IE ARC for SCE 2024 WMP

Independent Evaluator Annual Report on Compliance for Wildfire Mitigation Plan Compliance Year 2024

June 25, 2025

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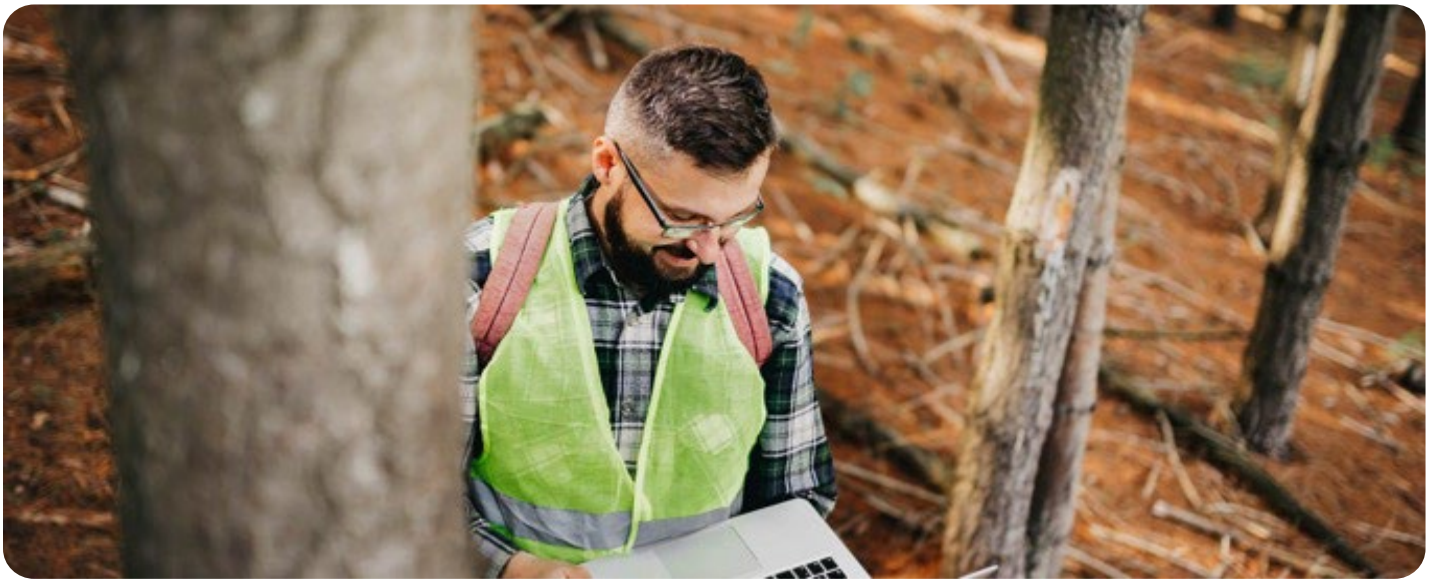
Glossary

AFN	Access and Functional Needs
AI	Artificial Intelligence
ARC	Annual Report on Compliance
AVD	Architecture Vision Definition
C&Q	Compliance and Quality
CAP	Corrective Action Program
CAL FIRE	California Department of Forestry and Fire Protection
CAPEX	Capital Expenditures
CB	Circuit Breaker
CCBB	Critical Care Backup Battery
CPUC	California Public Utilities Commission
DMS	Distribution Management System
DM&G	DM&G Construction & Engineering Services, Inc.
DOH	Distribution Overhead Construction Standards
DR	Data Request
DUG	Distribution Underground Construction Standards
EC	Electrical Corporation
ECCs	Emergency Conditions and Constraints
EFD	Early Fault Detection
GFN	Ground Fault Neutralizer
GIS	Geographic Information System
GO	General Order
GRC	General Rate Case
HD	High Definition
HFRA	High Fire-Risk Area
HFRI	High Fire Risk-Informed
HFTD	High Fire-Threat District
IC	Incident Commander
IE	Independent Evaluator
IE ARC	Independent Evaluator Annual Report on Compliance
IOU	Investor-Owned Utility
ISO	Independent System Operator
IVR	Initiative Validation Rate
LiDAR	Light Detection and Ranging
LSI	Long Span Initiative
ML	Machine Learning
O&M	Operations and Maintenance
NERC	North American Electric Reliability Corporation
OEIS	Office of Energy Infrastructure Safety or Energy Safety
PA	PA Consulting Group Inc.
PQS	Program Qualification System
PSPS	Public Safety Power Shutoff
PUC	Public Utilities Code
QA/QC	Quality Assurance / Quality Control
QDR	Quarterly Data Report
QMS	Quality Management System
QRF	Quick Reaction Force
RAMP	Risk Assessment Mitigation Phase
REFCL	Rapid Earth Fault Current Limiter
RFQ	Request for Qualifications
RSE	Risk Spend Efficiency
SA	Situational Awareness
SCE	Southern California Edison
SME	Subject Matter Expert
SSPs	Senior Specialists
TOPD	Transmission Open Phase Detection
UVM	Utility Vegetation Management
VM	Vegetation Management
WiSDM	Wildfire Safety Data Management System
WMP	Wildfire Mitigation Plan



1 Executive Summary

This Executive Summary provides a high-level overview of the Independent Evaluator's (IE) assessment of Southern California Edison's (SCE) 2023 Wildfire Mitigation Plan (WMP) implementation. It summarizes key findings related to initiative completion, funding performance, and data quality, and highlights recommendations for improving future WMP execution and evaluation processes. After the overview of key compliance metrics, the section offers additional high-level information on the background, process, findings, and recommendations.

Overview of Key Compliance Metrics

- **Initiative Completion Performance:**
  - Of the 39 initiatives evaluated, all 39 initiatives (100%) were completed within ±5% of their approved WMP targets, based on IE sample validation.
- **Budget and Expenditure Summary:**
  - Total Planned Spend: $1.62 billion
  - Total Actual Spend: $1.36 billion
  - Total Variance: $(263.2 million), representing a 16.2% underrun
  - Initiatives with >10% Budget Variance: 32 of 39 initiatives (82%)
- **Top 10 Largest Initiatives by Planned Spend:**
  - Of the ten largest initiatives by planned expenditure, nine were funded below 100% of their planned budget:

1.	**SH-1:** Covered Conductor	83% funded
2.	**IN-1.1:** Distribution HFRI Remediations	69% funded
3.	**VM-7:** Distribution Expanded Clearances	89% funded
4.	**SH-2:** Undergrounding	93% funded
5.	**SH-17:** REFCL (GFN)	76% funded
6.	**VM-4:** Dead & Dying Tree Removal	57% funded
7.	**VM-2:** Structure Brushing	66% funded
8.	**DEP-5:** Aerial Suppression	103% funded
9.	**IN-1.2:** Transmission HFRI Inspections & Remediations	67% funded
10.	**VM-1:** Hazard Tree Management	22% funded

- **Recommendations for Future WMPs and Data Management:**
  - Finalize IE contracts earlier to allow for timely sampling and field coordination.
  - Provide reconciled initiative-level spend data (CAPEX/O&M) at the start of the evaluation period.

- Improve traceability of field-verifiable work through better tagging, GPS accuracy, and before/after documentation.
- Standardize initiative tracking across WMP, Quarterly Data Reports (QDRs), and ARC filings to reduce reconciliation challenges.
- Enhance QA/QC documentation and role clarity, particularly within vegetation management programs.

Independent Evaluator Background

On March 10, 2025, SCE awarded PA Consulting Group Inc. (PA) and the IE team the work to assess the utility's execution of 2024 wildfire mitigation activities.[1] In accordance with California Public Utilities Code Section (§) 8386.3 and the requirements outlined in the 2024 Request for Qualifications (RFQ) issued by the Office of Energy Infrastructure Safety (OEIS or Energy Safety), each Electrical Corporation (EC) under Energy Safety's jurisdiction must retain a qualified IE to independently evaluate the implementation of its WMP for the applicable compliance year.

As a listed IE approved by Energy Safety and California Department of Forestry and Fire Protection (CAL FIRE), the IE is responsible for conducting a comprehensive review of the EC's prior-year compliance with its established WMP targets, associated funding, and quality assurance/quality control (QA/QC) programs.

Figure 1-1: IE Core Responsibilities

This includes verifying initiative execution through field inspections and documentation review, assessing whether initiatives were adequately funded, carrying out EC interviews, and evaluating the maturity and effectiveness of QA/QC understanding and implementation throughout initiative execution. The evaluation is conducted under the direction of Energy Safety and culminates in the submission of the IE Annual Report on Compliance (ARC) due annually by July 1st.[2] The EC engaged the IE team on March 10, 2025 and provided an executable contract on March 28th. As a result, the evaluation began in earnest in April 2025. While Public Utilities Code (PUC) § 8386.3(c)(2)(B)(i) requires Energy Safety to qualify a list of IEs on or before March 1st, the compressed timeline between engagement and the July 1st deadline necessitated a highly structured and timely evaluation. The IE proceeded accordingly to complete all required ARC components within the timeframe allotted.

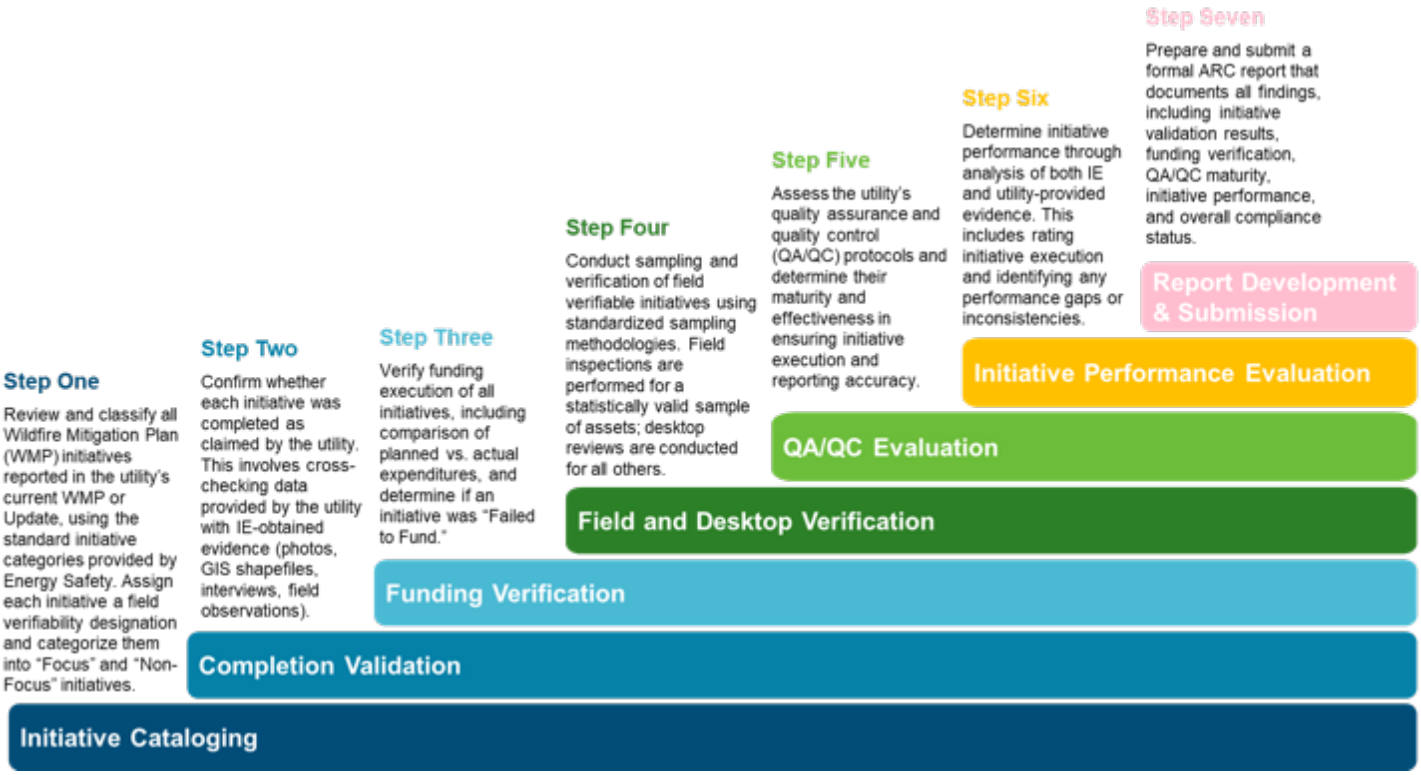
[1] **The IE team:** led by PA for all project management, regulatory coordination, desktop review, and development of the IE Annual Report on Compliance (IE ARC). DM&G Construction & Engineering Services, Inc. (DM&G) conducted field inspections of electrical infrastructure while JH Land Consultants provided field audits of vegetation-related wildfire mitigation initiatives.

[2] Energy Safety qualified the IE team via the IE's proposal to Request for Qualifications (RFQ No. 24-033680) on January 21, 2025. Specifically, under PUC § 8386.3(c)(2)(B)(i), Energy Safety is required to qualify a list of IEs on or before March 1st of each calendar year. Despite Energy Safety's January 21st qualification date, award notifications of IE work occurs after this date in 2025.

The report herein was conducted in accordance with the seven-step methodology outlined in the 2024 IE ARC guidance, including initiative cataloging, prioritization of high-risk mitigation activities, statistically valid sampling, and verification of initiative execution. Field-verifiable initiatives were inspected on-site and verified with post-inspection images and documentation; non-field-verifiable initiatives were assessed through records review and subject matter expert interviews. Completion was determined through inspection images, work orders, and geospatial asset tags cross-referenced with initiative targets

The IE assessed funding compliance by comparing planned versus actual expenditures and analyzing discrepancies for their material impact. QA/QC maturity was evaluated using Energy Safety's seven-dimension framework, with findings benchmarked accordingly.[3] Where possible, the IE aligned its validation approach with the EC's systems of record, including SAP exports and Geographic Information System (GIS) overlays, to ensure data integrity. Initiatives deferred or marked incomplete by the EC were excluded from initiative-level verification but noted. The IE did not identify any Emergency Conditions and Constraints (ECCs) that would limited access to field sites, personnel, or data.

Figure 1-2: IE ARC Process Overview



Findings are presented by initiative category, with detailed initiative-level validation results, funding variance analysis, and recommendations for improving future WMP implementation and reporting.

All findings are subject to the methodologies outlined in the *2024 RFQ No. 24-033680*[4] with motivation sculpted by Senate Bill 901 (2018), Assembly Bill 1054 (2019), and subsequent wildfire safety legislative and regulatory requirements as codified by the California Public Utilities Commission (CPUC or Commission).

The IE team consisted of PA, JH Land Consultants, and DM&G.

[3] Office of Energy Infrastructure Safety. (2024, December 12). *Request for Qualifications: Independent Evaluator List (RFQ No. 24-033680)*. State of California – Natural Resources Agency. https://energysafety.ca.gov
[4] Office of Energy Infrastructure Safety. (2024, December 12). *Request for Qualifications: Independent Evaluator List (RFQ No. 24-033680)*. State of California – Natural Resources Agency. https://energysafety.ca.gov

Figure 1-3: SCE 2024 WMP Activities IE Team

PA serves as the prime contractor, responsible for overall program management, initiative verification design, regulatory coordination, QA/QC assessment, and alignment with Energy Safety's evaluation protocols and PUC § 8386. The team has direct experience leading WMP Independent Evaluations for both publicly owned and investor-owned utilities and brings deep knowledge of wildfire mitigation strategies, initiative sampling, and risk reduction accountability. Our team includes core members with years of experience implementing WMP and Public Safety Power Shutoff (PSPS) programs, managing compliance cycles, and carrying out IE ARCs since the state of California's inaugural WMP IE in 2019.

DM&G enhances the IE team with technical field verification capacity and licensed electrical engineering oversight for distribution and transmission-related initiatives. Their personnel are experienced in the design, implementation, and field validation of grid hardening measures. The firm maintains in-state inspection crews, equipment, and capabilities to support ground-truthing and engineering reviews of WMP infrastructure programs.

JH Land Consultants contributes comprehensive expertise in utility vegetation management (VM), including experience conducting field-based and desktop reviews for vegetation mitigation initiatives. Their personnel have previously participated in WMP Independent Evaluations across multiple electric corporations and maintain familiarity with Energy Safety expectations, utility compliance reporting, and vegetation-focused QA/QC procedures.

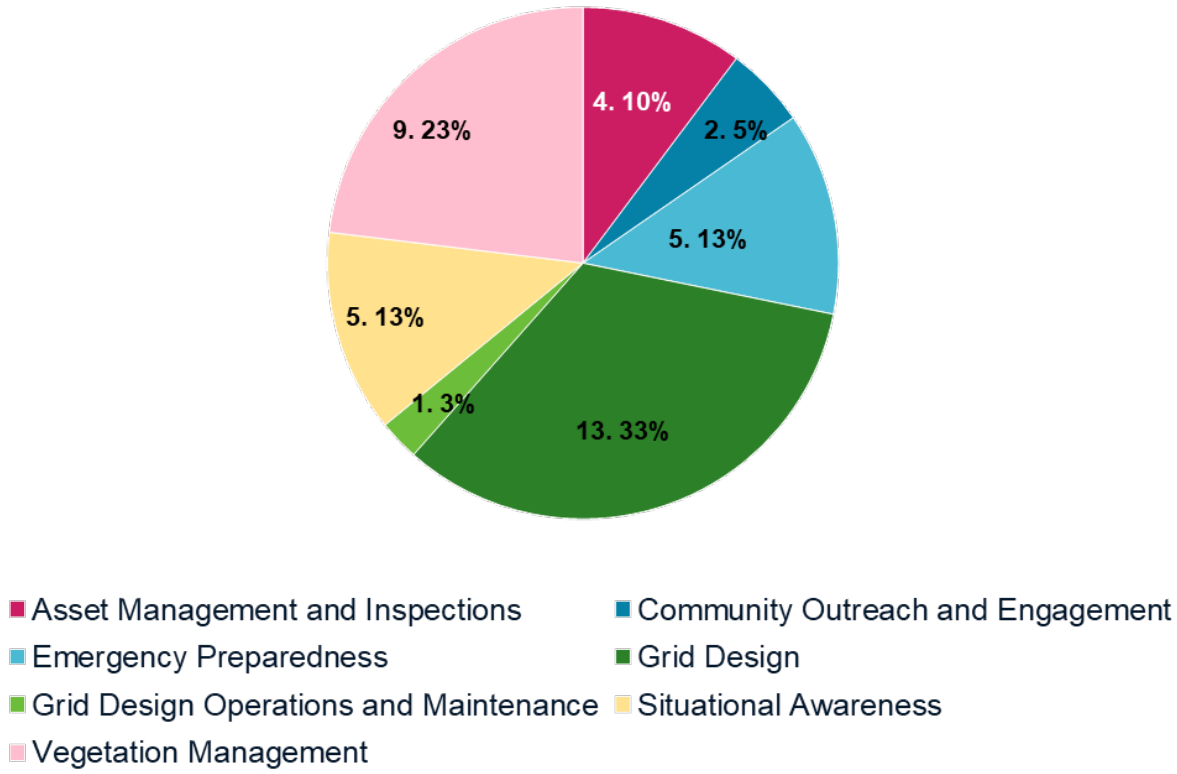
Performance Against Approved WMP Targets

The IE completed review of 2024 WMP targets considering completion status, sampling and validation, field verification, and funding alignment for each initiative. Findings presented are grounded in statistically valid sampling, initiative-specific assessments, and considered with results and field inspection notes.

SCE documented a total of 39[5] wildfire mitigation initiative line items under its approved WMP.[6] In accordance with PUC § 8386.3,[7] this report evaluates the EC's progress toward its 2024 WMP targets. The process to review the initiatives incorporated the field verifications performed in accordance with Energy Safety's protocols[8] and desktop reviews, site inspections, geospatial evidence validation, and SME interviews.

[5] The 39 initiatives evaluated in this ARC reflect two instances of disaggregation where a single initiative in the EC's ARC was separated into multiple line items to enable completeness in evaluation. Specifically, **IN-1.2** was split into **IN-1.2a** and **IN-1.2b** to differentiate between ground and aerial transmission inspection. Additionally, **IN-9** is also split into **IN-9a** and **IN-9b** in many instances of the review, as activities included both LineVue and X-ray conductor evaluations.
[6] The WMP was submitted on April 6, 2023 and approved with the November 14, 2024 version of the WMP, under which the IE conducted its evaluation.
[7] PUC § 8386.3(c)(2)(B)(i): The independent evaluator shall consult with, and operate under the direction of, the Office of Energy Infrastructure Safety and shall issue a report on July 1st of each year, to include an evaluation of whether the electrical corporation failed to fund any activities included in its plan.
[8] The 2023-2025 WMP Guidelines outlines Energy Safety's protocols for field verifications, as echoed in RFQ No. 24-033680.

Figure 1-4: SCE's 2024 WMP Initiatives by Category (Percent Share by Number of Initiatives per Category)



To meet Energy Safety's expectations for a risk-prioritized, evidence-based evaluation, the IE team applied a structured selection process to designate *Focus Initiatives*. These are initiatives that, by nature of their scale, complexity, or consequence, warranted enhanced scrutiny and field validation. The IE was tasked to select 10-15 Focus Initiatives per the RFQ, leaving the remaining initiatives for a less scrutinizing review. The IE selected 11 Focus Initiatives in total.

Table 1-1: Identified Focus vs. Non-Focus Initiatives

WMP Initiatives	Focus	WMP Initiatives	Non-Focus
SH-1 Covered Conductor	FOCUS	**DEP-1** Wildfire Safety Community Meetings	Non-Focus
SH-14 Long Spans	FOCUS	**DEP-2** SCE Emergency Responder Training	Non-Focus
SH-16 Vibration Dampers	FOCUS	**DEP-4** Customer Research and Education	Non-Focus
VM-1 Hazard Tree Management	FOCUS	**DEP-5** Aerial suppression	Non-Focus
VM-4 Dead and Dying Tree Removal	FOCUS	**IN-1.1a** Distribution HFRI Inspections & Remediations (Ground)	Non-Focus
SH-17 REFCL (GFN)	FOCUS	**IN-1.1b** Distribution HFRI Inspections & Remediations (Aerial)	Non-Focus
SH-18 REFCL (Ground Conversion)	FOCUS	**IN-3** Infrared Inspection of Energized Overhead Distribution Facilities and Equipment	Non-Focus
IN-1.2a Transmission HFRI Inspections & Remediations (Ground)	FOCUS	**IN-4** Infrared Inspection, Corona Scanning and High-Definition (HD) Imagery of Transmission facilities and equipment	Non-Focus
IN-1.2b Transmission HFRI Inspections & Remediations (Aerial)	FOCUS	**IN-5** Generation Inspections and Remediations	Non-Focus

WMP Initiatives	Focus	WMP Initiatives	Non-Focus
SH-5 RAR Settings	FOCUS	**IN-8** Inspection & Maintenance Tools InspectForce	Non-Focus
SH-2 Undergrounding	FOCUS	**IN-9** Spans - LineVue and Splices - X-Ray	Non-Focus
		PSPS-2 Customer Care Programs (Critical care Backup Battery)	Non-Focus
		PSPS-3 Customer Care Programs (Portable Power Station and generation)	Non-Focus
		SA-1 Weather Stations	Non-Focus
		SA-10 High Definition (HD) Cameras	Non-Focus
		SA-11 Early Fault Detection	Non-Focus
		SA-3 Weather and Fuels Modeling	Non-Focus
		SA-8 Fire Science	Non-Focus
		SH-6 CB Relay Fast Curve	Non-Focus
		SH-8 Transmission Open Phase Detection	Non-Focus
		VM-10 LiDAR Vegetation Inspections – Transmission	Non-Focus
		VM-2 Structure Brushing	Non-Focus
		VM-3 Expanded Clearances for Legacy Facilities	Non-Focus
		VM-6 Vegetation Work Mgmt Tool	Non-Focus
		VM-7 Detailed inspections and management practices for vegetation clearances around Distribution electrical lines, and equipment	Non-Focus
		VM-8 Detailed inspections and management practices for vegetation clearances around Transmission electrical lines, and equipment	Non-Focus
		VM-9 LiDAR Vegetation Inspections – Distribution	Non-Focus
		VM-7 Detailed inspections and management practices for vegetation clearances around Distribution electrical lines, and equipment	Non-Focus
		VM-8 Detailed inspections and management practices for vegetation clearances around Transmission electrical lines, and equipment	Non-Focus
		SH-10 Tree Attachment Remediation	Non-Focus

The team assessed all initiatives across several criteria, including:

- Potential to materially reduce wildfire risk
- High planned or actual unit volumes or spend
- Operational complexity or implementation difficulty
- Field verifiability and observability of results
- Strategic importance to SCE's overall mitigation framework
- Prior performance concerns, regulatory attention, or incomplete execution history

This vetting process ensured the selected *Focus Initiatives* represented a cross-section of the utility's highest consequence efforts across grid hardening, inspections, vegetation management, and emerging protection technologies. Therefore, all remaining initiatives not designated as *Focus* are classified as *Non-Focus Initiatives*. While they are not subject to the same level of enhanced review, they are still evaluated through sampling and documentation to determine compliance and funding alignment. *Non-Focus Initiatives* were sampled using Energy Safety's prescribed methodology and reviewed for QA/QC adequacy, target alignment, and overall execution fidelity.

