



OFFICE OF ENERGY INFRASTRUCTURE SAFETY

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September 2, 2021

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Subject: Office of Energy Infrastructure Safety Issuance of Southern California Edison Company's 2021 Safety Culture Assessment per Public Utilities Code Sections 8389(d)(4)

Dear Mr. Brown:

Enclosed is the 2021 Safety Culture Assessment (SCA) report for Southern California Edison Company (SCE) conducted by DEKRA on behalf of the Office of Energy Infrastructure Safety (Energy Safety) in fulfillment of Public Utilities Code Section 8389(d)(4). This is the first annual SCA under this statute and as such provides a baseline for future comparison. Energy Safety will use the SCA reports to assess safety culture outcomes over time and incorporate continuous learning into the SCA process.

The enclosed report includes as an attachment (at Section 8.1) SCE's full written response to the draft report provided to SCE on August 24, 2021, for factual review and correction. SCE provided its written response and any relevant factual corrections on August 31, 2021. DEKRA and Energy Safety incorporated SCE's clarifications of fact where appropriate within the body of the report. These clarifications and corrections consist of the following:

- Page 1: "Use monthly Safety Culture Pulse Surveys" was changed to "Use Safety Culture Pulse Surveys." Page 10 and page 18: References to the "monthly Safety Culture Pulse Surveys" were changed to "Safety Culture Pulse Surveys."
- Page 7: "861 SCE employees" was changed to "861 contractor employees."
- Page 21: The meaning of the term "null" in the workforce survey results tables was clarified.
- Pages 23-28: The company name in the header was corrected.

SCE can satisfy the "good standing" requirement in Public Utilities Code Section 8389(e)(2) by agreeing to implement all of the findings (including recommendations for improvement) of its

most recent SCA. This may be done by submitting a letter to this effect via E-Filing on the 2021 Safety Culture Assessments docket (Docket #2021-SCAs).¹

Sincerely,

Lucy Morgans

Lucy Morgans
Acting Program Manager, Safety Policy Division
Office of Energy Infrastructure Safety

cc:
Caroline Thomas Jacobs,
Director, Office of Energy Infrastructure Safety

Ryan Arba,
Program & Project Supervisor, Office of Energy Infrastructure Safety

Sara Moore,
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Service List for Docket #2021-SCAs

¹ The 2021 Safety Culture Assessments docket can be accessed at <https://efiling.energysafety.ca.gov/EFiling/DocketInformation.aspx?docketnumber=2021-SCAs>.

SAFETY CULTURE ASSESSMENT



SOUTHERN CALIFORNIA EDISON COMPANY
SEPTEMBER 2021



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1. Executive Summary

In 2019, California Assembly Bill 1054 added an annual safety culture assessment requirement to the Public Utilities Code. Public Utilities Code Section 8389(d)(4) requires the California Public Utilities Commission (Commission or CPUC), in consultation with the Wildfire Safety Division—as of July 1, 2021, now the Office of Energy Infrastructure Safety (Energy Safety), a new department under the California Natural Resources Agency—to develop a process for an annual Safety Culture Assessment for each electrical corporation. The annual Safety Culture Assessment process (approved by the Commission in 2020 in Resolution WSD-011) includes a workforce survey, a management self-assessment, submission of supporting documentation, and interviews. Energy Safety contracted with DEKRA Services, Inc., (DEKRA) to conduct the inaugural 2021 annual Safety Culture Assessment for each electrical corporation. The Safety Culture Assessments took place in May and June 2021. In the course of these assessments, the safety culture of Southern California Edison Company (SCE or Edison) was assessed with respect to both personal and wildfire safety.

As SCE's own management self-assessment attests, this is an organization that has made significant progress on its safety culture but has not yet achieved its target goals. SCE has implemented several training programs and systems to improve its safety culture, linking clear objectives and action plans with recent assessments to target critical areas for improvement. Frontline workers have noticed the shift and experienced the impact firsthand, including a greater emphasis on "tailgates" (crew meetings at worksites where safety briefings take place), monthly incident calls, and better tools to do their jobs.

Despite these positive developments, frontline workers at SCE report a disconnect between the field and leadership as they try to make sense of unclear or counter-intuitive manager-level decisions that sometimes appear to conflict with standard operating policies and procedures. These workers also perceive that their voices are not heard at higher levels of the organization and are wary of reporting incidents due to concerns about repercussions, hindering SCE's progress toward becoming a learning organization. These challenges are compounded when changes to company policies, organizational structures, and resources increase confusion and complexity.

To drive consistent improvement in its safety culture throughout the organization, SCE should act on the following recommendations:

1. Update current safety leader activities to address issues noted by the workforce concerning wildfire communications, roles, and decisions.
2. Use Safety Culture Pulse Surveys to evaluate progress of supervisors in engaging frontline workers on wildfire hazards and providing clear communication about wildfire-related procedures.

3. Embed learning organization concepts into the culture via training, incident investigations and corrective action systems.
4. Recognize and take action to mitigate the serious exposure posed by interactions with certain discontented members of the public.

Taking these actions will enable SCE to advance its wildfire and personal safety culture by aligning wildfire and personal safety programs, monitoring these updates for improvement and gaps, and continuing to focus on creating a high-reliability and learning organization in which issues are readily identified and reported, investigated for understanding, and solved through the implementation of effective corrective actions.

A detailed narrative on the information collected through the workforce survey, management self-assessment, supporting documentation, and interviews, and the corresponding assessment and findings is provided below.

2. Overview

Assembly Bill 1054, signed by Governor Newsom in July 2019, states that “[b]y December 1, 2020, and annually thereafter, the [California Public Utilities Commission], after consultation with the [Wildfire Safety Division], shall adopt and approve [...] [a] process for the division to conduct annual safety culture assessments for each electrical corporation” (Public Utilities Code Section 8389[d][4]).¹

On November 30, 2021, the California Public utilities Commission (Commission or CPUC) issued its approval for a process for conducting annual safety culture assessments for each electrical corporation in Resolution WSD-011.² On January 22, 2021, the Wildfire Safety Division (WSD) at the CPUC published the Safety Culture Assessment (SCA) Requirements of Electrical Corporations (2021 Requirements).³ The 2021 Requirements set out the key components of the SCA process: a workforce survey, a management self-assessment, submission of supporting documentation, and interviews. The 2021 Requirements also provide guidance as to which components apply to which electrical corporations.

The first SCA under Public Utilities Code Section 8389(d)(4) took place in May and June 2021 under the WSD’s direction. On July 1, 2021, the WSD transitioned to the Office of Energy Infrastructure Safety (Energy Safety), a new department under the California Natural Resources Agency. The first SCA reports are being issued under the direction of Energy Safety.⁴

The present SCA process is intended to be complementary to, and not a replacement for, ongoing work to improve safety culture at each electrical corporation. Energy Safety

¹ The full text of Pub. Util. Section 8389 can be found here:

https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=8389.&lawCode=PUC (accessed July 16, 2021).

² Resolution WSD-011 “Resolution implementing the requirements of Public Utilities Code Sections 8389(d)(1), (2) and (4), related to catastrophic wildfire caused by electrical corporations subject to the Commission’s regulatory authority,” dated November 19, 2020, and issued November 30, 2020: <https://energysafety.ca.gov/wp-content/uploads/docs/misc/docket/352490594.pdf> (accessed August 18, 2021). Also see the attachments to WSD-011, including Attachment 4 “Annual Safety Culture Assessment Process Proposal,” dated November 2020: <https://energysafety.ca.gov/wp-content/uploads/docs/wmp-2021/docs/352460864.pdf> (accessed August 18, 2021).

³ Safety Culture Assessment: Requirements of Electrical Corporations (published Jan. 22, 2021, accessed July 16, 2021): <https://energysafety.ca.gov/wp-content/uploads/docs/safety-culture-assessments/wsd-safety-culture-assessment-requirements-final-20210122.pdf>.

⁴ Pursuant to Public Utilities Code Section 326(b), on July 1, 2021, the WSD transitioned from the CPUC into the Office of Energy Infrastructure Safety (Energy Safety) under the California Natural Resources Agency. Energy Safety “is the successor to” and “is vested with all of the duties, powers, and responsibilities of the Wildfire Safety Division” (Government Code Section 15475). WSD is used to describe the work of the WSD prior to July 1, 2021. Energy Safety is used to describe the work of Energy Safety beginning on July 1, 2021. Any references to WSD action post July 1, 2021, or to Energy Safety action prior to July 1, 2021, are inadvertent and should be interpreted as the actions of WSD or Energy Safety as appropriate.

seeks to develop a longitudinal view of safety culture across electrical corporations to identify best practices and relative gaps, along with an understanding of each electrical corporation's relative strengths and weaknesses. Ultimately, Energy Safety seeks to assess safety outcomes over time and incorporate continuous learning into the assessment process.⁵

Different components of the SCA target different parts of the electrical corporation's workforce. The workforce survey is intended to target electrical corporation employees (including frontline workers and supervisors) and contractors who are engaged in wildfire hazard mitigation activities, for example workers performing vegetation management or installing system hardening infrastructure.⁶ The management self-assessment and supporting documentation components are intended to be completed by electrical corporation employees capable of: evaluating the corporation's presently employed practices and capabilities regarding safety, identifying a target level on the four-point scale for each question by the end of 2022 based on wildfire mitigation and safety initiatives planned in the coming year, and describing its plan to realize that target.⁷ The interview component is intended to support the workforce survey and management self-assessment by asking additional questions of those who may have participated in those components for further context. The interviews are intended to help DEKRA interpret the results of the survey and self-assessment more accurately and better identify the priority areas that electrical corporations should focus on improving.⁸

2.1 Components of the SCA

As stated above, the key components of the SCA are a workforce survey, a management self-assessment, submission of supporting documentation, and interviews. Not every component applies to every electrical corporation. An overview of the SCA components, together with guidance on which electrical corporations must complete each SCA component, is below. Note that electrical corporations are categorized as follows for this purpose:

- **Large electrical corporations ("Large IOUs"⁹):** Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), Southern California Edison Company (SCE).
- **Small and multi-jurisdictional electrical corporations ("SMJUs"¹⁰):** Liberty Utilities (CalPeco), PacifiCorp, Bear Valley Electric Service, Inc.
- **Independent transmission operators ("ITOs"):** Horizon West Transmission, Trans Bay Cable.

⁵ Safety Culture Assessment: Requirements of Electrical Corporations (2021), p. 3.

⁶ Safety Culture Assessment: Requirements of Electrical Corporations (2021), p. 8.

⁷ Safety Culture Assessment: Requirements of Electrical Corporations (2021), p. 14.

⁸ Safety Culture Assessment: Requirements of Electrical Corporations (2021), p. 35.

⁹ IOU: investor-owned utility.

¹⁰ SMJUs: small and multi-jurisdictional utilities.

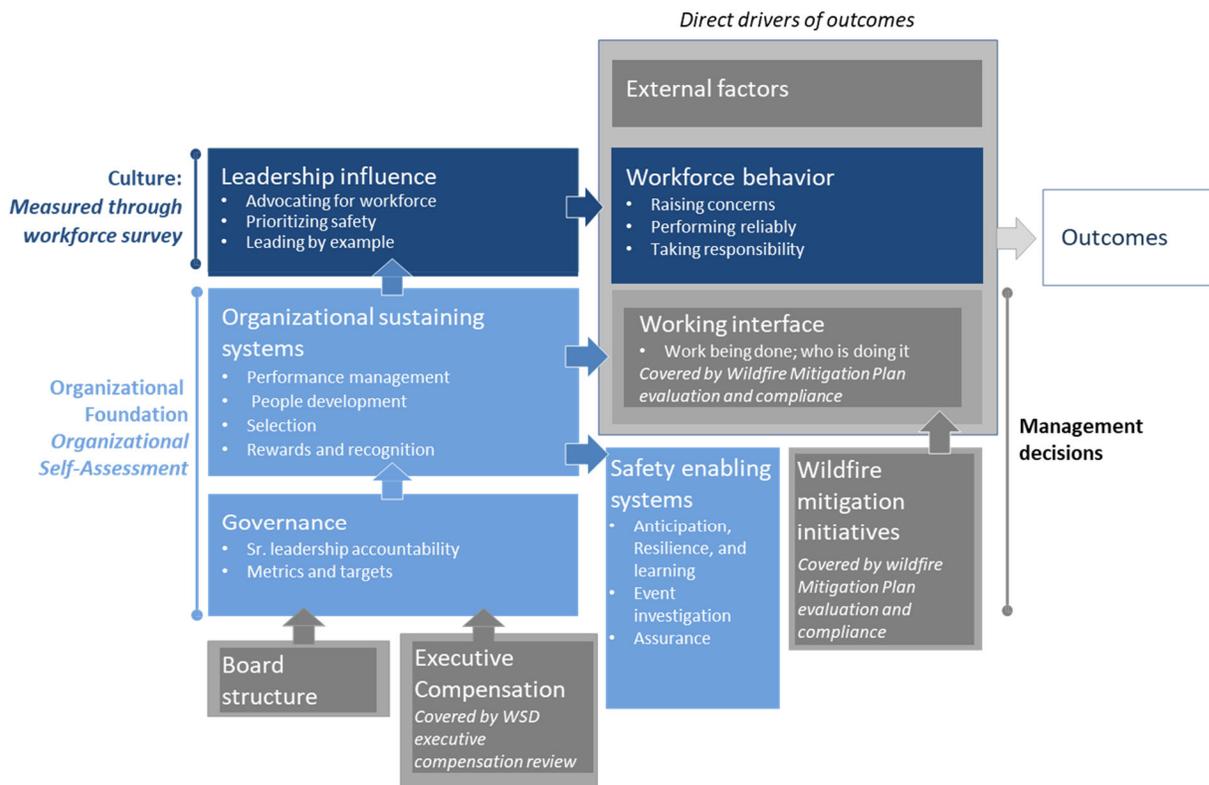
SCA requirements	Electrical corporations that must complete this requirement
Workforce survey	Large IOUs, SMJUs
Management self-assessment and plan summary	Large IOUs
Supporting documentation Section 1: Safety culture objectives	Large IOUs, SMJUs, ITOs
Supporting documentation Section 2: Summary of lessons learned	Large IOUs, SMJUs, ITOs
Supporting documentation Section 3: Summary plan for the following year	Large IOUs
Supporting documentation Section 4: Documentation to support responses to the management self-assessment	Large IOUs
Interviews	To be determined by Energy Safety upon review of submissions
Observational visits	To be determined by Energy Safety upon review of submissions

2.2 Framework for the SCA

The abovementioned components of the SCA (a workforce survey, a management self-assessment, submission of supporting documentation, and interviews) all inform the SCA findings. The SCA components are designed to be administered annually such that progress on the SCA can be measured over time. This is the inaugural assessment and will provide the baseline for evaluating progress in future years. Figure 1 below shows the elements of the organization's culture and foundation assessed by different components of the SCA.

The workforce survey component was designed to evaluate leadership’s influence on the culture and the impact that it has on worker behavior. This was supplemented with follow-up interviews of frontline employees and supervisors. The management self-assessment component was designed to evaluate the organizational sustaining and safety-enabling systems that undergird and reinforce every safety culture. In addition, the self-assessment measured the electrical corporation’s approach to governance of its safety culture. The self-assessment was also supplemented by a focus group comprised of electrical corporation staff members who participated in the organization’s self-assessment responses.

Figure 1. Framework for the Safety Culture Assessment



Source: Resolution WSD-011 Attachment 4 “Annual Safety Culture Assessment Process Proposal” (2020), p. 9.

2.3 Survey and Interview Data Collected

The first stage of the SCA process is a workforce survey. The workforce survey is comprised of 30 statements rated on a five-point Likert scale¹¹ from Strongly Disagree to Strongly Agree. The 30 statements were originally sourced from DEKRA's validated safety culture instrument, called the Organizational Culture Diagnostic Instrument (OCDI).¹² The OCDI statements were then cut and modified to (a) reduce the size of the survey and (b) ensure the SCA survey questions covered aspects of wildfire hazard mitigation pertinent to the SCA. The survey statements are all framed in a positive light (e.g., "managers treat workers with respect"), so agreement with any statement can be considered an indication of better performance by the corporation. The statements were constructed in this way to avoid respondent misinterpretation or coding errors and to improve the interpretation of the survey results.¹³

The 30 workforce survey questions fell into one of three categories: wildfire, safety, and culture. Nine questions specifically asked about the electrical corporation's safety culture with regard to wildfire (e.g., "our management acts quickly to address wildfire hazards"), eleven questions specifically asked about personal safety (e.g., "pausing work for hazards and safety concerns is viewed positively"), and ten questions asked about workplace culture in general (e.g., "the company cares about my opinions").

