level procedures were created. The significant aspects were determined at a high-level, and programs have been established around them.

Programs are structured by air, water, waste, land, etc., and these groups have Directors that report directly to the VP of environmental Services. Under **air**, they have permitting engineers. Under **water, ecological services and resources**, they have renewables, avian protection and more nuanced types of species. Under **land** group, they have hazardous waste and CCR program related to landfills.

In the future, AEP believes this structure will change as they de-risk the coal fleet. The number of SMEs and technical air permits is going to decrease significantly as complexity of environmental aspects eases, so will have more general support.

## Risk Assessments

Environmental risk management is new to the company. Currently looking at risk to plant and cost to company of compliance and public outreach. A newly created position, environmental Risk Director, will be leading the complex management system around CCR. They will be evaluating legacy facilities, like coal plants, and assessing the risk of ownership.

The ERM group is now centralized within Energy Delivery that assesses all types of risks, not just environmental. Using a matrix to look at financial risks, etc., they can evaluate where effort is needed. Primarily focus on reviewing internal audit reports and ensuring corrective actions/level of risk are evaluated. In doing so, they are able to decide if more structure is needed across the organization for a particular program and will reach out to Environmental Services to review controls in place as needed.

### Public benchmarking highlights

- AEP ties a portion of the funding for short-term incentive compensation for all employees to environmental stewardship, which is measured based on the number of environmental enforcement actions with significant fines that are resolved during the year, if any.
- The Generation organization instituted an Environmental Good Catch program...a "Good Catch" is an observation or recognition of a condition that could lead to a reportable environmental event and the subsequent actions taken by employees to correct the situation, preventing the event from occurring.

**100**  
Environmental FTEs

# American Electric Power (AEP)

Industry: Power & utility with generation and T&D  
 Regulatory complexity: OH, IN, WV, KY, VA, AR, LA, OK, TX  
 Revenue: 14.9B

## Incident Management

Incident reports go through a system and send notifications to leadership automatically after an event is entered.

Environmental incidents/events that would trigger a root cause investigation include:

- Any NOV that would result in a fine
- In Generation, any reportable spill, opacity exceedance, reportable releases, etc.
- Incident metrics in Incentive Compensation Plans (ICPs)
- Environmental Services administrative error (e.g., late report submittal)

## Environmental Compliance Performance

Processes and training are in place to ensure and enforce environmental compliance in the field. There is environmental oversight provided on projects by construction representatives who ensure contractors understand the impact of their work.

### Metrics, KPIs and goals

Environmental “Good Catch” program is used for field observations – personnel enter captured data from near misses that prevented an environmental event, and compare to actual incident data.

## Documentation, Communications and Training Programs

Roles specifically dedicated to the maintenance and oversight of environmental programs has enabled optimal success. Document control management teams use SharePoint for management of procedures and plans, which are updated regularly. The transition to home offices has driven electronic records and retention of permits, etc. When there is a task with an associated procedure, the document is stored in one of two approved content management locations and linked to the task itself. There is a method in place to ensure these hyperlinks aren’t changed.

There is a lot of communication, education and leadership influence so that the importance of change management is understood.

## Digital Systems

Use Enviaance for compliance task management. Centralized the creation of tasks within the software to a particular team for standardization purposes. In doing so, this removed the individual contributors ability to access the system except for completing tasks and activities. This results in more reliable KPIs and control structure of the system.

For example, the task configuration for a new NPDS permit is done by corporate to evaluate changes that need to be made to tasks, and then they update the system.

AEP builds custom reporting apps in SharePoint and other third-party software to create workflows and send notifications for work needing to be done (e.g., facility inspection).

## Change Management

- There is a formal regulatory review process in place for incorporating regulatory changes into operational controls
- MOC process for:
  - New permit
  - New facility
  - Changes to facility
  - Changes to permit
  - Changes to regulation
  - Changes to environmental aspects
  - And more
- There is a rigorous MOC process around management of significant programs (e.g., CCR)
- After a review of the regulatory monitoring process, a new procedure was developed to clearly define roles/responsibilities and applicability to the organization
- The environmental legal team are engaged in staff meetings

### Key lessons learned (per interviewee)

- Leader of EMS implementation and development should be directly aligned to top management to ensure support
- Corporate-level program > facility-level program, as it relates to an EMS
- Documentation needs to be centralized so that all pieces work together correctly
- Have had challenges and learned through trial and error

# Xcel Energy

Industry: Power & utility

Regulatory complexity: CO, MI, MN, NM, ND, SD, TX, WI

Revenue: 11.5B

## EMS Model

Xcel has an environmental management system governed by a corporate environmental policy. The EMS incorporates the same nine elements of the ISO 14001 standard and provides oversight, risk analysis, policies & procedures, monitoring, follow-up for compliance gaps, training, communication, and a centralized software solution for data and reporting.

This comprehensive EMS is designed to promote environmental excellence and continuous improvement, as well as ensure compliance with all applicable environmental requirements.

## Organizational Structure

Environmental Services is composed of the following areas:

- A. Environmental Compliance
- B. Chemistry (Central, System and Plant)
- C. Water Resources

The organization is structured with regional groups and leadership based on media. One Senior Director is over the entire group with a supporting leadership cast. The individual directors report to the Senior Director in addition to a Manager for Auditing, Emission Testing and Corporate Reporting and three "Bench" consultants. These "Bench" consultants are the company expert in a prescribed media and are responsible for ensuing consistency in compliance across all OpCos. Currently, there are 139 employees for Environmental Services including the Senior Director and leadership staff. This group is responsible for environmental compliance, avian, biological and cultural issues, chemistry, and water resources management for all operations.

## Risk Assessments

Each program/facility is evaluated for compliance by an internal auditing program employed by Environmental Services. Each OpCo has an internal environmental auditor that audits facilities on a frequent basis defined by risk. Each audit encompasses a final report documenting the results of the auditing and any corrective actions required. Corrective actions are then tracked to completion through the centralized environmental reporting software – Sphera Essential Suites.

## Environmental Programs

The legal registry structure is purely dependent on the program. Operating permits are facility specific while program requirements are applicable to all facilities but not registered individually in most cases. Compliance is determined by the requirement and application to the appropriate OpCo, unit, Service Center, project, etc.

## Public benchmarking highlights

- *Xcel can only be successful with insight into the needs and priorities of those whom their business relies on and serves. They regularly engage with stakeholders to inform their business plans and seek opportunities to better understand their interests, concerns and emerging needs. Resource planning and other regulatory proceedings offer built-in stakeholder engagement opportunities before state public utilities commissions.*
- *External agency audits or inspections is a reported metric.*

# Xcel Energy

Industry: Power & utility

Regulatory complexity: CO, MI, MN, NM, ND, SD, TX, WI

Revenue: 11.5B

## Incident Management

Any deviation from a regulation or permit requirement must have an event assessment and Root Cause Analysis (RCA) completed. The results of the RCA are then entered into Sphera with corrective actions and additional measures to be tracked to completion. These are shared across the company for learning and implementation as applicable.

## Environmental Compliance Performance

### Metrics, KPIs and goals

Metrics are composed of the following:

- A. Annual Permit Deviations
- B. Compliance Actions/NOVs
- C. Performance Dashboards
- D. Training Tracking
- E. Internal Audits
- F. SME Assessments

## Documentation, Communications and Training Programs

Environmental Services has a robust program aimed at training and communication for applicable requirements. "Bench" consultants are responsible for implementation of consistent and streamlined process to ensure compliance. Environmental Services also partners with training organization to ensure training is implemented and tracked for all applicable requirements. Environmental Services routinely conducts assessments at all facilities and has a series of robust processes and procedures in place to ensure the program is mature and vested.

## Digital Systems

Xcel currently uses Sphera Essential Suites for environmental compliance. The digital system is composed of modules implemented for compliance activities:

- A. Air
- B. Chemical Inventory
- C. Incident (Spills)
- D. Waste
- E. Water
- F. Audit

## Change Management

Each regulatory requirement whether new, amended or ongoing is evaluated for applicability at all required facilities for the rule. The requirements of the rule are then compared to the current operations and a plan for compliance is developed and agreed by the appropriate facility and Environmental Services. Reporting and documentation of compliance is defined and implemented. It is then tracked through the Sphera Essential Suites system.

## Contractors

All contractors are required to comply with the same policies and requirements as employees. These contractors are routinely audited by the Environmental Services internal auditing group. The results of the audit follow the same process and reporting as do the internal audits. Additionally, Environmental Services conducts program audits that evaluate contractor performance in all areas of waste, water, air and other environmental components. Xcel has a set of "Environmental Directives for Contractors" that all must review and follow.

# Duke Energy

Industry: Power & utility  
 Regulatory complexity: FL, OH, NC, IN, SC  
 Revenue: 23.9B



## EMS Model

Duke's EMS dates back several years, but was improved 5 years ago and redesigned with an environmental consultant. After suffering from multiple significant spills and environmental events within a short time frame, the company decided to upgrade their EMS and address these risks. The EMS conforms to ISO 14001, but is not certified as didn't see the value in third-party accreditation. Through the engagement of the change management team, Duke's EMS has been pushed out to all business units, who should then be able to identify and mitigate hazards, respond to spills, identify EH&S requirements, and report incidents. Governance organizations must understand the details of the EMS to ensure there are programs and procedures in place to meet expectations.

