

OFFICE OF ENERGY INFRASTRUCTURE SAFETY SAFETY CULTURE ASSESSMENT GUIDELINES FOR ELECTRICAL CORPORATIONS

April 2023

## **TABLE OF CONTENTS**

Introduction 1
1. The Role of the Third-Party Administrator in the Safety Culture Assessment Process 2
2. Application of Safety Culture Assessment Components to Different Electrical
Corporations 2
3. Workforce Survey
3.1 The Workforce Survey Process4
4. Management Self-Assessment
4.1 How Electrical Corporations Should Complete the Management Self-Assessment10
4.2 Behaviorally Anchored Rating Scale11
4.3 Management self-assessment structure12
4.4 Index of self-assessment questions13
4.5 Management Self-Assessment Response Options for Each Question
4.6 Summary Plan for the Coming Year27
5. Objectives and Lessons Learned 28
5.1 Safety Culture Objectives28
5.2 Summary of Lessons Learned29
6. Interviews, Observational Visits, and Supporting Documentation
6.1 Interviews and Observational Visits
6.2 Documentation to Support Responses to the Management Self-Assessment
7. Conclusion
Glossary1

## **INTRODUCTION**

The 2023 update to the Safety Culture Assessment Guidelines for Electrical Corporations (SCA Guidelines) by the Office of Energy Infrastructure Safety (Energy Safety) contains the guidelines for the third annual Safety Culture Assessment process. The process described herein is based on the process described in Resolution SPD-6, adopted by the California Public Utilities Commission (CPUC) on December 1, 2022.<sup>1</sup>

1

The SCA Guidelines are divided into the following sections: (1) Application of Components to Different Electrical Corporations; (2) Workforce Survey; (3) Management Self-Assessment; (4) Objectives and Lessons Learned; (5) Interviews, Observational Visits, and Supporting Documentation.

The results of the Safety Culture Assessment will be consolidated into utility-specific reports that will present Energy Safety's findings (including recommendations) that an electrical corporation may agree to implement to demonstrate "good standing" per Public Utilities Code section 8389(e)(2).

<sup>1</sup> <u>Resolution SPD-6 "Resolution Adopting Safety Culture Assessment Process for Electrical Corporations Pursuant to</u> <u>Public Utilities Code § 8389(d)(4)"</u>

(https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M499/K482/499482543.pdf, accessed Feb. 7, 2023).

## 1. The Role of the Third-Party Administrator in the Safety Culture Assessment Process

Energy Safety conducts its Safety Culture Assessment process through a third-party administrator. Use of a third-party for these activities provides Energy Safety with expertise in industrial safety culture assessments, assistance in refining the SCA process, and minimizes bias in the data collection process.

## 2. Application of Safety Culture Assessment Components to Different Electrical Corporations

Not every SCA component applies to every electrical corporation. Below is a table explaining which components apply to each category of electrical corporation.

There are three categories of electrical corporations used for the purposes of the SCA:

- Large electrical corporations, also called investor-owned utilities ("Large IOUs"): Pacific Gas and Electric Company, San Diego Gas & Electric, and Southern California Edison Company.
- Small and multijurisdictional utilities<sup>2</sup> ("SMJUs"): Liberty Utilities, PacifiCorp, and Bear Valley Electric Service, Inc.
- Independent transmission operators ("ITOs"): Horizon West Transmission, Trans Bay Cable, and LS Power.

Component	The category of electrical corporation to which this component applies	Commentary
Workforce survey	Large IOUs, SMJUs	Energy Safety uses the workforce survey to assess key workforce perceptions and behaviors at the large and small electrical corporations, but not the independent transmission operators,

Table 1. Overview of Requirements by Category of Electrical Corporation

<sup>&</sup>lt;sup>2</sup> In this document "utility" should be understood to mean "electrical corporation."

Component	The category of electrical corporation to which this component applies	Commentary
		where the workforces are too small to ensure the anonymity of respondents.
Management self- assessment with summary plan for the coming year	Large IOUs	Energy Safety uses the management self-assessment, a detailed assessment of organizational systems, to evaluate the larger, more complex electrical corporations.
Safety culture objectives and summary of lessons learned (including reporting on implementation of recommendations)	Large IOUs, SMJUs, ITOs	Energy Safety uses the safety culture objectives and summary of lessons learned in the evaluation of all electrical corporations. This is the only requirement for ITOs, which are small organizations with a lower risk profile than the large IOUs and SMJUs.
Interviews	To be determined by Energy Safety upon review of submissions	Interviews may be required of any electrical corporation. In 2023, they will be required of the large IOUs.
Observational visits	To be determined by Energy Safety upon review of submissions	Observational visits may be required of any electrical corporation.
Supporting documentation	To be determined by Energy Safety upon review of submissions	Supporting documentation may be required of any electrical corporation.

## 3. Workforce Survey

In 2021 and 2022, Energy Safety required the large IOUs (Pacific Gas and Electric Company, Southern California Edison, and San Diego Gas & Electric) and the SMJUs (Liberty Utilities, PacifiCorp, and Bear Valley Electric Service, Inc.) to participate in the workforce survey. In 2023, Energy Safety will require the same electrical corporations to complete the survey.

#### **3.1 The Workforce Survey Process**

#### 3.1.1 Target Population for the Workforce Survey and Planning Meeting

#### **Target Population**

The target population for the workforce survey consists of those employees, supervisors, managers, and contractors who are engaged in wildfire mitigation activities. This would include any electrical corporation employee or contractor employee who conducts work related to the electrical corporation's most recent wildfire mitigation plan as defined by any initiative listed within that plan. One example of this type of employee is a lineperson who is working to install system hardening infrastructure.

Energy Safety acknowledges that the small number of respondents from SMJUs may lead to skewed survey results. Energy Safety will take this into account in its evaluation.

