State of California – A Natural Resources Agency   Gavin Newsom, Governor

OFFICE OF ENERGY INFRASTRUCTURE SAFETY   Caroline Thomas Jacobs, Director
715 P Street, 20th Floor | Sacramento, CA 95814
916.902.6000 | *www.energysafety.ca.gov*

October 27, 2021

Paul Marconi
President
Bear Valley Electric Service
630 East Foothills Blvd.
San Dimas, CA 91733
paul.marconi@bvesinc.com

Subject: **Office of Energy Infrastructure Safety Issuance of Bear Valley Electric Service's 2021 Safety Culture Assessment per Public Utilities Code Sections 8389(d)(4)**

Dear Mr. Marconi:

Enclosed is the 2021 Safety Culture Assessment (SCA) report for Bear Valley Electric Service, Inc., (BVES) 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.

Energy Safety provided a draft of the report to BVES on October 19, 2021, for factual review and correction. On October 25, 2021, BVES confirmed that it would not be providing any written response to this draft report.

BVES 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,

Melissa Semcer

Melissa Semcer
Program Manager, Electric Safety Policy Division
Office of Energy Infrastructure Safety

---

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

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

Sara Moore,
Wildfire Safety Analyst, Office of Energy Infrastructure Safety

Service List for Docket #2021-SCAs

SAFETY CULTURE ASSESSMENT

BEAR VALLEY ELECTRIC SERVICE, INC.

OCTOBER 2021

DEKRA

TABLE OF CONTENTS

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. Not all components apply to all electrical corporations. Energy Safety required small and multi-jurisdictional electrical corporations, including Bear Valley Electrical Service, Inc. (Bear Valley or BVES), to participate in the workforce survey and submit supporting documentation including its safety culture objectives for the next 12 months and three years and also its summary of lessons learned from the previous 12 months for the Safety Culture Assessment. 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 Bear Valley was assessed with respect to both personal and wildfire safety.

Bear Valley's safety culture emphasizes identifying wildfire hazards and protecting the community. Employees feel a strong personal responsibility for their own and others' safety. They believe they are authorized to stop the job for safety if necessary and that doing so would be viewed positively by management. In addition, Bear Valley has put in place several ambitious safety culture objectives for the next 12 months and three years. These objectives include an increase in field engagement from managers and executives, strengthening the safety committee to boost employee involvement, and implementing a mix of leading and lagging indicators to measure progress.

To move forward effectively, however, Bear Valley must address several challenges. The first of these centers on gaps in the present safety culture. These gaps occur principally in the Customer Service and Accounting business units, and to a lesser extent in Field Operations.

Secondly, the Bear Valley contractor for vegetation management has a culture in which employees feel they cannot talk to their supervisors about wildfire hazards and a workgroup that does not follow procedures to control workplace and wildfire hazards. A third challenge is that Bear Valley's safety culture objectives do not provide details for how progress will be monitored and sustained.

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

1. Embed leadership skills development into the "Engaged Management" 12-month objective to improve the Bear Valley safety culture.

2. In collaboration with Bear Valley's vegetation management contractor, develop and implement an action plan to address safety culture issues, in particular regarding the flow of information about wildfire hazard mitigation.

A critical mechanism for addressing Bear Valley's safety culture gaps will be its "Engaged Management" objective, which calls for managers to spend time in the field listening to employees, making safety a priority, and providing resources to solve problems. If successful, the program supporting this objective should improve Bear Valley's safety culture. To be successful, this program must ensure that leaders (a) have the skills necessary to engage employees effectively, (b) apply these skills regularly in the field with their teams, and (c) sustain the skills over time through senior leadership coaching.

In addition, Bear Valley should work directly with its vegetation management contractor to ensure the contractor understands the safety culture assessment results and collaborates with Bear Valley leaders to develop a detailed and effective plan for addressing safety culture gaps. Implementing these recommendations should enable Bear Valley to continue advancing its wildfire and personal safety culture. A detailed narrative on the information collected through the workforce survey, supporting documentation, 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, 2020, 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]

---

[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.

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 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, and different components apply to different types of electrical corporations (see Section 2.1 below). 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:

---

[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.

- **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.

| 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

---

[9] IOU: investor-owned utility.
[10] SMJUs: small and multi-jurisdictional utilities.

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 safety culture and foundation assessed by different components of the SCA.

The workforce survey component was designed to evaluate leadership's influence on the safety 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
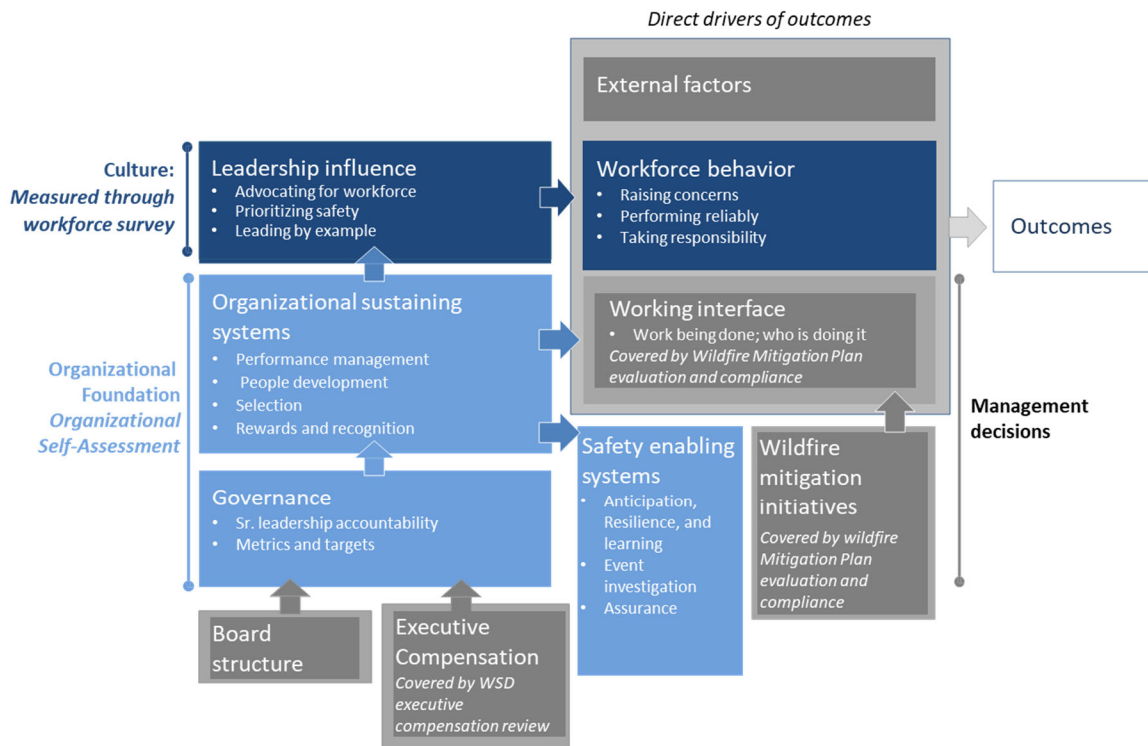
Source: Resolution WSD-011 Attachment 4 "Annual Safety Culture Assessment Process Proposal" (2020), p. 9.

2.3 Survey 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 Scale[11] 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 regarding wildfire (e.g., "our management acts quickly to address wildfire hazards"), 11 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 Bear Valley) administered the workforce survey using both electronic and paper surveys to ensure all levels of Bear Valley Electric Service employees and contractors had an ample opportunity to complete the survey. Bear Valley distributed the survey on May 12, 2021. Participants had 11 working days to respond (the survey closed on May 26, 2021). A total of 41 employees responded to the survey out of a base population of 46 employees working on wildfire mitigation, a response rate of 89 percent. In addition, DEKRA received survey responses from 11 Bear Valley contractor employees out of out of an estimated population base of 12 employees of Bear Valley contractors, a response rate of 92 percent.

