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

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

May 8, 2023

Alona Sias
President
Trans Bay Cable/NextEra Energy Transmission
1 Letterman Dr #500
San Francisco, CA 94129
Alona.Sias@nexteraenergy.com

Subject: Office of Energy Infrastructure Safety Issuance of Trans Bay Cable's 2022 Safety Culture Assessment per Public Utilities Code Section 8389(d)(4)

Dear Ms. Sias:

Enclosed is the 2022 Safety Culture Assessment (SCA) report for Trans Bay Cable, LLC, (TBC) presenting the findings (including recommendations) of the assessment conducted by the National Safety Council (NSC) on behalf of the Office of Energy Infrastructure Safety (Energy Safety) pursuant to Public Utilities Code Section 8389(d)(4).

Energy Safety provided TBC a draft of the report on March 24, 2023, for factual review and correction. On April 7, 2023, TBC responded indicating that it had reviewed the report and had no questions or comments.

TBC can satisfy the "good standing" requirement in Public Utilities Code section 8389(e)(2) by agreeing to implement the findings (including recommendations) of its most recent SCA performed pursuant to Public Utilities Code section 8386.2 and section 8389(d)(4), if applicable. This may be done by submitting a letter to this effect via the e-filing system on the 2022 Safety Culture Assessments docket (Docket #2022-SCAs).[1]

Sincerely,

Lucy C. Morgans

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

[1] See the 2022 Safety Culture Assessments docket (https://efiling.energysafety.ca.gov/EFiling/DocketInformation.aspx?docketnumber=2022-SCAs, accessed March 20, 2023).

OFFICE OF ENERGY INFRASTRUCTURE SAFETY | nsc

The Office of Energy Infrastructure Safety's 2022 Safety Culture Assessment

Trans Bay Cable

Prepared by the National Safety Council

Published May 2023

Table of Contents

Executive Summary

The Office of Energy Infrastructure Safety's (Energy Safety's) second annual Safety Culture Assessment of electrical corporations in California took place from July to November 2022. Energy Safety directed the process pursuant to the requirements of Public Utilities Code section 8389(d)(4). The process was carried out by Energy Safety's Safety Culture Assessment contractor. In 2022, Energy Safety's Safety Culture Assessment contractor was the National Safety Council.

This report contains the assessment of Trans Bay Cable's (TBC's) inputs to the 2022 Safety Culture Assessment and associated findings and recommendations. The findings and recommendations are based on TBC's safety culture objectives, lessons learned, progress on 2021 recommendations, and supporting documentation.

According to its Safety Culture Assessment inputs in 2021 and 2022, TBC has maintained a safety vision and guiding principles, along with effective integration of safety communications throughout the organization. Further, in 2022, TBC's safety culture objectives, lessons learned, and progress on 2021 recommendations includes wildfire safety objectives.

To drive consistent improvement in its safety culture throughout the organization, TBC should act on the recommendations listed below.

- Instead of aiming for zero near-miss events, TBC should establish targets and undertake actions that will increase hazard and near-miss reporting. TBC leadership and frontline supervisors should encourage workers to report hazards and near misses.

- TBC should review its safety culture objectives and ensure that its 12-month objectives build toward its 3-year objectives.

1 Safety Culture Assessment

1.1 Safety Culture Assessment Framework

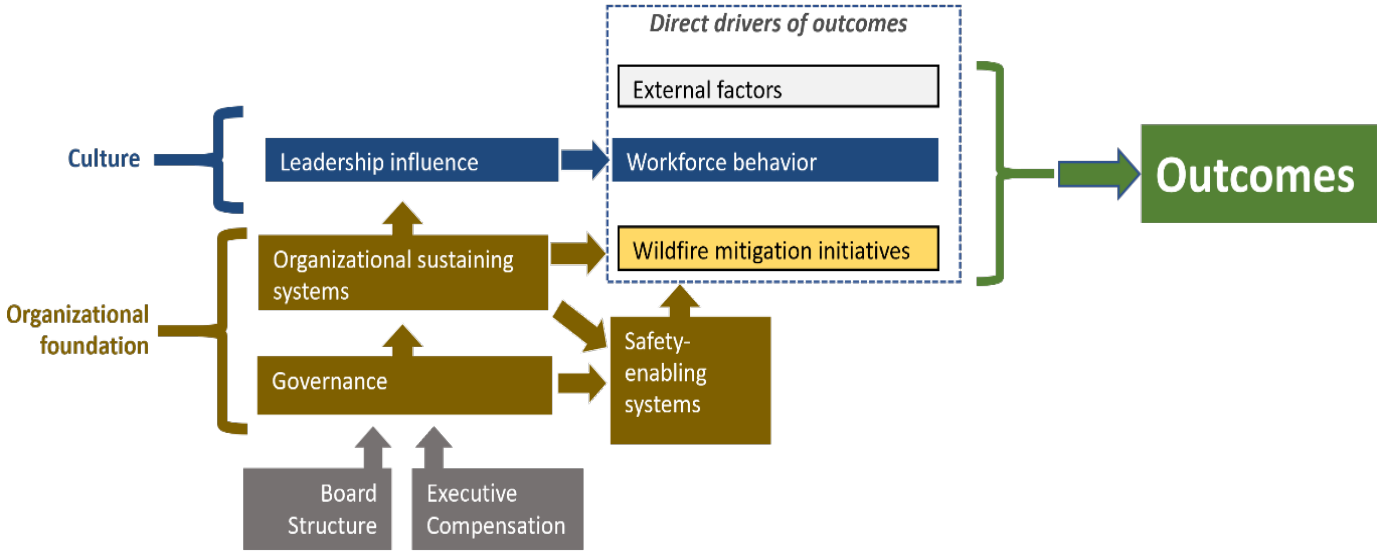
The Office of Energy Infrastructure Safety's (Energy Safety's) Safety Culture Assessment (SCA) process is described in the Safety Culture Assessment Guidelines for Electrical Corporations (SCA Guidelines).[1] The SCA Guidelines are built on the SCA framework adopted by the California Public Utilities Commission (CPUC) in Resolution WSD-011 on November 19, 2020,[2] and the update adopted by the CPUC in Resolution M-4860 on December 2, 2021.[3] This framework, depicted in Figure 1, is rooted in the belief that safety culture affects both personal and wildfire safety outcomes and by extension its study provides insights into strengths and key opportunities for improvement.

[1] Safety Culture Assessment Guidelines for Electrical Corporations (March 2022) (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52124&shareable=true, accessed Dec. 14, 2022).

[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" (2020) (https://energysafety.ca.gov/wp-content/uploads/docs/misc/docket/352490594.pdf, accessed Feb. 8, 2023);
Resolution WSD-011 Attachment 4 "Annual Safety Culture Assessment Process Proposal" (2020), p. 9 (https://energysafety.ca.gov/wp-content/uploads/docs/wmp-2021/docs/352460864.pdf, accessed Jan. 18, 2023).

