Safety Culture Assessment Rulemaking

October 31, 2022

R.21-10-001: ORDER INSTITUTING RULEMAKING TO DEVELOP SAFETY CULTURE ASSESSMENTS FOR ELECTRIC AND NATURAL GAS UTILITIES



Welcome and Introduction

1:00pm-1:20pm

Desired Outcomes

- Work to build consensus on goals and guiding principles for safety culture assessments.
- Receive initial comments on SPD proposed approach for integration of feedback into staff proposal.
- Communicate next steps for the proceeding.

Meeting Agenda

Time	Topic	
1pm-1:20pm	Welcome, Introduction, and Opening Remarks	
1:20-2:00pm	Party Presentations on Guiding Principles and Goals Joint UtilitiesPublic Advocate's Office	
2:00-2:20pm	SPD Presentation	
2:20-2:50pm	Facilitated Q&A discussion	
2:50-3:00pm	Closing Remarks and Next Steps	

Virtual Housekeeping

Recording; Slides

- Please note that this meeting is being recorded
- Workshop recording and slides will be sent to the service list and posted on the CPUC website after the meeting

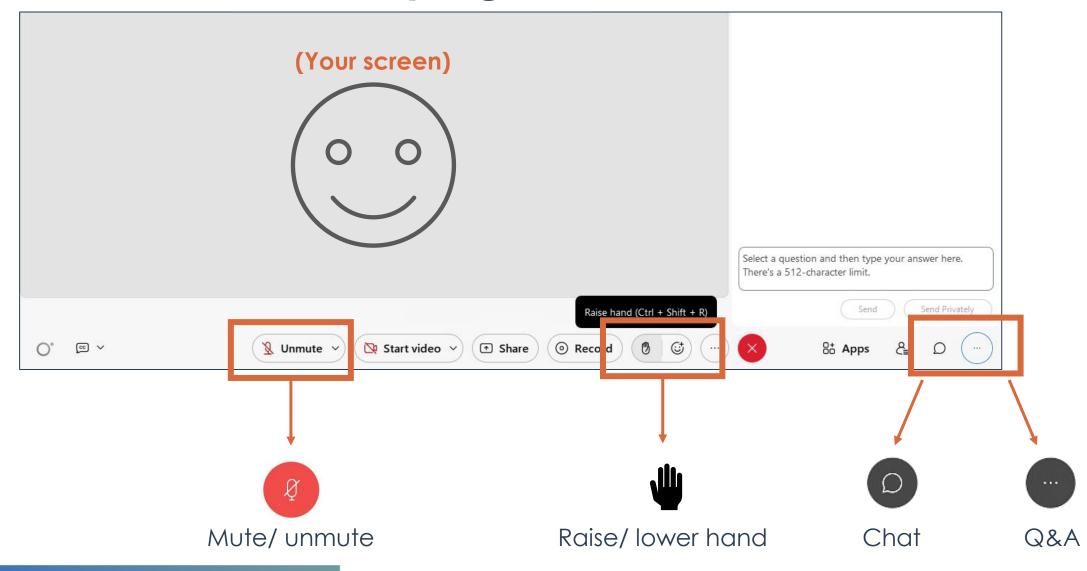
Questions

- Please type questions into chat, use Q&A feature, or raise hand
- Q&A sessions throughout presentations, if time permits + longer discussion at the end of workshop
- Staff will follow to respond to any unanswered (or additional) questions after the workshop

Timing

- To be respectful of everyone's time, we will maintain scheduled starting times for each presentation outlined in the agenda