---

[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).

2.4   Supporting Documentation Collected

1. In addition to the workforce survey (described above), Energy Safety required small and multi-jurisdictional electrical corporations, including Bear Valley, to submit the following supporting documentation: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.[14]

Small and multi-jurisdictional electrical corporations were not required to participate in any interviews or observational visits in 2021.

The documentation submitted by Bear Valley is included in Section 6 of this report.

2.5   Next Steps in the 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, Bear Valley may agree to implement its findings to demonstrate "good standing" per Public Utilities Code Section 8389(e)(2).[15]

---

[14] 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.)

[15] 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 Bear Valley management and employees have a strong focus on wildfire prevention.

Results from the workforce survey indicate that nearly all survey respondents (96 percent) either "strongly" or "somewhat" agreed with the statement "Protecting the community from wildfire hazards is a high priority with management" (see Section 6.1.1). Furthermore, 92 percent either "strongly" or "somewhat" agreed with the statements "Our management acts quickly to address wildfire hazards" and "Wildfire and personal safety concerns are communicated openly."

Some other strong results include 95 percent of respondents "strongly" or "somewhat" agreeing with the statement "I take responsibility for the safety of myself and others in my work area." Additionally, 92 percent of survey respondents "strongly" or "somewhat" agreed with the statement "Pausing work for hazards and safety concerns is viewed positively." Additionally, 91 percent of respondents "strongly" or "somewhat" agreed that "People in my work group treat each other with respect." These results held across all levels of the organization, business units, and among contractors.

3.1.2 Bear Valley has set ambitious safety culture objectives for the next 12 months and the next three years.

Bear Valley's safety culture objectives for the next 12 months and over the next three years cover resourcing, developing safety leaders, organizing a safety committee, involving management in safety, creating more open communications, conducting training, tracking leading indicators[16] in addition to lagging indicators,[17] and rewarding employees for above and beyond safety performance and results. Wildfire risk prevention is incorporated into many of these plans. Highlighted below are three objectives that should directly support Bear Valley's safety culture goals:

- **Management and leadership engagement in the field.** "Engaged Management" is a central theme of the plan for the next year. Bear Valley plans for managers to perform Job Hazard Analyses on a regular basis and document and mitigate risks. Managers will also focus on ensuring employees are properly resourced. This is an important step forward as "We have the right tools for the job" was the second lowest-rated statement

---

[16] Leading Indicator: here, input measures that are predictive of future events or occurrences.
[17] Lagging Indicator: here, outcome or output measures that are backward-looking, indicators of events that have already occurred.

on the workforce survey among respondents from the Field Operations[18] business unit (average rating of 3.58 out of 5, see Section 6.1.2).

- **Development of and commitment to an Active Safety Committee.** The plan for an active Safety Committee includes involving employees at all levels in safety improvement. In addition, the Safety Committee has an expanded scope to seek improvements for community safety and wildfire risk reduction. Having a centralized team that focuses on wildfire, community, and personal safety should improve Bear Valley's safety culture overall.

- **Mix of leading and lagging indicators.** Organizations with advanced safety culture maturity evaluate safety performance holistically by tracking not just lagging indicators like injuries but also leading indicators. Bear Valley plans to rely on leading indicators that emphasize potentially risky near misses[19] as well as preventive activities and preventive actions. Reported near misses provide opportunities for learning about risks and are an important source of information for risk mitigation.

Achieving these safety culture objectives over the next year should improve Bear Valley's personal and wildfire safety culture.

3.2 Opportunities

3.2.1 Some Bear Valley business units have considerable safety culture challenges.

Overall, Bear Valley's average workforce survey scores were highest in the safety and wildfire categories of the workforce survey (an average score of 4.28 and 4.25, respectively, on a five-point scale; see Section 6.1.1). The culture category of statements had a much lower average score (4.01). Only 58 percent of survey respondents "somewhat" or "strongly" agreed with the statement "The company cares about my opinions."

Examining the results by business unit (see Section 6.1.2), the Engineering and Planning unit seems to have a relatively strong safety culture, but the Customer Service and Accounting units have considerable challenges.

Respondents in Customer Service and Accounting, and to a lesser extent Field Operations, assigned a relatively low score to the statement "I believe managers apply the same rules for all workers"— it was assigned the lowest average score in the culture category (3.00 for Customer Service and 2.83 for Accounting). Perceptions of unfairness may have a corrosive effect on an organization's culture.

---

[18] Operations: here, refers to the parts of a business that affect the production, distribution, and service necessary for a company to function. For Energy Safety's purposes, electrical operations, field services, transmissions, substations, and distribution are considered in operations, but generation is not.
[19] Near Miss: here, an unplanned event that did not result in injury, illness, or damage, but had the potential to do so.

The challenges in Customer Service and Accounting are not identical, however. In Accounting, respondents indicated there are challenges with how well team members share and communicate with each other. For example, the two lowest-scored statements in the culture category were "People listen to one another; it is rare that someone's views go unheard" (an average score of 3.00) and "Information about important events and lessons learned is shared within my work group" (an average score of 3.33).

By contrast, Customer Service respondents gave high scores to the statement "Information about important events and lessons learned is shared within my work group" (average score of 4.50) and "People listen to one another; it is rare that someone's views go unheard" (4.13) but respondents were not as strong in their endorsement of statements about having a supportive supervisor. For example, "My supervisor would use whatever power he/she has to help me out" (3.25) and "My supervisor makes sure all employee concerns are heard before job decisions are made" (3.5) are among the lowest-scored statements in the culture category for that unit.

The lowest-scored culture-related statement from respondents in Field Operations was "People report mistakes they make, even if others do not notice them." This statement, which represents an important feature of learning organizations,[20] received a 3.58 average score among Field Operations respondents: lower average scores were found in responses from respondents in Customer Service (3.50) and Accounting (3.0). More concerning is that Field Operations respondents indicated that they are not regularly asked for suggestions related to wildfire hazards (the statement "I am regularly asked for my ideas and suggestions about wildfire hazards and ways to address them" got an average score of 3.33). Responses from employees in Field Operations also indicate a possible shortcoming in terms of having the right tools for the job (the statement "We have the right tools for the job" received an average score of 3.58).

Note that the abovementioned opportunities for improvement are based on responses from staff in small business units where there is a risk that employees who participated in the workforce survey may be identifiable despite safeguards around anonymity. Bear Valley must ensure that staff in supervisory positions do not take counterproductive actions in response to the reporting of these possible shortcomings.

3.2.2 Bear Valley's contractor survey results indicate they do not follow procedures to control workplace or wildfire hazards and are not comfortable discussing wildfire hazards with their supervisors.

In general, the contractor employees responding to the workforce survey, representing a vegetation management contractor, indicated they "strongly" or "somewhat" agreed

---

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

with many of the wildfire, safety, and culture statements. However, four statements with low scores indicate important issues that should be addressed:

- "Information about important events and lessons learned is shared within my work group." (Average score: 2.09.)
- "The company cares about my opinions." (Average score: 2.09.)
- "I feel comfortable discussing wildfire hazards with my supervisor." (Average score: 2.09.)
- "My workgroup follows procedures to control workplace and wildfire hazards." (Average score: 1.82.)

Of these, most concerning for wildfire safety is the last: vegetation management contractor employees often "strongly" or "somewhat" disagree that their workgroup follows wildfire hazard control procedures. Bear Valley should in particular address this gap in its safety culture.

See Section 6.1.2 for more workforce survey results broken down by demographic questions.

3.2.3 Governance and sustaining plans are lacking.

Bear Valley's safety culture objectives for the next 12 months include several progress metrics it is monitoring to ensure success, such as job hazard analysis records, training compliance records, safety checklists, and the employee survey (see Section 6.2.1). These are necessary first steps to ensure that the required safety and training activities are taking place as planned.