[3] Resolution M-4860 "Resolution Pursuant to the Requirements of Public Utilities Code Sections 8389(d)(1), (2), (3) and (4), Related to Catastrophic Wildfires Caused by Electrical Corporations Subject to the Commission's Regulatory Authority (2021) (https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M428/K722/428722129.PDF, accessed Feb. 8, 2023);
Resolution M-4860 Attachment 4 "2022 Safety Culture Assessment Process" (2021) (https://energysafety.ca.gov/wp-content/uploads/attachment-4_sca-proposal-for-2022.pdf, accessed Feb. 8, 2023).

Figure 1: Framework for Energy Safety's Safety Culture Assessment



The SCA framework illustrates that safety outcomes are driven by leadership influence and organizational sustaining systems. Governance impacts these factors and also safety-enabling systems. These elements all impact workforce behavior and wildfire mitigation initiatives, which most directly drive safety outcomes.

This framework helps assess the value of safety at different levels of an organization. A strong safety culture exhibits the value of safety at all levels of the organization, from the highest levels of leadership to the frontline employee and through all facets of job performance and the factors that influence job performance like work environment, training, tools, and resources. Additionally, a strong safety culture maintains the priority of safety as it relates to production or job performance outcomes, without exception. Measures of safety culture like Energy Safety's SCA are essential for understanding, managing, and making the necessary interventions to improve safety culture to benefit both workers and the public.

1.2 Overview

Pursuant to Public Utilities Code Section 8389(d)(4),[4] Energy Safety must conduct an annual SCA for each California electrical corporation.[5] The first SCA took place in May and June 2021. Energy Safety contracted the National Safety Council (NSC)[6] to conduct the second annual SCA. This took place between July and November 2022.

1.2.1 Focus of Energy Safety's SCA

Energy Safety's SCA is distinct and complimentary to other safety culture assessments required elsewhere in the Public Utilities Code. Energy Safety's SCA is not a replacement for ongoing work to improve safety culture at each electrical corporation. Energy Safety's SCA specifically focuses on the safety culture present in the wildfire mitigation work setting: the setting most pertinent to risks faced by the wildfire mitigation workforce in terms of personal risk and risks faced by the public in terms of wildfire risk. Energy Safety's goal is to develop a longitudinal view of safety culture across electrical corporations to identify best practices and relative gaps. Energy Safety seeks to understand outcomes over time and incorporate continuous learning into the assessment process.

[4] The full text of Public Utilities Code section 8389 (https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=8389.&lawCode=PUC, accessed November 15, 2022).
[5] In 2022, the California electrical corporations required to participate in Energy Safety's Safety Culture Assessment were Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), Southern California Edison Company (SCE), Liberty Utilities, PacifiCorp, Bear Valley Electric Service, Inc., Horizon West Transmission, and Trans Bay Cable.
[6] The National Safety Council is a nonprofit, mission-based organization focused on eliminating the leading causes of preventable death and injury, from the workplace to anyplace.

1.2.2 Energy Safety's SCA Components

Energy Safety published the 2022 SCA Guidelines in March 2022.[7] The SCA Guidelines outline the SCA framework, components, and requirements for each category of electrical corporation. The SCA Guidelines categorize electrical corporations as follows:

- **Large electrical corporations, also called investor-owned utilities[8] (Large IOUs):** Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), and Southern California Edison Company (SCE).
- **Small and multijurisdictional utilities (SMJUs):** Liberty Utilities, PacifiCorp, and Bear Valley Electric Service, Inc. (BVES).
- **Independent transmission operators (ITOs)**: Horizon West Transmission (HWT) and Trans Bay Cable (TBC).

The 2022 SCA process included a management self-assessment with a summary plan for 2023, 12-month and 3-year safety culture objectives, lessons learned, progress on the 2021 SCA recommendations, a workforce survey, and follow-up interviews to give context and clarity to the management self-assessment (one interview) and workforce survey (three interviews in the form of focus groups). See below for more details about each of these components. The SCA Guidelines require different kinds of electrical corporations to complete different components of the SCA as follows:[9]

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[7] Safety Culture Assessment Guidelines for Electrical Corporations (March 2022) (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52124&shareable=true, accessed Dec. 14, 2022). For more information, see Energy Safety's Safety Culture Assessments web page (https://energysafety.ca.gov/what-we-do/electrical-infrastructure-safety/wildfire-mitigation-and-safety/safety-culture-assessments/, accessed Dec. 22, 2022).

[8] In this document, "utility" should be understood to mean "electrical corporation."

[9] See Section 1 "Application of Safety Culture Assessment Components to Different Electrical Corporations," Safety Culture Assessment Guidelines for Electrical Corporations (March 2022) (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52124&shareable=true, accessed Dec. 14, 2022).

Component	Electrical corporations that must complete this component	Commentary
Workforce survey	Large IOUs, SMJUs	Energy Safety uses the workforce survey to assess key workforce perceptions and behaviors at the large and small electrical corporations, but not the independent transmission operators, where the workforces are too small to ensure the anonymity of respondents.
Management self-assessment with summary plan for the coming year	Large IOUs	Energy Safety uses the management self-assessment, a detailed assessment of organizational systems, to evaluate the larger, more complex electrical corporations.
Safety culture objectives and summary of lessons learned (including reporting on implementation of recommendations)	Large IOUs, SMJUs, ITOs	Energy Safety uses the safety culture objectives and summary of lessons learned in the evaluation of all electrical corporations. This is the only requirement for ITOs, which are small organizations with a lower risk profile than the large IOUs and SMJUs.
Interviews	To be determined by Energy Safety upon review of submissions	Interviews may be required of any electrical corporation. In 2022, they will be required of the large IOUs.

Component	Electrical corporations that must complete this component	Commentary
Observational visits	To be determined by Energy Safety upon review of submissions	Observational visits may be required of any electrical corporation.
Supporting documentation	To be determined by Energy Safety upon review of submissions	Supporting documentation may be required of any electrical corporation.

Below are descriptions of the different components of the 2022 SCA.

1.2.2.1 Workforce Survey

The workforce survey was only completed by the large electrical corporations and SMJUs in the 2022 SCA process; it was not completed by the ITOs.

1.2.2.2 Management Self-Assessment with 2023 Summary Plan

The management self-assessment was only completed by the large electrical corporations in the 2022 SCA process; it was not completed by the ITOs.

1.2.2.3 Safety Culture Objectives, Lessons Learned, and Progress On 2021 Recommendations

Unlike some components of the SCA that are only applicable to some electrical corporations (see Section 1.2.2), each electrical corporation is required to submit its safety culture objectives, summary of lessons learned, and progress on 2021

recommendations.[10] Electrical corporations submitted these using an online survey administered by NSC.

In this component, the electrical corporations presented their 12-month and 3-year safety culture objectives, target and progress metrics, and a description of how the objectives will reduce wildfire risk.

Electrical corporations also presented their lessons learned and a description of progress made on their 2021 SCA recommendations.

1.2.2.4 Interviews

Follow-up interviews were only conducted with the large electrical corporations in the 2022 SCA process; they were not conducted with the ITOs.

1.2.2.5 Observational Visits

The 2022 SCA process did not include observational visits due to time constraints.

1.2.2.6 Supporting Documentation

The SCA Guidelines provide that Energy Safety may ask for supporting documentation.[11] For example, Energy Safety may require documentation to support justifications given for electrical corporations' self-ratings in the management self-assessment.