Out of the total 39[9] grouped initiatives reviewed:

- **39 initiatives (100%)** were completed within 5% of their approved WMP targets, based on IE sample validation.[10]
- **0 initiatives (0%)** were either not completed, lacked a numerical unit for evaluation, for which the IE could measure (i.e., required qualitative review), could not be validated due to insufficient evidence, accessibility barriers, or due to discrepancies which would require further review for successful verification.

Table 1-2: Initiatives Not Completed

Initiative ID	Initiative Name	Target	Achieved	IE Finding	Validation Rate (%)	Reason for Not Completed
SH-1	Covered Conductor	1,050 circuit miles	796.03 circuit miles	Not Completed	75%	Environmental, access, and outage constraints delayed full execution
SH-2	Undergrounding	16 circuit miles	11.88 circuit miles	Not Completed	74%	Permitting, inclement weather, and access issues limited total progress
SH-17	REFCL (GFN)	1 substation	0.30 substations (30% completed)	*Not Completed* (IE notes significant completion in January 2025 now at 75% completion)	30%	Long-lead materials delayed completion at Banducci substation

[9] SCE's ARC provided 37 initiatives, as explained, the IE separated two initiatives bringing the total to 39.
[10] Guidance in accordance with the IE ARC Outline from Energy Safety

Initiative ID	Initiative Name	Target	Achieved	IE Finding	Validation Rate (%)	Reason for Not Completed
SH-18	REFCL (Ground Conversion)	4 substations	2 substations	Not Completed	50%	Delays with land acquisition, permitting, and external coordination
IN-8	InspectForce Digital Integration	1 integration milestone	0.50 achieved	Not Completed	50%	Scope was revised mid-year; funding delays slowed execution

Budget and Funding Assessment

The funding performance compares actual expenditures against WMP-planned budgets, as require by the IE ARC Outline.

Based on the IE's evaluation of the 2024 SCE WMP initiative execution, the findings revealed:

- **Planned Total Spend:** $1.62 billion
- **Planned CAPEX:** $1,052.9 million
- **Planned OPEX:** $567.4 million
- **Actual Total Spend:** $1.36 billion
- **Actual CAPEX:** $893.7 million
- **Actual O&M:** $463.4 million
- **Total Variance:** ($263.2 million) (16.2% underrun)
- **Initiatives with >10% Budget Variance:** 23 of 39 initiatives (59%) exceeded
- **Average CAPEX Variance:** 12.7%
- **Average O&M Variance:** 24.4%

These discrepancies arise from various factors, primarily including procurement delays, internal reprioritization, resource availability, and the partial execution of initiatives.

The IE calculated an Initiative Validation Rate (IVR)[11] for each initiative based on:

- Several initiatives demonstrated significant understanding or overspending
- Variables that were explainable through contractor impacts, weather, permitting, efficient work bundling, or scope changes

The supporting documentation in Attachment 7.1 provides the complete catalogue of initiatives, planned, and actual spending. The tables presented on the following pages summarize the IE's financial review and provides required table presentation from the IE ARC Outline. The IE utilized the EC's 2024 ARC, QDR filings, and supplemental interviews and Data Requests (DR) to determine financial expenditure history.[12] To validate the consistency of initiative-level expenditure data, the IE conducted a line-by-line reconciliation of the 2024 WMP initiative execution figures reported by the EC against the independently derived actuals in the IE evaluation.

The table below summarizes this comparative analysis for all initiatives with non-zero spend, highlighting alignment and divergence at the initiative level across both capital (CAPEX) and operations and maintenance (O&M) categories. All figures are presented in thousands of dollars ($000).

[11] The Initiative Validation Rate is a practical metric applied by the IE team to assess whether execution levels were both achieved and substantiated through field or desk review. It reflects the proportion of the WMP target that was validated, calculated by multiplying the sample validation rate by the achieved population and dividing by the original target. While not a term defined in the ARC Outline, this method aligns with Energy Safety's direction to assess whether initiatives met their WMP targets within a ±5% margin. It provides a clear, consistent basis for interpreting whether initiative outcomes were both delivered and confirmed.

[12] The complete Data Request and SME interview list are found in Attachments 7.2 and 7.3.

Table 1-3: SCE WMP Financial Summary vs. IE Evaluation

Metric	IE Evaluation	SCE ARC / QDR	Difference[1]	Explanation Notes[2]
Planned Total Spend	1,620,273	1,620,273	$0	No discrepancy; both use the same planned totals from the approved 2024 WMP.
Planned CAPEX	1,052,894	1,052,894	$0	Fully aligned with WMP initiative budget tables.
Planned O&M	567,430	567,430	$0	Matches across both reports.
Actual Total Spend	1,357,066	1,374,618	($17,552)	IE excluded costs not supported by execution evidence or classified differently.
Actual CAPEX	893,682	911,250	($17,568)	Some capital costs reclassified or unverified by IE due to insufficient field evidence.
Actual O&M	463,384	463,368	$16	Minor rounding difference; IE included small updates based on late journal reclassifications.
Total Variance	(263,207)	(245,655)	($17,552)	IE found larger underrun due to tighter standards for spend validation.
% Underrun (Total)	16.2%	15.2%	+1%	Reflects the IE's application of more conservative accounting for unverified or partial spend.
Initiatives >10% Variance	23 of 39 (59%)	21 of 39	+2 initiatives	IE identified two additional initiatives crossing the 10% threshold based on full-year spend totals.
Average CAPEX Variance (%)	12.7%	12.7%	0%	Aligned; initiative-level reclassifications net out.
Average O&M Variance (%)	24.4%	24.7%	-0.3%	Slightly lower in IE report due to smoothing of outlier variances and exclusion of one initiative.

[1]The "Difference" columns reflect the absolute delta between the IE-calculated actuals and those presented by SCE

[2]The "Explanation Notes" column captures root causes for any deviations exceeding $250K, derived from a review of SCE's narrative justifications or the IE's field validation findings.

This comparison serves to transparently document areas of congruence and divergence, providing regulatory stakeholders a defensible basis to assess both utility reporting integrity and the fidelity of the IE's independent evaluation process.

Table 1-4: Initiatives with >10% Budget Variance

Initiative ID	Initiative Name	CAPEX Planned ($000)	CAPEX Actual ($000)	CAPEX % Variance	O&M Planned ($000)	O&M Actual ($000)	O&M % Variance
SA-10	High Definition Cameras	131	-240	-283%	4,665	3,432	-26%

Initiative ID	Initiative Name	CAPEX Planned ($000)	CAPEX Actual ($000)	CAPEX % Variance	O&M Planned ($000)	O&M Actual ($000)	O&M % Variance
SH-6	Fast Curve Hardware (Relay)	560	-252	-145%	1,609	1,954	21%
SH-16	Vibration Damper Retrofit	171	1	-99%	-	-	-
SA-11	Early Fault Detection	3,522	1,158	-67%	363	56	-85%
SH-18	REFCL – Grounding Conversion	5,714	2,287	-60%	175	1	-99%
SH-14	Long Span Initiative	4,338	3,012	-31%	4,009	1,369	-66%
SH-5	Fast Curve Settings	2,629	1,862	-29%	-	-	-
SH-17	REFCL (GFN)	30,164	22,956	-24%	175	-	-100%
IN-8	Inspection Tools	4,448	7,796	75%	1,232	1,249	1%
SH-10	Tree Attachments Remediation	17,484	21,123	21%	-	-	-
SA-1	Weather Stations	1,171	2,411	106%	5,591	5,518	-1%
VM-6	VM Work Mgmt Tool (Arbora)	2,747	7,467	172%	4,000	2,147	-46%
VM-9	Distribution LiDAR	-	-	-	1,498	14,088	841%
VM-1	Hazard Tree Management	-	-	-	49,896	10,958	-78%

The table below identifies the ten initiatives with the highest combined planned expenditure (CAPEX + O&M). These initiatives represent the largest areas of intended WMP investment. Among these top initiatives, the IE found that 8 of the 10 were "*Failed to Fund*," falling short of full budget execution. Most notable is SH-1, which accounted for nearly half of the utility's total planned WMP budget, was underfunded by approximately 17%. Additionally, key vegetation management programs like VM-2 and VM-4 fell well below target, with funding shortfalls exceeding 30% and 40% respectively, which prompted additional discovery requests to SCE during the IE's review.

Table 1-5: Ten Largest Initiatives by Planned Spend

Rank	Initiative ID	Initiative Name	Total Planned ($000)	Total Actual ($000)	% Funded	Funding Status
1	SH-1	Covered Conductor	781,927	650,636	83%	**Failed** to Fund
2	IN-1.1	Distribution HFRI Remediations	195,523	154,138	79%	**Failed** to Fund
3	VM-7	Distribution Expanded Clearances	216,394	193,573	89%	**Failed** to Fund
4	SH-2	Undergrounding Overhead Conductor	60,897	56,753	93%	**Failed** to Fund
5	DEP-5	Aerial Suppression	35,000	36,059	103%	Fully Funded
6	SH-17	REFCL (GFN)	30,339	22,956	76%	**Failed** to Fund
7	VM-4	Dead & Dying Tree Removal	27,601	15,663	57%	**Failed** to Fund
8	VM-2	Structure Brushing	25,915	17,102	66%	**Failed** to Fund
9	SH-10	Tree Attachments Remediation	17,484	21,123	121%	Fully Funded
10	SH-14	Long Span Initiative	8,348	4,381	52%	**Failed** to Fund

IE Conclusion & Recommendations

Conclusions for SCE Execution

Based on the IE's evaluation of the 2024 WMP initiative execution, SCE successfully demonstrated meaningful progress across its mitigation categories. Notable concerns from the IE revealed significant underspending, particularly across capital-intensive vegetation management and grid design initiatives. While the majority of initiatives met execution thresholds, 59% exceeded the 10% variance threshold defined in Energy Safety's IE ARC guidance.

Documentation gaps, scope timeline and approval changes, and inconsistent classification between capital and O&M contributed to validation challenges for a subset of initiatives, for which this report discusses. The IE found that, in general, failed field activities lagged behind budget allocation, underscoring the need for tighter linkage between spend, scope, and deliverables.

Recommendations for SCE

1. Improve alignment of WMP initiative budgets with internal project tracking to minimize mid-year adjustments and unanticipated variances.
2. Strengthen QA/QC execution and documentation, especially for initiatives with field-verifiable components such as SH-18 (Grounding Conversion) and VM-6 (Arbora).
3. Introduce periodic internal progress milestones to de-risk end-of-year implementation gaps.
4. Clarify accounting treatment for initiatives likely to straddle CAPEX and O&M classification (e.g., SH-6, SA-10), ensuring that classification changes are proactively flagged and documented.

5. Enhance transparency in initiative scoping changes, especially where partially completed efforts were reclassified or deferred.

Recommendations for IE Programmatic Improvements

The IE conducted the 2024 evaluation under a condensed schedule, with the executable contract finalized on March 28th and work beginning in earnest in April 2025. This significantly limited the window available for field verification and EC engagement. The IE has experience performing these evaluations and acknowledges that Energy Safety made significant strides in streamlining the qualification process and encouraging early engagement. While this has provided several weeks of evaluation and field review time, the IE notes that the field sampling values for certain initiatives were more numerous than compared to prior years. Nonetheless, the evaluation was completed in accordance with Energy Safety's seven-step methodology and completed before June 2025 ahead of the July 1st IE ARC publication.

The IE team also noted improved access to initiative metadata compared to prior cycles as SCE provided an initial initiative discovery package aligning spreadsheets to each initiative. However, the IE encountered challenges in validating initiatives where SCE's supporting evidence needed additional data cleaning, conforming, or mapping. This constrained the IE team and slowed the launch period for sampling reviews. The volume and variability of initiative types also introduced operational complexity. The QDR and EC ARC documents provide majority directional information into initiative verification, though, additional detail tracking initiatives would continue to streamline review.

1. Secure finalized contracts earlier in the evaluation cycle to ensure full access to EC data and adequate time for field inspection coordination.
2. Standardize the provision of reconciled initiative-level spend data (CAPEX/O&M split) at the start of the engagement to avoid late-cycle adjustments.
3. Document clearly the initiative budgets within the WMP to provide a grounding comparison to the budget and actuals.
4. Develop a shared documentation repository between ECs and IEs to store inspection photos, field notes, and verification memos, improving traceability.
5. Implement a tiered sampling approach to allow deeper inspection of high-risk or high-dollar initiatives while maintaining adequate coverage across all program areas.
6. Strengthen coordination protocols with ECs to ensure mutual understanding of initiative boundaries, particularly for cross-initiative tools and systems like Arbora or InspectApp.

2 Focus Initiatives and Discussion

This section outlines the ten Focus Initiatives selected by the IE for further evaluation from SCE's 2024 WMP. It describes the methodology used to identify these initiatives, based on Energy Safety's updated selection framework, and explains the criteria considered in the selection process.

The IE applied Energy Safety's updated selection methodology[13] to identify a final set of Focus Initiatives from the 39 total initiatives included in SCE's WMP. These selected ten Focus Initiatives are subject to enhanced scrutiny, as prescribed by the 2024 IE ARC Outline.[14] This curated cross-section represents initiatives targeting to reduce greatest risk drivers in terms of wildfire risk consequences, operational complexity, and strategic significance. Collectively, they also span the broadest scope of programmatic oversight, enabling a rigorous and representative evaluation of the utility's compliance performance.

Table 2-1: Focus Initiatives

WMP Category	Initiative Tracking ID	WMP Section Number	Initiative Name	Initiative Type
Grid Design	SH-1	8.1.2.01	Covered Conductor	Focus & field verifiable
Grid Design	SH-2	8.1.2.02	Undergrounding	Focus & field verifiable
Grid Design	SH-14	8.1.2.05	Long Spans	Focus & field verifiable
Grid Design	SH-5	8.1.2.08	RAR Settings	Focus & field verifiable
Grid Design	SH-16	8.1.2.12	Vibration Dampers	Focus & field verifiable
Grid Design	IN-1.2	8.1.3	Transmission HFRI Inspections & Remediations (Ground + Aerial)	Focus & field verifiable
Vegetation Management	VM-4	8.2.1.2	Dead and Dying Tree Removal	Focus & field verifiable

[13] Section 2.2 and Appendix A of the 2024 IE ARC Outline requires identifying a final set of 10-15 Focus Initiatives.
[14] Office of Energy Infrastructure Safety. (2024). Independent Evaluator Annual Report on Compliance Outline for Wildfire Mitigation Plan Compliance Year 2024. Retrieved from https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=57098&shareable=true.

WMP Category	Initiative Tracking ID	WMP Section Number	Initiative Name	Initiative Type
Vegetation Management	VM-1	8.2.3.4	Hazard Tree Management	Focus & field verifiable
Grid Design	SH-17	8.1.2.06	REFCL (GFN)	Focus & non-field verifiable
Grid Design	SH-18	8.1.2.06	REFCL (Ground Conversion)	Focus & non-field verifiable

Methodology and Criteria for Determining Focus Initiatives

To identify the Focus Initiatives, the IE followed the process outlined in Section 2.2 of the IE ARC Outline and detailed in Appendix A.

The IE's methodology for identifying Focus Initiatives was structured around three core pillars: regulatory alignment, risk-informed prioritization, and field verifiability. The process began with a comprehensive cataloging of all WMP initiatives, followed by a multi-criteria screening that considered:

- Alignment with high-risk mitigation objectives
- Historical and current-year performance
- Budget-to-actual expenditure variance
- Field verifiability and sampling feasibility
- Strategic importance within SCE's WMP portfolio

The IE then conducted a review of each initiative's risk reduction potential, spend magnitude, field verifiability, and historical performance and catalogued findings internally. Initiatives were ranked according to these criteria and the criteria established with the Risk Assessment Mitigation Phase (RAMP) proceedings, which supports risk reduction metrics such as Risk Spend Efficiency (RSE). These resources also informed the shortlisting process. Only those initiatives demonstrating either high consequence mitigation potential or elevated concern from prior performance cycles were advanced for final selection.

The determination of field verifiability was guided by Energy Safety's criteria outlined in Appendix A of the 2024 IE RFQ and the Master List of Field Verifiable Initiatives. Initiatives designated as "*Recommended*" or "*Context-dependent*" were prioritized for field assessment, contingent upon logistical feasibility, asset accessibility, and the potential for observable implementation outcomes. These classifications align with Energy Safety's intent to focus evaluation resources on initiatives where physical inspection can yield meaningful insights into installation quality, adherence to engineering standards, and actualization of wildfire risk mitigation intent.

While the majority of selected *Focus Initiatives* were confirmed as both eligible and practical for field verification, there were two exceptions. The IE consulted with Energy Safety regarding SH-17 REFCL GFN and SH-18 REFCL Ground Conversion, which were retained as non-field-verifiable *Focus Initiatives*. The decision to include these was based on their critical role in advancing the utility's adaptive protection strategy. REFCL (Rapid Earth Fault Current Limiter) systems represent a significant innovation in fire-risk-responsive grid operation, employing fast-acting neutral grounding to suppress fault energy and mitigate ignition potential. Though not directly observable through standard field inspection protocols, these initiatives merit focused desktop evaluation due to their complex commissioning requirements, cross-functional integration, and measurable contribution to grid modernization and wildfire resilience.

Consideration of Non-Focus Initiatives

The IE reviewed the remaining 29 *Non-Focus Initiatives* using the standard verification protocols outlined in the IE ARC guidance. These initiatives were not selected for Focus status due to comparatively lower wildfire risk consequence, reduced implementation complexity, or limited field verifiability. The evaluation incorporated Energy Safety's prescribed sampling methodologies and reasonable field access considerations without clustering samples. While *Focus Initiatives* served as a representative cross-section for deeper evaluation, *Non-Focus Initiatives* were still subject to systematic validation as described in the IE ARC Outline.

3 Site and Sample Selection and Discussion

This section provides an overview of the IE's approach to site and sample selection for both Focus and non-Focus Initiatives. It includes a list of all initiatives that were field verified, along with explanations for any deviations from the standard field verification guidance, such as instances where eligible initiatives were not verified or where additional initiatives were included. The section also outlines the methodology used to select sample locations across the utility's service territory and includes a geographic visualization of those sampling points to support transparency and representativeness in the evaluation process. Table 3-1 below shows the Focus Initiatives that were assessed.

Table 3-1: Field Sampling Summary

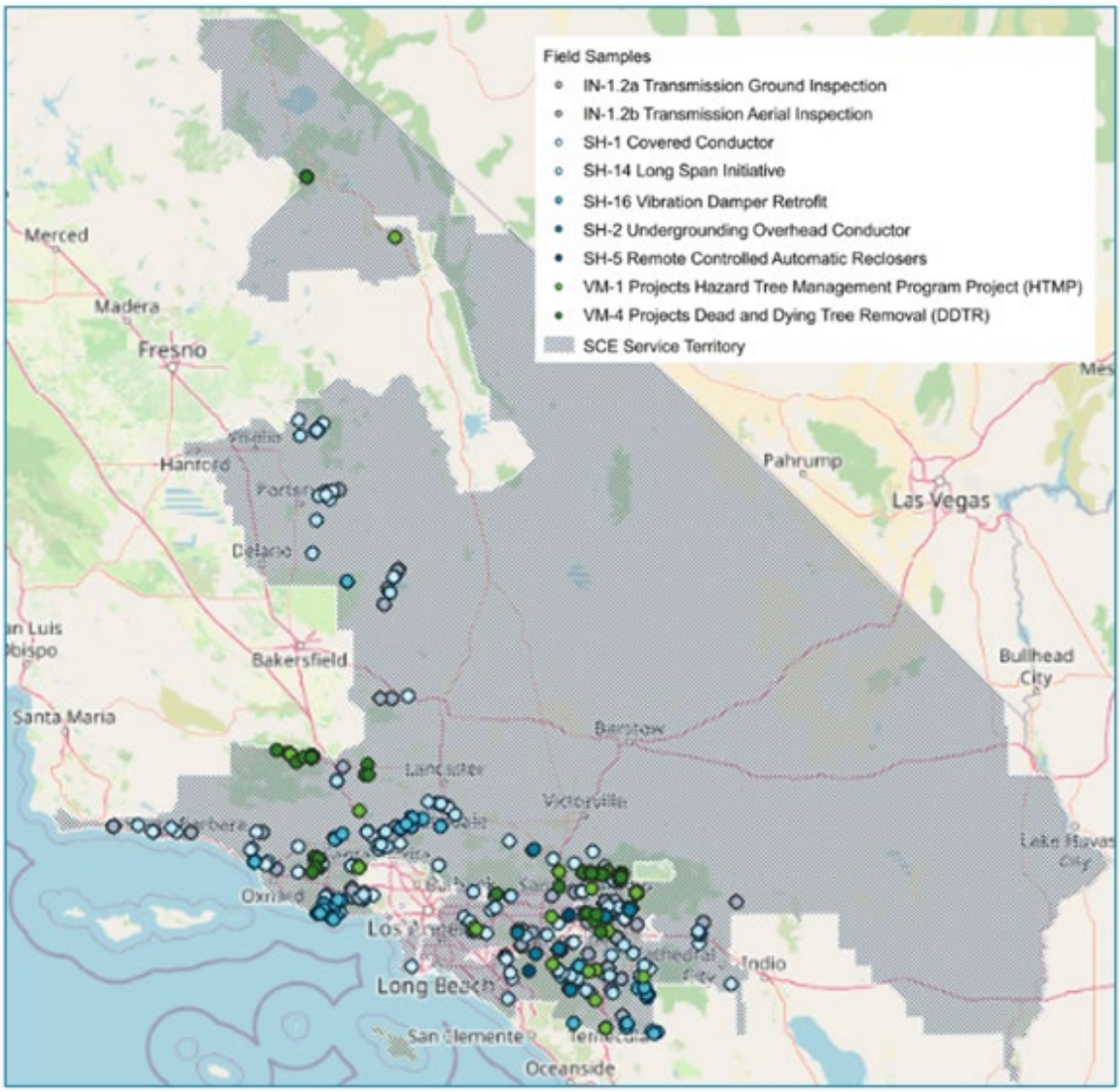
WMP Initiatives	Target Population	Achieved Population	Focus / Non-Focus	Field / Desk	Samples Required	Sampled Evaluated	Units used for Eval	Sample Proportion
SH-1 Covered Conductor	29,778	22,581	FOCUS	Field	73	77	Structures	95%
SH-14 Long Spans	1,000	1,314	FOCUS	Field	69	74	Spans	95%
SH-16 Vibration Dampers	500	710	FOCUS	Field	66	68	Structures	95%
VM-1 Hazard Tree Management	2,195	2,195	FOCUS	Field	71	70	Trees mitigated	95%
VM-4 Dead and Dying Tree Removal	4,278	5,179	FOCUS	Field	72	70	Trees mitigated	95%
SH-17 REFCL (GFN)	1	0.3	FOCUS	Desk	1	0[15]	GFN Construction	85%
SH-18 REFCL (Ground Conversion)	4	2	FOCUS	Desk	4	0[16]	Substations	85%
IN-1.2a Transmission HFRI Inspections & Remediations (Ground)	28,000	31,708	FOCUS	Both (Field + Desk)	73	82	Ground Structures Inspected	95%

[15] Since SH-17 was not completed, it was not field verified.
[16] Since SH-18 was not completed, it was not field verified.

WMP Initiatives	Target Population	Achieved Population	Focus / Non-Focus	Field / Desk	Samples Required	Sampled Evaluated	Units used for Eval	Sample Proportion
IN-1.2b Transmission HFRI Inspections & Remediations (Aerial)	28,000	30,729	FOCUS	Both (Field + Desk)	73	82	Aerial Structures Inspected	95%
SH-5 RAR Settings	5	5	FOCUS	Both (Field + Desk)	5	3	Installed RAR/RCS Sectionalizing Devices	95%
SH- 2 Undergrounding[17]	298	221	FOCUS	Both (Field + Desk)	80	81	Structures Removed	91%

Figure 3-1 below is a geographical view of the field sample locations.

Figure 3-1: Map of Sampled Assets and SCE Territory



[17] SH-2 involved undergrounding, which was verified by inspecting for remaining overhead wires and determining whether any were still live, indicating incomplete decommissioning after underground installation.

Initiative Crosswalk and ARC Reconciliation

To ensure transparency in initiative tracking and defensibility in our evaluation approach, we note that the Independent Evaluator team assessed 41 distinct initiatives, while the ARC lists 39. This discrepancy is due solely to two ARC initiatives, IN-1.2 and IN-9, that were split into separate components in our evaluation framework. These adjustments were made to improve clarity, allow differentiated verification approaches, and better reflect underlying scope distinctions. No initiatives were added or removed; the total scope remains consistent.

Our report includes 39 initiative-level entries. While the ARC also accounts for 41 initiatives, the naming conventions and structure differ in a few key areas. In two cases, we disaggregated single ARC-reported initiatives into multiple line items to enable a differentiated review. This allowed us to apply more precise field verifiability designations and reflect distinctions in implementation that are relevant for evaluation.

