Date of Issuance
November 17, 2023

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

SAFETY POLICY DIVISION

Resolution SPD-14
November 16, 2023

R E S O L U T I O N

RESOLUTION SPD-14. Resolution Retaining Existing Performance Metrics, Wildfire Mitigation Plan Requirements, and Safety Culture Assessment Process for Electrical Corporations Pursuant to Public Utilities Code §§ 8389(d)(1), (2), and (4).

This resolution retains the existing performance metrics and wildfire mitigation plan (WMP) requirements and makes minor modifications to Office of Energy Infrastructure Safety's (Energy Safety) annual safety culture assessment process. This resolution satisfies the requirements of Public Utilities Code (Pub. Util. Code) §§ 8389(d)(1), (2), and (4) related to catastrophic wildfires.[1]

OUTCOME SUMMARY:

- Adopts Energy Safety's recommendations to retain the existing performance metrics and WMP requirements.[2]

- Adopts Energy Safety's Safety Culture Assessment Process for the 2024 WMPs.

SAFETY CONSIDERATIONS:

- Mitigation of catastrophic wildfires in California is among the most important safety challenges the Commission-regulated electrical corporations face. WMPs provide an electrical corporation's proposed actions to help prevent catastrophic wildfires, so comprehensive WMPs are essential to safety.
- Any changes to WMPs should enhance California's ability to review and monitor the electrical corporations' actions in mitigating catastrophic wildfires.
- The process for conducting annual safety culture assessments should help ensure electrical corporations improve their focus on and culture of safety at all levels of their businesses.

---

[1] All statutory references are to the Public Utilities Code unless otherwise noted.

[2] Resolution SPD-3 Adopting Performance Metrics and Retaining Existing Requirements for the 2023 Wildfire Mitigation Plans of Electrical Corporations accessed July 19, 2023.

ESTIMATED COST:

- This Resolution does not address or approve costs.

- Costs incurred to comply with WMPs are to be addressed in electrical corporation General Rate Cases or other applications. The WMPs do not approve costs for recovery in rates.

SUMMARY

This Resolution satisfies the requirements of Pub. Util. Code §§ 8389(d)(1), (2), and (4) related to catastrophic wildfires. The statute requires the following:

> (d) By December 1, 2020, and annually thereafter, the [C]ommission, after consultation with the [Office of Energy Infrastructure Safety],[3] shall adopt and approve … the following:
>
> > (1) Performance metrics for electrical corporations.
> >
> > (2) Additional requirements for wildfire mitigation plans. […][4]
> >
> > (4) A process for the [Office of Energy Infrastructure Safety] to conduct annual safety culture assessment for each electrical corporation.

Pursuant to § 8389(d)(1), this Resolution adopts Energy Safety's recommendation to retain the existing performance metrics for the 2025 WMP Updates. Performance metrics are intended to assess utility performance and outcomes resulting from executing the WMPs. Retaining the existing performance metrics will allow for consistent data reporting across the current Wildfire Mitigation Plan cycle.

Under § 8389(d)(2), this Resolution also maintains the existing WMP requirements in Pub. Util. Code § 8386(c). Energy Safety does not plan to include any new WMP requirements in its 2025 WMP Update Guidelines. Consequently, Energy Safety does not recommend any changes to the WMP requirements at this time.

Pursuant to § 8389(d)(4), this Resolution adopts Energy Safety's proposed annual safety culture assessment process, containing minor modifications to last year's process approved in Resolution SPD-6.

---

[3] The Wildfire Safety Division (WSD) transitioned from the California Public Utilities Commission (CPUC or Commission) to the Office of Energy Infrastructure Safety (Energy Safety) at the California Natural Resources Agency (CNRA) on July 1, 2021.

[4] Sections (d)(3) relates to the WMP compliance process, which the Commission addressed in Resolution SPD-13.

Energy Safety's proposals related to the §§ 8389(d)(1), (2), and (4) requirements are contained within this Resolution in the following Attachments:

- **Attachment 1: Energy Safety's 2023 Review of Performance Metrics for Electrical Corporations and Additional Requirements for Wildfire Mitigation Plans**

- **Attachment 2: Energy Safety's 2024 Safety Culture Assessment Process**

DISCUSSION

1.   Performance Metrics

Energy Safety recommends maintaining the existing performance metrics for the 2025 WMP Update submissions.[5] Energy Safety made significant changes to the performance metrics last year, the first year in the three-year WMP cycle (2023-2025),[6] which the Commission adopted and approved.[7] The metrics quantify consequences resulting from the implementation of WMPs and provide insights that will measure improvements to wildfire mitigation and inspection programs specified in the approved WMPs.[8, 9] The metrics comprise over 800 unique data points in 17 categories: risk events, time between vegetation inspection finding and resulting trimming activity, time between level 1 asset inspection finding and resulting maintenance activity, time between level 2 asset inspection finding and resulting maintenance activity, time between level 3 asset inspection finding and resulting maintenance activity, vegetation management work orders, asset management work orders, response time, fatalities and injuries due to utility-related ignitions, value of assets destroyed by utility-related ignitions, listed by asset type, structures damaged or destroyed by utility-related ignitions, acreage burned by utility-ignited wildfires, number of utility-related ignitions, grid condition findings from

---

[5] Attachment 1, p. 2.

[6] Resolution SPD-3 (Resolution SPD-3 Adopting Performance Metrics and Retaining Existing Requirements for the 2023 Wildfire Mitigation Plans of Electrical Corporations, accessed July 19, 2023).

[7] Resolution SPD-3.

[8] Office of Energy Infrastructure Safety 2023-2025 Wildfire Mitigation Plan Technical Guidelines (December 6, 2022), Sections 8.1.1.3, 8.2.1.3, 8.3.1.3, 8.4.1.3, 8.5.1.3, and 9.1.5, 2023 Wildfire Mitigation Plans | Office of Energy Infrastructure Safety (ca.gov), accessed September 29, 2023.

