



SOUTHERN CALIFORNIA
EDISON[®]

(U 338-E)

Southern California Edison Q1 2023 Quarterly Data Report

May 1, 2023

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I. INTRODUCTION

Pursuant to the Office of Energy Infrastructure Safety's (OEIS, or Energy Safety) Final Data Guidelines v3.1 that were adopted on March 17, 2023 (Data Guidelines), this Q1 2023 Quarterly Data Report (QDR) includes Southern California Edison Company's (SCE) (1) Geographic Information System (GIS) database and the related Spatial Status Report, in Excel, that further denotes what spatial data SCE is providing at this time; (2) Wildfire Mitigation Data Tables, in Excel, pursuant to Energy Safety's Wildfire Mitigation Data Table template for Tables 1-15; and (3) a description of the data included in the GIS database and Wildfire Mitigation Data Tables.

SCE appreciates Energy Safety's acknowledgment that utilities are at different stages of their data journey and that the Data Guidelines is intended to be a phased approach including ongoing changes to the GIS schema. SCE is committed to providing more data and details with each successive QDR submission. The confidential geodatabase is being submitted directly to Energy Safety. Pursuant to the California Code of Regulations, Title 14, Article 3, Section 29200, please see SCE's application for confidential designation of the data previously provided with the Q4 2022 QDR.

If SCE identifies corrections or revisions, SCE will provide them in subsequent QDR submittals or earlier or as directed by Energy Safety, as applicable and to the best of its ability.

II. GEOSPATIAL DATA

Beginning with this Q1 2023 submission, SCE has begun to utilize WiSDM (Wildfire Safety and Data Management) to support the development of this submission. WiSDM creates a consolidated, centralized repository of wildfire data, pulling data from SCE's systems of record and transforming it to comport with the Data Guidelines requirements. WiSDM provides better data access for many mitigation activities.

Based on the Data Guidelines, this QDR provides recorded GIS data for the January through March 2023 period and planned GIS data for the April through June 2023 period, where available.

SCE has identified the following items to provide additional clarity on some activities:

- In the Q1 2023 GDB, SCE has left data with null geometry in the file to show more completeness of the work performed in the activity. Historically, SCE removed records with null geometry from previous GDBs. GIS data for certain activities provided in QDR may not be available at the time of the QDR submission.
- IN-1.1 Distribution High Fire Risk Informed Inspections in HFRA (Ground Inspections)
 - Quarterly Notification Letter (QNL) totals reflect ~10% fewer inspections than what is mapped in the GDB. This is due to the timing of the data pulled from the source system for the QNL. Inspection data pulled for the GDB occurred after data pulled for QNL and includes additional inspections reported in early April.
- IN-1.2 Transmission High Fire Risk Informed Inspections in HFRA (Aerial Inspections)
 - QNL totals reflect ~10% fewer inspections than what is mapped in the GDB. This is due to the timing of the data pulled from the source system for the QNL. Inspection data pulled for the GDB occurred after data pulled for QNL and includes additional inspections reported in early April.
- SH-2 Undergrounding Overhead Conductor
 - ~80% of lat/long data for Q1 2023 completions is not yet available in SCE's GIS system of record. These structures were new installations, and their lat/longs were not available at the time of reporting due to processing time between work order completion in the field and final data updates to the system of record and GIS mapping systems
- VM-7 Detailed Inspections for the Prescription, Where Necessary and Feasible, of Expanded Vegetation Clearances from Distribution Lines in HFRA
 - 71 grid inspections completed in November/December of 2022 to inform trimming prescriptions in Q1 2023
- VM-8 Detailed Inspections for the Prescription, Where Necessary and Feasible, of Expanded Vegetation Clearances from Transmission Lines in HFRA
 - 32 circuits inspections completed in 2022 to inform trimming prescriptions in Q1 2023
 - 28 circuits inspections completed in November/December of 2022
 - 4 circuits inspections completed earlier than scheduled in end of October 2022 to inform trimming prescriptions in Q1 2023 (and not for Q4 2022)

The following targeted work has not begun in 2023, therefore, geospatial mapping is not provided in Q1:

- IN-1.3 Infrared Inspection of Energized Overhead Distribution Facilities and Equipment
- IN-5 Generation High Fire Risk-Informed Inspections and Remediations in HFRA
- SH-5 Installation of System Automation Equipment RAR/RCS
- SH-8 Transmission Open Phase Detection
- SH-15 Vertical Switches
- SH-17 Rapid Earth Fault Current Limiters (REFCL) (Ground Fault Neutralizer)
- SH-18 Rapid Earth Fault Current Limiters (REFCL) (Grounding Conversion)
- VM-9 LiDAR Distribution Vegetation Inspections
- No PSPS events observed, therefore, no PSPS data provided

This QDR includes the geospatial Initiative,¹ Asset Point, Asset Line, PSPS and Risk Events, and Other Required Data datasets. SCE is not providing metadata in this submission given that SCE does not provide additional data not defined within the Data Guidelines. If applicable in future submissions, SCE will confer with Energy Safety and peer utilities to benchmark and align regarding metadata requirements.

SCE appreciates that Energy Safety, through its comprehensive, updated Data Guidelines, intends to obtain and standardize significant amounts of wildfire-related data. SCE also understands Energy Safety's desire to understand our current systems and data availability. To this end, SCE also provides updated responses in the Status Report in the Excel file template that generally describe the status of the requested data fields, actions we plan to take if a particular data field is not being provided at this time, the timeline for completing those actions, and whether the data is confidential. SCE describes its approach to the updated Status Report.

SCE also notes that it does not capture several data elements that still require time for our teams and subject matter experts to assess with respect to the labor, operational, system and technical requirements. Where available, SCE provides more details of our submission at the Feature Class level within the accompanying GIS Status Report. While SCE understands that Energy Safety desires specific timelines to address all data gaps, we are not able to provide all assessments with this QDR submission.

Like its previous QDR, SCE is providing the requested spatial data in the geodatabase. Additionally, SCE is submitting an updated Status Report based on the datasets described above. SCE notes that it continues to take a phased approach to improve the data being provided. SCE looks forward to continued collaboration with Energy Safety, utilities, and other stakeholders to refine and improve the Data Guidelines.

¹ The Initiative dataset includes grid hardening, vegetation management (projects & inspections), and asset inspections initiatives where work was performed and/or projected to be performed in HFRA over the reporting periods.

III. WILDFIRE MITIGATION DATA TABLES 1-15

Introduction:

SCE provides Wildfire Mitigation Data Tables 1-15 pursuant to the requirements in the Data Guidelines. Where applicable, SCE includes revisions to historical data where inputs may have changed over time as identified through discovery and/or further quality review of the calculations and data.

The information provided in conjunction with ignition events and “utility-ignited” wildfire statistics in Tables 1-15 should not be construed as an admission of any wrongdoing or liability by SCE. SCE further notes that the damages metrics provided may be tracked by other agencies and thus, SCE does not guarantee the accuracy of such information. Additionally, in many instances the cause of wildfires is still under investigation and even where an Authority Having Jurisdiction (AHJ) has issued a report on the cause, SCE may dispute the conclusions of such report.

In some tables, the Data Guidelines require electrical corporations to provide projections for future projected unit counts, risk events, customer impacts, etc. over the course of the 2023 – 2025 period. SCE notes that these projections are subject to change and represent an estimation of potential future scenarios. Several factors, such as weather and third-party response, can impact the actual performance. These projections are not part of SCE’s WMP initiative targets and should not be included in the scope of compliance review.

SCE provides data for all Wildfire Mitigation Data Tables and is also including additional information for some of the tables to provide further clarification:

Table 1: Quarterly Initiative Update (QIU)

SCE notes that Targets are described in several documents including the Quarterly Data Report and throughout the 2023-2025 WMP. While SCE has made efforts to align the language and numerical values across these locations, in the case of discrepancies, SCE’s intention is for Tables 1 and 12 to serve as the authoritative and governing source for the Targets.

Table 2: Performance Metrics

- **Time Between Inspection and Resulting Remediation:**

SCE interprets these data points to include only closed work orders (notifications) that were completed on Jan. 1, 2020, or later and identified through an overhead inspection program (e.g., risk-informed ground inspection, aerial, etc.) regardless of date that the finding was identified. Included in this calculation are work orders that have been subject to external constraints such as permitting, access constraints, and/or long lead time environmental clearances that may have extended the remediation time. Furthermore, work orders that are identified as a Level 1 condition (i.e., Priority 1) are emergent and are made safe to the public

within 24 hours. The resulting permanent repair may extend longer due to material availability, customer access, and/or local permitting requirements.