The online survey used to elicit safety culture objectives, summary of lessons learned, and progress on 2021 recommendations permitted electrical corporations to upload

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[10] See Section 1 "Application of Safety Culture Assessment Components to Different Electrical Corporations," Safety Culture Assessment Guidelines for Electrical Corporations (March 2022) (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52124&shareable=true, accessed Dec. 14, 2022).

[11] See the Safety Culture Assessment Guidelines for Electrical Corporations Section 5.2 for more information about supporting documentation Energy Safety may require at its discretion (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52124&shareable=true, accessed Jan. 23, 2023).

additional supporting documentation as attachments to illustrate actions taken since the 2021 SCA.

1.2.3 Changes from 2021

The SCA process did not change significantly from 2021 to 2022.[12] There were three key differences. Firstly, in 2022 Energy Safety's SCA contractor could assess each electrical corporation's progress against the baseline data gathered in 2021 and the extent to which the electrical corporation had implemented the 2021 recommendations. Secondly, in 2022 Energy Safety introduced a public workshop to allow the large electrical corporations the opportunity to present information about their safety culture and the public the opportunity to ask questions.[13] Thirdly, in 2022 the invitees to the workforce survey follow-up focus groups included contractors in addition to electrical corporation employees.

[12] Resolution M-4860 "Resolution Pursuant to the Requirements of Public Utilities Code Sections 8389(d)(1), (2), (3) and (4), Related to Catastrophic Wildfires Caused by Electrical Corporations Subject to the Commission's Regulatory Authority (2021) (https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M428/K722/428722129.PDF, accessed Feb. 8, 2023);
Resolution M-4860 Attachment 4 "2022 Safety Culture Assessment Process" (2021) (https://energysafety.ca.gov/wp-content/uploads/attachment-4_sca-proposal-for-2022.pdf, accessed Feb. 8, 2023).

[13] 2022 Safety Culture Assessment Public Workshop: see link for workshop materials and recording (https://energysafety.ca.gov/events-and-meetings/events/2022-safety-culture-assessment-public-workshop/, accessed Dec. 22, 2022).

2 TBC Inputs and Findings

2.1 TBC Inputs to the SCA

The findings and recommendations below are based on TBC's safety culture objectives, lessons learned, and progress on 2021 recommendations.[14] As an ITO, TBC was only required to complete this component of the SCA process.[15]

TBC voluntarily appended five supporting documents to provide additional context to its responses.[16] TBC's supporting documentation included a set of slides on how to do a "Two Minute Review" for hazard awareness and the "7 Saves" poster:[17] the "Two Minute Review" and "7 Saves" were referenced in TBC's progress report on its 2021 SCA recommendations. TBC's supporting documentation also included a screenshot of its "Health and Safety" channel in the internal online communication platform showing examples of communication (e.g., an alert about unsafe traffic conditions at a power station under demolition), discussed in its 2022 lessons learned. NSC reviewed this supporting documentation to further understand TBC's safety culture objectives, lessons learned, and progress on 2021 recommendations.

Note that TBC also appended a set of slides with the title "What does it take to be a good safety leader?" and a one-page flier with a table titled "Top 10 Off-Normal Situations" with examples of safe behavior in an array of situations such as working in adverse weather; however, TBC didn't discuss these slides or this table in its safety culture objectives, lessons learned, or progress on 2021 recommendations. In 2022, the

[14] See Section 5 for TBC's safety culture objectives, lessons learned, and progress on 2021 recommendations.
[15] See Section 1 "Application of Safety Culture Assessment Components to Different Electrical Corporations," Safety Culture Assessment Guidelines for Electrical Corporations (March 2022) (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52124&shareable=true, accessed Dec. 14, 2022).
[16] See the supporting documentation appended at the end of Section 5.
[17] The poster read "7 SAVES = SAVING LIVES" followed by eight statements: "Clip it! Drive it! Switch it! Tag it! Ground it! Cover it! Glove it! Dig it!" See the end of Section 5 for the images.

first step of the SCA process was submission of the safety culture objectives, lessons learned, and progress on 2021 recommendations. TBC submitted these components on August 15, 2022.

2.2 Strengths

Through its SCA inputs, TBC has demonstrated a number of safety culture strengths. The following sections identify these strengths. TBC should continue to build on these strengths to advance its safety culture.

2.2.1 Established Vision and Guiding Principles

TBC's input on its 2022 safety culture objectives, lessons learned, and 2021 recommendations indicated TBC's sustained dedication to advancing safety performance. TBC established a vision, identified progress metrics, and communicated this vision throughout all levels of the organization. TBC's "5 Guiding Principles" focus on prevention and engagement for all levels of the organization. In its report on progress on its 2021 recommendations, TBC reported these principles as: "1. All injuries are preventable; 2. Every day safety is MY responsibility; 3. Leadership is accountable for preventing injuries; 4. See something, Say something, Do something; 5. Live the 7 Saves." [18] The "7 Saves" consist of eight sentences describing key proactive behaviors to help keep workers safe: "Clip it! Drive it! Switch it! Tag it! Ground it! Cover it! Glove it! Dig it!"[19] These behaviors are clear, simple, and easy to remember.

2.2.2 Integration of Safety Communications

TBC described in its 2022 lessons learned a list of types of safety communication shared at the enterprise level, including a bi-annual leadership workshop and a monthly

[18] See Section 5 for TBC's safety culture objectives, lessons learned, and progress on 2021 recommendations.
[19] See TBC's "7 Saves" poster as part of the supporting documentation appended at the end of Section 5.

"Safety Share."[20]

TBC described other actions it took to enhance its safety culture in its progress report regarding its 2021 SCA recommendation "Build sustainment activities into the safety culture objectives." These included adding safety objectives to each field employee's annual performance goals and creating a "Health and Safety" channel in the internal online communication platform where employees can share health and safety news and identify potential hazards and solutions.

2.2.3 Safety Culture Objectives include Fire Safety

TBC includes fire safety measures in its 2022 12-month and 3-year safety culture objectives.[21] In TBC's 12-month safety culture objective "Enhanced Fire Safety training," TBC states its intention to ensure operational staff are trained in the use of on-site suppression equipment ("suppression resource"). In TBC's 3-year safety culture objective "Annual Fire Season Safety Stand Down," TBC states its intention to hold a meeting annually prior to fire season to assess the need for training, review any planned projects which may impact fire safety, and assess or schedule the assessment of fire prevention and suppression equipment. In TBC's 3-year safety culture objective "Increase Coordination of Fire Safety Knowledge/Program with Affiliates," TBC outlines a plan to create an annual round table that will enable its affiliates to share "fire prevention and related risk reduction techniques and experience."

[20] The "Safety Share Moment" is described in the 12-month objective of that name (TBC's 12-month Objective 7) as follows: "Safety [share] moments provide an opportunity for employees to recognize a safety observation or concern that might be of particular import. This moment serves as an additional remainder to keep safety at the forefront of all workplace activity." See Section 5 for TBC's safety culture objectives.
[21] See Section 5 for TBC's safety culture objectives.