[9] Office of Energy Infrastructure Safety Data Guidelines, Version 3.1 (February 8, 2023), pp. 158-159, Data Analytics Division | Office of Energy Infrastructure Safety (ca.gov), accessed September 29, 2023.

inspection, grid condition fixes in response to inspection findings, vegetation clearance findings from inspection, and community outreach metrics.[10]

The existing metrics appropriately assess the effectiveness of WMP implementation. Additionally, retaining the existing performance metrics will allow for consistent data reporting across the current WMP cycle. The Commission supports Energy Safety's decision to keep the current performance metrics.

2.   Additional WMP Requirements

Public Utilities Code Section 8386(c) provides the requirements for WMP submissions. Energy Safety does not recommend any changes for the 2025 WMP Update submissions.[11] Consistent with Energy Safety's recommendation, the Commission will not adopt additional WMP requirements for the WMPs submitted in 2024.

3.   2024 Safety Culture Assessment Process

Public Utilities Code Section 8389(c)(4) requires approval of a safety culture assessment process.

3.1   Energy Safety's Proposed Safety Culture Assessment Process

To achieve the vision for its safety culture assessment, Energy Safety assesses the following elements of culture: leadership influence, workforce perceptions and behavior, and the organizational foundation that drives culture, including sustaining systems, governance, and safety-enabling systems.[12] The process Energy Safety proposes for 2024 is similar to the process it conducted in 2021, 2022, and 2023 with minor modifications:

- Replaces "outcome metrics" with "performance metrics."[13]

- Adds "quality control" in the assessment framework of an electrical corporation's organizational foundation.[14]

---

[10] Required in Office of Energy Infrastructure Safety Data Guidelines, Version 3.1 (February 8, 2023) and reported in Energy Safety Quarterly Data Reports (Table 2).

[11] Attachment 1, p. 3.

[12] Attachment 2, p. 2.

[13] Attachment 2, pp. 3, 7, 13.

[14] Attachment 2, p. 10.

- Requires electrical corporations to produce supporting documentation that is required by Energy Safety to verify responses to self-assessment questions.[15]

- Requires electrical corporations to provide supporting documentation that is required by Energy Safety to verify and add context to information presented in the principal inputs of the safety culture assessment.[16]

3.2   Discussion

Energy Safety proposes edits to the annual safety culture assessment process clarifying language and adding requirements to submit supporting documentation. For instance, Energy Safety replaces the term "outcome metrics" with "performance metrics" to align with the terminology it uses to describe how it evaluates electrical corporations' WMP progress. Energy Safety includes "quality control" along with "quality assurance" as one of the safety enabling systems in the assessment framework.[17] With regard to workforce survey planning, Energy Safety extends planning to more informal avenues such as meetings and email correspondence as oppose to planning sessions.[18] Relating to the second and third principal inputs that Energy Safety relies on for its safety culture assessment, Energy Safety modifies the process to require electrical corporations to provide supporting documentation when asked by Energy Safety to do so, to verify responses to self-assessments and to verify and add context to the principal inputs of the assessment.[19]

In accordance with Public Utilities Code Section 8386.2, the Commission must require safety culture assessments of electric corporations that are updated at least once every five years and set a schedule for assessments. Although the Commission's mandate for assessments is separate and distinct from Energy Safety's requirement, both involve assessing safety culture for the same electric corporations. We commend Energy Safety's stated aim of coordinating with the Commission to make the two assessments complementary and mutually informative.[20] It's important to note that the Commission's own safety culture assessment process is still under development and the manner in which these two processes will complement each other is an evolving topic.[21] The

---

[15] Attachment 2, p. 17.

[16] Attachment 2, p. 18.

[17] Attachment 2, p. 10.

[18] Attachment 2, p. 15.

[19] Attachment 2, pp. 17, 18.

[20] Attachment 2, p. 4.

[21] R.21-10-001 Order Instituting Rulemaking to Develop Safety Culture Assessments for Electric and Natural Gas Utilities.

Commission reviewed Energy Safety's updates and adopts the 2024 Safety Culture Assessment Process.

COMMENTS

Pub. Util. Code § 311(g)(1) provides that resolutions must be served on all parties and subject to at least 30 days public review. However, given that this Resolution is issued outside of a formal proceeding, interested stakeholders needed not have party status in a Commission proceeding in order to have submitted comments. Comments were due 20 days from the mailing date of this Resolution. Replies were not accepted.

This draft Resolution was served on the service list of R.18-10-007, noticed on the Commission's Daily Calendar, and placed on the Commission's agenda no earlier than 30 days from its mailing date.

The Commission received comments from Green Power Institute (GPI). GPI supports the decision in Resolution SPD-14 to retain the WMP performance metrics, WMP requirements, and safety culture assessment process for the 2024 WMP annual filings, all of which reinforce the underlying Energy Safety documents.

FINDINGS

1. Pub. Util. Code §§ 8389(d)(1), (2), and (4) require the Commission to adopt, after consultation with Energy Safety, the following: (1) performance metrics for electrical corporations, (2) additional requirements for wildfire mitigation plans, and (4) a safety culture assessment process. This Resolution, with its Attachments, meets each of the foregoing requirements.

2. Energy Safety's proposal to maintain the existing performance metrics as set forth in Attachment 1, hereto, is reasonable.

3. Energy Safety's proposal to maintain the existing WMP requirements, as set forth in Attachment 1, hereto, is reasonable.

4. Energy Safety's proposal to update the existing Safety Culture Assessment process, as set forth in Attachment 2, hereto, is reasonable.

5. Energy Safety's recommendations contained in Attachment 1 regarding performance metrics and WMP requirements reasonably address the requirements of Public Utilities Code §§ 8389(d)(1) and (2).

6. Energy Safety's recommendations contained in Attachment 2 regarding the Safety Culture Assessment process reasonably address the requirements of Public Utilities Code § 8389(d)(4).

THEREFORE, IT IS ORDERED that:

1. The Office of Energy Infrastructure Safety's recommendations are hereby adopted for the following: (1) performance metrics for electrical corporations, (2) requirements for wildfire mitigation plans, and (3) the Safety Culture Assessment Process for 2025 Wildfire Mitigation Plans.

