Safety Culture Assessment Rulemaking

February 24, 2023, Technical Working Group

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

California Public Utilities Commission

Welcome, Introduction, and Opening Remarks

9:00am-9:10am

Desired Outcomes

1. Work to edit and build consensus on Draft Safety Culture Framework.

2. Communicate next steps for the Draft Safety Culture Framework and Safety Policy Division Staff Proposal.

Meeting Agenda

Time	Topic
9:00am-9:10am	Welcome, Introduction, and Opening Remarks
9:10am-9:30am	SPD Presentation on Draft Safety Culture Framework
9:30am-10:30am	Party Presentations on Draft Safety Culture Assessment Framework • Cal Advocates *(45 mins)* • Joint Utilities *(15 mins)*
10:30am-10:45am	Break
10:45am-11:45am	Discussion and Next Steps
11:45am-12:00pm	Closing Remarks

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 meeting

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

Virtual Housekeeping, Continued

(Your screen)

Mute/ unmute

Raise/ lower hand

Chat

Q&A
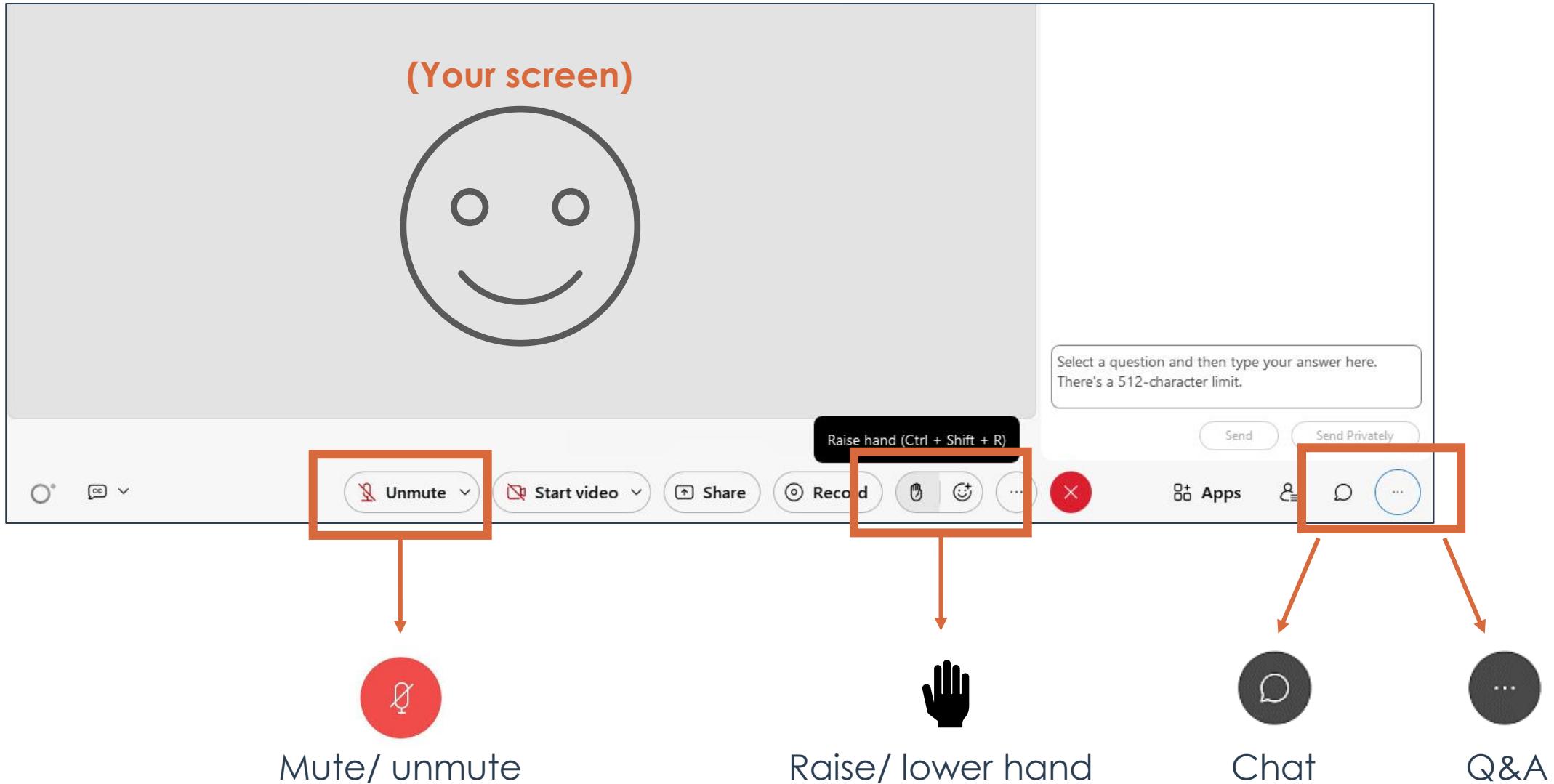
Opening Remarks

Commissioner Houck; Director Thomas Jacobs

Safety Policy Division Presentation on Draft Safety Culture Framework
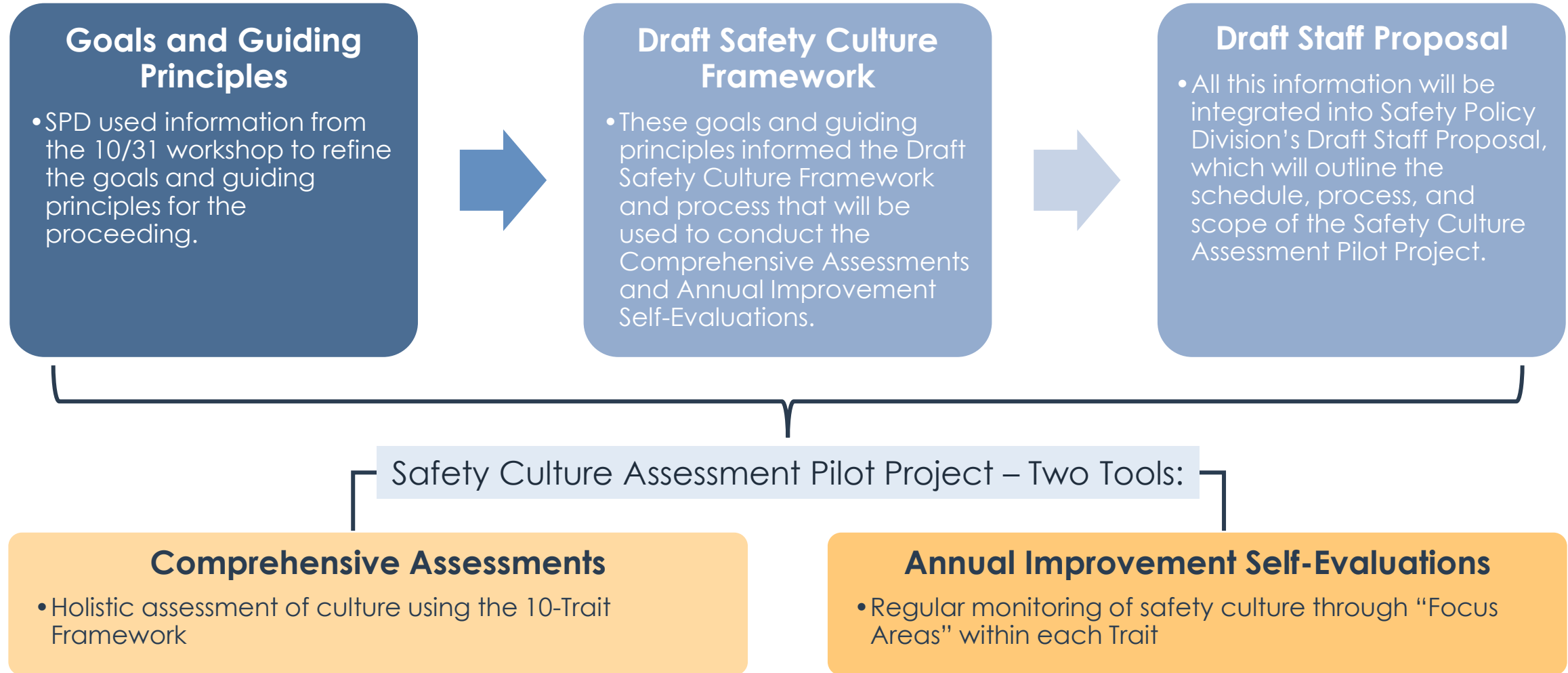
9:10am-9:30am

About Safety Culture Frameworks

Used to describe characteristics of safety culture

Simplify and communicate a complex concept into distinct dimensions to support its understanding and assessment

Provide a basis for the systematic review of safety culture against a defined set of qualities
→ In our case, 10 "Traits"

Framework Overview

Goals and Guiding Principles

- SPD used information from the 10/31 workshop to refine the goals and guiding principles for the proceeding.