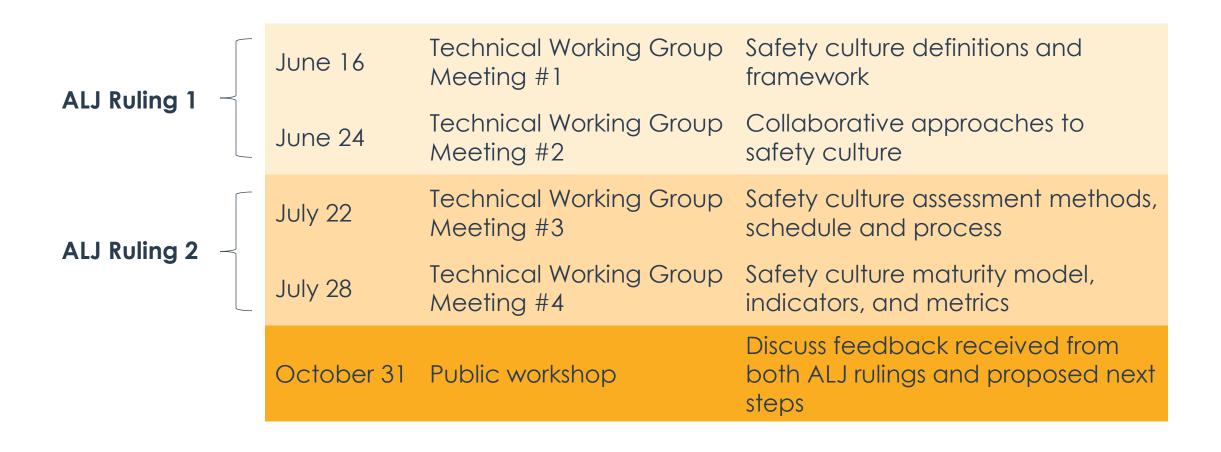
Virtual Housekeeping, Continued



Commissioner Opening Remarks

Proceeding Background

R.21-10-001 Timeline to date



July ALJ Ruling Comment Summary

- The CPUC should set a framework for the IOUs: general agreement from parties in the value of adopting a (general/broad) safety culture framework to use in assessments
- Use INPO instead of PURE for the framework: universal support among the four large IOUs for using the Institute of Nuclear Power Operations' (INPO) safety culture framework ("Traits of a Healthy Nuclear Safety Culture") instead of the PURE model
- Share best practices and lessons learned, potentially with a third party: some suggested that this be achieved through potential creation of a third-party group/ facilitator similar to INPO or through establishment of a peer utility group (PG&E, SCE, SDG&E, SBUA)
- And/or, create a voluntary self-reporting initiative: emphasis on establishing a non-punitive reporting initiative or group to
 foster trust (Cal Advocates, PG&E, SDG&E, SBUA, Cal Advocates)
- **Don't include safety culture in inspections/ audits:** fear that this would hinder trust and lead to penalties for safety culture observations (PG&E, SCE, SDG&E, SoCalGas)
- Opposing views on whether to include contractors in definitions: some utilities think contractors should not be included in the definition of safety culture and subsequent assessment process (SDG&E, SoCalGas, SCE); SBUA and Cal Advocates think they should
- The Commission should reflect on its own safety culture: and think about how to strengthen, it as discussed in some of the workshops (SBUA, SoCalGas)

September ALJ Ruling Comment Summary

- Pause first to revisit goals and guiding principles: before addressing other questions, come to a consensus on proceeding goals and guiding principles (SDG&E, SoCalGas, PG&E)
- **Differing opinions on timeline/ schedule:** while some parties recommend a synchronized schedule to foster learning between utilities and avoid complication (SCE, PG&E), others recommend adopting a staggered schedule that eventually aligns with RAMP (Cal Advocates)
- **Delay initial assessment until after 2023:** utilities argue that starting assessments in 2023 would be premature (SDG&E, PG&E) and that the new framework should be phased in to allow completion of planned/ongoing assessments (SCE, SoCalGas); Cal Advocates suggests that SDG&E and SCE start assessments in 2023
- **Sync requirements with Energy Safety:** consider/incorporate Energy Safety's process into a single assessment process (SDG&E, PG&E); convene stakeholders to integrate/align requirements (PG&E, Cal Advocates)
- Lack of alignment of PURE with internal maturity models: utilities argue that the PURE model is incompatible because it
 does not sufficiently include critical components of safety culture (SDG&E, SCE, PG&E); Cal Advocates objects
- **Using leading outcomes/ indicators, including SPMs:** adopt leading metrics empirically linked to safety culture and outcomes (SCE, Cal Advocates); establish goals first, then develop indicators that could monitor those goals (SoCalGas, PG&E); leverage Safety Performance Metrics (SDG&E, SoCalGas, PG&E, and SDG&E)
- Compare results over time, not across utilities: monitor improvement over time within a utility (SDG&E, Cal Advocates, and PG&E); use evidence-based models (SCE) or the same third-party assessor (SoCalGas) to ensure comparability
- **Differing opinions on entity to conduct the assessments:** designating a specific entity would unnecessarily restrict utilities and limit the potential pool of assessors (SCE and Cal Advocates); more work is needed to answer this question (SDG&E, PG&E), but a third-party, INPO-like structure that helps conduct assessments could be helpful (SDG&E, PG&E, SoCalGas)