2. This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed, and adopted at a conference of the Public Utilities Commission of the State of California held on November 16, 2023; the following Commissioners voting favorably thereon:

/s/   Rachel Peterson

Rachel Peterson
Executive Director

ALICE REYNOLDS
President

GENEVIEVE SHIROMA
DARCIE L. HOUCK
JOHN REYNOLDS
KAREN DOUGLAS
Commissioners

ATTACHMENT 1:

Office of Energy Infrastructure Safety 2023 Review of Performance Metrics for Electrical Corporations and Additional Requirements for Wildfire Mitigation Plans

OFFICE OF ENERGY INFRASTRUCTURE SAFETY

2023 Review of Performance Metrics for Electrical Corporations and Additional Requirements for Wildfire Mitigation Plans

August 2023

TABLE OF CONTENTS

1.0   Introduction

Public Utilities Code section 8389(d)[1] requires the California Public Utilities Commission (Commission), after consultation with the Office of Energy Infrastructure Safety (Energy Safety), to adopt and approve the following:

1. Performance metrics for electrical corporations.
2. Additional requirements for Wildfire Mitigation Plans (WMPs).
3. A WMP compliance process.
4. A process for the division to conduct annual safety culture assessments for each electrical corporation.

This document constitutes Energy Safety's consultation regarding Public Utilities Code section 8389(d)(1) and (2), performance metrics (Section 2) for electrical corporations and additional requirements for WMPs (Section 3).

---

[1] Public Utilities Code section 8389
(https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PUC&sectionNum=8389, accessed June 28, 2023).

2.0   Performance Metrics

Public Utilities Code section 8386(c)(4)[2] describes performance metrics as:

> *"A description of the metrics the electrical corporation plans to use to evaluate the plan's performance and the assumptions that underlie the use of those metrics."*

Performance metrics indicate the extent to which an electrical corporation's Wildfire Mitigation Plans is driving performance outcomes.

The Commission adopted and approved the current performance metrics in 2022 within Resolution SPD-3[3] *Resolution Adopting Performance Metrics and Retaining Existing Requirements for the 2023 Wildfire Mitigation Plans of Electrical Corporations Pursuant to Public Utilities Code §§ 8389(d)(1) and (2)).* Further details of Energy Safety's performance metrics reporting requirements can be found in Version 3.1 of Energy Safety's Data Guidelines.[4]

Energy Safety does not recommend any changes to the performance metrics for the 2025 Update Guidelines at this time. Energy Safety made significant updates to the performance metrics last year, the first year in the three-year WMP cycle (2023-2025).[5] Retaining the existing performance metrics, approved by the Commission in Resolution SPD-3, will allow for consistent data reporting across the current Wildfire Mitigation Plan cycle. Energy Safety will revisit performance metrics next year when developing the Base Plan Guidelines for 2026-2028.

---

[2] Public Utilities Code Section 8386
(https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PUC&sectionNum=8386, accessed July 13, 2023).

[3] Resolution SPD-3
(Resolution SPD-3 Adopting Performance Metrics and Retaining Existing Requirements for the 2023 Wildfire Mitigation Plans of Electrical Corporations, accessed July 19, 2023).

[4] Office of Energy Infrastructure Safety Data Guidelines (Version 3.1), Section 4 – Wildfire Mitigation Data
(https://efiling.energysafety.ca.gov/Search.aspx?docket=Data+Guidelines, accessed July 20, 2023)

[5] Resolution SPD-3
(Resolution SPD-3 Adopting Performance Metrics and Retaining Existing Requirements for the 2023 Wildfire Mitigation Plans of Electrical Corporations, accessed July 19, 2023).

3.0   WMP Requirements

Energy Safety is developing its 2025 WMP Guidelines that will apply to the update year of the three-year (2023-2025) WMP cycle (Update Guidelines). The purpose of these Update Guidelines is fourfold:

1) Meet the WMP statutory requirements in Public Utilities Code section 8386(c);

2) Focus on and define "*significant*" updates between the 2023-2025 Base WMP and the 2025 Update;

3) Enable each electrical corporation to provide new and updated information regarding its WMP in a streamlined way; and

4) Allow Energy Safety and stakeholders to evaluate any "*significant*" updates and provide direction to the electrical corporations mid-WMP cycle.

These Update Guidelines will fully align with existing WMP requirements set forth in Public Utilities Code section 8386 (c). Energy Safety does not plan to include any new WMP requirements in its 2025 Draft WMP Update Guidelines. Consequently, Energy Safety does not recommend any changes to the WMP requirements at this time.

DATA DRIVEN
FORWARD-THINKING
INNOVATIVE
SAFETY FOCUSED

ATTACHMENT 2:

Office of Energy Infrastructure Safety's 2024 Safety Culture Assessment Process

TABLE OF CONTENTS

INTRODUCTION

Pursuant to Public Utilities Code section 8389, by December 1, 2020, and annually thereafter, the California Public Utilities Commission (the Commission or CPUC), after consultation with the Office of Energy Infrastructure Safety (Energy Safety) must adopt and approve a process for Energy Safety to conduct annual safety culture assessments for each electrical corporation.[1] This document presents an overview of how Energy Safety proposes to adjust the annual safety culture assessment process approved in Resolution SPD-6, adopted by the Commission on December 1, 2022.[2]

Energy Safety published an update of the previous safety culture assessment requirements in April 2023.[3] Energy Safety will publish a new safety culture assessment requirements document, the Safety Culture Assessment Guidelines for Electrical Corporations (SCA Guidelines), after the Commission's adoption and approval of the present process document. The SCA Guidelines will stipulate the specific requirements of electrical corporations participating in the annual safety culture assessment, including the different requirements of large investor-owned utilities (IOUs), small and multi-jurisdictional utilities (SMJUs), and independent transmission operators (ITOs).[4] Energy Safety plans to conduct its next safety culture assessment in the spring and summer of 2024.

Energy Safety expects its safety culture assessment process to evolve year over year and may phase in elements of the full process described herein that were not fully implemented in prior years. The process Energy Safety proposes for 2024 is similar to the process it conducted in previous years, with minor modifications. Energy Safety plans to incorporate lessons learned each year to improve the safety culture assessment process for consideration by the Commission pursuant to Public Utilities Code section 8389(d)(4).

---

[1] For 2022, these electrical corporations are Pacific Gas and Electric Company, San Diego Gas & Electric, Southern California Edison, Liberty Utilities, PacifiCorp, Bear Valley Electric Service, Inc., Horizon West Transmission, and Trans Bay Cable.

