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California Wildfire Safety Advisory Board
300 Capital Mall, 5th Floor
Sacramento, CA 95814

SUBJECT: Comments of Southern California Edison, Pacific Gas and Electric Company, and San Diego Gas & Electric Company on the California Wildfire Safety Advisory Boards' Recommendations for the Office of Energy Infrastructure Safety's Annual Wildfire Safety Culture Assessment

Dear Chair, Vice Chair, and Board Members,

Southern California Edison (SCE), Pacific Gas and Electric Company (PG&E) and San Diego Gas & Electric Company (SDG&E) hereby jointly submit these comments on the July 21, 2022 Draft Recommendations of the Wildfire Safety Advisory Board (WSAB) on Safety Culture Assessment (Draft Recommendations).

INTRODUCTION

SCE, PG&E and SDG&E (collectively, Joint Utilities) appreciate the opportunity to provide comments on the recommendations by the WSAB on the Office of Energy Infrastructure Safety's (Energy Safety) annual safety culture assessment process. Joint Utilities' comments focus on two primary concerns. First, WSAB's recommendations should be consistent with the statutory requirements for obtaining safety certification. WSAB appears to recommend an expansion of the statutory requirement to show "good standing" and such recommendations should be clarified or stricken to the extent they are inconsistent with the statutory requirements for safety certification under Public Utilities Code (PUC) Section 8389(e)(2), as discussed below. Second, while the Joint Utilities agree that a safety culture assessment should be robust, many of WSAB's

recommendations aim to incorporate factors that are not typical for safety culture assessments or are more appropriately considered in other procedural venues. Adopting these recommendations would inappropriately lead to significant expansion of Energy Safety’s process, delaying the ability to timely complete the annual assessments and reducing the ability to extract meaningful results by including additional dimensions to evaluate that do not add value to Energy Safety’s SCA process.

DISCUSSION

The WSAB Should Clarify Language Regarding Meeting the Requirements of Section 8389(e)(2) for Safety Certification

First, the Joint Utilities are concerned that certain statements within the Draft Recommendations may suggest expansion of the requirements to be “in good standing” for a Safety Certification beyond the provisions of Assembly Bill (AB) 1054. Public Utilities Code Section 8389(e)(2) makes it clear that an electrical corporation can satisfy the good standing requirement by agreeing “to implement the findings of its more recent safety culture assessment.”¹ When discussing Energy Safety’s finding that SDG&E, PG&E, SCE, and Bear Valley Electric met the good standing requirement by agreeing to implement the 2021 safety culture assessment recommendations, the WSAB included a footnote stating that “[a]ccepting the OEIS recommendations is a necessary but not sufficient condition for the safety certificates.”²

Given the wording of this footnote, the Joint Utilities are not clear whether the WSAB intends the footnote commentary to (1) reflect a policy judgment that agreeing to the safety culture assessment recommendations—as provided by statute—should be insufficient to meet the “good standing” requirement, or alternatively (2) note the fact that the electrical corporations must meet several other requirements (established in Public Utilities Code Section 8389) to receive a safety certification. If the former, it is the Joint Utilities’ understanding that it would be outside of WSAB’s jurisdiction to make recommendations to Energy Safety regarding the issuance of the electrical corporations’ safety certifications, and footnote 8 could be wrongfully interpreted or construed as doing so. Because the statute clearly provides the means by which the electrical corporations may meet the “good standing” requirement of Section 8389(e)(2),³ the Joint Utilities respectfully request that the WSAB either clarify that this comment refers to the fact that the electrical corporations must meet several other requirements (established in Public

¹ Pub. Util. Code §8389(e)(2).

² Draft Recommendations at 2, fn. 8.

³ Energy Safety has also confirmed that the electrical corporations can meet the good standing requirement through an agreement to implement the recommendations of the most recent safety culture assessment. See, e.g. Energy Safety’s Final 2021 Safety Certification Guidance (July 26, 2021) at 4,

Utilities Code Section 8389) to receive safety certification or remove it from the Recommendations.