This table and framing provide a documented explanation for the 41-initiative count used in the evaluation without altering the substance of SCE's WMP filings. This reconciliation ensures internal consistency while honoring the structure of the ARC. It supports clear traceability between our findings and the utility's reported activities.

Table 3-2: Initiative Crosswalk Adjustments

ARC Initiative ID	ARC Initiative Name	IE Initiative ID(s)	IE Initiative Name(s)	Notes
IN-1.2	Transmission HFRI Inspections and Remediations (Ground and Aerial)	IN-1.2a, IN-1.2b	Transmission HFRI Inspections (Ground); Transmission HFRI Inspections (Aerial)	Separated by modality to enable discrete evaluation of field vs. non-field elements.
IN-9	Transmission Conductor & Splice Assessment: Spans with LineVue & X-Ray	IN-9a, IN-9b	Spans – LineVue; Splices – X-Ray	Split by technology to clarify differences in inspection type, cost structure, and outputs.
All others	—	All others aligned 1:1	—	All remaining initiatives are directly aligned between the ARC and IE review framework.

All other initiatives retain direct mapping between the ARC and the IE Table of Contents. No ARC initiative was excluded from review. The disaggregations were driven by meaningful distinctions in activity type, technology application, and evaluation requirements.

Sampling Methodology

The sampling methodology employed for this project is designed to ensure statistical rigor and alignment with the 2024 ARC. The determination of sample size is based on the size of the population under review. For populations exceeding 15 units, a standardized sample size calculator is used. In contrast, for populations of 15 units or fewer, a complete review of all units is conducted to ensure comprehensive coverage. Where applicable, circuit miles are converted into structure counts to standardize the unit of measurement across datasets. All sample size percentages are calibrated to align with the 2024 ARC to maintain consistency and compliance.

Sample location selection follows a stratified and randomized approach, with specific attention to the distribution across High Fire Threat District (HFTD) tiers. In accordance with ARC guidance, 10% of the sample is allocated to non-HFTD areas, while the remaining 90% is distributed proportionally between HFTD tiers 2 and 3 based on their respective population ratios. For populations that do not include HFTD stratification, a purely random sampling method is applied. Desk-verifiable samples are selected using random sampling techniques while avoiding clustering to ensure a representative distribution. For field-verifiable samples, practical assumptions

are incorporated to enhance the feasibility of fieldwork. These assumptions consider factors such as accessibility of locations, visibility of completed work, and the density of field-verifiable objects.

To ensure robustness and account for potential variability, a 25% buffer is added to all calculated sample sizes. Additionally, when sample size calculations result in non-integer values, the figures are always rounded up to the nearest whole number. This approach guarantees that the sample remains sufficiently large to support reliable conclusions.

Assumptions

Several key assumptions underpin the sampling methodology to ensure consistency, accuracy, and practical feasibility. First, unit conversions were standardized based on actual data. For SH-2, circuit miles were converted to structures using a ratio of 12 circuit miles to 221 structures, equating to approximately 18–19 structures per circuit mile. For SH-1, the conversion was based on 22,581 actual structures over 796 completed circuit miles, resulting in a ratio of 28 structures per mile. Additionally, grids or circuits assessed were converted into the number of trees identified for removal. For vegetation management, VM-1 had an average of 5 trees removed or trimmed per circuit, while VM-4 had an average of 9 trees removed per circuit, both based on actual removal data.

Sample size assumptions were also clearly defined. All sample sizes are based on the 2024 planned population, rather than reach goals. For VM-4, only removed trees were included in the sample, as 5,127 trees were removed compared to just 9 trimmed, making trimmed trees statistically insignificant. In contrast, VM-1 includes both trimmed and removed trees, as 18% were trimmed, which is considered statistically significant and representative of the overall activity.

Field location considerations were incorporated to enhance the reliability and practicality of field verification. Locations damaged by the January 2025 fires were excluded due to concerns about the "Observability of work completed." In some cases, sampling locations were aligned with randomized samples from related asset classes to improve accessibility. For VM-1 and VM-4, the sampling process was based on the total number of mitigated trees, with data tied to specific grid locations. The process involved calculating a sample size from the total mitigated trees, generating a randomized list of tree locations, and selecting grids that contain those trees until the desired sample size is reached. This method ensures representative coverage across a subset of grids.

For inspection categories IN-1.1 and IN-1.2, ground inspections are selected randomly, and aerial inspections are aligned with those same ground assets to enhance efficiency and comprehensiveness. Additionally, in cases where the same structure was inspected multiple times, only the most recent inspection is retained. This ensures that the population reflects unique inspection points and avoids overcounting.

To establish a consistent and defensible sampling population for vegetation management efforts, aligned with Energy Safety's verification standards, PA implemented a field-verifiable, tree-per-circuit conversion method. This approach leverages both mitigation data and ARC-reported grid and circuit counts to ensure that the sampling units (trees) accurately represent actual mitigation activities, while maintaining traceability through field inspections or documentation.

Table 3-3: VM-1: Hazard Tree Management

Attribute	Value
WMP Target (Circuits)	408
Total Trees Mitigated (Removed + Trimmed)	2,195
Adjusted Conversion Factor	5 trees per circuit
Sample Unit	Trees mitigated
Description	The actual mitigation records include both tree removals and trims linked to unique circuit IDs. Dividing 2,195 trees across 408 circuits yields an anchored conversion of 5 trees per circuit. This rate reflects a balanced average, one that assumes trees are sufficiently spaced for sampling, visually verifiable in the field, and documentable via evidence records. It minimizes outlier skew while ensuring coverage across program areas.

Attribute	Value
Field Verification Readiness	High — Visual spot checks of sampled trees can confirm mitigation. Desk-based records can support tree-type and location.

Table 3-4: VM-4: Dead and Dying Tree Removal

Attribute	Value
WMP Target (Circuits)	485
Total Trees Mitigated (Removed + Trimmed)	5,136
Adjusted Conversion Factor	9 trees per circuit
Sample Unit	Trees mitigated
Description	Using mitigation data (5,127 removals + 9 trims), we divide 5,136 trees across 582 unique circuits for a conversion of 9 trees per circuit. This reflects a slightly denser mitigation effort compared to VM-1 but remains within field verification feasibility. The assumption here maintains enough spatial separation for safe crew verification and enables a stratified selection of tree locations across diverse vegetation corridors.
Field Verification Readiness	High — Individual mitigation sites are observable, and grouping by circuit facilitates verification in terrain-aware batches.

SH-1 Sampling Methodology and Unit Calibration

Initially, we approached sampling for SH-1 using SH-2's assumed structure density of ~19 structures per mile, derived from a standard pole spacing estimate of 284 feet. This conversion was used to enable structure-level sampling from circuit mile targets. However, this assumption understated the true structure density of SH-1 work.

In response to Question 01 of data request set "IE-SCE-2024 Initial," SCE provided a direct mapping: 22,581 structures completed across 796 circuit miles under SH-1. This resulted in a revised, evidence-based conversion of 28 structures per mile, or 0.04 miles per structure. This is significantly higher than the initial estimate and reflects the higher density of poles associated with covered conductor installation.

Following this data response, we recalibrated our SH-1 sampling and extrapolation to reflect this updated conversion. Sampling now occurs at the structure level using a rate of 0.04 circuit miles per structure, ensuring that our selected samples represent the actual miles completed. This shift enhances the alignment with Energy Safety's emphasis on structure-level verification and improves the fidelity of sampling for initiatives like SH-1 where circuit mileage alone does not capture field-level granularity.

SH-2 Sampling Methodology and Unit Calibration

For SH-2, structure-level evidence was provided with each structure tied to a work order that included a defined amount of completed circuit mileage work order (totaling 14 work orders). After removing duplicate work orders and aggregating the data, the final count reflected 221 unique structures associated with 12 circuit miles of completed undergrounding work.

This yields an empirically grounded conversion rate of 19 structures per mile, or 0.05 miles per structure, which was used to calibrate our sampling. Although circuit miles were reported at the work order level, our sampling occurs at the structure level. To avoid overcounting circuit miles when multiple structures belong to the same work order, we ensured that cumulative circuit mileage covered through sampling was calculated based on unique work order coverage.

Table 3-5: SH-1 and SH-2-Sampling Conversion

Initiative	WMP Target (Circuit Miles)	WMP Target (Converted Structures)	WMP Target (Converted Structures)	ARC Actuals (Circuit Miles)	Structures Found in Evidence	Unit	Structures per Circuit Mile	Circuit Miles per Structure
SH-1	1,050	29,778	29,778 structures (1,050 × 28)	796	22,581	Circuit Miles / Structures	28	0.04
SH-2	16	298	297.76 structures (16 × 19)	12	221	Circuit Miles / Structures	19	0.05

Initiative	Structures to be Sampled	Circuit Miles per Structure	Approx. Circuit Miles Samples[18,19]
SH-1	66	0.04	2
SH-2	1	0.05	0.05

[18] For SH-1, validated 3 miles out of 796 completed.
[19] For SH-2, validated 5 miles out of 12 completed.

4 Initiative Review by WMP Categories: Compliance and Funding

This section provides a summary of the initiatives included in SCE's 2024 WMP, organized by WMP initiative categories. It presents a breakdown of initiatives across four compliance sub-categories: Focus and Field Verifiable, Focus and Non-Field Verifiable, Non-Focus and Field Verifiable, and Non-Focus and Non-Field Verifiable. Within each category, the section also presents the IE's assessment of funding compliance, providing context for how the implementation of initiatives is evaluated in relation to approved budgets and reported expenditures.

The section is organized by WMP category:

- Grid Design, Operations, and Maintenance
- Vegetation Management and Inspections
- Situational Awareness and Forecasting
- Emergency Preparedness
- Community Outreach and Engagement

4.1 Grid Design, Operations, and Maintenance

This section presents the initiatives categorized under Grid Design, Operations, and Maintenance in the 2024 WMP. It identifies the initiatives reviewed by the IE, outlines their field verification status, and describes the methodology used to assess implementation and funding compliance.

4.1.1 Initiative Summary Table

Table 4-1 provides a summary of the initiatives evaluated under the Grid Design, Operations, and Maintenance category. The table includes initiative-specific details such as targets, claimed progress, verification methods, sample validation rates, and funding data. It also presents the IE's findings on initiative performance and whether each initiative met its intended risk reduction goal. The subsequent sections describe these findings in additional detail.

Table 4-1: Initiative Summary Table – Grid Design, Operations, and Maintenance

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate (%)[20]	Verification Method	IE Finding on Initiative	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?
IN-1.1 WMP 8.1.3.1 Distribution HFRI Inspections & Remediations (Ground + Aerial)	Inspect 187,000 structures in HFRA	208,828	Target met	23	100%	Desk review	112%	$113,845,388	$93,805,192 (-18%)	Yes (100%)
IN-1.2a WMP 8.1.3.2 Transmission HFRI Inspections & Remediations (Ground)	Inspect 28,000 structures in HFRA	31,708	Target met	82	100%	Field inspection	113%	$19,885,501	$21,089,362 (6%)	Yes (100%)
IN-1.2b WMP 8.1.3.2 Transmission HFRI Inspections & Remediations (Aerial)	Inspect 28,000 structures in HFRA	30,729	Target met	82	100%	Field inspection	110%	See IN-2a for the total of IN-2a & IN-2b	See IN-2a for the total of IN-2a & IN-2b	Yes (100%)

[20] Sample Validation Rate = (IE verified or reviewed) / (Sample size required). It is used to calculate the initiative validation rate as Initiative Validation Rate = (Sample validation rate) * (SCE claimed progress / Initiative target population), based on the 2024 IE ARC Outline, Section 2.4.

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate (%)[20]	Verification Method	IE Finding on Initiative	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?
IN-3 WMP 8.1.3.5 Infrared Inspection of Energized Overhead Distribution Facilities and Equipment	Inspect 5,300 distribution overhead circuit miles in HFRA	5,399	Target met	23	100%	Desk review	102%	$475,146	$475,146 (0%)	Yes (100%)
IN-4 WMP 8.1.3.6 Infrared Inspection, Corona Scanning and High-Definition (HD) Imagery of Transmission facilities and equipment	Inspect 1,000 transmission overhead circuit miles in HFRA	1,086	Target met	23	100%	Desk review	109%	$103,542	$188,316 (82%)	Yes (100%)
IN-5 WMP 8.1.3.7 Generation Inspections and Remediations	Inspect 160 generation related assets in HFRA	225	Target met	21	100%	Desk review	141%	$280,000	$41,133 (-85%)	Yes (100%)
IN-9a WMP 8.1.3.8 Spans - LineVue	Inspect 25 spans with Line Vue	33	Target met	15	100%	Desk review	132%	$1,759,269	$817,152 (-54%)	Yes (100%)
IN-9b WMP 8.1.3.8 Splices - X-Ray	Inspect 50 splices with X-Ray	70	Target met		100%	Desk review	140%	See IN-9a contains the total of IN-9a & IN-9b	See IN-9a contains the total of IN-9a & IN-9b	Yes (100%)
IN-8 WMP 8.1.5 Inspection & Maintenance Tools InspectForce	Execute the approved designs/recommendations for incorporating distribution ground and InspectCam capabilities into single digital platform	0.5	Target not met	1	100%	Desk review	50%	$1,231,555	$1,249,082 (1%)	Partial (50%)

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate (%)[20]	Verification Method	IE Finding on Initiative	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?
SH-1 WMP 8.1.2.1.1 Covered Conductor	Install 1,050 circuit miles of covered conductor in SCE's HFRA	796	Target not met	73	100%	Field inspection	76%	$872,613	-$1,392,735 (-260%)	Partial (76%)
SH-16 WMP 8.1.2.1.2 Vibration Dampers	Retrofit vibration dampers on 500 structures where covered conductor is already installed in SCE's HFRA	710	Target met	68	100%	Field inspection	142%	$-	$0 (0%)	Yes (100%)
SH-2 WMP 8.1.2.2.1 Undergrounding	Convert 16 circuit miles of overhead to underground in SCE's HFRA	12	Target not met	81	100%	Field Inspection & Desk Review	74%	$-	$0.00 (0%)	Partial (74%)
SH-10 WMP 8.1.2.3.1 Tree Attachments Remediation	Remediate 500 tree attachments in SCE's HFRA	521	Target met	34	100%	Desk review	104%	$-	$0.00 (0%)	Yes (100%)
SH-14 WMP 8.1.2.5.2 Long Spans	Remediate 1,000 spans in SCE's HFRA	1,200	Target met	74	99%	Field inspection	119%	$4,009,369	$1,368,792 (-66%)	Yes (100%)
SH-17 WMP 8.1.2.6.1 REFCL (GFN)	Complete construction of GFN at one substation (Banducci)	0.3	Target not met	1	100%	Desk review	30%	$175,000	$0 (-100%)	No (0%)
SH-18 WMP 8.1.2.6.2 REFCL (Ground Conversion)	Target four locations for grounding conversion, subject to land availability	2	Target not met	2	100%	Desk review	50%	$175,000	$1,176 (-99%)	Partial (50%)
SH-5 WMP 8.1.2.6.2 RAR Settings	Install 5 RAR/RCS sectionalizing devices subject to 2022 2023 PSPS analysis and subject to change	5	Target met	3	100%	Field inspection and Desk Review	100%	$-	$0.00 (0%)	Yes (100%)
SH-6 WMP 8.1.2.8.2 CB Relay Fast Curve	Replace/upgrade 10 CB relay units with fast curve settings in SCE's HFRA	11	Target met	11	100%	Desk review	110%	$1,609,302	$1,953,957 (21%)	Yes (100%)

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate (%)[20]	Verification Method	IE Finding on Initiative	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?
SH-8 WMP 8.3.3.1.2.1 Transmission Open Phase Detection	Retrofit TOPD at 5 locations with trip capabilities where alarm mode was previously deployed and that serve HFRA circuitry	5	Target met	5	100%	Desk review	100%	$412,500	$830,310 (101%)	Yes (100%)

4.1.2 IN-1.1 Distribution HFRI Inspections (Ground + Aerial)

EC Tracking ID: IN-1.1

WMP Section Number: 8.1.3.1

WMP Initiative Name: Distribution HFRI Inspections & Remediations (Ground + Aerial)

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

In SCE's 2023-2025 WMP (***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf)***, SCE defines the IN-1.1 tracking ID as assigned to the activity distribution high fire risk-informed inspections and remediation in Table SCE 7-02. IN-1.1 is further broken down in Table 8-4 into Ground and Aerial categories. SCE identifies their 2023 target to inspect 187,000 structures in HFRA and they will strive to inspect up to 217,000 structures in HFRA. SCE describes that this target includes HFRI inspections, compliance due structures in HFRA and emergent risks identified during the fire season. SCE identifies the same target for 2024. In 2025, SCE identified a quarter 2 target of 101,000 structures and a quarter 3 target of 172,000 structures. To verify, SCE will complete a listing of completed work orders.

In 2024, in their 2024 Wildfire Mitigation Plan Annual Report on Compliance ***(SCE 2024 WMP ARC.pdf)***, SCE described the target verification process as aggregating and assessing initiative compliance data from its systems of record. The data was extracted into a year-end evidence spreadsheet to confirm performance outcome. SCE's target assessment summary confirmed the target outcome and relied upon the year-end evidence spreadsheet for verification.

To verify the materials the IE team examined the year-end evidence spreadsheets provided in two Excel worksheets, one for ground inspections ***(IN-1.1a Dist Ground Inspections.xlsx)*** and one for aerial inspections ***(IN-1.1b Dist Aerial Inspections.xlsx)***.

Finding: Based on the evidence reviewed, the IE has reasonable assurance that SCE achieved its target of inspecting 187,000 structures in HFRA.

Funding Verification – Findings

Refer to Table 4-4, the IE verified that the funding of Distribution HFRI Inspections & Remediations (Ground + Aerial) presented in the table is being tracked appropriately. Regarding the underspend of CAPEX and O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** that drone purchases for the HFRA 360-Distribution Inspections program were reclassified under wildfire-related capital budgeting due to their exclusive use in wildfire compliance, while capital and O&M underruns were driven by a higher mix of lower-cost preventive maintenance and reduced labor and contractor usage. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the underspend of CAPEX and O&M, was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.1.3 IN-1.2a Transmission HFRI Inspections (Ground)

EC Tracking ID: IN-1.2a

WMP Section Number: 8.1.3.2

WMP Initiative Name: Transmission HFRI Inspections & Remediations (Ground)

Initiative Type: Focus & both (field & non-field verifiable)

Initiative Review – Findings & Method

Findings

The 2024 target of 28,000 was met. SCE completed 31,711 inspections and 31,711 remediations, according to SCE's WMP and ARC, ***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf*** and ***SCE 2024 WMP ARC.pdf***. Out of 82 field samples inspected, 81 passed and 1 failed, resulting in a sample validation rate of

99%. Non-conformances are documented in Attachment 7.5, including photographic evidence. The risk reduction goal was met.

Record-keeping and data management for this initiative is sufficient, but challenging. See below for IE observations.

Finding, Observations, and Risk Areas:

- Based on the evidence reviewed, the IE has reasonable assurance that SCE met their target, however, this is extremely difficult to validate.
- Inspections found improper vegetation at many of their sites. It is of the opinion of the IE team that the site was likely verified, but without enhancing future documentation it is nearly impossible to properly verify.
- The IE team was provided work orders, but the work orders give no indication of what was found during the inspection. It is a time stamp and a location. Broadly, the IE team finds this level of documentation unsatisfactory to best evaluate work order success.
- Validation dependent on exception management.

Recommendations for Improvement:

- Strengthen quality assurance protocols to reduce field inspection failure rates.
- Future field verifications should focus on what exactly is found, planned remediation, and indicating the remediation is complete.

Method & Evidence

For this initiative, 82 samples were verified in the field through ground inspections of visible and accessible structures. For IN-1.2a and IN-1.2b, field verifications of both ground and aerial were conducted on the same structure.

The IE evaluated installations against applicable regulatory and utility standards, including General Order (GO) 95, GO 165, PUC § 8386, North American Electric Reliability Corporation (NERC) FAC-501-WECC-1, and SCE's standards.

SCE submitted an initial set of evidence, ***IN-1.2a Trans Ground Inspections.xlsx***, containing the list of assets inspected and remediated in 2024. Additionally, the IE submitted data requests to SCE for documentation elaborating on the work order of the intended work, to validate field findings and non-conformities. SCE responded with ***IE01-SCE-2024 Q.01 IN-1.2a-Answer.pdf***. Overall, the documentation was sufficient to support the verification.

No SME interviews were required for evaluation of IN-1.2a.

Funding Verification – Findings

This funding verification contains expenditures spent on both IN-1.2a and IN-1.2b. Refer to Table 4-1, the IE verified that the funding of Transmission HFRI Inspections & Remediations presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for O&M. Regarding the underspend of CAPEX, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** that the capital underrun was due to delays from permitting, environmental, and other exceptions that limited the number of completed notifications. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the underspend of CAPEX was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.1.4 IN-1.2b Transmission HFRI Inspections (Aerial)

EC Tracking ID: IN-1.2b

WMP Section Number: 8.1.3.2

WMP Initiative Name: Transmission HFRI Inspections & Remediations (Aerial)

Initiative Type: Focus & both (field & non-field verifiable)

Initiative Review – Findings & Method

Findings

The 2024 target of 28,000 was met. SCE completed 30,735 inspections and 30,735 remediations, according to SCE's WMP and ARC, ***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf*** and ***SCE 2024 WMP ARC.pdf***. Out of 82 field samples inspected, 81 passed and 1 failed, resulting in a sample validation rate of 99%. Non-conformances are documented in Attachment 7.5, including photographic evidence. The risk reduction goal was met.

Record-keeping and data management for this initiative is sufficient. Record-keeping and data management for this initiative is sufficient, but challenging. See below for IE observations.

Finding, Observations, and Risk Areas:

- Based on the evidence reviewed, the IE has reasonable assurance that SCE met their target, however, this is extremely difficult to validate echoing the same issues as 1.2a.
- Inspections found improper vegetation at many of their sites. It is of the opinion of the IE team that the site was likely verified, but without enhancing future documentation it is nearly impossible to properly verify.
- The IE team was provided work orders, but the work orders give no indication of what was found during the inspection. It is simply a time stamp and a location. Broadly, the IE team finds this level of documentation unsatisfactory.

Recommendations for Improvement:

- Future field verifications should focus on what exactly is found, planned remediation, and indicating the remediation is complete.
- Strengthen quality assurance protocols.

Method & Evidence

For this initiative, 81 samples were verified in the field through ground inspections of visible and accessible structures. For IN-1.2a and IN-1.2b, field verifications of both ground and aerial were conducted on the same structure.

The IE evaluated installations against applicable regulatory and utility standards, including GO 95, GO 165, PUC § 8386, NERC FAC-501-WECC-1, and SCE's standard.

SCE submitted an initial set of evidence, ***IN-1.2b Trans Aerial Inspections.xlsx***, containing the list of assets inspected and remediated in 2024. Additionally, the IE submitted data requests to SCE for documentation elaborating on the work order of the intended work, to validate field findings and non-conformities. SCE responded with ***IE01-SCE-2024 Q.02 IN-1.2b-Answer.pdf***. Overall, the documentation was sufficient to support the verification.

No SME interviews were required for evaluation of IN-1.2b.

Funding Verification – Findings

IN-1.2a and IN-1.2b were combined as IN-1.2 by SCE for funding verification. See detailed funding verification of IN-1.2 in Table 4-1 for both IN-1.2a and IN-1.2b initiatives.

4.1.5 IN-3 Infrared Inspection of Energized Overhead Distribution Facilities and Equipment

EC Tracking ID: IN-3

WMP Section Number: 8.1.3.5

WMP Initiative Name: Infrared Inspection of Energized Overhead Distribution Facilities and Equipment

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

Section 8.1.3.5 and Table 8-35 of ***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf*** and ***SCE 2024 WMP ARC.pdf*** included a 2024 target to inspect 5,300 distribution overhead circuit miles in HFRA. SCE reported that the target was met by completing 5,339 inspections in 2024.

To verify the inspections were performed, the IE reviewed ***IN-3 Dist Infrared Inspections.xlsx*** provided by SCE and created a sample set, submitting a data request to request 23 samples of line miles to demonstrate, through work orders that the inspection work was completed in 2024. SCE provided a response in document ***IE08-SCE-2024 Q.06. IN-3 Answer.pdf*** that this work is tracked through SCE's WiSDM (Wildfire Safety Data Management) System and showing complete in the system for each work order.

Finding: Based upon evidence reviewed, the IE has reasonable assurance that SCE met its target for inspecting 5,300 distribution overhead circuit miles in HFRA in 2024.