However, to advance the safety culture further, leadership must be actively engaged. The employee survey can be a helpful measure for tracking progress in leadership engagement, but it may not be administered frequently enough to make timely course corrections. The best way to ensure the safety culture advances between surveys is for trained leaders to be held accountable for achieving specific activity goals, supported by manager coaching and senior team supervision.

4. Recommendations

4.1 Embed leadership skills development into the "Engaged Management" 12-month objective to improve Bear Valley's safety culture

An important near-term objective for Bear Valley is its "Engaged Management" objective, with an emphasis on managers regularly performing Job Hazard Analyses (JHAs), working with employees to create a training plan, and demonstrating the leadership behaviors necessary to drive an effective safety culture. The plan includes managers going into the field to conduct JHAs and observe the work. It is, however, less clear whether Bear Valley has evaluated the level of preparation of its frontline supervisors to ensure they have the skills to engage in positive and effective ways with their direct reports and are able to demonstrate those skills. How supervisors communicate heavily influences employee perceptions of openness and trust. A healthy dialogue can give employees a sense that what they say is important and their opinions are valued.

Bear Valley needs to ensure that the program that supports its Engaged Management objective (a) provides supervisors the skills necessary to engage with workers in positive and effective ways, (b) supports supervisors applying these skills regularly in the field with their teams, and (c) gives supervisors access to senior leadership coaching to help sustain these efforts over time.

- **Observation:** Based on the workforce survey, Bear Valley has gaps in its safety culture that vary by business unit. The Engineering and Planning unit has the strongest safety culture based on the survey results, followed by Field Operations. Accounting and Customer Service have the most considerable challenges from a safety culture standpoint.

- **Goal of Recommendation:** Ensure the frontline supervisors have the skills to improve the safety culture regardless of business unit.

- **Verification Method:** In next year's assessment provide a description of how the Engaged Management objective was implemented and monitored for quality. Progress should be evident in increased positivity in response to the statements "I believe managers apply the same rules for all workers," "Managers treat workers with respect," and "My supervisor makes sure all employee concerns are heard before job decisions are made" on the 2022 workforce survey.

To ensure sustainability, the progress of the Engaged Management objective in the 12-month plan needs to be monitored regularly. This requires a method for monitoring activity completion, quality, and impact. It also requires a process for supervision of progress and regular coaching. This governance process should be implemented for all the safety culture objectives, but first and foremost for the Engaged Management objective.

4.2 In collaboration with Bear Valley's vegetation management contractor, develop and implement an action plan to address safety culture issues, in particular with regard to the flow of information about wildfire hazard mitigation

Bear Valley has done a good job developing its safety culture objectives and plan but needs to address issues concerning contractor wildfire safety, in particular the wildfire safety of its vegetation management contractor. This expanded plan should describe in detail how the contractor will address concerns about information flow regarding wildfire hazards and following procedures to control workplace and wildfire hazards.

- **Observation:** Contractor employees gave low ratings on the workforce survey to several statements related to wildfire hazards and the contractor's safety culture. Specifically, employees gave low ratings to the statements "Information about important events and lessons learned is shared within my work group;" "The company cares about my opinions;" "I feel comfortable discussing wildfire hazards with my supervisor;" and "My workgroup follows procedures to control workplace and wildfire hazards."

- **Goal of Recommendation:** Ensure there is a specific plan to improve information flow among contractor employees and between contractor employees and supervisors about wildfire hazards. The plan should also include steps to increase compliance with procedures to control workplace and wildfire hazards. This plan should be developed by Bear Valley in cooperation with the vegetation management contractor.

- **Verification Method:** In next year's assessment provide a description of the action plan developed by Bear Valley and the vegetation management contractor to address information flow and procedural compliance. Progress should be evident in increased positivity on the 2022 workforce survey in response to the four statements that received low scores in 2021 (see above). An important concern about this recommendation is that the vegetation management contractor may react in a punitive way to those who may have responded to the survey (despite safeguards around anonymity) and may take counterproductive actions, stifling communication instead of improving information flow. Bear Valley must take special care to prevent counterproductive actions by supervising implementation of the safety culture plan.

5. Conclusion

This report provides the findings from Bear Valley's first Safety Culture Assessment under Public Utilities Code Section 8389(d)(4). It gives Energy Safety a baseline measurement of Bear Valley's current safety culture for future comparison. Following the publication of this report, Bear Valley 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 Bear Valley. 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 Bear Valley'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.[21]

---

[21] 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. Results are only displayed if a demographic category has five or more responses to protect anonymity.

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
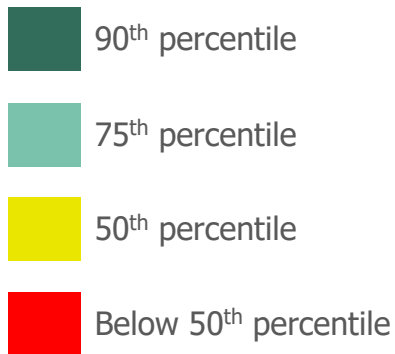
6.1.1 Overall Results

SENTIMENT ANALYSIS: **BEAR VALLEY**	Overall Category Mean	Strongly Agree (5)	Somewhat Agree (4)	Neutral (3)	Somewhat Disagree (2)	Strongly Disagree (1)
Culture	4.01	42%	33%	6%	6%	9% / 4%
Safety	4.28	52%	32%	5%	3%	2%
Wildfire	4.25	53%	28%	6%	6%	5% / 2%

Culture

	Mean	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
People in my work group treat each other with respect	4.33	54%	37%	2%	6%	
My supervisor would use whatever power he/she has to help me out	4.33	56%	31%	3%	3%	6%
Leaders encourage people to ask questions	4.27	50%	33%	6%	6%	
Managers treat workers with respect	4.19	50%	33%	3%	10%	
My supervisor makes sure all employee concerns are heard before job decisions are made	4.00	37%	40%	7%	7%	6% / 4%
People listen to one another; it is rare that someone's views go unheard	3.96	35%	44%	4%	10%	4%
People report mistakes they make, even if others do not notice them	3.77	25%	38%	13%	13%	8%
I believe managers apply the same rules for all workers	3.87	42%	29%	5%	12%	8%
Information about important events and lessons learned is shared within my work group	3.79	40%	23%	8%	8%	17% / 4%
The company cares about my opinions	3.58	31%	27%	9%	9%	19% / 6%

Safety

	Mean	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
I take responsibility for the safety of myself and others in my work area	4.71	75%	21%	2%		
People have the ability to respond and correct problems and errors before they get out of control	4.13	27%	63%	4%	2%	
Pausing work for hazards and safety concerns is viewed positively	4.65	77%	15%	4%		
Leaders keep people prepared to intervene when an emergency occurs	4.44	56%	35%	4%		
If I stopped a job because an important safety step was missing, it would be viewed positively by my supervisor	4.50	63%	27%	4%	2%	
People have the skills they need to resolve workplace safety issues	4.23	46%	40%	4%	4%	
Accidents and incidents are investigated completely to find out what happened and the corrective actions needed	4.38	58%	27%	6%	4%	
Leaders use mistakes and incidents as learning opportunities	4.33	54%	29%	7%	4%	
I stop people, even those I do not know, to point out unsafe behavior when I see it in the work environment	4.15	44%	33%	10%	2%	2%
We have the right tools for the job	4.04	48%	25%	7%	10%	4%
People focus on one task at a time and avoid distractions	3.56	21%	40%	10%	12%	8%