#### **Planning Meeting**

Energy Safety, each electrical corporation to be surveyed, and a third-party administrator carrying out the survey on Energy Safety's behalf will meet before the administration of the survey to agree on the work units and contractor firms that should be included in the target population. Additionally, Energy Safety, the electrical corporation, and the administrator will use this meeting to define deadlines, identify additional languages needed for the survey, finalize demographic questions, <sup>3</sup> identify the best ways to encourage target population participation, and ensure there is agreement on next steps and responsibilities. Results will be broken down by demographic categories where doing so would not compromise respondent anonymity. The results may be broken down by:

- Whether the respondent is an electrical corporation employee or contractor employee.
- Seniority (executive, management, supervisor, or frontline worker).
- Type of wildfire mitigation activity (asset inspection, community engagement, grid operations, vegetation management, etc.).

<sup>&</sup>lt;sup>3</sup> Demographic questions: here, questions that are part of the workforce survey that are used to analyze the survey results according to common groups within the organization while maintaining anonymity. For example, a common demographic question is to ask respondents to indicate which level they belong to in the organization with options including executive, management, supervisor, and frontline worker.

• Location (where applicable: this varies by electrical corporation— for example, Liberty Utilities' locations are North Lake and South Lake).

5

- Business unit.
- Length of tenure.
- Seniority with length of tenure (this shows, for example, if executives who have been in their jobs longer gave more positive responses than new executives).

Below are examples of demographic questions; the terminology used in the question and the response options may vary by electrical corporation so that respondents are best able to recognize where they fit among the options.

- In which organizational function do you primarily work?
  - Response options: Field Services, Transmission, Distribution, Environment, Health & Safety, Subcontractor, etc.
- What is your primary work location?
  - Response options: List of company locations.
- What is your position within the company?
  - Response options: Executive, Manager, Supervisor, Frontline Worker.
- Mark the wildfire mitigation activities in which you spend at least 10% of your time (check all that apply):
  - Response options: Risk Assessment & Mapping, Situational Awareness and Forecasting, Grid Design and System Hardening, Vegetation Management, etc.

Planning meeting participants should include representatives from the electrical corporation (including utility employee representatives and human resources staff), Energy Safety, and the third-party survey administrator.

#### 3.1.2 Guidelines for Workforce Survey Communication, Administration, and Collection

#### Overview

A critical element of any workforce survey is to administer it in an unbiased manner so that the survey output represents, to the extent possible, a true representation of employees' perceptions of their work environment, not unduly influenced by the employer or any other party. To that end, Energy Safety's third-party administrator and the electrical corporations must comply with the following communication guidelines in all survey communication, administration, and data collection to maximize the survey output's accuracy.

#### Workforce Survey Communication

To achieve an effective response rate, it is critical that the electrical corporation communicates the purpose for the workforce survey and the value of participation to the target population. In

communicating with the target population about the survey, Energy Safety's third-party administrator and the electrical corporations must:

- Encourage people to participate in the survey and be honest in their responses.
- Indicate that the purpose of the survey is to fulfill a state requirement for a safety culture assessment. However, it should not emphasize the fact that the survey is being conducted at the direction of a state regulator.
- Indicate that survey responses will be used to inform a plan for improvement.
- Ensure communication supporting survey participation comes from both management and labor leadership.
- Avoid implying in any way that responses to the survey might have repercussions for the electrical corporation's ability to get a Safety Certification.
- Indicate that the electrical corporation is interested in the employee's perceptions and is invested in improvement.
- Make it clear responses are anonymous and employees' survey responses will have no bearing on their performance review or compensation package (e.g., salary, benefits, incentives).

#### Workforce Survey Administration

In the administration of the workforce survey, the third-party administrator and the electrical corporations must:

- Ensure the privacy of responses submitted both online and in paper form.
- Take measures to ensure a private place to complete the survey for those workers who may lack a private workspace, such as frontline workers. For example:
  - If respondents are completing the survey on a shared workstation (i.e., a workstation used by multiple people), instructions should be provided for going to the survey link, responding, and then submitting the survey such that there is no need for a supervisor to be involved with submitting the survey or resetting the computer.
  - No supervisors or co-workers should be next to the survey respondent, looking over the respondent's shoulder, or in the vicinity of respondents while they complete the survey.
  - If a paper version of the survey is used, no supervisors should be in the room while respondents are completing the survey and completed surveys should be placed in a sealed envelope before they are handled further.
- Ensure that all workers in the target population have the opportunity to complete the survey.

• Ensure that accessibility and health-related needs are accommodated (e.g., assistive technology, translation, COVID-19 considerations).

#### Workforce Survey Data Collection

In the collection of data from the workforce survey, the third-party administrator and the electrical corporations must:

- Ensure the survey and responses are stored securely on the third-party administrator's server.
- Not allow respondents to view or change survey responses after hitting "submit."
- Ensure paper surveys are not reviewed or handled by any supervisors or managers in the electrical corporation.
- Ensure paper surveys are put in pre-addressed and stamped envelopes and sent directly to the third-party administrator for processing.

#### **3.1.3** Workforce Survey Questions

The workforce survey is designed to measure critical aspects of safety culture including both the general safety culture of the organization and the safety culture in the wildfire mitigation work setting.

The survey consists of 30 statements that respondents evaluate on a five-point scale ranging from "strongly disagree" to "strongly agree."<sup>4</sup> Respondents should be encouraged to respond to each statement<sup>5</sup> based on their personal observations of the organization, supervisors, and fellow workers. If a respondent is unable to evaluate a statement based on personal observations, the respondent should be instructed to not evaluate that statement.

The following terms are used within the survey statements:

- "Leaders" and "management" are people in managerial responsibilities in the organization above the respondent's level.
- "My supervisor" refers to the respondent's immediate manager.
- "People" are others around the worker such as other work colleagues, contractors, or workers in peer groups.
- "People in my work group" and "my work group" refer specifically to the respondent's work team.

<sup>&</sup>lt;sup>4</sup> The 30 workforce survey statements are based on a safety culture measurement instrument, the Organizational Culture Diagnostic Instrument, created by DEKRA Services, Inc. <u>More information on this instrument</u>

<sup>(</sup>https://www.dekra.us/en/organizational-safety-reliability/ocdi/, accessed Feb. 28, 2023). DEKRA modified some of the statements from the instrument in 2020 to incorporate wildfire safety concerns.