[2] Resolution SPD-6 "Resolution Adopting Safety Culture Assessment Process for Electrical Corporations Pursuant to Public Utilities Code § 8389(d)(4)"
(https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M499/K482/499482543.pdf, accessed Feb. 7, 2023).

[3] 2023 Safety Culture Assessment (SCA) Guidelines for Electrical Corporations (April 2023)
(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=53626&shareable=true, accessed September 5, 2023).

[4] In both 2021 and 2022 Energy Safety categorized the electrical corporations as follows: large IOUs—Pacific Gas and Electric Company, San Diego Gas & Electric, and Southern California Edison; SMJUs—Liberty Utilities (CalPeco), PacifiCorp, and Bear Valley Electric Service, Inc.; ITOs—Horizon West Transmission, Trans Bay Cable, and LS Power. Energy Safety plans to continue to do so in 2024.

Overview

This document serves as the foundation for Energy Safety's safety culture assessment process. It is organized as follows:

1. **Overall goals and objectives**
2. **Framework and scope**
3. **Process**
4. **Next steps**

Below are summaries of the content in each of these sections.

1. Overall Goals and Objectives: Safety Culture Assessment Vision

Energy Safety's vision for its safety culture assessment is rooted in the conviction that each electrical corporation's safety culture influences safety performance in the context of wildfire mitigation. Energy Safety aspires to ground its safety culture assessment in data-driven insight, including insight from data on the cultural drivers of wildfire risk, and connect the results to known performance metrics. Energy Safety focuses its assessment on safety in the wildfire mitigation context, but also considers cultural elements that are relevant to broader safety outcomes. Energy Safety's assessment fosters the continuous and collaborative improvement of safety culture.

2. Framework and Scope

To achieve the vision for its safety culture assessment, Energy Safety assesses the following elements of culture: leadership influence, workforce perceptions and behavior, and the organizational foundation that drives culture, including sustaining systems, governance, and safety-enabling systems. Energy Safety's annual safety culture assessment is distinct from and intended to be complementary to the safety culture assessment the Commission is required to conduct under Public Utilities Code section 8386.2, an assessment that is to be updated at least every five years, the process for which is in development under Rulemaking 21-10-001.[5, 6] While the Commission's safety culture assessment is expected to cover safety culture broadly, Energy Safety's annual safety culture assessment focuses on safety culture most relevant to wildfire risk. Energy Safety accomplishes this by identifying the **safety culture present in the wildfire mitigation work setting**, the setting most pertinent to **personal** risk faced by the wildfire mitigation workforce and **wildfire** risk faced by the public.

---

[5] Public Utilities (Pub. Util.) Code section (§) 8386.2 (https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=8386.2&lawCode=PUC, accessed Sept. 2, 2022).

[6] Order Instituting Rulemaking to Develop Safety Culture Assessments for Electric and Natural Gas Utilities, R. 21-10-001 (Oct. 13, 2021) (https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M414/K981/414981208.PDF, accessed Sept. 9, 2022).

3. Process

Per Public Utilities Code section 8389(d)(4), Energy Safety conducts an annual safety culture assessment process (subject to Commission approval) to assess the safety culture of each electrical corporation. Energy Safety developed the process in 2020 for the baseline assessment in 2021 and now amends it annually.

Energy Safety's assessment evaluates the relative strengths and areas where there are opportunities for growth in the electrical corporation's safety culture, and provides specific, actionable recommendations based on those findings. Energy Safety bases its assessment on three principal inputs collected from the electrical corporations (though not all inputs are collected from all electrical corporations):

1. **A workforce survey targeted at wildfire mitigation workers,** intended to assess culture across dimensions and settings particularly relevant to wildfire, including communication regarding safety between the workforce and leadership. This is required of the large IOUs and SMJUs. Follow-up interviews (focus groups) with the targeted workforce are required of the large IOUs.

2. **A management self-assessment and summary plan for the coming year,** intended to give insights into the elements of the organizational foundation[7] that heavily influence culture, including wildfire safety-related communication across the organization, as well as each electrical corporation's targets and how they plan to reach those targets. This includes follow-up interviews for clarification purposes with the team that prepared the management self-assessment. This is required of the large IOUs.

3. **Objectives and lessons learned.** Energy Safety requires all electrical corporations to submit 12-month and 3-year safety culture objectives, any lessons learned since the electrical corporation's last safety culture assessment, and an update on implementation of the previous year's safety culture assessment recommendations.

In addition to the above, Energy Safety may seek out additional details and context for the principal inputs through:

- Observational visits.
- Supporting documentation such as a list of required safety trainings, minutes from recent high-level safety meetings, a description of safety-related incentives, or other materials that might help validate the management self-assessment.

---

[7] Organizational foundation includes organizational sustaining systems (processes that sustain enabling systems and assure their effectiveness, supporting safety management, leadership, and wildfire safety performance), certain governance elements (how systems or objectives relevant to wildfire safety are monitored), and certain safety-enabling systems (systems and processes that improve safety). For more information see Section 2.1 "Framework."

4. Next Steps

Energy Safety expects to release the draft 2024 SCA Guidelines for public comment in early 2024, and the safety culture assessment will follow their finalization.

Energy Safety will incorporate lessons learned each year to continuously improve the safety culture assessment process.

1.   Overall Goals and Objectives

1.1. Statutory Mandate

Public Utilities Code section 8389(d)(4) requires the Commission, in consultation with Energy Safety, to annually adopt and approve a process for Energy Safety to conduct safety culture assessments for each electrical corporation.[8]

Pursuant to Public Utilities Code section 8389(e), for an electrical corporation to obtain a safety certification, it must be in "good standing." An electrical corporation can satisfy this requirement by agreeing to implement the findings of its most recent safety culture assessment.

1.2. Vision for Energy Safety's Annual Safety Culture Assessment

Energy Safety's safety culture assessment is intended to further its overall vision:

> *A sustainable California, with no catastrophic utility-related wildfires, that has access to safe, affordable, and reliable electricity.*[9, 10]

An organization's culture is central to executing any strategy and a key driver of organizational performance. An organization's culture consists of shared values, shared assumptions, and standards governing behavior, as well as the resulting behavior. Safety culture is part of an organization's culture.