Joint Utility Presentation

PG&E, SCE, SDG&E, SoCalGas

1:20-1:45pm



Proposed Safety Culture Assessment Goal & Principles

» Proposed Goal:

- Consistent with prior Commission statements, the Joint Utilities propose that the goal of the safety
 culture assessment should be "to influence and support the development and maintenance of healthy
 safety cultures through non-punitive engagement, collaboration, learning, and continuous improvement."
- The proposed goal is consistent with several Core Principles, outlined below and detailed in the following slides, along with prior Technical Working Group presentations.
 - CPUC Focus on Influence and Support
 - Non-punitive Engagement and Collaboration
 - Learning and Continuous Improvement
 - Prevent Potential Unintended Consequences and Recognize Limitations
- "Learning, proactive engagement, and continuous improvement are essential elements of improving safety cultures." (Technical Working Group #3, Slide 18)

Core Principle – CPUC Focus on Influence and Support

- The Commission intends to "influence and support the development and maintenance of healthy safety cultures" through the Assessment Framework
 - Commission can best influence a healthy safety culture by focusing on collaboration, engagement, learning, and forward-looking improvement – not punishment or enforcement
 - Commission experts have suggested the Commission voluntarily undertake its own third-party led safety culture assessment to understand its own culture to best influence utility safety culture (Technical Working Group #1, Slide 44)
- » Safety Policy Division has previously recognized the challenges around influencing versus mandating safety culture, with focus on influencing as a preferred pathway (Technical Working Group #4, Slide 14)
 - As Dr. Schulman noted, it is important "to find the appropriate strategies to motivate companies to engage in self-development processes for safety culture, and to help them along the way, without giving direct instructions."
 (Technical Working Group #2, Slide 33)
- » To focus on influence and support, assessments should explicitly be non-punitive
 - Safety Culture Assessments should not become enforcement mechanisms but help facilitate growth through learning

Core Principle – Engagement and Collaboration are Essential

- The development, implementation, evaluation, and refinement of the Assessment Process and Framework should be advanced through engagement and collaboration with utilities
 - Assessment Framework should be developed with Utilities because we ultimately own our safety culture and as the Commission's panel of safety culture experts have highlighted, unilateral regulation inhibits the development of a strong safety culture
- Prior workshops and discussions similarly highlighted the importance of engagement and collaboration from the experiences of other regulators and organizations. For example, the Canada Energy Regulator highlighted the following as key to their success:
 - Positively influence safety outcomes through outreach, education and collaboration
 - Collaborate with industry associations and other regulators to share and implement best practices
 - Develop effective partnerships based on relationship building and trust focused on collective safety culture learning
- "Other regulators and organizations have prioritized collaboration from the onset of their safety culture efforts through distinct activities" (Technical Working Group #2, Slide 15)