- **Asset / Vegetation Management Open and Past-Due Work Orders**

SCE provides open and past-due work orders (notifications) counts as a snapshot in time at the end of each quarter. For example, for Q1 2020, a count of all open and past due work as of March 31, 2020, was provided. These figures include work orders that may have been constrained due to external factors that are outside of SCE's control (e.g., permitting and customer access) and include only work identified through inspection programs.

Asset management work orders are defined as past-due when the repair has not been completed by the GO 95 specified compliance timeframes or SCE's internal due date, whichever is sooner.

Vegetation management work orders are defined as past-due based on the clearance distances at time of inspection as recommended by GO 95, Rule 35, when the required trimming activity has not been completed by SCE's prescribed internal timeframes:

- **30 Days:** Trees with clearances less than the Regulation Clearance Distance (RCD)
- **90 Days:** Trees with clearances less than the RCD and are less than or equal to the Trigger Clearance Distance (TCD)

- **Asset Management WO/Past Due Projections:**

For metrics 6a, 6b, 7a, and 7b, 2023 projections are based on the average of the quarter-end recorded counts from 2020-2022. SCE used 2023 as the basis for its 2024 and 2025 projections, due to the variability in work orders anticipated in those years. For example, while SCE is committed to actively working down its open and past due work orders over time, in 2024, assets governed by Priority 3 inspection timelines will become due for the first time. It is difficult to project volumes of future open work order counts when there is no historical data to show how the influx of Priority 3 notifications may impact workflow. As discussed in SCE's 2023-2025 WMP, SCE is focused on prioritizing the remediation of work orders that have the highest risk first, while also working to reduce overall open and past due work orders over time.

- **Circuit Mile Conversion:**

SCE accounts for completed inspections by noting the counts of assets inspected instead of noting by circuit miles. To present completed inspections in the requested format, SCE uses a calculated average span length multiplied by the number of structures inspected. Unique span length multipliers are used for both Transmission and Distribution as well as HFRA and Non-HFRA calculations.

- **Inspection Methods:**

SCE provides counts of structures inspected, circuit miles inspected, grid condition findings and fixes from inspections where applicable. SCE does not differentiate its inspections in its system of record by the exact methods provided by OEIS. For the methods that SCE does not utilize, SCE has provided values in the blank meaning column to account for the null rows.

- **Response Time**

For metric 8a, data for crew response time to a locked circuit breaker incident is not readily available for instances not involving hazard conditions such as 911 or wire down calls. SCE will continue to review the available information in its outage systems to provide this information in a future filing. Currently, any quarterly data would reflect only 911 and wire down events and is not a good representation of SCE’s overall response time.

- **Community Outreach Metrics**

For metric 17a, SCE has no jurisdiction over evacuation orders. SCE diligently requested and followed up with local governments and law enforcement and was only able to obtain information from one county. Even then, the information provided included high-level estimations of evacuation counts estimated by the local government and law enforcement entity for a limited number of fires. Because of this, SCE is unable to obtain the requested data, analyze it, and report on evacuation related requirements in this table. SCE anticipates this to be a recurring challenge going forward.

Table 3: List and Description of Additional Metrics

In Table 3, SCE identifies several performance metrics which may be helpful to inform evaluation of the performance of SCE’s wildfire mitigation portfolio. SCE identified metrics because WMP activities are ultimately designed to reduce wildfire ignitions associated with its electrical infrastructure and reduce the impact of PSPS de-energization events to customers. Importantly, these metrics are within the reasonable control of utilities when appropriately normalized for weather and other exogenous factors. Other metrics such as safety incidents, acres burned or structures destroyed, though important to understand, track, and monitor are impacted by events and circumstances largely outside of the utility’s control such as climate change, droughts, fire suppression efforts and fire response.

Metrics and underlying data are critical components for WMP development, execution, and evaluation, but we continue to emphasize that the near-term focus should be on efficient implementation of our planned activities, while the assessment of whether the activities are having the desired and expected impact on risk reduction should be measured over a longer time horizon. A clear distinction is necessary between initiative targets as outlined in Table 1 that establish goals and monitor compliance with approved WMPs and metrics that evaluate effectiveness of these approved plans and inform future WMP updates. As stated in previous filings and submittals, tracking initiative targets for approved WMPs is the best means of determining progress and assessing WMP compliance in the near-term.

