(U 338-E)

Southern California Edison Q4 2022 Quarterly Data Report

February 1, 2023

Table of Contents

I. INTRODUCTION

Pursuant to the Office of Energy Infrastructure Safety's (OEIS, or Energy Safety) Final Data Guidelines that were adopted on December 14, 2022, this Quarterly Data Report (QDR) includes Southern California Edison Company's (SCE) (1) GIS Data pursuant to the requirements in the January 2022 Geographic Information System (GIS) Data Standard for California Electrical Corporations (GIS Data Schema), v2.2 and the related Status Report, in Excel, that further denotes what spatial data SCE is providing at this time;[1] (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 GIS Data Schema is intended to be a phased approach including ongoing changes to the 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 Q3 2022 QDR. Further description of the geospatial data and responses to Guidance-10 deficiency conditions can be found in Section II.

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.

[1] Pursuant to Energy Safety's Final Data Guidelines, electrical corporations will submit their GIS data using the version 3 standard for their Q1 2023 QDRs, to be submitted on May 1, 2023.

II. GEOSPATIAL DATA

Class B deficiency Guidance-10 included in CPUC Resolution WSD-002 requires SCE to submit geospatial data according to the current data taxonomy and schema and to provide details regarding (1) locations where grid hardening, vegetation management, and asset inspections were completed over the prior reporting period, clearly identifying each initiative and supported with GIS data; (2) the type of hardening, vegetation management and asset inspection work done, and the number of circuit miles covered, supported with GIS data; (3) the analysis that led it to target that specific area and hardening, vegetation management or asset inspection initiative; and (4) hardening, vegetation management, and asset inspection work scheduled for the following reporting period. The GIS Data Schema includes additional geospatial data requirements beyond the four items above. Below, SCE explains the geospatial data it is providing in this Q4 2022 QDR.

This QDR provides recorded GIS data for the October through December 2022 period. Initiative work plans are in the process of being developed for 2023, therefore, a more comprehensive projection of planned work will be included in subsequent filings. Planned GIS 2023 data is included where available in this filing based v2.2 GIS Data Schema.[2] The following targeted work was completed prior to Q4; therefore, do not reflect any data for Q4:

- IN-3 Infrared Inspection of Energized Overhead Distribution Facilities and Equipment was fully completed in Q2 2022
- IN-4 Infrared Inspection, Corona Scanning and High-Definition Imagery of Energized Overhead Transmission Facilities Equipment fully completed in Q3 2022
- VM-11 Substation Inspections data was not submitted in Q4 2022 as all substations had already been visited previously in 2022

SCE works to continuously improve its quarterly submissions. The following are areas for which SCE was unable to provide requested information in our Q4 2022 submission. SCE is continuing to QC these issues for future submissions.

- SCE's mapping source system currently does not track Parcel APN and Line Deenergized for certain WMP activities
- Substation count in Q4 2022 declined from 1,056 to 980 due to substation mapping updates that recategorized pole top substations and removed inactive substations previously included in the Q3 2022 submission
- VM-1 Hazard Tree Management Program (HTMP): Approximately 11% of data in Q4 could not be mapped due to discrepancies between SCE's Vegetation work management systems. SCE is currently working on a solution. Data is expected to be available by Q2 2023
- VM-4 Dead and Dying Tree Removal: Approximately 12% of data in Q4 2022 could not be mapped due SCE's Vegetation work management systems. SCE is currently working on a solution. Data is expected to be available by Q2 2023
- SH-2 Undergrounding Overhead Conductor: 56% of data in Q4 could not be mapped in Q4 2022 due to locations for new structures still in the process of being mapped in SCE's system of record

[2] *See* Energy Safety's January 2022 GIS Data Reporting Standard Version 2.2.

This QDR includes the geospatial Initiative,[3] Asset Point, Asset Line, PSPS and Risk Events, and Other Required Data datasets. SCE is not providing metadata in this submission given that we first must focus on obtaining as much data as possible pursuant to the requirements and Energy Safety has informed that further refinements to the GIS Data Schema will be issued. SCE will confer with Energy Safety and peer utilities to benchmark and align on metadata requirements to be for future submissions. Additionally, some data elements within the datasets SCE is providing are not available due to either our inability to correlate data from multiple systems within the available times or because SCE does not currently capture the requested data.

SCE appreciates that Energy Safety, through its comprehensive updated GIS Data Schema, 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 template below.

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. SCE has made some progress in this area in recent quarters (such as the addition of the support structure aging data and for Q3 2022, beginning to provide Vegetation Genus and Common Name as well as inclusion of our covered conductor Non-Wildfire Covered Conductor Program (non-WCCP) installations). 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, the requested spatial data is being provided 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 GIS Data Schema. Responses to the specific Guidance-10 conditions are detailed below.

i. locations where grid hardening, vegetation management, and asset inspections were completed over the prior reporting period, clearly identifying each initiative and supported with GIS data

Please see the geodatabase that includes grid hardening, vegetation management and asset inspection initiative data completed in High Fire Risk Area (HFRA) from October 2022 through December 2022. As noted above, SCE also provides in the geodatabase other feature class datasets in support of Energy Safety's direction to provide as much information as practicable and is readily available. The additional datasets include Asset Line, Asset Point, PSPS Event, Risk

[3] 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.