Core Principle – Foster Learning and Continuous Improvement

- The Commission's Assessment Framework should explicitly and meaningfully foster and advance learning and continuous improvement
 - Assessment Framework and Safety Culture Model should be demonstrated to provide valid (expected) and reliable (consistent) results
 - Assessments should focus on opportunities to learn and improve
- » Safety Policy Division's Guiding Principles directly address learning and continuous improvement
 - "Ensure that safety culture assessments, and resulting recommendations, are tied to tangible IOU safety-related behaviors and outcomes"
 - "Provide methods to measure and monitor IOU safety culture improvements resulting from the implementation of recommendations"
 - "Reflect commitment to continuous safety improvement and learning based on practical experience and research evidence"
- » Prior workshops and discussions also highlighted the necessity of this focus
 - "We know that to improve safety culture, we need to commit to continuous learning and improvement." (Technical Working Group #2, Slide 13)

Core Principle – Prevent Potential Unintended Consequences and Recognize Limitations

- » Prevent potential unintended consequences, such as:
 - Assessment results used in a punitive fashion, thereby reducing trust and hindering learning and growth
 - Assessment activities that are duplicative, leading to survey fatigue and diminishing data quality
 - Assessment activities that negatively impact operations (e.g., hindering field organization's capacity to perform work)
 - Assessment framework that does not inform a holistic approach to safety culture, potentially leading to efforts with limited impact on strengthening safety culture and improving safety performance
- » Safety Policy Division's Guiding Principles implicitly acknowledge limitations and the need to balance
 - "Coordinate with, but not duplicate, existing safety and reporting requirements..."
 - "Result in meaningful information sharing among regulated utilities"; though the second clause indicates an intent to advance comparability, rather than focusing on sharing, learning, and continuous improvement
- » Utilities also suggest recognition of the following:
 - As other safety culture experts have stated previously, "safety culture science is still immature and evolving" (Technical Working Group #3, Slide 18)
 - Safety culture assessments are not quantitatively comparable across IOUs, but are useful tools to influence and promote learning, proactive engagement, and continuous improvement through information sharing among regulated utilities
 - Utilities have limited ability to influence and control external stakeholder culture Utilities agree with the Commission that we
 must be the owners of our safety culture. This foundational principle must also be applied to the organizations with whom we
 contract; therefore, Utilities should not be held responsible for the safety culture of our contractors or other third-party entities
 (e.g., local governments)

18

Conclusion

- » The Joint Utilities' Proposed Safety Culture Assessment Goal and Core Principles focus on non-punitive engagement, collaboration, learning, and continuous improvement, with:
 - Commission focus on influencing and supporting safety culture
 - Utility engagement and collaboration in assessment framework development, implementation, evaluation and refinement
 - Commitment to learning and continuous improvement
 - Measures to prevent potential unintended consequences and recognition of limitations

Public Advocates Office

1:45-2:00pm



Guiding Principles Recommendations

R. 21-10-001

Mina Botros | October 31, 2022

Cal Advocates Goals

- Promote Participation from All Contractors
- II. Continuous Learning
- III. Commitment to Continuous Safety Improvement

I - Promote Participation from All Contractors

Play a significant role in the safety performance of an organization.

- 2. Depending on utility, contractors may perform majority of critical safety work such as vegetation management and pipeline construction.
- 3. IOUs do have much control over their contractors.
 - IOUs set the contractual requirements for contractors to be able to bid for work.
 - Over time, IOUs can require that their contractors are trained, equipped and supervised similarly to the IOUs direct employees.

II - Continuous Learning

Staggered Schedule		Synchronized Schedule
Advantages	 Allow the Commission and stakeholders to: A. Dedicate appropriate resources and attention to each utility assessment. B. Make incremental changes to assessment guidelines over time, rather than waiting until the next four-year cycle. Explicit tie-in between the safety culture assessments and risk management and funding processes. 	Implement the safety maturity model and guideline improvements in a coordinated timeframe once every four years.
Disadvantages	 Less conducive to comparison across utilities since the results will not be available for contemporaneous comparison. 	 Commission and stakeholders will have to review each utility's assessment simultaneously, resulting in less scrutiny for each assessment.