Moreover, there are other avenues than the safety certification requests by which the utilities can provide information regarding improvements and growth in their respective safety cultures. The Joint Utilities welcome innovation and continual improvement to their safety culture, which may include some of the very “stretch goals”⁴ that the WSAB seeks to better understand. As discussed below, the annual wildfire safety culture assessments address only a targeted component of the collective safety cultures at the Joint Utilities. Thus, both Energy Safety and the Commission will gain better insight regarding the holistic safety cultures of the electrical corporations through avenues such as the five-year safety culture assessments at the Commission and the board-of-director level safety reporting provided annually to the Commission, in addition to the process of the wildfire safety culture assessments. Furthermore, the quarterly notification letters also provide an update to Energy Safety and the Commission by including progress made on the current safety culture assessment recommendations. But implying a new requirement that the utilities go beyond the agreement to implement the recommendations of the safety culture assessments through their letter submissions to Energy Safety for purposes of the safety certification would impermissibly expand the requirements of Section 8389(e)(2) and should be removed.

In addition to potentially confusing the safety certification requirements, the additional recommended requirements would also be redundant with existing Energy Safety guidance currently implemented in the 2022 safety culture assessments. For instance, as part of the ongoing management self-assessment, the electrical corporations are required to report on their safety culture objectives (some of which are also equivalent to the “stretch goals” that the WSAB seeks to incorporate⁵). Thus, while recognizing the importance of owning safety and striving for continuous improvement, the Joint Utilities believe that this recommendation should be removed as Energy Safety’s safety culture assessment report and recommendations each year already account for and assess how utilities expect to grow in their safety culture maturity levels.

The Areas Evaluated Should be Appropriate for a Safety Culture Assessment

Most definitions of safety culture include key components of shared beliefs, attitudes, and values of employees within an organization. The California Public Utilities Commission (Commission) has recognized that:

...[A]n organization’s culture is the set of values, principles, beliefs, and norms shared by individuals within the organization, manifested through their planning, behaviors, and actions. A public utility with a mature safety culture has an organizational culture and governance that prioritizes safety and achieves a positive record of safe operation. I.15-08-019 further defines a

⁴ *Id.*

⁵ Draft recommendations at 3.

public utility with a mature safety culture as having an organizational culture and governance that includes:

- A clearly articulated set of principles and values with a clear expectation of full compliance.
- Effective communication and continuous education and testing.
- Uniform compliance by every individual in the organization, with effective safety metrics, recognition, and compensation, and consequences or accountability for deviating or performing at, above, or below the standard of compliance.
- Continuous reassessment of hazards and reevaluation of norms and practices.

While there are many definitions of safety culture across industries and academic literature, a common theme is that in organizations with an effective safety culture, safety is a predominant objective that permeates the entire organization and is continuously reinforced.⁶

For example, SCE's definition of safety culture is the collective set of values, principles, beliefs, norms, attitudes, behaviors, and practices that an organization's employees share with respect to risk and safety. This broadly accepted definition of safety culture forms the basis through which valid and reliable safety culture measures are developed and sets clear boundaries for the dimensions that should be measured in the assessment of an organization's safety culture. SCE's safety culture maturity model takes a robust multi-method approach to comprehensively measure and triangulate the following, evidence-based safety culture dimensions through its triennial safety culture assessment. The underlying research behind each of these dimensions help provide assurance that SCE's safety culture assessment effectively tracks the values, principles, beliefs, norms, attitudes, behaviors, and practices that contribute to organizational risk and safety. Please refer to Appendix A for a list of dimensions evaluated in SCE's triennial safety culture assessment and supporting research for each dimension.

Some of the WSAB's Draft Recommendations are primarily focused on operational risk events and/or safety outcomes, rather than safety culture, and are not supported by either the research or accepted safety culture definitions. While the Joint Utilities note the intentions behind some of these, goals and recommendations such as WSAB Draft Recommendations 6, 7, 8, 9, and 11 are not appropriate for safety culture assessments. For example, WSAB's recommended inclusions of cybersecurity⁷, climate change impact⁸ and customer perception of the utility's safety culture⁹ are not dimensions that have been supported by the available safety culture research literature and should not be

⁶ Order Instituting Rulemaking to Develop Safety Culture Assessments for Electric and Gas Natural Utilities, R.21-10-001, California Public Utilities Commission (October 7, 2021) at 11.

⁷ Draft Recommendations at 6.

⁸ Draft Recommendations at 6-7.

⁹ Draft Recommendations at 10, recommendations #8, 9, 10, 11, and 12.

included in any assessment of an IOU's safety culture. As these metrics have not been evaluated for their ability to contribute to safety culture or improvements in safety culture, they risk reducing the validity of the assessment itself and the ability to draw meaningful conclusions from the results.