<sup>&</sup>lt;sup>5</sup> For the online version of the survey, responses to all statements are mandatory; for the paper version of the survey, respondents can only be encouraged to respond to each statement.

There are three general topics covered by the 30 survey statements: wildfire safety, personal safety, and overall culture.

- Wildfire safety is addressed by 9 statements (e.g., "Our management acts quickly to address wildfire hazards").
- **Personal safety** is addressed by 11 statements (e.g., "Pausing work for hazards and safety concerns is viewed positively").
- **Overall culture** is addressed by 10 statements (e.g., "The company cares about my opinions").

All 30 survey statements are listed below, broken down by topic category.

#### Wildfire safety

The 9 statements addressing wildfire safety:

- My work group consistently follows procedures to control workplace hazards in our work areas (including procedures specific to wildfire hazards).
- I feel comfortable discussing wildfire hazards with my supervisor.
- Wildfire and personal safety concerns are communicated openly.
- Protecting the community from wildfire hazards is clearly a high priority with management.
- People look for wildfire hazards and risks as work progresses.
- People in my work group report all wildfire hazards, no matter how minor.
- Our management acts quickly to address wildfire hazards.
- Leaders actively seek out signs of potential wildfire hazards.
- I am regularly asked for my ideas and suggestions about wildfire hazards and ways to address them.

#### Personal safety

The 11 statements addressing personal safety:

- I take responsibility for the safety of myself and others in my work area.
- If I stopped a job because an important safety step was missing, it would be viewed positively by my supervisor.
- Pausing work for hazards and safety concerns is viewed positively.
- I stop people, even those I do not know, to point out unsafe behavior when I see it in the work environment.
- Accidents and incidents are investigated completely to find out what happened and the corrective actions needed.
- People have the skills they need to resolve workplace safety issues.
- Leaders use mistakes and incidents as learning opportunities.
- Leaders keep people prepared to intervene when an emergency occurs.

- People have the ability to respond to and correct problems and errors before they get out of control.
- We have the right tools for the job.
- People focus on one task at a time and avoid distractions.

#### **Overall culture**

The 10 ten statements addressing overall culture:

- People in my work group treat each other with respect.
- My supervisor would use whatever power they have to help me out.
- Leaders encourage people to ask questions.
- Information about important events and lessons learned is shared within my work group.
- My supervisor makes sure all employee concerns are heard before job decisions are made.
- Managers treat workers with respect.
- People listen to one another: it is rare that someone's views go unheard.
- I believe managers apply the same rules for all workers.
- People report mistakes they make, even if others do not notice them.
- The company cares about my opinions.

## 4. Management Self-Assessment

In 2021 and 2022, Energy Safety required the large IOUs (Pacific Gas and Electric, Southern California Edison, and San Diego Gas & Electric) to submit a management self-assessment, including a summary plan for the coming year. This component gives the electrical corporations the opportunity to report the current state of 22 safety culture elements of their organizational culture (listed below)<sup>6</sup> and project their state at end of the coming year (reflecting two years of expected progress). In 2023, Energy Safety will require the same electrical corporations to again submit the management self-assessment with projections for the end of the 12-month period following submission of the management assessment and associated summary plan for the coming year.

10

## 4.1 How Electrical Corporations Must Complete the Management Self-Assessment

Energy Safety uses the management self-assessment to track organizational culture over time.

In 2023, Energy Safety will require each large IOU to indicate its expected status of various elements of its safety culture at present, expected status at the end of 2024, and its summary plan for the coming 12-month period. This summary plan should outline the steps that are expected to move the corporation from its current status to its expected status at the end of 12 months from the date the plan is submitted to Energy Safety (if movement is expected).

Each electrical corporation completing the management self-assessment must:

- 1. Indicate the most appropriate response option for each of the 22 questions based on the presently employed practices and capabilities of the electrical corporation, including a description of why the corporation has rated itself at that level.
- 2. Indicate the electrical corporation's expected response to each question at the end of 2024 based on work planned for the coming year.
- 3. Summarize its plan to realize that target through its work in the coming 12-month period (see Section 4.6 "Summary Plan for the Coming Year" for more details).

The management self-assessment rating scale and structure are presented below.

<sup>&</sup>lt;sup>6</sup> The 22 safety culture elements measured in the management self-assessment were developed by DEKRA Services, Inc.

#### 4.2 Behaviorally Anchored Rating Scale

The questions on the management self-assessment are rated using a four-level behaviorally anchored rating scale that is customized for each question. The four levels indicate how safety is viewed within the organization as defined by the table below:<sup>7</sup>





**Public Compliance** 

Safety is viewed as an external requirement. Safety-supporting behaviors are not intrinsically motivated. Also, the utility does not incorporate safetysupporting protocols where not required by law.

"I need to make sure I'm following safety procedures when management is looking, even though they are a burden." Safety is viewed as a personal priority, though may be routinely susceptible to competing pressures.

**Private Compliance** 

"I choose to be safe: safety procedures are there to protect me. It is my responsibility to follow them."

Supervisors may react to injuries or incidents rather than focusing on exposure control.



Individually directed safety citizenship. Workers see wellbeing and public safety as having intrinsic worth and take action to make their teams safer.

"To stay safe as a team, we need to look out for one another."

Supervisors may seek to understand exposures, weak signals, and performance consistency.



Citizenship

Organizationally directed safety citizenship. Safety is inherent within the organizational identity creating sensitivity to subtle changes in exposure.

"Safety is a core part of everyone's job. It is a shared responsibility. We strive to improve ourselves and learn from our collective mistakes."

The culture is inclusive, caring, and trusting. Safety leadership is broad and learningoriented, with governance that is highly effective and systematic.