DEKRA instructed the electrical corporation to share the survey with all classifications of employees directly involved in wildfire mitigation. Based on that instruction, the electrical corporation selected the classifications of employees that would receive the survey.

DEKRA (via SCE) administered the workforce survey using a combination of paper and electronic surveys. The goal was for all levels of SCE employees and contractors to have ample opportunity to complete the survey. SCE distributed the survey electronically on May 10, 2021. Participants had 15 working days to respond (the survey closed on May 28, 2021). A total of 2,042 employees responded to the survey out of 5,306 employees working on wildfire mitigation, resulting in a response rate of 38 percent. In addition, survey responses were received from 861 contractor employees out of an undetermined contractor employee population base. Because of the large number of contractors, DEKRA provided guidance to SCE to allow contractors to sample from their employee populations who predominantly work in SCE territory on wildfire mitigation activities. The final number of contractor employees receiving the survey could not be determined

¹¹ 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, see:

<https://www.questionpro.com/blog/what-is-likert-scale/> (accessed July 28, 2021).

¹² For more information about the OCDI see: <https://www.dekra.us/en/organizational-safety-reliability/ocdi/> (accessed July 28, 2021).

¹³ See the following research article evaluating the effects of using positively and negatively worded survey statements: Sauro and Lewis (May 2011), "When Designing Usability Questionnaires, Does It Hurt to Be Positive?" Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, https://measuringu.com/wp-content/uploads/2017/07/sauro_lewisCHI2011.pdf (accessed August 23, 2021).

because the recipients were determined by the contractors and the contractors did not provide DEKRA with the total number of their employees receiving the survey. The workforce survey planning meeting for this assessment focused primarily on electrical corporation demographics, administration details, and the survey launch timeline. Planning meetings for subsequent assessments will need to address contractor outreach more formally. In the future, SCE should be more direct with requiring contractors to report the number of their employees invited to participate in the survey so that a response rate can be calculated.

Following administration of the workforce survey, three groups of SCE employees involved in wildfire mitigation were interviewed on June 14, 2021. Due to time constraints and COVID-19 considerations, these interviews were conducted virtually over the phone using a teleconference line and a virtual meeting platform. The purpose of these group interviews was to better understand how frontline workers and supervisors view the organization's culture. The findings from these interviews provided context for the data from the survey. DEKRA asked SCE to invite relevant workers to participate in the calls. DEKRA instructed SCE to identify workers from departments that play a direct role in wildfire mitigation to participate in the group interviews, and the workers identified by SCE were invited to participate in the interviews. A total of seven SCE employees participated in the three workforce survey follow-up calls. SCE's participation in these follow-up interviews was much lower than it was for SCE's peer corporations (e.g., SDG&E had 14 participants and PG&E had 17). Tenure information was elicited for four of the seven employees interviewed (including the three supervisors). All four employees had between 11 and 23 years of experience, with a median of 19 years of experience. Two of the groups consisted of frontline employees whose work entails some form of wildfire mitigation. These interviews were 90 minutes in length, conducted virtually via conference call and facilitated by a DEKRA consultant. A total of four frontline workers participated in the two calls (three on one, one on the other). The third group was an hour-long virtual meeting with three SCE frontline supervisors,¹⁴ supervising work that entails some form of wildfire mitigation. This was also facilitated by a DEKRA consultant. Interview questions followed a semi-structured format. They were open-ended and allowed for follow-up questions for clarity. For example, "What words would you use to describe the culture here?" and "How are personal safety and wildfire hazards addressed here?"

2.4 Management Self-Assessment Data Collected

Each large electrical corporation completed a management self-assessment consisting of 22 questions organized into three categories: organizational sustaining systems, governance, and safety-enabling systems. These categories represent the systems and management processes that are needed for a safety culture to advance and sustain itself.

¹⁴ Frontline Supervisors: here, the first level of leadership that has direct oversight of employees within operational units of the organization.

Respondents answered each question using a four-point behaviorally anchored rating scale. The safety culture maturity scale used in the management self-assessment starts on the low end at Level 1, “Requirement” (i.e., minimum requirements are met), and goes up to Level 4, “Who We Are.”

The electrical corporation selected the team of employees that would complete the management self-assessment. Each large electrical corporation submitted one self-assessment.

For each of the 22 questions, the management self-assessment respondents evaluated the current (2021) status of their organization and provided a justification for this rating using a free text form. In addition, respondents rated how much progress they expect the organization to make by the end of 2022 on the same questions and scales.

Each electrical corporation also submitted supporting documentation, providing the following:

1. Safety culture objectives for the next 12 months.
2. Safety culture objectives for the next three years.
3. A description of lessons learned since the most recent Safety Culture Assessment.¹⁵
4. A summary plan for how each corporation will achieve its 2022 self-assessment goals in the coming year.

Finally, DEKRA conducted an interview with the electrical corporation employees who had completed the management self-assessment to better understand their submission and supporting documentation. Like the workforce survey follow-up interviews, this interview was conducted virtually.

2.5 Next Steps in Assessment Process

This is the first annual Safety Culture Assessment under Public Utilities Code Section 8389(d)(4) and as such provides a baseline for future comparison. Following the publication of this report, SCE may agree to implement its findings to demonstrate “good standing” per Public Utilities Code Section 8389(e)(2).¹⁶

¹⁵ As 2021 is the first year of the annual Safety Culture Assessment under Public Utilities Code Section 8389(d)(4), the electrical corporation was asked to evaluate lessons learned since its “most recent” safety culture assessment (if any), and specifically to: “[d]escribe 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. If you have not completed a safety culture assessment in over three years, consider your safety culture as it exists today and describe the major themes that exist today.” (See Section 6.4 “Lessons Learned” below for more information.)

¹⁶ Pub. Util. Section 8389(e)(2), “The electrical corporation is in 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” (accessed July 16, 2021):

https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=8389.&lawCode=PUC.

3. Findings

3.1 Strengths

3.1.1 SCE has been actively and directly focused on improving its culture for wildfire and personal safety.

SCE began performing internal safety culture assessments in 2014 using a third-party consulting company with additional assessments in 2017 and 2020 using a different consulting company.¹⁷ SCE intends to continue these assessments triennially, with the next planned for 2023. Through these assessments, SCE has mapped its results to a safety maturity model and has developed a roadmap for advancement in maturity, incorporating specific behavioral goals (for example, tracking frontline supervisor time in the field and the number of reported safety concerns) to make progress.

Furthermore, SCE has implemented an integrated change management approach, putting in place several aligned and reinforcing elements to advance the culture for wildfire and personal safety. These include:

- Training, goals, coaching, and tracking of supervisor safety observations.
- A Safety Council governance structure focused on high-hazard risks and mitigation.
- Safety Culture Pulse Surveys.
- Implementation of a continuous improvement program to spur innovation and generate ideas from all areas of the organization.

On 21 of the 22 self-assessment questions, SCE rated its 2021 status at Level 3 (“Value”) or Level 4 (“Who We Are,” the top level). Furthermore, SCE expects to be at Level 4 on 17 of the 22 questions by the end of the 2022, with the remaining responses at Level 3, (see Section 6.2.1).

When asked about the corporation’s culture, one workforce interview participant responded: “Safety is a value Edison strives for.”

Some workforce interview participants highlighted improvements in the wildfire safety culture. For example, to guard against fatigue during fire events, SCE shortened its shifts for wildfire response staff: shifts used to be 32 hours long, now the frontline workers do a first shift of 24 hours, take an eight-hour break, and roll into 16-hour shifts. One supervisor added that communication during wildfires has improved, noting in particular that “working with fire liaisons has been a huge improvement.” The SCE fire liaison works with the county fire services, and they decide together when it’s safe to send SCE staff into an area to assess damage. He noted that they used to go in when it was still too hot (“We used to have our shoes melting”), but now his team waits

¹⁷ Full disclosure: In 2014, BST, Inc., a property of DEKRA since 2012, conducted an internal safety culture assessment for SCE. The team that worked on that assessment was not involved in the present SCA process. SCE employed Propulo Consulting, not BST/DEKRA, to do its assessments in 2017 and 2020.

until they have good information from fire officials. He noted that in particular the “Bobcat Fire communication went well.”¹⁸

These comments support the workforce survey results (see Section 6.1.1). Five of the nine wildfire-related questions on the workforce survey had more than 80 percent of respondents giving “strongly agree” or “somewhat agree” positive responses.¹⁹ Among survey respondents:

- 88 percent “strongly” or “somewhat” agreed with the statement “Protecting the community from wildfire hazards is clearly a high priority with management.”
- 85 percent “strongly” or “somewhat” agreed with the statement “Wildfire and personal safety concerns are communicated openly.”
- 83 percent “strongly” or “somewhat” agreed with the statement “Our management acts quickly to address wildfire hazards.”
- 81 percent “strongly” or “somewhat” agreed with the statement “My workgroup follows procedures to control workplace and wildfire hazards.”
- 80 percent “strongly” or “somewhat” agreed with the statement “I feel comfortable discussing wildfire hazards with my supervisor.”

Respondents to both the workforce survey and the management self-assessment perceive SCE as an organization moving from a culture of compliance to one in which safety is a value that is held consistently across all departments. Survey respondents rated the safety-related statements highest (averaging 4.25 on a five-point Likert scale) followed closely by the wildfire-related statements (4.16) and then the culture-related statements (4.04).

3.1.2 Frontline employees feel empowered to work safely.

Frontline employees report that they’re well equipped to perform their jobs safely. They see themselves working in teams with co-workers and frontline supervisors who have the same priorities for getting the job done safely. Notably, interview participants say monthly incident²⁰ calls have shifted from being focused on blame to being focused on learning. Participants also report they have “never had a problem getting the right tools for the work.” These perceptions are aligned with other positive results from the workforce survey (see Section 6.1.1). Among survey respondents:

- 95 percent “strongly” or “somewhat” agreed with the statement “I take responsibility for the safety of myself and others in my work area.” (This statement received the most strongly positive response of all 30 statements on the survey.)

¹⁸ For more information on the Bobcat Fire of Sept.-Oct. 2020, see the National Wildfire Coordinating Group’s profile of the fire on Inciweb, its incident management information system: <https://inciweb.nwccg.gov/incident/7152/> (accessed Aug. 11, 2021).

¹⁹ This is on par with the results from the workforce survey for the other two large electrical corporations surveyed, where five of nine wildfire-related questions and four of nine received greater than 50 percent “strongly agree” positive responses from those surveyed (at SDG&E and PG&E respectively).

²⁰ Incident: here, an unplanned, undesired event that adversely affects normal operations.

- 87 percent “strongly” or “somewhat” agreed with the statement “Pausing work for hazards and safety concerns is viewed positively.”
- 86 percent “strongly” or “somewhat” agreed with the statement “People in my work group treat each other with respect.”
- 85 percent “strongly” or “somewhat” agreed with the statement “My supervisor would use whatever power he/she has to help me out.”

Contractor employees responding to the survey have similar views. Of the 2,903 SCE responses, 861 were from contractor employees. In evaluating the 30 statements, they rate the work environment and culture consistently higher than SCE full-time employees (see Section 6.1.2).

3.2 Opportunities

3.2.1 There is a disconnect between the field and senior leadership at SCE on perceptions of wildfire safety and the culture.

In their responses to the survey, supervisors and employees assign consistently lower ratings than do executives and managers to the statement “I am regularly asked for my ideas and suggestions about wildfire hazards and ways to address them.” In the overall results, this statement had weak responses, with only 48 percent “strongly” or “somewhat” agreeing with this statement (and 22 percent “strongly” or “somewhat” disagreeing—the highest “strongly” or “somewhat disagree” negative response of all 30 statements). All three large electrical corporations’ worst performance overall on the workforce survey was on this statement.²¹ Other workforce survey statements with notably negative evaluations include:

- “The company cares about my opinions” (only 61 percent “strongly” or “somewhat” agreed, while a relatively large number, 15 percent, “somewhat” or “strongly” disagreed).
- “I believe managers apply the same rules for all workers” (18 percent “somewhat” or “strongly” disagreed).

See Section 6.1.1 for the complete results.

These results are supported by some comments made by the workforce in the follow-up interviews. One frontline worker was concerned that SCE leadership was not taking the field reports seriously when making decisions about shutting off power to prevent wildfire (a Public Safety Power Shutoff or PSPS). He remarked:

They send us out to monitor the wind. We are experts. They [SCE leadership] should listen to us, trust us. For example: they are monitoring, there’s no trouble call on a line: yes, it’s windy but it’s in a place where it’s a normal amount of

²¹ For all three large electrical corporations surveyed, this statement garnered the highest “strongly disagree” negative response of all 30 statements (7 percent of SDG&E’s respondents, 11 percent of SCE’s respondents, and 15 percent of PG&E’s respondents).

wind, they [the field workers] report in that everything's ok, and SCE still shuts it down. If windy conditions are normal for a location and it's not low humidity, they should not de-energize. There's one circuit that is shut off every year but it's over bare dirt and produce – a carrot field that is watered multiple times a day. There's no wildfire danger there. There's the IMT group [Incident Management Team] and the ACE team [Advanced Circuit Evaluation team]. They never came out to the district, never talked to personnel. [Frontline workers] send in videos and photos. They kind of ignore us.

He added later, "we are subject matter experts in the field and [SCE leadership isn't] listening to us." Another frontline worker on the same call also added:

The IMT team contact [...] should be there to witness it firsthand. Now it is just phone conversations. [The frontline worker] calls and says: "looks OK!" Then the line is de-energized without notice to the people in the field.

In another follow-up interview, a frontline worker added to this concern about the re-energization process after a PSPS, saying that SCE's "PSPS group," formed in June 2020, has no operations experience, and in one case made a call to re-energize without consulting the appropriate staff:

They don't have the expertise to make that call. [There was] lots of confusion. [Supervision] threw their hands up in the air. Linemen were asking what to do. [There's a] very difficult time with communication right now.

This interview participant voiced a concern that there was no organizational change management process for the document dictating the operational protocols for overhead distribution and sub-transmission equipment within the high fire risk area (HFRA), Standard Operating Bulletin (SOB) 322.

In response to a question about whether safety rules were ever rewritten because of an incident, another interview participant responded: "the SOB [Standard Operating Bulletin] 322 was changed nine times in a year. Everyone's confused. Culture keeps people safe, not rules."

The frontline workforce expressed satisfaction with its immediate level of supervision, but above that, "you get a disconnect." In the frontline supervisor interview, one participant reported: "There's always a lag between information coming in from the field and filtering it up." These comments and others indicate that frontline workers don't feel their opinions are valued or that they are provided with the context for decisions. Decisions made by SCE's leadership may be legitimate and well-supported, but if the process behind the decision is not effectively communicated to the frontline workforce, it can negatively impact the leadership's credibility.

The increased use of the PSPS wildfire mitigation tactic has also increased the personal safety exposure²² of frontline workers due to hostile interactions with certain

²² Exposure: here, 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

discontented members of the public.²³ One interview participant talked about his experience monitoring the impact of high winds on power lines during a PSPS warning. “The public’s not dumb:” people get angry when they see SCE personnel on their property during high winds. He described the hazard further:

[We] are out where there is no cell service, [we] may or may not have a satellite phone. This includes contractors, ODI [overhead distribution inspector] groups, [...] biologists... people have Edison personnel constantly on their property. Someone’s going to get beat up.

The interview participant reported being blocked, spit on, locked into a ranch, and threatened during the course of his work for SCE. This represents a serious injury and fatality exposure for SCE and should be taken very seriously.

Ensuring strong alignment between senior leadership and the field is even more challenging when the work is physically distant from the office. Viewing the workforce survey results by Operating Unit (see Section 6.1.2), the survey results from office-based organizations such as Asset Management are much more positive than field-based organizations such as Transmission and Distribution.