Event, and Other Required Data.

ii. the type of hardening, vegetation management and asset inspection work done, and the number of circuit miles covered, supported with GIS data

SCE provides data associated with its system hardening, vegetation management, and asset inspection initiatives described in our 2022 WMP Update. Most wildfire initiatives are not planned, managed, or executed based on the number of circuit miles (or miles) and thus line geometry for these initiatives is not available. This is consistent with Resolution WSD-011, Attachments 2.1 and 2.3 that describe how the number of circuit miles unit of measurement is not applicable for certain types of work. The limited initiatives that do have line geometry, circuit miles or miles are available in the geodatabase and for circuit-based distribution and transmission inspections, the entire circuit geometry has been included.

SCE notes that line geometry for covered conductor is not currently available. In place of this, SCE has provided Energy Safety with a Point feature class, while it continues to develop a more accurate method of providing installations of covered conductor across its territory as a Line feature class.

iii. the analysis that led it to target that specific area and hardening, vegetation management or asset inspection initiative

SCE first provided its risk-based analyses for how it determines and targets deployment for its wildfire-related initiatives in its July 27, 2020 Remedial Compliance Plan (RCP) to Guidance-3 and provided updates in the 2021 WMP Update process and most recently in its 2022 WMP Update. Please see Sections 7.1.2, 7.3.3, 7.3.4 and 7.3.5 of SCE's 2022 WMP Update for current information regarding methods SCE employs to analyze and prioritize work for grid hardening, vegetation management and asset inspection initiatives.[4] Please also see Chapter 4 of SCE's 2022 WMP Update that describes SCE's improvements to its risk modeling.

iv. hardening, vegetation management, and asset inspection work scheduled for the following reporting period, with the detail in (i) – (iii)

Please see the geodatabase that includes grid hardening, vegetation management and asset inspection initiatives planned in HFRA from October through December 2022 pursuant to the GIS Data Schema (v.2.2). As noted above, dates provided for all WMP Planned work are subject to change depending on operating constraints, changes in priority, and resource availability Similar to part (ii) above, limited initiatives have line geometry (i.e., circuit miles or miles). Initiatives with line geometry are available in the geodatabase. SCE notes that it provided point geometry for covered conductor for work completed in January through December 2022. Also, line geometry for planned circuit-based distribution and transmission inspections includes the entire circuit geometry, not just partial geometry of the circuit. Please see SCE's response to part (iii) for the detail for condition (iii).

[4] Risk prioritization is followed to the best of SCE's abilities to plan / schedule wildfire mitigation work; however, operational realities (e.g., permitting, customer acceptance, etc.), operational efficiencies (e.g., when a higher risk segment is adjacent to a lower risk segment, both circuits may be covered while the crew is working that location), and subsequent field review of the specific geographic locations may alter the execution plans of some activities.

III. WILDFIRE MITIGATION DATA TABLES 1-15

Introduction:
SCE provides Wildfire Mitigation Data Tables 1-15 pursuant to the requirements in Energy Safety's Final Data Guidelines v3.0, effective December 14, 2022. 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 all of the ignitions 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 Non-Spatial Tables and is also including additional information for some of the Tables to provide further clarification:

Table 1: Quarterly Initiative Update (QIU)

SCE provides information for 2022 and 2023 activities in the Q4 2022 filing. Pursuant to the 2023-2025 WMP Guidelines, SCE provides Risk Target Reduction and Mid-Year Target information for applicable 2023 activities only.

SCE notes that Targets are described in several documents, including the Quarterly Data Report and throughout the 2023 Wildfire Mitigation Plan. 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 Table 1 and Table 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 1/1/2020 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 an external constraint such as permitting, access constraints, 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 in nature and are made safe to the public within 24-

hours. The resulting permanent repair may extend longer due to material availability, customer access, 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 3/31/2020 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 GO95 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 GO95, 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 WMP, we are 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 our 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 required for these Tables.

Table 7: State of Service Territory and Utility Equipment
SCE does not track projections for the current state of its service territory as the counts and circuit miles associated with the metrics on this table are a snapshot in time. SCE's projections for utility equipment, removals, and infrastructure upgrades are shown in Tables 8 & 9.

Tables 8 & 9: Location of Utility Equipment Additions, Removals, Infrastructure Upgrades
SCE provides equipment addition, removal and upgrade data where available. In some instances, the

exact circuit and/or geospatial locational data and line lengths required are not available. This is due in part to detailed designs not yet completed for certain infrastructure projects. 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, 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).

- **SAIDI / SAIFI:** SCE is currently unable to provide planned outage data metrics due to recent IT system implementation issues. SCE is actively working to correct this issue and resume reporting and will provide OEIS the data when it is available.

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 or operative expenditure and is broken out by total territory and HFTD.

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 Wildfire Mitigation Plan. 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 Table 1 and Table 12 to serve as the authoritative and governing source for the Targets.

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 a CSV 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., GO95 exceptions).

Table 14: HFTD Area Risk Summary
In Table 14, SCE provides information summarizing its High-Fire Threat District (HFTD) risk. SCE is currently in the process of finalizing the risk analysis for its WMP submission due to Energy Safety on February 13, 2023. If future changes to this risk analysis result in changes to this table, SCE will update the values in Table 14 as applicable either in its Q1 2023 QDR or earlier, 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. SCE is currently finalizing the risk analysis for its WMP submission due to Energy Safety on February 13, 2023. If changes to this risk analysis result in modifications to this table, SCE will update the values in Table 15 as applicable, either in its Q1 2023 QDR or earlier, pursuant to guidance from Energy Safety.

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