Safety culture is critical for enabling the safe design and execution of electrical corporations' Wildfire Mitigation Plans and for achieving Energy Safety's broader vision.

Accordingly, Energy Safety conducts an annual safety culture assessment. Energy Safety aspires to achieve the following through its safety culture assessment:

1. **A baseline safety culture assessment and subsequent measurement of improvement over time.** Energy Safety's safety culture assessment provides a longitudinal measure of safety culture across electrical corporations. This enables tracking of improvement in a consistent fashion year over year, as well as the identification and sharing of best practices

---

[8] Pub. Util. Code section 8389
(https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=8389.&lawCode=PUC, accessed Sept. 8, 2022).

[9] See Appendix 2 "Utility Wildfire Mitigation Vision and Objectives" of Energy Safety's strategic roadmap "Reducing Utility-Related Wildfire Risk" (2020) (https://energysafety.ca.gov/who-we-are/strategic-roadmap/, accessed September 1, 2022).

[10] In this document "utility" should generally be understood to mean "electrical corporation."

for improving safety culture based on the assessment's findings. Energy Safety conducted the baseline assessment in 2021.

2. **Data-driven insights and connections to known performance metrics.** Energy Safety recognizes that risk-informed, data-supported decision making is critical to successful wildfire mitigation.[11] Energy Safety's safety culture assessment must also be driven by data. Energy Safety therefore bases its assessment on the qualitative and quantitative data collected during the assessment process and strives to understand how the data collected relate to performance metrics year over year (see Section 2.2.2 "Role of Wildfire Mitigation Plan Performance Metrics" for more details). As Energy Safety's safety culture assessment process evolves, it may refine the types of data it collects in pursuit of a better understanding of electrical corporations' safety culture.

3. **A focus on the cultural drivers of wildfire risk.** Energy Safety accomplishes this by focusing on the safety culture present in the wildfire mitigation work setting: the setting most pertinent to personal risk faced by the wildfire mitigation workforce and wildfire risk faced by the public. Energy Safety expects its assessment to evolve to incorporate lessons learned and best practices over time.

4. **A better understanding of how safety culture in the wildfire mitigation context interacts with broader safety culture.** Energy Safety recognizes that an electrical corporation's wildfire mitigation safety culture is a subset of its overall safety culture. Energy Safety's annual safety culture assessment aims to identify the personal and wildfire[12] safety culture present at each electrical corporation. The assessment will focus on the safety culture present in the wildfire mitigation work setting (see Section 2.2.1 "Focus on Safety Culture in the Wildfire Mitigation Context"). As the Commission develops its safety culture assessment pursuant to Public Utilities Code section 8386.2, Energy Safety and the Commission will coordinate the two assessments, including their implementation and reporting of findings and recommendations.[13] The Commission and Energy Safety will aim to make the two assessments complementary and mutually informative.

---

[11] See Appendix 2 "Utility Wildfire Mitigation Vision and Objectives" of Energy Safety's strategic roadmap [Reducing Utility-Related Wildfire Risk](https://energysafety.ca.gov/who-we-are/strategic-roadmap/) (2020) (https://energysafety.ca.gov/who-we-are/strategic-roadmap/, accessed September 8, 2022).

[12] Here, "personal safety," also called occupational safety, refers to the safety of individual members of an organization, and concerns itself with incidents that happen to one person or a few people (e.g., slips, trips, and falls). This is distinct from "process safety," which refers to the safety of the actions and environment of an organization or a part of an organization in execution of the organization's mission. "Wildfire safety," a kind of process safety, here refers to safety issues pertinent to wildfire mitigation activities undertaken by the electrical corporations.

[13] [Order Instituting Rulemaking to Develop Safety Culture Assessments for Electric and Natural Gas Utilities](https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M414/K981/414981208.PDF), R. 21-10-001 (Oct. 13, 2021) (https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M414/K981/414981208.PDF, accessed Sept. 9, 2022).

5. **Continuous and collaborative improvement and learning over time.** Energy Safety recognizes that changing culture throughout a large organization requires a clear vision and focused attention over time. Energy Safety aspires to support accountability for improving safety culture and promote continuous learning across electrical corporations such that a safety culture becomes woven into the fabric of each organization.

2. Framework and Scope

2.1. Framework

Energy Safety's safety culture assessment process is rooted in the belief that safety culture affects wildfire mitigation outcomes.

Building on that belief, Energy Safety assesses the following elements of an electrical corporation's safety culture:

1. **Culture,** which includes:

    a. **Leadership influence**: how leadership is perceived by the workforce to prioritize safety, and the extent to which leadership encourages and demonstrates key behaviors relevant to wildfire safety. For example:

        i.   Advocating for workforce
        ii.   Prioritizing safety
        iii. Leading by example

    b. **Workforce behavior**: the extent to which the workforce demonstrates key behaviors relevant to wildfire safety. For example:

        i.   Raising concerns
        ii.   Performing consistently
        iii. Taking responsibility

2. **The organizational foundation**, which includes:

    a. **Organizational sustaining systems**: the extent to which there are well-functioning processes that sustain enabling systems and assure their effectiveness, and how well these processes support safety management, leadership, and performance. For example:

        i.   Performance management
        ii.   Workforce development
        iii. Selection of workers (hiring and promotion)
        iv.   Rewards and recognition

    b. **Governance**: how systems or objectives relevant to safety are monitored. For example:

        i.   Senior leadership accountability
        ii.   Metrics and targets

    c. **Safety-enabling systems**: the types and quality of systems and processes that improve safety. For example:

       i.   Anticipation, resilience, and learning
      ii.   Event investigation
     iii.   Quality assurance and quality control

A depiction of how these elements interact to influence outcomes is provided in Figure 1 below.