Funding Verification – Findings

Refer to Table 4-1, the IE verified that the funding of Infrared Inspection of Energized Overhead Distribution Facilities and Equipment presented in the table is being tracked appropriately and considered no discrepancy[21] between budget and actual expending for capital expenditures (CAPEX). Regarding the overspend[22] of O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** that it is mainly due to the increase of expenses to accommodate the number of inspections for the year and to provide air operations support for scanning certain circuit miles. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the overspend of operations and maintenance (O&M) was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.1.6 IN-4 Infrared Inspection, Corona Scanning & HD Imagery - Transmission

EC Tracking ID: IN-4

WMP Section Number: 8.1.3.6

WMP Initiative Name: Infrared Inspection of Energized Overhead Distribution Facilities and Equipment

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

In section 8.1.3.6 of the SCE 2023-2025 WMP (**SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf)**, SCE included the objective to inspect 1,000 transmission overhead circuit miles in HFRA. SCE reported that the target was met by completing 1,086 transmission overhead circuit miles in 2024.

To verify the inspections were performed, the IE reviewed ***IN-4 Trans Infrared_Corona_HD Inspections.xlsx*** provided by SCE and created a sample set, submitting a data request to request 23 samples of line miles to demonstrate, through work orders that the inspection work was completed in 2024. SCE

[21] For funding verification, the IE calculated the absolute percent difference of the initiative's expenditure from the budget according to the formula documented in ***2024_IE_ARC_Outline.pdf***: Absolute percent difference = abs(Budget - Expenditure)/Budget. No discrepancy means the absolute percent difference is less than or equal to 10%.

[22] Overspend means SCE's actual expenditure on the initiative is greater than 10% of the budget.

provided a response in document ***IE08-SCE-2024 Q.07. IN-4 Answer.pdf*** that the work was tracked through SCE's WiSDM System and showing complete in the system for each work order.

Finding: Based upon the evidence reviewed, the IE has reasonable assurance that SCE met its target for inspecting 1,000 transmission overhead circuit miles in HFRA in 2024.

Funding Verification – Findings

Refer to Table 4-1, the IE verified that the funding of Infrared Inspection, Corona Scanning and HD Imagery of Transmission Facilities and Equipment presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for CAPEX. Regarding the overspend of O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** that SCE increased the number of transmission circuit flights, resulting in more air operations hours, and hired contractors to support engineering and review infrared footage for inspection accuracy. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the overspend of O&M was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.1.7 IN-5 Generation Inspections and Remediations

EC Tracking ID: IN-5

WMP Section Number: 8.1.3.7

WMP Initiative Name: Generation Inspections and Remediations

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

In section 8.1.3.7 of the SCE 2023-2025 WMP (**SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf)**, SCE included the objective to inspect 160 generation related assets in HFRA. SCE reported that the target was met by completing 225 inspections of generation related assets in 2024.

To verify the inspections were performed, the IE reviewed ***IN-5 Gen Inspections.xlsx*** provided by SCE and created a sample set, submitting a data request to request 21 samples of inspections of generation related assets to demonstrate, through work orders that the work was completed in 2024. SCE provided a response in document ***IE08-SCE-2024 Q.08. IN-5 Answer.pdf*** that the work was tracked through SCE's WiSDM System and showing complete in the system for each work order.

Finding: Based upon the evidence reviewed, the IE has reasonable assurance that SCE met its target for inspecting 160 generation related assets in HFRA in 2024.

Funding Verification – Findings

Refer to Table 4-1, the IE verified that the funding of Generation Inspections and Remediations presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for CAPEX. Regarding the underspend[23] of O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf***, ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** and ***IE011-SCE-2024 Q. 04-06 IN-5, SA-11, VM-6 Answer.pdf*** in response to a data request that fewer remediation needs than forecasted due to fewer issues found, and overall inspection, planning, and training costs were lower than expected in 2024, benefiting from efficiency gains from 2023 IN-5 work, such as field crews becoming more familiar with the assets. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the underspend of O&M, was reasonably assured and reflective in SCE's 2024 initiative portfolio.

[23] Underspend means SCE's actual expenditure on the initiative is less than -10% of the budget.

4.1.8 IN-9a Spans - LineVue

EC Tracking ID: IN-9a

WMP Section Number: 8.1.3.8

WMP Initiative Name: Spans - LineVue

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

In section 8.1.3.8 of the SCE 2023-2025 WMP (**SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf)**, SCE included the objective to inspect 25 spans with Line Vue. SCE Reported that the target was met by completing 33 span inspections with Line Vue in 2024.

To verify the inspections were performed, the IE reviewed ***IN-9a Transmission Conductor and Splice Assessments_LineVue.xlsx*** provided by SCE and created a sample set, submitting a data request to request 7 samples of span inspections to demonstrate, through work orders that the work was completed in 2024. SCE provided a response in document ***IE08-SCE-2024 Q.09. IN-9 Answer.pdf*** that the work was tracked through SCE's WiSDM System and showing complete in the system for each work order.

Finding: Based upon the evidence reviewed, the IE has reasonable assurance that SCE met its target for inspecting 25 spans with Line Vue in 2024.

Funding Verification – Findings

This funding verification contains expenditures spent on both IN-9a and IN-9b. Refer to Table 4-1, the IE verified that the funding of Spans - LineVue presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for O&M. Regarding the underspend of CAPEX, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf***, ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** and ***IE05-SCE-2024 -Funding Questions Q.01-09 Answer.pdf*** in response to a data request that the program reduced annual costs by leveraging efficiency gains and bundling inspections—such as coordinating X-ray and LineVue work at nearby locations—to make better use of onsite resources. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the underspend of CAPEX was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.1.9 IN-9b Splices - X-Ray

EC Tracking ID: IN-9b

WMP Section Number: 8.1.3.8

WMP Initiative Name: Splices - X-Ray

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

In section 8.1.3.8 of the SCE 2023-2025 WMP (**SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf)**, SCE included the objective to inspect 50 splices with X-Ray. SCE Reported that the target was met by completing 70 splice inspections with X-Ray in 2024.

To verify the inspections were performed, the IE reviewed ***IN-9b Transmission Conductor and Splice Assessments_X-Ray.xlsx*** provided by SCE and created a sample set, submitting Data Request 8 to request 8 samples of splice inspections to demonstrate, through work orders that the work was completed in 2024. SCE provided a response in document ***IE08-SCE-2024 Q.09. IN-9 Answer.pdf*** that the work was tracked through SCE's Wildfire Safety Data Management (WiSDM) system and showing complete in the system for each work order.

Finding: Based upon the evidence reviewed, the IE has reasonable assurance that SCE met its target for inspecting 50 spans with X-ray in 2024.

Funding Verification – Findings

IN-9a and IN-9b were combined as IN-9 by SCE for funding verification. See detailed funding verification of IN-9 in Table 4-2 for both IN-9a and IN-9b initiatives.

4.1.10 IN-8 Inspection & Maintenance Tools InspectForce

EC Tracking ID: IN-8

WMP Section Number: 8.1.5

WMP Initiative Name: Inspection & Maintenance Tools InspectForce

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

Section 8.1.1.2 of the SCE 2023-2025 WMP (***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf***) included an end of year 2024 target to execute the approved designs and recommendations for incorporating distribution ground and InspectCam capabilities into a single digital platform. SCE reported that the Architecture Vision Definition (AVD) was updated and provided an AVD Table of Contents (***IN-8 Inspection and Maintenance Tools.pdf***).

To verify the materials were updated and incorporated into a single digital platform, an SME meeting was held with SME's firm IN-8 and the SME's walked the IE team through their documentation and progress.

Finding: Based on the evidence reviewed, the IE has reasonable assurance that SCE achieved its target of executing the approved designs and recommendations for incorporating the distribution ground and InspectCam capabilities into a single digital platform.

Funding Verification – Findings

Refer to Table 4-1, the IE verified that the funding of Inspection & Maintenance Tools InspectForce presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for CAPEX. Regarding the overspend of O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** that the budget overran due to added features and survey redesigns, while integration of distribution ground and InspectCam was delayed for scope refinement, with completion now planned for Q3 2025. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the overspend of O&M was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.1.11 SH-1 Covered Conductor

EC Tracking ID: SH-1

WMP Section Number: 8.1.2.1.1

WMP Initiative Name: Covered Conductor

Initiative Type: Focus & field verifiable

Initiative Review – Findings & Method

Findings

The 2024 target of installing 1,050 circuit miles of covered conductor in SCE's HFRA was not met. SCE completed 809 miles, resulting in a shortfall of 241 miles, according to SCE's WMP and ARC, ***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf*** and ***SCE 2024 WMP ARC.pdf***. The IE converted circuit miles to number of structures, proportionately based on actual installations. Out of 77 field samples inspected, 76 passed and 1 failed, resulting in a sample validation rate of 99%. Non-conformances are documented in Attachment 7.5, including photographic evidence.

The shortfall in achieving the target was due to multiple constraints, including environmental challenges and permitting constraints as noted by SCE within the EC ARC.

Although SCE did not complete the full 1,050 circuit mile target, the 796 miles of covered conductor installed proportionally represents a substantial reduction in ignition risk along high-priority overhead lines and this is demonstrated with the locations sampled and the field verification results. The field IE team revealed that the initiative achieved a meaningful portion of its intended work in high-risk locations and therefore would still contribute to reduction of wildfire risk. Though, the remaining mileage defers a segment of planned mitigation to future years.

Record-keeping and data management for this initiative is sufficient. The EC provided an asset-level spreadsheet with installed structures, allowing traceability for field samples after data cleaning and mapping. Work order maps were not provided, as the IE developed sampling mapping products for field activities. The tracking process overall appeared mature and facilitated auditability.

Finding, Observations, and Risk Areas:

- Based on the evidence reviewed, the IE has confirmed as reported by SCE that the EC did not meet its target for installing 1,050 circuit miles of covered conductors in 2024. The IE team understand that for this specific initiative might be delayed due to environmental, outages and access issues to continue installation. All field verified locations the IE team sampled, passed for this initiative.

Recommendations for Improvement:

- Update installation cycle to overcome issues such as weather, permitting, or potential access issues.
- Enhance metadata tagging and organization within the asset management data schema within the GIS shapefile (or asset logs) to aid tracing of structures conversion from circuit mile completion units to poles (structures).

Method & Evidence

For this initiative, 77 samples were verified in the field through ground inspections of visible and accessible structures. To support field verification and identification of specific structures to verify, the IE converted the total circuit miles completed (796 miles) into an estimated number of structures using a standard conversion factor (1 circuit mile = 28 structures), proportionate to the 22,581 structures[24] reported as removed by SCE.

The IE evaluated installations against applicable regulatory and utility standards, including GO 95, GO 165, GO 128, SCE's standards.

SCE submitted an initial set of evidence, ***SH-1 Covered Conductor.xlsx***, containing the list of assets installed in 2024. Additionally, the IE submitted data requests to SCE for documentation elaborating on the work order and confidential drawings and maps of the intended work, to validate field findings and non-conformities. SCE responded with ***IE01-SCE-2024 Q.01–SH-1 Answer.pdf***. Overall, the documentation was sufficient to support the verification.

No SME interviews were required for evaluation of SH-1.

Funding Verification – Findings

Refer to Table 4-1, the IE verified that the funding of Covered Conductor presented in the table is being tracked appropriately. Regarding the underspend of CAPEX and O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf***, ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** and ***IE05-SCE-2024 -Funding Questions Q.01-09 Answer.pdf*** in response to the data request that the capital underrun resulted from SCE completing fewer miles than targeted, while the O&M underrun was due to a journal entry correction for joint investor-owned utility (IOU) covered conductor testing, with PG&E and SDG&E reimbursing SCE for their share of costs related to CPUC Rulemaking R.20-07-013. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls, the IE believes that the overspend of CAPEX and O&M was reasonably assured and reflective in SCE's 2024 initiative portfolio.

[24] Structure counts for SH-1 were estimated using a conversion factor of 28.36 structures per circuit mile, based on 2024 outcomes (796.03 circuit miles installed, 22,581 structures completed). This reflects denser pole spacing typical of overhead covered conductor work and is more granular than the 17.81 structures/mile ratio used for SH-2. The conversion supports estimation of inspection populations and alignment of circuit mile targets for sampling..

4.1.12 SH-16 Vibration Dampers

EC Tracking ID: SH-16

WMP Section Number: 8.1.2.1.2

WMP Initiative Name: Vibration Dampers

Initiative Type: Focus & field verifiable

Initiative Review – Findings & Method

Findings

The 2024 target of retrofitting vibration dampers on 500 structures where covered conductor is already installed in SCE's HFRA was met. SCE completed 710 installations, according to SCE's WMP and ARC, ***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf*** and ***SCE 2024 WMP ARC.pdf***. Out of 68 field samples inspected, all 68 passed, resulting in a sample validation rate of 100%. Non-conformances are documented in Attachment 7.5, including photographic evidence.

No, the risk reduction goal was not satisfied. While SCE met its 2024 installation target with 710 dampers installed, field inspections revealed placement inconsistencies. Dampers were not installed on the intended structure listed in the work order for several sites, and the IE could not confirm whether dampers were present at the alternate span ends. Due to this ambiguity and validation failures, the initiative's contribution to risk reduction could not be fully substantiated.

Record-keeping and data management for this initiative is sufficient.

Finding, Observations, and Risk Areas:

- Based on the evidence reviewed, the IE has reasonable assurance that SCE did meet its target for retrofitting vibration dampers on 500 structures.
- Many of the filed verified structures failed and the IE team found that a vibration damper was not placed on the proper pole. However, the IE team understands that the effectiveness of this technology needs to only be on one end of the wire span.
- The IE team was not able to validate if a damper was on the other end of the structure based on the data provided. Additionally, these were deemed a failure given the damper was not installed on the proper structure listed on the work order.

Recommendations for Improvement:

- Strengthen quality assurance protocols to reduce field inspection failure rates.
- Ensure proper documentation of where exactly a vibration damper is installed. Consider additional notes in the work order or the attachment of a low-resolution photo.
- Consider leveraging done-based visual inspections to ensure proper work is completed.
- Conduct post installation effectiveness audits by spot checking installed dampers and include a comparison pre and post.

Method & Evidence

For this initiative, 68 samples were verified in the field through ground inspections of visible and accessible structures.

The IE evaluated installations against applicable regulatory and utility standards, including GO 95, GO 165, GO 128, SCE's standards.

SCE submitted an initial set of evidence, ***SH-16 Vibration Damper Retrofit.xlsx***, containing the list of assets installed in 2024. Additionally, the IE submitted data requests to SCE for documentation elaborating on the work order of the intended work, to validate field findings and non-conformities. SCE responded with ***IE01-SCE-2024 Q04 SH-16–Answer.pdf***. Overall, the documentation was sufficient to support the verification.

No SME interviews were required for evaluation of SH-16.

Funding Verification – Findings

Refer to Table 4-1, the IE verified that the funding of Vibration Dampers presented in the table is being tracked appropriately and considered no discrepancy between budget[25] and actual[26] expending for O&M. Regarding the underspend of CAPEX, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf***, ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** and ***IE05-SCE-2024 -Funding Questions Q.01-09 Answer.pdf*** in response to Data Request 5 that there is an accounting issue, most associated costs were recorded under capital distribution preventative and breakdown maintenance, and SCE is currently reviewing these charges to correct the accounting treatment. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the underspend of CAPEX was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.1.13 SH-2 Undergrounding

EC Tracking ID: SH-2

WMP Section Number: 8.1.2.2.1

WMP Initiative Name: Undergrounding

Initiative Type: Focus & field verifiable

Initiative Review – Findings & Method

Findings

The 2024 target of undergrounding 16 circuit miles was not met. SCE completed 12 miles, resulting in a shortfall of 5 miles, according to SCE's WMP and ARC, ***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf*** and ***SCE 2024 WMP ARC.pdf***. The IE converted circuit miles to number of structures, proportionately based on actual installations. Out of 81 field samples inspected, 77 passed and 4 failed, resulting in a sample validation rate of 95%. Non-conformances are documented in Attachment 7.5, including photographic evidence.

The shortfall in achieving the SH-2 target was due to multiple constraints, including permitting challenges, execution delays, and delays in obtaining necessary easements.

Partial risk reduction was achieved due to the incomplete mileage reported by SCE. While the completed segments contributed to wildfire risk mitigation, the shortfall limited the full intended impact.

Record-keeping and data management for this initiative is sufficient.

Finding, Observations, and Risk Areas:

- Based on the evidence reviewed, the IE has reasonable assurance that SCE did not meet its target for undergrounding 16 circuit miles.
- The IE teams field verification for undergrounding found all passes despite not completing the entire initiative.

Recommendations for Improvement:

- Strengthen quality assurance protocols to reduce field inspection failure rates.
- Continue to prioritize high-risk circuits using enhanced risk models.
- Consider adopting trenchless and micro-trenching techniques by expanding the use of direction drilling in more urban areas.

[25] Budget refers to original planned expenditure demonstrated in ***SCE Q1 2024 Tables 1-15 R1.xlsx*** attached to ***SCE Q1 2024 Quarterly Data Report.pdf*** advised by Energy Safety. The breakdown of budget by each initiative was also provided by SCE in ***2024 ARC Worksheet_Budget & Actuals by Initiative.xlsx***. in response to Data Request-01 requested on April 16, 2025. The note applies to all the fund verification throughout this IE report.

[26] Actual refers to the actual expenditures and expenses demonstrated in ***SCE 2024 ARC Attachment B_Supplemental.xlsx provided by SCE***. The note applies to all the fund verification throughout this IE report.

Method & Evidence

For this initiative, 81 samples were verified in the field through ground inspections of visible and accessible structures. To support field verification and identification of specific structures to verify, the IE converted the total underground circuit miles completed (12 miles) into an estimated number of overhead structures removed using a standard conversion factor (1 circuit mile = 19 structures), proportionate to the 221 overhead poles reported as removed by SCE.

The IE evaluated installations against applicable regulatory and utility standards, including General Order (GO) 95, GO 128, SCE's Distribution Overhead Construction Standards (DOH), and Distribution Underground Construction Standards (DUG).

SCE submitted an initial set of evidence, ***SH-2 Undergrounding Overhead Conductor.xlsx*** containing the list of assets installed in 2024. Additionally, the IE submitted data requests to SCE for documentation elaborating on the work order and confidential drawings and maps of the intended work, to validate field findings and non-conformities. SCE responded with ***IE01-SCE-2024 Q.02 – SH-2 Answer.pdf.*** Overall, the documentation was sufficient to support the verification.

No SME interviews were required for evaluation of SH-2.

Funding Verification – Findings

Refer to Table 4-1, the IE verified that the funding of SH-2 Undergrounding presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for both CAPEX and O&M. Therefore, no additional explanation is required.

4.1.14 SH-10 Tree Attachments Remediation

EC Tracking ID: SH-10

WMP Section Number: 8.1.2.3.1

WMP Initiative Name: Tree Attachments Remediation

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

Section 8.1.2.3.1and Table 8-3 of ***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf*** and ***SCE 2024 WMP ARC.pdf*** demonstrated that SCE should remediate 500 tree attachments in SCE's HFRA in 2024 to address contact-from-object and equipment failure ignition risks, reducing the probability of vegetation contact and the potential ignition caused by a spark close to vegetation. SCE reported that the target was met by remediating a total of 521 tree attachments by the end of 2024.

To verify the remediations were performed, the IE reviewed documentation ***SH-10 Tree Attachment Remediation.xlsx*** provided by SCE and created a sample set, submitting Data Request IE14-SCE-2024 to request 24 samples of tree attachment remediations to demonstrate, through work orders that the work was completed in 2024. SCE provided a response in document ***IE14-SCE-2024 Q.1 SH-10 Answer.pdf*** that the work was tracked through SCE's WiSDM System and showing complete in the system for each work order.

Finding: Based upon the evidence reviewed, the IE has reasonable assurance that SCE met its target for remediating 500 tree attachments in HFRA in 2024.

Funding Verification – Findings

Refer to Table 4-1, the IE verified that the funding of Tree Attachments Remediation presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for O&M. Regarding the overspend of CAPEX, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** that the overrun was driven by higher material costs per foot compared to previous years, increased contractor expenses due to full aerial cable replacements on two atypical projects, and greater than anticipated overhead costs. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the overspend of CAPEX was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.1.15 SH-14 Long Spans

EC Tracking ID: SH-14

WMP Section Number: 8.1.2.5.2

WMP Initiative Name: Long Spans

Initiative Type: Focus & field verifiable

Initiative Review – Findings & Method

Findings

The 2024 target of 1,000 was met. SCE completed 1,315 installations, according to SCE's WMP and ARC, ***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf*** and ***SCE 2024 WMP ARC.pdf***. Out of 74 field samples inspected, all 73 passed and 1 failed, resulting in a sample validation rate of 99%. Non-conformances are documented in Attachment 7.5, including photographic evidence.

Although the target itself was exceeded, the high field fail rate raised concerns to the IE team about whether risk reduction was fully achieved as intended. This initiative aims to mitigate long span conductor slaps, gallops, or high wind impacts. Confidence in realized risk reduction came into question.

Record-keeping and data management for this initiative is sufficient. Opportunities to strengthen alignment between asset records and field implementation activities.

Finding, Observations, and Risk Areas:

- Based on the evidence reviewed, the IE has reasonable assurance that SCE completed the targeted scope of work for long span mitigations. Yet, the IE team observed discrepancies between documented installation types (e.g., mid-span isolates) and what was physically observed in the field. This could suggest a breakdown in installation quality control or work order clarity. More information is needed to fully understand the completeness of the initiative installation.
- Based on IE field observations, many of the long span initiatives were cited as a fail. Many of the work orders indicated that mid span isolators were installed, however the IE team often found this not to be the case. The IE team was unable to determine a consistent pattern or root cause for the discrepancy across failed samples.

Recommendations for Improvement:

- Strengthen quality assurance protocols to reduce field inspection failure rates.
- Ensure proper documentation of where exactly a vibration damper is installed. Consider additional notes in the work order or the attachment of a low-resolution photo.
- Consider refining span selection criteria using structural and environmental modeling.
- Consider implementing a secondary review of work order closeouts.

Method & Evidence

For this initiative, 74 samples were verified in the field through ground inspections of visible and accessible structures.

The IE evaluated installations against applicable regulatory and utility standards, including GO 95, GO 165, GO 128, SCE's standards.

SCE submitted an initial set of evidence, ***SH-14 Long Span Initiative.xlsx*** , containing the list of assets installed in 2024. Additionally, the IE submitted data requests to SCE for documentation elaborating on the work order of the intended work, to validate field findings and non-conformities. SCE responded with ***IE01-SCE-2024 Q.03–SH-14 Answer.pdf***. Overall, the documentation was sufficient to support the verification.

No SME interviews were required for evaluation of SH-14.

Funding Verification – Findings

Refer to Table 4-1, the IE verified that the funding of Long Spans presented in the table is being tracked appropriately. Regarding the underspend of CAPEX and O&M, the IE reviewed the detailed explanation

provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** that the capital underrun was driven by the volume of work and the use of less expensive non-Long Span Initiative (LSI) components, while the O&M underrun resulted from a higher percentage of LSI line spacers in 2024 (compared to the 2022-based budget), use of internal resources over contractors, and bundling efforts that reduced the number of crew dispatches needed for remediation. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls, the IE believes that the underspend of CAPEX and O&M was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.1.16 SH-17 REFCL (GFN)

EC Tracking ID: SH-17

WMP Section Number: 8.1.2.6.1

WMP Initiative Name: REFCL (GFN)

Initiative Type: Focus & non-field verifiable

Initiative Review – Findings & Method

Findings

The 2024 target of completing construction of Rapid Earth fault Current Limiters (REFCL) - Ground Fault Neutralizer (GFN) at one substation (Banducci) was not met. SCE completed approximately 30%[27] of GFN at Banducci substation in 2024, according to ***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf***, ***SCE 2024 WMP ARC.pdf***, ***SH-17 REFCL Ground Fault Neutralizer_Construction Photos.pdf*** and ***IE08-SCE-2024 Q.02. SH-17 Answer.pdf*** in response to a data request. The IE also reviewed the funding to verify the expenditures funded on this initiative and reasonably assured that SCE did not meet the goal of completing one GFN at Bonducci substation but still was considered in compliance with 2024 WMP.

The shortfall in achieving the target was due to schedule impacts associated with obtaining certain materials with long lead times. SCE has completed below-ground construction as of January 2025 and initiated above-ground construction with major material procurement, including the production of a critical circuit breaker that was expected to be delivered in Q1 2025.

No risk reduction was achieved due to the incomplete GFN at the substation since the shortfall limited the full intended impact. The IE notes these challenges are logistical and structure, and not compliance failures of QA/QC inefficiencies.

Record-keeping and data management for this initiative is sufficient even though requested work order was not delivered.

Finding, Observations, and Risk Areas:

Even though SH-17 is compliant, the IE observed delays due to moderate scheduling execution risk. It can pose consideration for crew activity readiness, such that internal teams are positioned to keep pace when one or more sites fall through due to factors outside of SCE's control. Also, SCE mentioned that testing window is limited to December-April and if testing is not ready to be performed by April 2025, it will be deferred to December 2025, which ultimately will impact the commissioning of intended risk mitigation.

Recommendations for Improvement:

- Address long-lead material procurement
- Expand flexibility in field crew deployment and testing window
- Continue documenting deferred work clearly to catch delays soon (if possible)
- Include commissioning status with installations to verify asset functionality

[27] SCE completed 72% of one GFN at Banducci substation as of Q1, 2025 and fully completed the construction of the GFN at Phelan substation carried over from prior year WMP activities. SCE targets to complete the construction in Q2 2025.