<sup>&</sup>lt;sup>7</sup> The four levels of safety culture maturity (Public Compliance, Private Compliance, Stewardship, and Citizenship) are based on <u>research by Burke et al. (2002)</u>, (https://psycnet.apa.org/record/2002-15213-006, accessed Feb. 28, 2023) and <u>Hofmann, Morgeson, and Gerras (2003)</u>, (https://psycnet.apa.org/record/2003-04931-017, accessed Feb. 28, 2023) and <u>the work of Sentis Pty Ltd</u> (https://sentis.com.au/articles/safety-citizenship, accessed Feb. 28, 2023).

## 4.3 Management self-assessment structure

The management self-assessment is intended to assess nine dimensions across three categories: organizational sustaining systems, governance, and safety-enabling systems. The self-assessment structure is provided below:

1.	Organizational sustaining systems
	Performance management:
1.1	How the organization drives individual safety performance
	(3 questions)
	Workforce development:
1.2	How employees and contractors are provided with training and continuous learning opportunities
	(3 questions)
	Rewards and recognition:
1.3	Extent to which rewards and incentive systems support safety
	(1 question)

2.	Governance
2.1	Senior leadership accountability: How safety leadership accountability is assigned and reflected through measures and objectives
	(3 questions)
	Metrics and targets:
2.2	Effectiveness of safety metrics and actions of leadership in response to metrics, and the extent to which metrics are
2.2	communicated
	(3 questions)

3.	Safety-enabling systems
3.1	Event investigation:
	Types of incidents investigated, quality and results of investigations
	(3 questions)
3.2	Hazard recognition:
	Extent to which hazards are reported and recognized
	(1 question)
3.3	Anticipation, resilience, and learning:
	How the organization anticipates and learns from incidents and near misses
	(3 questions)
3.4	Assurance:
	Safety audit processes used and tracking of findings
	(2 questions)

#### 4.4 Index of self-assessment questions

Each self-assessment dimension is assessed through one to three multiple choice questions. A list of all questions is provided here. The response options for each question are provided in the next section (Section 4.5).

#### **1. Organizational Sustaining Systems**

#### **1.1 Performance Management**

<b>Dimension Subsection</b>	Assessment question
1.1.1	To what extent is wildfire safety performance integrated into leadership
1.1.1	selection/promotion decisions?
1.1.2	How are wildfire safety responsibilities integrated into frontline supervisors' goals and
1.1.2	objectives?
1.1.3	To what extent is safety and the ability to work safely incorporated into position descriptions
1.1.5	and expectations?

#### **1.2 Workforce Development**

<b>Dimension Subsection</b>	Assessment question
1.2.1	To what extent are training and support resources available to frontline supervisors to
	improve their safety leadership skills?
1.2.2	To what extent are training and support resources available to frontline workers to improve
	their wildfire safety skills?
1.2.3	What are the personal safety and wildfire-specific training requirements of contractors?

#### 1.3 Rewards and Recognition

<b>Dimension Subsection</b>	Assessment question
1131	To what extent do rewards and incentives for operational leaders and workers support safety and
	mitigating wildfire hazards?

#### 2. Governance

#### 2.1 Senior Leadership Accountability

<b>Dimension Subsection</b>	Assessment question
2.1.1	Who is accountable for wildfire safety outcomes?
2.1.2	Who is accountable for personal safety outcomes?
2.1.3	Rate the types of wildfire safety measures and objectives tracked by senior operational leadership.

#### 2.2 Metrics and Targets

<b>Dimension Subsection</b>	Assessment question
2.2.1	How effective are wildfire safety metrics <sup>8</sup> in providing insight into critical areas of risk?
2.2.2	How frequently does the senior safety team monitor and adjust actions and strategies related to wildfire safety?
2.2.3	To what extent are wildfire safety metrics communicated throughout the organization?

<sup>&</sup>lt;sup>8</sup> Wildfire safety metrics may include metrics such as inspection findings, ignitions, wire down events, wildfire fatalities, etc.

#### 3. Safety-Enabling Systems

#### 3.1 Event Investigation

<b>Dimension Subsection</b>	Assessment question
3.1.1	What types of adverse events are investigated using root cause analysis?
3.1.2	Rate the quality of event investigations.
3.1.3	What happens with investigation results?

#### 3.2 Hazard recognition

<b>Dimension Subsection</b>	Assessment question
3.2.1	What kind of process is used by frontline workers to recognize and report wildfire hazards?

#### 3.3 Anticipation, Resilience, and Learning

<b>Dimension Subsection</b>	Assessment question
3.3.1	What structures, systems, and/or processes have been established to encourage sensitivity
5.5.1	to weak signals of wildfire hazards?
3.3.2	What steps are taken to ensure frontline supervisors and workforce can respond quickly to
3.3.2	upset conditions?
3.3.3	What processes and structures have been established to create a learning organization?

#### 3.4 Assurance

<b>Dimension Subsection</b>	Assessment question
3.4.1	What types of safety audits are used for activities related to wildfire mitigation?
3.4.2	How are the findings from safety audits used for activities related to wildfire mitigation
5.4.2	tracked to closure?

### 4.5 Management Self-Assessment Response Options for Each Question

This section contains the questions and response options for each management self-assessment dimension. To enable Energy Safety to verify responses, Energy Safety requires electrical corporations to describe their reasoning for each self-assessment rating. Energy Safety may ask for more detailed supporting documentation in the future. Requests for supporting documentation in 2023 are at Energy Safety's discretion. Section 6.2 "Documentation to Support Responses to the Management Self-Assessment" gives examples of the kind of supporting documentation Energy Safety might request.