3.2.2 More structures and resources to combat wildfire hazards have also increased confusion and complexity.

As noted above, participants in the workforce interviews expressed concern about SOB 322, which dictates operational protocols for overhead distribution and sub-transmission equipment within SCE’s HFRA. One participant said that when he started working with it in 2018 it was a three-page document: it has since grown to 65 pages. He summarized, “It’s complicated.” Also noted above, another participant said SOB 322 was changed nine times in one year. There is apparently no organizational change management process for SOB 322. Changes were being communicated on the fly in real time by email. In one case, frontline workers were told “if you have any questions, let the PSPS group know.” Workers are concerned that this could create safety issues. One participant reported reluctance on the part of the PSPS group to having a more deliberative process. Meanwhile, operators are confused: they have to abide by multiple Standard Operating Bulletins and don’t want to be blamed for not following protocol.

As noted above, the confusion caused by the PSPS group’s changes to SOB 322 is compounded by inconsistencies in how the Incident Management Teams (IMTs) make decisions about PSPS implementation. One interviewee said that prior to the formation of the PSPS group in 2020, IMTs acted as the field liaison for operators at switching centers. There are 13 switching centers, and they operate “like separate utilities,” with

protecting the person from the vulnerability raised by the hazard (for example, by wearing protective equipment).

²³ On the workforce survey follow-up calls with frontline workers, some of the different hazards mentioned included: the hazardous nature of the work (e.g., “covered conductor ... stays energized when it goes down” – there’s less fire risk but more risk to personnel, a firefighter trying to move it will die); interactions with members of the public (e.g., wind monitoring when there is a PSPS warning); mental fatigue and low morale due to frustration.

unique operating procedures, equipment, etc. SCE apparently tried to create a generic incident management training, but things “got lost” in the uniqueness of the different switching centers. Meanwhile, the PSPS group was created, and the chain of command around PSPS events became less clear. At the same time, according to input from interviewees, the IMTs operate on four different staff rotations, and different staff use different PSPS decision-making criteria. An interviewee reported: “One group might be more lenient in decision-making: ‘it looks OK!’ The next group, looking at the same information, shuts it off.” According to the interviewees, who makes the decision to de-energize or re-energize keeps changing, and the criteria used for these decisions also keep changing. This state of flux is bound to reduce workforce performance effectiveness and could degrade both wildfire and personal safety.

3.2.3 Distrust of incident reporting is hindering SCE’s progression toward becoming a learning organization.

SCE has been working to drive a more positive environment for reporting incidents and near misses.²⁴ One workforce interview participant reported that SCE had created a “Craft Driven Safety Program” (CDSPP), which resulted in the creation of a Union Safety Board to take care of incidents in-house (e.g., within the union). He added, “That helped – people felt more comfortable reporting near misses.” However, he felt the reporting process from this program lacked transparency, so it was now harder for the workforce to learn from what went wrong. He said, “People could benefit from knowing more about contributing factors.”

Other interviewees noted that sometimes workers don’t report near misses out of fear not of personal repercussions but out of fear that new rules would be created as a result. One said that the field workers are bonded with one another and openly discuss incidents among themselves, but “guys shut down in front of management: an authority figure shuts down discussion. What new rules will they create? What new protocols, bureaucracy?” This impacts SCE’s efforts to creating a learning organization.²⁵

Furthermore, SCE’s self-assessment indicates that corrective actions from personal safety incidents are still focused on the lower levels of the hierarchy of controls, emphasizing training and personal protective equipment (PPE), which can reinforce a blame-the-worker approach to errors, incidents, and near misses.

On the workforce survey, SCE employees gave some of their lowest scores to statements related to the organization’s ability to learn such as “people report mistakes they make, even if others do not notice them,” and “people focus on one task at a time and avoid distractions.” It takes time to create a safe environment for the reporting of issues where workers feel the information they provide will result in positive change

²⁴ Near Miss: here, an unplanned event that did not result in injury, illness, or damage, but had the potential to do so.

²⁵ Learning Organization: here, an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights.

instead of negative consequences. The evidence from this assessment indicates that there is still work to be done for SCE on the incident and near-miss reporting front.

4. Recommendations

4.1 Augment frontline supervisor field safety activities to improve wildfire communications, reduce confusion, and enhance leadership credibility.

SCE is engaged in advancing its wildfire and personal safety culture, launching new programs and projects to mitigate wildfire hazards and address personal safety issues. To the frontline worker, however, this can seem like a constant series of changes that serve to confuse and frustrate. Furthermore, frontline workers report that they're not being heard and that the rules aren't communicated clearly or applied consistently. SCE needs to ensure the rationale behind decisions, programs, and initiatives are clearly communicated down the organization, and that ideas, feedback, and concerns from the frontline are heard and conveyed up the organization in a timely fashion.

4.1.1 Improve safety-related communication. Update current safety leader activities to address issues with wildfire/PSPS communications, roles, and decisions.

Currently SCE leaders are actively engaged in leader observations and "tailgates" (crew meetings at worksites where safety briefings take place). These activities can be modified to address the concerns noted by the workforce. For example, SCE can ensure updates to wildfire hazard procedures are incorporated into tailgates. Leader observations can be modified to ensure open-ended questions are asked of frontline workers to solicit suggestions and ideas and funneled up the organization.

- **Observation.** Frontline workers report that their perspective and wildfire expertise are not taken into consideration, they are sometimes confused about the protocol for PSPS events, and do not understand the rationale for some wildfire-related leadership decisions. In particular, there is confusion regarding the chain of command for decisions around de-energizing and re-energizing lines. Frontline workers are not adequately trained in incident management, SOB 322 changes, or the impact of protocol changes on their work.
- **Goal of Recommendation.** Improve communications clarity by modifying the current frontline supervisor safety activities (e.g., observations and tailgates) to incorporate wildfire hazards and mitigation.
- **Verification Method.** In next year's assessment, provide a description of where SCE made modifications to improve safety-related communication, regarding wildfire and PSPS-related communication. Describe the organizational change management process for SOB 322 and associated trainings. Also describe communication protocols to ensure consistent adherence to SOB procedures. Describe how wildfire hazards are integrated into the frontline supervisor observations program.

Addressing the concerns and issues surfaced in this assessment will continue to enhance SCE's culture and leadership's credibility.

4.1.2 Use Safety Culture Pulse Surveys to evaluate progress of supervisors engaging frontline workers on wildfire hazards and clearly communicating wildfire procedures.

Modifying leadership activities may take time to impact employee perceptions of wildfire communications and these perceptions may not be consistent across the organization. It is important SCE monitor the employee perceptions of wildfire communications using its Safety Culture Pulse Surveys to identify successes and problem areas in the implementation of recommendation 4.1.1.

- **Observation.** Frontline supervisor safety activities can be augmented to better address challenges with wildfire safety communications. Implementation of these changes should be accompanied by a way to measure success.
- **Goal of Recommendation.** Provide a way for SCE to evaluate progress on the implementation of recommendation 4.1.1.
- **Verification Method.** In next year's assessment, show how SCE modified its Safety Culture Pulse Surveys and how these modifications provided ways to evaluate progress on the implementation of recommendation 4.1.1.

Gauging progress of supervisor engagement of frontline workers on wildfire hazards and clearly communicating wildfire procedures via the Safety Culture Pulse Surveys will enable SCE to monitor and adjust these activities to quickly improve wildfire communications consistently across the organization.

4.2 Embed learning organization concepts into the culture via training, incident investigations, and corrective action systems.

Organizations with advanced safety cultures are learning organizations with deeply embedded values for responding to incidents productively rather than punitively. These organizations invest in systemic fixes such as failsafes²⁶ rather than reflexively prescribing retraining or more PPE.

The Error Prevention Training SCE currently is developing should help the organization better understand error in the workplace and assist in changing the focus toward root causes and systemic solutions. SCE needs to continue its progress by ensuring that (a) mistakes and incidents are studied to determine what can be learned to prevent them in the future, (b) corrective actions continue to focus on systemic fixes, and (c) lessons learned and actions taken are communicated throughout the organization to foster a positive environment for reporting of issues, errors, and near misses.

- **Observation.** Interview participants note a shift in emphasis on monthly incident calls from blaming to learning, a change that they say represents positive progress for SCE but are still concerned about incident reporting repercussions.

²⁶ Failsafe: here, a system or plan that comes into operation in the event of something going wrong or that is there to prevent such an occurrence²

- **Goal of Recommendation.** Continue to advance SCE’s safety culture toward building an effective learning organization.
- **Verification Method.** In next year’s assessment, describe how near-miss and incident reporting has changed, and how workers are receiving information on contributing factors and root causes pertinent to reported near misses and incidents. Progress should be evident in increased positivity in response to the statements “people focus on one task at a time to avoid distractions” and “people report mistakes they make, even if others do not notice them” on the 2022 workforce survey.

Focusing directly on demonstrated learning from incidents and instituting effective corrective actions will reinforce the Error Prevention Training and show frontline workers the positive effects of reporting errors, incidents, and near misses.

4.3 Recognize and take action to mitigate the risk exposure posed by certain discontented members of the public

Frontline workers report concerns for their personal safety from interactions with certain discontented members of the public. Interview participants indicated their belief that this hostility may be related to the use of Public Safety Power Shutoffs (PSPS) and vegetation management activities. It was reported as a safety concern by workers at all three large electrical corporations.

- **Observation:** Participants in the workforce survey follow-up interviews noted instances of hostile interactions with discontented members of the public, particularly when monitoring lines during high winds events. This is not only a problem for worker safety and morale but could meaningfully hamper wildfire mitigation activities.
- **Goal of Recommendation:** Reduce the safety risks to the workforce from the public. To this end, SCE should track the trends in hostile interactions with the public to guide future response strategies and develop (if not already developed) and train frontline workers on a protocol to de-escalate and disengage from unsafe interactions with the public.
- **Verification Method:** In next year’s self-assessment, provide a description of how SCE has made progress toward this goal. If a protocol and training are already in place, provide all available information on outcomes from the training (e.g., reports of improvements in interactions with the public using tactics learned in the training).

Beyond the obvious benefit of potentially improving frontline worker safety, tracking trends in hostile interactions with the public and developing a protocol and related training around de-escalation and disengagement would demonstrate that field voices are welcome—and heard—at management levels.

5. Conclusion

This report provides the findings from SCE's first Safety Culture Assessment under Public Utilities Code Section 8389(d)(4). It gives Energy Safety a baseline measurement of SCE's current safety culture for future comparison. Following the publication of this report, SCE may agree to implement its findings to demonstrate "good standing" per Public Utilities Code Section 8389(e)(2).

This process is intended to be complementary to, and not a replacement for, ongoing work to improve safety culture at SCE. Energy Safety seeks to develop a longitudinal view of safety culture across electrical corporations to identify best practices and relative gaps, along with an understanding of SCE's relative strengths and weaknesses. As stated above, Energy Safety ultimately seeks to assess safety culture outcomes over time and incorporate continuous learning into the SCA process.²⁷

²⁷ Safety Culture Assessment: Requirements of Electrical Corporations (2021), p. 3.

6. Data Attachments

6.1 Workforce Survey Results

The results for the Workforce Survey are displayed on the following pages. In the tables in 6.1.2 “Results by Demographic Questions” and 6.1.3 “Results by Tenure and Level in the Organization” below, the data in the “Null” column represent results from respondents who chose not to respond to the demographic question. For example, in 6.1.2, there were 41 respondents who did not indicate their Employee Type on the survey.

The colors assigned to average scale scores correspond to percentile scores based on the typical distribution of scores across DEKRA clients evaluating comparable statements using a survey instrument as follows:

-  90th percentile
-  75th percentile
-  50th percentile
-  Below 50th percentile

6.1.1 Overall Results

SENTIMENT ANALYSIS: SCE		Overall Category Mean	Strongly Agree (5)	Somewhat Agree (4)	Neutral (3)	Somewhat Disagree (2)	Strongly Disagree (1)
Overall	Culture	4.04	43%	31%	7%	7%	6% 4%
	Safety	4.25	51%	30%	6%	6%	3% 2%
	Wildfire	4.16	50%	27%	8%	8%	4% 3%
Culture	People in my work group treat each other with respect	4.36	57%	29%	5%	5%	3% 2%
	My supervisor would use whatever power he/she has to help me out	4.33	58%	27%	5%	5%	4% 3%
	Leaders encourage people to ask questions	4.24	50%	32%	6%	3%	3%
	Managers treat workers with respect	4.18	49%	31%	6%	5%	3%
	Information about important events and lessons learned is shared within my work group	4.15	50%	29%	5%	6%	4%
	My supervisor makes sure all employee concerns are heard before job decisions are made	4.04	43%	32%	8%	8%	6% 4%
	People listen to one another; it is rare that someone's views go unheard	3.96	36%	37%	9%	9%	6% 3%
	People report mistakes they make, even if others do not notice them	3.72	25%	36%	14%	14%	8% 3%
	I believe managers apply the same rules for all workers	3.79	38%	29%	8%	8%	10% 8%
	The company cares about my opinions	3.65	25%	36%	12%	12%	9% 6%
Safety	I take responsibility for the safety of myself and others in my work area	4.68	76%	19%	2%	1%	
	Pausing work for hazards and safety concerns is viewed positively	4.46	64%	23%	4%	3%	1%
	If I stopped a job because an important safety step was missing, it would be viewed positively by my supervisor	4.45	64%	23%	5%	2%	2%
	I stop people, even those I do not know, to point out unsafe behavior when I see it in the work environment	4.31	52%	31%	7%	2%	1%
	Leaders use mistakes and incidents as learning opportunities	4.30	53%	31%	6%	3%	2%
	People have the skills they need to resolve workplace safety issues	4.24	46%	37%	6%	3%	1%
	Accidents and incidents are investigated completely to find out what happened and the corrective actions needed	4.34	56%	26%	7%	2%	2%
	People have the ability to respond and correct problems and errors before they get out of control	4.14	40%	40%	7%	7%	3% 2%
	Leaders keep people prepared to intervene when an emergency occurs	4.19	48%	31%	7%	7%	4% 2%
	We have the right tools for the job	4.04	41%	35%	6%	6%	4%
People focus on one task at a time and avoid distractions	3.66	24%	37%	12%	12%	10% 5%	
Wildfire	Protecting the community from wildfire hazards is clearly a high priority with management	4.52	68%	20%	4%	2%	1%
	Wildfire and personal safety concerns are communicated openly	4.35	55%	30%	6%	2%	2%
	Our management acts quickly to address wildfire hazards	4.30	55%	28%	6%	6%	3% 2%
	People look for wildfire hazards and risks as work progresses	4.17	44%	34%	9%	9%	2% 1%
	My workgroup follows procedures to control workplace and wildfire hazards	4.25	57%	24%	5%	4%	5%
	I feel comfortable discussing wildfire hazards with my supervisor	4.28	62%	18%	6%	5%	4%
	People in my work group report all wildfire hazards, no matter how minor	4.10	43%	29%	11%	11%	3%
	Leaders actively seek out signs of potential wildfire hazards	4.06	42%	31%	10%	10%	4%
	I am regularly asked for my ideas and suggestions about wildfire hazards and ways to address them	3.37	22%	26%	16%	16%	11% 11%