SCE notes that projections provided for its performance metrics are estimates only and subject to change.

Tables 4, 5, and 6: No additional clarification is needed at this time. Please see SCE’s change log for corrections made to these tables since the Q4 submission.

Table 7: State of Service Territory and Utility Equipment: No additional clarification is needed at this time.

Tables 8 Location of Utility Equipment Additions and Removals: Please see SCE’s change log for corrections made to this table since the Q4 submission.

Tables 9: Location of Infrastructure Upgrades: SCE provides equipment upgrade data where available. In some instances, the exact circuit and/or geospatial locational data and line lengths required are not available at the time of reporting. This is due in part to detailed designs not yet completed for certain infrastructure projects (e.g., detailed design for projects requiring a Permit to Construct or a CPCN from the CPUC do not begin until the Commission approves the project). Where detailed design is available, SCE is working internally to begin incorporating the geospatial data needed to provide these data points for future submissions. Furthermore, projections are subject to change due to operating constraints, design changes in the field, changes in priority, and resource availability.

Table 10: Recent Use of PSPS and Other PSPS Metrics

- **Fast-Trip Events and Unplanned Outages Resulting from Fast Trip**
SCE provides all outages that have occurred while fast-trip settings were enabled. This does not mean that those outages would not have occurred were it not for fast-trip. Sensitive protection settings are designed to activate quickly when a fault is detected by de-energizing a circuit or circuit segment which minimizes the overall fault energy and reduces the probability of ignition. SCE’s fast trip settings are enabled during times of increased fire risk (red flag warning, fire weather threat, fire climate zone threat, or thunderstorm threat).
- **Customer Hours of Unplanned Outage / SAIDI / SAIFI:** SCE has resumed the ability to provide metrics 2a and 2d-2g for Q1 2023. As SCE finalizes the enhancement project to improve outage reporting, historical values for 2022 metrics will be added to the QDR.

Please see SCE’s change log for corrections made to this table since the Q4 submission.

Table 11: Mitigation Initiative Financials

In Table 11, SCE provides annual recorded costs through 2022 and projected costs for 2023, 2024, and 2025. Each initiative type is categorized by either capital expenditure or operating expense and is broken out by total territory and High Fire Threat District (HFTD).

Please see SCE’s change log for corrections made to this table since the Q4 submission.

Table 12: Mid-Year and End-of-Year Targets

In Table 12, SCE provides mid-year and end-of-year Targets, pursuant to the 2023-2025 WMP Guidelines, for the following WMP activities:

- Asset Inspections
- Vegetation Management
- Stakeholder Coordination (with regards to PSPS)

SCE notes that Targets are described in several documents, including the Quarterly Data Report and throughout the 2023-2025 WMP. While SCE has made efforts to align the language and numerical values across these locations, in the case of discrepancies, SCE’s intention is for Tables 1 and 12 to serve as the authoritative and governing source for the Targets.

Please see SCE’s change log for corrections made to this table since the Q4 submission.

Table 13: Open Work Orders/Notifications

Due to the volume of information requested by Energy Safety, SCE submits Table 13 data in the form of an Excel file. In Column H, SCE indicates which open work orders are potential ignition risks that are not constrained by a documented external constraint (i.e., GO 95 exceptions).

Table 14: HFTD Area Risk Summary

In Table 14, SCE provides information summarizing its HFTD risk. If future changes to this risk analysis result in changes to this table, SCE will update the values in Table 14 as applicable, pursuant to guidance from Energy Safety.

SCE also notes that its risk models and analytics are currently focused on the areas of our system that have been designated as having either an elevated or extreme threat of wildfire pursuant to the CPUC’s HFTD maps and as such, SCE does not currently calculate the risk values in Table 14 in non-HFTD areas.

Table 15: Top Risk Circuit Scores

In Table 15, SCE provides the calculated value of each risk component by circuit that significantly contributes to risk. Risk scores are updated annually and updates to Table 15 will not reflect each quarter unless changes need to be reflected.

SCE also notes the Risk and Likelihood information is per HFRA circuit mile to be consistent with Table 6-5 in SCE’s 2023-2025 WMP.