Corporate program is structured around expectations (e.g. identify risks and mitigate) and implementation guidance that business units must align with.

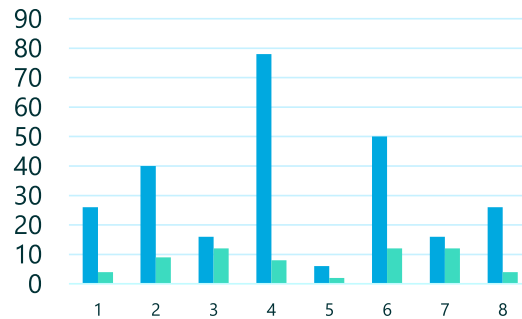
### Leadership commitment

Accountability from leadership is key. The senior management committee, EH&S performance board, etc. provide cascading environmental governance. At the highest level, there is an event-free steering committee led by VP of organization, which is driven down to regions and facilities.

## Organizational Structure

Environmental is centralized (H&S is decentralized) and continue to see need for a centralized environmental organization and standard. However, the BUs need a certain level of support, so it's been challenging to keep a centralized environmental structure.

**EH&S Programs and Env. Services**



■ Series1 ■ Series2

B23

## Environmental Programs

Corporate EHS programs group includes:

- Governance
- Building of the improved EMS
- Centralized SMEs for each environmental media (air, water, waste, etc.)

### Digital Systems

Sphera Essential Suite is used by EH&S for task management, audit management, and incident management.

Cordi is used for occupational health services and industrial hygiene.

Power BI is used for displaying trends by both the business units and enterprise.

In-house apps are developed for EH&S observations.

## Risk Assessments

Duke's risk methodology has been revamped into a mature and integrated program across all business units, with increased visibility at the management level. There are formal annual risk reviews where the level of risk is tiered and mitigation is built in at the facility level, then pushed upward to leadership.

Each business has their own risk register which rolls up to a corporate risk register. These risks are ranked based on probability and impact scoring, which then leads to mitigation selection. A program level document for the entire enterprise defines the probability and impact scoring (EH&S Risk Assessment). When there isn't a mitigation plan in place, the issue is escalated. This program has been resourced with risk consultants and designated software in the past.

All EH&S risks feed into the businesses and then to ERM corporate.

# Duke Energy

Industry: Power & utility  
Regulatory complexity: FL, OH, NC, IN, SC  
Revenue: 23.9B



## Incident Management

Tier 1 level events require a root cause analysis, while tier 3 uses a quick cause analysis (5 why's). A risk matrix is used to assign point values to each event based on quantity of material released, toxicity and impact.

Controllable behaviors multiplier: If you have controls in place and considered risk ahead of time, then multiplier is 1, but if you don't have mitigation plans in place, then a higher multiplier is assigned. High multiplier for human error.

## Contractor Performance

A few years ago, Duke revised the contractor oversight program to be more risk based instead of extensive reporting of every event (including near misses). Through this, Duke has found contractor performance to have improved.

There is a contractor policy in place with reportable event requirements and management review expectations. Contractor score card must be reviewed and presented in management review meetings. Veta is used for contractor management and pre-screening.

## Environmental Compliance Performance

The EH&S compliance obligation management program, separate from risk management, helps verify and document compliance with applicable regulations.

### Metrics, KPIs and goals

Enterprise-wide initiative for event-free operations.

Environmental metrics are tiered into three buckets (level 1, 2 and 3) based on rankings developed through a risk matrix. The enterprise and individual businesses have targets for each level.

Within EH&S, leading indicators include: compliance task closure on time, etc. These have led to few environmental events and citations.

Metrics include:

- NOVs
- Fines
- Low level indicators (don't have targets, but trends)
  - Spills, emissions, eagle fatalities, solid waste recycled

## Documentation, Communications and Training Programs

Duke's structured and formal change management process, which follows the Change Management ADKAR (Awareness, Desire, Knowledge, Ability and Reinforcement) model, has enabled the organization to achieve optimal performance in their environmental documentation, communications and training programs. Additionally, buy-in from the highest level of leadership helps to define expectations of business leaders and personnel.

EEL learning model is being implemented to drive down incidents.

The EH&S handbook lists all basic requirements for frontline employees and is broken down into a digestible format. From a compliance perspective, this is how requirements are communicated to employees, but direct communication with EH&S professional are also encouraged as needed.

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## Change Management

Duke has MOC program level documents for the entire company that are broken into 5 categories:

1. Projects
2. Permits
3. Products (chemical management)
4. Property
5. Personnel

Each of these categories has an implementation procedure, project management standard and environmental requirements checklist. For projects, this engages the environmental organization in terms of permitting and planning to manage risk and compliance obligations. For permits, there is a modification and implementation procedure program for management of permit modifications.

Products has a separate chemical control program for management of chemicals that have been brought on site, and their eventual disposal. Property management involves acquisitions, transactions, and M&A. Personnel program is for onboarding of new hires and training of environmental requirements.

The MOC process has shared responsibility (e.g. the permitting organization is responsible for initiation and completion of an MOC for permit alterations).

The EH&S compliance obligation management program determines how the permit/plan is broken down, actionable programs, identification of citations, and role responsible.

# Con Edison

Industry: Power & utility  
Regulatory complexity: NY  
Revenue: 12.3B

## EMS Model

ConEd is the only company benchmarked with a certified corporate ISO 14001 environmental management system. Their EMS journey is constantly moving forward, making necessary improvements and changes along the way. Currently, the organization is focusing more on approaching business priorities from a sustainability perspective and lens, and engraining sustainability into every project review, similar to the process for environmental and safety related matters.

ConEd's transparent culture encourages employees to come forward to report issues.

### Leadership commitment

- Top down program with CEO and VP involvement
- Committed to zero harm to the environment

## Organizational Structure

The EH&S organization is an intertwined group with a programmatic approach for growth. The 7 departments that fall under EH&S include:

- Safety (compliance pieces)
- Programs (IT component, QA and RM, training and compliance)
- EH&S Ops
- Air and Steams
- Chem Lab (24/7 response team)
- Remediation
- Engineering and Construction

Quality Assurance and Risk Management are responsible for implementing ISO 14001 activities. They track site audits and assess those that have been done in the past to inform what will be assessed in the coming or following year. The self-assessment process entails aligning key requirements from ISO 14001 to the overall program.

There are 230 EH&S employees, in which some have dual hats in both environmental and safety.

## Risk Assessments

ConEd has a robust ERM process that includes 5 steps:

1. Identify
2. Assess
3. Mitigate
4. Monitor
5. Report

Frequent assessments and audits are scheduled.

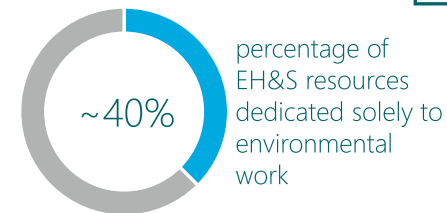
There are corporate and department-level risk registers which are cascaded down through the organization. Embedded into every risk is the environmental severity level. A trend analysis is done on NOVs, audit findings and non-compliances where gaps in risks are identified.

Drills and tabletop exercises are performed within departments by simulation a certain condition or real-life event and going through the motions (e.g. oil spill drills – call the contractor to the event site, deploy equipment, etc.).

## Change Management

Emerging issues group reviews environmental requirements and incoming regulatory changes as part of the intake process, and both works with industry groups and pulls in law internally to understand incoming changes and make preparations.

Within the Engineering division, EH&S must sign-off and review all major projects in order to for work to commence and move forward.



### Public benchmarking highlights

- ConEd informs local community groups – including business improvement districts, chambers of commerce, and local development corporations – about major capital projects, new initiatives such as smart meters, energy efficiency programs, etc. They maintain close working relationships with local stakeholders to remain aware of changes and new developments in the communities served.
- Has maintained ISO 14001 certification through a rigorous third-party process for years.

# Con Edison

Industry: Power & utility  
Regulatory complexity: NY  
Revenue: 12.3B

## Incident Management

The EHS investigation team determines root causes of environmental events, using a similar approach between safety and environmental incidents. Root causes are tiered based on incidents, but there aren't specific level distinctions. VPs, General Managers, etc. can ask the team to perform a RCA on any issue. For smaller incidents, local groups perform the RCA within their department. For larger, more complicated issues, an environmental representative from each area is involved.

RCAs only look at the processes and procedures – disciplinary action is not based on completed RCAs.

## Digital Systems

IT's strategy revolves around mostly homegrown tools with legacy systems embedded.

Archer is used by the auditing department, ERM and to track corrective actions. Looking into how they can enhance their compliance calendar through Archer, but currently its managed by department and SME.