III - Commitment to Continuous Safety Improvement

The Commission needs a process for what happens after third-party Safety Culture Assessments (SCAs), similar to the process after Energy Safety's SCAs

- The assessor delivers an SCA draft report.
- The utility provides a response to the draft report.
- The assessor issues an SCA final report.
- Within 10 business days, utility submits a sworn declaration from an officer that they will implement all findings of the SCA.
- SPD submits a resolution within 15 business days for the Commission to adopt the SCA findings, which will include the sworn declaration.
- The utility issues an improvement plan via tier 2 Advice Letter within 60 days to act on all findings.

For any finding that the utility opposes, SPD should request the Commission to open an Oll.

III - Commitment to Continuous Safety Improvement (cont.)

PU Code References

PU Code §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 performed pursuant to **Section 8386.2** and paragraph (4) of subdivision (d), if applicable.

PU Code §8386.2 The commission shall require a safety culture assessment of each electrical corporation to be conducted by an independent third-party evaluator. The commission shall set the schedule for each assessment, including updates to the assessment at least every five years. The electrical corporation shall not seek reimbursement for the costs of the assessment from ratepayers.



Thank you!

Safety Policy Division

2:00-2:20pm

Introduction

Focusing on the following guiding principle: "Reflect commitment to continuous safety improvement and learning based on practical experience and research evidence."

What this means:

- We know our understanding will evolve over time based on what we learn from assessments
- We can think of the first round of assessments as a pilot program
- We can modify our assessment process based on what works, what doesn't work, and potential blind spots

Challenges

- 1. We want to get started but want to be sure that our foundation reflects consensus on goals and guiding principles.
- 2. Utilities prefer the Institute of Nuclear Power Operations' (INPO) safety culture framework ("Traits of a Healthy Nuclear Safety Culture"), but we need a way to link the comprehensive assessments to measurable indicators of safety culture to track improvement over time.
- 3. We need to make sense of and integrate CPUC's assessment process with Energy Safety requirements, but we do not know exactly what we're integrating yet.
- 4. Parties and SPD have indicated support for a third-party facilitator or evaluator to assist in safety culture efforts, but we lack consensus on what that group would do, its role within the proceeding, and how to establish it.

Staff proposed framework/ process

1. Use the INPO's 10 Traits as the overarching framework for the assessment process

- This framework is broad enough to encompass fundamental elements of safety culture and aligns with existing work underway at the utilities.
- It provides a structure for the comprehensive assessments, which will investigate underlying issues that are impeding progress to safety culture improvement.

2. Guide and monitor improvement in safety culture over time through annual evaluations

- By integrating information including PURE's Tier 2 Focus Areas and Tier 3 Indicators into corresponding traits within the INPO framework, we can determine what will be tracked/reported on for annual self-improvement evaluations.
- This would provide utilities with a tool for developing quantitative strategies for improvement using the PURE maturity model's functional process.
- We would align the annual self-improvement evaluations with Energy Safety's reporting where possible to avoid duplication.

Background: INPO and PURE framework highlevel comparison

INPO "Traits of a Healthy Nuclear Safety Culture"

Individual Commitment to Safety:

- 1. Personal Accountability
- 2. Questioning Attitude
- 3. Effective Safety Communication

Management Commitment to Safety:

- 4. Leadership Safety Values and Actions
- 5. Decision-Making
- 6. Respectful Work Environment

Management Systems:

- 7. Continuous Learning
- 8. Problem Identification and Resolution
- 9. Environment for Raising Concerns
- 10. Work Processes

PURE

- 1. Strategy
- 2. Risk Assessment
- 3. Profit Before Safety
- 4. Just Culture
- 5. Safety Leadership
- 6. Managerial Compliance
- 7. Safety Communication
- 8. Safety Competence
- 9. Lessons Learned
- 10. Corrective and Preventative Actions (CAPA)

Background: INPO and PURE framework high-level comparison (continued)