Wildfire

	Mean	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
Protecting the community from wildfire hazards is clearly a high priority with management	4.69	73%	23%			
Our management acts quickly to address wildfire hazards	4.63	71%	21%	4%		
Wildfire and personal safety concerns are communicated openly	4.42	52%	40%	3%	2%	
People look for wildfire hazards and risks as work progresses	4.35	48%	38%	7%		
People in my work group report all wildfire hazards, no matter how minor	4.29	48%	33%	10%		
Leaders actively seek out signs of potential wildfire hazards	4.33	54%	29%	7%	4%	
My workgroup follows procedures to control workplace and wildfire hazards	3.98	50%	23%	4%	13%	6%
I feel comfortable discussing wildfire hazards with my supervisor	4.06	58%	17%		19%	4%
I am regularly asked for my ideas and suggestions about wildfire hazards and ways to address them	3.52	21%	27%	20%	20%	6% / 6%

6.1.2   Results by Demographic Questions

SURVEY RESULTS by DEMOGRAPHIC: **BEARVALLEY**

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

	OVERALL	EMPLOYEE TYPE		LEVEL		
		Full Time Employee	Contractor	Exec	Supervisor	Individual Contributor
	52	41	11	5	6	30
Culture Average	4.01	4.04	3.87	4.27	4.88	3.86
I believe managers apply the same rules for all workers	3.87	3.73	4.36	3.83	5.00	3.50
Information about important events and lessons learned is shared within my work group	3.79	4.24	2.09	4.50	5.00	4.07
Leaders encourage people to ask questions	4.27	4.24	4.36	4.50	5.00	4.07
Managers treat workers with respect	4.19	4.15	4.36	4.17	5.00	4.00
My supervisor makes sure all employee concerns are heard before job decisions are made	4.00	3.95	4.18	4.50	4.80	3.70
My supervisor would use whatever power he/she has to help me out	4.33	4.29	4.45	4.83	5.00	4.07
People in my work group treat each other with respect	4.33	4.34	4.27	4.67	5.00	4.17
People listen to one another; it is rare that someone's views go unheard	3.96	3.88	4.27	4.17	4.60	3.70
People report mistakes they make, even if others do not notice them	3.77	3.63	4.27	3.50	4.40	3.53
The company cares about my opinions	3.58	3.98	2.09	4.00	5.00	3.80
Safety Average	4.28	4.27	4.35	4.75	4.50	4.14
Accidents & incidents are investigated completely	4.38	4.41	4.27	5.00	5.00	4.20
I stop people to point out unsafe behavior when I see it	4.15	4.15	4.18	4.60	4.50	4.00
I take responsibility for the safety of myself and others in my work area	4.71	4.80	4.36	5.00	5.00	4.73
Leaders keep people prepared to intervene when an emergency occurs	4.44	4.41	4.55	5.00	4.33	4.33
Leaders use mistakes and incidents as learning opportunities	4.33	4.27	4.55	4.80	4.33	4.17
Pausing work for hazards and safety concerns is viewed positively	4.65	4.71	4.45	5.00	5.00	4.60
People focus on one task at a time and avoid distractions	3.56	3.39	4.18	4.40	3.67	3.17
People have the ability to respond and correct problems and errors before they get out of control	4.13	4.17	4.00	4.60	4.67	4.00
People have the skills they need to resolve workplace safety issues	4.23	4.22	4.27	4.60	4.67	4.07
Stopping a job because a safety step is missing, is viewed positively by my supervisor	4.50	4.49	4.55	4.60	4.83	4.40
We have the right tools for the job	4.04	3.93	4.45	4.60	3.50	3.90
Wildfire Average	4.25	4.38	3.76	4.84	4.70	4.24
I am regularly asked for my ideas and suggestions about wildfire hazards and ways to address them	3.52	3.49	3.64	4.60	4.17	3.17
I feel comfortable discussing wildfire hazards with my supervisor	4.06	4.59	2.09	5.00	4.83	4.47
Leaders actively seek out signs of potential wildfire hazards	4.33	4.29	4.45	4.80	4.50	4.17
My workgroup follows procedures to control workplace and wildfire hazards	3.98	4.56	1.82	4.80	5.00	4.43
Our management acts quickly to address wildfire hazards	4.63	4.66	4.55	5.00	5.00	4.53
People in my work group report all wildfire hazards, no matter how minor	4.29	4.29	4.27	4.60	4.83	4.13
People look for wildfire hazards and risks as work progresses	4.35	4.37	4.27	4.80	4.33	4.30
Protecting the community from wildfire hazards is clearly a high priority with management	4.69	4.73	4.55	5.00	4.83	4.67
Wildfire and personal safety concerns are communicated openly	4.42	4.49	4.18	5.00	4.83	4.33

WILDFIRE HAZARD ACTIVITIES: **BEARVALLEY**

LEGEND

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

	Asset inspection, maintenance and repair (..	Community engagement	Grid operations	Monitoring weather for wildfire risk	PSPS initiation and re-energization	Vegetation assessment and mitigation	Wildfire and PSPS risk assessment	Wildfire data collection and tracking	Wildfire emergency planning and preparation	Other
	15	16	11	14	12	15	12	15	15	12
Culture Average	3.83	4.19	4.35	4.24	4.33	4.27	4.52	4.28	4.21	3.65
I believe managers apply the same rules for all workers	3.60	3.94	4.09	3.86	4.17	4.00	4.67	4.13	4.00	3.17
Information about important events and lessons learned is shared within my work group	3.87	4.38	4.73	4.79	4.83	4.80	4.67	4.40	4.40	3.75
Leaders encourage people to ask questions	4.07	4.56	4.45	4.50	4.42	4.40	4.67	4.53	4.40	3.83
Managers treat workers with respect	3.80	4.31	4.36	4.07	4.33	4.20	4.67	4.40	4.27	4.00
My supervisor makes sure all employee concerns are heard before job decisions are made	3.93	4.06	4.18	3.93	4.08	4.27	4.42	4.27	4.40	3.58
My supervisor would use whatever power he/she has to help me out	4.47	4.38	4.64	4.50	4.67	4.60	4.83	4.60	4.40	4.17
People in my work group treat each other with respect	4.00	4.38	4.64	4.43	4.58	4.27	4.33	4.20	4.13	4.17
People listen to one another; it is rare that someone's views go unheard	3.67	4.13	4.27	4.07	4.08	3.93	4.42	4.13	4.07	3.33
People report mistakes they make, even if others do not notice them	3.60	3.50	4.09	4.00	4.08	3.93	4.00	3.73	3.73	3.08
The company cares about my opinions	3.33	4.25	4.00	4.21	4.08	4.27	4.50	4.40	4.27	3.42
Safety Average	4.30	4.42	4.51	4.56	4.47	4.56	4.65	4.62	4.56	3.85
Accidents & incidents are investigated completely	4.60	4.69	4.64	4.86	4.75	4.93	4.83	4.93	4.93	4.00
I stop people to point out unsafe behavior when I see it	4.20	4.31	4.36	4.43	4.33	4.47	4.58	4.40	4.33	3.83
I take responsibility for the safety of myself and others in my work area	4.73	4.94	5.00	5.00	4.92	5.00	4.92	4.80	4.93	4.50
Leaders keep people prepared to intervene when an emergency occurs	4.33	4.63	4.45	4.57	4.50	4.53	4.67	4.80	4.67	4.25
Leaders use mistakes and incidents as learning opportunities	4.27	4.63	4.55	4.64	4.58	4.73	4.83	4.73	4.60	3.58
Pausing work for hazards and safety concerns is viewed positively	4.60	4.81	4.82	4.86	4.83	4.87	5.00	5.00	4.93	4.33
People focus on one task at a time and avoid distractions	3.80	3.56	4.00	4.14	3.92	4.07	4.17	4.00	4.00	2.50
People have the ability to respond and correct problems and errors before they get out of control	4.40	4.31	4.64	4.57	4.50	4.53	4.50	4.40	4.33	3.92
People have the skills they need to resolve workplace safety issues	4.20	4.25	4.73	4.50	4.58	4.47	4.58	4.47	4.33	3.75
Stopping a job because a safety step is missing, is viewed positively by my supervisor	4.47	4.50	4.73	4.57	4.50	4.53	4.58	4.67	4.53	4.00
We have the right tools for the job	3.73	4.00	3.73	4.07	3.75	4.00	4.50	4.67	4.53	3.67
Wildfire Average	4.27	4.63	4.57	4.61	4.55	4.67	4.72	4.78	4.67	4.05
I am regularly asked for my ideas and suggestions about wildfire hazards and ways to address them	3.80	4.13	3.73	3.79	3.75	4.07	4.42	4.40	4.13	3.42
I feel comfortable discussing wildfire hazards with my supervisor	4.07	4.88	4.82	4.71	4.83	4.87	5.00	4.93	4.73	4.17
Leaders actively seek out signs of potential wildfire hazards	4.13	4.69	4.18	4.21	4.17	4.40	4.67	4.87	4.73	4.00
My workgroup follows procedures to control workplace and wildfire hazards	4.07	4.63	4.82	4.86	4.75	4.80	4.58	4.67	4.73	3.92
Our management acts quickly to address wildfire hazards	4.67	4.88	4.82	4.93	4.83	4.93	4.92	5.00	4.93	4.33
People in my work group report all wildfire hazards, no matter how minor	4.40	4.31	4.64	4.64	4.58	4.73	4.58	4.67	4.53	4.08
People look for wildfire hazards and risks as work progresses	4.27	4.56	4.55	4.71	4.50	4.67	4.58	4.73	4.53	4.08
Protecting the community from wildfire hazards is clearly a high priority with management	4.53	4.94	4.73	4.79	4.67	4.80	4.92	5.00	5.00	4.42
Wildfire and personal safety concerns are communicated openly	4.47	4.69	4.82	4.86	4.83	4.80	4.83	4.73	4.73	4.00