## Environmental Compliance Performance

### Metrics, KPIs and goals

Corporate metrics:

- Late spill notifications (leading indicator)
- NOVs and non-compliances
  - Anti-idling law (i.e., vehicle can't run for >3 minutes)
  - Unreasonable noise law
  - Fire inspections
  - Asbestos (i.e., errors in paperwork and submittals)
- SF6 gas emissions
- Energy efficiency (e.g. heat pump) reduction components – involve business and update infrastructure to implement renewables

### Contractors

The contractor oversight program helps determine whether contractors are working in an environmentally responsible manner. Environmental procedures and expectations are reviewed with them (e.g. spill response).

EHS plans must be developed and submitted for review against their programs for each contractor job – will deny the plans if they don't meet requirements. For any size project, work will be stopped if issues are observed. Inspectors monitor contractors and complete observation forms. If a non-compliance is observed, a line item is issued and must be remedied, but this could impact future business with the company.

Past fraudulent contractors encouraged ConEd to develop a stronger contractor compliance program and enhance it.

Metrics:

- % of CFORs (Contractor Field Observation Reports) reviewed and complete

## Documentation, Communications and Training Programs

ConEd's onboarding process for new hires has been revamped to include a much more comprehensive training program where employees:

1. Are provided access to a mobile app for all environmental and safety documentation, such as procedures and checklists
2. Are instructed and empowered to stop a job if there are environmental or safety concerns
3. Receive weekly packages via email for environmental and safety related topics

# San Diego Gas & Electric



Industry: Power & utility  
 Regulatory complexity: CA  
 Revenue: 4.4B

## EMS Model

SDG&E (Sempra) has a strong company-specific EMS and are currently considering ISO 14001 certification. They aren't using any formal certification standard currently, but did an internal gap analysis against ISO 14001 a few years ago. They have both an internal and public facing environmental policy that is set at the VP level and drives the rest of their EMS. There are then standards in place that facilitate aspects of the policy.

### Leadership commitment

- Leadership commitment is set at the VP level

## Organizational Structure

S-CAMP program is an operational risk management system that is:

- Corporate level
- Implemented annually
- Certification process
- Tracks NOVs

Senior environmental employee in the company is the VP of Procurement and Sustainability, who reports to the President. The environmental organization is very centralized – all employees work out of 1 or 2 offices and support entire service areas, as well as interface with gas and electric groups. Environmental services team consists of (see FTE graph to right):

- 81 FTEs
- 7 consultants

## Environmental Programs

Standards run through all 70 environmental programs of the company and support 30+ operational departments. These standards maintain continuity and establish clear roles and responsibilities. They are tiered down from the federal to local level. Some standards are set around 28 supported municipal ordinances.

Programs are grouped and categorized by functional area:

- Hazardous waste
- Site remediation
- New products
- Clean water act
- And others

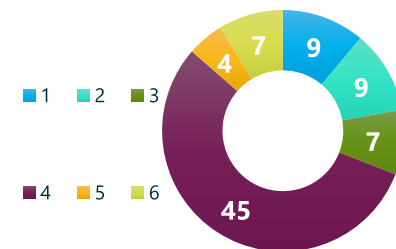
## Risk Assessments

Internal risk assessment process (enterprise risk registry) is led by the enterprise risk department and updated annually for environmental management review. There are representatives from each of the 5 functional areas in environmental services. Risk registry and ideation workshop focused on more granular key risks, controls and mitigation. SDG&E (Sempra) want to understand consequences or risk events, how to mitigate, and cost if something goes wrong.

## Public benchmarking highlights

- Important components of SDG&E (Sempra)'s environmental management practices are employee and contractor education and training and regular reviews of our performance, including environmental audits at their facilities to identify any areas of potential improvement.
- For new construction or major projects, specialized teams support environmental compliance from planning to project completion with the aim of being responsible stewards of natural resources.

Environmental FTEs



# San Diego Gas & Electric

Industry: Power & utility  
Regulatory complexity: CA  
Revenue: 4.4B



## Incident Management

Triggers and thresholds for root cause investigations include:

- Oil spills, waste spills and anything that reaches the waters of the U.S.
- Air emissions events
- Habitat impacts (unplanned occupancy)
- Taking of listed species

The law department is contacted and a deep dive investigation is performed to prevent incident recurrence in the future.

## Digital Systems

SAP is foundational enterprise-wide and is the only system used by environmental and safety. SharePoint is used across company. Different tools are used for different functions, nothing is centralized. Environmental systems include:

- CERS
- Enviance for hazmat and GHG programs
- GEERS GTS for assessments of O&M and projects
- Intelix for sustainability program

## Environmental Compliance Performance

To ensure compliance is being met for applicable requirements, self-assessments are conducted annually or bi-annually depending on the facility. Field representatives and site managers have aligned responsibilities and complete the rigorous self-assessment checklist at each facility.

### Metrics, KPIs and goals

- 100% compliance goal for training completion
- Notices to comply and NOV's
- Spills, releases, etc.
- Non-compliance air emissions (PERP, fugitives)

Do not have goals set for above, but do have compliance targets. Do not want level 2 or 3 non-compliances (CPUC).

Released their first sustainability strategy in 2020 with 12 aspirational goals and specific projects. They also started an internal sustainability scorecard with over 100 metrics.

### Contractors

There is a centralized staff to keep track of contractors better and to ensure pre-activity surveys are filled out for every project and O&M activity. A post-construction impact assessment is also performed to monitor contractor performance and work completed. Monitors observe contractors in the field before, during and after project completion. KPIs are included in vendor MSAs and expectations are discussed on environmental performance every quarter.

## Documentation, Communications and Training Programs

Extensive training program used for mandatory and voluntary training that combines environmental compliance and safety through online or in-person modules. There are instructor-led trainings annually or bi-annually specific to operational responsibilities and applicable regulations that impact their facilities.

Training is organized by functional groups (facility, field or office based) and target reasonable level of engagement (6-8 courses as primary core). SDG&E (Sempra) has accelerated the timeline for training completion (full business quarter) to ensure there is adequate time to reach the 100% compliance goal.

Contractor training is being implemented through a contractor-specific environmental compliance manual with all applicable regulations and requirements.

## Change Management

Regulatory changes are monitored and tracked closely by SMEs, managers, etc. for each environmental discipline and department. Previously, the Environmental Strategy group was responsible for tracking regulations. There is a regulatory tracking program now in each governance group. There is an internal environmental alert/publication sent to operation groups when applicable requirements have changed. Any regulatory changes that impact a facility and operational group are implemented through the associated standard and related environmental training. These operational groups are actively engaged and new compliance requirements are discussed with the impacted teams.

### Key lessons learned (per interviewee)

- Overhauled training program a few years ago after finding that there were 400 individual specialized courses, and condensed training down to 150 by simplifying for non-technical practitioners

# Dow Chemical

Industry: Chemicals

Regulatory complexity: United States and internationally (~160 countries)

Revenue: 38.5B

## EMS Model

Dow builds tools internally and has created their own EMS framework and standard to set up their environmental program. Their global system is currently maintained from a regulatory timeline standpoint, which focuses on end-of-year deadlines. Dow is considering moving towards a monthly reporting schedule to help with compliance issues and smoother annual environmental reporting.

### Leadership commitment

- Begins with the executive leadership level and cascades down throughout the entire organization
- Executive commitment is strong, especially from the CSO

### Culture

There is overall buy-in and recognition that it is not just the environmental department's job to handle this workload, it's everyone's. Integration at newly acquired sites has seen a lack of commitment, but Dow is dedicated to transitioning personnel from an old mindset to new values, and facilities must own the environmental compliance piece.

EH&S as an organization has moved from a policing role (telling them to comply) to more of a partnership (helping them with compliance).

Culturally, Dow is never quite settled or satisfied, and is always pressing.

## Organizational Structure

Operations group (former delivery) are closest to facilities and plants, and are assigned to a given manufacturing area. At the plant level, EH&S specialists and technicians cover a broad area in operations and deliver day-to-day business needs. Corporate environmental group focuses on continuous improvement and regulations, operational environmental teams maintain regulatory compliance at the facilities. The centralized environmental group supports environmental systems and provides a feedback mechanism for partners.

- Environmental operations report directly to the EH&S organization and CSO, no longer to the individual businesses
- Responsible Care Leaders and Environmental Plant Leaders report to CSO now, previously reported to site leaders

Number of environmental FTEs depends on the size of the site (how many manufacturing plants).

## Environmental Programs

The expertise and technology group own the global framework and standards (written documents and tools that sync together). They ensure the standards meet the intent of the rule/regulation and have discussions with the regulators.

### Risk Assessments

Specific teams monitor and watch incoming rule changes through news articles, EPA conferences, etc. and will do advocacy work accordingly. They identify the risk and figure out internally how to gauge and address issues by managing the effort with public policy and govt. affairs. This is then communicated internally to decipher the risk impacts and how to mitigate the risks at the site level. Compliance requirements are monitored closely and changes are implemented as needed.