The WSAB Should Reconsider Recommendations Expanding the Scope of the Wildfire Safety Culture Assessments in Light of Existing Avenues for Review

While the WSAB notes its appreciation of the “care that OEIS has taken to avoid duplication with the California Public Utilities Commission’s [Commission] broader safety culture assessment work and mission,”¹⁰ the Joint Utilities are concerned that many of the WSAB’s recommendations, if implemented, would do precisely that. In several instances, the WSAB’s recommendations would expand the scope of the annual wildfire safety culture assessments to include enterprise-wide operations that are outside the scope of the Joint Utilities’ Wildfire Mitigation Plans and wildfire mitigation efforts. For instance, several of the questions posed by the WSAB when discussing the inclusion of cybersecurity and the impacts of climate change on safety, as well as labor recommendations regarding the use of Qualified Electrical Workers for utility projects (in addition to being outside the scope of a traditional safety culture assessment) are better addressed in other forums, as discussed below.

While the Joint Utilities do not necessarily object to the WSAB’s considerations regarding community, employee, and customer safety as expressed in the Draft Recommendations, there are more appropriate tools in place where many of these recommendations may be better reviewed and implemented.

First, many of the WSAB’s recommendations regarding community safety practices, such as PSPS restorations, utility practices to address power shutoff impacts on critical facilities, and customer safety during wildfire-related outages are already addressed in the utilities’ Wildfire Mitigation Plans,¹¹ as well as in the PSPS Rulemaking at the Commission.¹² It would be imprudent to expand the scope of the safety culture assessments to include those issues given the potential for contradiction and regulatory confusion. The safety culture assessments should not be an area where existing regulations and practices may be second guessed or expanded.

Moreover, while these recommendations may impact community safety, they fall outside of the scope of a “safety culture” which is more commonly defined to focus on the internal values, norms, and behaviors of an organization. As the Commission explained:

A public utility whose organizational culture and governance prioritize[s] safety, makes safety the primary objective of the entire organization, encourages employees to report safety concerns with non-punitive

¹⁰ Draft Recommendations at 2.

¹¹ See, e.g. Pub. Util. Code §§ 8386(c)(18-20).

¹² R.18-12-005; see also Pub. Util. Code §8386(c)(10).

outcomes, and that achieves a positive record of safe operation, can be described as possessing a high-functioning safety culture.¹³

Both Energy Safety and the Commission have several existing tools to facilitate review and stakeholder input regarding the important issues addressed in the WSAB's recommendations regarding community and customer safety. But given their external and operational focus, the Joint Utilities believe they are better addressed outside of the annual safety culture assessments.

Second, it is important that Energy Safety continue to complement and not contradict the efforts of the Commission to conduct holistic and enterprise-level safety culture assessments of regulated utilities. As required by Public Utilities Code §8386.2, the electrical corporations are subject to a complete safety culture assessment by the Commission, performed by an independent third-party evaluator at least every five years. This assessment is in addition to the annual safety culture assessments performed by Energy Safety and provides a venue for the Commission to perform a more expansive review of the utilities' enterprise-wide safety cultures, which could include areas such as cybersecurity. Like Energy Safety, the Commission recognizes the targeted nature of the "annual AB 1054 safety culture assessments [which] are intended to be complementary, and not a replacement for, broader ongoing Commission efforts to improve safety culture within utilities" as addressed in the ongoing Rulemaking.¹⁴

Additionally, the Commission exercises its oversight over the utilities' safety culture in several other proceedings. As noted in the ongoing safety culture assessment rulemaking,¹⁵ "the Commission has opened an array of proceedings to drive utilities to improve their safety practices and policies to avoid the occurrence of" disasters and related potential costs to ratepayers.¹⁶ And the five-year safety culture assessments for the electrical corporations required by Senate Bill 901 "shall include review of the AB 1054 wildfire-related assessments conducted by OEIS and expand into broader utility organizational structure, processes, and infrastructure."¹⁷ Because of these existing opportunities for a holistic review of the electrical corporations' safety cultures, the WSAB should remove its recommendations to expand the scope of the annual safety culture assessments.

To facilitate Energy Safety's ability to successfully conduct an annual assessment and produce a report with recommendations to be implemented each year, the Joint Utilities recommend that the scope of the annual wildfire safety culture assessments continue to focus on the organizational cultures regarding wildfire safety and not seek to fold in

¹³ Order Instituting Investigation to Determine Whether Southern California Gas Company's and Sempra Energy's Organizational Culture and Governance Prioritize Safety, I.19-06-014, California Public Utilities Commission (June 27, 2019).