Figure 1: Framework for Energy Safety's Safety Culture Assessment
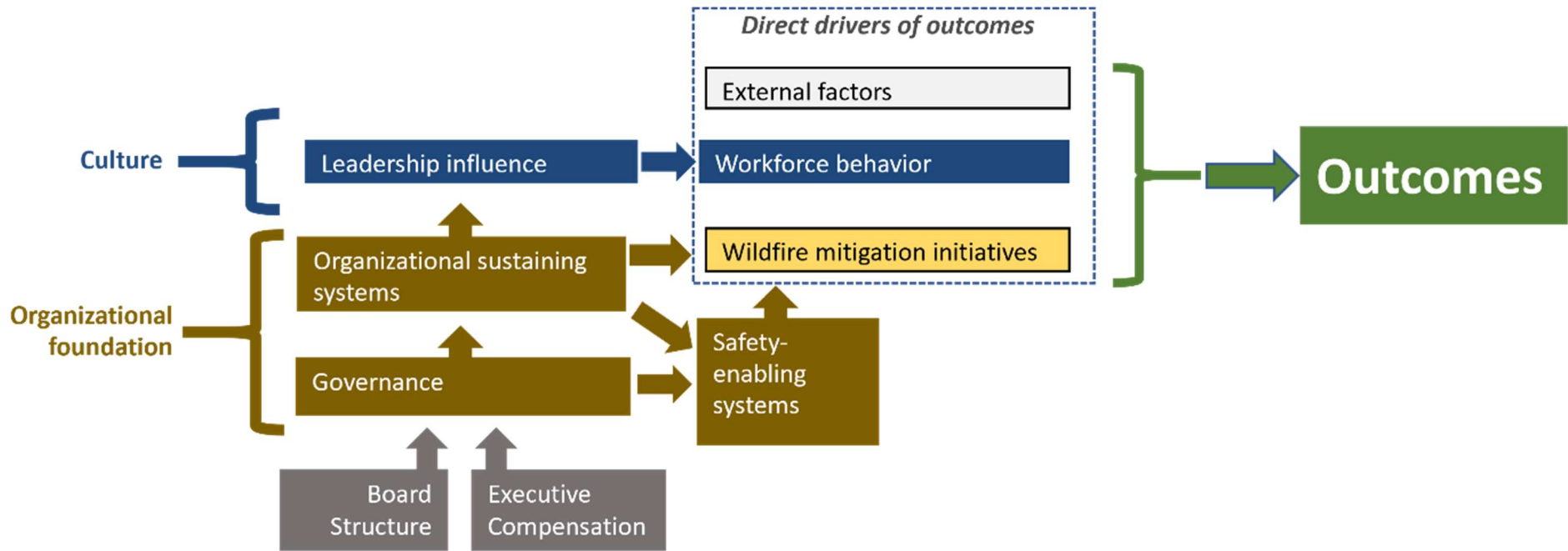
Culture is measured by the **workforce survey**, which is targeted at the workforce involved in carrying out wildfire mitigation activities.

The **organizational foundation** is measured through the **management self-assessment**, which includes a summary plan for how the electrical corporation plans to achieve its management self-assessment targets set for the end of the following year.

Additional to the management self-assessment, electrical corporations must submit 12-month and 3-year safety culture objectives, any lessons learned since the electrical corporation's last safety culture assessment, and an update on implementation of the previous year's safety culture assessment recommendations. These parts of the assessment also contribute to Energy Safety's understanding of the organizational foundation of the electrical corporation.

The governance element is directly affected by two elements that are not measured by the safety culture assessment but are covered by other Energy Safety review processes (see Section 1.1 "Statutory Mandate"):

1. Board Structure (covered by Energy Safety's Safety Certification review process)
2. Executive Compensation (covered by Energy Safety's Executive Compensation review process)

Outcomes are directly affected by the following elements, also not measured by the safety culture assessment:

1. External factors
2. Wildfire mitigation initiatives: the work being done and who is doing it (covered by Energy Safety's Wildfire Mitigation Plan and compliance review processes)

2.2. Scope

2.2.1. Focus on Safety Culture in the Wildfire Mitigation Context

As discussed in Section 3.2 "Inputs for Energy Safety's Assessment," Energy Safety recognizes that safety culture permeates an organization beyond the wildfire mitigation work setting. Energy Safety's annual safety culture assessment focuses on identifying the safety culture present in the wildfire mitigation work setting: the setting most pertinent to personal risk faced by the wildfire mitigation workforce and wildfire risk faced by the public.

For example, Energy Safety focuses its annual safety culture assessment on safety culture in the wildfire mitigation context through:

- The workforce survey (see Section 3.2.1 "Workforce Survey"), which is targeted at the workforce whose work intersects both directly and indirectly with wildfire mitigation activities as defined in each electrical corporation's Wildfire Mitigation Plan. Energy Safety works with electrical corporations to identify this target population. The survey asks the workforce's level of agreement with statements regarding wildfire safety

practices (e.g., "people look for wildfire hazards and risks as work progresses"), among other safety-related practices.

- The management self-assessment (see Section 3.2.2 "Management Self-Assessment and Summary Plan for the Coming Year), which asks specific questions about how the corporation's organizational sustaining systems, governance, and safety-enabling systems support wildfire safety (e.g., "how are wildfire safety responsibilities integrated into frontline supervisors' goals and objectives?").

Energy Safety's assessment of safety culture is intended to be complementary to, and not a replacement for, ongoing work to improve safety culture at each electrical corporation. Each electrical corporation may additionally conduct internal safety culture assessments that measure additional elements specific to that electrical corporation.

While Energy Safety's assessment primarily focuses on the safety culture found in the wildfire mitigation work context, it may extend beyond that context.

2.2.2. Role of Wildfire Mitigation Plan Performance Metrics

In the future, Energy Safety's safety culture assessment may consider performance metrics that are influenced by safety culture in addition to the principal inputs (see Section 3.2).

In addition, Energy Safety may select a subset of relevant performance metrics submitted as part of the Wildfire Mitigation Plan requirements to consider in the context of a safety culture assessment, such as fatalities due to utility-related ignitions within an electrical corporation's service territory. Energy Safety may modify what performance metrics it requires electrical corporations to report in their Wildfire Mitigation Plans as it further develops its safety culture assessment process.

Energy Safety seeks to understand through its safety culture assessment process which elements of safety culture could influence performance metrics. Energy Safety recognizes that this knowledge will be built over time as the safety culture assessment and Wildfire Mitigation Plan processes evolve, and throughout this evolution Energy Safety will strive for close coordination between its safety culture assessment and Wildfire Mitigation Plan processes such that conclusions regarding performance metrics can inform the findings of both processes.