RESULTS by BUSINESS UNIT: **BEARVALLEY**

LEGEND

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

	Accounting	Customer Service	Engineering & Planning	Field Operations
	6	8	8	12
Culture Average	3.77	3.80	4.44	3.97
I believe managers apply the same rules for all workers	2.83	3.00	4.50	3.83
Information about important events and lessons learned is shared within my work group	3.33	4.50	4.63	4.25
Leaders encourage people to ask questions	4.00	4.38	4.63	4.00
Managers treat workers with respect	4.00	3.50	4.75	3.92
My supervisor makes sure all employee concerns are heard before job decisions are made	3.83	3.25	4.25	3.92
My supervisor would use whatever power he/she has to help me out	5.00	3.63	4.38	4.58
People in my work group treat each other with respect	4.83	4.25	4.50	4.00
People listen to one another; it is rare that someone's views go unheard	3.00	4.13	4.25	3.75
People report mistakes they make, even if others do not notice them	3.00	3.50	4.13	3.58
The company cares about my opinions	3.83	3.88	4.38	3.83
Safety Average	3.91	4.11	4.53	4.35
Accidents & incidents are investigated completely	3.67	4.38	4.63	4.58
I stop people to point out unsafe behavior when I see it	3.83	4.13	4.38	4.33
I take responsibility for the safety of myself and others in my work area	4.83	4.75	5.00	4.83
Leaders keep people prepared to intervene when an emergency occurs	4.17	4.25	4.63	4.33
Leaders use mistakes and incidents as learning opportunities	3.67	4.13	4.50	4.42
Pausing work for hazards and safety concerns is viewed positively	4.50	4.38	4.88	4.83
People focus on one task at a time and avoid distractions	2.17	3.25	3.63	3.75
People have the ability to respond and correct problems and errors before they get out of control	4.00	4.00	4.50	4.25
People have the skills they need to resolve workplace safety issues	3.67	4.00	4.63	4.25
Stopping a job because a safety step is missing, is viewed positively by my supervisor	4.83	4.25	4.50	4.67
We have the right tools for the job	3.67	3.75	4.63	3.58
Wildfire Average	4.07	4.26	4.72	4.41
I am regularly asked for my ideas and suggestions about wildfire hazards and ways to address them	2.83	3.63	4.13	3.33
I feel comfortable discussing wildfire hazards with my supervisor	4.50	4.13	4.88	4.83
Leaders actively seek out signs of potential wildfire hazards	4.00	4.00	4.88	4.17
My workgroup follows procedures to control workplace and wildfire hazards	4.83	4.50	4.50	4.58
Our management acts quickly to address wildfire hazards	4.33	4.50	5.00	4.75
People in my work group report all wildfire hazards, no matter how minor	3.83	4.38	4.63	4.33
People look for wildfire hazards and risks as work progresses	3.67	4.38	4.63	4.50
Protecting the community from wildfire hazards is clearly a high priority with management	4.83	4.50	5.00	4.67
Wildfire and personal safety concerns are communicated openly	3.83	4.38	4.88	4.50

SURVEY RESULTS by TENURE: **BEARVALLEY**

	OVERALL	TENURE 0-1 Years	2-5 Years	6-10 Years	10+ Years
LEGEND ■ High 4.1+ | ■ Med High 3.65-4.1 | ■ Medium 3.3-3.65 | ■ Low <3.3	52	16	9	8	7
Culture Average	4.01	4.36	3.87	3.23	4.40
I believe managers apply the same rules for all workers	3.87	4.13	3.56	2.38	4.57
Information about important events and lessons learned is shared within my work group	3.79	4.31	4.44	3.63	4.57
Leaders encourage people to ask questions	4.27	4.75	3.67	3.50	4.57
Managers treat workers with respect	4.19	4.31	4.00	3.25	4.86
My supervisor makes sure all employee concerns are heard before job decisions are made	4.00	4.13	4.11	3.00	4.29
My supervisor would use whatever power he/she has to help me out	4.33	4.50	4.00	4.00	4.43
People in my work group treat each other with respect	4.33	4.75	3.78	3.88	4.57
People listen to one another; it is rare that someone's views go unheard	3.96	4.38	3.56	2.75	4.43
People report mistakes they make, even if others do not notice them	3.77	3.94	3.78	3.00	3.43
The company cares about my opinions	3.58	4.44	3.78	2.88	4.29
Safety Average	4.28	4.40	4.39	3.76	4.39
Accidents & incidents are investigated completely	4.38	4.38	4.67	3.75	5.00
I stop people to point out unsafe behavior when I see it	4.15	4.19	4.44	3.88	3.86
I take responsibility for the safety of myself and others in my work area	4.71	4.81	4.67	4.75	5.00
Leaders keep people prepared to intervene when an emergency occurs	4.44	4.50	4.67	3.75	4.57
Leaders use mistakes and incidents as learning opportunities	4.33	4.25	4.44	3.63	4.71
Pausing work for hazards and safety concerns is viewed positively	4.65	4.88	4.89	3.88	5.00
People focus on one task at a time and avoid distractions	3.56	3.88	3.67	2.63	3.00
People have the ability to respond and correct problems and errors before they get out of control	4.13	4.31	4.22	3.88	4.14
People have the skills they need to resolve workplace safety issues	4.23	4.25	4.11	3.88	4.71
Stopping a job because a safety step is missing, is viewed positively by my supervisor	4.50	4.75	4.56	3.88	4.43
We have the right tools for the job	4.04	4.25	4.00	3.50	3.86
Wildfire Average	4.25	4.40	4.43	4.04	4.65
I am regularly asked for my ideas and suggestions about wildfire hazards and ways to address them	3.52	3.50	3.67	3.25	3.57
I feel comfortable discussing wildfire hazards with my supervisor	4.06	4.63	4.67	4.25	4.71
Leaders actively seek out signs of potential wildfire hazards	4.33	4.38	4.33	3.75	4.57
My workgroup follows procedures to control workplace and wildfire hazards	3.98	4.50	4.56	4.38	4.86
Our management acts quickly to address wildfire hazards	4.63	4.63	4.67	4.38	5.00
People in my work group report all wildfire hazards, no matter how minor	4.29	4.25	4.33	4.13	4.57
People look for wildfire hazards and risks as work progresses	4.35	4.44	4.44	3.75	4.71
Protecting the community from wildfire hazards is clearly a high priority with management	4.69	4.75	4.67	4.63	4.86
Wildfire and personal safety concerns are communicated openly	4.42	4.50	4.56	3.88	5.00