6.1.2 Results by Demographic Questions

SURVEY RESULTS by DEMOGRAPHIC: SCE

	EMPLOYEE TYPE				LEVEL				
	OVERALL	SCE Employee	SCE Contractor	Null	Exec	Manager	Supervisor	Individual Contributor	Null
	2,903	2,001	861	41	36	266	263	1,313	123
Culture Average	4.04	3.97	4.22	3.84	4.49	4.34	3.99	3.92	3.54
I believe managers apply the same rules for all workers	3.79	3.65	4.13	3.90	4.42	4.18	3.68	3.54	3.28
Information about important events and lessons learned is shared within my work group	4.15	4.16	4.17	3.10	4.56	4.58	4.24	4.12	3.37
Leaders encourage people to ask questions	4.24	4.23	4.29	3.42	4.71	4.68	4.18	4.18	3.62
Managers treat workers with respect	4.18	4.11	4.34	4.15	4.58	4.60	4.16	4.04	3.62
My supervisor makes sure all employee concerns are heard before job decisions are made	4.04	3.95	4.27	3.95	4.44	4.25	4.01	3.89	3.65
My supervisor would use whatever power he/she has to help me out	4.33	4.29	4.43	4.07	4.58	4.58	4.34	4.25	3.92
People in my work group treat each other with respect	4.36	4.30	4.48	4.34	4.69	4.67	4.30	4.26	3.86
People listen to one another; it is rare that someone's views go unheard	3.96	3.86	4.21	4.05	4.33	4.06	3.93	3.81	3.55
People report mistakes they make, even if others do not notice them	3.72	3.60	4.00	3.88	4.08	3.76	3.55	3.58	3.43
The company cares about my opinions	3.65	3.58	3.85	3.16	4.47	4.09	3.53	3.51	3.02
Safety Average	4.25	4.19	4.41	4.24	4.51	4.44	4.25	4.14	3.87
Accidents & incidents are investigated completely	4.34	4.28	4.48	4.23	4.58	4.68	4.25	4.24	3.80
I stop people to point out unsafe behavior when I see it	4.31	4.26	4.40	4.48	4.53	4.48	4.50	4.19	4.01
I take responsibility for the safety of myself and others in my work area	4.68	4.69	4.68	4.70	4.83	4.88	4.77	4.66	4.32
Leaders keep people prepared to intervene when an emergency occurs	4.19	4.08	4.44	4.20	4.83	4.46	4.11	4.01	3.71
Leaders use mistakes and incidents as learning opportunities	4.30	4.21	4.50	4.18	4.36	4.56	4.23	4.17	3.85
Pausing work for hazards and safety concerns is viewed positively	4.46	4.43	4.53	4.10	4.67	4.74	4.51	4.39	3.98
People focus on one task at a time and avoid distractions	3.66	3.48	4.06	4.15	3.69	3.39	3.56	3.47	3.52
People have the ability to respond and correct problems and errors before they get out of control	4.14	4.03	4.38	4.20	4.39	4.23	4.10	3.99	3.85
People have the skills they need to resolve workplace safety issues	4.24	4.16	4.41	4.18	4.50	4.39	4.21	4.13	3.85
Stopping a job because a safety step is missing, is viewed positively by my supervisor	4.45	4.43	4.49	4.08	4.75	4.80	4.52	4.38	3.94
We have the right tools for the job	4.04	3.98	4.18	4.13	4.44	4.22	4.02	3.93	3.75
Wildfire Average	4.16	4.10	4.29	3.99	4.62	4.53	4.17	4.04	3.59
I am regularly asked for my ideas and suggestions about wildfire hazards and ways to address them	3.37	3.19	3.76	3.79	4.17	3.79	3.31	3.03	2.97
I feel comfortable discussing wildfire hazards with my supervisor	4.28	4.32	4.25	3.05	4.81	4.84	4.49	4.25	3.46
Leaders actively seek out signs of potential wildfire hazards	4.06	3.96	4.30	4.28	4.64	4.45	3.94	3.88	3.54
My workgroup follows procedures to control workplace and wildfire hazards	4.25	4.28	4.23	3.21	4.58	4.67	4.32	4.26	3.56
Our management acts quickly to address wildfire hazards	4.30	4.25	4.43	4.40	4.81	4.63	4.27	4.20	3.70
People in my work group report all wildfire hazards, no matter how minor	4.10	4.02	4.26	4.30	4.42	4.30	4.13	3.96	3.70
People look for wildfire hazards and risks as work progresses	4.17	4.09	4.35	4.28	4.50	4.47	4.17	4.03	3.69
Protecting the community from wildfire hazards is clearly a high priority with management	4.52	4.50	4.56	4.41	4.92	4.88	4.52	4.47	3.92
Wildfire and personal safety concerns are communicated openly	4.35	4.30	4.46	4.18	4.78	4.69	4.34	4.25	3.81

Southern California Edison

2021 Safety Culture Assessment

WILDFIRE HAZARD ACTIVITIES: SCE

LEGEND

High 4.1+ | Med High 3.65-4.1 | Medium 3.3-3.65 | Low <3.3

	Grid Design & System Hardening	Asset Management & Inspections	Situational Awareness & Forecasting	Vegetation Management & Inspections	Grid Operations & Protocols	Risk Assessment & Mapping	Data Governance	Stakeholder Cooperation Community Engagement	Resource Allocation Methodology	Other
	667	538	502	499	473	449	220	160	135	798
Culture Average	4.18	4.06	4.23	4.17	4.04	4.22	4.23	4.23	4.32	4.02
I believe managers apply the same rules for all workers	3.89	3.76	3.98	4.05	3.71	3.93	3.94	4.02	4.13	3.71
Information about important events and lessons learned is shared within my work group	4.44	4.31	4.45	4.13	4.24	4.47	4.50	4.48	4.47	4.21
Leaders encourage people to ask questions	4.40	4.33	4.44	4.30	4.29	4.43	4.52	4.48	4.61	4.27
Managers treat workers with respect	4.33	4.19	4.36	4.32	4.13	4.35	4.36	4.33	4.50	4.11
My supervisor makes sure all employee concerns are heard before job decisions are made	4.15	4.02	4.19	4.16	4.06	4.18	4.22	4.05	4.26	4.01
My supervisor would use whatever power he/she has to help me out	4.46	4.35	4.50	4.35	4.42	4.47	4.48	4.44	4.56	4.29
People in my work group treat each other with respect	4.50	4.41	4.50	4.50	4.36	4.48	4.52	4.56	4.58	4.33
People listen to one another; it is rare that someone's views go unheard	4.06	3.93	4.13	4.17	3.93	4.11	4.01	4.04	4.24	3.93
People report mistakes they make, even if others do not notice them	3.71	3.62	3.83	3.92	3.63	3.83	3.80	3.83	3.80	3.68
The company cares about my opinions	3.83	3.73	3.92	3.78	3.61	3.93	3.93	4.04	4.04	3.67
Safety Average	4.32	4.26	4.41	4.38	4.23	4.38	4.35	4.36	4.38	4.23
Accidents & incidents are investigated completely	4.45	4.41	4.54	4.51	4.29	4.52	4.51	4.55	4.56	4.30
I stop people to point out unsafe behavior when I see it	4.38	4.35	4.46	4.47	4.38	4.43	4.43	4.46	4.42	4.26
I take responsibility for the safety of myself and others in my work area	4.76	4.73	4.79	4.76	4.74	4.79	4.81	4.75	4.78	4.67
Leaders keep people prepared to intervene when an emergency occurs	4.28	4.22	4.43	4.33	4.15	4.38	4.35	4.44	4.47	4.16
Leaders use mistakes and incidents as learning opportunities	4.39	4.31	4.47	4.43	4.21	4.44	4.45	4.44	4.47	4.28
Pausing work for hazards and safety concerns is viewed positively	4.58	4.51	4.60	4.55	4.44	4.59	4.65	4.58	4.62	4.48
People focus on one task at a time and avoid distractions	3.51	3.46	3.74	3.82	3.51	3.70	3.50	3.49	3.42	3.60
People have the ability to respond and correct problems and errors before they get out of control	4.15	4.09	4.33	4.28	4.14	4.24	4.15	4.21	4.25	4.10
People have the skills they need to resolve workplace safety issues	4.32	4.23	4.41	4.34	4.19	4.34	4.27	4.29	4.35	4.22
Stopping a job because a safety step is missing, is viewed positively by my supervisor	4.61	4.55	4.61	4.57	4.51	4.59	4.64	4.61	4.69	4.43
We have the right tools for the job	4.06	4.03	4.16	4.17	4.03	4.13	4.08	4.13	4.13	3.99
Wildfire Average	4.34	4.26	4.38	4.29	4.18	4.40	4.40	4.40	4.47	4.14
I am regularly asked for my ideas and suggestions about wildfire hazards and ways to address them	3.51	3.44	3.64	3.66	3.28	3.69	3.65	3.71	3.83	3.26
I feel comfortable discussing wildfire hazards with my supervisor	4.63	4.53	4.65	4.20	4.51	4.66	4.69	4.62	4.75	4.35
Leaders actively seek out signs of potential wildfire hazards	4.20	4.13	4.28	4.25	4.07	4.29	4.31	4.30	4.41	4.04
My workgroup follows procedures to control workplace and wildfire hazards	4.55	4.47	4.54	4.19	4.41	4.61	4.61	4.54	4.60	4.33
Our management acts quickly to address wildfire hazards	4.43	4.38	4.51	4.45	4.27	4.50	4.45	4.50	4.57	4.29
People in my work group report all wildfire hazards, no matter how minor	4.23	4.14	4.25	4.29	4.11	4.30	4.28	4.31	4.30	4.04
People look for wildfire hazards and risks as work progresses	4.32	4.22	4.32	4.37	4.14	4.37	4.35	4.40	4.36	4.14
Protecting the community from wildfire hazards is clearly a high priority with management	4.67	4.57	4.65	4.63	4.53	4.67	4.71	4.71	4.78	4.51
Wildfire and personal safety concerns are communicated openly	4.51	4.44	4.55	4.52	4.34	4.54	4.50	4.55	4.60	4.32

RESULTS by BUSINESS UNIT: SCE

LEGEND

■ High 4.1+ | ■ Med High 3.65-4.1 | ■ Medium 3.3-3.65 | ■ Low <3.3

	Distribution NW Div	Program Management	Transmission	Central Design & Engineering	Central Field Services	Distribution SE Div	Aerial Inspections	Compliance & Quality	Advanced Analytics & Process.	Vegetation & Land Management	T&D Business Strategy	Grid Operations	Design Engineering & Work Mgmt.	Audit Services	System and Asset Strategies	Western Operations	Local Public Affairs	Corporate Communications	Null
	345	160	140	132	117	113	83	63	51	45	43	43	19	15	13	7	7	6	591
Culture Average	3.97	4.18	4.13	4.10	4.24	4.08	3.82	4.23	4.43	4.13	4.36	3.91	4.28	4.62	4.24	4.04	4.24	3.93	3.65
I believe managers apply the same rules for all workers	3.54	3.83	3.74	3.64	3.98	3.80	3.57	3.97	4.18	4.07	4.30	3.44	4.05	4.47	3.62	3.57	3.86	3.67	3.38
Information about important events and lessons learned is shared within my work group	4.30	4.54	4.42	4.48	4.44	4.30	4.02	4.56	4.63	4.33	4.65	4.19	4.47	4.73	4.54	4.14	4.57	3.83	3.61
Leaders encourage people to ask questions	4.28	4.41	4.38	4.42	4.56	4.26	4.08	4.49	4.63	4.38	4.70	4.35	4.63	4.87	4.77	4.57	4.57	4.00	3.79
Managers treat workers with respect	4.08	4.34	4.21	4.28	4.43	4.27	3.99	4.43	4.55	4.29	4.60	4.12	4.58	4.80	4.46	3.86	4.00	3.83	3.77
My supervisor makes sure all employee concerns are heard before job decisions are made	3.90	4.13	4.20	4.07	4.15	4.13	3.67	4.13	4.47	4.02	4.23	3.72	4.11	4.60	4.00	4.57	4.00	4.00	3.69
My supervisor would use whatever power he/she has to help me out	4.34	4.43	4.54	4.43	4.54	4.47	4.16	4.35	4.80	4.20	4.49	4.16	4.42	4.87	4.62	4.57	4.57	4.33	4.00
People in my work group treat each other with respect	4.32	4.61	4.38	4.48	4.51	4.35	4.16	4.49	4.71	4.58	4.84	4.37	4.58	4.87	4.54	4.29	4.71	4.83	3.96
People listen to one another; it is rare that someone's views go unheard	3.86	4.08	3.95	3.88	4.07	3.90	3.63	4.13	4.35	3.98	4.12	3.67	4.11	4.60	4.15	4.00	4.14	3.67	3.63
People report mistakes they make, even if others do not notice them	3.54	3.68	3.85	3.64	3.74	3.60	3.53	3.76	3.86	3.73	3.63	3.42	3.68	4.00	3.62	3.29	3.86	3.50	3.47
The company cares about my opinions	3.55	3.74	3.64	3.63	3.97	3.73	3.42	4.05	4.14	3.69	4.05	3.63	4.16	4.40	4.08	3.57	4.14	3.67	3.21
Safety Average	4.22	4.33	4.37	4.33	4.36	4.29	4.10	4.36	4.43	4.25	4.40	4.13	4.24	4.44	4.35	4.27	4.48	4.06	3.94
Accidents & incidents are investigated completely	4.27	4.49	4.45	4.36	4.56	4.39	4.18	4.48	4.73	4.47	4.58	4.30	4.53	4.40	4.31	4.00	4.86	4.50	3.99
I stop people to point out unsafe behavior when I see it	4.34	4.31	4.63	4.45	4.35	4.29	4.37	4.40	4.29	4.33	4.37	4.19	4.05	4.40	4.23	4.71	4.00	3.67	4.02
I take responsibility for the safety of myself and others in my work area	4.77	4.82	4.91	4.84	4.78	4.76	4.76	4.73	4.84	4.78	4.93	4.81	4.68	4.73	4.85	4.86	4.86	4.67	4.41
Leaders keep people prepared to intervene when an emergency occurs	4.08	4.18	4.20	4.23	4.34	4.26	3.95	4.30	4.49	4.02	4.16	4.07	3.84	4.53	4.46	4.00	4.86	4.33	3.85
Leaders use mistakes and incidents as learning opportunities	4.19	4.46	4.37	4.34	4.53	4.32	4.14	4.54	4.57	4.27	4.51	4.05	4.53	4.53	4.46	4.14	4.14	3.67	3.93
Pausing work for hazards and safety concerns is viewed positively	4.51	4.60	4.59	4.64	4.63	4.61	4.37	4.76	4.75	4.58	4.72	4.47	4.74	4.87	4.77	4.57	5.00	4.17	4.07
People focus on one task at a time and avoid distractions	3.44	3.51	3.58	3.59	3.40	3.57	3.48	3.49	3.29	3.42	3.33	3.16	3.26	3.67	3.23	3.71	3.29	3.17	3.52
People have the ability to respond and correct problems and errors before they get out of control	4.09	4.15	4.21	4.14	4.12	4.04	3.77	4.17	4.14	3.93	4.26	4.00	4.00	4.20	4.31	4.29	4.29	4.17	3.88
People have the skills they need to resolve workplace safety issues	4.20	4.33	4.31	4.23	4.38	4.27	3.96	4.37	4.45	4.22	4.42	4.07	4.26	4.27	4.38	4.00	4.57	4.17	3.93
Stopping a job because a safety step is missing, is viewed positively by my supervisor	4.49	4.64	4.66	4.68	4.73	4.57	4.35	4.65	4.86	4.69	4.74	4.44	4.79	4.87	4.77	4.57	4.71	4.00	4.03
We have the right tools for the job	3.99	4.16	4.15	4.13	4.15	4.11	3.70	4.11	4.35	4.04	4.42	3.84	4.00	4.40	4.08	4.14	4.71	4.17	3.72
Wildfire Average	4.14	4.28	4.34	4.26	4.27	4.21	4.03	4.31	4.64	4.21	4.45	4.05	4.37	4.73	4.46	4.27	4.63	4.44	3.75
I am regularly asked for my ideas and suggestions about wildfire hazards and ways to address them	3.07	3.16	3.22	3.14	3.13	3.27	3.05	3.29	4.20	3.24	3.72	2.88	3.68	4.67	3.38	3.43	4.14	3.67	3.08
I feel comfortable discussing wildfire hazards with my supervisor	4.46	4.66	4.70	4.61	4.64	4.49	4.28	4.54	4.86	4.49	4.72	4.47	4.74	5.00	5.00	4.71	4.71	4.67	3.73
Leaders actively seek out signs of potential wildfire hazards	3.97	4.06	4.12	4.13	4.09	4.07	3.82	4.32	4.51	3.91	4.35	3.65	4.42	4.80	4.54	4.00	4.57	4.50	3.66
My workgroup follows procedures to control workplace and wildfire hazards	4.41	4.62	4.67	4.54	4.56	4.51	4.31	4.56	4.76	4.58	4.67	4.28	4.68	4.73	4.38	4.57	4.29	4.67	3.71
Our management acts quickly to address wildfire hazards	4.27	4.39	4.52	4.48	4.50	4.32	4.12	4.48	4.67	4.24	4.53	4.30	4.47	4.60	4.69	4.14	5.00	4.83	3.91
People in my work group report all wildfire hazards, no matter how minor	4.01	4.16	4.24	4.07	4.07	4.04	3.99	4.02	4.35	4.18	4.40	4.07	3.79	4.67	4.31	4.29	4.14	4.00	3.83
People look for wildfire hazards and risks as work progresses	4.14	4.30	4.32	4.17	4.23	4.23	4.04	4.25	4.67	4.16	4.26	3.98	4.21	4.33	4.38	4.14	4.86	4.33	3.80
Protecting the community from wildfire hazards is clearly a high priority with management	4.57	4.64	4.79	4.70	4.72	4.57	4.48	4.76	4.92	4.60	4.79	4.58	4.89	4.93	5.00	4.71	5.00	4.83	4.12
Wildfire and personal safety concerns are communicated openly	4.34	4.57	4.49	4.51	4.54	4.40	4.20	4.62	4.84	4.47	4.63	4.26	4.47	4.80	4.46	4.43	5.00	4.50	3.92