### Public benchmarking highlights

- Numerous Dow sites in Europe, Latin America, Asia Pacific, the United States and Canada have received third-party verification of compliance with Responsible Care® and with outside specifications such as ISO 14001.
- Embedding Sustainability into Dow Culture: Two recognition programs – 2025 Breakthrough Achievement Awards and Engaging for Impact Awards – recently recognized a diverse group of employees and their projects for making a positive social, environmental and economic impact.

# Dow Chemical

Industry: Chemicals

Regulatory complexity: United States and internationally (~160 countries)

Revenue: 38.5B

## Incident Management

Dow follows the Corrective and Preventative Action (CAPA) process to report incidents, perform root cause investigations of significant events that meet a certain threshold, and establish corrective actions to prevent the event from reoccurring. RCIs help to capture learnings and take action as needed.

## Digital Systems

Dow creates digital tools internally instead of using external standards (e.g., Dow's GEI vs. external GRI). They also utilize their own version of Aspen software.

Compliance Tracking Tool (CTT) is used to track environmental and safety compliance tasks and then document actions taken to close out the task by the specified due date.

Incident Management database is used to report near misses and low-level spills that don't hit a trigger.

## Environmental Compliance Performance

Every organization and business is required to do a management system review (MSR) which gauges whether the processes in place are suitable and effective. The MSR capture gaps where compliance is not being met and/or if improvements must be made. This information rolls up to the business for evaluation.

### Metrics, KPIs and goals

API RP-754 is used, which has a standard on reporting for the chemical industry – any type of spill and guidance for different severity levels. This practice has been adopted internally.

Key metrics are very visible which helps drive the resources to invest in these areas for improvement. Criteria has been developed along with the metrics depending on the incident.

- KPIs around injuries, spills, regulatory performance (NOVs) which are visible to leadership
- Unplanned events are tracked
- Near misses are captured as leading indicators
- Metrics are tied to compensation and performance
- 2025 sustainability goals (goals set annually to build to 2025 targets)

## Documentation, Communications and Training Programs

Learning, integration, partnership, structure, and adherence to the program are the keys to these program's success. Dow relies on talented and exceptional employees to maintain these programs and ensure systems are in place for role transitions. There is an EMS and ODMS structure that helps manage and support documentation, communications and training.

- Constantly evaluating and re-evaluating
- Starts with the executive leadership team and filters down

## Change Management

Corporate Regulatory Affairs group assess incoming regulations and how it fits into existing system.

Typically, new or updated regulations are piloted in certain areas first and the voice of the customer is engaged for comments. A team is created for rule changes that helps to guide the process, but don't prescribe exactly how to close gaps, as long as they know they're in compliance.

The MOC process, using an internal tool, is the formal hand-off from Regulatory Affairs to EH&S Operations for regulatory impacts, but it is the facility's responsibility to implement changes to meet the new or updated requirements.

### Key lessons learned (per interviewee)

- Due to monthly self-auditing (reasonable inquiry) to monitor compliance with air permits, emissions data and calculations should be tracked and performed monthly instead of annually, which will also ensure smoother annual external reporting
- Regardless of your role, you must have ownership of environmental compliance obligations

# Burlington Northern and Santa Fe Railway (BNSF)

Industry: Logistics  
 Regulatory complexity: United States  
 Revenue: 20.9B

## EMS Model

BNSF utilizes an Environmental Management System that is not certified. Additionally, the organization is certified to the Responsible Care program.

BNSF found that working at the “ground level” (field operations level) was most effective in managing compliance, and was the basis for their Best Way Program. A critical element of this program’s success is a strong emphasis on “why” environmental compliance is important for the employees.

*“Simple is better”*

### Leadership commitment

- Leadership commitment is first to safety, but all leadership commitments are shared throughout the organization.

## Organizational Structure

BNSF’s Environmental group falls under both the Legal group and Operations group, which report directly to the CEO. Their Safety team falls under the Technical R&D group.

They have a total of 65 people in Environmental operating across 10 regions nationally.

### Environmental Programs

Best Way Program – A PDCA based program designed for field staff around environmental processes. This program was based on recognizing a need to simplify processes for field workers.

There has been a concerted shift to move away from paper-based processes to digital processes and controls.

### Digital Systems

BNSF used a number of systems with the main system being Enablon.

## Risk Assessments

BNSF utilizes an audit program where key indicators inform and drive a risk based priority process for the audits. Age and type of facility determines levels of controls and priority rating. This program encompasses both the compliance program as well as assessing the Environmental Management System.

Additionally, they use local consultant support to conduct ongoing inspections for areas such as hazardous waste storage areas, tank inspections, and air inspections. The auditing program then checks and validates the inspection program and compliance performance.

### Documentation, Communications and Training Programs

BNSF has a three-level training program aligned by region, facility and field level and focused on operational controls.

## Incident Management

Local teams support investigations. All spills are reported and tracked in the EMIS. Incident severity is defined and then slowly tightened to promote continuous improvement. For example, spills that cost \$7500 or 75 gal lost require an investigation. The team plans to eventually reduce those numbers to \$5000 or 50 gal.

## Environmental Compliance Performance

### Metrics, KPIs and goals

BNSF tracks fines and NOVs, training program performance, and conditions by permit. These metrics are shared with the whole organization. Additionally, they track cost per program. BNSF also routinely monitors the risk profiles for their facilities.

## The Best Way Program

This program is a philosophy that runs through compliance programs across the organization. It is based on the idea that simpler is better and that compliance activities in the field should be made as easy as possible for the field workers. For example, procedures and instructions are simplified with visual cues, decals, etc.

- Moving away from paper - BNSF is working to move away from physical/paper procedures where possible.

# Enbridge

Industry: Oil & gas pipeline, distribution and storage, renewables  
Regulatory complexity: North America  
Revenue: 20.9B

## EMS Model

Enbridge's EMS loosely follows the ISO 14001 framework, which has been in place for 10 years. Their EMS is the backbone of how environmental is managed and how goals, objectives and targets are set. In one of the most highly regulated industries, management system frameworks answer the expectations from regulators. Each business unit takes the management system framework and aligns it to their individual business model.

Enbridge does not have an environmental policy, but a safety & reliability policy which is signed off on at the executive senior level of company.

Goals and objectives are funneled down to the staff from corporate after moving through the businesses and departments.

Some businesses present quarterly management system reports to the president and senior leaders in the company.

## Organizational Structure

Within the environmental group, there are 120 staff and contingent workers.

- Environmental directors and senior leaders broken out into different teams
- Regional advisors
- Centralized employees in various offices
- Contractors relied on for construction work activities
- Specialist come to sites for inspections, stack testing, etc.
- External third-party vendors used
- SMEs perform specific tasks within environmental operations
- Shared services within environmental (corporate entity) serves all the business units and helps meet governance and training requirements

## Environmental Programs

The environmental programs are broken out by media, and processes are designed to fit into each of those groupings. Enbridge is constantly evaluating the most effective way to manage these programs, and if they will meet future needs. The EMS sets up the programs, but must continue to re-evaluate and identify whether a program is needed each year. These systems and the methodology used for each program are necessary for tracking and confirming requirements are being met, which will validate overall environmental compliance.

## Risk Assessments

Risk assessment and management are doing at many levels within the company. At the highest level, as well as under each business unit, there are risk management teams that identify the most significant environmental risks in their areas and review the potential impacts to the environment.

Risk must be managed from project to project to understand where the risks are during the project lifecycle, and what controls will be used to mitigate. Risks can be evolving and must be evaluated on an annual basis, translating into actionable programs.

Enbridge's risk matrix is used to categorize risk from low to high in a 7 by 7 chart, which includes an environmental component. Environmental risks are only included at the corporate level if significant enough.

EMS level risk is observed through risk registers, but risk assessments trickle down to the field as well (e.g. environmental hazard form used).

# Enbridge

Industry: Oil & gas pipeline, distribution and storage, renewables  
Regulatory complexity: North America  
Revenue: 39.1B

## Incident Management

Enbridge's risk matrix is used to measure and score incidents. Risks that are scored at medium or higher necessitate a corrective action.

### Auditing

The internal audit group audits management programs, like Enbridge's Environmental Protection Program, on a set frequency.

Agencies perform assessments and audits.

There is a formal process for staff to perform self-assessments and facility checks. Consultants have previously been hired to audit specific business functions.

## Environmental Compliance Performance

### Metrics, KPIs and goals

Leading and lagging metrics are used and based on ensuring success. Within their environmental programs, they decide what and how performance can be measured. Activities executed within the programs can be measured.

### Contractors

Scorecards are used with contractors that measures environmental performance, which is tied to their contract. Environmental requirements and responsibilities are listed in the contract and must be approved. Contractors are continually measured and monitored, and provided feedback on their performance.

## Documentation, Communications and Training Programs

Positive impact training is provided so that field workers are aware of their environmental responsibilities without having to refer to specific regulatory or permit requirements, helping to maintain compliance.