2.3 Opportunities

TBC has several areas where it can strengthen its safety culture. The following section describes the areas where TBC should prioritize improving its safety culture. Specific recommendations are in Section 3.

2.3.1 Safety Event Reporting

In TBC's 2022 12-month safety culture objective "Ensure Safe Behavior at Job Site," TBC focuses on increasing hazard awareness.[22] Its progress metrics for this objective include identification of hazards and discussion of mitigating actions at safety tailboards[23] and including safety objectives in each field employee's annual performance goals. Its 12-month target is "0 Safety Incidents or near misses."[24] Striving for zero near-miss incidents, which translates to zero near-miss *reports*, is not conducive to advancing safety culture because a zero-event approach may discourage safety event reporting.

TBC has another 12-month safety culture objective titled "Safety Risk Mitigation 'Sub-zero Injuries.'" Its progress metric for this objective is the timely addressing of Safety Activity Management System (SAMS) entries and the 12-month target is "Addressed within specified time period depending on severity," presumably referring to the SAMS entries in the metric. It is unclear how TBC defines a "sub-zero" injury or how it relates to safety event reporting through SAMS.

TBC's 12-month objectives also include "Zero Employee Safety and Health Incidents" and "Zero Motor Vehicle Safety Incidents." As noted above, a zero-event approach may

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[22] See Section 5 for TBC's safety culture objectives.
[23] Tailboards or tailgates are crew meetings at worksites where project-specific safety briefings take place.
[24] Near miss: here, an unplanned event that did not result in injury, illness, or damage, but had the potential to do so. Safety Culture Assessment Guidelines for Electrical Corporations (March 2022) (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52124&shareable=true, accessed Dec. 14, 2022).

discourage safety event reporting. The objectives did not include explicit measures to encourage safety event reporting, although the objective “Zero Employee Safety and Health Incidents” objective included a progress metric of an annual training, and the “Ensure Safe Behavior at Job Site” objective included the metric of reinforcing hazard identification training at safety tailboards.

See the corresponding recommendation in Section 3.1 of this report.

2.3.2 Safety Culture Objectives

TBC’s 2022 safety culture objectives, while sufficiently well-defined and specific in their targets, do not illustrate how TBC intends to continuously improve its safety culture over the coming years.

Four of TBC’s 12-month objectives are repeated as 3-year objectives. These are:

Objective 1. Zero Employee Safety and Health Incidents

Objective 2. Zero Motor Vehicle Safety Incidents

Objective 3. 100% Contractor Safety Training

Objective 4. Safety Risk Mitigation “Sub-zero Injuries”

TBC’s remaining 12-month objectives are:

Objective 5. Enhanced Fire Safety training

Objective 6. Annual Fire Drill

Objective 7. Ensure Safe Behavior at Job Site (with the target “0 Safety Incidents or near misses”)

Objective 8. Safety Share Moment ("Start every meeting with more than 3 persons with a short safety share or observation")

Objective 9. Increase Safety Shares Across Corporate Enterprise

The remaining 3-year objectives that are not duplicated as 12-month objectives (below) seem to be roughly on the same level of ambition and vision as the 12-month objectives:

Objective 5. Annual Fire Season Safety Stand Down

Objective 6. Increase Coordination of Fire Safety Knowledge/Program with Affiliates

Objective 7. Safety Survey

Objective 8. Employee Engagement Survey (Safety Dimension)

It is unclear how the 12-month objectives represent milestones on the way to longer-term achievements represented by the 3-year objectives.

See the corresponding recommendation in Section 3.2 of this report.

3 Recommendations

Culture change takes time, dedication, and starts with understanding where a company is on its organizational safety culture journey and the underlying drivers influencing the workforce. One of the recommendations included here is newly introduced based on TBC's 2022 assessment while the other builds on a recommendation from TBC's 2021 Safety Culture Assessment report.[25]

Recommendations for TBC are outlined below and structured as follows: overall theme of the recommendation; observations from the SCA inputs contributing to the recommendation; goals of the recommendation; and verification method.

3.1 Encourage Safety Event Reporting

TBC should endeavor to foster a sense of safety, including psychological safety, among its workers, such that workers feel safe to report mistakes and near misses. Instead of aiming for zero safety events, TBC should establish reporting targets and otherwise undertake actions that will that increase safety event (hazard and near-miss) reporting. TBC should look at leading indicators,[26] such as percent of the workforce trained on safety event reporting or numbers of safety observations in the field, alongside lagging indicators,[27] such as the number of injury reports. This is a new recommendation in

[25] Trans Bay Cable 2021 Safety Culture Assessment (Nov. 2021) (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51875&shareable=true, accessed March 15, 2023).
[26] Leading indicator: here, an input measure that is predictive of a future event. Safety Culture Assessment Guidelines for Electrical Corporations (March 2022) (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52124&shareable=true, accessed Dec. 14, 2022).
[27] Lagging indicator: here, an outcome or output measure that is backward-looking, describing a past event. Safety Culture Assessment Guidelines for Electrical Corporations (March 2022) (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52124&shareable=true, accessed Dec. 14, 2022).

response to TBC's 2022 SCA inputs.

A zero safety-event goal can be successful if TBC encourages early and frequent event reporting and incentivizes other proactive safety behaviors.

3.1.1 Observation

TBC's 2022 12-month safety culture objectives included "Ensure Safe Behavior at Job Site" with an associated target of "0 Safety Incidents or near misses." Other objectives with a zero safety-event target included "Zero Employee Safety and Health Incidents" and "Zero Motor Vehicle Safety Incidents." One objective had a target of addressing safety event reports in a timely manner, but the title of the objective indicated a goal of having less than zero injuries ("Safety Risk Mitigation 'Sub-zero Injuries'"), the meaning of which is unclear.

3.1.2 Goals of Recommendation

The goal of this recommendation is for TBC to encourage safety event reporting and so increase its capacity as a learning organization.[28]

3.1.3 Verification Method

In its 2023 progress report on its 2022 recommendations, TBC must provide an update on its efforts to encourage safety event (hazard and near-miss) reporting. It must report the percent change in event reports from 2022. It must describe any new efforts to encourage workers to report safety events, including trainings on reporting protocols.

[28] Learning organization: here, an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights. Safety Culture Assessment Guidelines for Electrical Corporations (March 2022) (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=52124&shareable=true, accessed Dec. 14, 2022).

3.2 Review and Refine Safety Culture Objectives

TBC should review its safety culture objectives and ensure that its 12-month objectives build toward its 3-year objectives.[29] This recommendation builds upon a 2021 SCA recommendation.[30]

3.2.1 Observation

Four of TBC's 12-month objectives are repeated as 3-year objectives. It is unclear how TBC's 12-month objectives build toward its 3-year objectives.

3.2.2 Goal of Recommendation

The goal of this recommendation is to improve TBC's safety culture objectives such that they illustrate TBC's long-term vision for safety culture and the milestones it expects to achieve on the way.

3.2.3 Verification Method

In its 2023 SCA safety culture objectives, TBC must provide 3-year safety culture objectives that are supported by 12-month objectives. TBC must not include 12-month objectives as 3-year objectives.