RESULTS by OPERATING UNIT: SCE

LEGEND

High 4.1+ | Med High 3.65-4.1 | Medium 3.3-3.65 | Low <3.3

	Distributio..	Transmissio..	Asset Mana..	Compliance..	Operations	Corporate	Safety, Security & Business Resiliency	Finance	Enterprise Risk Manag..	Generation	Information Technology	Null
	1,272	321	129	111	47	17	16	15	15	12	6	40
Culture Average	3.91	3.97	4.37	4.19	3.98	4.20	4.30	4.18	4.62	3.99	3.77	3.68
I believe managers apply the same rules for all workers	3.56	3.62	4.16	4.01	3.57	3.88	4.19	4.13	4.47	3.58	3.17	3.33
Information about important events and lessons learned is shared within my work group	4.09	4.17	4.61	4.47	4.19	4.29	4.31	4.33	4.73	4.17	3.50	3.50
Leaders encourage people to ask questions	4.14	4.26	4.67	4.44	4.36	4.35	4.31	4.53	4.87	4.33	4.33	3.86
Managers treat workers with respect	4.05	4.11	4.57	4.38	4.17	4.12	4.31	4.00	4.80	3.92	3.83	3.73
My supervisor makes sure all employee concerns are heard before job decisions are made	3.89	3.93	4.30	4.07	3.83	4.06	4.31	4.27	4.60	4.33	4.00	3.79
My supervisor would use whatever power he/she has to help me out	4.25	4.35	4.60	4.27	4.34	4.41	4.69	4.20	4.87	4.25	3.83	3.95
People in my work group treat each other with respect	4.25	4.28	4.71	4.53	4.15	4.76	4.56	4.40	4.87	4.17	4.50	3.98
People listen to one another; it is rare that someone's views go unheard	3.80	3.80	4.23	4.07	3.83	4.12	4.19	4.13	4.60	4.00	3.33	3.74
People report mistakes they make, even if others do not notice them	3.56	3.61	3.73	3.77	3.51	3.88	4.06	3.80	4.00	3.25	3.17	3.45
The company cares about my opinions	3.47	3.53	4.10	3.90	3.87	4.12	4.06	4.00	4.40	3.92	4.00	3.45
Safety Average	4.15	4.21	4.39	4.32	4.22	4.32	4.44	4.21	4.44	4.21	3.85	3.95
Accidents & incidents are investigated completely	4.22	4.31	4.60	4.49	4.34	4.65	4.56	4.53	4.40	4.08	3.83	3.88
I stop people to point out unsafe behavior when I see it	4.21	4.42	4.29	4.39	4.49	3.88	4.50	4.00	4.40	4.50	4.00	4.00
I take responsibility for the safety of myself and others in my work area	4.64	4.81	4.85	4.76	4.79	4.76	4.69	4.60	4.73	4.75	4.33	4.40
Leaders keep people prepared to intervene when an emergency occurs	4.03	4.07	4.29	4.21	4.21	4.65	4.56	4.33	4.53	4.08	3.50	3.85
Leaders use mistakes and incidents as learning opportunities	4.17	4.22	4.54	4.42	4.17	4.00	4.56	4.33	4.53	4.00	3.83	3.83
Pausing work for hazards and safety concerns is viewed positively	4.37	4.45	4.74	4.68	4.55	4.53	4.69	4.47	4.87	4.50	4.50	4.10
People focus on one task at a time and avoid distractions	3.51	3.46	3.32	3.43	3.36	3.29	3.44	3.20	3.67	3.42	2.50	3.58
People have the ability to respond and correct problems and errors before they get out of control	4.02	4.02	4.19	4.07	3.96	4.24	4.31	4.13	4.20	4.17	3.50	3.80
People have the skills they need to resolve workplace safety issues	4.14	4.15	4.41	4.29	4.09	4.47	4.50	4.13	4.27	4.00	3.83	3.82
Stopping a job because a safety step is missing, is viewed positively by my supervisor	4.36	4.46	4.81	4.67	4.47	4.47	4.69	4.60	4.87	4.67	4.50	4.08
We have the right tools for the job	3.93	3.90	4.29	4.09	3.98	4.53	4.38	3.93	4.40	4.17	4.00	4.08
Wildfire Average	4.02	4.14	4.53	4.28	4.21	4.56	4.47	4.39	4.73	4.22	3.91	3.75
I am regularly asked for my ideas and suggestions about wildfire hazards and ways to address them	3.07	3.12	3.89	3.29	3.57	4.00	3.88	3.60	4.67	3.33	3.50	3.18
I feel comfortable discussing wildfire hazards with my supervisor	4.23	4.40	4.81	4.51	4.60	4.76	4.56	4.53	5.00	4.75	4.00	3.65
Leaders actively seek out signs of potential wildfire hazards	3.87	3.93	4.45	4.17	4.06	4.53	4.56	4.47	4.80	4.00	3.83	3.75
My workgroup follows procedures to control workplace and wildfire hazards	4.20	4.37	4.69	4.57	4.34	4.41	4.56	4.47	4.73	4.67	4.17	3.66
Our management acts quickly to address wildfire hazards	4.18	4.28	4.60	4.40	4.23	4.94	4.69	4.60	4.60	4.17	3.67	3.85
People in my work group report all wildfire hazards, no matter how minor	3.95	4.12	4.29	4.10	4.09	4.06	4.19	4.27	4.67	4.08	3.83	3.80
People look for wildfire hazards and risks as work progresses	4.03	4.15	4.44	4.23	4.19	4.65	4.56	4.13	4.33	4.08	3.83	3.83
Protecting the community from wildfire hazards is clearly a high priority with management	4.43	4.56	4.88	4.70	4.51	4.94	4.69	4.87	4.93	4.50	4.33	4.08
Wildfire and personal safety concerns are communicated openly	4.23	4.32	4.68	4.56	4.32	4.76	4.50	4.53	4.80	4.42	4.00	3.95

6.1.3 Results by Tenure and Level in the Organization

SURVEY RESULTS by TENURE: SCE

	TENURE					
	OVERALL	0-1 Years	2-5 Years	6-10 Years	10+ Years	Null
	2,903	170	385	263	1,155	28
Culture Average	4.04	4.35	4.00	3.87	3.94	3.42
I believe managers apply the same rules for all workers	3.79	4.22	3.79	3.48	3.56	3.07
Information about important events and lessons learned is shared within my work group	4.15	4.35	4.18	4.11	4.15	3.25
Leaders encourage people to ask questions	4.24	4.53	4.20	4.12	4.23	3.38
Managers treat workers with respect	4.18	4.58	4.15	4.03	4.06	3.46
My supervisor makes sure all employee concerns are heard before job decisions are made	4.04	4.41	4.03	3.76	3.91	3.57
My supervisor would use whatever power he/she has to help me out	4.33	4.58	4.27	4.24	4.28	3.75
People in my work group treat each other with respect	4.36	4.56	4.26	4.26	4.30	3.79
People listen to one another; it is rare that someone's views go unheard	3.96	4.34	3.86	3.76	3.82	3.30
People report mistakes they make, even if others do not notice them	3.72	3.93	3.75	3.46	3.53	3.46
The company cares about my opinions	3.65	4.01	3.52	3.47	3.57	3.15
Safety Average	4.25	4.40	4.17	4.10	4.19	3.78
Accidents & incidents are investigated completely	4.34	4.45	4.26	4.24	4.28	3.71
I stop people to point out unsafe behavior when I see it	4.31	4.18	4.19	4.06	4.35	3.96
I take responsibility for the safety of myself and others in my work area	4.68	4.71	4.59	4.61	4.74	4.21
Leaders keep people prepared to intervene when an emergency occurs	4.19	4.36	4.08	4.02	4.07	3.57
Leaders use mistakes and incidents as learning opportunities	4.30	4.51	4.25	4.18	4.18	3.67
Pausing work for hazards and safety concerns is viewed positively	4.46	4.64	4.38	4.36	4.45	4.11
People focus on one task at a time and avoid distractions	3.66	3.86	3.57	3.32	3.43	3.46
People have the ability to respond and correct problems and errors before they get out of control	4.14	4.31	4.07	3.94	4.01	3.61
People have the skills they need to resolve workplace safety issues	4.24	4.46	4.18	4.10	4.14	3.71
Stopping a job because a safety step is missing, is viewed positively by my supervisor	4.45	4.62	4.40	4.38	4.44	3.96
We have the right tools for the job	4.04	4.28	3.95	3.86	3.98	3.59
Wildfire Average	4.16	4.20	4.07	4.01	4.14	3.48
I am regularly asked for my ideas and suggestions about wildfire hazards and ways to address them	3.37	3.34	3.17	3.10	3.19	3.00
I feel comfortable discussing wildfire hazards with my supervisor	4.28	4.37	4.16	4.26	4.40	3.54
Leaders actively seek out signs of potential wildfire hazards	4.06	4.02	3.99	3.84	3.97	3.36
My workgroup follows procedures to control workplace and wildfire hazards	4.25	4.41	4.22	4.25	4.32	3.39
Our management acts quickly to address wildfire hazards	4.30	4.36	4.20	4.12	4.29	3.54
People in my work group report all wildfire hazards, no matter how minor	4.10	4.12	4.05	3.86	4.04	3.54
People look for wildfire hazards and risks as work progresses	4.17	4.14	4.08	4.01	4.12	3.61
Protecting the community from wildfire hazards is clearly a high priority with management	4.52	4.55	4.45	4.38	4.56	3.82
Wildfire and personal safety concerns are communicated openly	4.35	4.51	4.27	4.27	4.31	3.54

Organizational Level by Job & Tenure | SCE

LEGEND

High 4.1+ | Med High 3.65-4.1 | Medium 3.3-3.65 | Low <3.3

Organizational Level by Job & Tenure																	
Exec	Manager			Supervisor			Individual Contributor					Null					
	10+ Years	2-5 Years	6-10 Years	10+ Years	2-5 Years	6-10 Years	10+ Years	0-1 Years	2-5 Years	6-10 Years	10+ Years	Null	0-1 Years	2-5 Years	6-10 Years	10+ Years	
29	10	20	231	10	13	238	146	331	220	605	11	18	32	8	52	13	
Culture Average	4.54	4.57	4.30	4.34	4.53	3.67	3.99	4.38	3.99	3.84	3.80	3.45	4.23	3.72	3.64	3.24	3.27
I believe managers apply the same rules for all workers	4.48	4.70	4.20	4.17	4.60	3.23	3.67	4.24	3.76	3.44	3.31	2.91	4.22	3.56	3.00	2.87	3.15
Information about important events and lessons learned is shared within my work group	4.69	4.90	4.70	4.56	4.90	4.08	4.24	4.48	4.18	4.08	4.04	3.18	3.56	3.78	3.63	3.08	3.15
Leaders encourage people to ask questions	4.86	4.60	4.60	4.68	4.56	3.85	4.19	4.58	4.23	4.10	4.10	3.30	4.23	3.73	3.67	3.48	3.17
Managers treat workers with respect	4.62	4.90	4.55	4.60	4.90	3.69	4.16	4.62	4.12	4.01	3.87	3.45	4.33	4.00	3.63	3.19	3.38
My supervisor makes sure all employee concerns are heard before job decisions are made	4.52	4.40	4.00	4.26	4.60	3.46	4.01	4.42	4.00	3.76	3.75	3.64	4.44	3.97	3.43	3.27	3.38
My supervisor would use whatever power he/she has to help me out	4.66	4.50	4.50	4.59	4.90	3.77	4.34	4.61	4.28	4.25	4.16	4.00	4.50	3.84	4.13	3.87	3.38
People in my work group treat each other with respect	4.72	4.90	4.75	4.65	4.70	4.08	4.31	4.57	4.25	4.22	4.21	3.91	4.39	3.97	4.25	3.62	3.62
People listen to one another; it is rare that someone's views go unheard	4.28	4.50	3.95	4.06	4.40	3.85	3.92	4.34	3.84	3.73	3.72	3.27	4.33	3.75	3.88	3.19	3.23
People report mistakes they make, even if others do not notice them	4.03	4.00	3.90	3.74	3.70	3.31	3.55	3.90	3.76	3.43	3.46	3.45	4.28	3.56	3.38	3.10	3.31
The company cares about my opinions	4.55	4.30	3.85	4.10	4.00	3.38	3.52	4.02	3.53	3.43	3.40	3.40	3.93	2.97	3.43	2.75	2.83
Safety Average	4.56	4.43	4.48	4.45	4.52	3.97	4.26	4.41	4.18	4.06	4.09	3.88	4.47	3.89	4.25	3.68	3.54
Accidents & incidents are investigated completely	4.69	4.80	4.60	4.70	4.70	4.23	4.24	4.49	4.27	4.20	4.17	3.82	4.50	3.81	4.00	3.63	3.31
I stop people to point out unsafe behavior when I see it	4.59	4.20	4.40	4.51	4.80	3.92	4.52	4.15	4.18	4.02	4.26	4.09	4.44	4.00	4.63	3.85	3.69
I take responsibility for the safety of myself and others in my work area	4.90	5.00	4.85	4.87	4.90	4.54	4.78	4.72	4.60	4.58	4.71	4.36	4.61	4.22	4.88	4.29	3.92
Leaders keep people prepared to intervene when an emergency occurs	4.86	4.20	4.60	4.46	4.30	4.08	4.10	4.33	4.10	3.95	3.92	3.73	4.50	3.74	4.25	3.44	3.31
Leaders use mistakes and incidents as learning opportunities	4.41	4.50	4.55	4.58	4.70	4.08	4.21	4.53	4.24	4.17	4.05	3.82	4.50	4.09	3.63	3.62	3.38
Pausing work for hazards and safety concerns is viewed positively	4.79	5.00	4.85	4.72	4.60	4.38	4.50	4.66	4.41	4.31	4.35	4.36	4.67	3.77	4.50	3.88	3.62
People focus on one task at a time and avoid distractions	3.69	3.10	3.55	3.41	3.50	2.92	3.60	3.87	3.60	3.31	3.37	3.27	4.29	3.45	3.50	3.27	3.69
People have the ability to respond and correct problems and errors before they get out of control	4.45	4.20	4.45	4.22	4.30	3.92	4.11	4.33	4.07	3.87	3.92	3.45	4.44	3.91	4.38	3.60	3.54
People have the skills they need to resolve workplace safety issues	4.48	4.50	4.40	4.40	4.60	3.92	4.20	4.49	4.19	4.07	4.03	3.91	4.39	3.84	4.25	3.69	3.46
Stopping a job because a safety step is missing, is viewed positively by my supervisor	4.86	5.00	4.90	4.80	4.90	4.38	4.51	4.67	4.40	4.32	4.32	4.00	4.50	4.00	4.50	3.69	3.69
We have the right tools for the job	4.41	4.20	4.15	4.24	4.40	3.23	4.05	4.29	3.93	3.85	3.87	3.82	4.28	3.88	4.25	3.54	3.25
Wildfire Average	4.68	4.62	4.54	4.53	4.61	3.89	4.17	4.22	4.07	3.96	4.01	3.51	4.15	3.65	3.97	3.38	3.32
I am regularly asked for my ideas and suggestions about wildfire hazards and ways to address them	4.21	3.90	3.70	3.81	4.20	3.31	3.28	3.25	3.14	3.05	2.91	3.09	4.06	2.84	2.50	2.77	2.85
I feel comfortable discussing wildfire hazards with my supervisor	4.83	4.90	4.85	4.84	4.90	4.23	4.50	4.45	4.17	4.20	4.29	3.27	3.61	3.59	4.38	3.15	3.54
Leaders actively seek out signs of potential wildfire hazards	4.69	4.60	4.40	4.46	4.60	3.54	3.94	3.99	3.99	3.79	3.83	3.45	4.22	3.63	4.00	3.27	3.23
My workgroup follows procedures to control workplace and wildfire hazards	4.69	4.70	4.65	4.68	4.90	4.31	4.31	4.51	4.21	4.18	4.26	3.45	3.67	3.97	4.75	3.15	3.38
Our management acts quickly to address wildfire hazards	4.83	4.50	4.65	4.65	4.60	3.69	4.29	4.37	4.23	4.09	4.19	3.73	4.39	3.63	4.25	3.56	3.15
People in my work group report all wildfire hazards, no matter how minor	4.48	4.50	4.35	4.31	4.70	3.92	4.12	4.14	4.04	3.82	3.93	3.45	4.28	3.75	3.50	3.56	3.46
People look for wildfire hazards and risks as work progresses	4.55	4.60	4.65	4.47	4.10	4.08	4.18	4.14	4.09	3.94	4.01	3.55	4.28	3.81	3.88	3.42	3.54
Protecting the community from wildfire hazards is clearly a high priority with management	5.00	5.00	4.85	4.87	4.70	3.85	4.55	4.57	4.48	4.36	4.48	4.00	4.44	3.77	4.50	3.85	3.46
Wildfire and personal safety concerns are communicated openly	4.83	4.90	4.75	4.68	4.80	4.08	4.33	4.53	4.27	4.24	4.19	3.55	4.39	3.88	4.00	3.69	3.23