Accountability has enabled the organization to achieve optimal performance of their environmental documentation, communications and training programs. Goals set at the top, but teams manage the work and are held accountable for that work.

Systems like Enablon structure documentation records and provide the support needed.

Consistent and repetitive communications are important, as well as senior leaders involvement in those communications. These can't just come from the environmental department, but others must express buy-in to help engage operations.

## Change Management

There is a group that manages regulatory changes and triggers other relevant teams (e.g. governance) to review the impacts. These changes are then sent to the responsible SME based on environmental media to make sure processes are updated and mapped out to reflect changes.

### Digital Systems

Enablon is used for environmental processes, however, they struggle with the user interface and have to educate end users to understand their capabilities.

### Key lessons learned (per interviewee)

- Incredibly important to have good metrics – as soon as these were visible at the senior executive level, they could see what changes needed to be made and have a clearer, united understanding on current state.

# Public benchmarking results and analysis

Energy for What's Ahead®

B34



SOUTHERN CALIFORNIA  
**EDISON**®

Environmental  
Management System

Integrate environmental stewardship into the company's culture

# Environmental management systems

Majority of benchmarked companies indicate use of an EMS that follows the ISO 14001 standard, and all benchmarked companies make their environmental policy publicly available online.

Company	Environmental certifications	Environmental policy	Environmental management system
	Publicly reported	Publicly available?	Publicly reported
<b>PG&amp;E</b>	LEED, API 1173, API RP 754, ISO 55001, PAS 55-1	√	PG&E employs an EMS modeled after the ISO 14001 environmental management standard and consistent with the ISO standard's "Plan, Do, Check, Act" model for continuous improvement. The EMS and environmental operations are aligned to PG&E's Compliance and Ethics Maturity Model to allow integration of compliance activities with the rest of PG&E, and to use common compliance performance measurements.
<b>AEP</b>	ISO 14001 (used only as guidance)	√	No available information, but according to recent AEP peer interview, AEP environmental services has a team that develops, maintains and implements environmental management systems.
<b>SDG&amp;E (Sempra)</b>	ISO 14001 (Mexico operations certified only), pursuing California OSHA Voluntary Protection Program, LEED (14 facilities)	√	Environmental management systems are in place across operations and are critical to assessing and mitigating environmental risks associated with operations. These systems identify compliance requirements and procedures, training opportunities for employees, and audits performance.
<b>BP</b>	ISO 14001 (major sites attest or certify to)	√	BP uses an Operating Management System (OMS) which is a systematic framework designed to sustainably deliver safe, reliable and compliant operations. It covers key topics including safety, process safety and quality.
<b>Dow</b>	Responsible Care® and ISO 14001 (sites in Europe, Asia, North & South America are compliant)	√	Dow uses a comprehensive and integrated Operating Management System at the corporate level that includes policies, requirements, processes, best practices and procedures to support business units and facilities to drive safe and environmentally compliant operations. Within this system, they lay the foundational expectations of hazard assessment and risk mitigation, aligned to Responsible Care®.
<b>Xcel Energy</b>	ISO 14001 (used only as guidance)	√	Xcel has a comprehensive EMS designed to promote environmental excellence and continuous improvement, and ensure compliance with all applicable environmental requirements. The EMS incorporates the same nine elements of the ISO 14001 standard and provides oversight, risk analysis, policies and procedures, monitoring, follow-up for compliance gaps, and training and communication.
<b>Chevron</b>	ISO 14001, 45001, 9001 16949 (used only as guidance)	√	Chevron uses its Operational Excellence Management System to manage risk and compliance for workforce safety and health; process safety, reliability and integrity; environment; efficiency; security; and stakeholders.
<b>Exelon</b>	ISO 14001 (66% of facilities conform to)	√	The Exelon corporate level EMS is based on the primary function of the Corporate Sustainability organization which is to provide governance and oversight in support of the production and delivery of electricity and natural gas. Exelon's EMS is an integral part of managing environmental risk and is designed to conform to ISO 14001 by laying out the necessary steps to maintain responsible operations throughout businesses.
<b>Con Edison</b>	ISO 14001	√	Through implementation of an ISO 14001 certified EMS, Con Edison is committed to improving safety and environmental performance, strengthening regulatory compliance, enhancing relationships with stakeholders, identifying and reducing significant EH&S risk potential, and promoting wise and effective use of natural resources. ISO 14001 requires a commitment from all levels of the Con Edison organization, led by the top management, to environmental protection through pollution prevention and continuous improvement. It gives Con Edison and their stakeholders a means of verification that the EMS is operating at a world-class standard. Con Edison has maintained ISO 14001 certification through a rigorous third-party process for 18 consecutive years.
<b>FPL (NextEra)</b>	N/A	√	No available information
<b>SCE</b>	N/A	N/A	SCE's EMS provides the framework through which SCE identifies, monitors and reduces environmental risks. SCE is committed to effectively and transparently managing its environmental impacts through best practices. SCE evaluates adherence to industry practices for EMS, including their implementation, striving to ensure that each element is effective and to identify opportunities for improvement.

# Environmental programs summary

## Best practices and key findings

### Observations & Risk Mitigation

Listing or mention of environmental observations programs to identify environmental risks and impacts before incidents occur

**AEP** runs an Environmental Good Catch program, where a "Good Catch" is an observation or recognition of a condition that could lead to a reportable environmental event and the subsequent actions taken by employees to correct the situation, preventing the event from occurring. A "Good Catch" could also be behaviors or conditions that represent a best practice. Using knowledge sharing and lessons learned helps to prevent future non-compliance events.

**PG&E** implemented contractor safety inspection and observations programs, which involve internal safety professional conducting unannounced job site visits to validate contractor compliance.

**Dow's** environmental risks are characterized using their risk characterization process tool. This tool requires the assessment of hazard and exposure information to identify the appropriate risk tier, which then determines the required actions and reviews.

**Chevron** has developed a new environmental risk management strategy to facilitate continual improvements in environmental performance that is aligned to environmental principles. The strategy provides a dynamic framework to identify emerging and long-term environmental risks and issues as well as drive actions to improve performance across the enterprise. Chevron's environmental risk management strategy will:

- 1) Set and track objectives to meet environmental expectations
- 2) Enable data-driven decision-making with enhanced digital innovation and analytics
- 3) Expand the use of the risk management practices and cost effective technologies to identify and mitigate risk, benefit the environment, and make better decisions
- 4) Inspire the workforce by recognizing the good work already being done and increasing employee engagement

**Exelon** participates in EPRI's Program 51, which allows use of an industry-wide database to compare nameplate data information and identify if a piece of equipment is likely to have PCBs, resulting in the continued reduction of PCB-containing equipment across the company while mitigating environmental risk.

**FPL's** corporate risk management committee, consisting of officers and key personnel, provides oversight and support for risk management activities. The committee meets four times per year to discuss risks, related mitigation activities, and performs detailed risk reviews. Risks are assessed based on impact, probability and speed of onset. Committee reps meet twice a year with the risk lead team, comprised of the CEO, CFO and General Counsel, to review and provide feedback. The results are then reported to the audit committee of the board of directors annually.

**SDG&E's** environmental policies and procedures are designed to manage and reduce environmental impacts and advance the circular economy. Their environmental policy describes their commitment to abide by applicable laws, regulations and permit requirements, and their work to reduce impacts.

### Audits

Listing or mention of audits done for environmental compliance and risks both internal and external

**PG&E** reviews and audits environmental performance through self-assessments, internal audits and compliance testing and risk reviews. PG&E also participated in a third-party audit of their compliance programs and incorporated the findings into their EMS and operational processes.

**AEP** is continually in the process of completing or preparing for compliance audits, and must maintain a constant state of audit readiness. One way they check their own compliance is through internal audits, which provide additional focus on controlling risks and providing assurance.

**SDG&E** conducts periodic internal audits to review data accuracy, and publicly reports certain data to govt. agencies that is third-party verified. Facility environmental audits are an important component of their EMS to identify any areas of improvement.

**Dow** schedules routine EH&S integrated audits. **Xcel Energy** conducts internal and external audits. **Exelon** audits their environmental programs in accordance with ISO 14001.

**FPL** programs include routine self-assessments and environmental audits, and daily site inspections. NextEra Energy's audit committee receives regular reports on the key risks facing the company from the corporate risk committee. All aspects of waste management are validated through facility environmental audits that include records review, site inspection and personnel interviews. All waste management vendors receive an environmental audit from either internal audit personnel or through the nonprofit trade association CHWMEG and its global Facility Review Program.

### Training

Listing or mention regarding environmental impacts training for key

**SDG&E's** employee and contractor education and training are important components of their environmental management practices.

**Con Edison** conducts training sessions for public and emergency officials on how to properly respond to steam incidents.

**FPL** programs include employee and contractor training.

In **AEP's** construction heavy Transmission business, project teams must complete a mandatory environmental compliance-training program.

**PG&E** conducts training to ensure employees have the skills and knowledge to correctly perform environmental activities associated with their work.