6.1.3 Results by Tenure and Level in the Organization

Organizational Level by Job & Tenure | **BEARVALLEY**	Organizational Level by Job & Tenure		
	Individual Contributor		
LEGEND	0-1 Years	2-5 Years	6-10 Years
■ High 4.1+ | ■ Med High 3.65-4.1 | ■ Medium 3.3-3.65 | ■ Low <3.3	13	8	5
Culture Average	4.25	3.73	2.70
I believe managers apply the same rules for all workers	4.00	3.38	1.80
Information about important events and lessons learned is shared within my work group	4.23	4.38	3.20
Leaders encourage people to ask questions	4.77	3.50	3.00
Managers treat workers with respect	4.23	3.88	2.80
My supervisor makes sure all employee concerns are heard before job decisions are made	3.92	4.00	2.20
My supervisor would use whatever power he/she has to help me out	4.38	3.88	3.40
People in my work group treat each other with respect	4.69	3.63	3.40
People listen to one another; it is rare that someone's views go unheard	4.23	3.38	2.20
People report mistakes they make, even if others do not notice them	3.69	3.63	2.80
The company cares about my opinions	4.38	3.63	2.20
Safety Average	4.29	4.32	3.27
Accidents & incidents are investigated completely	4.23	4.63	3.00
I stop people to point out unsafe behavior when I see it	4.00	4.38	3.60
I take responsibility for the safety of myself and others in my work area	4.77	4.63	4.60
Leaders keep people prepared to intervene when an emergency occurs	4.46	4.63	3.20
Leaders use mistakes and incidents as learning opportunities	4.15	4.38	3.20
Pausing work for hazards and safety concerns is viewed positively	4.85	4.88	3.20
People focus on one task at a time and avoid distractions	3.62	3.50	2.00
People have the ability to respond and correct problems and errors before they get out of control	4.23	4.13	3.20
People have the skills they need to resolve workplace safety issues	4.08	4.00	3.60
Stopping a job because a safety step is missing, is viewed positively by my supervisor	4.69	4.50	3.40
We have the right tools for the job	4.15	3.88	3.00
Wildfire Average	4.26	4.36	3.62
I am regularly asked for my ideas and suggestions about wildfire hazards and ways to address them	3.23	3.50	2.40
I feel comfortable discussing wildfire hazards with my supervisor	4.54	4.63	3.80
Leaders actively seek out signs of potential wildfire hazards	4.23	4.25	3.20
My workgroup follows procedures to control workplace and wildfire hazards	4.38	4.50	4.00
Our management acts quickly to address wildfire hazards	4.54	4.63	4.00
People in my work group report all wildfire hazards, no matter how minor	4.08	4.25	3.80
People look for wildfire hazards and risks as work progresses	4.31	4.38	3.60
Protecting the community from wildfire hazards is clearly a high priority with management	4.69	4.63	4.40
Wildfire and personal safety concerns are communicated openly	4.38	4.50	3.40

6.2 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 three years.

Bear Valley Response

Policy Statement: It is the policy of Bear Valley Electric Service, Inc. ("BVES") to:

- Ensure the safety of the public, its customers, and stakeholders that are exposed to its facilities and operations including the consequences that its facilities and operations may have on them.
- Continually implement and execute initiatives to reduce the risk of wildfire.
- Provide a safe, healthful workplace for all its employees, onsite contractors and vendors, and other visitors to its facilities.

Safety Culture Objectives in the next 12 months and next three years:

- Engaged Management – December 31, 2021
- Active Safety Committee – December 31, 2021
- Safety Program Properly Resourced – December 31, 2021
- Safety Training Program – December 31, 2022
- Leading Indicators – December 31, 2022
- Continuous Improvement Program – December 31, 2022
- Safety Recognition Program – December 31, 2023
- Transparency and Open Communication – December 31, 2023

6.2.1 Safety Culture Objectives for the next 12 months

A. Objective	B. Progress metrics or cultural indicators used to track progress	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
Engaged Management. A strong safety culture starts at the top with the management team. If the management team makes safety a priority, applies sufficient resources to safety, and leads by example, employees are more likely to follow suit.	1. JHA Records: • Managers and Supervisors regularly perform Job Hazard Analysis (JHAs) at jobsites and BVES facilities according to the Company's JHA schedule and document the JHAs. • Managers and Supervisors make substantive comments on JHAs. • Issues identified on JHAs are properly resolved in a timely manner. 2. Training Records: • Each employee has a safety training plan approved by their applicable Manager or Supervisor. • Managers and Supervisors ensure that their employees complete all required safety training. • Managers and Supervisors regularly participate and monitor safety training. 3. Employee Survey: • Employees feel Managers and Supervisors continually remind all employees about safety at every opportunity.	Management is highly engaged in public safety and worker safety in a productive and positive manner that significantly elevates management's awareness of the work being conducted and how it impacts the public and employees. Management is focused on properly resourcing employees with training, procedures, tools, equipment, material, etc. to perform wildfire mitigation work in a safe and high-quality manner. Management listens to employees, actively seeks to resolve safety issues; promotes learning from lessons learned; and thoroughly investigates accidents, incidents, and near misses in a timely manner seeking out the root causes of such events. Management consistently promotes safety as a top priority and empowers employees to report safety issues or concerns	Engaged Management will reduce wildfire risk to the public and risk to employees conducting wildfire mitigation work because they will have an accurate understanding of actual conditions: • In the field. • At worksites. This awareness will provide them a better opportunity to make informed decisions that promote public and worker safety. Engaged management will ensure the workforce is properly trained and resourced to perform wildfire mitigation work in a safe, technically correct, and high quality of craftsmanship manner. All of these reduce wildfire risk and promote worker safety. Additionally, engaged management will listen to employee concerns; investigate accidents, incidents, and near misses; and empower employees to report unsafe conditions and stop work if they believe conditions are unsafe.

A. Objective	B. Progress metrics or cultural indicators used to track progress	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
	• Employees feel Managers and Supervisors listen to safety concerns that employees bring to them. • Employees feel Managers and Supervisors do not hesitate to stop work if unsafe conditions are discovered or suspected. • Employees feel they are empowered to stop work if unsafe conditions develop. • Employees feel that if work is stopped, work is not resumed until the situation is resolved. • Employees feel that Managers and Supervisors prioritize public and worker safety without compromise. Accident/Incident/Near Miss Records: Managers and Supervisors must thoroughly investigate accidents, incidents, and near misses as soon as feasible in accordance with the Company's accident/incident procedures.	and stop work if unsafe conditions develop. Management leads by example. Management follows all safety policies and encourages employees to do the same. When safety issues are observed by management, management steps in and corrects the safety issues.	
<u>Active Safety Committee</u>. The safety committee should accurately represent the full	1. Safety Committee Meeting Records: • Safety Committee meetings are regularly scheduled and conducted at least monthly.	The Safety Committee contributes significantly to the Company's actions to promote public and worker safety. The Safety Committee meets	A highly effective and functional Safety Committee will reduce wildfire risk to the public and risk to employees conducting wildfire mitigation work because it provides a formal mechanism and forum for the