[29] See Section 5 for TBC's safety culture objectives.
[30] See 4.1 "Integrate actions for progressively building the safety culture into a three-year safety culture plan," Horizon West Transmission 2021 Safety Culture Assessment (Nov. 2021) (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=51874&shareable=true, accessed March 13, 2023).

4 Conclusion

This report provides the findings and recommendations from TBC's second SCA under Public Utilities Code section 8389(d)(4). This report includes a year-over-year assessment of TBC's safety culture based on the results of the first SCA in 2021. Following the publication of this report, TBC 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 TBC. 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 TBC's relative strengths and opportunities in designing and implementing a strong safety culture. As stated above, Energy Safety ultimately seeks to assess safety culture outcomes over time and incorporate continuous learning into the SCA process.

5 Safety Culture Objectives, Lessons Learned, and 2021 Recommendations

OFFICE OF ENERGY INFRASTRUCTURE SAFETY

nsc

TBC Trans Bay Cable

Safety Culture Objectives and Lessons Learned Report

August 2022

Trans Bay Cable

Section 1. Safety Culture Objectives, Lessons Learned, and 2021 Recommendations

The texts below, other than the headings, are as they were received from the electrical corporation, presented without revision.

1.1 Objectives for the Next 12 Months

A1. Objective 1

Zero Employee Safety and Health Incidents

B1. Progress Metrics (if applicable)

Number of OSHA Recordable Injuries
Annual training for employees

C1. 12-Month Target

0
100%

D1. Description of Objective

Ensures employees understand the components of Safety and current metrics.
Zero safety incidents puts the focus on employing enterprise guiding principles for safe work habits with the goal that all injuries are preventable.
Zero incidents translates to reduced risk in operations thus reducing risk to public and fire risk.

A2. Objective 2

Zero Motor Vehicle Safety Incidents

B2. Progress Metrics (if applicable)

Number of ANSI preventable accidents

C2. 12-Month Target

0

D2. Description of Objective

Employees practice safe driving which directly translates to reduce risk to public and reduction in likelihood of a vehicle accident instigating a fire.

A3. Objective 3

100% Contractor Safety Training

B3. Progress Metrics (if applicable)

All contractors to receive site safety training

C3. 12-Month Target

100% trained

D3. Description of Objective

Ensures contractors are familiar with the station, that the contractors understand the fire related requirements, and are prepared for the planned work and contingencies.
This activity supports risk reduction of utility equipment instigated fire or contractor work instigating a fire both of which could pose a risk to employees and the public.

A4. Objective 4

Safety Risk Mitigation “Sub-zero Injuries”

B4. Progress Metrics (if applicable)

Safety Activity Management System (SAMS) entries are addressed timely

C4. 12-Month Target

Addressed within specified time period depending on severity

D4. Description of Objective

Ensure risks are timely mitigated thereby protecting our staff

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A5. Objective 5

Enhanced Fire Safety training

B5. Progress Metrics (if applicable)

Conducted Fire Safety Training

C5. 12-Month Target

Operational staff trained

D5. Description of Objective

Ensures operational staff have enhanced fire safety training and training on use of on-site suppression resource

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A6. Objective 6

Ensure Safe Behavior at Job Site

B6. Progress Metrics (if applicable)

Safety tailboards reinforce hazard awareness and recognition training by requiring on-site field personnel to do job-specific identification of hazards and discussion of mitigating actions.
Identification of fire risks related to job specific tasks is part of the daily safety briefings and fire weather is considered as part of work planning activities e.g. construction work is limited during red flag warning days.
Safety objectives in each field employee's annual performance goals to ensure adherence to the safety program

C6. 12-Month Target

0 Safety Incidents or near misses

D6. Description of Objective

Ensure employees are employing hazard awareness techniques to reduce risk to themselves, and the public, including the risk of a utility equipment instigated ignition

A7. Objective 7

Safety Share Moment

B7. Progress Metrics (if applicable)

Perform a safety share at meetings

C7. 12-Month Target

Start every meeting with more than 3 persons with a short safety share or observation

D7. Description of Objective

Safety moments provide an opportunity for employees to recognize a safety observation or concern that might be of particular import. This moment serves as an additional remainder to keep safety at the forefront of all workplace activity

A8. Objective 8

Increase Safety Shares Across Corporate Enterprise

B8. Progress Metrics (if applicable)

Participate in monthly safety shares across corporate enterprise to draw on experiences and knowledge of affiliates

C8. 12-Month Target

Attendance and participation in monthly safety meetings hosted by TBC and other affiliates across corporate enterprise

D8. Description of Objective

Participation in monthly safety meetings hosted in a round-robin style by TBC and other operating affiliates across the corporate enterprise increases employee exposure to and knowledge of:
-safety processes and procedures;
-utilization of new techniques, PPE and equipment; and
-situational awareness/response.
This serves to increase knowledge basis of employees and enhance awareness of the value and importance of safe work practices which directly impact the reduction of risk to employee and public health and safety.

A9. Objective 9

Site Evacuation Drill

B9. Progress Metrics (if applicable)

Conduct Site Evacuation Drill

C9. 12-Month Target

Complete Site Evacuation Drill

D9. Description of Objective

Site evacuation drill is conducted annually to ensure that employee are familiar with and can correctly execute site evacuation drills and contact emergency response in accordance with Company's emergency procedures. This activity ensures that employees can respond efficiently and accurately to an emergency event including a fire event which can reduce the impact of such event.

Section 1. Safety Culture Objectives, Lessons Learned, and 2021 Recommendations

The texts below, other than the headings, are as they were received from the electrical corporation, presented without revision.

1.2 Objectives for the Next 3 Years

A1. Objective 1

Zero Employee Safety and Health Incidents

B1. Progress Metrics (if applicable)

Number of OSHA Recordable Injuries
Annual training for employees

C1. 3-Year Target

0
100%

D1. Description of Objective

Ensures employees understand the components of Safety and current metrics.
Zero safety incidents puts the focus on employing enterprise guiding principles for safe work habits with the goal that all injuries are preventable.
Zero incidents translates to reduced risk in operations thus reducing risk to public and fire risk.

A2. Objective 2

Zero Motor Vehicle Safety Incidents

B2. Progress Metrics (if applicable)

Number of ANSI preventable accidents

C2. 3-Year Target

0

D2. Description of Objective

Employees practice safe driving which directly translates to reduce risk to public and reduction in likelihood of a vehicle accident instigating a fire.

A3. Objective 3

100% Contractor Safety Training

B3. Progress Metrics (if applicable)

All contractors to receive site safety training

C3. 3-Year Target

100% trained

D3. Description of Objective

Ensures contractors are familiar with the station, that the contractors understand the fire related requirements, and are prepared for the planned work and contingencies.
This activity supports risk reduction of utility equipment instigated fire or contractor work instigating a fire both of which could pose a risk to employees and the public.