# Governance

## Documented descriptions and key takeaways

### Governance related topics

Company	Environmental & sustainability management approach
PG&E	Boards and Committees have oversight responsibility for key sustainability issues. The Compliance and Public Policy Committee of PG&E Corporation's Board of Directors has primary oversight of corporate sustainability issues, such as environmental compliance and leadership and climate change. This includes an annual review of PG&E's sustainability practices and performance. PG&E Corporation's VP of Federal Affairs and CSO is responsible for leading PG&E's corporate sustainability initiatives, reporting and engagement. To further embed sustainability into our operations, PG&E established an internal Sustainability Leadership Council, co-chaired by the CSO and CCO, that brings together leaders across various functions, including environmental compliance. PGE's officers review compliance performance updates monthly.
AEP	AEP's board and board committees consider climate-related issues when reviewing and guiding their business strategy, major plans of action, risk management policies, annual budgets, setting the organization's performance objectives, etc. The Executive Council, consisting of AEP's top executives (CEO, CFO, etc.), discuss climate-related issues and climate policy risks that could affect AEP's operations, employees and customers regularly in meetings.
SDG&E (Sempra)	Sempra Energy's Board of Directors' Sustainability, Safety and Technology (SS&T) Committee is the highest-level committee responsible for the review of EH&S laws, regulations, and climate-related risks and opportunities. Six non-employee board members serve on the committee, which is briefed by the company's compliance, technology, environmental, health, safety, security and sustainability officers and senior personnel. The SS&T Committee is engaged in the development of sustainability goals for Sempra Energy.
BP	The board and its committees identify environmental and legal or regulatory non-compliance risks each year. The board has established a safety and sustainability committee focused on oversight of the management of safety and sustainability matters such as process safety and operational integrity, security risks, personal safety and operational health risks, operational environment and social risks, and the implementation of BP's sustainability frame.
Dow	Dow's CEO provides leadership oversight for the entire organization, including decisions made on sustainability and climate change strategy. As Chairman of the Board, the CEO ensures that topics related to sustainability and climate change are given appropriate time on meeting agendas, and that decisions made related to the Company's strategy around sustainability and climate change are brought to consensus. The EH&S and Technology Committee is a Board-level committee that oversees and advises the Board on sustainability efforts and EH&S policies and performance to ensure compliance with applicable laws and regulations.
Xcel Energy	The executive team is accountable for strategy execution, including sustainability and ESG responsibilities and initiatives. Xcel Energy was among the first U.S. energy providers to tie environmental performance directly to long-term executive compensation over 15 years ago, with annual incentive compensation currently tied to carbon reductions and ESG-related issues.
Chevron	Chevron's strategy and sustainability groups have been integrated into a single team led by the VP of Strategy and Sustainability, which has helped accelerate ESG progress and sustainability priorities. Engagement starts at the highest level with the Board of Directors, who maintain focus on ESG issues and provide oversight of Chevron's efforts to build an enduring business – one that is capable of delivering strong financial returns while meeting sustainability goals. The Public Policy and Sustainability Committee provide oversight of climate risks, policies and trends that affect Chevron's activities and performance.
Exelon	Exelon has designated leadership and team members who ensure the company is moving in the right direction as an energy company for the future. The sustainability team is led by Senior VP of Corporate Strategy and Chief Innovation and Sustainability Officer so that sustainability is incorporated into decision-making at the highest levels. As an energy company, sustainability and environmental management are integrated throughout the entire business, requiring the Board to actively participate in making decisions about their most pressing sustainability challenges.
Con Edison	To help guide and oversee their sustainability strategy, Con Edison has developed a governance structure that extends from the board of directors to the employee level. This structure includes a Safety, Environment, Operations, and Sustainability Committee of the Board and VP-level ESG Committee. The audit committee of the Board oversees the risk management framework and meets with the director of risk management at least annually to discuss program initiatives and to provide strategic direction for the program.
FPL (NextEra)	FPL's approach to sustainability engages all levels of the company from the board of directors to our employees. The Board of Directors oversees issues and risks which could impact the long-term sustainability of the company, but the chairman and CEO has ultimate responsibilities for the company's sustainability performance and long-term success. The sustainability council focuses on proactively addressing sustainability issues and policies and driving strategic initiatives across the company. This council reports to and receives feedback from the sustainability executive steering committee quarterly. FPL Group incorporates sustainability metrics into executive officer compensation goals.

All peers disclose their governance structure around environmental/sustainability risks

All peers have Board-level oversight of sustainability progress and ESG topics

7 peers with environmental/sustainability-focused committees or councils

# Stakeholder engagement

## Documented descriptions and key takeaways

### Stakeholder engagement related topics

Company	Environmental & sustainability management approach
<b>PG&amp;E</b>	To meet their commitments, it is essential that PG&E listen to the needs, expectations and guidance of their many stakeholders. PG&E seeks engagement across a broad spectrum of voices to help shape their thinking about how to better deliver outcomes for the many constituencies they serve. The Sustainability Advisory Council provides independent expertise to help ensure that PG&E's business strategy, operations and future energy network incorporate sustainability best practices to improve service now and in the future. The Local Stakeholder Advisory Group discusses major projects and topics relevant to the local area.
<b>AEP</b>	AEP engages with a variety of stakeholders on issues ranging from climate change, clean energy transition, energy efficiency, reliability and affordability, supply chain management and human capital management. New issues arose in 2020, especially focused on environmental, social and governance (ESG) impacts, risks and management. AEP recognizes that climate change remains a significant risk and opportunity for which they are preparing to ensure delivery of clean, safe electricity expected by customers. They engage with different stakeholders, including Climate Action 100+, to understand their concerns and address their questions about AEP's carbon reduction goals and climate scenario analysis.
<b>SDG&amp;E (Sempra)</b>	SDG&E's operating companies use a variety of methods to provide open communication with external audiences and stakeholders. This includes Energy Collaborative Communities, online portals that bring innovation and communication together, and established stakeholder groups called Community Advisory Councils (CACs). Their ethics and compliance helpline serves as their formal grievance mechanism for stakeholders to share concerns or describe project impacts.
<b>BP</b>	2020 was a year of transition for BP as they developed a new strategy and sustainability frame, and began the process of reinventing BP. These activities were informed by extensive and varied engagement with their many stakeholders, where they listened to and considered their interests. BP believes their new strategy will create long-term value for stakeholders – helping the world to decarbonize while harnessing the business opportunities the energy transition has to offer. Stakeholder engagement activity takes place across BP, from the board through to local community liaison officers.
<b>Dow</b>	At Dow's large manufacturing sites, community stakeholder engagement is a key priority, with resources aligned to ensure strong community involvement along with active listening by both Dow and their community partners. Dow uses numerous tools to identify and prioritize risks and opportunities, including a sustainability materiality assessment, a stakeholder engagement process and their ERM process. Engaging stakeholders and establishing collaborative partnerships is an essential element of their ESG strategy. By engaging with a wide variety of stakeholders on a regular basis, Dow can build a clearer understanding of complex global challenges and of the local conditions in the countries they do business.
<b>Xcel Energy</b>	Closely collaborating with those they service and do business with is essential to Xcel Energy's operations. As a regulated and customer-focused energy provider, Xcel Energy can only be successful with insight into the needs and priorities of those whom their business relies on and serves. They regularly engage with stakeholders to inform their business plans and seek opportunities to better understand their interests, concerns and emerging needs. Xcel Energy's business is unique in that their resource planning and other regulatory proceedings offer built-in stakeholder engagement opportunities before state public utilities commissions. Because of this, their stakeholder engagement is far-reaching and transparent with regular, ongoing business interactions, special meetings and presentations.
<b>Chevron</b>	Chevron recently updated their Stakeholder Management System (SMS), their digital tool to manage stakeholder engagements and issues. SMS enables business units to track stakeholder engagements, consistently collect and track grievances, and enhance cross-function collaboration on issue management, including human rights.
<b>Exelon</b>	Through regular engagement with their stakeholders, Exelon improves their understanding of emerging trends affecting their business and address stakeholder needs and concerns. Every year, Exelon facilitates specialized forums with individual stakeholder groups to discuss their sustainability interests and concerns to incorporate into business and sustainability planning.
<b>Con Edison</b>	Con Edison informs local community groups – including business improvement districts, chambers of commerce, and local development corporations – about major capital projects, new initiatives such as smart meters, energy efficiency programs, and how to do business with Con Edison. They maintain close working relationships with local stakeholders so Con Edison remains aware of changes and new developments in the communities served.
<b>FPL (NextEra)</b>	At NextEra, stakeholders are engaged through various methods including: outreach meetings, web, email, speaking engagements, social media, customer care center, open houses, surveys, materiality analysis, shareholder meetings, etc.