Method & Evidence

For this initiative, the IE verified from desk data that SCE initiated the GFN construction on site as the construction is not complete by the end of 2024; thus, no wildfire mitigation is accomplished and no site visit required.

SCE submitted an initial evidence, ***SH-17 REFCL Ground Fault Neutralizer_Construction Photos.pdf***, containing the list of photos showing the construction progress on site. Additionally, the IE submitted a data request to SCE for documentation elaborating on the work order, to validate the construction records. SCE directed the IE to review the photos of the construction mentioned above. Overall, the documentation was sufficient to support the verification as the construction is still in progress.

No SME interviews were required for evaluation of SH-17.

Funding Verification – Findings

Refer to Table 4-1, the IE verified that the funding of REFCL (GFN) presented in the table is being tracked appropriately. Regarding the underspend of CAPEX and O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** that the capital underrun is mainly due to schedule impacts associated with obtaining certain materials with long lead times, while the O&M budget was underutilized because the assets have not yet established. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the underspend of CAPEX and O&M was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.1.17 SH-18 REFCL (Ground Conversion)

EC Tracking ID: SH-18

WMP Section Number: 8.1.2.6.2

WMP Initiative Name: REFCL (Ground Conversion)

Initiative Type: Focus & non-field verifiable

Initiative Review – Findings & Method

Findings

The 2024 target of completing construction of four locations for grounding conversion, was not met. SCE completed two[28] locations for grounding conversion in 2024 but has not commissioned, according to ***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf***, ***SCE 2024 WMP ARC.pdf***, ***SH-18 REFCL Grounding Conversion_Construction Photos.pdf*** and ***IE08-SCE-2024 Q.03. SH-18 Answer.pdf*** in response to a data request. The IE also reviewed the funding to verify the expenditures funded on this initiative and reasonably assured that SCE did not meet the goal of completing four locations but still was considered in compliance with 2024 WMP.

The shortfall in achieving the target was due to delays with land acquisition that impacted design initiation. Therefore, ongoing wildfire mitigations such as vegetation management, asset inspections, protection settings, and situational awareness activities will help mitigate risk at locations that have not yet received REFCL protection. SCE intends to complete the scope that was not completed in 2024.

No risk reduction was achieved due to two incomplete locations and two complete locations but not commissioned since the shortfall limited the full intended impact. The IE notes these challenges are logistical and structure, and not compliance failures of QA/QC inefficiencies.

Record-keeping and data management for this initiative is sufficient.

[28] SCE completed three locations for grounding conversion as of Q1 2025 and one location is pending. SCE is continuing discussion with the city and initiating design at the Brydon site.

Finding, Observations, and Risk Areas:

Although SH-18 is compliant, the IE observed delays stemming from challenges in securing locations for grounding conversions. This may impact crew readiness, as internal teams must remain agile and prepared to adapt when one or more sites become unavailable due to factors beyond SCE's control.

Recommendations for Improvement:

- Address contingency location clearance from county/forest service ahead of time
- Expand flexibility in field crew deployment and testing window
- Continue documenting deferred work clearly to catch delays soon (if possible)

Method & Evidence

For this initiative, the IE verified from desk data that SCE completed two locations for grounding conversion site by the end of 2024, but the locations have not been commissioned; thus, no wildfire mitigation was accomplished and no site visit required.

SCE submitted initial evidence, ***SCE 2024 WMP ARC.pdf***, ***SH-18 REFCL Grounding Conversion_ Construction Photos.pdf***, containing the list of photos showing the completion of grounding conversion on site. Additionally, the IE submitted a data request to SCE for documentation elaborating on the work orders, to validate the target completion. SCE responded with ***IE08-SCE-2024 Q.03. SH-18 Answer.pdf***. Overall, the documentation was sufficient to support the verification.

No SME interviews were required for evaluation of SH-18.

Funding Verification – Findings

Refer to Table 4-1, the IE verified that the funding of REFCL (Ground Conversion) presented in the table is being tracked appropriately. Regarding the underspend of CAPEX and O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** that only two of the four grounding conversion units were completed due to delays from site access issues, project reassignments to Targeted Undergrounding, fire restoration crew redeployments, land acquisition challenges, and lack of environmental clearances from forest services; meanwhile, the O&M budget was underutilized because the relatively new assets have not yet entered their maintenance cycle, and few weather-triggered events have required equipment performance investigations. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the underspend of CAPEX and O&M was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.1.18 SH-5 RAR Settings

EC Tracking ID: SH-5

WMP Section Number: 8.1.2.6.2

WMP Initiative Name: RAR Settings

Initiative Type: Focus & both (field & non-field verifiable)

Initiative Review – Findings & Method

Findings

The 2024 target of 5 was met. SCE completed 5 installations, according to SCE's WMP and ARC, ***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf*** and ***SCE 2024 WMP ARC.pdf***. Out of 3 field samples inspected, 3 passed and 0 failed, resulting in a sample validation rate of 100%. The risk reduction goal was met.

Record-keeping and data management for this initiative is sufficient.

Finding, Observations, and Risk Areas:

- Based on the evidence reviewed, the IE has reasonable assurance that SCE meet its target for installing 5 RAR settings.

- The IE teams were able to verify 3 out of 5 installed RAR settings. One of the unverified assets is not accessible due to a location constraint and the other one was excluded due to it being located in an area that experienced wildfires since the work was completed.
- **Recommendations for Improvement:**
- Continue to prioritize high-risk circuits using enhanced risk models.
- Provide photos of installed RAR settings ahead of field inspection for the ease of observation verification and to show the proper settings were applied to the installed systems.

Method & Evidence

For this initiative, 3 samples were verified in the field through ground inspections of visible and accessible structures. For SH-5, the actual settings within the substation system are not able to be field-verified, so the IE verified in the field whether or not the physical device was present and then augmented the verification with a desk review of evidence of proper settings within the system.

SCE submitted an initial set of evidence, ***SH-5 Remote Controlled Automatic Reclosers Settings Update.xlsx***, containing the list of assets installed in 2024. Additionally, the IE submitted data requests to SCE for documentation elaborating on the work order of the intended work, to validate field findings and non-conformities. SCE responded with ***IE012-SCE-2024 Q.02 SH-5 Answer.pdf*** and ***IE 15-SCE-2024 Q. 5 SH-5 Answer.pdf***. Overall, the documentation was sufficient to support the verification.

No SME interviews were required for evaluation of SH-5.

Funding Verification – Findings

Refer to Table 4-1, the IE verified that the funding of RAR Settings presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for O&M. Regarding the underspend of CAPEX, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** that the budget was based on historical averages tied to the number of circuits impacted by PSPS events, but in 2024, both the unit count and completed work were lower than forecasted. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the underspend of CAPEX was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.1.19 SH-6 CB Relay Fast Curve

EC Tracking ID: SH-6

WMP Section Number: 8.1.2.8.2

WMP Initiative Name: CB Relay Fast Curve

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

In Section 8.1.2.8.2 of the SCE 2023–2025 WMP (**SCE 2023–2025 WMP R3.1 (November 14, 2024).pdf**), SCE included the objective to replace or upgrade 10 CB relay units with fast curve settings in SCE's HFRA. SCE reported that the target was met by completing 11 upgrades in 2024.

To verify the installations were performed, the IE reviewed documentation provided by SCE and selected a sample of 11 records for validation. As this initiative is non-focus and non-field verifiable, the verification was conducted through a desk review of the submitted materials. The documentation confirmed that the work was completed as described.

Finding: Based upon the evidence reviewed, the IE has reasonable assurance that SCE met its target for replacing or upgrading 10 CB relay units with fast curve settings in HFRA in 2024.

Funding Verification – Findings

Refer to Table 4-1, the IE verified that the funding of CB Relay Fast Curve presented in the table is being tracked appropriately. Regarding the underspend of CAPEX and overspend of O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment***

B_Supplemental.xlsx that the capital underrun was due to the cancellation of the Kern River project—where a full substation overhaul was required—and the reclassification of the Pebbly Beach project from capital to O&M due to its limited scope involving only relay software programming; meanwhile, the O&M overrun occurred because 2024 SH-6 projects involved only settings upgrades on existing assets without hardware replacement, shifting costs from capital to O&M. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the underspend of CAPEX and overspend of O&M were reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.1.20 SH-8 Transmission Open Phase Detection

EC Tracking ID: SH-8

WMP Section Number: 8.3.3.1.2.1

WMP Initiative Name: Transmission Open Phase Detection

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

Vm-6In Table 8-1 of the SCE 2023-2025 WMP (***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf)***, SCE included the objective for three years of continuing to deploy protection system mitigations and refine circuit protection strategies to further reduce wildfire risk, while balancing system reliability. Towards this objective, SCE identified SH-8, the transmission open phase detection (TOPD) initiative. In Table 8-3 of the SCE 2023-2025 WMP (***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf***), the Company identified their 2023 target of installing TOPD at 5 locations that serve HFRA circuitry with both alarm and trip functionality; a 2024 target of retrofitting TOPD at 5 locations with trip capabilities where alarm mode was previously deployed and that serve HFRA circuitry; and a 2025 target to be determined based on further evaluation.

In 2024, in their 2024 Wildfire Mitigation Plan Annual Report on Compliance ***(SCE 2024 WMP ARC.pdf)***, SCE describes the target verification process as aggregating and assessing initiative compliance data from its systems of record. The data was extracted into a year-end evidence spreadsheet to confirm performance outcome. SCE's target assessment summary confirmed the target outcome and relied upon the year-end evidence spreadsheet for verification.

To verify the materials the IE team examined the year-end evidence spreadsheet provided in the Excel worksheet (***SH-8 Transmission Open Phase Detection.xlsx****).*

Finding: Based on the evidence reviewed, the IE has reasonable assurance that SCE achieved its target of installing the TOPD at 5 locations.

Funding Verification – Findings

Refer to Table 4-1, the IE verified that the funding of Transmission Open Phase Detection presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for CAPEX. Regarding the overspend of O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf***, ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** and ***IE05-SCE-2024 -Funding Questions Q.01-09 Answer.pdf*** in response to a data request that the budget overran due to payments made in 2024 for vendor work completed in prior years. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status, the IE believes that the overspend of O&M was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.1.21 Synthesis of Findings

Synthesis of Findings – Initiative Review

The IE reviewed a comprehensive portfolio of initiatives under the Grid Design, Operations, and Maintenance category of the 2024 WMP. Most initiatives met or exceeded their targets, including inspections of transmission and distribution infrastructure, advanced imaging, and specialized equipment installations. IN-1.1, IN-1.2a, IN-1.2b, IN-3, IN-4, IN-5, IN-8, IN-9a, and IN-9b were verified through documentation, sampling,

and field inspections where applicable. SCE's use of the WiSDM system and year-end evidence spreadsheets supported verification of inspection and remediation activities.

Among the field-verifiable initiatives, SH-1 (Covered Conductor) and SH-2 (Undergrounding) did not meet their installation targets due to environmental, permitting, and execution constraints. Field inspections for both revealed a mix of conforming and non-conforming installations. SH-5 (RAR Settings), SH-6 (CB Relay Fast Curve), SH-8 (Transmission Open Phase Detection), SH-14 (Long Spans), and SH-16 (Vibration Dampers) met their respective targets, though some included non-conformances. SH-17 (REFCL at Banducci) and SH-18 (Ground Conversion) did not meet their construction targets due to long-lead material delays and land acquisition issues, respectively. While no risk reduction was achieved for these two initiatives in 2024, the IE found the delays to be logistical rather than compliance-related. SH-10 (Tree Attachments Remediation) is pending full review, but funding was verified. Across all initiatives, the IE found that record-keeping and data management were sufficient and provided recommendations to strengthen quality assurance protocols, improve scheduling resilience, and enhance coordination for deferred work.

Synthesis of Findings – Funding Verification

The IE assessed funding compliance across all Grid Design, Operations, and Maintenance initiatives by comparing planned and actual expenditures. For IN-1.1, IN-1.2a, IN-1.2b, IN-3, and IN-4, variances in CAPEX and O&M were attributed to changes in inspection volume, reclassification of drone and air operations costs, and contractor support. IN-5, IN-9a, and IN-9b showed underspending due to fewer remediation needs and operational efficiencies. IN-8 overspent in O&M due to added features and redesigns, while integration was delayed to 2025.

For SH-1, both CAPEX and O&M were underspent due to fewer miles completed and a journal entry correction related to joint utility testing. SH-2 had no discrepancies in CAPEX or O&M. SH-5 underspent in CAPEX due to fewer installations than forecasted. SH-6 experienced a CAPEX underrun and O&M overrun due to project reclassification and scope changes. SH-8 overspent in O&M due to vendor payments for prior-year work. SH-14 underspent due to the use of less expensive components and internal resources. SH-16 showed a CAPEX underspend due to accounting misclassification. SH-17 and SH-18 also underspent, primarily due to delays in material procurement, land access, and the fact that assets were not yet commissioned. SH-10 showed a CAPEX overspend, attributed to higher material and contractor costs. Across all initiatives, the IE verified that expenditures were appropriately tracked and aligned with initiative execution. The funding patterns were considered reflective of the 2024 initiative portfolio, with no discrepancies requiring further explanation.

4.2 Vegetation Management and Inspections

This section presents the initiatives categorized under Vegetation Management and Inspections in the 2024 WMP. It identifies the initiatives reviewed by the IE, outlines their field verification status, and describes the methodology used to assess implementation and funding compliance.

4.2.1 Initiative Summary Table

Table 4-2 provides a summary of the initiatives evaluated under the Vegetation Management and Inspections category. The table includes initiative-specific details such as targets, claimed progress, verification methods, sample validation rates, and funding data. It also presents the IE's findings on initiative performance and whether each initiative met its intended risk reduction goal. The subsequent sections describe these findings in additional detail.

Table 4-2: Initiative Summary Table – Vegetation Management and Inspections

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate (%)[29]	Verification Method	IE Finding on Initiative	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?
VM-9 WMP 8.2.2.4.1 LiDAR Vegetation Inspections – Distribution	Inspect at least 1,020 HFRA circuit miles	1,131	Target met	23	100%	Desk review	111%	$1,497,907	$14,088,070 (841%)	Yes (100%)
VM-10 WMP 8.2.2.4.1 LiDAR Vegetation Inspections – Transmission	Inspect at least 1,500 HFRA circuit miles	3,181	Target met	23	100%	Desk review	212%	$5,789,542	$11,124,288 (92%)	Yes (100%)
VM-2 WMP 8.2.3.1.1 Structure Brushing	Inspect and clear (where clearance is needed) 63,700 structures, with the exception of structures for which there are customer access or environmental constraints	116,388	Target met	22	100%	Desk review	183%	$25,915,392	$17,102,057 (-34%)	Yes (100%)

[29] Sample Validation Rate = (IE verified or reviewed) / (Sample size required). It is used to calculate the initiative validation rate as Initiative Validation Rate = (Sample validation rate) * (SCE claimed progress / Initiative target population), based on the 2024 IE ARC Outline, Section 2.4.

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate (%)[29]	Verification Method	IE Finding on Initiative	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?
VM-7 WMP 8.2.3.3.1 Detailed inspections and management practices for vegetation clearances around Distribution electrical lines, and equipment	Inspect 770 grids within our distribution system	778	Target met	23	100%	Desk review	101%	$216,394,452	$193,573,261 (-11%)	Yes (100%)
VM-8 WMP 8.2.3.3.1 Detailed inspections and management practices for vegetation clearances around Transmission electrical lines, and equipment	Inspect 416 circuits within transmission system	430	Target met	23	100%	Desk review	103%	$21,120,459	$12,691,133 (-40%)	Yes (100%)
VM-3 WMP 8.2.3.3.2 Expanded Clearances for Legacy Facilities	Perform vegetation treatment and maintenance to 50 sites	70	Target met	19	100%	Desk review	140%	$830,000	$519,449 (-37%)	Yes (100%)
VM-6 WMP 8.2.4 Vegetation Work Mgmt Tool	Monitor stabilization of Arbora and develop plan and begin execution of plan to enable additional VM maintenance programs	N/A[30]	Target met	1	100%	Desk review	Target not quantified in the initiative	$4,000,034	$2,147,428 (-46%)	Yes (100%)
VM-1 WMP 8.2.3.4.1 Hazard Tree Management	Inspect 408 grids/circuits and prescribe mitigation for hazardous trees with strike potential within those grids in SCE's HFRA	430	Target met	72	99%	Field Inspection	104%	$49,896,476	$10,958,113 (-78%)	Yes (100%)

[30] Target is not quantified in the SCE WMP initiative.

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate (%)[29]	Verification Method	IE Finding on Initiative	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?
VM-4 WMP 8.2.3.4.2 Dead and Dying Tree Removal	Inspect 485 grids/circuits and prescribe mitigation for dead and dying trees with strike potential along those circuits	581	Target met	73	100%	Field Inspection	120%	$27,601,487	$15,662,675 (-43%)	Yes (100%)

4.2.2 VM-9 LiDAR Vegetation Inspections – Distribution

EC Tracking ID: VM-9

WMP Section Number: 8.2.2.4.1

WMP Initiative Name: LiDAR Vegetation Inspections – Distribution

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

SCE conducts LiDAR inspections to identify vegetation intrusions along distribution lines. These inspections are typically completed annually and inform proactive maintenance work. The QA/QC documentation refers to processing of LiDAR results and integration into work management systems for validation. This initiative uses LiDAR technology to identify vegetation encroachments on distribution lines. It supports proactive vegetation management through remote sensing and data analytics.

In 2024, SCE conducted LiDAR scans across 1,020 HFRA miles of distribution circuits. The data collected was processed to identify vegetation within the grow-in threshold. These results were integrated into the vegetation management system for review and resolution.

Finding: Based on the evidence provided, the IE has reasonable assurance SCE met and exceeded its 2024 target (111% completed) to inspect at least 1,020 HFRA circuit miles.

Funding Verification – Findings

Refer to Table 4-2, the IE verified that the funding of LiDAR Vegetation Inspections – Distribution presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for CAPEX. Regarding the overspend of O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf, SCE 2024 ARC Attachment B_Supplemental.xlsx*** and ***IE05-SCE-2024 -Funding Questions Q.01-09 Answer.pdf*** in response to a data request that the overrun was due to an expanded LiDAR scope and unbudgeted digital modeling baseline work, as SCE accelerated inspections to avoid potential contractor rate increases from unionization talks and hired a vendor to process and QA/QC LiDAR data to support the transition—costs not originally included in the budget. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the overspend of O&M was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.2.3 VM-10 LiDAR Vegetation Inspections – Transmission

EC Tracking ID: VM-10

WMP Section Number: 8.2.2.4.1

WMP Initiative Name: LiDAR Vegetation Inspections – Transmission

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

LiDAR inspections on transmission circuits help identify grow-in vegetation threats and prioritize trimming or removals. These inspections are referenced in program overviews as a key input into transmission vegetation risk mitigation planning. LiDAR initiatives leverage remote sensing to identify vegetation encroachments on transmission lines.

In 2024, SCE conducted LiDAR scans across 1,500 HFRA miles of distribution circuits. The data collected was processed to identify vegetation within the grow-in threshold. These results were integrated into the vegetation management system for review and resolution.

Finding: Based on the evidence provided, the IE has reasonable assurance SCE met its 2024 target to conduct LiDAR scans across 1,500 HFRA miles of distribution circuits.

Funding Verification – Findings

Refer to Table 4-2, the IE verified that the funding of LiDAR Vegetation Inspections – Transmission presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for CAPEX. Regarding the overspend of O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf, SCE 2024 ARC Attachment B_Supplemental.xlsx*** and ***IE05-SCE-2024 -Funding Questions Q.01-09 Answer.pdf*** in response to a data request that the overrun was due to an expanded LiDAR scope and unbudgeted digital modeling baseline work, as SCE accelerated inspections to avoid potential contractor rate increases from unionization talks and hired a vendor to process and QA/QC LiDAR data to support the transition—costs not originally included in the budget. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the overspend of O&M was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.2.4 VM-2 Structure Brushing

EC Tracking ID: VM-2

WMP Section Number: 8.2.3.1.1

WMP Initiative Name: Structure Brushing

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

VM-2 involves brushing vegetation around distribution poles and structures within 10 feet of the base to comply with PRC 4292. Structure brushing activities are reviewed through SCE's QA/QC program, which includes documentation verification and sampling. For 2024, the QA/QC program targeted a monthly sampling rate sufficient to achieve 99/2 confidence and precision. This effort ensures consistent application of brushing criteria and supports overall system safety objectives. Structure brushing involves the clearing of vegetation around poles and structures to reduce the risk of wildfire ignition.

The initiative experienced a delayed rollout in Q1 2024 due to revisions in criteria and sampling targets. Nevertheless, the brushing program achieved monthly execution aligned with performance expectations in subsequent quarters.

Supporting documentation, including a detailed spreadsheet of structure entries inspected by QC in 2024 (***VM-2 Structure Brushing.xlsx)*** was referenced. Work order data was also reviewed, file name: ***IE09-SCE-2024 Q.07. VM-2.pdf.***

The IE reviewed two SME interviews conducted on May 19 and May 23, 2025.

QA/QC applied a combination of manual review of work orders and Excel-based pivot tables to ensure representative monthly selection and result tracking.

Findings: Of the samples that the IE reviewed, 100% passed. Based on the evidence provided, the IE has reasonable assurance SCE met its 2024 target to complete 183% of their goal for structure brushing treatments.

Funding Verification – Findings

Refer to Table 4-2, the IE verified that the funding of Structure Brushing presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for CAPEX. Regarding the underspend of O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** that the underrun is due to a budget forecast based on a higher volume of work. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the underspend of O&M was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.2.5 VM-7 Vegetation Inspection and Management - Distribution

EC Tracking ID: VM-7

WMP Section Number: 8.2.3.3.1

WMP Initiative Name: Detailed inspections and management practices for vegetation clearances around Distribution electrical lines, and equipment

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

The QA function within SCE's Vegetation Management Program reviews contractor and internal operations through documentation-based audits. QA leads examine work packages, verify evidence submissions, and track trends across vendors and regions. QA efforts are internally reported and used to shape training and corrective measures. The program ensures work aligns with approved standards and is consistently documented for oversight. This initiative governs the quality assurance of distribution-level vegetation management activities, including internal audits and contractor oversight.

QA responsibilities are held by two senior advisors who review internal assessments, generate corrective actions, and vet evidence before submission. These roles are defined functionally rather than procedurally in UVMO documentation. Internal assessments are structured but not publicly benchmarked. Oversight is informed by interactions with field personnel and contractor meetings.

Finding: Based on the evidence provided, QA activities demonstrate organizational commitment but require clearer performance benchmarks to substantiate outcomes.

Funding Verification – Findings

Refer to Table 4-2, the IE verified that the funding of Vegetation Inspection and Management for Distribution Line presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for CAPEX. Regarding the underspend of O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** that the underrun in routine trims and removals was due to a lower-than-expected tree growth rate, which led to a reduced prescription rate despite expanded clearance and removal efforts. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the underspend of O&M was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.2.6 VM-8 Vegetation Inspection and Management - Transmission

EC Tracking ID: VM-8

WMP Section Number: 8.2.3.3.1

WMP Initiative Name: Detailed inspections and management practices for vegetation clearances around Transmission electrical lines, and equipment

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

SCE maintains VM QA/QC program that ensures vegetation maintenance (including inspections, pruning, and removals) is conducted to company standard. Work is performed by contractors and reviewed through a comprehensive QC methodology. QC inspections are carried out by qualified personnel who are organizationally independent from operations. Inspectors are ISA-certified arborists who confirm that vegetation clearances meet program standards.

QC is led by a dedicated senior advisor supported by 25–40 contracted inspectors from a single vendor. The program uses a monthly schedule and tracks pass/fail rates. QC inspectors undergo a PQS-based qualification program. Work results are tracked via a dashboard and are discussed monthly with vendors to monitor performance. In 2024, a total of 430 circuits were inspected under the distribution vegetation QC program, with a compliance rate of 100%.

Documents reviewed include ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx.***

Finding: Based on the evidence provided, the IE has reasonable assurance SCE met its 2024 target to inspect 416 circuits within the transmission system.

Funding Verification – Findings

Refer to Table 4-2, the IE verified that the funding of Vegetation Inspection and Management for Transmission Lines presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for CAPEX. Regarding the underspend of O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** that the underrun in routine trims and removals was due to a lower-than-expected tree growth rate, which led to a reduced prescription rate despite expanded clearance and removal efforts. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the underspend of O&M was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.2.7 VM-3 Expanded Clearances for Legacy Facilities

EC Tracking ID: VM-3

WMP Section Number: 8.2.3.3.2

WMP Initiative Name: Expanded Clearances for Legacy Facilities

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

The expanded clearance initiative for legacy facilities addresses older infrastructure that may not have been built to current vegetation clearance standards. SCE identifies applicable sites and applies enhanced clearance protocols. This initiative targets enhanced clearance practices around legacy infrastructure to reduce ignition risk.

Documents reviewed include ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx.***

Findings: Based on the evidence provided, the IE has reasonable assurance SCE met its 2024 target to perform vegetation treatment and maintenance to 50 sites.