6.2 Management Self-Assessment Results

6.2.1 Graph of 2021 Management Self-Assessment: Current Status to 2022 Goal

SCE Self-Assessment Categories and Questions
2021 Current Status | 2022 Goal

Categories & Questions	Requirement	Priority	Value	Who We Are
Organizational Sustaining Systems			● Value	● Who We Are
Wildfire safety integrated into leader selection and promotion			● Value	
Wildfire safety integrated into leader goals and objectives			● Value	
Safety incorporated into position descriptions				● Who We Are
Training available to frontline leaders			● Value	● Who We Are
Training available to frontline workers			● Value	● Who We Are
Training requirements for contractors				● Who We Are
Rewards and incentives to support safety				● Who We Are
Structure and Governance				● Who We Are
Accountable for wildfire safety outcomes				● Who We Are
Accountable for personal safety outcomes				● Who We Are
Wildfire measures tracked by senior leadership				● Who We Are
Effectiveness of wildfire measures			● Value	● Who We Are
Monitor and adjust strategies to wildfire safety				● Who We Are
Communication of wildfire safety metrics			● Value	● Who We Are
Safety Enabling Systems			● Value	● Who We Are
Investigations using root cause analysis			● Value	● Who We Are
Quality of event investigations			● Value	
Results of investigations			● Priority	● Value
Process for reporting wildfire hazards			● Value	● Who We Are
Systems to encourage sensitivity to weak signals			● Value	● Who We Are
Responding to upset conditions				● Who We Are
Process/structures to create a learning organization			● Value	
Audits of wildfire hazard activities				● Who We Are
Use of audit findings and tracking to closure				● Who We Are

6.2.2 2021 Management Self-Assessment and Justification Part 1: Organizational Sustaining Systems

The yellow highlighted cell is where the corporation ranks itself at the time of the self-assessment (May 2021), and the light blue cell is where it expects to be at the end of 2022, if it expects its status to change.

The text in the “Justification” fields below is as it was received from the electrical corporation, presented without revision.

Organizational Sustaining Systems		Rating Levels			
		(1) Requirement	(2) Priority	(3) Value	(4) Who we are
1.1.1 Wildfire safety integrated into leader selection and promotion	Not Considered	Personal and wildfire safety performance are considered in selection/promotion decisions but are not the primary factors	Personal and wildfire safety performance are heavily weighted, primary factors in hiring / promotion decisions	Excellent personal and wildfire safety performance are necessary for advancement; poor safety performance eliminates leader from selection/promotion	
Justification	Safety performance is one of several factors in determining selection or promotion. Safety is a core competency and is a component of performance management and career planning for leaders. Candidates are evaluated on safety values and performance. There is also a menu of standardized safety interview questions that must be used for selection /candidate differentiation. Passing a Leader Assessment that evaluates safety is a requirement for all new to role leaders. For existing leaders, SCE has processes that account for safety performance in leadership advancement that are continuing to mature and evolve beyond 2022.				
1.1.2 Wildfire safety integrated into leader goals and objectives	No annual goals / objectives related to wildfire safety	Goals and objectives focus on only lagging measures ²⁸ for wildfire or personal safety related to wildfire mitigation work	Goals and objectives contain a mix of leading ²⁹ and lagging indicators for wildfire and personal safety related to wildfire mitigation work	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	
Justification	Safety is included in the values and competencies ratings of all leaders and employees as well as SCE’s organizational goals. Wildfire safety goals and objectives include both leading and lagging indicators and are discussed in performance meetings. Leading indicators encompass WMP implementation/deployment of measures and include quality checks, inspections, maintenance, grid hardening, vegetation management and audits. SCE does not currently have indicators that focus on the quality of each leader’s visible engagement in support of wildfire and personal safety programs/initiatives but there are efforts working towards this that will mature beyond 2022.				

²⁸ Lagging Indicator: here, an outcome or output measure that is backward-looking, describing a past event.

²⁹ Leading Indicator: here, an input measure that is predictive of a future event.

Organizational Sustaining Systems		Rating Levels			
		(1) Requirement	(2) Priority	(3) Value	(4) Who we are
1.1.3 Safety incorporated into position descriptions		No mention of safety	Focus is on compliance with rules and dismissal if found out of compliance	Emphasis on more than just compliance with rules, but each employee's position description includes responsibility to speak up and intervene if unsafe conditions exist, both for wildfire and personal safety	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
Justification	Safety is one of SCE's corporate values, which sets foundational performance expectations for all employees and demonstrates an unwavering commitment to safety. SCE expects that all employees are accountable for addressing unsafe conditions, reinforced through various forums (e.g. observational guidelines, cognitive behavioral safety culture training provided to employees). Safety performance expectations are included in our competency model and all position descriptions used for recruiting. Safety is incorporated into individual and company annual goals, annual performance reviews are the mechanism through which employees, officers and the organization are held accountable for safety outcomes (e.g. through impacts to compensation). Executive leadership is informed of incidents and accountable to ensure corrective actions are implemented and adhered to.				
1.2.1 Training available to frontline leaders		No training available	Job-specific wildfire safety training focused on rules compliance, procedures, and safety systems (e.g. familiarity with wildfire-related job procedures or personal safety related procedures.)	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.)	All criteria in "value" option are met; In addition, training includes advanced safety topics such as exposure management ³⁰ , and human performance reliability ³¹
Justification	SCE provides job specific wildfire training and technical training to our workers to safely perform their job tasks. Safety culture training was also deployed to all employees and leaders; providing practical tools for leaders to support a strong safety culture, influence safe behaviors aligned with our values and inspire employees to take ownership of their safety. In 2022, SCE will implement Error Prevention Training which will provide a human performance foundation across our safety culture and wildfire mitigation efforts.				

³⁰ Exposure Management Training: here, 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.

³¹ Human Performance Reliability: here, the suite of knowledge, skills and capabilities required to anticipate, control, and respond to unplanned issues and error.

Organizational Sustaining Systems		Rating Levels			
		(1) Requirement	(2) Priority	(3) Value	(4) Who we are
1.2.2 Training available to frontline workers		No training available	Job specific wildfire safety training focused on rules compliance, procedures, and safety systems (e.g. familiarity with wildfire-related job procedures or personal safety related procedures.)	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.) ³²	All criteria in “value” option are met; in addition, training includes advanced safety topics such as human performance reliability
Justification	SCE provides job specific wildfire training and resources. Deployed cognitive behavioral safety culture training for all employees. SCE has also provided safety observation training coupled with paired safety observations to provide on-the-job coaching for leaders. In 2022, SCE will implement Error Prevention Training which will provide a human performance foundation across our safety culture and wildfire mitigation efforts.				
1.2.3 Training requirements for contractors		No safety training required	Site or location specific general safety introduction and orientation	Electrical corporation-wide standardized safety training in addition to site-specific orientation	Electrical corporation-wide standardized safety training in addition to site-specific orientation and wildfire hazard awareness training
Justification	SCE does not train our contractor workforce, but sets requirements for general safety, PSPS wildfire-specific training and safety orientations for contractors. Programs including our Work Restrictions During Elevated Fire Conditions and Hazard Assessment and Safety Plan provides wildfire hazard awareness and mitigation requirements on which contractors are responsible for training their employees and subcontractors. In addition, SCE’s HS Handbook includes standardized Wildfire Prevention requirements for contractors to ensure employees are trained and work in compliance with SCE’s High Fire Risk Areas Hot Work Restrictions & Mitigation Measures Program; and employees are trained and work in compliance with the Operations and Maintenance Plan Prepared for Electric Facilities on National Forest System Lands within the Pacific Southwest Region. SCE’s Contractor Safety and Supply Management groups ensure consistent requirements are in place across tier one contractors and conducts observations to ensure compliance with all safety requirements including implementation of fire plans and protocols. Opportunities for improvement are escalated and managed real time to drive performance				
1.3.1 Rewards and incentives to support safety		No rewards or incentives specific to	Rewards and incentives only focus on lagging indicators such as	Rewards and incentives emphasize lagging indicators for personal and wildfire safety and	Rewards and incentives focus on leading activities such as reporting wildfire concerns,

³² Behavior-Based Safety (BBS): a broad term used to describe programs for improving workplace safety by observing and analyzing employees’ behavior while they work.

Organizational Sustaining Systems		Rating Levels			
		(1) Requirement	(2) Priority	(3) Value	(4) Who we are
		safety and wildfire safety	achieving no injuries or wildfires	some leading indicators related to wildfire hazard mitigation activities	bringing innovative ideas to reduce wildfire hazards, and approaching others on safety
Justification	Safety performance is one of several factors in determining selection, promotion, and rewards/incentives. Employees are rewarded for impactful actions or observations and may receive rewards/recognition through our enterprise-wide programs (such as Safety Recognition, Xchange, or Spot bonuses). As described in 1.1.1 above, wildfire safety and safety are reflected in annual goals and strong performance results in greater short-term incentive opportunities; in addition, there is a corporate multiplier for strong organizational safety performance.				

6.2.3 2021 Management Self-Assessment and Justification Part 2: Governance

The yellow highlighted cell is where the corporation ranks itself at the time of the self-assessment (May 2021), and the light blue cell is where it expects to be at the end of 2022, if it expects its status to change.

The text in the “Justification” fields below is as it was received from the electrical corporation, presented without revision.

Governance		Rating Levels			
		(1) Requirement	(2) Priority	(3) Value	(4) Who we are
2.1.1 Accountable for wildfire safety outcomes		Not defined	Safety department	Operational leadership ³³ and Safety Department	Executive leadership ³⁴ with Safety Department as trusted advisor
Justification	SCE's Safety Culture Maturity model reinforces personal safety ownership and accountability (Private Compliance) as we progress to Stewardship safety culture maturity, which builds on our foundation of Private Compliance through workers proactively sharing knowledge of hazards and learning through shared safety ownership. SCE reinforces personal safety ownership where employees make safe choices to protect themselves for who and what they value. SCE's portfolio of wildfire mitigation activities is designed to reduce wildfire risks and improve associated safety outcomes. Goals and targets related to operational deployment of these activities are established at the corporate and organizational unit levels and assigned to a responsible executive. In addition, specific safety goals for employee, contractor, and public safety are established at the corporate level. Performance against these goals is reviewed throughout the year by management with periodic reporting to the Board and its committees.				
2.1.2 Accountable for personal safety outcomes		Not defined	Safety department	Operational leadership and Safety Department	Executive leadership with Safety Department as trusted advisor
Justification	SCE's Safety Culture Maturity model reinforces personal safety ownership and accountability through programs, training, and resources to anchor our safety culture in Private Compliance, where employees make safe choices to protect themselves for who and what they value. In addition, SCE fosters a culture of shared safety accountability where employees feel psychologically safe to speak up. All employees, including Officers, are held accountable for safety outcomes via impacts to compensation and annual performance ratings. Operational leadership and Edison Safety are accountable by ensuring incidents are assessed (e.g., investigations, root cause evaluations) and comprehensive corrective actions are identified and deployed. Executive leadership is informed of incidents and accountable to ensure corrective actions are implemented and adhered to.				
2.1.3 Wildfire measures tracked by senior leadership		No wildfire safety objectives	Leading and lagging wildfire safety	Required safety measures for regulatory purposes. Additional	Required safety measures. Additional leading measures

³³ Operational Leadership: here, levels of management within operations ranging from frontline supervisors (who have direct oversight of employees) to executive level senior operational leaders (e.g., COO).

³⁴ Executive Leadership: here, the highest level of management in an organization, reports to the CEO.

Governance		Rating Levels			
		(1) Requirement	(2) Priority	(3) Value	(4) Who we are
			measures required to be reported for regulatory purposes	leading measures used for wildfire mitigation work that are aligned to actionable initiatives	used for wildfire mitigation work that are aligned to actionable initiatives at each level of the organization
Justification	Leading and lagging wildfire safety indicators are tracked through our councils and routine reporting. All levels of teams have goals anchored to concrete activities that are tracked, cascaded and executed at multiple levels of the organization.				
2.2.1 Effectiveness of wildfire measures	Not effective	Reasonably effective in providing data and trends across company	Highly effective in providing data and trends in critical exposure ³⁵ areas	Highly effective in providing data and critical exposure area trends, and actionable insight	
Justification	Established regular review and trend analysis of inspection findings and fire investigations leading to new and refined mitigations. Continuous refinement of analytical models to calculate risk (e.g. related to PSPS, ignitions and wires down), improve data, and identifying priority areas for deployment. In addition, internal quality control and audit practices allow for objective evaluation of mitigation processes and continuous improvement thereof. As these models and practices continue to mature, we expect to continue progressing through level 4 maturity in 2022.				
2.2.2 Monitor and adjust strategies to wildfire safety	Never	Periodically (at even or uneven intervals; for example, once or twice a year as wildfire season approaches)	Often (at even or uneven intervals; for example, 3-5 times per year) monitors action plans and responds to emerging issues, and developments	Regularly (at even intervals; for example, monthly) monitors action plans and strategies. Conducts real time strategic problem solving focused on systemic risks ³⁶	
Justification	Senior executives regularly meet in various forums ranging from weekly to monthly cadences. SCE's safety governance structure includes safety forums which manage safety strategy and execution. For example, the Executive Safety Council (which includes the CEO of SCE) sets and monitors overarching safety strategy, which is operationalized through the Senior Safety Council, comprised of senior leaders across the company. In addition, wildfire safety specific forums such as the Wildfire Governance Forum which is comprised of SCE officers, specifically focus on monitoring wildfire mitigation action plans and strategies through a systematic risk-based perspective to proactively mitigate wildfire risk for members of the public and our workers.				

³⁵ Exposure: here, 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).

³⁶ Systemic Risks: here, vulnerabilities that could result in cascading or broad failures across the utility.

Governance		Rating Levels			
		(1) Requirement	(2) Priority	(3) Value	(4) Who we are
2.2.3 Communication of wildfire safety metrics		Safety metrics are not shared	Lagging metrics for wildfire outcomes are posted at local/site operations ³⁷	Lagging and leading measures for wildfire safety are posted and discussed in regular management and supervisor meetings	Lagging and leading measures for wildfire safety are discussed; individual/team contributions to leading measures are highlighted and recognized publicly
Justification	Leading and lagging measures are in place and are refined/developed through continuous improvement [e.g. Wildfire Mitigation Plan (WMP) execution, number of faults and near misses, ignitions, and ignition outcomes]. Both leading and lagging metrics are discussed in leadership meetings (e.g. regular WMP leads meeting and the Performance Management Council where metrics and performance against the metrics are reviewed on a regular basis). Individuals and teams are recognized for meeting and exceeding wildfire mitigation targets, and as we continue to mature, we will expand the forums where team and individual contributions are recognized.				