#### **1.1 Performance Management**

Assessment Question	(1)	Public compliance	(2)	Private compliance	(3)	Stewardship	(4)	Citizenship
1.1.1 To what extent is wildfire safety performance integrated into leadership selection/ promotion decisions?		Not Considered		Personal and wildfire safety performance are considered in selection/promotion decisions but are not the primary factors	0	Personal and wildfire safety performance are heavily weighted, primary factors in selection/promotion decisions	0	Excellent personal and wildfire safety performance are necessary for advancement; poor safety performance eliminates leader from selection/promotion
1.1.2 How are wildfire safety responsibilities integrated into frontline supervisors' goals and objectives?		No annual goals or objectives related to wildfire safety	_	Goals and objectives focus on only lagging indicators for wildfire or personal safety related to wildfire mitigation work	0	Goals and objectives contain a mix of leading and lagging indicators for wildfire and personal safety related to wildfire mitigation work	0	Goals and objectives contain a mix of leading and lagging indicators including a focus on the quality of each leader's visible engagement in and support of wildfire and personal safety programs and initiatives
1.1.3 To what extent is safety and the ability to work safely incorporated into position descriptions and expectations?	0	No mention of safety		Focus is on compliance with rules and dismissal if found out of compliance	0	Emphasis on more than just compliance with rules, but each employee's position description includes that each employee has to speak up and intervene if unsafe conditions exist, both for wildfire and personal safety	0	Emphasis on each person's role and the expectation and mechanism to hold the organization accountable if unsafe conditions exist, both for wildfire and personal safety

#### **1.2 Workforce Development**

Assessment Question	(1)	Public compliance	(2)	Private compliance	(3)	Stewardship	(4)	Citizenship
1.2.1 To what extent are training and support resources available to frontline supervisors to improve their safety leadership skills?	0	No training available	tr cu sa fa p	ob-specific wildfire safety raining focused on rules compliance, procedures, and afety systems (e.g., amiliarity with wildfire- elated job procedures or ersonal safety related rocedures)	0	Job-specific wildfire safety training; in addition, wildfire safety training beyond job requirements (e.g., wildfire mitigation strategy and initiatives), and leadership training (giving feedback, accountability, etc.)	0	All criteria in "Stewardship" option are met; In addition, training includes advanced safety topics such as exposure management, and human performance reliability
1.2.2 To what extent are training and support resources available to frontline workers to improve their wildfire safety skills?	0	No training available	tr ca sa fa p	ob-specific wildfire safety raining focused on rules ompliance, procedures, and afety systems (e.g., amiliarity with wildfire- elated job procedures or ersonal safety related rocedures)	0	Job-specific wildfire safety training; in addition, wildfire safety training beyond job requirements (e.g., wildfire mitigation strategy) and behavior-based safety training (observing safe behaviors, approaching others, etc.)	0	All criteria in "Stewardship" option are met; In addition, training includes advanced safety topics such as human performance reliability
2.3 What are the personal safety and wildfire- pecific training equirements of contractors?	0	No safety training required	g	ite or location-specific eneral safety introduction nd orientation	0	Electrical corporation-wide standardized safety training in addition to site-specific orientation	0	Electrical corporation-wide standardized safety training in addition to site-specific orientation and wildfire hazard awareness training

#### 1.3 Rewards and Recognition

Assessment Question	(1)	Public compliance	(2)	Private compliance	(3)	Stewardship	(4)	Citizenship
1.3.1 To what extent do rewards and incentives for operational leaders and workers support safety and mitigating wildfire hazards?		No rewards or incentives specific to safety and wildfire safety	fc su	ewards and incentives only ocus on lagging indicators uch as achieving no injuries r wildfires	0	Rewards and incentives emphasize lagging indicators for personal and wildfire safety and some leading indicators related to wildfire mitigation activities	0	Rewards and incentives focus on leadership activities such as reporting wildfire concerns, generating innovative ideas to reduce wildfire hazards, and approaching others about safety concerns

2.1 Senior Lead	2.1 Senior Leadership Accountability										
Assessment Question	(1)	Public compliance	(2)	Private compliance	(3)	Stewardship	(4)	Citizenship			
2.1.1 Who is accountable for wildfire safety outcomes?	0	Not defined	O Sa	Safety department	0	Operational leadership and Safety Department	0	Executive leadership with Safety Department as trusted advisor			
2.1.2 Who is accountable for <b>personal</b> safety outcomes?	0	Not defined	O Sa	fety department	0	Operational leadership and Safety Department	0	Executive leadership with Safety Department as trusted advisor			
2.1.3 Rate the types of wildfire safety indicators and objectives tracked by senio operational	f s	No wildfire safety objectives	sa be	eading and lagging wildfire fety indicators required to e reported for regulatory urposes	0	Required safety measures for regulatory purposes. Additional leading indicators used for wildfire mitigation work that are aligned with actionable initiatives	0	Required safety indicators. Additional leading indicators used for wildfire mitigation work that are aligned with actionable initiatives at each level of the organization			

#### 2.1 Seni

leadership.

2.2 Metrics and	llar	gets						
Assessment Question	(1)	Public compliance	(2)	Private compliance	(3)	Stewardship	(4)	Citizenship
2.2.1 How effective are wildfire safety metrics <sup>9</sup> in providing insight into critical areas of risk?	0	Not effective	р	easonably effective in roviding data and trends cross company	0	Highly effective in providing data and trends in critical exposure areas	0	Highly effective in providing data and critical exposure area trends, and actionable insight
2.2.2 How frequently does the senior safety team monitor and adjust actions and strategies related to wildfire safety?	0	Never	u ez a:	eriodically (at even or neven intervals; for kample, once or twice a year s wildfire season oproaches)	0	Often (at even or uneven intervals; for example, 3-5 times per year) monitors action plans and responds to emerging issues, and developments	0	Regularly (at even intervals; for example, monthly) monitors action plans and strategies. Conducts real time strategic problem solving focused on systemic risks
2.2.3 To what extent are wildfire safety metrics communicated throughout the organization?	$\sim$	Safety metrics are not shared	0	agging indicators for wildfire utcomes are posted at cal/site operations	0	Lagging and leading indicators for wildfire safety are posted and discussed in regular management and supervisor meetings	0	Lagging and leading indicators for wildfire safety are discussed; individual/ team contributions to leading indicators are highlighted and recognized publicly

<sup>2.2</sup> Metrics and Targets

<sup>&</sup>lt;sup>9</sup> Wildfire safety metrics may include metrics such as inspection findings, ignitions, wire down events, wildfire fatalities, etc.