Funding Verification – Findings

Refer to Table 4-2, the IE verified that the funding of Expanded Clearances for Legacy Facilities presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for CAPEX. Regarding the underspend of O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** that the underrun was due to efficiency gains in the fifth year of the expanded clearance program, as many sites had been previously treated effectively, resulting in lower-than-expected find rates and fewer treatments needed in 2024. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the underspend of O&M was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.2.8 VM-1 Hazard Tree Management

EC Tracking ID: VM-3

WMP Section Number: 8.2.3.4.1

WMP Initiative Name: Hazard Tree Management

Initiative Type: Focus & Field verifiable

Initiative Review – Findings & Method

Findings

The 2024 target of 408 grids/circuits was met. SCE completed 437, according to SCE's WMP and ARC, ***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf*** and ***SCE 2024 WMP ARC.pdf***. The IE converted the units of grids/circuits to number of trees to more consistently identify field samples. Out of 72 field samples inspected, 71 passed and 1 failed, resulting in a sample validation rate of 99%. Non-conformances are documented in Attachment 7.5, including photographic evidence.

The evaluation for the initiative was completed within ±5% of their approved WMP targets, based on IE sample validation. There were potential strike risks identified near the sampled tree locations, but those risks were not observed on the trees mediated during the 2024 WMP cycle. While the majority of inspected sites demonstrated appropriate hazard mitigation, several observations indicate areas for improvement.

Record-keeping and data management for this initiative is sufficient. Documentation is generally well-organized and traceable. However, some inconsistencies between work order descriptions and field outcomes (e.g., trimming requested but removal performed) suggest a need for improved alignment between field execution and recorded intent.

Finding, Observations, and Risk Areas:

- At several locations, no evidence of recent tree removals was observed. Before/after photographs from the time of inspection and remediation were provided by SCE to inform field samples where the removed tree was not identified by the IE.
- Field inspections revealed discrepancies between documented work orders and observed outcomes. In multiple cases, work order indicated trimming, yet field evidence showed full tree removal. These inconsistencies suggest a need for improved alignment between recorded intent and actual field execution
- Trees with visible structural defects—such as dead tops, poor health, or codominant stems—were observed left in place. In multiple locations, topped trees were regrowing with weak, unstable structures, continuing to pose a strike risk to nearby conductors.
- Routine trimming was frequently applied in situations where full removal would have been more appropriate. Small-diameter trees were topped rather than removed, contributing to increased fuel accumulation directly beneath overhead lines.
- Eucalyptus trees were pruned but not removed at several sites. These trees remain within strike distance and retain the potential to fail under stress.

- In many instances, VM-1 work was difficult to distinguish from routine vegetation maintenance. The lack of clear differentiation reduced the visibility of hazard-specific mitigation efforts. Additionally, some accessible areas with chipper access showed no evidence of recent hazard treatment.

Recommendations for Improvement:

- To improve traceability and verification of vegetation management work, SCE should consider a method to visually mark trees designated for removal or pruning—such as temporary spray paint or tagging—at the time of identification. This would help field inspectors accurately match work records to specific trees, especially in areas with dense vegetation or where GIS data may have limited precision.
- For future evaluations of field-verifiable initiatives, SCE should provide associated work orders and before/after photos after the field-verifiable initiatives have been selected and locations sampled. This documentation would significantly improve the efficiency and accuracy of field verification by enabling direct comparison between reported work and observed conditions.

- Strengthen quality assurance protocols to reduce field inspection failure rates.
- Evaluate whether drought cycles are influencing year-to-year variance

Method & Evidence

For this initiative, samples were verified in the field through ground inspections of visible and accessible structures. For VM-1 and VM-4, the sampling process was based on the total number of mitigated trees, with data tied to specific grid locations. The process involved calculating a sample size from the total mitigated trees, generating a randomized list of tree locations, and selecting grids that contain those trees until the desired sample size is reached. This method ensures representative coverage across a subset of grids.

The IE evaluated trees against applicable regulatory and utility standards, including GO 95, Rule 35, Tree Trimming Guidance.

SCE submitted an initial set of evidence, ***VM-1 Hazard Tree Management Program_Inspections.xlsx***, containing the list of trees remediated in 2024. Additionally, the IE submitted data requests to SCE for documentation elaborating on the work order of the intended work, to validate field findings and non-conformities. SCE responded with ***IE13-SCE-2024_Q.01_VM-1.pdf***. Overall, the documentation was sufficient to support the verification.

Additional documents reviewed include ***IE017-SCE-2024 VM-1 Q.1 & 2 – Answer, IE06-SCE-2024-Veg Work Orders Q. 01 Answer, IE06-SCE-2024-Veg Work Orders_Q.01, IE10-SCE-2024_Q.05_VM-1, IE13-SCE-2024_Q.01_VM-1, IE15-SCE-2024 Q. 6 VM Answer*** and ***IE16-SCE-2024 Q.04 VM-1, VM-4 Answer***.

No SME interviews were required for evaluation of VM-1.

Funding Verification – Findings

Refer to Table 4-2, the IE verified that the funding of Hazard Tree Management presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for CAPEX. Regarding the underspend of O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** that the expense underrun for hazard tree mitigation and removals was primarily due to fewer hazard tree conditions found in HFRA circuits than forecasted, resulting in a lower prescription rate, and lower-than-expected participation in the property owner incentive program offering utility-friendly trees. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the underspend of O&M was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.2.9 VM-4 Dead and Dying Tree Removal

EC Tracking ID: VM-4

WMP Section Number: 8.2.3.4.2

WMP Initiative Name: Dead and Dying Tree Removal

Initiative Type: Focus & Field verifiable

Initiative Review – Findings & Method

Findings

The 2024 target of 485 grids/circuits was met. SCE completed 581, according to SCE's WMP and ARC, ***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf*** and ***SCE 2024 WMP ARC.pdf***. Out of 73 field samples inspected, 73 passed and 0 failed, resulting in a sample validation rate of 100%.

Yes, the risk reduction goal was met. There were potential strike risks identified near the sampled tree locations, but those risks were not observed on the trees mediated during the 2024 WMP cycle.

Record-keeping and data management for this initiative is sufficient.

Finding, Observations, and Risk Areas:

- Field inspections documented instances where trees, including eucalyptus and pine species with co-dominant leaders and poor structure, were pruned or topped rather than removed. These trees remain in proximity to conductors and retain the potential to contact lines.

- At several locations, no evidence of recent tree removals was observed. Before/after photographs from the time of inspection and remediation were provided by SCE to inform field samples where the removed tree was not identified by the IE.

Recommendations for Improvement:

- To improve traceability and verification of vegetation management work, SCE should consider implementing a method to visually mark trees designated for removal or pruning—such as temporary spray paint or tagging—at the time of identification. This would help field verifiers accurately match work records to specific trees, especially in areas with dense vegetation or where GIS data may have limited precision.
- For future evaluations of field-verifiable initiatives, SCE should provide associated work orders and before/after photos after the field-verifiable initiatives have been selected and locations sampled. This documentation would significantly improve the efficiency and accuracy of field verification by enabling direct comparison between reported work and observed conditions.
- Strengthen quality assurance protocols to reduce field inspection failure rates.
- Refine target setting by tying to latest mortality mapping
- Evaluate whether drought cycles are influencing year-to-year variance

Method & Evidence

For this initiative, samples were verified in the field through ground inspections of visible and accessible structures. For VM-1 and VM-4, the sampling process was based on the total number of mitigated trees, with data tied to specific grid locations. The process involved calculating a sample size from the total mitigated trees, generating a randomized list of tree locations, and selecting grids that contain those trees until the desired sample size is reached. This method ensures representative coverage across a subset of grids.

The IE evaluated trees against applicable regulatory and utility standards, including GO 95, Rule 35, Tree Trimming Guidance.

SCE submitted an initial set of evidence, ***VM-4 Dead and Dying Tree Removal_Inspections.xlsx***, containing the list of trees remediated in 2024. Additionally, the IE submitted data requests to SCE for documentation elaborating on the work order of the intended work, to validate field findings and non-conformities. SCE responded with ***IE13-SCE-2024_Q.02-VM-4.pdf***. Overall, the documentation was sufficient to support the verification.

Additional documents reviewed include ***IE06-SCE-2024-Veg Work Orders Q. 01 Answer, IE06-SCE-2024-Veg Work Orders_Q.01, IE10-SCE-2024_Q.06_VM-4, IE13-SCE-2024_Q.02_VM-4, IE15-SCE-2024 Q. 6 VM Answer*** and ***IE16-SCE-2024 Q.04 VM-1, VM-4 Answer***

No SME interviews were required for evaluation of VM-4.

Funding Verification – Findings

Refer to Table 4-2, the IE verified that the funding of Dead and Dying Tree Removal presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for CAPEX. Regarding the underspend of O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** that the underrun related to fewer dead and dying trees that needed to be removed than originally forecasted. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the underspend of O&M was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.2.10 VM-6 Vegetation Work Management Tool

EC Tracking ID: VM-6

WMP Section Number: 8.2.4

WMP Initiative Name: Vegetation Work Management Tool

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

The Vegetation Work Management Tool supports planning, execution, and QA/QC of vegetation tasks. It tracks unit completions, compiles photos and documentation to each work order, and integrates with PQS records for trained personnel. QA/QC staff use the tool to validate contractor compliance, monitor progress, and ensure that mitigation goals are documented and evidenced for regulatory purposes. In 2024, SCE integrated the Abora system to enhance real-time visibility and analytics. Abora serves as the platform for both QA/QC monitoring and work order management, allowing for digital documentation, tagging of exceptions, and centralized audit trails.

Based on interviews, the platform integrates with the PQS (Performance Qualification System) used for training and certifying senior specialists. Approximately 45 internal staff are qualified via PQS, incorporating document-based training and field assessments. The platform supports role-based access and dashboards for assigning work and reviewing contractor performance. QA staff use it to monitor trends and verify evidence before regulatory submissions.

Again, in 2024, SCE incorporated the Abora system, which enhanced the functionality of work management platform by supporting the documentation, tracking, and review of QA/QC activities. Abora provides a clear centralized view of digital records, issues tracking, and performance dashboards all of which are aimed at strengthening oversight across vendors and internal staff.

Documents reviewed include ***VM-6 Work Management Tool.pdf, SCE 2024 ARC Attachment B_Supplemental.xlsx,*** and ***SCE 2024 ARC Attachment B_Redline.pdf.***

Findings: Based on the evidence provided, the tool appears robust from a compliance process standpoint. However, effectiveness in reducing risk cannot be assessed without direct validation of its outputs which were not directly provided to the IE.

Funding Verification – Findings

Refer to Table 4-2, the IE verified that the funding of Vegetation Work Management Tool presented in the table is being tracked appropriately. Regarding the overspend of CAPEX and the underspend of O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf***, ***SCE 2024 ARC Attachment B_Supplemental.xlsx***, ***IE05-SCE-2024 -Funding Questions Q.01-09 Answer.pdf*** in response to a data request and ***IE011-SCE-2024 Q. 04-06 IN-5, SA-11, VM-6 Answer.pdf*** in response to a data request that the capital overrun was due to an accelerated rollout of Arbora and the advancement of TCS and Salesforce Professional Services work from 2025 to 2024, while the O&M underrun occurred because some originally budgeted O&M costs were reclassified as capital to support system development.. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the overspend of CAPEX and the underspend of O&M were reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.2.11 Synthesis of Findings

Synthesis of Findings – Initiative Review

The IE reviewed ten initiatives under the Vegetation Management and Inspections category of the 2024 WMP. All initiatives were verified through field inspections or desk reviews, with most meeting or exceeding their stated targets.

- VM-1 (Hazard Tree Management) and VM-4 (Dead and Dying Tree Removal) were field-verifiable initiatives. Both met their 2024 targets, with field inspections conducted to validate performance. Non-

conformances were documented in Attachment 7.5. The IE found record-keeping sufficient and recommended strengthening QA protocols to reduce inspection failure rates.

- VM-2 (Structure Brushing) exceeded its target, completing 183% of planned treatments. QA/QC documentation, work orders, and SME interviews confirmed a 100% sample pass rate.
- VM-3 (Expanded Clearances for Legacy Facilities) met its target of treating 50 sites. The IE noted efficiency gains in 2024 due to prior years' work reducing the need for additional treatments.
- VM-6 (Vegetation Work Management Tool) achieved its goal of integrating the Arbora system to enhance real-time visibility, QA/QC tracking, and centralized documentation. While the tool was found robust from a compliance standpoint, the IE noted that its direct impact on risk reduction could not be assessed without output validation.
- VM-7 (Vegetation Inspection and Management for Distribution Lines) met its target of inspecting 770 grids. QA activities demonstrated organizational commitment, though the IE recommended clearer performance benchmarks to substantiate outcomes.
- VM-8 (Vegetation Inspection and Management for Transmission Lines) met its target of inspecting 416 circuits. The IE confirmed a 100% compliance rate and validated the effectiveness of the QA/QC program.
- VM-9 and VM-10 (LiDAR Inspections for Distribution and Transmission) exceeded their circuit mile inspection targets. The IE confirmed that LiDAR data was processed and integrated into vegetation management systems to support proactive maintenance.

Based on the evidence reviewed, the IE found reasonable assurance that all initiatives achieved their implementation goals and contributed to wildfire risk mitigation.

Synthesis of Findings – Funding Verification

The IE verified funding compliance for all Vegetation Management and Inspections initiatives by comparing planned and actual expenditures:

- VM-1, VM-2, VM-3, VM-4, VM-7, and VM-8 reported underspending, with variances ranging from 10% to over 78%. These underruns were attributed to reduced contractor usage, lower-than-expected tree growth rates, and efficiency gains from prior years. For VM-1, the lower prescription rate and limited participation in the property owner incentive program contributed to the underspend.
- VM-6 reported a CAPEX overspend and O&M underspend. The overspend was due to the accelerated rollout of the Arbora platform and advancement of related system development work. The O&M underrun resulted from reclassification of some originally budgeted O&M costs as capital.
- VM-9 and VM-10 reported significant O&M overspending. The IE attributed this to expanded LiDAR scope, unbudgeted digital modeling work, and vendor costs for QA/QC and data processing. These costs were not originally included in the budget but were necessary to support accelerated inspections and mitigate potential contractor rate increases.

Despite these variances, the IE confirmed that all expenditures were appropriately tracked and aligned with initiative execution. The funding patterns were considered reflective of the 2024 initiative portfolio, with no discrepancies requiring further explanation.

4.3 Situational Awareness and Forecasting

This section presents the initiatives categorized under Situational Awareness and Forecasting in the 2024 WMP. It identifies which initiatives were evaluated by the IE, outlines their field verification status, and describes the methodology used to assess implementation and funding compliance.

4.3.1 Initiative Summary Table

Table 4-3 summarizes the initiatives evaluated under the Situational Awareness and Forecasting category of the 2024 WMP. The table provides initiative-specific details such as targets, claimed progress, verification methods, sample validation rates, and funding data. It also includes the IE's findings on initiative performance and whether each initiative met its intended risk reduction goal. The subsequent sections describe these findings in additional detail.

Table 4-3: Initiative Summary Table – Situational Awareness and Forecasting

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate (%)[31]	Verification Method	IE Finding on Initiative	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?
SA-1 WMP 8.3.2.1.1 Weather Stations	Install 50 weather stations in SCE's HFRA	55	Target met	18	100%	Desk review	110%	$5,590,881	$5,517,959 (-1%)	Yes (100%)
SA-11 WMP 8.3.3.1.1 Early Fault Detection	Install Early Fault Detection (EFD) at 50 locations	53	Target met	18	100%	Desk review	106%	$363,000	$55,774.93 (-85%)	Yes (100%)
SA-10 WMP 8.3.4.1.1 High Definition (HD) Cameras	Install 10 HD Cameras	10	Target met	10	100%	Desk review	100%	$4,664,823	$3,431,590 (-26%)	Yes (100%)
SA-8 WMP 8.3.4.1.2; 8.3.4.1.3 Fire Science	Provide vendor with analytics report and work with the vendor to complete a plan on future improvements	N/A[32]	Target met	1	100%	Desk review	Target not quantified in the initiative	$2,360,264	$2,482,887 (5%)	Yes (100%)
SA-3 WMP 8.3.5 Weather and Fuels Modeling	Equip 200 weather station locations with machine learning capabilities	441	Target met	23	100%	Desk review	221%	$5,951,601	$6,492,959 (9%)	Yes (100%)

[31] Sample Validation Rate = (IE verified or reviewed) / (Sample size required). It is used to calculate the initiative validation rate as Initiative Validation Rate = (Sample validation rate) * (SCE claimed progress / Initiative target population), based on the 2024 IE ARC Outline, Section 2.4.
[32] Target is not quantified in the SCE WMP initiative.

4.3.2 SA-1 Weather Stations

EC Tracking ID: SA-1

WMP Section Number: 8.3.2.1.1

WMP Initiative Name: Weather Stations

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

In section 8.3.2.1.1 of the SCE 2023-2025 WMP (**SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf)**, SCE included the objective to install 50 weather stations in SCE's HFRA. SCE Reported that the target was met by installing 55 weather stations in HFRA in 2024.

To verify the inspections were performed, the IE reviewed ***SA-1 Weather Station.xlsx*** provided by SCE and created a sample set, submitting a data request to request 18 samples of installation records to demonstrate, through work orders that the work was completed in 2024. SCE provided a response in document ***IE012-SCE-2024 Q. 01 SA-1 Answer.pdf*** that the work was tracked through SCE's WiSDM System and showing complete in the system for each work order.

Finding: Based upon the evidence reviewed, the IE has reasonable assurance that SCE met its target for installing 50 weather stations in SCE's HFRA in 2024.

Funding Verification – Findings

Refer to Table 4-3, the IE verified that the funding of Weather Stations presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for O&M. Regarding the overspend of CAPEX, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf***, ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** and ***IE05-SCE-2024 -Funding Questions Q.01-09 Answer.pdf*** in response to a data request that SCE exceeded the SA-1 WMP target by installing 55 units in 2024, with costs aligning to the revised $2.4 million budget—up from $1.2 million—due to increased labor and material costs, network and battery upgrades, higher transmission installation expenses, and a pilot to evaluate alternative communication vendors. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the overspend of CAPEX was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.3.3 SA-11 Early Fault Detection

EC Tracking ID: SA-11

WMP Section Number: 8.3.3.1.1

WMP Initiative Name: Early Fault Detection

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

In section 8.3.3.1.1 of the SCE 2023–2025 Wildfire Mitigation Plan (**SCE 2023–2025 WMP R3.1, (November 14, 2024).pdf**), SCE identified the objective to install EFD devices at 50 locations within its HFRAs as part of its situational awareness strategy. SCE reported that the target was met by installing 53 EFD units in 2024.

To verify the installations were performed, the IE reviewed documentation provided by SCE and created a sample set, selecting 18 samples of installation records to demonstrate that the work was completed in 2024. The verification was conducted through a desk review, as the initiative is non-focus and non-field verifiable. SCE's documentation indicated that the installations were tracked and completed as reported.

Finding: Based on the evidence reviewed, the IE has reasonable assurance that SCE achieved its 2024 target of installing EFD devices at 50 locations. While the initiative slightly exceeded its target with 53 installations, the IE notes that the risk reduction impact is dependent on the ongoing performance and integration of these devices into SCE's broader monitoring and response systems. No discrepancies were observed in the documentation.

Funding Verification – Findings

Refer to Table 4-3, the IE verified that the funding of Weather Stations presented in the table is being tracked appropriately. Regarding the underspend of CAPEX and O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf***, ***SCE 2024 ARC Attachment B_Supplemental.xlsx***, ***IE05-SCE-2024 -Funding Questions Q.01-09 Answer.pdf*** in response to a data request and ***IE011-SCE-2024 Q. 04-06 IN-5, SA-11, VM-6 Answer.pdf*** in response to a data request that the budget was based on the strive goal of 100 units while the compliance goal was 50 units, resulting the underrun; while the O&M underrun resulted from fewer field crew deployments, and the budget was based on the higher strive target as part of standard planning practice. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the overspend of CAPEX was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.3.4 SA-10 High Definition (HD) Cameras

EC Tracking ID: SA-10

WMP Section Number: 8.3.4.1.1

WMP Initiative Name: High Definition (HD) Cameras

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

In Table 8-23 of the SCE 2023-2025 WMP (***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf)***, SCE details their targets for installing HD cameras. SCE identifies their 2023 target to install 10 HD cameras and strive to install up to 20 HD cameras, subject to resource and execution constraints. SCE identifies their 2024 target to install 10 HD cameras and to strive to install up to 20 HD cameras. In 2025, SCE did not identify any additional planned installations.

In their 2024 Wildfire Mitigation Plan Annual Report on Compliance ***(SCE 2024 WMP ARC.pdf)***, SCE described their target verification for SA-10. SCE aggregated and assessed initiative completion data from its systems of record. The data was extracted into a year-end evidence spreadsheet to confirm performance outcome.

To verify the materials, the IE team examined the year-end evidence spreadsheet to conform performance outcomes and the installation of 10 HD cameras.

Finding: Based on the evidence reviewed in the year-end evidence spreadsheet ***(SA-10 HD Cameras.xlsx)***, the IE has reasonable assurance that SCE achieved its target of installing 10 HD cameras.

Funding Verification – Findings

Refer to Table 4-3, the IE verified that the funding of HD Cameras presented in the table is being tracked appropriately. Regarding the underspend of CAPEX and O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf***, ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** and ***IE05-SCE-2024 -Funding Questions Q.01-09 Answer.pdf*** in response to a data request that SCE installed 10 of the 20 budgeted units in 2024, spending $90K against a $131K capital budget—though a journal entry error temporarily showed a credit, which has since been corrected. On the O&M side, maintenance was performed on 200 of the 226 budgeted cameras, resulting in lower software and data service costs and contributing to the underrun. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the underspend of CAPEX and O&M, was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.3.5 SA-8 Fire Science

EC Tracking ID: SA-8

WMP Section Number: 8.3.4.1.2; 8.3.4.1.3

WMP Initiative Name: Fire Science

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

In sections 8.3.4.1.2 and 8.3.4.1.3 of the SCE 2023–2025 WMP (**SCE 2023–2025 WMP R3.1 (November 14, 2024).pdf**), SCE outlined their target to provide a vendor with an analytics report and collaborate on a plan for future improvements in fire science capabilities. This initiative did not involve physical installations or fieldwork but focused on analytical and planning deliverables.

SCE reported that the target was met in 2024. To verify this, the IE conducted a desk review of the documentation provided by SCE. The review included a single sample, which was evaluated to confirm that the deliverables were completed as described. Given the nature of the initiative, which is non-field verifiable, the verification relied solely on documentation review rather than physical inspection.

Finding: Based on the documentation reviewed, the IE has reasonable assurance that SCE met its stated objective for the Fire Science initiative in 2024.

Funding Verification – Findings

Refer to Table 4-3, the IE verified that the funding of Weather Stations presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for CAPEX and O&M. Therefore, no additional explanation is required.

4.3.6 SA-3 Weather and Fuels Modeling

EC Tracking ID: SA-3

WMP Section Number: 8.3.5

WMP Initiative Name: Weather and Fuels Modeling

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

In Table 8-23 of the SCE 2023-2025 WMP (***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf)***, SCE details their targets for equipping 500 weather stations with machine learning capabilities and explains they will strive to equip 600 weather station locations with machine learning capabilities, subject to resource and execution constraints. SCE identifies their 2024 target to equip 200 weather station locations with machine learning capabilities and will strive to equip up to 300 weather station locations. In 2025, SCE plans to implement machine learning capabilities at remaining weather station locations that meet eligible criteria. To verify, SCE will provide a list and location of weather station locations that are equipped with machine learning capabilities.

In their 2024 Wildfire Mitigation Plan Annual Report on Compliance ***(SCE 2024 WMP ARC.pdf)***, SCE describes aggregating and assessing this initiative completion into a year-end evidence spreadsheet to confirm performance outcome.

To verify the materials, the IE team examined the year-end evidence spreadsheet, detailing the equipment of machine learning capabilities at weather stations.

Finding: Based on the evidence reviewed in the year-end evidence spreadsheet ***(SA-3 Weather and Fuels Modeling.csv)***, the IE has reasonable assurance that SCE achieved its target of equipping machine learning capabilities at 200 weather station locations.

Funding Verification – Findings

Refer to Table 4-3, the IE verified that the funding of Weather and Fuels Modeling presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for O&M.

Regarding the overspend of CAPEX, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** that the capital overrun was due to the unplanned integration of Baron Weather, which became necessary after SCE switched vendors from Heavy.AI to Baron Weather in late 2023, requiring system integration that was not included in the original General Rate Case (GRC)/WMP budget. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the overspend of CAPEX, was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.3.7 Synthesis of Findings

Synthesis of Findings – Initiative Review

The IE reviewed six initiatives under the Situational Awareness and Forecasting category of the 2024 WMP. All initiatives were verified through desk reviews and were classified as non-focus and non-field verifiable. Each initiative met or exceeded its stated implementation targets.