A. Objective	B. Progress metrics or cultural indicators used to track progress	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
array of the Company's workforce roles and employee types. The safety committee should meet regularly and offer value-added activities to employees so that the employees will want to engage. The safety committee should not only consider workplace safety but also public safety including wildfire risk reduction. There should be follow-through and accountability for all actionable items coming out of the Safety Committee.	• Safety Committee meetings include management and employees that represent the workforce roles and employee types. • Safety Committee minutes are maintained and action items are documented with assignment of responsibility and due dates. • Safety Committee meetings include a review of JHAs. • Safety Committee meetings include review of accidents, incidents, and near misses to ensure investigations are thorough, timely, and lessons learned are applied as applicable. 2. Employee Survey: • Employees feel that they are adequately represented on the Safety Committee. • Employees feel they have the opportunity to raise issues to the Safety Committee. • Employees feel that their concerns are properly addressed at the meetings.	regularly and at least monthly. The meeting is formal with designated attendees that properly represent management and the various workforce roles and employee types. The meetings have an agenda and minutes are maintained. Action items are documented and tracked until resolved; there is follow through and accountability. JHAs are reviewed at the meetings to ensure issues are being resolved. Additionally, accidents, incidents, and near misses are discussed at the meeting to ensure the investigations are thorough, timely, and that lessons learned are being applied as applicable.	Company to discuss safety issues, decide on the appropriate courses of action, adequately resource the intended actions, and follow through with accountability to ensure issues are properly resolved.
Safety Program Properly Resourced. It takes dedicated resources to make	1. Records of the Company's budget and actual expenditures. 2. Work Records: Wildfire mitigation projects are	All safety program elements are properly funded and resourced in the Company's budget.	A fully funded and resourced safety program will reduce wildfire risk and improve workplace safety for workers involved in wildfire mitigation initiatives by providing:

A. Objective	B. Progress metrics or cultural indicators used to track progress	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
the safety program work. The Company's budget needs to fully support program elements and objectives. Funds must cover everything from safety committee meetings to safety training to rewards and incentives for employees.	completed per design and planning specifications. 3. Safety Committee Records: • Safety program initiatives requests are adequately funded. • Safety recognition program is properly funded. 4. Safety Training Records: Safety training is adequately funded. 5. Employee Surveys: • Employees feel that the Company adequately funds personal protective equipment and other safety tools and equipment. • Employees feel that the Company adequately funds equipment and projects to ensure they are safe. • Employees feel that wildfire mitigation initiatives are adequately funded and resourced.	Management expended allocated budget on the intended safety initiatives. Safety Committee is involved in the budgeting process. Safety Committee and management identify funding and resource shortfalls.	• Appropriate and quality safety training to employees. • Resources for a productive Safety Committee. • Funding for continuous safety improvement initiatives. Support for an effective employee safety recognition program.

6.2.2 Safety Culture Objectives for the next three years

A. Objective	B. Progress metrics or cultural indicators 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
<u>Safety Training Program</u>. A key part of the Company's safety culture is frequent training opportunities. Training must be high quality, meet safety training requirement, and be delivered effectively to enhance employee learning. Training must be formal and documented. Training must be made easy for employees to attend and not become a burden. In addition to required safety training, training should be conducted to present lessons learned and improve specific worker skillset that improve the quality and safety in their work product.	1. Training Records: • Each group within the Company has an approved recurring training plan (annual plan) to provide group training approved by the Manager or Supervisor. • Training listed on the plan is actually conducted and documented. • Each employee has an individual training plan approved by the Manager or Supervisor. • Employees complete all required safety training. • Managers & Supervisors periodically monitor training and comment on its quality on the record of training. • Training records support that employees are being trained on all required safety training. 2. Employee Surveys: • Employees feel that they are adequately trained to safely perform their jobs and tasks. • Employees feel that safety training is of high quality and	The Company has a purposeful, comprehensive, formal, and documented safety training program that provides: • All required safety training to employees based on their roles and responsibilities. • Other safety training that will be valuable to employees in improving their safety in workplace, public safety, and reducing the likelihood of wildfires. Each group within the Company has a training plan that is executed with quality training. Each employee has a training plan tailored to the employee's roles and responsibilities. Lessons learned are a key part of periodic training. Impromptu training is utilized to provide employees with timely lessons learned, emergent or changing conditions, and/or urgent warnings that have been issued.	A highly effective and purposeful Safety Training Program will reduce wildfire risk to the public and risk to employees conducting wildfire mitigation work because it provides a formal mechanism for the Company to ensure employees are properly trained to perform their roles and responsibilities in a safe and professional manner. It also ensures employees are trained to recognize unsafe conditions and how to properly take action to remedy the unsafe conditions. Additionally, an effective safety training program ensures that lessons learn from accidents, incidents, near misses, or other industry sources are shared with employees so that these issues to not occur or reoccur.

A. Objective	B. Progress metrics or cultural indicators 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
	effective in meeting their ongoing learning needs. • Employees feel that safety training is properly resourced and supported by management. • Employees feel that safety training is an essential part of their work and not a burden to participate in.		
Leading Indicators. Instead of relying on incidents as the only metric for safety, the Company should develop and use leading indicators to measure success and/or failure. While both lagging and leading indicators can provide feedback on the safety program, leading indicators look forward and allow the Company to be proactive. Leading indicators help gauge the health of the Company's safety culture and alert	1. Safety Program Records: • Periodic (monthly or quarterly) reports are delivered to management and the Safety Committee with safety program leading indicators, trends and analysis, and recommendations consistently and on time. • Substantive analysis is conducted on the leading indicators. • The selected leading indicators are routinely analyzed for trends and out of the ordinary or anomalous data points (for example, outside a standard deviation or other predetermined specification). • The selected leading indicators are relevant to the	The Company has a set of regularly reported leading indicators that are provided to management, the Safety Committee, and all employees. The collection and reporting of the leading indicators is institutionalized in the Company with designated staff responsible for ensuring data for leading indicators are collected, analyzed, and reported. Management and the Safety Committee use the leading indicators to make decisions. The selected leading indicators are relevant to the Company's safety program including public safety and wildfire mitigation and worker safety.	Relevant and Institutionalized leading indicators will reduce wildfire risk to the public and improve workplace safety of employees conducting wildfire mitigation work because it provides management and the Safety Committee clear visibility on the effectiveness of the Company's Safety Program and telltale warning of safety issues that might be developing. Additionally, employees can see the results of their safety related efforts and if adjustments need to be made. Leading indicators are a key element of any continuous improvement program which will support wildfire risk reduction and improved worker safety for employees performing wildfire mitigation work.

A. Objective	B. Progress metrics or cultural indicators 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
management to unsafe trends. Implementing leading indicators in safety reporting will provide a comprehensive look at how the Company is performing when it comes to safety. Understanding current and past performance is essential to any continuous improvement program.	Company's safety program and public safety including wildfire risk reduction efforts. • The selected leading indicators include the following: (1) Near-miss reporting is being utilized. (2) JHA being performed and being substantive. (3) Corrective action to safety related issues are tracked and resolved in a timely manner. (4) Field workers conduct tailboards before performing work. (5) Vehicle and equipment checks are conducted as required by the Company's procedures. (6) Safety checklists such as underground vault entry are properly performed and documented. (7) Safety equipment is in good condition and any required periodic checks are properly conducted within the required periodicities. (8) Safety training is being conducted by all required	The selected data for the leading indicators are collected at a relevant frequency such that the indicator is meaningful yet timely. The selected leading indicators are analyzed for trends and out of the ordinary or anomalous data points (for example, outside a standard deviation or other predetermined specification). Employee annual performance appraisals include review of safety leading indicators pertaining to the employee. Staff is held accountable to safety performance in part based on leading indicators.	