A4. Objective 4

Safety Risk Mitigation “Sub-zero Injuries”

B4. Progress Metrics (if applicable)

Safety Activity Management System (SAMS) entries are addressed timely

C4. 3-Year Target

Addressed within specified time period depending on severity

D4. Description of Objective

Ensure risks are timely mitigated thereby protecting our staff

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A5. Objective 5

Annual Fire Season Safety Stand Down

B5. Progress Metrics (if applicable)

Attendance to annual Fire Safety Stand Down

C5. 3-Year Target

Hold annual pre-fire season safety stand down

D5. Description of Objective

Safety stand down will be opportunity to meet annually before the start of the fire season to focus on fire-prevention, assess any needed training or update thereto, review any planned projects which may impact fire safety, assess or schedule assessment of fire prevention and suppression equipment

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A6. Objective 6

Increase Coordination of Fire Safety Knowledge/Program with Affiliates

B6. Progress Metrics (if applicable)

Regular sharing of fire prevention and related risk reduction techniques and experience amongst affiliates

C6. 3-Year Target

Hold annual fire safety/prevention round table meeting

D6. Description of Objective

Creation of annual fire safety/prevention meeting with affiliates will provide an opportunity to share fire prevention practices and schema with entities that have differing risk profiles and operational experience which will aid in the expanding knowledge base of employees in fire prevention and risk reduction techniques, procedures and equipment.

A7. Objective 7

Safety Survey

B7. Progress Metrics (if applicable)

Participation in safety survey

C7. 3-Year Target

Complete an employee safety survey

D7. Description of Objective

An employee safety survey will be conducted to assess employee perception of safety culture at the company. The result will be utilized to assess messaging, leadership performance on safety and employee buy-in of safety culture norms.

A8. Objective 8

Employee Engagement Survey (Safety Dimension)

B8. Progress Metrics (if applicable)

Responses to Employee Engagement - Safety Dimension

C8. 3-Year Target

Maintain or improve current score

D8. Description of Objective

Survey is taken every 2 years and measure the percentage of employees that agree with statements such as: "Employee safety is a top concern of my immediate supervisor", "I have the tools and training to do my job safely", and "I feel safe and secure in the workplace".

Section 1. Safety Culture Objectives, Lessons Learned, and 2021 Recommendations

The texts below, other than the headings, are as they were received from the electrical corporation, presented without revision.

1.3 Lessons Learned

A1. Major Theme/ Lesson Learned 1	B1. Actions Taken
ZERO injuries is the only acceptable target	Corporate Message and Leadership models this theme

A2. Major Theme/ Lesson Learned 2	B2. Actions Taken
Guiding Principles: All injuries are preventable, Every day safety is my responsibility, Leadership is accountable for preventing injuries, and See something, Say something, Do something	Business Unit Guiding Principles that are discussed at least monthly. Guiding Principles are also discussed at each safety post-event call.

A3. Major Theme/ Lesson Learned 3	B3. Actions Taken
Practice Human Performance Excellence (HPE)	HPE tools are discussed at least monthly with the team

A4. Major Theme/ Lesson Learned 4	B4. Actions Taken
Cultivate a Culture of Continuous improvement, openness, and trust	Enterprise level safety communications that are shared: • Weekly Safety Beacon • Monthly Safety Connect • Summer Safety Series • Edge Bulletins (as applicable) • Leadership Workshop (bi-annual) • Post Event Leadership Calls (as needed) • Monthly SSIP Call/Safety Share • Stand-up/Stand-down (as needed) Monthly meeting to review safety improvement plans with leadership – Sub Zero Safety Improvement Program

A5. Major Theme/ Lesson Learned 5	B5. Actions Taken
Strive for Sub-zero Injuries	-Corporate issued Safety Coin to each employee as a physical reminder that safety is a 24/7/365 concern -Team leader participation in enterprise-wide safety meetings -Health and Safety Teams channel where employees can share safety/health information and news, identify potential safety hazards and fixes -There are monthly safety themes which are discussed at enterprise wide safety meetings which focus on reducing risk of injury by focusing on safe habits and behaviors -Details of events (near misses and injuries), investigative activities, and lessons learned are distributed to the entire organization through our edge bulletin program. Edge bulletins are routinely reviewed during monthly safety meetings. -Increased safety culture signage posted around job sites to reinforce a safety conscious mindset

Section 1. Safety Culture Objectives, Lessons Learned, and 2021 Recommendations

The texts below, other than the headings, are as they were received from the electrical corporation, presented without revision.

1.4 2021 Recommendations

A1. Recommendation 1

Integrate actions for progressively building the safety culture into a three-year safety culture plan.

B1. Actions Taken

Overall safety planning and goals are driven by enterprise level leadership and directives as Company has eight operational staff members. Company staff report up through NEET Operations and ultimately the Power Delivery business unit at the enterprise level. Power Delivery has been on an evolving safety journey as they strive to improve safety metrics throughout the fleet. Some key directives are (1) driving safety incidents to zero [ZeroTODAY safety initiative] and (2) proactive approach to reduce the potential for a safety incident to occur [SubZero safety initiative]. The Company participates in these efforts through participation in the safety initiatives described in sections B2 and B3 below. Additionally, the NEET team plans to further understand the mindset of employees and look for improvement areas through an expanded safety survey. This will build upon the current safety dimension questions which exist in the current employee engagement survey.

C1. Results

Company continues to have zero reportable safety incidents
-Employees actively participate in various safety meetings and take turns presenting safety topics at monthly safety meeting, asking questions and sharing workplace and personal experiences during meeting roundtable discussions
-Company continues to integrate into enterprise safety culture plan and program by adopting safety signage as evidenced in supporting documentation, adhering to guiding principles for safe work operations, and adopting corporate risk reduction strategies such as two minute review, living the 7 saves, and the see something say something do something approach to potential hazard recognition and correction.

A2. Recommendation 2

Build sustainment activities into the safety culture objectives.

B2. Actions Taken

Safety sustainment activities are driven by enterprise level philosophy. Enterprise safety guidelines have the following 5 Guiding Principles which are championed throughout the organization by senior and manager level leadership:
1. All injuries are preventable
2. Every day safety is MY responsibility
3. Leadership is accountable for preventing injuries
4. See something, Say something, Do something
5. Live the 7 Saves

C2. Results

Sustainment activities that are part of/ and enhance safety culture:
-Corporate safety messaging is posted in conspicuous areas throughout company property.
-Employees are provided badges which highlight "Live the 7 Saves" mantra
- Team leads participate in enterprise-wide Post Event Leadership Lessons Learned after any OSHA reportable injury.
-Team participates in monthly division-wide safety meeting which cover a variety of topics which include Yellow and Red Edge bulletins on safety incidents and lessons learned; human performance excellence tools for improving situational safety awareness; monthly safety awareness topic which has applicability both at work and home; and safety improvements in the form or new tools, PPE, work processes/procedures, or site upgrades
-Health and Safety Teams channel where employees can share safety/health information and news, identify potential safety hazards and fixes
-Significant safety incidents trigger an enterprise-wide standdown meeting to discuss the event, lessons learned, refocus on principle that all injuries are preventable and leadership discussion of actions to prevent recurrence.
-Safety objectives in each field employee’s annual performance goals to ensure adherence to the safety program

A3. Recommendation 3

Ensure the Safety Risk Mitigation objective incorporates both regular and proactive risk identification activities, including wildfire risk.