- SA-1 exceeded its target by installing 55 weather stations in SCE's HFRAs, surpassing the goal of 50. The IE reviewed installation records and confirmed completion through SCE's WiSDM system and supporting documentation.
- SA-3 exceeded its target by equipping 441 weather station locations with machine learning capabilities, more than double the planned 200. The IE validated the initiative through a year-end evidence spreadsheet and confirmed a 100% sample validation rate.
- SA-8 achieved its objective by delivering analytics reports and collaborating with vendors on future improvement plans. The IE reviewed documentation and confirmed the initiative was implemented as planned.
- SA-10 met its target by installing 10 HD cameras and implementing satellite and imaging technologies across 11 locations. The IE reviewed year-end evidence spreadsheets and confirmed the installations.
- SA-11 met its target by installing EFD at 53 locations, slightly exceeding the planned 50. The IE confirmed implementation through documentation and internal tracking systems.

Based on the evidence reviewed, the IE has reasonable assurance that all initiatives achieved their implementation goals and contributed to enhanced situational awareness and wildfire risk mitigation. No material discrepancies or performance gaps were identified during the review.

Synthesis of Findings – Funding Verification

The IE verified funding compliance for all Situational Awareness and Forecasting initiatives by comparing planned and actual expenditures:

- SA-1 reported a slight CAPEX overspend due to the installation of five additional weather stations and increased costs related to labor, materials, network upgrades, and a pilot program for alternative communication vendors. The overspend was deemed reasonable and aligned with the revised budget.
- SA-3 reported a CAPEX overspend due to the unplanned integration of Baron Weather following a vendor switch. The IE found the overspend justified and reflective of the initiative's expanded scope.
- SA-8 reported no discrepancies in CAPEX or O&M spending. The IE confirmed that expenditures were appropriately tracked and aligned with initiative execution.
- SA-10 reported a CAPEX and O&M underspend. The IE attributed this to the installation of only 10 of the 20 budgeted units and reduced maintenance activity, a corrected journal entry error. Maintenance was performed on 200 of the 226 budgeted cameras, resulting in lower software and data service costs.
- SA-11 showed significant underspending in both CAPEX and O&M. The IE attributed this to the budget being based on a higher "strive" target of 100 units, while the compliance goal was 50. Fewer field crew deployments also contributed to the O&M underrun.

Across all initiatives, the IE confirmed that expenditures were appropriately tracked and aligned with initiative execution. The funding patterns were considered reflective of the 2024 initiative portfolio, with no discrepancies requiring further explanation.

4.4 Emergency Preparedness

This section presents the initiatives categorized under Emergency Preparedness in the 2024 WMP. It identifies the initiatives reviewed by the IE, outlines their field verification status, and describes the methodology used to assess implementation and funding compliance.

4.4.1 Initiative Summary Table

Table 4-4 provides a summary of the initiatives evaluated under the Emergency Preparedness category. The table includes initiative-specific details such as targets, claimed progress, verification methods, sample validation rates, and funding data. It also presents the IE findings on initiative performance and whether each initiative met its intended risk reduction goal. The subsequent sections describe these findings in additional detail.

Table 4-4: Initiative Summary Table – *Emergency Preparedness*

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate (%)[33]	Verification Method	IE Finding on Initiative	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?
DEP-2 WMP 8.4.2.2.1 SCE Emergency Responder Training	PSPS response teams are fully qualified/requalified by 7/1 annually to maintain readiness	N/A[34]	Target met	1	100%	Desk review	Target not quantified in the initiative	$1,124,453	$239,089 (-79%)	Yes (100%)
DEP-5 WMP 8.4.3.3.1 Aerial suppression	continue to reassess availability and funding for aerial suppression resources in SCE's service area annually to determine ongoing QRF strategy	N/A[35]	Target met	1	100%	Desk review	Target not quantified in the initiative	$35,000,000	$36,059,374 (3%)	Yes (100%)
PSPS-2 WMP 8.4.6.2 Customer Care Programs (Critical care Backup Battery)	Complete 85% of battery deliveries to eligible customers within 30 calendar days of program enrollment, subject to customer availability, reschedule requests and battery supply constraints.	1	Target met	1	100%	Desk review	118%	$8,507,395	$7,699,919 (-9%)	Yes (100%)

[33] Sample Validation Rate = (IE verified or reviewed) / (Sample size required). It is used to calculate the initiative validation rate as Initiative Validation Rate = (Sample validation rate) * (SCE claimed progress / Initiative target population), based on the 2024 IE ARC Outline, Section 2.4.
[34] Target is not quantified in the SCE WMP initiative.
[35] Target is not quantified in the SCE WMP initiative.

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate (%)[33]	Verification Method	IE Finding on Initiative	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?
PSPS-3 WMP 8.4.6.3 Customer Care Programs (Portable Power Station and generation)	Process 85% of all rebate claims within 30 business days of receipt from website vendor; excluding website related delays and subject to receiving all required customer information	1	Target met	1	100%	Desk review	118%	$1,521,049	$1,044,234 (-31%)	Yes (100%)

4.4.2 DEP-2 SCE Emergency Responder Training

EC Tracking ID: DEP-2

WMP Section Number: 8.4.2.2.1

WMP Initiative Name: SCE Emergency Responder Training

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

Section 8.4.2.2.1 and Table 8-35 of ***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf*** and ***SCE 2024 WMP ARC.pdf*** demonstrated that SCE should ensure a qualified emergency response workforce by conducting annual technical and specialized training for employees, contractors, and key PSPS personnel, with training compliance actively tracked for core position in 2024. SCE reported that PSPS response teams are fully qualified/requalified by July 1st annually to maintain readiness.

To verify the training completion, the IE reviewed ***DEP-2 SCE Emergency Response Training.xlsx*** provided by SCE which included a total of 454 records of the employee position, training material title, completion date and time, and training delivery method. SCE's tracking training records against core PSPS positions indicated in Table 8-38 of ***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf*** was compiled in below table for comparison.

Table 4-5: Emergency Preparedness Staffing and Qualifications Comparison

<table>
<tr><th colspan="2">Training Records</th><th colspan="2">WMP Target</th></tr>
<tr><th>Training Title</th><th>No. of Staff Trained</th><th>Role</th><th>No. of Dedicated Staff</th></tr>
<tr><td rowspan="2">2024 PSPS Operation Section Task Force</td><td rowspan="2">74</td><td>PSPS Operations Section Chief</td><td>7</td></tr>
<tr><td>PSPS Task Force (Substation Tech Spec, GCC Liaison, PSPS Analyst, Transmission Tech Spec, Distribution Tech Spec, Operations Compliance Tech Spec)</td><td>60</td></tr>
<tr><td>PSPS Incident Commander (IC) Training</td><td>16</td><td>PSPS Incident Commander</td><td>9</td></tr>
<tr><td>PSPS Planning Section Training</td><td>25</td><td>Planning Section Chief</td><td>16</td></tr>
<tr><td>PSPS Annual General Refresher</td><td>17</td><td rowspan="3">Customer Care Branch (Customer Care Branch Director, Customer Notifications Group, Access and Functional Needs Group, Customer Outreach)</td><td rowspan="3">217</td></tr>
<tr><td>PSPS Public Information Officer, Liaison Officer, Customer Care & Customer Service Notifications Trainings</td><td>44</td></tr>
<tr><td>PSPS Exercises</td><td>278</td></tr>
</table>

By comparing side to side of training title and the staff counts, the IE observed that SCE performed more trainings than required regarding 4 training roles: PSPS Operations Section Chief, PSPS Task Force, PSPS Incident Commander and Customer Care Branch. While the training titles in the record file does not fully match with the WMP roles, the IE grouped the remaining 3 training titles of PSPS Annual General Refresher, PSPS Public Information Officer, Liaison Officer, Customer Care & Customer Service Notifications Training and

PSPS Exercises. The total combined staff count is 339 which exceeded the target of 217 in the customer care branch defined in the WMP Table 8-35. This finding was corroborated using SCE's 2024 PSPS Post-Season Report and internal After Action Review documents submitted in June 2025, both of which reinforced that all PSPS-designated personnel were qualified or requalified in advance of the July 1 readiness deadline.

Finding: Based on the documentations reviewed, the IE has reasonable assurance that SCE achieved its targets of having all PSPS members fully trained and qualified/requalified in 2024.

Funding Verification – Findings

Refer to Table 4-4, the IE verified that the funding SCE Emergency Responder Training presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for CAPEX. Regarding the underspend of O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** that SCE delivered 37 essential courses—focused on PSPS and wildfire risk—instead of the 49 originally forecasted, omitting less critical supplemental and hands-on sessions. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the underspend of O&M, was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.4.3 DEP-5 Aerial suppression

EC Tracking ID: DEP-5

WMP Section Number: 8.4.3.3.1

WMP Initiative Name: Aerial suppression

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

Section 8.4.3.3.1 and Table 8-35 of ***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf*** and ***SCE 2024 WMP ARC.pdf*** demonstrated that SCE's 2024 target is to continue reassessing availability and to partner with local fire agencies to fund for aerial suppression resources in SCE's service territory, allowing reginal fire coordination centers to deploy these assets as needed to protect SCE infrastructure and surrounding communities from wildfire risk. SCE reported that the target was met by entering into 3 funding agreements with Los Angeles, Orange, and Venture County fire agencies.

To verify the funding, the IE reviewed ***DEP-5 Aerial Suppresion_LA_OC_Ventura_Payments and Agreements.pdf*** provided by SCE. All three agreements stipulated that SCE covers standby costs while the respective agencies are responsible for deployment and operational expenses. These arrangements are subject to ongoing review to ensure effectiveness and appropriate allocation of resources for wildfire risk mitigation. SCE also provided three screenshots of the invoice and funding payments made to the three fire agencies.

Finding: Based upon evidence reviewed, the IE has reasonable assurance that SCE met its target for entering into three formal funding agreements with the local county fire authorities in 2024.

Funding Verification – Findings

Refer to Table 4-4, the IE verified that the funding of Aerial Suppression presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for CAPEX and O&M. Therefore, no additional explanation is required.

4.4.4 PSPS-2 Customer Care Programs (Critical care Backup Battery)

EC Tracking ID: PSPS-2

WMP Section Number: 8.4.6.2

WMP Initiative Name: Customer Care Programs (Critical care Backup Battery)

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

Section 8.4.6.2 and Table 8-35 of ***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf*** and ***SCE 2024 WMP ARC.pdf*** demonstrated the Critical Care Backup Battery (CCBB) Program in 2024 with the target to complete 85% of battery deliveries to eligible customers within 30 calendar days of program enrollment.

To verify the CCBB program were addressed as target, the IE reviewed ***PSPS-2 Customer Care Programs_Critical Care Backup Battery.xlsx*** provided by SCE. The documentation demonstrated 2,654 program enrollments within 2024 and 2,454 battery deliveries which represents 92% of the total deployment were completed within 30 calendar days.

Finding: Based on the documentation provided, the IE has reasonable assurance SCE met its 2024 target to complete 85% of battery deliveries to eligible customers within 30 calendar days of program enrollment.

Funding Verification – Findings

Refer to Table 4-4, the IE verified that the funding of Customer Care Programs (Critical care Backup Battery) presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for CAPEX and O&M. Therefore, no additional explanation is required.

4.4.5 PSPS-3 Customer Care Programs (Portable Power Station and generation)

EC Tracking ID: PSPS-3

WMP Section Number: 8.4.6.3

WMP Initiative Name: Customer Care Programs (Portable Power Station and generation)

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

Section 8.4.6.3 and Table 8-35 of ***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf*** and ***SCE 2024 WMP ARC.pdf*** demonstrated the Portable Power Station Rebate Program and Portable Generator Rebate Program in 2024 with the target to process 85% of all rebate claims within 30 business days of receipt from website vendor.

To verify the programs were addressed as planned, the IE reviewed ***PSPS-3 Customer Care Programs_Portable Power Station and Generator Rebates.xlsx*** provided by SCE. The documentation demonstrated 2,395 rebate claims received within 2024 and all of them were processed within 30 business days.

Finding: Based on the documentation provided, the IE has reasonable assurance SCE met its 2024 target to process 85% of all rebate claims within 30 business days of receipt from website vendor.

Funding Verification – Findings

Refer to Table 4-4, the IE verified that the funding of Customer Care Programs (Portable Power Station and generation) presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for CAPEX. Regarding the underspend of O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf***, ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** and ***IE05-SCE-2024 -Funding Questions Q.01-09 Answer.pdf*** in response to a data request that the high cost of generators led to fewer customers taking advantage of the rebates. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as

well as on SME interviews, the IE believes that the underspend of O&M, was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.4.6 Synthesis of Findings

Synthesis of Findings – Initiative Review

The IE reviewed five initiatives under the Emergency Preparedness category of the 2024 WMP, all verified through desk reviews with a 100% sample validation rate. For IN-1.1, SCE exceeded its inspection target by reviewing over 208,000 structures in HFRA, validating the initiative's implementation. DEP-2 focused on ensuring PSPS response teams were fully trained by July 1, 2024. The IE reviewed 454 training records and found that SCE exceeded training targets across multiple roles, providing reasonable assurance that all PSPS personnel were qualified or requalified. DEP-5 met its goal by entering into three formal funding agreements with county fire agencies for aerial suppression resources, verified through documentation and payment records. PSPS-2 achieved a 92% on-time delivery rate for backup batteries to eligible customers, surpassing the 85% target. PSPS-3 processed 100% of 2,395 rebate claims for portable power stations and generators within the required 30 business days. Based on the documentation reviewed, the IE validated that all initiatives met their respective implementation targets.

Synthesis of Findings – Funding Verification

The IE verified funding compliance for each Emergency Preparedness initiative by comparing planned and actual expenditures. For IN-1.1, PSPS-2, and PSPS-3, actual spending was below budget, with variances ranging from 9% to 31%. DEP-2 showed a significant underspend of nearly 79%, which the IE attributed to SCE delivering 37 essential training courses instead of the 49 originally forecasted, omitting less critical sessions. Despite this, the IE found the underspend to be reasonable and reflective of the initiative's scope. DEP-5 slightly exceeded its planned budget by 3%, with no discrepancies noted. For PSPS-3, the IE reviewed additional documentation and responses to Data Request 5, which explained that the high cost of generators led to fewer customers utilizing the rebate program, contributing to the underspend. Across all initiatives, the IE confirmed that both capital and operational expenditures were appropriately tracked and aligned with initiative execution, with no discrepancies requiring further explanation.

4.5 Community Outreach and Engagement

This section presents the initiatives categorized under Community Outreach and Engagement in the 2024 WMP. It identifies the initiatives reviewed by the IE, outlines their field verification status, and describes the methodology used to assess implementation and funding compliance.

4.5.1 Initiative Summary Table

Table 4-6 provides a summary of the initiatives evaluated under the Community Outreach and Engagement category. The table includes initiative-specific details such as targets, claimed progress, verification methods, sample validation rates, and funding data. It also presents the IE findings on initiative performance and whether each initiative met its intended risk reduction goal. The subsequent sections describe these findings in additional detail.

Table 4-6: Initiative Summary Table – Community Outreach and Engagement

Initiative Number, WMP Section Number, and Name	WMP – Initiative Target	EC-Claimed Progress	EC-Claimed Initiative Status	Sample Size	Sample Validation Rate (%)[36]	Verification Method	IE Finding on Initiative	WMP – Planned Spend ($)	EC-Claimed Actual Spend ($ and % from budget)	Satisfied Risk Reduction Goal?
DEP-1 WMP 8.5.2.1 Wildfire Safety Community Meetings	Continue or revise – determined based on the outcome of 2023	2	Target met	2	100%	Desk review	Target not quantified in the initiative	$109,597	$51,137 (-54%)	Yes (100%)
DEP-4 WMP 8.5.2.3 Customer Research and Education	Conduct at least three PSPS-related customer studies in 2024	3	Target met	3	100%	Desk review	100%	$4,356,762	$2,015,649 (-54%)	Yes (100%)

[36] Sample Validation Rate = (IE verified or reviewed) / (Sample size required). It is used to calculate the initiative validation rate as Initiative Validation Rate = (Sample validation rate) * (SCE claimed progress / Initiative target population), based on the 2024 IE ARC Outline, Section 2.4.

4.5.2 DEP-1 Wildfire Safety Community Meetings

EC Tracking ID: DEP-1

WMP Section Number: 8.5.2.1

WMP Initiative Name: Wildfire Safety Community Meetings

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

Section 8.5.2.1 and Table 8-55 of ***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf*** and ***SCE 2024 WMP ARC.pdf*** included a target to hold wildfire safety community meetings throughout SCE's service area in 2024, focusing the communities frequently impacted by PSPS events in HFRA. SCE reported that 2 meetings were conducted to inform and educate customers and communities about SCE's wildfire mitigation efforts.

To verify the meetings were held, the IE reviewed ***DEP-1 Wildfire Safety Community Meetings.pdf*** provided by SCE, which directed IE to the SCE website. The IE reviewed the SCE website which contains community safety virtual meeting recordings and presentation materials for 2 meetings hosted on June 6 and June 13, 2024, respectively.

Finding: Based on the evidence reviewed, the IE has reasonable assurance that SCE achieved its target of holding wildfire safety meetings in 2024.

Funding Verification – Findings

Refer to Table 4-6, the IE verified that the funding of Wildfire Safety Community Meetings presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for CAPEX. Regarding the underspend of O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** that SCE conducted virtual townhalls instead of in-person events, avoiding expenses like facility rentals, employee travel, and refreshments. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the underspend of O&M, was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.5.3 DEP-4 Customer Research and Education

EC Tracking ID: DEP-4

WMP Section Number: 8.5.2.3

WMP Initiative Name: Customer Research and Education

Initiative Type: Non-focus & non-field verifiable

Initiative Review – Findings & Method

Section 8.5.2.3 and Table 8-55 of ***SCE 2023-2025 WMP R3.1 (November 14, 2024).pdf*** and ***SCE 2024 WMP ARC.pdf*** included a target of conducting at least 3 PSPS-related customer studies in 2024 for the purpose of customer research and education. The list of studies included were as follows and provided by SCE in the documentations of ***DEP-4 PSPS Season Tracker_AFN-p1_BIZ-p178_REZ-p218.pdf***, ***DEP-4 In-Language PSPS Communications and Outreach Effectiveness_AFN-p1_BIZ-p32_REZ-p117.pdf***, ***DEP-4 PSPS Voice of the Customer.pdf***.

- PSPS Tracker 2023: Access and Functional Needs (AFN) Customers Quantitative Report, published on June 11, 2024, to help SCE understand customer awareness, experience, and opinions of the PSPS practice, and how that affects their opinion toward SCE.
- In-Language Wildfire Mitigation Communications and Outreach Effectiveness Survey, published on September 23, 2024. This survey demonstrated that non-English-speaking and vulnerable communities—including AFN, business, and tribal groups—face significant barriers in receiving and understanding PSPS notifications. The report also recommended SCE to expand culturally and linguistically appropriate outreach through partnerships and more accessible communications.

- PSPS Voice of Customer| 2024 Updates, published on December 19, 2024. The survey contains PSPS Survey Methodology of Invites and Net Score, and PSPS Net Score of 2024 Performance Details YTD.

Finding: Based on the documentations provided, the IE has reasonable assurance that 3 surveys were conducted by SCE within 2024.

Funding Verification – Findings

Refer to Table 4 5, the IE verified that the funding of Customer Research and Education presented in the table is being tracked appropriately and considered no discrepancy between budget and actual expending for CAPEX. Regarding the underspend of O&M, the IE reviewed the detailed explanation provided by SCE in ***SCE 2024 WMP ARC.pdf*** and ***SCE 2024 ARC Attachment B_Supplemental.xlsx*** that the cost underrun was due to the cancellation of a planned Electrification Readiness study and the postponement of sce.com personalization efforts to 2025. Based off the financial data provided in the documentation, and the discussions conducted on the weekly status calls as well as on SME interviews, the IE believes that the underspend of O&M, was reasonably assured and reflective in SCE's 2024 initiative portfolio.

4.5.4 Synthesis of Findings

Synthesis of Findings – Initiative Review

The IE reviewed initiatives under the Community Outreach and Engagement category of the 2024 WMP to assess their implementation and effectiveness. For DEP-1 (Wildfire Safety Community Meetings), the IE confirmed that SCE met its target by hosting two documented meetings in June 2024, aimed at educating communities in high fire risk areas. For DEP-4 (Customer Research and Education), the IE verified that three PSPS-related customer studies were conducted, addressing awareness, communication effectiveness, and customer sentiment. Based on the documentation and evidence reviewed, the IE found reasonable assurance that both initiatives achieved their intended outreach and engagement goals.

Synthesis of Findings – Funding Verification

The IE conducted a funding verification for the Community Outreach and Engagement initiatives, focusing on both CAPEX and O&M spending. For both DEP-1 and DEP-4, the IE found no discrepancies in CAPEX tracking and confirmed that expenditures aligned with the planned budgets. Although there was underspending in O&M, the IE reviewed supporting documentation and held discussions with subject matter experts, concluding that the underspend was justified and accurately reflected in SCE's 2024 initiative portfolio. Overall, funding for these initiatives was deemed appropriately managed and transparently reported.

5 Evaluation of QA/QC Programs

As part of our 2024 assessment, the IE team reviewed SCE QA/QC programs supporting wildfire mitigation activities. This evaluation was conducted in accordance with Section 3.5 and Appendix E of the 2024 IE ARC Outline provided by Energy Safety.

Documentation and Interviews

The IE reviewed the following documents related to QA/QC:

- 2024 WMP QA QC Program Summary.pdf
- QCP-006 Overhead Detailed Quality Control Inspection Process - Revision 5_3-13-2024.pdf
- QCP-014 Transmission Detail Inspection QC Inspection Process v1.pdf
- QCP-015 Generation QC Inspection Process Revision 1.pdf
- UVM-07 - V9.pdf
- 2024 QC Data Arbora_.xlsx
- 2024 QC Data S123.xlsx
- 2025 UVM Core Plans_2-12-25_Redacted.pdf
- 27_OEIS-E-SVM_2025-SCE-001 Q.27 – Answer.pdf
- IE-SCE-2024 QA-QC Follow-up II Q.01 – Answer.pdf
- IE-SCE-2024 QA-QC Follow-up Q.01-04 Answer.pdf
- PQS UVMFTS_Final_Rev1 – APPROVED.pdf
- Q27_2024 Structure Brushing PRC 4292.xlsx
- Redacted-CQ Quality Manual v4_6-30-23.pdf
- Redacted-UVM-01 - V4-Final.pdf
- Redacted-UVM-07 - V10.pdf
- ThreeLinesModel_2023.08.pdf
- UVM Qualification Matrix - Revision 23 – Redacted.pdf

The IE team also conducted structured interviews with subject matter experts identified as leads for the QA/QC programs. There were 2 interviews lasting approximately 45 minutes each.

QA/QC Program Description

SCE has established QA/QC programs covering both asset inspections and vegetation management as outlined in Sections 8.1.6 and 8.2.5 of its WMP. The Compliance and Quality (C&Q) group oversees the asset inspection QA/QC, performing both desktop and field verification activities. Asset inspection QA/QC is responsible for conducting quality control inspections across transmission, distribution, and system planning assets. These inspections include structured assessments of field work, validation of construction and maintenance standards, and use of a centralized database supported by dashboards to track trends and non-conformances. Vegetation Management QA/QC involves external arborist contractors and sampling-based inspections aligned with the Tree Risk Index model. Internal training for vegetation internal senior specialists (SSPs) is also part of the quality assurance strategy.

Most notably, SCE's QA/QC program includes separate oversight tracks for vegetation management and asset inspections as described above. Of note, the IE team was not able to validate all statements with documentation and will make note when this is the case. The interviews provided were invaluable, but without formal documentation, the IE team is inclined to deduct points in the new scoring matrix provided at the end of the section. With all that said, these are the key aspects of the programs broadly as the IE team understands.

Vegetation Management

- **SSPs**: SCE has approximately 45 SSPs. All of which are ISA-certified arborists, trained and qualified through a task-based Performance Qualification System (PQS), modeled after US Navy QA systems. SSPs undergo required reading, knowledge assessments, and field demonstrations. The IE team was able to validate adequate documentation for this program.
- **Annual Training**: Annual training is provided to internal teams, and contractor leads covering VM plans, refusal management, hazard tress process, and regulatory clearances. As the IE team understands it, the annual training is only required once. The IE team was able to validate adequate documentation for this program.
- **Vegetation Management QC**: QC inspections are performed by external contractors (e.g., [redacted]) under the coordination of a dedicated QC senior advisor. Performance is tracked monthly with trends reviewed for each contractor. The IE team was able to validate adequate documentation for this program.

Of keynote for VM, the IE team was provided an organization chart, but there was subsequently no formal roles and responsibilities for individuals. During our interview, the roles were validated, but without proper documentation the IE team must deduct points from our final evaluation. Thie was not the case for the Asset Inspection group.