A. Objective	B. Progress metrics or cultural indicators 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
	and on time per the Company's schedule. 2. Safety Committee Records: • The Safety Committee approves a set of relevant leading indicators for the Company to collect, monitor, document, and analyze. • The Safety Committee makes review of leading indicators a key part of the regular meetings. 3. Employee Survey: • Employees feel that leading indicators are shared with them by management. • Employees feel that leading indicators are meaningful and relevant to their work and provide an accurate depiction of the Company's safety program. • Employees feel that management takes action based on the leading indicators when appropriate.		
<u>Continuous Improvement Program</u>. Company staff should never stop learning, growing, and improving. These	1. Safety Records: • Areas for improvement are identified. • Plans of action are developed for the selected improvement areas.	The Company has a functioning continuous improvement program that consists of the following standardized steps: • Areas for improvement through various means such as safety audit findings;	A highly effective continuous improvement program will result in steady, continual, and incremental improvements in the Company's efforts to reduce wildfire risk to the public. Additionally, the continuous improvement program will enhance worker safety including workers performing wildfire

▷ **DEKRA**

A. Objective	B. Progress metrics or cultural indicators 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
efforts mostly seek "incremental" improvement over time through a set of activities designed to bring gradual, ongoing improvement to the safety program through constant review, measurement, and action. These actions can occasionally result in "breakthrough" improvement all at once. Effective continuous improvement programs have a standard process that the company utilizes to identify areas for improvement, creates a plan of action for improvement, executes the plan, evaluates the effectiveness of the	• Courses of action are implemented with follow through and accountability. • Results of actions are evaluated using metrics and other objective observation methods. • Adjustment or additional actions are implemented as appropriate. 2. Safety Committee Records: • Safety Committee reviews results of continuous improvement program. • Safety Committee uses the program to implement improvements where it deems necessary through safety audit findings; root cause analysis on accidents, incidents, and near misses; management observations, employee referrals, etc. 3. Employee Surveys: • Employees feel that they can refer areas for improvement without retribution. • Employees feel that management and the Safety Committee take their referrals under consideration. • Employees feel that the continuous improvement	root cause analysis on accidents, incidents, and near misses; management observations, employee referrals, etc. • Develop a plan of action for improvements in the identified improvement opportunities. • Implement the plan of action with specific staff assigned to be accountable for executing the desired measures. • Evaluate the effectiveness of the action taken metrics and other objective observation methods. • Determine if further action or adjustments are necessary to achieve the desire improvement. Management and the Safety Committee reviews the continuous improvement program on a regular basis and takes action based on results of the program. The results of the continuous improvement program are shared with employees so that they see	mitigation safety work. The program will identify areas in public safety including wildfire mitigation initiatives that would benefit from improvement and then implement a plan to make the improvements. Likewise, this process would also identify areas for improvement in safety for workers performing wildfire mitigation work and implement a course of action to make the improvements.

A. Objective	B. Progress metrics or cultural indicators 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
action taken, and determines if further adjustments are necessary.	program is effective at improving public and worker safety.	the effectiveness and value of the program. Employees are empowered to refer to management and the Safety Committee areas for improvement without fear of retribution.	
Safety Recognition Program. Recognizing and rewarding employees that go above and beyond to enhance public and workplace safety incentivizes the right behaviors and attitudes that are essential to improving safety culture. Additionally, when Company staff or groups of employees perform above and beyond safety program targets, they should be recognized and rewarded. It should be clear to employees that performing safety program activities per the Company's	1. Safety Committee Records: • The Safety Committee plays a key role in the safety recognition program ideas, implementation, and operation. • Recognition is awarded based solely on objective performance. 2. Safety Recognition Records: • Safety recognition citations cite specific safety performance achievement. • Safety recognition is used regularly by management and the Safety Committee. 3. Employee Surveys: • Employees feel that recognition is provided to employees that genuinely went above and beyond in their safety performance. • Employees feel that they will be recognized if they go above and beyond and that the "system" is not rigged.	Management and the Safety Committee recognize and reward employees that go above and beyond to improve public and workplace safety. Management and the Safety Committee celebrate groups of employees or even the entire staff when performance is above and beyond safety program targets. Employees know that safety performance above and beyond what is expected of them will be recognized by management and their peers.	An effective safety recognition program will reduce the risk of wildfires and improve workplace safety for workers performing wildfire mitigation initiatives by incentivizing the right behaviors and attitudes essential to a great safety culture. A great safety culture is key to enhancing public safety and promoting workplace safety.

A. Objective	B. Progress metrics or cultural indicators 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
standards is expected as part of their job. Recognition and reward should be reserved for above and beyond performance and results.	• Employees feel safety recognition program motivates them to improve their performance.		
Transparency and Open Communication. Transparency and open communication are essential ingredients of great safety cultures. If the lines of communication are not open, employees will not have clear direction and management will not receive the feedback it needs to make the safety culture successful.	1. Safety Records: Safety policies and procedures are widely made available in print and via online resources. 2. Safety Committee Records: • Safety Committee agendas and minutes are widely published for employees to review. • Safety Committee meetings frequently include input from employees. • Safety Committee routinely uses cross functional teams of employees to address safety issues or implement continuous improvement plans. 3. Employee Surveys: • Employees feel that they are encouraged to report safety hazards and that there will be no retribution.	Management communicates frequently with employees through safety talks. Management encourages employees to also lead safety talks periodically. Safety policies and procedures are readily available to all employees. Safety Committee meeting results are made available to employees. Safety performance metrics are made available to employees. Management encourages employees to report safety hazards by recognizing and rewarding them. Management encourages employees to make recommendations on how to	Transparent safety programs that have open lines of communications between employees and management promote a highly effective safety culture which will reduce the risk of wildfire, enhance public safety and improve worker safety for workers performing wildfire mitigation initiatives. Transparency and open lines of communication encourage employees to report actual or potential safety issues and unsafe conditions so that management and the Safety Committee are able to take effective corrective action.

A. Objective	B. Progress metrics or cultural indicators 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
	• Employees feel that they are encouraged to recommend improvements to safety and wildfire risk reduction. • Employees feel that their communications with management on safety matters are listened to and acted upon.	reduce workplace hazards and reduce the risk of wildfire. Employees are involved in the safety programs processes to encourage buy-in.	

6.3 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.

6.3.1 Lessons Learned since most recent Safety Culture Assessment

A. Major Themes or Lessons Learned	B. Actions Taken
Safety Committee needs to have a more active role in leading the safety program.	Staff to attend Safety Committee meeting have been designated and the Committee is being given strong support from senior management. Establishing an active Safety Committee has been designated as a safety culture objective to be completed by December 31, 2021.
Management needs to be more engaged out in the field at work sites.	Job Hazard Analysis (JHA) schedule for managers and supervisors has been established to ensure managers and supervisors observe actual work and facilities in the field. Engaged Management has been designated as a safety culture objective to be completed by December 31, 2021.
Safety Training quality needs to improve.	Individual and Group Employee Safety Training plans will be drafted and implemented in 2021. Managers have safety training accomplishments by their employees as a performance metric. Management will make a concerted effort to promote and support safety training. Safety Training has been designated as a safety culture objective to be completed by December 31, 2022.

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.

Term	Definition
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.
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	An outcome or output measure that is backward-looking, describing a past event.
Leading Indicator	An input measure that is predictive of a future event.
Learning Organization	An organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights.
Likert Scale	A rating system commonly used in questionnaires and survey research to measure people's attitudes, perceptions, and opinions.

Term	Definition
Near Miss	An unplanned event that did not result in injury, illness, or damage, but had the potential to do so.
Operations	The parts of a business that affect the production, distribution, and service necessary for a company to function. For the purposes of this assessment, electrical operations, field services, transmissions, substations, and distribution are considered part of operations, but generation is not.
Operational 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.