Assessment Question (1	) Public compliance	(2) Private compliance	(3)	Stewardship	(4)	Citizenship
3.1.1 What types of adverse events are investigated using root cause analysis?	Only fatal or serious incidents required to be reported to OSHA CPUC reportable ignitions, or incidents required to be reported to Energy Safety (pursuant to Cal. Code Regs. title 14, section 29301)	reported; in addition, work- , related injuries involving days away from work and	ро	incidents with the tential to be serious or al, including near misses	r e F	All high potential events and near misses. Also, event learning teams evaluate high risk situations for proactive opportunities to reduce exposure

#### 2.1 Event Investigation

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Assessment Question	(1)	Public complia	ance	(2) Private compliance		(3)	Stewardship	(4)	Citizenship
3.1.2 Rate the quality of event investigations.	0	A "fix the emplo mentality is commonplace w addressing incid or other adverse events	/hen ents	<ul> <li>Investigations primarily focus on identifying exposure and the root c of the exposure</li> </ul>	ause	identif the exp	gations focus on ying the root cause o posure and describing to control the are		Incidents are regarded as learning events that spur a comprehensive look at culture, processes, and safety systems that led to the event
3.1.3 What happens with investigation results?	0	Reported to the regulator if requ but no systemic tracking, correct actions or closure/sharing corrective actior	iired, ive of	Corrective actions are tracked and are predominantly focused rule changes, personal protective equipment, a training		tracked include value o learned	tive actions are d to closure and e more focus on high controls; lessons d are shared hout organization	0	Systemic approach to tracking/closing actions using high value controls; lessons learned leveraged broadly across organization to effect change and control exposure (e.g., leading to procedural or policy changes throughout organization, where applicable)
3.2 Hazard Reco	ogni <sup>.</sup>	tion							
Assessment Question	(1)	Public compliance	(2)	Private compliance	(3)	S	tewardship	(4)	Citizenship
3.2.1 What kind of process is used by frontline workers to recognize and report wildfire hazards?	0	No formal process	Ň	rocess exists to report rildfire hazards but no raining or feedback	0	is trained i is commur	tablished, workforce n the process, and it nicated widely; there nt follow-up to posure	$\cup$	Process established and communicated for wildfire hazard reporting; workforce is trained in the process and encouraged to report wildfire hazards; results broadly shared across organization to spur learning and exposure reduction

3.3 Anticipation	3.3 Anticipation, Resilience, and Learning									
Assessment Question	(1)	Public compliance	(2)	Private compliance	(3)	Stewardship	(4)	Citizenship		
3.3.1 What structures, systems, and/or processes have been established to encourage sensitivity to weak signals of wildfire hazards?	Ŭ	No formal process or structure		Workforce is encouraged to report wildfire hazards as it sees them	0	System established for reporting and mitigating wildfire hazards; leaders encourage reporting of weak signals	0	A cross-functional team is established to proactively look for, track, and mitigate wildfire hazards and potential black swan situations		
3.3.2 What steps are taken to ensure frontline supervisors and workforce can respond quickly to upset conditions?	0	No formal training or preparation		Common upset conditions have been identified and response protocols are reviewed regularly	0	Simulations and drills are conducted regularly to prepare the workforce	0	Simulations and drills are conducted regularly to practice responses to upset conditions and leaders have instilled a "what could go wrong?" mentality		

Assessment Question	(1)	Public compliance	(2)	Private compliance	(3)	Stewardship	(4)	Citizenship
3.3.3 What processes and structures have been established to create a learning organization?		Few processes, training or structures have been established for sharing safety- related lessons learned across the organization		Have implemented a knowledge managemen system for sharing safety-related best practices and incidents throughout the organization	· ·	All criteria met in "Private Compliance" option, plus processes exist for systematically using the knowledge management system and implementing safety-related best practices		All criteria met in "Stewardship" option, plus these processes for tapping best practices in knowledge management system are used routinely and by nearly everyone

#### 3.4 Assurance

Assessment Question	(1)	Public compliance	(2)	Private compliance	(3)	Stewardship	(4)	Citizenship
3.4.1 What types of safety audits are used for activities related to wildfire hazard mitigation?	ā	No formal self- audits conducted	r c	ite-specific self-audits equired; internal audits occur only after an incident as occurred	0	Site-specific self-audits required; internal audits occur based on level of wildfire risk present	0	Systemic and rigorous self, independent, and internal audits conducted and used for alignment, calibration, and learning
3.4.2 How are the findings from safety audits of activities related to wildfire mitigation tracked to closure?	t	No formal tracking mechanism	_	elf-tracking of closures; no erification	0	Audit findings tracked and verified to closure	0	Audits tracked, implementation verified to closure, and effectiveness validated

#### 4.6 Summary Plan for the Coming Year

For 2023, each large IOU must submit a summary action plan for the work that is planned for the coming 12-month period to achieve the targets for the end of 2024 indicated in its management self-assessment. The template for the summary plan follows:

#### Summary plan for the following year:

In the table below, provide a summary action plan for the work that is planned over the coming 12-month period to achieve your 2024 targets indicated in the Management Self-Assessment.

A. Action/Activity	B. Deadline	C. Management Self-Assessment Reference(s). Indicate which question(s) this activity links to.
[Action or activity - brief description]	[Date in 2024]	[Question number, e.g., 1.1.1]

Energy Safety may in the future ask for this plan to include detailed action steps, owners, deadlines, and how the action will be monitored and tracked.

## 5. **Objectives and Lessons Learned**

In 2021 and 2022, Energy Safety required all electrical corporations (large electrical corporations, small and multi-jurisdictional utilities, and independent transmission operators) to submit 12-month and 3-year safety culture objectives and any lessons learned since the electrical corporation's last safety culture assessment. In 2022, Energy Safety additionally required all electrical corporations to report on the implementation of findings, including recommendations, from the 2021 SCA reports, including any results observed so far.

In 2023, Energy Safety will again use the safety culture objectives and summary of lessons learned in the evaluation of all electrical corporations. Energy Safety will again require all electrical corporations to report on the implementation of findings, including recommendations, from the previous year's SCA reports.