Energy Safety recognizes that performance metrics are distinct from indicators of culture, and they will be assessed accordingly. Specifically, Energy Safety seeks to understand over time whether improvements in an electrical corporation's safety culture and organizational foundation evident in the workforce survey and management self-assessment can be correlated with improvements in safety outcomes, as reflected by the data submitted annually in each electrical corporation's Wildfire Mitigation Plan. Similarly, if safety outcomes are worsening over time, Energy Safety will seek to understand how each electrical corporation plans to address the cultural issues which may have contributed to those outcomes.

3. Safety Culture Assessment Process

3.1. Assessment Report

Energy Safety publishes an annual safety culture assessment report for each electrical corporation pursuant to Public Utilities Code section 8389(d)(4). Specifically, Energy Safety's safety culture assessment report includes the following:

1. **Executive summary:** overall assessment findings including any notable changes from the previous year's results and a brief description of recommendations.

2. **Overview:** a description of the process undertaken to produce the assessment report.

3. **Findings**: a description of the findings from the principal inputs described below (the workforce survey, management self-assessment and summary plan for the coming year, follow-up interviews for the workforce survey and management self-assessment, 12-month and 3-year safety culture objectives and any lessons learned, including a report on implementation of the previous year's recommendations) and any additional inputs if applicable (e.g., observational visits, supporting documentation). This section includes areas of relative strength and areas where there are opportunities for growth in the electrical corporation's safety culture.

4. **Recommendations:** detailed recommendations that are specific, actionable, verifiable (where possible), and informed by industry best practices around safety culture development.

3.2. Principal Inputs

Energy Safety assesses safety culture in a standardized way to generate data that can be compared year-over-year for each electrical corporation and across electrical corporations. Energy Safety's safety culture assessment relies on three principal inputs.

1. **A workforce survey targeted at wildfire mitigation workers.**

2. **A management self-assessment and summary plan for the coming year.**

3. **Objectives and lessons learned, including an update on implementation of the previous year's safety culture assessment recommendations.**

A brief overview of each is presented below.

Not all principal inputs are collected from all electrical corporations. Energy Safety may phase in selected elements over subsequent years or modify the data collection process for SMJUs as well as ITOs. What is required of each electrical corporation will be described in the SCA Guidelines (see Section 4 "Next Steps").

3.2.1. Workforce Survey

Workforce surveys are a common tool for assessing perceptions and practices related to safety culture. They have been used for this purpose at many electrical corporations, including Pacific Gas and Electric, San Diego Gas & Electric, and Southern California Edison.

Energy Safety conducts a survey to assess the perceptions and practices related to key elements of safety culture in the context of wildfire mitigation work, targeting the wildfire mitigation workforce. The workforce survey is not required of ITOs at this time.

Scope of the survey: Energy Safety targets the survey at workforce whose work intersects both directly and indirectly with wildfire mitigation activities as defined in each electrical corporation's Wildfire Mitigation Plan. In 2024, Energy Safety will work with each electrical corporation to identify this population (to clarify or update the work classifications to be included, based on the 2023 survey process).

Content of the survey: The survey consists of 30 statements covering three topics: the general safety culture of the corporation (10 statements), personal safety (11 statements), and wildfire safety (9 statements). Respondents assign a level of agreement from "Strongly Agree" to "Strongly Disagree" to each statement using a five-point Likert scale.[14] The full text of the survey will be released separately with the SCA Guidelines (see Section 4 "Next Steps"). In 2024, Energy Safety expects to use the same survey it used in previous years, allowing it to compare results year over year.

Examples of survey statements from each category follow.

1. General safety culture:
    a. Leaders encourage people to ask questions.
    b. I believe managers apply the same rules for all workers.
    c. The company cares about my opinions.
2. Personal safety:
    a. I stop people, even those I do not know, to point out unsafe behavior when I see it in the work environment.
    b. People focus on one task at a time and avoid distractions.
    c. Pausing work for hazards and safety concerns is viewed positively.
3. Wildfire safety:
    a. People look for wildfire hazards and risks as work progresses.
    b. I am regularly asked for my ideas and suggestions about wildfire hazards and ways to address them.
    c. I feel comfortable discussing wildfire hazards with my supervisor.

---

[14] A Likert scale is a rating system commonly used in questionnaires and survey research to measure people's attitudes, perceptions, and opinions. For more information: Croasmun, J. T., and L. Ostrom. "Using Likert-Type Scales in the Social Sciences." Journal of Adult Education 40, no. 1 (2011): 19-22 (https://files.eric.ed.gov/fulltext/EJ961998.pdf, accessed September 15, 2022).

Survey data collection: A critical element of any workforce survey is a fair and unbiased manner of administration so that the data received is, to the extent possible, a true representation of each employee's perceptions of the work environment and not unduly influenced by the electrical corporation. Energy Safety and/or its contractor administers the survey in compliance with specific requirements established by Energy Safety to ensure survey outputs are anonymous and as accurate as possible. The survey requirements cover the communication, administration, and collection of the survey.

Follow-up interviews (focus groups): Energy Safety may conduct follow-up interviews or focus groups with the targeted workforce. At this time these are only required of the large IOUs. Energy Safety may adjust the scale and scope of these follow-up interviews or focus groups in future years as the safety culture assessment process evolves.

3.2.2. Management Self-Assessment and Summary Plan for the Coming Year

Process for completion: At present, Energy Safety requires only the large IOUs to complete a management self-assessment and summary plan for the coming year. Each large IOU indicates its present status and where it expects to be at the end of the coming year and provides its summary plan for the coming year. The summary plan consists of a two to three-sentence summary of actions it plans to take to achieve its management self-assessment targets for the end of the coming year.

Content: This self-assessment evaluates elements of the electrical corporation's organizational foundation, specifically organizational sustaining systems, governance, and safety-enabling systems, further described below. Each element is intended to be under the direct influence of leadership at each electrical corporation. Note that, as discussed in Section 4 "Next Steps," the self-assessment and summary plan template will be released as part of the SCA Guidelines following adoption and approval by the CPUC of the safety culture assessment process. Energy Safety may modify the self-assessment and summary plan template based on findings from 2023 and recommendations from the Wildfire Safety Advisory Board.