All peers engage stakeholders in some form to obtain feedback and suggestions, as well as to provide awareness of their activities

8 peers apply GRI's standard for stakeholder engagement when preparing their corporate sustainability reports

# Supply chain and contractor management

## Documented descriptions and key takeaways

Supply chain/contractor management related topics	
Company	Environmental & sustainability management approach
<b>PG&amp;E</b>	PG&E has a published supplier <a href="#">Environmental Management Standard</a> which all top suppliers must meet and expects them to manage environmental impacts through an EMS. environmental sustainability is 5 points out of a total of 100 in the supplier score. Environmental sustainability constitutes 5 points (out of 100) on PG&E's supplier performance scorecard. Data is collected through the annual Electric Utility Industry Sustainable Supply Chain Alliance (EUISSCA) Sustainability Survey. Additionally, in 2019 as part of their <a href="#">supply chain sustainability efforts</a> , PG&E "benchmarked our supply chain environmental performance for continuous improvement, enhanced survey tool to gather supplier environmental data and metrics, updated workshops focused on environmental sustainability and supplier code of conduct, and encouraged supplier speak up."
<b>AEP</b>	AEP is publishing a new Supplier Code of Conduct that addresses climate and environment-related performance and expectations. In addition, some business units incorporate expectations for sustainability performance into RFPs.
<b>SDG&amp;E (Sempra)</b>	SDG&E is changing its supplier evaluation criteria on bid events to include sustainability as a fundamental element of the bid review process. SDG&E plans to enhance its supply chain sustainability program by 2025 that continues to champion supplier diversity, resilience, environmental excellence and safety. SoCalGas has been incorporating sustainability in its bid review process for several years and, in 2020, began working with a supply chain consultant to create a road map for creating an improved supply chain sustainability plan. Additionally, as outlined in <a href="#">2020 Sempra Energy Sustainability Report</a> , their " <a href="#">supplier code of conduct</a> details expectations for suppliers to evaluate their operations, products and services from a total lifecycle perspective in order to propose and implement effective policies and measurable improvements. [Sempra] value suppliers who disclose their corporate sustainability results and set measurable goals that reduce environmental impact."
<b>BP</b>	BP is in transition with their supplier management process. According to their website "In parallel, we will establish a roadmap to identify and improve the sustainability in high priority areas of goods and services, continuing to action opportunities as we find them. We will trial the inclusion of sustainability drivers in major purchasing decisions. Our next step is to develop a sustainable procurement policy and set aims by 2023."
<b>Dow</b>	According to <a href="#">Dow's Code of Business Conduct for Suppliers</a> , Dow expects suppliers to "Respect the Environment: Suppliers will comply with all applicable environmental laws. Suppliers will have systems in place to ensure safe management of waste, air emission and wastewater discharges. Dow will favor suppliers who seek ways to minimize the use of nonrenewable resources, use all resources more efficiently and minimize the environmental impact of their operations."
<b>Xcel Energy</b>	According to Xcel's Supply Chain Management, "four key business objectives drive our supply chain strategy" including "Maximizing investment yield, Achieving operational excellence, Managing risks and opportunities, <i>Supporting community and environmental leadership.</i> " Xcel has also "developed guidelines for bid analysis...Within these guidelines, up to 20% of the bid analysis weight can be allocated to social and environmental factors such as diversity, safety and environmental performance."
<b>Chevron</b>	According to <a href="#">Chevron's Business Conduct and Ethics Expectations from Suppliers and Contractors</a> , Chevron "manages supplier and contractor conformance to Operational Excellence through contractual agreements," including expectations for suppliers to "Comply with all applicable Chevron company policies and requirements, both in regard to suppliers' and contractors' own workers, and the workers of their subcontractors and comply with all applicable environmental, health and safety laws and regulations." Additionally, Chevron utilizes a "Contractor Health, Environment and Safety Management (CHESM) process" that "establishes clear accountabilities and facilitates active engagement with contractors."
<b>Exelon</b>	A key Sustainability Issue for Exelon is a Sustainable Supply Chain: "Working with our suppliers and industry peers to build a sustainable supply chain that delivers quality products and services for Exelon, supports local and diverse businesses in the communities in which we operate, drives eco-efficiency up through the supply chain, ensures supply chain continuity and upholds human rights." Exelon utilizes a specific <a href="#">Special Quality Assurance Document</a> designed to outline specific supplier requirements Exelon PO/Contracts.
<b>Con Edison</b>	Con Edison has an eight-module <a href="#">eHASP</a> (Environmental, Health, and Safety Plan) "designed to educate contractors working with our company to meet or exceed established regulatory standards of worker health, safety, and environmental concerns." <a href="#">The Vendor Standards of Business Conduct</a> states "Operations shall be carried out in compliance with all applicable environmental laws and regulations."
<b>FPL (NextEra)</b>	FPL uses a hosted <a href="#">supplier database</a> for supplier registration. FPL also has a <a href="#">Supplier Code of Conduct</a> which states a commitment to Environmental Protection and Sustainability: "This commitment is consistent with our values and our NextEra Energy Environmental Policy. We expect our Suppliers to share this commitment to protect our environment, and to abide by the letter and spirit of all applicable environmental laws and regulations. In addition, suppliers must abide by any contractually required Company policies and procedures related to pollution, waste disposal, air emissions and stormwater management. Suppliers should have environmental management systems and training in place to manage risk, conserve resources and protect the environment."

# Sustainability reporting and disclosure platforms

All benchmarked companies publicize sustainability goals and performance through their company website and/or annual sustainability report, and measure progress in alignment with recognized reporting frameworks such as GRI, SASB and EEI/AGA.

Company	Reporting vehicles			2020 CDP score		2020 Materiality assessment	Alignment to standards					
	Sustainability report	Sustainability website	Other	Climate Change	Water Security	Publicly reported	GRI	TCFD	UN SDG	SASB-specific report	EEI ESG/AGA	Other
<b>PG&amp;E</b>	√	√	-	B	B-	√	√			√	√	-
<b>AEP</b>	√	√	-	B	B	√	√	√	√	√	√	-
<b>SDG&amp;E (Sempra)</b>	√	√	Annual report	Submitted, not scored		√	√	√	√	√	-	-
<b>BP</b>	√	√	ESG performance report, environmental policy, annual report	Submitted, not scored	No response	√	√	√	√	√	-	IPIECA, WEF IBC
<b>Dow</b>	√	√	CDP response, ESG report	B	C	√	√	√	√	√	-	WEF IBC
<b>Xcel Energy</b>	√	√	ESG library on company website, performance data summary, TCFD report	No response		√	√	√	√	√	-	-
<b>Chevron</b>	√	√	Climate change resilience report	No response		N/A		√	√	√	-	IPIECA
<b>Exelon</b>	√	√	Environmental policy, ESG programs	A-	B	N/A	√	√	√	√	√	-
<b>Con Edison</b>	√	√	Proxy statements	Submitted, not scored	No response	√		√		√	√	-
<b>FPL (NextEra)</b>	N/A	√	ESG report	No response		√	√	√	√	√	√	-
<b>SCE</b>	√	√	Sustainability report card	No response		√	√	√	√	√	√	-

# Environmental and sustainability goals

Highlights on GHG/decarbonization goals of benchmarked companies

		Timeline	Baseline
PG&E	10% GHG emissions reduction for operations (natural gas transmission and distribution, vehicle fleet and PG&E facilities)	2022	2016
	Avoid 1 million MT of cumulative GHG emissions	2018-2022	2016
	90% of agency inspections without a written enforcement action	2020	N/A
AEP	Net zero carbon emissions	2050	N/A
	Reduce coal-fuel generating capacity by 74%	2030	2010
	Zero environmental violations and enforcement actions	N/A	N/A
SDG&E (Sempra)	Net zero GHG emissions (scope 1, 2 and 3)	2050	N/A
	Deliver 100% renewable or zero carbon energy to electric utility customers	2045	N/A
	Eliminate 100% of natural gas vented during transmission pipeline work (SDG&E and SCG)	2030	N/A
BP	Net zero GHG emissions across organization (scope 1, 2 and 3)	2050	N/A
	Reduce carbon in products by 50%	2050	N/A
	Net positive impact (NPI) to restore, maintain and enhance biodiversity for all new projects starting in 2022	N/A	2022
Dow	Enable 1 million MT of plastic to be collected, reused or recycled	2030	N/A
	Enable 100% of products sold into packaging applications to be reusable or recyclable	2035	N/A
	Reduce Level 1 and 2 PSCes (Process Safety Containment Events) by more than 80%	2025	2015
Xcel Energy	Deliver 100% carbon-free electricity	2050	N/A
	Reduce carbon emissions from electricity provided to customers by 80%	2030	2005
	Maintain vitality of natural habitats and species impacted by generating electricity and distributing electricity and natural gas	N/A	N/A
Chevron	Zero routine flaring	2030	N/A
	Reduce kg CO2e/boe for oil by 40%	2028	2016
	Reduce kg CO2e/boe for gas by 26%	2028	2016
Exelon	Reduce GHG emissions from its internal operations by 15%	2022	2015
	Reduce GHG emissions of Exelon's utilities by at least 50%	2030	2015
Con Edison	100% clean electricity	2040	N/A
	Reduce SF6 emissions by 5% annually	N/A	N/A
FPL (NextEra)	Install more than 30 million solar panels in Florida = 10,000 new MW of solar in the state	2030	N/A
	Reduce CO2 emissions by 67%	2025	2005
	Zero significant environmental events annually	N/A	N/A