B3. Actions Taken

-Zero Today enterprise safety messaging maintains focus on risk reduction by employing safety assessment and mitigation strategies prior to commencement of work. These strategies include "2 minute review", tail boarding, and pre-work equipment checks. Employee badges also contain image of the "7 saves" which are 7 short mantras that enhance work place safety and save lives.
-There are monthly safety themes which are discussed at enterprise wide safety meetings which focus on reducing risk of injury by focusing on safe habits and behaviors.

C3. Results

Activities were taking place in 2021 and continue to present
-Employees proactively look for hazards when they tailboard
-Employees routinely look for and identify hazards as they execute general duties and inform their team lead and or raise the issues in the shared Health and Safety MS Teams channel
-Company conducted enhanced fire training on types of fires, fire response and utilization of on-site suppression resource.
-Enterprise level communications provide guidance on having a questioning mindset when it comes to safety such as proactive recognition of off-normal conditions which could increase the potential for a safety incident, hazard mitigation, and supporting leaders in shaping a culture focused on safety as evidenced in supporting documentation.

Section 2. Supporting Documentation

In this section, the electrical corporation provides any additional supporting documentation that would help Energy Safety assess their organizational safety culture. These documents are listed below and provided in subsequent pages of this section.

Supporting Document 1

7saves-walk-the-line.pdf

Supporting Document 2

Two Minute Review.pdf

Supporting Document 3

Top 10 Off Normal Situations Job Aid.pdf

Supporting Document 4

TBC Health and Safety Teams Channel Screen Shot.jpg

Supporting Document 5

Shaping Safety Culture.pdf

Supporting Document 1: 7 Saves-walk-the-line.pdf

Supporting Document 2: Two Minute Review.pdf

The two-minute review allows us to enhance our situational awareness, identify potential hazards and have a questioning attitude

Why is it Important?

Situational awareness

Site-specific conditions

Questioning attitude

Conduct the two-minute review upon arriving to a new worksite, before starting a task, or when the scope of work changes

There is always time for a two-minute review

- When a potential safety hazard exists
- After extended breaks or unintentional interruptions
- Prior to interactions with risk potential equipment

TIME OUT

A two-minute review helps identify potential hazards at the immediate worksite and its surrounding location

How should it be done?

- Walk around the job site and adjacent areas
- Look for potential industrial and environmental hazards
- Identify conditions that could require additional PPE

The two-minute review can identify self-imposed pressures and potential communication errors

Never rush a job

- Time pressure
- Lack of Communications
- Work stress/fatigue

Use the two-minute review to talk about unexpected hazards and conditions and what precautions to take

How should it be done?

- Eliminate hazards; install appropriate defenses or develop contingencies before moving forward
- Verify expected results and share lessons learned
- Always leave the work area in a better condition than you found it

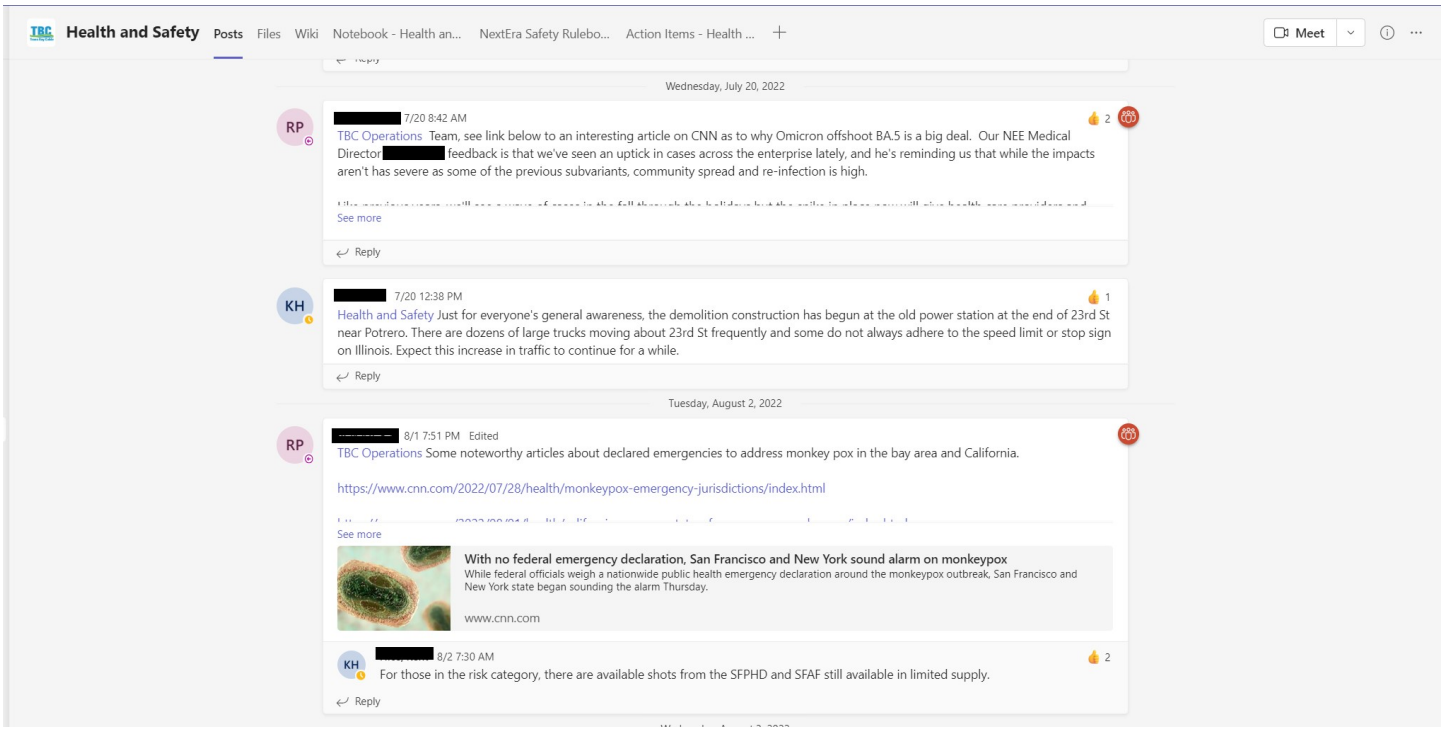
FPL

Top 10 Off-Normal Situations

ZERO TODAY! AT WORK. AT HOME. AT PLAY.