³⁷ Operations: here, the parts of a business that affect the production, distribution, and service necessary for a company to function. For purposes of this assessment, electrical operations, field services, transmissions, substations, and distribution are considered in operations, but generation is not.

6.2.4 2021 Management Self-Assessment and Justification Part 2: Safety-Enabling Systems

The yellow highlighted cell is where the corporation ranks itself at the time of the self-assessment (May 2021), and the light blue cell is where it expects to be at the end of 2022, if it expects its status to change.

The text in the “Justification” fields below is as it was received from the electrical corporation, presented without revision.

Safety-Enabling Systems		Rating Levels			
		(1) Requirement	(2) Priority	(3) Value	(4) Who we are
3.1.1 Investigations using root cause analysis		Only fatal or serious incidents required to be reported to OSHA ³⁸ or fire incidents required to be reported to CPUC ³⁹	All incidents required to be reported; in addition, work-related injuries involving days away from work and fire incidents that do not meet CPUC reporting standards	All incidents with the potential to be serious or fatal, including near misses	All high potential events and near misses. Also, event learning ⁴⁰ teams evaluate high risk situations ⁴¹ for proactive opportunities to reduce exposure
Justification	SCE performs root cause analysis on ignitions, wire downs, underground equipment failures, and faults. We are building capabilities to further drive these metrics, including establishing forums where root cause findings are shared and evaluated to enhance learning and determine mitigations. We are also developing several efforts to proactively reduce exposure, examples include the Long Span Initiative where we are evaluating situations that could lead to wire downs or faults because of the configuration; and a transmission strategy that proactively evaluates risk on the transmission system (e.g. conductor, hardware, guy-wires) to reduce exposure. Furthermore, high energy (actual and potential) and low energy Serious Injuries and all fatalities are evaluated using a rigorous cause evaluation process or learning team. Some days away from work incidents are evaluated using a cause evaluation methodology or learning team. As these processes mature to be more consistently and broadly applied, we expect to progress into level 4 in 2022.				
3.1.2 Quality of event investigations		A “fix the employee” mentality is commonplace when addressing incidents or other adverse events	Investigations primarily focus on identifying exposure and the root cause of the exposure	Investigations focus on identifying the root cause of the exposure and describing actions to control the exposure	Incidents are regarded as learning events that spur a comprehensive look at, culture,

³⁸ OSHA Reportable Incidents: here, 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.

³⁹ CPUC Reportable Ignition: here, 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 CPUC information about this event that is useful in identifying operational and/or environmental trends relevant to the event. (See CPUC Decision 06-04-044 and Resolution E-4184.)

⁴⁰ Event Learning: here, 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.

⁴¹ High Risk Situations: here, work activities or situations that have previously been shown in incident data to be consistent with serious or fatal incidents.

Safety-Enabling Systems		Rating Levels			
		(1) Requirement	(2) Priority	(3) Value	(4) Who we are
					processes, and safety systems that led to the event
Justification	SCE has a rigorous cause evaluation process for investigating actual and potential injury/illness incidents. Evaluations are performed in partnership between the line organization and Edison Safety. They are facilitated by a trained evaluator who leads the team through a systematic process to determine organizational & programmatic causes and associated corrective actions that are documented within the Incident Management System. In addition, SCE's FIPA (Fire Incident Preliminary Analysis) is a comprehensive learning framework that that investigates all ignitions to inform design standards, work methods, inspection and maintenance cycles, and also incorporates the results of audits and quality control inspections. SCE is already deploying some practices aligned with level 4 and anticipates continued progression in 2022 and beyond as these practices mature, recognizing that fully anchoring in level 4 represents a significant shift (e.g. culture and systems) that will take multiple years.				
3.1.3 Results of investigations	Reported to the regulator if required, but no systemic tracking, corrective actions, or closure/sharing of corrective actions	Corrective actions are tracked and are predominantly focused on rule changes, personal protective equipment, and training	Corrective actions are tracked to closure and include more focus on high value controls ⁴² ; learnings are shared throughout organization	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)	
Justification	Cause Evaluations are performed for all significant safety incidents and the resulting actions are developed to prevent repetition of the problem or mitigate consequences to an acceptable level. We have a system in place to track and close actions. Organizational and Programmatic Corrective Actions are sometimes identified and implemented. Some groups still implement Corrective Actions for significant incidents through rule changes, coaching and training. As current processes mature SCE expects our Corrective Actions to be consistently higher on the hierarchy of controls through a management peer review process and will more effectively share lessons learned throughout the organization by 2022.				
3.2.1 Process for reporting wildfire hazards	No formal process	Process exists to report wildfire hazards but no training or feedback	Process established and communicated widely; there is consistent follow-up to reduce exposure	Process established and communicated for wildfire hazard reporting; workforce trained and encouraged to report wildfire hazards; results broadly shared across	

⁴² High Value Controls: here, 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.

Safety-Enabling Systems		Rating Levels			
		(1) Requirement	(2) Priority	(3) Value	(4) Who we are
					organization to spur learning and exposure reduction
Justification	Established process for inspections and remediation, status and progress are shared broadly for visibility and action. Safety culture efforts also reinforce ownership and discretionary effort to address all safety hazards. We are working to improve learning from PSPS events, including pre- and post-patrol inspections, where findings are tracked and reported but not currently shared broadly for learning opportunities. Continuing to leverage findings to inform/improve programs and processes (i.e. inspection programs, risk assessment, design standards, and training curriculum). SCE anticipates maturing in 2022 and will continue to improve on consistency and effectiveness of messaging, processes and learning.				
3.3.1 Systems to encourage sensitivity to weak signals ⁴³	No formal process or structure	Workforce is encouraged to report wildfire hazards as they see them	System established for reporting and mitigating wildfire hazards; leaders encourage reporting of weak signals	A cross-functional team is established to proactively look for, track, and mitigate wildfire hazards and potential black swan ⁴⁴ situations	
Justification	SCE interprets “weak signals” as indicators that are low probability, low frequency, low consequence and that would not lead to prediction of a wildfire. SCE has developed and launched an Asset Failure and Risk Mitigation (AF&RM) register which tracks failures including “weak signals”, using various data sources, including inspection data, fires, and outages, to detect trends in the data and develop mitigation measures. In addition to monitoring failure data, SCE actively tracks the potential of a significant fire based upon actual conditions. Moreover, in addition to the tracking mitigation measures, the AF&RM register prioritizes mitigation measures and flows into the Enterprise Risk Management program that among other things has a process to evaluate potential black swans. ERM also trains management on how to spot black swans which SCE defines as low probability high consequence events. SCE has adopted and deployed processes and practices that align with level 4 in many instances (i.e. risk-informed inspections) and anticipates maturing fully in 2022.				
3.3.2 Responding to upset conditions ⁴⁵	No formal training or preparation	Common upset conditions have been identified and response protocols are reviewed periodically	Simulations and drills ⁴⁶ are conducted regularly to prepare the workforce	Simulations and drills are conducted regularly to practice responses to upset conditions and leaders have instilled a “what could go wrong?” mentality	
Justification	SCE conducts regular training and exercises at multiple levels of the company and with local agencies, incorporating federal and/or state training standards (e.g. FEMA NIMS, Cal OES SEMS), throughout the year. SCE conducts PSPS-specific training and exercises and routinely conducts exercises on windstorms, rainstorms, and wildfires. These exercises result in after action reports and corrective actions. Field response is supplemented by an Incident Management Team to ensure operations have appropriate access to personnel and material resources in order to respond to upset conditions. Further, SCE’s risk-				

⁴³ Weak Signals: here, an indicator of a potentially emerging issue that may become significant in the future.

⁴⁴ Black Swan: here, unpredictable events that are beyond what is normally expected and have potentially severe consequences.

⁴⁵ Upset Conditions: here, interruptions in the regular running of work processes or other planned activity.

⁴⁶ Drills: here, coordinated, supervised activities designed to test work team responses to various planned upset conditions.

Safety-Enabling Systems		Rating Levels			
		(1) Requirement	(2) Priority	(3) Value	(4) Who we are
		informed inspection program goes beyond compliance requirements and focuses on reliability, public safety and wildfire risk. Enterprise Risk Management also partners with operating units in proactively and reactively evaluating risk.			
3.3.3 Process/structures 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 management system for sharing safety-related best practices and incidents throughout the organization	All criteria met in “priority” option, plus processes exists for systematically using the knowledge management system and implementing safety-related best practices	All criteria met in “value” option, plus these processes for tapping best practices in knowledge management system are used routinely and by nearly everyone	
Justification	Continuous improvement is a core SCE value and competency for all employees. SCE has a collection of systems including a safety incident management system, processes, structures and tools (e.g. Failure Database to track wire down and UEF investigations) to incorporate safety lessons learned (e.g. from audits/quality control inspections) and cause evaluations on an ongoing basis in various company-wide learning forums. A cross-functional safety governance structure regularly reviews corrective actions and findings, which are shared broadly across the organization. Leaders use safety dashboards that provide real time safety performance data to inform adjustments and additional actions. SCE also benchmarks and shares safety best practices with IOUs/industry groups (e.g. EEI , NATF , IWRMC). SCE is conducting Black Swan training for senior management through Stanford and the RAND corporation. In addition, SCE has engaged with Stanford to conduct a multisession executive program focused on fundamental through complex aspects of Enterprise Risk Management. SCE remains committed to cultivating a learning mindset in all employees and has implemented several enterprise-wide forums to solicit, share and implement safety and work process best practices. This remains a core area of focus through 2022 and beyond, with maturing processes such as Job Hazard Analyses touching most of our employees, SCE continues to evolve to level 4 maturity.				
3.4.1 Audits of wildfire hazard activities	No formal self-audits conducted	Site specific self-audits required; internal audits occur only after an incident has occurred	Site specific self-audits required; internal audits occur based on wildfire risk present	Systemic and rigorous self, independent, and internal audits conducted; used for alignment, calibration and learning	
Justification	SCE’s internal audit department is independent, reporting functionally to the Audit and Finance Committees of the Boards of Directors of SCE and EIX. The department’s annual audit plan is risk based and includes wildfire related operations as this is a key risk for the company and the public we serve. The department conducts rigorous and systemic operational, safety, and wildfire audits leveraging a team of engineers and health and safety professionals focused on continuous improvement and proactively identifying and remediating control weaknesses. SCE also uses a co-sourcing strategy to integrate external technical experts in its independent audit team. Audit findings are reviewed by senior management and include deep dives by various Board Committees for identification of broader trends, and all audit observations are tracked to closure..				
3.4.2 Use of audit findings and tracking to closure	No formal tracking mechanism	Self-tracking of closures; no verification	Audit findings tracked and verified to closure	Audits tracked, implementations verified to closure, and effectiveness validated.	
Justification	All audit observations are tracked via an audit management system, TeamMate. Management is sent a series of reminders regarding audit observation due dates. Before an observation can be marked as closed, it must be verified by the assigned auditor after reviewing evidence. Follow up audits are required				

Safety-Enabling Systems	Rating Levels			
	(1) Requirement	(2) Priority	(3) Value	(4) Who we are
	for all high rated observations to further evaluate effectiveness of implemented solutions. Senior management and various board committees including the Safety and Operations Committee and the Audit Committee review findings with an emphasis on high rated and overdue findings.			

6.2.5 Summary Plan for the Following Year

The text in the table below the headings is as it was received from the electrical corporation, presented without revision.

A. Action/Activity	B. Deadline	C. Self-Assessment Reference(s). Indicate which question(s) on self-assessment this activity links to.
Error Prevention training (Human Performance) was developed to be launched in 2020 and was paused as a result of the pandemic. We plan to launch this program in 2022, beginning with our field populations and their leaders engaged in high hazard/ Wildfire Mitigation work	Q3 2022	1.2.1 To what extent are training and support resources available to frontline leaders 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?
Finalize Asset Failure & Mitigation Register and incorporate into regular reviews of ignitions and wire down Onboard resource and finalize sampling methodology for performing root cause for wire down events Implement Smart Form to capture consistent data related to ignitions and wire down events	Q3 2021 Q3 2021 Q4 2021	2.2.1 How effective are wildfire safety measures in providing insight to critical areas of risk?
Expand where we highlight and publicly recognize individual/team contributions to leading measures to include broader performance management and wildfire governance forums	Q1 2022	2.2.3 To what extent are wildfire safety metrics communicated throughout the organization?
Develop UEF: Failure Mode and Effect Analysis Dashboard Enhance Failure Database to Include and track wire down and UEF investigations Launch Wire Down and UEF investigations Complete all UEF investigations that occurred before 10/31 Refine WD and UEF process	Q1 2021 Q2 2021 Q2 2021 Q4 2021 Q4 2021	3.1.1 What types of adverse events are investigated using root cause analysis?
Improve corrective actions through a management peer review process ensuring Corrective Actions are focused on high value controls (top of the hierarchy of controls) Developing a process for summarizing and sharing lessons learned throughout the organization using mobile technology solutions	Q1 2022 Q1 2022	3.1.3 What happens with investigation results?

A. Action/Activity	B. Deadline	C. Self-Assessment Reference(s). Indicate which question(s) on self-assessment this activity links to.
Develop scope of inspection communication report including audience, frequency, and content Release first draft of inspection communication report to inspection execution organization Establish regular cadence of production draft of inspection communication report	Q4 2021 Q2 2022 Q3 2022	3.2.1 What kind of process is used by frontline workers to recognize and report wildfire hazards?

6.3 Safety Culture Objectives

The text in the tables below, other than the instructions and headings, is as it was received from the electrical corporation, presented without revision.

Instructions

Provide a description of the electrical corporation’s objectives with respect to safety culture, over the next 12 months and over the next 3 years.

6.3.1 Safety Culture 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 or risk to employees conducting wildfire mitigation work
Continue improving leader ownership of Safety focusing on safety culture training refreshers, safety commitments/plans anchored in safety culture assessment findings and implement accountability processes.	Cultural indicators are assessed through a combination of triennial Safety Culture Assessments and monthly Safety Culture Pulse Surveys 1. Leader time in field 2. Felt leadership through employee perception of leader engagement 3. Leaders speaking positively about safety culture 4. Safety leadership progress through employee perception of leader engagement 5. Leader safety observation feedback and coaching	1. Increase leader time in field 2. Improve employee perception of quality of supervisor safety engagement 3. Increase number of leaders speaking positively about safety culture 4. Improve employee perception of leader's safety leadership 5. Increase number of leader observations with identified opportunities for improvement	SCE’s Safety Programs are focused on driving systematic risk identification and mitigation and are enhanced by safety culture tools which embed consistent shifts in employee safety mindset and behaviors to reduce wildfire and safety risk. Leader safety ownership in conjunction with existing controls and accountability measures will ensure leaders understand and have the tools to fulfill their role in executing and reinforcing our safety and wildfire mitigation programs.
Increase frequency of intrinsically motivated Safe Worker Behaviors (Safety Ownership)	1. Worker willingness to implement safety culture changes 2. Workers observing peers speaking positively about safety	1. Increase number of workers willing to implement safety culture changes 2. Increase number of	SCE's Safety Culture Maturity Model is currently focused on progressing from Public Compliance where employees follow rules primarily as a result of potential consequences, to Private Compliance,

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 or risk to employees conducting wildfire mitigation work
	<p>culture</p> <p>3. Worker comfort in speaking up when experiencing a safety concern</p>	<p>observations of peers speaking positive about safety culture</p> <p>3. Increase number of workers who feel comfortable speaking up to address a safety concern</p>	<p>where employees are motivated to make safe choices because they inherently value protecting themselves and the public. A private compliance mindset sets the foundation for discretionary effort to execute on all safety goals, including Wildfire Mitigation and SIF prevention efforts currently implemented to systematically identify and reduce risk exposure. SCE's Wildfire Mitigation and Safety Programs drive improved work practices, risk identification and mitigation; intrinsic motivation (safety ownership) drives acceptance and adoption; this integrated approach holistically addresses wildfire and safety risks to the public and our workers.</p>

6.3.2 Safety Culture Objectives for the Next 3 Years

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 or risk to employees conducting wildfire mitigation work
Anchor safety culture maturity in Private Compliance - where leaders are accountable for safety culture/outcomes, and employees consistently demonstrate safe behaviors	1. SCE uses a 25-dimension safety culture maturity model that evaluates safety environment within the company, safety practices, personal accountability and leadership.	1. Continued measurement of safety culture progress and impact through monthly safety culture pulse surveys	A private compliance mindset sets the foundation for employee discretionary effort and leadership safety ownership and accountability to execute on all safety goals including Wildfire Mitigation and SIF prevention programs currently implemented to systematically identify and reduce risk exposure. SCE's Wildfire Mitigation and Safety Programs drive improved work practices, risk identification and mitigation; employee intrinsic motivation and leadership safety ownership drives acceptance, adoption and accountability; this integrated approach holistically addresses wildfire and safety risks to the public and our workers.
Begin evolving safety culture mindset and actions to Stewardship level of maturity- where all employees collectively engage in and reinforce making safe choices and consistently demonstrate safe behaviors	1. SCE triennial Safety Culture Assessment planned for 2023 will determine specific areas of opportunities to ensure targeted actions and appropriate measures are implemented	1. Continued measurement of safety culture progress and impact through monthly safety culture pulse surveys	SCE attaining a Stewardship level of safety culture maturity builds on our foundation of Private Compliance, with workers proactively sharing knowledge of hazards and learnings through increased trust and shared safety ownership. There is increased cross-functional safety ownership and good safety performers are recognized as strong exemplars in the organization. These anchors of a Stewardship safety culture contribute to a proactive learning organization where teams go above and beyond to identify and mitigate exposures, including Wildfire and SIF. Teams govern themselves and hold each other accountable for Safety and Wildfire Mitigation outcomes.