¹⁴ *Id.* at 7.

¹⁵ R.21-10-001.

¹⁶ For a list of existing Rulemakings addressing safety culture, see Order Instituting Rulemaking (R.21-10-001) at 3-4.

¹⁷ Order Instituting Rulemaking at 6.

additional maturity targets that are beyond the scope of wildfire and are better suited for the Commission's comprehensive safety culture assessment.

CONCLUSION

The Joint Utilities appreciate the opportunity to submit these comments.

If you have any questions, or require additional information, please contact me at michael.backstrom@sce.com.

Sincerely,

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APPENDIX A

Dimensions Assessed in SCE's Triennial Safety Culture Assessment

- Equipment, tools, machinery, and maintenance (Bureau of Labor Statistics, 2006)
- Hazard awareness and control (Allahyari et al., 2014 and Barling, Loughlin, & Kelloway, 2002)
- Quality of safety procedures (meta analytic support from Christian et al., 2011)
- Safety mission, vision and values (Gallup, 2017)
- Employee safety performance (Cox et al., 2004)
- Work planning (Suraji et al., 2001)
- Organizational learning and improvement (Wachter & Yorio, 2014)
- Contractor management (Yemenu & McCartin, 2010)
- Emergency readiness (OSHA, 2002)
- Safety training and development (Robson et al., 2010; Bohr, 2000; 2002; Held et al., 2002; Zinkel, 2017)
- Health and well-being (Lombardi, Folkard, Willetts, & Smith, 2010; Galinsky et al., 2001)
- Within and between team safety communication (Sulzer-Azaroff and Santamaria, 1980)
- Safety responsibility (Vance, 2006; Jones & Wuebker, 1993)
- Person factors e.g., safety responsibility (Vance, 2006; Jones & Wuebker, 1993; Christian et al., 2009; Turner et al., 2010; Curcuruto, Parker, & Griffin 2019; Nahrgang et al., 2010; Probst and Estrada, 2010; Probst, Brubaker, & Barsotti, 2008)
- Management safety commitment (Beus et al., 2010)
- Supervisor safety commitment (Christian et al., 2009 meta analysis; Yanar, Lay, & Smith, 2018)
- Safety input (Detert & Burriss, 2016; Cigularov, Chen, & Rosecrance, 2010; Vance, 2006)
- Downwards safety communication (Zohar & Luria, 2003; Beus et al., 2011)

Works Cited

Albert A., & Hallowell M.R. (2017). Modeling the role of social networks on hazard recognition and communication. *Practice Periodical on Structural Design and Construction Online*.

Allahyari, T., Rangi, N., Khalkhali, H., & Khosravi, Y. (2014). Occupational cognitive failures and safety performance in the workplace. *International Journal of Occupational Safety and Ergonomics*, 20(1), 175–180.

- Barling, J., Loughlin, C., & Kelloway, E. K. (2002). Development and test of a model linking safety-specific transformational leadership and occupational safety. *Journal of Applied Psychology, 87*(3), 488–496.
- Beus, J. M., Payne, S. C., Bergman, M. E., & Arthur, W., Jr. (2010). Safety climate and injuries: An examination of theoretical and empirical relationships. *Journal of Applied Psychology, 95*(4), 713–727.
- Bohr, P. C. (2000). Efficacy of Office Ergonomics Education. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 44*(6), 696–699.
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology, 64*, 89–136.
- Christian, M. S., Bradley-Geist, J. C., Wallace, C., & Burke, M. (2009). Workplace safety: A meta-analysis of the roles of person and situation factors. *Journal of Applied Psychology, 94*(5), 1103–27.
- Cigularov, K. P., Chen, P. Y., & Rosecrance, J. (2010). The effects of error management climate and safety communication on safety: A multi-level study. *Accident Analysis and Prevention, 42*(5), 1498–1506.
- Clarke, S. (2010). An integrative model of safety climate: Linking psychological climate and work attitudes to individual safety outcomes using meta-analysis. *Journal of Occupational and Organizational psychology, 83*(3), 553–578
- Cox, S., Jones, B., & Rycraft, H. (2004). Behavioural approaches to safety management within UK reactor plants. *Safety Science, 42*, 825–839
- Curcuruto, M., Parker, S. K., & Griffin, M. A. (2019). Proactivity towards workplace safety improvement: An investigation of its motivational drivers and organizational outcomes. *European Journal of Work and Organizational Psychology, 28*(2), 221–238
- Detert, J. R., & Burris, E. R. (2016). Can your employees really speak freely. *Harvard Business Review, 94*(1), 80–87
- Dvorak, N. (2017). Three ways mission-driven workplaces perform better. *Gallup online*. <https://www.gallup.com/workplace/236279/three-ways-mission-driven-workplaces-perform-better.aspx>
- Giebe, K. (2013). Eliminating gaps in PPE. *The Welder*. <https://www.thefabricator.com/thewelder/article/safety/eliminating-gaps-in-ppe>
- Jiang, L. & Probst, T. M. (2014). Organizational communication: A buffer in times of job insecurity? *Economic and Industrial Democracy, 35*(3), 557–579