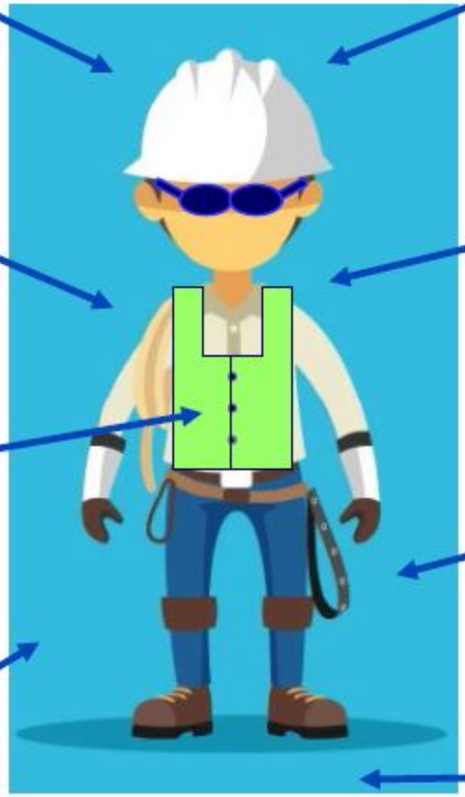
No.	Off-Normal Situation	Example	Action
1	**Working in restoration mode**	Time pressure with customers out of power	Do not rush Focus on one task at a time
		Customer interrupts repair to check on status of job	After a distraction, back up and refocus.
2	**Working/driving in adverse weather**	Driving in rain	Slow down, leave more space between vehicles, use headlights and wipers, apply Rain-X
		Working in heat	Hydrate and stretch
3	**Working with something new (crew member, apprentice, equipment, tool)**	Working with apprentice or someone new to your crew	Discuss previous experience/qualifications; Ask them for input in pre- and post-job briefing
		Working with new tool or piece of equipment	Read operating manual; do a two-minute review on how to properly use item; check for previous events associated with tool/equipment
4	**Outside event distractions (birthday, weekend, coming back to work, etc.)**	It's your/close family member's birthday	Choose to focus on work at work and birthday when you leave; communicate with crew members about potential distractions so we can all look out for one another
		You are returning from vacation	Do a two-minute review on returning to work
5	**Change in work plan or required clearance boundaries**	You are in the middle of a job and are reassigned to a different job	Clean up and secure your current work location; avoid self-imposed time pressure; do new tailboard on new job
		You are in the middle of a job and something did not go as planned	Re-tailboard with entire crew, discuss what happened
6	**Unexpected conditions in your environment (hole, slippery walkway, fence, dog, customer)**	Slippery walk surface	Identify in HAF, tape it off, set cones out
		Hole in walk path	Identify safest walk path in HAF, mark it by placing a cone
		Dog on property	Ask customer to secure it before going onto property
7	**Poor housekeeping**	Office desk is covered in papers and books, disorganized	Spend five minutes cleaning up before starting your next work task
		Truck is full of spare items and belly is not clear	Spend five minutes cleaning up before leaving yard; load vehicle in order of planned jobs to ensure material is easily accessible when needed
8	**Delays**	Time pressure from a delay in job	Do not rush Do a two-minute review prior to restarting job
9	**Improper PPE or material (or improperly used)**	You do not have right material to complete job	Stop and ask PL for correct material
		You see someone wearing regular sunglasses while working	Stop what they are doing and ask them to put on their safety glasses
10	**Insufficient MOT**	You are not able to park out of harm's way	Use safety cones and other vehicles as barriers; If you do not have enough, request MOT

Supporting Document 4: TBC Health and Safety Teams Channel Screen Shot.jpg



What does it take to be a good safety leader?

Safety Leadership

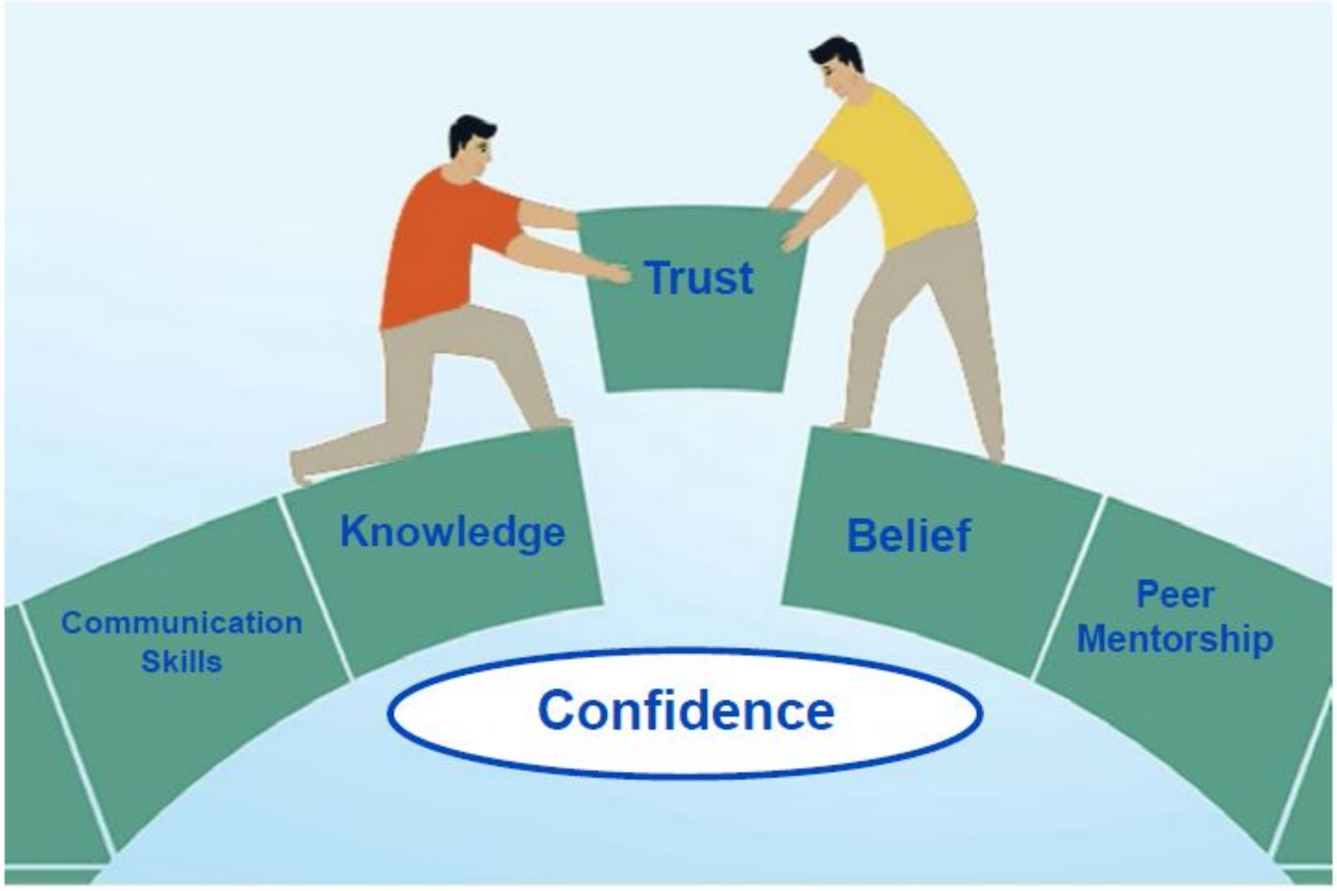


- Knowledge
- Consistency
- Relationships/ Trust
- Communication
- Vigilance
- Engagement
- Belief in the Message
- Confidence

Each characteristic contributes to a strong Safety Leader. Leadership is accountable for preventing injuries.

Confident safety leadership that inspires belief and builds trust will shape a healthy safety culture

Safety Leadership and Safety Culture



Safety leadership shapes safety culture!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