Instructions for completing these sections are included within each section below. The electrical corporation is given the opportunity to provide a narrative response. This narrative response may include quantitative and qualitative explanations, as well as supporting documentation including relevant spreadsheets, charts, or data tables.

#### 5.1 Safety Culture Objectives

Energy Safety requires all electrical corporations to provide a description of their objectives with respect to safety culture:

- Over the next 12 months
- Over the next 3 years

The template for reporting safety culture objectives follows:

#### **Objectives for the next 12 months**

A. Objective	B. Progress metrics or cultural indicators, if applicable, used to track progress against this objective	C. Target for 12 months from submission	D. Description of how this objective will reduce wildfire risk to the public and/or risk to employees conducting wildfire mitigation work
[Objective]	[Metrics]	[12-month target]	[Description]

#### **Objectives for the next 3 years**

C. Objective	D. Progress metrics or cultural indicators, if applicable, used to track progress against this objective	C. Target for 3 years from submission	D. Description of how this objective will reduce wildfire risk to the public and/or risk to employees conducting wildfire mitigation work
[Objective]	[Metrics]	[3-year target]	[Description]

#### 5.2 Summary of Lessons Learned

The template for reporting the summary of lessons learned follows:

#### Description of lessons learned since the most recent safety culture assessment:

Describe how the electrical corporation's objectives and priorities with respect to safety culture have evolved over the past year. Outline any major themes and lessons learned over the past 12 months and subsequent actions taken.

A. Major Themes or Lessons Learned	B. Actions Taken
[Theme, lesson in brief]	[Actions taken in response]

The template for reporting on the implementation of recommendations follows:

#### Description of implementation of recommendations from most recent safety culture assessment:

Describe the steps taken by the electrical corporation in response to the recommendations from its last Safety Culture Assessment. Include any results observed so far.

A. Recommendation	B. Actions Taken	C. Results (if any)
[Exact or paraphrased	[Actions taken in response to	[Any results]
recommendation from the last	recommendation]	
Safety Culture Assessment]		

## 6. Interviews, Observational Visits, and Supporting Documentation

### 6.1 Interviews and Observational Visits

In 2021 and 2022, Energy Safety required the large electrical corporations to participate in workforce survey follow-up interviews in the form of focus groups (three per electrical corporation) and management self-assessment follow-up interviews with staff completing the management self-assessment (one per electrical corporation). In 2023, Energy Safety will require the same electrical corporations to participate in these follow-up interviews.

The objective of the interviews is to allow Energy Safety to better understand the results of the workforce survey and self-assessment (where applicable). Understanding the organizational context behind responses helps Energy Safety interpret the results of the workforce survey and management self-assessment more accurately and better identify priority areas which electrical corporations should focus on improving.

Energy Safety did not carry out observational visits in 2021 or 2022. In 2023, Energy Safety may ask electrical corporations to make themselves available for observational visits.

## 6.2 Documentation to Support Responses to the Management Self-Assessment

The table below gives examples of the kind of supporting documentation Energy Safety might request from electrical corporations to support justifications given for their self-ratings in the management self-assessment.

Additional requests for supporting documentation are at Energy Safety's discretion. Supporting documentation that is confidential may be submitted using the confidential submission process in Energy Safety's e-filing system.<sup>10</sup>

Supporting documentation that Energy Safety might request (not an exhaustive list)	Applicable Questions
Evaluation and/or summary decision forms (containing the date, department, current job title, new job title, and decision criteria) used to make 3-4 leadership selection or promotion decisions (deleting any personal identifying information). The 3-4 examples should be operational leaders and a mix of levels from frontline supervisors to senior operational leaders.	1.1.1
A sample of performance goals and objectives used in personal annual performance reviews from 2-3 frontline supervisors.	1.1.2

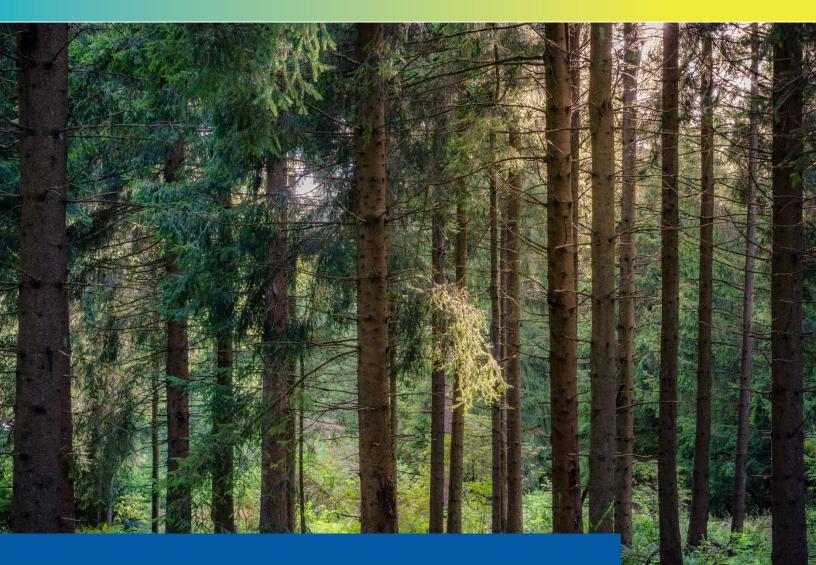
<sup>&</sup>lt;sup>10</sup> Energy Safety E-Filing System User's Guide [link to be added later].