6.4 Lessons Learned

The text in the tables below, other than the instructions and headings, is as it was received from the electrical corporation, presented without revision.

Instructions

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. If you have not completed a safety culture assessment in over three years, consider your safety culture as it exists today and describe the major themes that exist today.

6.4.1 Lessons Learned Since Most Recent Safety Culture Assessment

A. Major Themes or Lessons Learned	B. Actions Taken
Deepen Leadership Safety Ownership & Accountability	<ol style="list-style-type: none"> 1. Conducted Safety Commitment and Planning Workshops spanning executive to front line leaders to prioritize safety culture assessment themes and build contextualized OU-specific plans to address key findings 2. Shifted from a quarterly safety culture pulse to a monthly cadence, facilitating increased measurement of leader safety engagement and ownership 3. Refined safety governance structure to include additional operations executives to drive a deeper focus on high hazard safety topics 4. Provided leaders with leader cognitive behavioral leader safety ownership playbook to build on tools provided in Safety Culture Training
Increase leader visibility and time in field	<ol style="list-style-type: none"> 1. Operations leadership reinforced expectation of minimum leader time spent in field 2. Measure and communicate leadership time in field through safety culture pulse and implementing new vehicle telematics to provide additional leader field visibility data 3. Implemented safety observation enhancements to measure front line leader time spent with crew conducting observations
Improve the quantity and quality of safety recognition	<ol style="list-style-type: none"> 1. Provided all leaders with cognitive behavioral safety culture training to improve recognition skills 2. Launched micro-learnings to provide leaders with ongoing refreshers of core safety leader skills and tools, including safety recognition. 3. Provided leaders with leader cognitive behavioral leader safety ownership playbook to take specific actions using tools provided in safety culture training

A. Major Themes or Lessons Learned	B. Actions Taken
Increase psychological safety (speaking up & stopping work)	<ol style="list-style-type: none"> 1. Engaged leaders in broader culture workshops to help them better create an environment for employees to speak up 2. Provided leaders with specific tools through safety culture leadership training and Cultural Differences training to engage employees in psychologically safe discussions and to better foster a psychologically safe work environment 3. Providing front line leaders with real time coaching and peer to peer discussions to further embed skillset and tools to sustain a psychologically safety work environment
Increase the quantity and quality of safety observations	<ol style="list-style-type: none"> 1. Conducting paired safety observations with frontline leaders and field safety advisors to develop and embed safety observation skillset 2. Implemented safety observation guide to set expectations and provide leaders with tools to successfully conduct safety observations 3. Implemented structured ongoing discussions with leaders to address safety observation trends and feedback. 4. Developed indicators to measure and improve safety observation quality
Improve employee participation in safety	<ol style="list-style-type: none"> 1. Engaging employees and leaders in enterprise-wide competition to submit grassroots safety projects that drive safety continuous improvements 2. Conducting safety Kaizens with front line employees to develop and implement mitigations for high hazard risks 3. Conducted safety recognition event facilitated by SCE's CEO for employees who demonstrated significant safety engagement and ownership
Reduce stress, fatigue and perceptions of production pressure	<ol style="list-style-type: none"> 1. Implemented leadership workshops where leaders developed efforts to address 2020 triennial safety culture assessment results 2. Reinforced safe production messaging in all leader safety culture training classes and refreshers 3. Implemented key cultural indicator to measure employee perception of production pressure, stress and fatigue to provide leaders with actionable data to further target precise opportunities and drive timely actions

7. Glossary of Terms

Term	Definition
Behavior-Based Safety (BBS)	A broad term used to describe programs for improving workplace safety by observing and analyzing employees' behavior while they work.
Black Swan	Unpredictable events that are beyond what is normally expected and have 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 CPUC information about this event that is useful in identifying operational and/or environmental trends relevant to the event. (See CPUC Decision 06-04-044 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 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.
Failsafe	A system or plan that comes into operation in the event of something going wrong or that is there to prevent such an occurrence.

Term	Definition
Frontline Supervisors	The first level of leadership that has direct oversight of employees within operational units of the organization.
High Risk Situations	Work activities or situations that have previously been shown in incident data to be consistent 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.
Individual Contributor	An employee who is not in a management position or has any employees directly reporting to them.
IOU	Investor-owned utility.
ITO	Independent transmission operator.
Lagging indicator	Outcome or output measure that is backward looking describing a past event.
Leading indicator	Input measure that is predictive of future events.
Learning Organization	An organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights.
Likert Scale	A rating system commonly used in questionnaires and survey research to measure people's attitudes, perceptions, and opinions.
Near Miss	An unplanned event that did not result in injury, illness, or damage, but had the potential to do so.

Term	Definition
Operations	The parts of a business that affect the production, distribution, and service necessary for a company to function. For purposes of this assessment, electrical operations, field services, transmissions, substations, and distribution are considered in operations, but generation is not.
Operational Leadership	Levels of management within operations ranging from frontline supervisors (who have direct oversight of employees) to executive level senior operational leaders (e.g., 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.
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.

8. Other Attachments

8.1 Written Comments from SCE

Following are the written comments from SCE dated August 31, 2021, "SUBJECT: Southern California Edison Company's Comments on the August 2021 Draft Safety Culture Assessment."

August 31, 2021

Caroline Thomas Jacobs, Director
Office of Electrical Infrastructure Safety
California Natural Resources Agency
715 P Street 20th Floor
Sacramento, CA 95814

SUBJECT: Southern California Edison Company's Comments on the August 2021
Draft Safety Culture Assessment

Director Thomas Jacobs,

In response to the August 24, 2021 letter from the Office of Energy Infrastructure Safety (Energy Safety), Southern California Edison Company (SCE) submits its comments on the August 2021 draft Safety Culture Assessment (SCA) report conducted by DEKRA Services, Inc. (DEKRA) on behalf of Energy Safety in fulfillment of Public Utilities Code Section 8389(d).

As noted in the draft SCA report, DEKRA performed an extensive review, which involved workforce surveys, management assessments and interviews to support its analysis and recommendations. DEKRA found that SCE has been “actively and directly focused on improving its culture for wildfire and personal safety”¹ and that “frontline employees feel empowered to work safely.”² However, the draft SCA report also notes a few opportunities for improvement. To drive consistent improvements in SCE's safety culture, the report makes four recommendations:³

1. Update current safety leader activities to address issues noted by the workforce concerning wildfire communications, roles, and decisions.
2. Use monthly Safety Culture Pulse Surveys to evaluate progress of supervisors in engaging frontline workers on wildfire hazards and providing clear communication about wildfire-related procedures.
3. Embed learning organization concepts into the culture via training, incident investigations and corrective action systems.
4. Recognize and take action to mitigate the serious exposure posed by interactions with certain discontented members of the public.

¹ Draft SCA Report, p. 10.

² Draft SCA Report, p. 11.

³ Draft SCA Report, pp. 1-2.

SCE generally supports the findings and recommendations in the report and appreciates the efforts that Energy Safety and its consultant, DEKRA, have put into implementing the inaugural safety culture assessment process. Below, SCE offers a few clarifying comments on the report for consideration.

COMMENTS ON THE DRAFT SAFETY CULTURE ASSESSMENT REPORT

I. SCE is fully committed to improving communications with frontline workers about wildfire-related hazards, procedures, roles, and decisions.

SCE supports the recommendation to “[i]mprove safety-related communication [and] [u]pdate current safety leader activities to address issues with wildfire/PSPS communications, roles, and decisions.”⁴ SCE has already begun several efforts to integrate communications with frontline workers and feedback mechanisms around wildfire and Public Safety Power Shutoff (PSPS) hazards into its procedures, roles and decisions, and provides some examples below.

SCE’s PSPS preparedness activities take place year-round, including pre-planning efforts that involve frontline workers. Pre-planning work includes grid hardening activities (e.g., installing covered conductor), determining circuit exceptions, process and tool enhancements that include developing and updating switching plans for every circuit in High Fire Risk Areas (HFRA), and vegetation management. When determining circuit exceptions, SCE evaluates which circuit segments to remove from PSPS protocols when wildfire risk is temporarily or permanently abated, based on the circuit segment’s unique characteristics (such as construction type and outage history) and location characteristics (such as fuel quantity, fuel type, fuel dryness, fuel age and history of fires in the area). To inform these decisions, SCE solicits information from the field by meeting with district management, supervisors and frontline workers who have subject matter expertise and local knowledge of changing conditions in specific areas. Through this circuit exception review process, and other grid hardening efforts, SCE has removed 81,000 customers from PSPS scope to date.

During a PSPS event, frontline workers known as Live Field Observers (LFOs) are deployed to locations that are being considered for de-energization by the Incident Management Team (IMT). The IMT monitors these locations remotely along the entire circuit using our weather stations for wind speed and fire potential conditions and initiates de-energization protocols when thresholds are breached. The IMT also incorporates concurrent observations at these locations from LFOs, who provide valuable information about any imminent threats and real-time, ground-level wind speed readings with the LFOs’ hand-held devices to refine de-energization decisions. Finally, the IMT also includes an Operations Team that is in constant communication with our frontline employees who are responding to the event.

SCE utilizes an operating policy called System Operating Bulletin (SOB) 322 to standardize the operation of distribution voltage lines traversing fire hazard areas. This

⁴ Draft SCA Report, p. 17.

policy imposes operating restrictions on designated overhead distribution lines to reduce the risk of wildfires during a Red Flag Warning. In the past two years, the need to implement changes to SOB 322 has increased with the evolution in SCE's approach to its wildfire mitigation efforts and PSPS operations. These changes require quick turnaround and immediate action, which impact many functional organizations. For each change, SCE has implemented its long-standing training and communication strategy helping ensure impacted stakeholders were well-informed of the changes. Specifically, when updates to the procedure are required, conferences are held with impacted stakeholders (Grid Control Center, System Operators, and frontline supervision) and the changes are communicated. Additionally, prior to fire season each year, SCE performs training and communication assessments to identify the needs of individuals and determine the depth of the engagement required. This year, impacted stakeholders participated in computer-based and/or instructor-led training modules. Six out of the 16 courses offered targeted frontline workers including SOB 322, LFO, PSPS Field Photo Policy and several courses pertaining to field tools used by frontline workers during PSPS weather events. While these processes help improve communications and education between leadership and the field, SCE acknowledges that the impacts of frequent and complex changes in protocols on a large, distributed workforce can be challenging and is working towards simplifying messages and continually improving communications with its frontline workers.

Specific to communicating changes in PSPS protocols, SCE has developed a comprehensive and flexible organizational change management (OCM) strategy. The PSPS OCM framework is designed to drive timely and specific awareness of the changes, engagement at all levels of the organization, learning & development, and targeted two-way communication. In addition, changes are communicated via PSPS-focused livestream meetings. To enhance engagement and communication efforts with our frontline workers, the PSPS Operations team plans to reach out to all field locations in HFRA by the end of September to share the most up-to-date information, listen to the districts' and grids' concerns, reinforce communication protocols, and collaborate to help ensure the PSPS events are executed successfully when they are necessary to protect public safety.

II. SCE is conducting safety culture pulse surveys quarterly, not monthly, based on employee feedback.

The report recommends that SCE “[u]se monthly Safety Culture Pulse Surveys to evaluate progress of supervisors engaging frontline workers on wildfire hazards and clearly communicating wildfire procedures.”⁵ SCE requests that this recommendation be changed to quarterly instead of monthly Safety Culture Pulse Surveys. SCE clarified to Energy Safety and DEKRA in a meeting on August 27, 2021 that while SCE had made a reference to monthly surveys, SCE has continued to administer the surveys on a quarterly basis. Energy Safety and DEKRA agreed with SCE during the meeting that a quarterly basis would allow for sufficient opportunities to make adjustments throughout the year. A quarterly measurement approach would supplement the OCM strategy currently in place. SCE is confident that we will be able to monitor communications challenges using the

⁵ Draft SCA Report, p. 18.

quarterly Pulse Surveys and additional methodologies such as the OCM strategy for our PSPS efforts.

III. SCE thoroughly supported the safety culture assessment process.

The report notes that “SCE’s participation in these follow-up interviews was much lower than it was for SCE’s peer corporations.”⁶ However, this statement does not reflect the extensive effort that SCE undertook to support Energy Safety’s safety culture assessment process. SCE fully supported the implementation of the safety culture assessment, including making 20 employees available for the three focus groups conducted as a part of the assessment. Our focus group coincided with a heat event resulting in several of our field employees being unable to attend their scheduled focus group session. We look forward to engaging a broader sample of our population as we plan for next year’s assessment.

IV. A clearer distinction could be made between employees and contractors in the report.

In a meeting with Energy Safety and DEKRA on August 27, 2021, SCE clarified an instance on page 7 of the report where references to SCE employees in fact addressed SCE contractors.⁷ This correction to the report is provided in redline below:

“A total of 2,042 employees responded to the survey out of 5,306 employees working on wildfire mitigation, resulting in a response rate of 38 percent. In addition, survey responses were received from 861 SCE contractors out of an undetermined contractor population base. Because of the large number of contractors, DEKRA provided guidance to SCE to allow contractors to sample from their employee populations who predominantly work in SCE territory on wildfire mitigation activities.”

V. SCE will continue to embed learning organization concepts into our culture; error prevention training is just one of several strategies SCE can leverage to meet this objective.

The report also mentions SCE’s Error Prevention Training with respect to the recommendation to “embed learning organization concepts into the culture via training, incident investigations, and corrective action systems.”⁸ While SCE agrees with the report that Error Prevention Training helps workers “better understand error in the workplace and assist in changing the focus toward root causes and systemic solutions,”⁹ this training should not be construed as the primary nor the only means by which SCE embeds such concepts. Error Prevention training and similar possible approaches should be considered with our cause evaluation and corrective action programs, as part of a

⁶ Draft SCA Report, p. 8.

⁷ At the same meeting, SCE also clarified with Energy Safety and DEKRA that the results on pages 23-28 of the draft SCA Report are SCE’s--not SDG&E’s--results and that the “Null” column header includes data for which the employee/tenure categorization was not self-reported.

⁸ Draft SCA Report, p. 18.

⁹ Draft SCA report, p. 18.

comprehensive approach that helps create and sustain a learning organization through an overarching Safety Management System.

CONCLUSION

SCE appreciates the opportunity to submit these comments clarifying the factual information in the report. If you have any questions, or require additional information, please contact me at michael.backstrom@sce.com.

Sincerely,

 //s//

Michael A. Backstrom

VP Regulatory Policy Energy & Environmental Policy

Southern California Edison