Draft Safety Culture Framework

- These goals and guiding principles informed the Draft Safety Culture Framework and process that will be used to conduct the Comprehensive Assessments and Annual Improvement Self-Evaluations.

Draft Staff Proposal

- All this information will be integrated into Safety Policy Division's Draft Staff Proposal, which will outline the schedule, process, and scope of the Safety Culture Assessment Pilot Project.

Safety Culture Assessment Pilot Project – Two Tools:

Comprehensive Assessments

- Holistic assessment of culture using the 10-Trait Framework

Annual Improvement Self-Evaluations

- Regular monitoring of safety culture through "Focus Areas" within each Trait

Goals for the Staff Proposal and Pilot Project

	Goal	Notes
1	Develop and maintain healthy safety cultures through non-punitive engagement and collaboration.	Adapted from IOU's overarching goal presented at the October 31, 2022 workshop.
2	Institutionalize safety as an intrinsic priority beyond compliance and enforcement.	Originally an SPD guiding principle, with some modifications accepted from SoCalGas' September 2022 comments.
3	Develop non-punitive means for information-sharing and collaboration among regulated utilities to recognize risk.	Adapted with modification from SBUA's September 2022 comments.
4	Integrate process/ operational safety as fundamental to an IOU's safety culture.	Originally an SPD guiding principle, rephrased as a goal, and modified.
5	Promote and adopt a systemic approach to safety culture improvement that encompasses each organization's interactions between human, technical, and organizational factors.	Originally an SPD guiding principle, rephrased as a goal, and modified.
6	Build trust and partnership between IOUs and the Commission.	Adapted with modification from SBUA's September 2022 comments.
7	Develop methods to measure and monitor IOU safety culture improvements.	Originally an SPD guiding principle, rephrased as a goal, and modified.
8	Strive to tie safety culture assessments, and resulting recommendations, to tangible IOU safety-related behaviors and outcomes.	Originally an SPD guiding principle, rephrased as a goal, and modified.
9	Develop assessment and monitoring requirements to facilitate early observation, detection, and mitigation.	Originally an SPD guiding principle, rephrased as a goal, and modified.
10	Develop common definitions, language, and framework for similar activities and processes.	Originally an SPD guiding principle, rephrased as a goal, and modified.
11	Create opportunities to promote engagement from local, Tribal, State, and Federal government entities; public interest groups; industry associations; and other key stakeholders.	Originally an SPD guiding principle, rephrased as a goal, and modified.

Guiding Principles

Improving IOU safety performance through safety culture efforts requires the following foundational elements:

	Principle	Notes
1	A shared understanding of safety culture.	Adapted with modification from SPD's original guiding principles.
2	Engagement and collaboration from IOU workers, key stakeholders, and the Commission.	Originally an SPD guiding principle, rephrased based on SCE and SDG&E feedback.
3	Safety culture assessment methods that protect privacy, data confidentiality, and anonymity of individual workers.	An SPD guiding principle that derived from February 2022 opening comments California Utility Employees (CUE).
4	Open communication, questioning and reporting by workers at all levels within the IOUs.	Adapted with modification from SBUA's September 2022 comments.
4	Learning and continuous improvement, including from evaluation of past safety incidents.	Adapted with modification from IOU core goals presented at the October 31, 2022 workshop.
5	Recognition that the CPUC impacts and can influence and support the culture of the entities it regulates.	Adapted with modification from IOU core goals presented at the October 31, 2022 workshop and reflective of September 2022 comments from SBUA.
6	Awareness of potential unintended consequences and limitations of programs.	Adapted with modification from IOU core goals presented at the October 31, 2022 workshop.
7	Simplicity and minimal regulatory burden to avoid confusion.	Adapted with modification from SPD's original guiding principles.