The following descriptions are intended to provide an overview of the self-assessment with illustrative examples.

1. **Organizational sustaining systems:** processes that sustain enabling systems and assure their effectiveness, supporting safety management, leadership, and performance. Illustrative examples include:
   a. Performance management: the extent to which safety performance and wildfire safety responsibilities are integrated into annual performance reviews and promotion decisions.
   b. Workforce development: the extent to which training and support resources are available to frontline supervisors and workers.
   c. Selection: the extent to which a safety focus is incorporated into position descriptions and expectations for new hires.
   d. Contractor management: the extent to which contractors are trained in identifying and addressing potential wildfire risks.

    e.   Rewards and recognition: the extent to which rewards and incentive systems support wildfire safety objectives.

2. **Governance:** formal accountability mechanisms and targets. Illustrative examples include:
    a.   Senior leadership accountability: the extent to which accountability is clear for wildfire safety outcomes.
    b.   Metrics and targets: the extent to which wildfire safety measures and targets provide actionable insights and are communicated throughout the organization.

3. **Safety-enabling systems:** specific and direct mechanisms to manage and improve safety. Illustrative examples include:
    a.   Incident investigation: the extent to which near misses and other weak signals are investigated, and how effectively the information from these investigations is used.
    b.   Hazard recognition: the quality of the process used by the workforce to report potential wildfire hazards.
    c.   Anticipation, resilience, and learning: systems and processes to encourage sensitivity to weak signals of wildfire risks, as well as processes and structures to create a learning organization.
    d.   Assurance: types of audits conducted, and how those findings are tracked and leveraged.

For each element, the electrical corporation rates itself according to a four-point scale, reflecting how safety is viewed by the corporation's management.[15] This evaluation scale does not prescribe exact specifications of best practices, it only describes general characteristics of vision and performance.

Electrical corporations must provide any supporting documentation required by Energy Safety to verify responses to self-assessment questions. Electrical corporations may also submit supporting documentation related to self-assessment questions without it being requested by Energy Safety. This documentation would be collected as part of the supporting documentation outlined in Section 3.2.4 "Observational Visits and Supporting Documentation."

Content of the summary plan for the coming year: Each electrical corporation must submit a two to three-sentence summary of its planned actions to drive improvement for each element of the self-assessment in the coming year.

Follow-up interview: Energy Safety may conduct a follow-up interview for clarification purposes with the team that prepared the management self-assessment at each electrical

---

[15] The scale used in 2023 was (going from lowest to highest maturity): public compliance, private compliance, stewardship, citizenship.

corporation required to submit one. Energy Safety may adjust the scale and scope of these follow-up interviews in future years as the safety culture assessment process evolves.

3.2.3. *Objectives and Lessons Learned*

Objectives and lessons learned: All electrical corporations must provide to Energy Safety 12-month and 3-year safety culture objectives and any lessons learned since the electrical corporation's last safety culture assessment. All electrical corporations must also provide an update on implementation of the previous year's safety culture assessment recommendations. In 2024, as in 2023, these will be the only components of the safety culture assessment that are required of all electrical corporations, including SMJUs and ITOs. For the large IOUs, the 12-month and 3-year objectives must support the plan for advancement described in each corporation's responses to the management self-assessment and summary plan for the coming year.

3.2.4. *Observational Visits and Supporting Documentation*

Energy Safety may supplement the information collected in the inputs described above with observational visits or requests for supporting documentation. These can add nuance and depth to Energy Safety's understanding of each electrical corporation's safety culture and goals for improvement.

Observational visits: Energy Safety and its contractor(s) may conduct observational site visits. Energy Safety may adjust the scale and scope of observational visits in future years as the safety culture assessment process evolves.

Supporting Documentation: Electrical corporations must provide any supporting documentation required by Energy Safety to verify and add context to information presented in the principal inputs of the safety culture assessment. Electrical corporations may also submit supporting documentation without it being requested by Energy Safety. Types of information that may be required or included are:

1. Evidence to support select elements of the self-assessment so that Energy Safety can verify how electrical corporations have assessed themselves.
2. A more detailed plan for advancement in reference to each element of the self-assessment.
3. Other documentation Energy Safety identifies as relevant to the assessment.

3.3. Evaluation of Good Standing

Agreement to implement the findings of the Energy Division's safety culture assessment satisfies an electrical corporation requirement to establish "good standing" for the purposes of attaining a Safety Certification. Per Public Utilities Code section 8389(e)(2), a Safety Certification may be issued to an electrical corporation if (among other requirements):

> [T]he electrical corporation provides documentation of […] good standing, which can be satisfied by the electrical corporation having agreed to implement the findings of its most recent safety culture assessment, if applicable.

In addition to the provisions quoted above, the 2023 Safety Certification Guidelines include the following (bold added):[16]

> In its Safety Certification submission, an electrical corporation **must document its agreement to implement the findings of its most recent safety culture assessment undertaken by Energy Safety or its contractors.** If a safety culture assessment has been carried out pursuant to Public Utilities Code section 8386.2, the electrical corporation must also document in its submission an agreement to implement the findings of that safety culture assessment.

In this way an electrical corporation may use the safety culture assessment to establish "good standing" for the purposes of attaining a Safety Certification.

---

[16] 2023 Safety Certification Guidelines (June 2023), p. 2
(https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=54211&shareable=true, accessed September 5, 2023).

4.   Next Steps

Consistent with the process for conducting safety culture assessments approved in Resolution SPD-6 (2022), Energy Safety will release its SCA Guidelines and accept comments on them subsequent to the Commission's adoption and approval of the present process document, and the next safety culture assessment will follow.

Energy Safety expects its safety culture assessment process to evolve year over year, and accordingly may phase in implementation of the full process described in this document, building on the elements conducted in preceding years, and ramping up to a robust steady-state process.

DATA DRIVEN
FORWARD-THINKING
INNOVATIVE
SAFETY FOCUSED

OFFICE OF ENERGY INFRASTRUCTURE SAFETY
A California Natural Resources Agency
www.energysafety.ca.gov

715 P Street, 20th Floor
Sacramento, CA 95814
916.902.6000