IV. WILDFIRE MITIGATION DATA TABLES CHANGE LOG

Introduction:

Pursuant to Section 2.4 of the Data Guidelines, SCE provides the following revisions to historical data previously submitted in the Wildfire Mitigation Data Tables 1-15:

Table	Cell Reference	Description	Explanation	Change Order Req?
1	AC12, W9, X9, U21-W21, U30-X30, T33-X33, T37-X37, T39-X39, T40-X40	Projected Quarter-End and Annual Targets updated	Select WMP activities reflect changes from the WMP filing that were submitted in the Errata dated April 6, 2023. Additionally, the quarterly forecast for SH-1 and SH-5 were updated.	No
2	Z25, Y29, Z29, Y33, Z33	Count of Wire Downs updated/revised	Wire Down event review and investigations occur after the QDR reporting period. As such, re-categorization of event drivers, additions and removals can occur post QDR submission.	No
2	Z125	Value of assets destroyed by utility-related ignitions (total) Q42 022	Corrected a calculation error	No
2	S336-Z336, S396-Z396	Number of Trans Patrol Other circuit miles inspected updated/revised	Corrected a count of inspection to circuit mile conversion error	No
2	J342-U342, J402-U402	Circuit Miles Inspected updated	Corrected an error where historical circuit miles inspected were inadvertently omitted from Q4 submission.	No
2	O720-Z720, O736-Z736, O752-Z752, O768-Z768, O784-Z784, O800-Z800	Number of trees inspected for vegetation compliance	Values updated to reflect counts trees inspected instead number of vegetation work points.	No
5	O22, N28-O28, O30, N58-O58, O59, O60, N76-O76, O77-O79, M82-O82, N88-O88, O90, N118, M142, N154, M184-O184, O186, N189, O214, O216, N220-O220, O221	Counts of Wire Downs updated/revised	Wire Down event review and investigations occur after the QDR reporting period. As such, re-categorization of event drivers, additions and removals can occur post QDR submission.	No

8	J10-J117, K10-K117, L10-L117	SCE updating methodology used to populate Table 8	SCE is now using Table 7 actuals and the net change quarter over quarter to populate Table 8.	No
10	AA13, AE13, AI13	Updated PSPS Projections for Q3 2023, 2024 and 2025	Corrections made to projections provided in Q42022.	No
10	K37, L37	Critical Infrastructure Impacted by PSPS	An update was made to better align historical PSPS reporting with the approach, defined methodology and data provided in the PSPS Post Event Report.	No
10	L38, L39, L40, L41, K42, L42, L43, L45, K49, L49, K50, L50	Community Outreach of PSPS Events & Other PSPS Metrics	An update was made to better align historical PSPS reporting with the approach, defined methodology and data provided in the PSPS Post Event Report.	No
10	K22, L22, K23, L23, L24, I25-L25, J26-L26, J27, L27, J28, L28, I29-L29	Counts of Fast Trip Events and Circuit Mile Days	An update to the logic was done in Q1 of 2023 to better align outage data with Fast Curve enabled circuit days. Historical data updated to align 2022 inputs with 2023 logic.	No
11	AB47, AF47, AJ47, AN47	WMP Tracking ID 8.2.2.1: The % allocation to HFTD for Distribution & Transmission Pre-Inspection is updated.	The previous % allocation to HFTD was 84.50% and 15.50% for distribution and transmission, respectively. The updated % allocation to HFTD is 60.30% and 79.70% for distribution and transmission, respectively. This update is related to HFTD costs for 2022-2025.	No
11	AE60, AF60, AI60, AJ60, AM60, AN60	WMP Tracking ID 7: 2023-2025 projected cost numbers updated	Updates reflect Independent Evaluator (IE) costs related to the review of WMP compliance targets. This update is for 2023-2025.	No
12	Entire Table Updated Plus Value Changes for Cells G18, H18, J18-L18, F21-H21, E42-L42, E46-L46, F48-L48, F49-L49	Projected Quarter-End and Annual Targets updated	Select WMP activities reflect changes from the WMP filing that were submitted in the Errata dated April 6, 2023. For Q1 2023 submission, SCE has added Situational Awareness, System	No

			Hardening, and PSPS activities that were omitted from the Q4 QDR.	
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