Supporting documentation that Energy Safety might request (not an exhaustive list)	Applicable Questions
Position descriptions for one frontline worker, supervisor, and senior operational leader.	1.1.3
A list of safety training required by frontline supervisors (do not include training required for specialty certifications or licenses such as CPR certification).	1.2.1
A list of safety training required by frontline workers (do not include training required for specialty certifications or licenses such as a lineperson's International Brotherhood of Electrical Worker certification).	1.2.2
A list of safety and wildfire hazard training required by contractors to perform work onsite (do not include training required for specialty certifications or licenses). This is training provided by the electrical corporation.	1.2.3
A summary of safety-related incentives (for example, financial, career development, recognition, etc.) used by the organization for operational leaders and workers. Include how the incentives are tracked, measured, and distributed and who is eligible for these incentives.	1.3.1
Examples of the wildfire metrics and reports reviewed by senior operational leadership beyond those required by the WMP process.	2.1.3 <i>,</i> 2.2.1
Minutes, notes, and action items from the last 3-4 highest level operational safety meetings for wildfire management (the senior team charged with monitoring wildfire mitigation actions).	2.2.2
Examples of how the wildfire metrics are shared with frontline supervisors and workers. Describe how these are communicated.	2.2.3
Root cause analysis reports from the 3-5 most recent incident investigations that were not required to be reported to the CPUC or other regulatory body. Include corrective actions taken and the status of those actions.	3.1.1, 3.1.2, 3.1.3
A description of the process used for wildfire hazard recognition and the system used for tracking and communication. Describe actions taken as a result of hazards that surfaced over the past 6 months.	3.2.1
A spreadsheet of the last 50 wildfire hazard incidents (or potential incidents) recorded in the incident database including all demographic information (location, date, departments involved), type of incident (near miss, recordable, equipment damage, etc.) and actions taken.	3.3.1

Supporting documentation that Energy Safety might request (not an exhaustive list)	Applicable Questions
A description of the systems, processes, and/or structures that are used to capture, share, and implement best practices and lessons learned from incidents.	3.3.3
A description of the audit processes used for activities related to wildfire mitigation, detailing how they are conducted, their frequency, and how audit findings are tracked to closure.	3.4.1
The most recent audit conducted of a site or department on activities related to wildfire mitigation. Include the site or department's action plan based on the audit.	3.4.2

## 7. Conclusion

The 2023 update to the Safety Culture Assessment Guidelines for Electrical Corporations provides a pathway for utilities to participate in Energy Safety's annual Safety Culture Assessment process required under California Public Utilities Code Section 8389(d)(4).



## GLOSSARY

## GLOSSARY

Term	Definition
Black swan	An unpredictable event that goes beyond what is normally expected and has potentially severe consequences.
CPUC reportable ignition	A fire-related event meeting the following conditions: (1) A self- propagating fire of material other than electrical and/or communication facility, (2) The resulting fire traveled greater than one linear meter from the ignition point, (3) The electrical corporation has knowledge that the fire occurred. Electrical corporations must submit to the California Public Utilities Commission (CPUC) information about this event that is useful in identifying operational and/or environmental trends relevant to the event. (See CPUC Decision 06-04-055 and Resolution E-4184.)
Drills	Coordinated, supervised activities designed to test work team responses to various planned upset conditions.
Event learning	An approach to understanding incidents and events that evaluates the entire system leading to an event to better understand the causes of actions. The focus of event learning is primarily on how to alter the system to make it less likely for the factors that caused the event to recur rather than to assign blame or define a single root cause factor.
Executive leadership	The highest level of management in an organization, reports to the chief executive officer (CEO).
Exposure	A state of vulnerability to injury that exists when a person comes in contact with a hazard. Exposure reduction or exposure control results from separating the person from the hazard and protecting the person from the vulnerability raised by the hazard (for example, by wearing protective equipment).
Exposure management training	A training that emphasizes a proactive approach to safety through identifying and controlling exposure for self and others and is foundational for leaders to move beyond the traditional and reactive incident management approach to safety.

Term	Definition
Frontline supervisor	The first level of leadership that has direct oversight of employees within operational units of the organization.
Frontline worker	An employee who does not have any other employees reporting directly to them.
High risk situations	Work activities or situations that have previously been shown in in incident data to be associated with serious or fatal incidents.
High value controls	The hierarchy of controls consists of five layers of defenses used to protect against hazards in the workplace ranging from the most effective (Elimination) to the least effective (personal protective equipment or PPE). The layers are Elimination, Substitution, Engineering, Administrative, and PPE. High value controls are Elimination, Substitution, and Engineering because the effectiveness of the control is not susceptible to human error.
Human performance reliability	The suite of knowledge, skills and capabilities required to anticipate, control, and respond to unplanned issues and error.
Incident	An unplanned, undesired event that adversely affects normal operations, not limited to CPUC reportable ignitions.
IOU	Investor-owned utility.
ITO	Independent transmission operator.
Lagging indicator	An outcome or output measure that is backward-looking, describing a past event.
Leading indicator	An input measure that is predictive of a future event.
Learning organization	An organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights.
Near miss	An unplanned event that did not result in injury, illness, or damage, but had the potential to do so. Note that in other contexts, Energy Safety uses the term "risk event" instead of "near miss" but uses "near miss" in this document as it is a more commonly understood term in the safety culture context.

Term	Definition
Operations	The parts of a business that affect the production, distribution, and service necessary for a company to function. For the purposes of this assessment, electrical operations, field services, transmissions, substations, and distribution are considered part of operations, but generation is not.
Operational leaders	Supervisors working in the levels of management within operations ranging from frontline supervisors (who have direct oversight of employees) to executive level senior operational leaders (e.g., chief operating officer [COO]).
OSHA reportable incidents	Fatal and extremely serious injuries or illnesses, such as amputation, eye loss, in-patient hospitalization, or fatality, required to be reported to OSHA within defined time periods. OSHA stands for the Occupational Safety and Health Administration of the United States Department of Labor.
Root cause analysis	A systematic process for identifying root causes of problems or events and an approach for responding to them.
Safety audit	A structured process whereby information is collected relating to the efficiency, effectiveness, and reliability of a company's total health and safety management system.
SMJUs	Small and multi-jurisdictional utilities.
Systemic risk	Vulnerabilities that could result in cascading or broad failures across the utility.
Upset conditions	Interruptions in the regular running of work processes or other planned activity.
Weak signal	An indicator of a potentially emerging issue that may become significant in the future.

# DATA DRIVEN FORWARD-THINKING INNOVATIVE SAFETY FOCUSED



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