INPO

10 Traits

Attributes within each trait

PURE

10 Functional Domains (Tier 1)

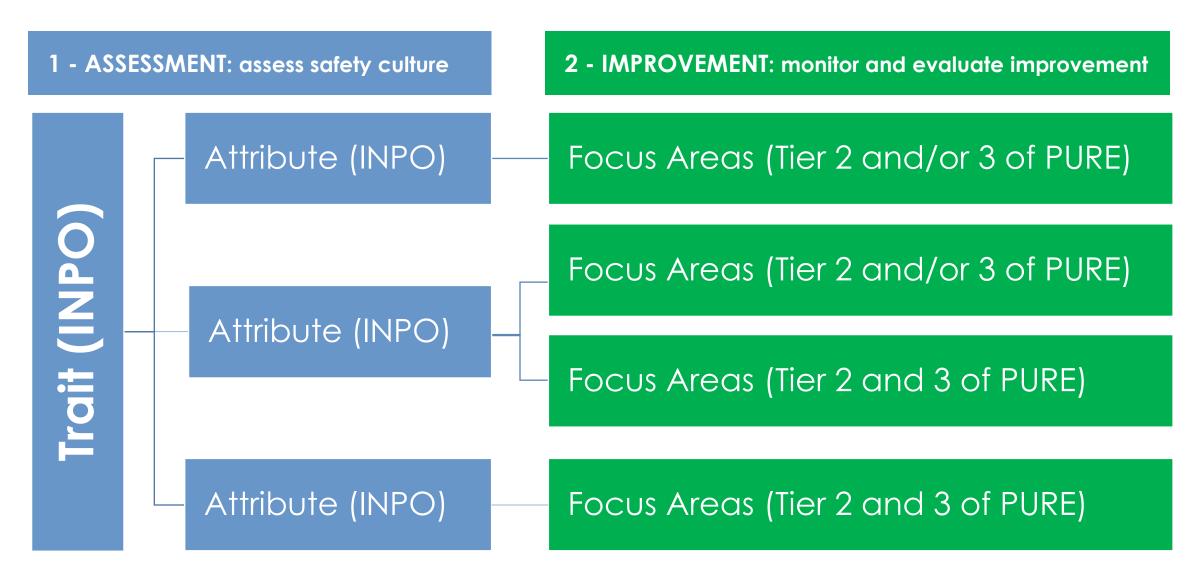
Focus Areas within each domain (Tier 2)

Indicators (Tier 3)

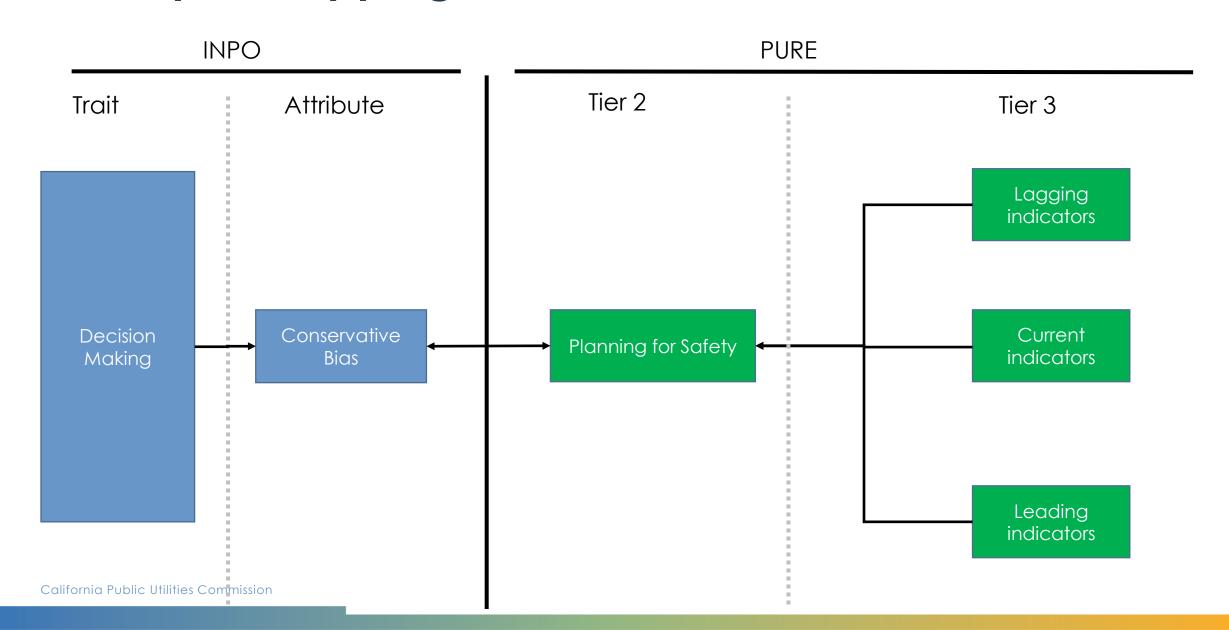
What does integrating PURE into INPO entail?