Jones, J. W., & Wuebker, L. J. (1993). Safety locus of control and employees' accidents. *Journal of Business and Psychology, 7*(4), 449–457

Lombardi, D. A., Folkard, S., Willetts, J. L., & Smith, G. S. (2010). Daily sleep, weekly working hours, and risk of work-related injury: US National Health Interview Survey (2004-2008). *Chronobiology International, 5*, 1013-30

Marino, M. (2018). By the numbers: Proven ways to reduce construction workplace accident. Manufacturing Net Online. <https://www.manufacturing.net/safety/article/13196219/by-the-numbers-proven-ways-to-reduce-construction-workplace-accidents>

Nahrgang, J. D., Morgeson, F., & Hofmann, D. A. (2010). Safety at work: A meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes. *Journal of Applied Psychology, 96*(1), 71-94.

Parke, M. R., Weinhardt, J. M., Brodsky, A, Tangirala, S. & DeVoe, S. E. (2018). When daily planning improves employee performance: The importance of planning type, engagement, and interruptions. *Journal of Applied Psychology, 103*(3), 300-312.

Pintelon, L., & Muchiri, P. N. (2014). Safety and maintenance. In *Handbook of Maintenance Management and Engineering, Springer, London*, 613-648.

Probst, T. M., Brubaker, T. L., & Barsotti, A. (2008). Organizational injury rate underreporting: The moderating effect of organizational safety climate. *Journal of Applied Psychology, 93*(5), 1147–1154.

Probst, T. M., & Estrada, A. X. (2010). Accident under-reporting among employees: Testing the moderating influence of psychological safety climate and supervisor enforcement of safety practices. *Accident Analysis and Prevention, 42*(5), 1438-44.

Sulzer-Azaroff, B., & de Santamaria, M. C. (1980). Industrial safety hazard reduction through performance feedback. *Journal of Applied Behavior Analysis, 13*(2), 287–295.

Suraji, A., Duff, A. R., & Peckitt, S. J. (2001). Development of causal model of construction accident causation. *Journal of construction engineering and management, 127*(4), 337-344.

Turner, N., Chmiel, N., Hershcovis, S., & Walls, M. (2010). Life on the line: Job demands, perceived co-worker support for safety, and hazardous work events. *Journal of Occupational Health Psychology, 15*(4), 482-93

U.S. Department of Labor Occupational Safety and Health Administration (2002). OSHA Fact Sheet. <https://www.osha.gov/sites/default/files/publications/factsheet-lockout-tagout.pdf>

Vance, R. J. (2006). Employee engagement and commitment. *Society for Human Resource Management Online*.
<https://www.shrm.org/about/foundation/research/Documents/1006EmployeeEngagementOnlineReport.pdf>

Wachter, J. K. & Yorio, P. L. (2014). A system of safety management practices and worker engagement for reducing and preventing accidents: An empirical and theoretical investigation. *Accident Analysis and Prevention*, 68, 117-130

Yanar, B., Lay, M., & Smith, P. M. (2018). The interplay between supervisor safety support and occupational health and safety vulnerability on work injury. *Safety Health Work*, 10(2), 172-179

Yemenu, D., & McCartin, K. (2010). Contractor management best practices: Using data for improved decision making. *ISN Software Australia Pty Ltd., Australia Square, New South Wales*.

Zohar, D., & Luria, G. (2003). The use of supervisory practices as leverage to improve safety behavior: A cross-level intervention model. *Journal of Safety Research*, 34(5), 567-77.