 Environmental compliance-specific goals

## Goal-setting notes

- Corporate-level sustainability goals have become standard as the worldwide concern over the impacts of climate change increases
- Setting annual targets focused on continuous improvement helps to lower environmental incidents
- Environmental/sustainability commitments stated publicly are greatly concentrated on GHG reduction and decarbonization and align typically with a state's clean energy goals

# Environmental metrics and KPIs

Comparison of benchmarked companies select publicly reported metrics/KPIs

	Climate change indicators			Environmental compliance tracking <small>*below is a combination of programs that are either mentioned publicly or metrics that are tracked</small>		Employee training <small>*mentioned in ESG or sustainability reports</small>	Other reported environmental metrics/KPIs
	GHG emissions	Total water withdrawal	Total waste generated	Environmental audits	Environmental violations/fines	Training	
<b>PG&amp;E</b>	√	√	√	Internal	√	√	<ul style="list-style-type: none"> <li>Agency inspections</li> <li>Supplier environmental performance standards</li> <li>Specific no. of self-assessments and internal audits for environmental matters performed</li> <li>Releases that exceed regulatory thresholds</li> <li>Inspections with no NOV issued (% of total inspections)</li> <li>Protected and restored habitats</li> </ul>
<b>AEP</b>	√	√	√	Internal and external	-	Avg. and total hrs/yr per employee	<ul style="list-style-type: none"> <li>Agency inspections</li> </ul>
<b>SDG&amp;E (Sempra)</b>	√	√	Hazardous waste	Internal and external	√	√	<ul style="list-style-type: none"> <li>Agency inspections</li> <li>Inspections with no NOV issued (% of total inspections)</li> <li>Internal compliance assessments and audits</li> </ul>
<b>BP</b>	√	√	-	-	√	Total hours of employee training completed	<ul style="list-style-type: none"> <li>Total air emissions of SOX, NOX and non-methane hydrocarbons</li> <li>Haz and non-haz waste disposal</li> </ul>
<b>Dow</b>	√	√	√	External	-	Avg. hrs/yr per employee	<ul style="list-style-type: none"> <li>Total waste disposed</li> <li>Hazardous vs. non-hazardous waste generated</li> <li>Process Safety Containment Events (PSCE) – industry best practice, API RP-754</li> </ul>
<b>Xcel Energy</b>	√	-	√	External	√	Total hours of employee training completed	<ul style="list-style-type: none"> <li>Total waste recycled and water consumed</li> <li>External agency audits or inspections</li> <li>Total hours of training (and per employee)</li> </ul>
<b>Chevron</b>	√	√	Hazardous waste	-	√	-	<ul style="list-style-type: none"> <li>Criteria pollutants emitted (VOC, SOX, NOX, etc.)</li> <li>Number and cost of EH&amp;S fines paid and settlements entered into</li> <li>Petroleum spills to land and water</li> </ul>
<b>Exelon</b>	√	√	Hazardous waste	Internal and external	√	√	<ul style="list-style-type: none"> <li>Permit non-compliance events</li> <li>Reportable spills to agencies</li> <li>Non-reportable spills with minimal impact</li> <li>Internal and external audits in accordance with ISO 14001</li> </ul>
<b>Con Edison</b>	√	-	Hazardous waste	-	-	√	<ul style="list-style-type: none"> <li>NOx, SO2, Hg emissions</li> <li>CO2 emissions from owned generation vs. purchased power</li> </ul>
<b>FPL (NextEra)</b>	√	√	√	Internal	√	√	<ul style="list-style-type: none"> <li>Hazardous vs. non-hazardous waste generated</li> <li>Significant spills and environmental violations</li> </ul>

# Appendix

Energy for What's Ahead®



SOUTHERN CALIFORNIA  
**EDISON**®

Environmental  
Management System

Integrate environmental stewardship into the company's culture

# Organization contacts and interview planning

The EY team worked through its network of business relationships to identify and connect with industry EHS leaders positioned in the benchmarking target company list. Interview questions were communicated prior to calls so that EHS leaders were able to bring key team members in support of planned discussion topics.

Company	Interviewee and Title	
<b>AEP</b>	Chris Long	Manager, EMS
<b>Xcel Energy</b>	Jeff Savage	Sr. VP and Controller
<b>Duke Energy</b>	Shane Wiesemann James Wells	Manager, EHS Systems VP, EHS
<b>Con Edison</b>	Theresa McGee Eric Dessen	Director, Health & Safety EH&S Compliance Liaison
<b>PG&amp;E</b>	Swapna Nigalye	Principal Program Manager, environmental Management
<b>SDG&amp;E (Sempra)</b>	Scott Boczkietwicz Brittany Syz	Manager, Environmental Programs Director, Environmental Services and Sustainability
<b>Dow</b>	William Nipper Tim O'Neal	Sr. Director, Remediation/environmental Compliance/Reg. Affairs Director, EH&S and Sustainability Technology
<b>BNSF</b>	David Smat	Global Leader, EHS&S and environmental Engineering
<b>Enbridge</b>	Brad Asmussen	Manager, Environment GTM Operations

# Additional charts and tables

- From NAEM's 2018 EHS Compliance Metrics report

## Most Commonly Tracked Leading Metrics

Figure 8

Metric	
Near-misses	76%
Regulatory visits/Inspections	76%
On-time completion of action items	61%
Days to close audit findings	61%
Facilities conformant to internal standards	52%
Facility Response Planning	36%
Time to correct non-compliance	30%
Disciplinary actions	24%

N=33

## Most Commonly Tracked Metrics

Figure 7

Metric	
Waste non-compliance	94%
Notices of violation	94%
Wastewater exceedances	94%
Spills and releases	91%
Permit violations	91%
Air exceedances	88%
Greenhouse Gas emissions	88%
Injuries and fatalities	85%
Lost day injuries	85%
Incident rate	85%

N=33

# Additional charts and tables

- From NAEM's 2020 EHS & Sustainability Staffing, Structure & Budget Report

**Types of EHS and Sustainability Departments**

Figure 11



**Variations in Structure**

Figure 12

	Corporate	Division	Regional	Facility
[Combined EHS & Sustainability]	28%	25%	25%	27%
[Combined Environment, Health & Safety (EHS)] + [Stand-alone Sustainability]	20%	19%	17%	19%
[Combined Environment, Health & Safety (EHS)]	11%	10%	11%	11%
[Combined Environment & Sustainability] + [Health & Safety]	7%	7%	7%	7%
[Stand-alone Health & Safety] + [Stand-alone Environment] + [Stand-alone Sustainability]	2%	2%	2%	2%

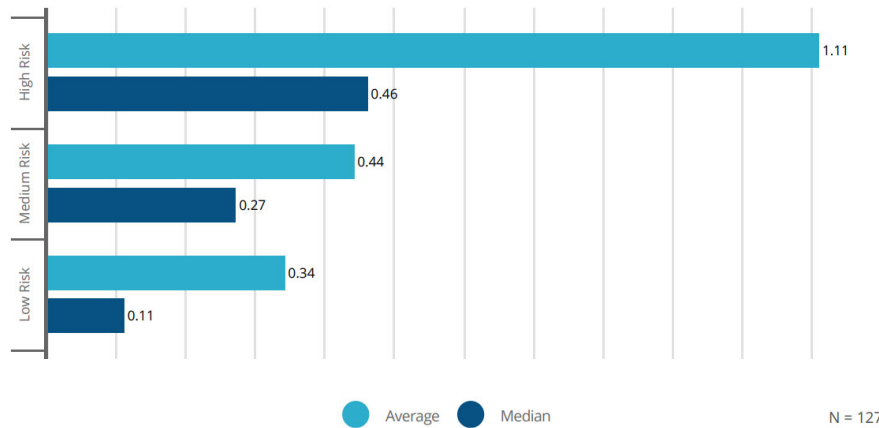
N = 90

# Additional charts and tables

- From NAEM's 2020 EHS & Sustainability Staffing, Structure & Budget Report

**EHS Staff by EHS Risk Profile**

Figure 46



**EHS Staff by Industry**

Figure 47

Industry	Median	Average
Mining (N=2)	3.46	3.46
Chemical Manufacturing (N=13)	1.31	1.77
Multi-Industry Company (N=4)	0.92	0.89
Diversified Manufacturing (N=5)	0.67	0.71
Construction (N=6)	0.61	1.06
Utilities (N=9)	0.48	0.73

Percentage of  
Privileged Audits  
2018-2022

	<b>Privileged</b>	<b>Non-Privileged</b>	<b>Total Audits</b>	<b>% Privileged</b>
<b>2018</b>	13	88	101	12.87%
<b>2019</b>	20	60	80	25.00%
<b>2020</b>	11	68	79	13.92%
<b>2021</b>	7	74	81	8.64%
<b>2022</b>	10	72	82	12.20%