- 1. Compare the INPO framework and PURE model framework.
- 2. Identify and address the differences and similarities between the two.
- 3. Determine which components (INPO attributes; PURE T2 Focus areas and T3 Indicators) to use from each for the annual self-assessments.
- 4. Determine how this affects the assessment methodologies and application/approach.

Proposed CPUC safety culture model structure



Example mapping of INPO to PURE



Proposed safety culture framework activity cycle

Model and process modifications for next cycle



Evaluation and Improvement of Model and Framework

- Conducted by CPUC and/or independent organization.
- Cross-sectional evaluation of (1) improvement focus areas and (2) assessment results for industry.

Comprehensive Safety Culture Assessment

- •Every 4/5 years; comprehensive; conducted by an independent assessor.
- Qualitative and quantitative components.

•Involves:

- Multi-method assessment of safety culture using Traits and Attributes of model (blue components in previous slides).
- Longitudinal assessment of Improvement
 Focus Areas and annual improvement results
 to determine actual impact on safety culture
 in relation to the comprehensive assessment
 of Traits and Attributes; recommend
 modifications to Improvement Focus Areas for
 next cycle.
- Output of comprehensive assessments used for annual improvement plans and to modify Improvement Focus Areas for next cycle (and cross-sectional evaluation)

Self-Improvement Evaluation

- Annual; focus on certain functional "Improvement Focus Areas" that support safety culture improvement and are linked to a Trait of the INPO framework.
- Primarily quantitative for tangible improvement monitoring in between assessments.

• Involves:

- Self-evaluation by Utility leadership using indicators of Improvement Focus Areas of model. Indicators include some that are common to all utilities, and others that are utility specific.
- Output monitored annually and evaluated in relation to model Traits and Attributes in comprehensive safety assessment (blue)
- Incorporates input from cycle's longitudinal assessment conducted every 4/5 years and cross-sectional study of Focus Areas and indicators.

CPUC/ Independent Organization and Utility Monitoring

- Monitoring of results.
- Annual Reporting at Safety Update Briefings to Commission.
- Safety Culture Promotion Activities.

Suggested next steps

- Continue to integrate/ map INPO Attributes with PURE Focus Areas (T2) and Indicators (T3), determining additional/ alternative attributes and indicators as needed.
- Once complete, compare the integrated Attributes/Focus Areas to Energy Safety's annual requirements to figure out how to synchronize CPUC and Energy Safety annual reporting, where possible.
- 3. Determine analogous annual requirements for gas utilities.
- 4. Develop a pilot program for the assessment process (including the comprehensive assessments and annual self-improvement evaluations).
- 5. Determine the role of a third-party evaluator and/ or facilitator in assisting with assessments and promoting ongoing learning within the industry.

Facilitated Q&A Discussion

2:20-2:50pm

Questions

Please raise hand, use chat, or use Q&A feature



Closing Remarks and Next Steps

2:50-3:00pm

Commissioner Closing Remarks

Next Steps

THANK YOU