Asset Inspection

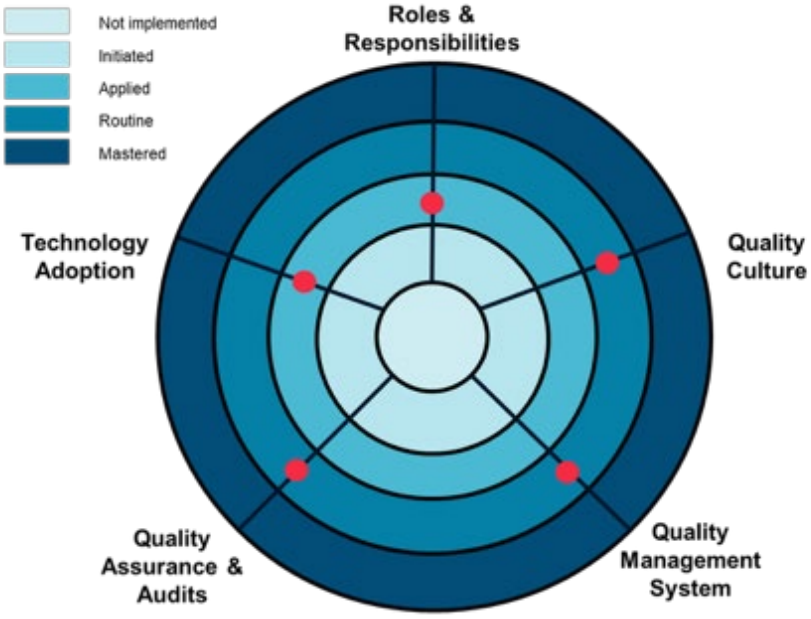
- **Field Organization**: QA/QC oversight is managed by a Field Quality Control team with three managers, each overseeing approximately 10 inspectors, totaling around 30 inspectors across Transmission, Distribution, and System Planning. The IE team was not able to validate this with adequate documentation.
- **Inspector Qualification**: Inspectors must be qualified through a PQS specific to their inspection domain (e.g., transmission construction, substation inspections). The IE team was able to validate adequate documentation for this program.
- **Checkpoint Process**: Weekly and monthly checkpoint meetings are held to review inspection findings, validate results, and promote cross-team knowledge sharing. The IE team was able to validate adequate documentation for this program.
- **Governance & Reporting**: A dedicated governance unit is responsible for QMS maintenance, risk-ranking, scope definition, and managing dashboards used for performance tracking and reporting. The IE team was able to validate adequate documentation for this program.
- **Quality Assurance**: A QA unit oversees root cause evaluations and process adherence assessments across transmission and distribution and engineering functions. The IE team was able to validate adequate documentation for this program.

- **Compliance Integration**: Compliance and Process Controls teams handle audit response, PUC and independent system operator (ISO) engagements, and interface with corporate compliance and audit groups. The IE team was able to validate adequate documentation for this program.

Table 5-1. QA/QC Maturity Framework Assessment with IE Team Comments

Dimension	Rating (0-4)	IE Comments
Roles and Responsibilities	2 - Applied	Defined roles across QA, QC, training, and regulatory compliance; no formal document mapping roles to individuals for VM.
Quality Culture	3 - Routine	Culture supported via annual training (not mandatory), SME-led assessments, and direct oversight by senior advisors.
Quality Management System	3 - Routine	System includes PQS, inspection dashboards, and structured plans (VM-7). Lacking AI/ML for document management and efficiency.
Quality Inspection and Audits	3 - Routine	High-frequency inspections; monthly QC tracking and contractor performance trending is in place. Limited predictive modeling and lack of sufficient SME quality inspection assessments.
Technology Adoption	2 - Applied	Tools such as LIDAR and digital dashboards in use; future technologies being actively explored.

Figure 5-1: QA/QC Maturity Assessment



Expanded Justification for Scores

Roles and Responsibilities: While SCE has clearly defined functional roles across QA, QC, training, and regulatory compliance, these are not comprehensively documented at the individual level within vegetation

management. The asset inspection team provided complete documentation, including a full org chart with assigned roles. However, for vegetation management, role assignments were only validated through interviews. This lack of formal documentation for VM prevents a higher score.

Quality Culture: The QA/QC culture is actively supported by executive leadership and reinforced through training, structured PQS processes, and routine engagement from senior subject matter experts. SCE promotes open communication and transparency and employs a "three lines of defense" model, as described in their corporate materials and validated during interviews. This strong culture merits a high score, with minor deductions due to the absence of formally tracked quality culture metrics.

Quality Management System: SCE's QMS includes detailed documentation and procedures accessible via a centralized SharePoint repository. The vegetation group has 22 core documents structured by function and requirement, and both asset and vegetation groups use PQS for qualifications. The inclusion of internal controls and corrective actions further supports the system's maturity. However, integration across all QA/QC domains and cross-functional accessibility is still evolving.

Quality Inspections and Audits: Both asset inspection and vegetation management programs conduct regular, structured inspections. Vegetation inspections exceeded statistical sampling targets in 2024 and included monthly performance tracking. Internal audits and post-verification reviews are documented, and assessments often lead to corrective actions. These practices demonstrate a mature inspection framework.

Technology Adoption: SCE utilizes advanced tools such as LIDAR, Power BI dashboards, and Survey123 in current operations. The vegetation group has transitioned to a fully digital inspection process. While AI/ML capabilities are in development (e.g., CanopySense, holistic asset viewer), they are not yet active in 2024 QA/QC workflows. The score reflects current deployment rather than future planning.

Recommendations for Improvement

- **Roles & Responsibilities**: Formalize role designations and responsibilities in documented policies. Consider publishing a QA/QC responsibility matrix that links job titles to key QA/QC functions and lines of accountability for all members.
- **Quality Culture**: Document and track cultural metrics related to quality awareness and behavior. The IE team understands this is already being done on the corporate level but seems specific benefit occurring explicitly within the C&Q group as well.
- **QMS**: Ensure centralized, auditable integration of all QMS elements across departments. Ensure that the ISO 9001-aligned frameworks with full system traceability and automated document control.
- **Inspections/Audits**: Track and document resolution of all identified issues and corrective actions. Consider implementation of a centralized Corrective Action Program (CAP) system to manage findings, deadlines, and validation steps.
- **Technology Adoption**: Continue AI/ML development and provide implementation documentation when deployed. Continue to discuss with peer utilities on their technology innovations as well.

6 Conclusion

The IE concludes this evaluation with reflection of both the evolution of SCE's wildfire activities and persistence in facing the challenges in reducing risk of wildfires. As such, utility mitigation performance has grown and adapted to these challenges over the years.

Across the compliance year 2024, the evaluation process verified progress all initiatives, ranging from high-impact grid hardening measures, vegetation management enhanced activities, to foundational QA/QC program oversight and utilization. While many initiatives demonstrated substantial alignment with the EC's targets, SCE identified gaps and misses, which were confirmed by the IE. Particularly, these findings reside in the areas of vegetation management verification, initiative funding alignment, and documentation quality.

In summary:

- A significant proportion of Focus Initiatives met or exceeded their WMP-defined targets and were validated by both field and desktop reviews, reinforcing confidence in their risk-reduction claims. However, several initiatives failed to achieve a 95% initiative validation rate, most often due to incomplete execution, misaligned siting in lower-risk areas, or under-documentation of commissioning.
- Funding discrepancies were prevalent across several high-cost initiatives. In cases where initiative expenditures exceeded budget by over 10%, many lacked adequate rationale to justify the variance. Additional communications and discovery requests filled in gaps where time allowed. Conversely, underfunded initiatives often showed corresponding lags in implementation or scope reductions. This disconnect suggests the need for greater budget realism, mid-cycle adjustment protocols, and improved financial transparency.
- In evaluating QA/QC programs, the utility demonstrated intermediate maturity across most framework dimensions. While foundational structures and audit procedures exist, many lack the traceability, accountability, and technology integration needed to drive continuous improvement. In particular, field inspection oversight, contractor QA practices, and cross-functional ownership of quality outcomes warrant closer attention.
- Lastly, recordkeeping and data management practices varied significantly by initiative type. Several EC submissions lacked consistent tracking identifiers across datasets (e.g., WMP, QDR, and ARC filings), impeding the evaluator's ability to cross-verify initiative status and spend. Future compliance cycles would benefit from a standardized, systematized approach to initiative tracking and reporting.

In conclusion this evaluation affirms the utility's meaningful progress toward wildfire risk reduction while emphasizing the critical need for improved funding alignment, robust documentation, and more mature quality systems.

6.1 WMP Initiative Findings and Recommendations

The table below identifies the IE's findings and suggested improvements and considerations for future year activities.

Table 6-1: IE Findings and Recommendations Summary by Initiative

Initiative	Focus Initiative	Field-Verified	Key Findings	IE Recommendations
Grid Design, Operations, and Maintenance				
IN-1.1 Distribution HFRI Inspections (Ground + Aerial)	-	-	• Achieved target of inspecting 187,000 structures in HFRA	• Include permitting risk in project scoping narrative • Create early alerts for delayed remediations tied to external dependencies
IN-1.2 Transmission HFRI Remediations (Ground + Aerial)			• Met the target, however, difficult to validate • Inspections found improper vegetation at many sites, unrelated to this initiative • Inspection work orders provide only a time stamp and a location, unsatisfactory level or documentation • Validation dependent on exception management	• Future field verifications should focus on what exactly is found, planned remediation, and indicating the remediation is complete • Strengthen quality assurance protocols
IN-3 Infrared Distribution Inspections	-	-	• Met target for inspecting 5,300 distribution overhead circuit miles in HFRA	• Flag mid-cycle scope increases in EC and ARC • Include separate cost lines for support operations (e.g., aerial scans) in future filings
IN-4 Infrared & Corona Transmission Scans	-	-	• Met target for inspecting 1,000 transmission overhead circuit miles	• Justify tech expansion in ARC filings with feature-level detail • Include a timeline for milestone delays and clarify implications for future initiatives
IN-5 Generation HFRI Inspections & Remediations	-	-	• Met target for inspecting 160 generation related assets in HFRA	• Consider including summary metrics on inspection yield and remediation rates to support risk reduction claims
IN-9a – LineVue	-	-	• Met target for inspecting 25 spans with LineVue	• Link LineVue inspection results to follow-up actions or fault detection metrics to demonstrate effectiveness

Initiative	Focus Initiative	Field-Verified	Key Findings	IE Recommendations
IN-9b – X-Ray	-	-	• Met target for inspecting 50 spans with X-ray	• Provide circuit-specific flight planning in future filings to justify spend • Link IR scan spend with inspection yield or fault detection where possible
IN-8 Inspection and Maintenance Tools	-	-	• Achieved target of executing the approved designs and recommendations for incorporating the distribution ground and InspectCam capabilities into a single digital platform	• Clarify cost allocations for platform development vs. physical inspections • Digital inventory cost disaggregation to help with cost-benefit evaluation
SH-1 Covered Conductor			• Did not meet target of installing 1,050 circuit miles of covered conductors	• Update installation cycle to overcome issues such as weather, permitting, or access • Enhance metadata tagging within asset management data schema to aid tracing of structures from circuit mile completion units to poles
SH-16 Vibration Damper Retrofit			• Met target for retrofitting vibration dampers on 500 structures • Many field verified structures failed and found that a vibration damper was not placed on the proper pole, however the team understands that the dampers only need to be on one end of the wire span • Not able to validate if a damper was on the other end of the structure based on the data provided	• Strengthen quality assurance protocols to reduce field inspection failure rates • Ensure proper documentation of where exactly a vibration damper is installed • Consider leveraging done-based visual inspections to ensure proper work is completed • Conduct post installation effectiveness audits by spot checking installed dampers
SH-2 Undergrounding Overhead Conductor			• Did not meet target for undergrounding 16 circuit miles • Field verification found all passes despite not completing the entire initiative	• Strengthen quality assurance protocols to reduce field inspection failure rates • Continue to prioritize high-risk circuits using enhanced risk models • Consider adopting trenchless and micro-trenching techniques
SH-10 Tree Attachments Remediation	-	-	• Met target for remediating 500 tree attachments in HFRA	• Clarify whether unspent capital rolls forward into next year's target • Include commissioning status with installations to verify asset functionality

Initiative	Focus Initiative	Field-Verified	Key Findings	IE Recommendations
SH-14 Long Span Initiative			• Completed the targeted scope of work for long span mitigations • However, IE observed discrepancies between documented installation types and what was observed in the field • More information required to understand the completeness of the initiative installation	• Strengthen quality assurance protocols to reduce field inspection failure rates • Ensure proper documentation of where exactly a vibration damper is installed • Consider refining span selection criteria using structural and environmental modeling • Consider implementing a secondary review of work order closeouts
SH-17 REFCL – Ground Fault Neutralizer		-	• SH-17 compliant • However, IE observed delays due to moderate scheduling execution risk • Testing window is limited to December-April, if testing is not ready by April 2025, it will be deferred to December 2025, impacting the commissioning of intended risk mitigation	• Address long-lead material procurement • Expand flexibility in field crew deployment and testing window • Continue documenting deferred work clearly to catch delays soon • Include commissioning status with installations to verify asset functionality
SH-18 REFCL – Grounding Conversion		-	• SH-18 compliant • However, IE observed delays from challenges in securing locations for grounding conversations	• Address contingency location clearance from county/forest service ahead of time • Expand flexibility in field crew deployment and testing window • Continue documenting deferred work clearly to catch delays soon
SH-5 RCAR Settings Update			• Met target of 5 completed installations	• Highlight exceptions in contractor pricing in future filings • Differentiate routine vs. exception unit cost profiles
SH-6 Circuit Breaker Relay Hardware – Fast Curve	-	-	• Met target for replacing or upgrading 10 CB relay units with fast curve settings in HFRA	• Track defect rates and inspection outcomes to reassess annual forecast • Clarify X-Ray-only cost and remediation triggers in future filings for transparency
SH-8 Transmission Open Phase Detection	-	-	• Achieved target of installing the TOPD at 5 locations	• Fix journal entry in next filing and annotate the correction • Clarify whether under installation was a delay or partial year target
Vegetation Management and Inspections				

Initiative	Focus Initiative	Field-Verified	Key Findings	IE Recommendations
VM-9 LiDAR – Distribution	-	-	• Met and exceeded target to inspect at least 1,020 HFRA circuit miles (111% completed)	• Use updated growth rate data to build prescription-adjusted forecasts • Maintain flexibility in scheduling trims when seasonal growth deviates
VM-10 LiDAR – Transmission	-	-	• Met target to conduct LiDAR scans across 1,500 HFRA miles of distribution circuits	• Same as VM-7: validate long-term clearance durability and seasonality
VM-2 Structure Brushing	-	-	• Met target to complete 183% of their goal for structure brushing treatments	• Confirm invoice timing with Energy Safety to avoid perception of misalignment • Ensure retroactive costs are separated in tracking sheets for audit clarity
VM-7 Expanded Clearances – Distribution	-	-	• QA activities demonstrate organizational commitment but require clearer performance benchmarks to substantiate outcomes	• Refine target setting by tying to latest mortality mapping • Evaluate whether drought cycles are influencing year-to-year variance
VM-8 Expanded Clearances – Transmission	-	-	• Met target to inspect 416 circuits within the transmission system	• Flag scope acceleration clearly in EC filings • Clarify shift rationale in capital/O&M tracking to avoid confusion
VM-3 Expanded Clearances – Generation Legacy	-	-	• Met target to perform vegetation treatment and maintenance to 50 sites	• Refine hazard tree forecasts using 3-year rolling averages • Evaluate incentive outreach strategies to increase participation
VM-1 Hazard Tree Management Program			• Met target to inspect 408 grids/circuits and prescribe mitigation for hazardous trees with strike potential within those grids in SCE's HFRA • Some field sites lacked visible evidence of recent removals; discrepancies noted between work orders and outcomes • Trees with structural defects (e.g., dead tops, codominant stems) were observed • Routine trimming was applied where full removal may have been more appropriate; some topped trees showed regrowth with poor structure	• Implement visual marking (e.g., spray paint or tags) for trees designated for removal or pruning to aid verification • Provide work orders and before/after photos after sampling to support field validation • Strengthen QA protocols and assess whether drought cycles are influencing year-to-year variance

Initiative	Focus Initiative	Field-Verified	Key Findings	IE Recommendations
VM-4 Dead & Dying Tree Removal			• Inspections documented instances where trees were pruned or topped rather than removed • At some locations, no evidence of recent tree removals, regardless of photos provided • One location included a verified tree removal with a visible stump	• Implement a method to visually mark trees designated for removal or pruning at the time of identification • Provide work orders and before/after photos after the initiatives have been selected and locations sampled • Strengthen quality assurance protocols to reduce field inspection failure rates • Refine target setting by tying to latest mortality mapping • Evaluate whether drought cycles are influencing year-to-year variance
VM-6 Arbora Work Management Tool	-	-	• Tool appears robust from a compliance process standpoint • However, effectiveness in reducing risk cannot be assessed without direct validation of its outputs	• Consider tapering budget for maturing programs • Continue monitoring clearance effectiveness and long-term growth cycles
Situational Awareness and Forecasting				
SA-1 (Weather Stations)	-	-	• Met target for installing 50 weather stations in HFRA	• Clarify dependency of scope on PSPS volume • Revisit settings update methodology to improve forecast alignment
SA-11 (Early Fault Detection)	-	-	• Achieved target of installing EFD devices at 50 locations • Initiative slightly exceeded target, however IE notes that risk reduction impact is dependent on performance and integration of devices into the borader monitoring and response systems	• Segment SA-8 worksteams by purpose (e.g., science enhancements vs. territory modeling) in filings • Clarify spend increase in relation to WMP risk reduction outcomes
SA-10 (HD Cameras)	-	-	• Achieved target of installing 10 HD cameras	• Flag external access risks in field planning • Ensure missed site sampling is either substituted or clearly documented

Initiative	Focus Initiative	Field-Verified	Key Findings	IE Recommendations
SA-8 (Fire Spread Modeling - Fuels/Science Enhancements)	-	-	• Met stated objective for the Fire Science initiative	• Highlight vendor transition timing and scope in future budget narratives • Track incremental model benefit (e.g., prediction accuracy)
SA-3 (Weather and Fuels Modeling)	-	-	• Met target of equipping machine learning capabilities at 200 weather station locations	• Clarify internal dependencies between undergrounding and other fire mitigation efforts (e.g., REFCL) • Consider bundling reporting across related initiatives where projects overlap
Emergency Preparedness				
IN-3 Infrared Distribution Inspections	-	-	• Achieved targets of having all PSPS members fully trained and qualified/requalified	• Clarify rationale for course adjustments in filings • Ensure prioritization is linked to identified risk and readiness gaps
DEP-5 (Aerial Suppression)	-	-	• Met target for entering into three formal funding agreements with the local county fire authorities	• Continue current strategy • Ensure aerial contracts maintain seasonal readiness verification
PSPS-2 (Critical Care Backup Battery Program)	-	-	• Met target to complete 85% of battery deliveries to eligible customers within 30 calendar days of program enrollment	• Review participation barriers post-event • Consider revised targeting or opt-in strategy for high-priority customers
PSPS-3 (Portable Power Station & Generator Rebates)	-	-	• Met target to process 85% of all rebate claims within 30 business days of receipt from website vendor	• Evaluate alternative rebate tiers or vendor negotiations • Adjust outreach to better match customer needs and affordability
Community Outreach and Engagement				
DEP-1 (Wildfire Safety Community Meetings)	-	-	• Achieved target of holding wildfire safety meetings	• Continue virtual delivery where appropriate, but capture metrics on reach and access • Document comparative benefits of virtual vs. in-person for future planning

Initiative	Focus Initiative	Field-Verified	Key Findings	IE Recommendations
DEP-4 Customer Research and Education)	-	-	• Met target of conducting 3 surveys based on the documentation provided	• Provide contingency planning details when initiatives are delayed • Improve transparency in shifting timelines to maintain trust in year-over-year WMP execution

6.2 Programmatic Findings & Recommendations

Across the 2024 evaluation cycle, the IE observed several process-level issues that influenced the timing and verification depth to ensure accuracy and efficiency while performing the compliance audit. These findings reflect broader themes applicable to both EC implementation and the overall WMP evaluation framework for consideration.

6.2.1 Key Findings

- Late contract execution compressed the evaluation timeline
- The IE contract was not executable until March 28, limiting the time available for fieldwork coordination, iterative data validation, and structured engagement with the EC. This contributed to avoidable delays and constrained the ability to follow up on data gaps.
- Field access and structure-level validation proved inconsistent
- For a number of field-verifiable initiatives, the IE encountered missing pole IDs, misaligned structure tags, or access issues that prevented proper observation of the scoped asset. This led to higher field sample failure rates and limited confidence in completion validation.
- Initiative documentation quality varied across categories
- Some initiatives had detailed unit-level logs and clear traceability to WMP targets. Others lacked reconciliation between scoped units, field verifications, and final spend, especially in vegetation management and grid hardening.
- O&M and CAPEX accounting classifications lacked consistency
- Several initiatives had mid-cycle reclassifications without clear documentation or timely explanation. This made funding verification more difficult and masked actual performance in cases of underspending.
- Mid-year scope changes were not systematically communicated
- When initiative scope changed due to internal reprioritization or external constraints, EC documentation often failed to update targets or clarify implications for verification and funding. These gaps reduced transparency and introduced ambiguity in performance assessment.

6.2.2 Recommendations Energy Safety and the IE Process

- Finalize IE contracts earlier to support timely kickoff, sampling design, and access planning
- Require ECs to submit a reconciled, initiative-level spend file with O&M and CAPEX splits within the first 30 days of engagement and ensure planned spend is included within the initial budgetary considerations
- Establish a shared documentation repository for inspection photos, verification memos, and structure-level work logs
- Encourage a tiered sampling protocol that prioritizes deeper inspection of high-risk or high-dollar initiatives
- Refine the Master List of Field Verifiable Initiatives with clearer guidance on observability criteria

6.2.3 Recommendations for ECs Overall

- Strengthen internal QA/QC to ensure tracking systems align with scoped targets and support external review and adoption into normal business practices as the programs have matured
- Ensure accounting reclassifications between CAPEX and O&M are documented in real time with supporting rationale and across documentation for traceability
- Improve the field readiness of sample documentation, including correct pole IDs, GPS tags, and work order references whether in data schema alignment, GIS asset fields, or logs
- Communicate initiative scope changes clearly through addenda, internal memos, or updates to QDRs, including impacts to unit counts and budget allocations

7 Attachments

**Appendix attachments for Sections 7.1 – 7.4 are available in a separate Microsoft Excel file (2025-06-25_2024_IE_Reporting_SCE.xlsx).*

7.1 Catalog of Initiatives

7.2 Data Requests

7.3 SME Interviews

7.4 List of “Fail-to-Fund” Initiatives

7.5 Pictures of Non-Conformance

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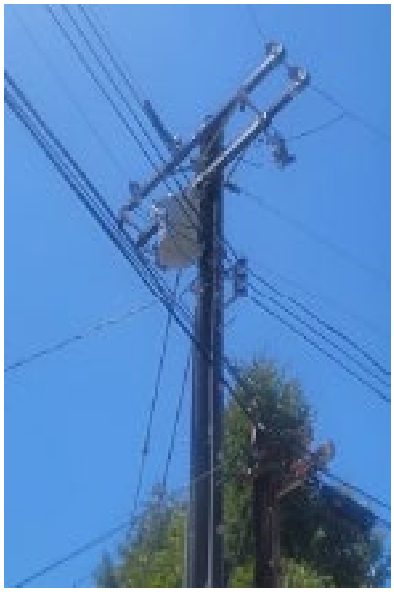
SCE 2024 WMP IE: Attachment 7.5
Photos of Non-Conformance

SH-14 Long Span Initiative:

Item	Response
Structure ID	1402981E **Latitude** 34.20750161 **Longitude** -117.1249599
Describe Non-Compliant Findings	During review of structure 1402981E, it was identified that Notification #41390670 issued for the installation of line spacers was inadvertently closed following the pole replacement on April 11, 2024. At the time of closure, midspan spacers had not been installed. The SCE Field Operations crew subsequently completed the installation on June 16, 2025. This delay and the absence of spacers until 2025 represent a non-conformance with the original scope and timeline of the work order.
Inspection Photos and Descriptions (attach photos below)	IE Field Inspection Photos:    

Item	Response
	SCE Work Order Photos

VM-1 Projects Hazard Tree Management Program Project (HTMP):

Item	Response
Structure ID	H00971184001 **Latitude** 33.604928 **Longitude** -117.23308
Describe Non-Compliant Findings	During field review, pruning was observed on a pine tree near the data point; however, the canopy continues to lean toward the conductors and remains tall enough to pose a potential strike risk. The tree also exhibits poor remaining structure. Additionally, a nearby eucalyptus tree shows signs of previous pruning and structural defects typical of the species, indicating a risk of failure. Due to limited property access, a full assessment was not possible. Further review of historical outage or fire incidents involving eucalyptus within the SCE system may be warranted. Separately, a discrepancy was identified between the vegetation management work order and photographic evidence sent by SCE. The work order indicated that trimming was requested, but photographic evidence suggests that removal occurred instead. This inconsistency between the documented scope and the observed outcome constitutes a non-conformance.
Inspection Photos and Descriptions (attach photos below)	IE Field Inspection Photos:   

Item	Response
	SCE's Work Order Photos  Before After