Framework Development

- Based on the US Nuclear Regulatory Commission's (USNRC) NUREG-2165, Safety Culture Common Language.

    - The Safety Culture Common Language was a result of collaboration between the US Nuclear Regulatory Commission and the industry.

    - The Institute for Nuclear Power Operations (INPO) has also published this common language in INPO 12-012, *Traits of a Healthy Nuclear Safety Culture*.

- SPD removed phrasing that was specific to the nuclear industry.

- SPD added elements from the more recent International Atomic Energy Agency Harmonized Safety Culture Framework for clarity and enhancement.

Framework Summary

10 Traits

1. Leadership Safety Values and Actions (LA)
2. Problem Identification and Resolution (PI)
3. Personal Accountability (PA)
4. Work Processes (WP)
5. Continuous Learning (CL)
6. Environment for Raising Concerns (RC)
7. Effective Safety Communication (CO)
8. Respectful Work Environment (WE)
9. Questioning Attitude (QA)
10. Decision making (DM)

40 Attributes

Example of Attributes – Continuous Learning (CL)

CL.1 Operating Experience: The organization systematically and effectively collects, evaluates, and implements relevant internal and external operating experience in a timely manner.

CL.2 Self-Assessment: The organization routinely conducts self-critical and objective assessments of its programs and practices.

CL.3 Benchmarking: The organization learns from other organizations to continuously improve knowledge, skills, and safety performance.

CL.4 Training: The organization provides training and ensures knowledge transfer to maintain a knowledgeable, technically competent workforce and instill nuclear utility safety values.

Today: Discuss Modifications to the Draft Framework

- Other or alternative modifications?

- Addition of negative dimensions or cultural threats? (See CER's [Statement on Safety Culture](#))

- Electric and gas utility specific information to add?

- Industry-specific examples? (See [USNRC's Safety Culture Common Language](#))

Next Steps: Develop Focus Areas for Annual Evaluations

- Revised framework will inform Annual Improvement Self-Evaluations and related reporting requirements for the pilot project, including focus areas and leading indicators.

  - Will allows us to monitor progress annually within the 10 Traits.

  - When the Comprehensive Assessments are conducted, we can look back at annual reporting to track change over time.

- For electric utilities, compare Annual Improvement Self-Evaluation to Energy Safety's annual reporting requirements and avoid duplication and to make sure they are complementary where possible.

Questions

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

Party Presentations on Draft Safety Culture Framework

9:30am-10:30am

Cal Advocates Presentation

9:30am-10:15am | *Mina Botros and Ben Katzenberg*

Safety Culture Assessment Framework Recommendations

R. 21-10-001

Mina Botros and Ben Katzenberg | February 24, 2023

Agenda

I. Introduction

II. SPD Questions

III. Future Steps

I- Introduction

This OIR was instituted to identify the structure, elements, and process necessary to drive **each regulated investor-owned**

1. Electric Utility

2. Natural gas utility

3. Gas storage operator

to establish and continuously improve their organization-wide safety culture.

II- SPD Questions

1. Whether the **ten traits** and their respective attributes **adequately** describe the most important aspect of safety culture for the regulated utilities.

2. Whether the **framework should include negative** dimensions or "cultural threats." For reference, The Canada Energy Regulator (CER) negative dimensions.

3. Whether **information specific** to the electric and gas utility industries should be added.

4. Whether **industry-specific examples** to further describe the traits should be developed. For reference, U.S. Nuclear Regulatory Commission's (USNRC's) Safety Culture Common Language document.

5. Whether **parties agree** with SPD's modifications and recommendations.

Public Advocates Office Proposed Changes to Adapted INPO Framework

Color Key:

- **Red** text has not been changed and indicates SPD's changes in preparation for this workshop
- **Blue** indicates suggested changes by the Public Advocates Office. Language was taken or adapted from either a CER Defense or the USNRC Common Language document
- **Green** indicates suggested language taken from a CER Threat, responds to Q2 (suggested negative attribute additions)
- **Light blue** indicates suggested changes to incorporate language from the PURE model, derived from SPD workshops over summer 2022

Suggested additional attributes are added after existing traits. The order and numbering are only for ease of reference and **do not indicate importance.**

SPD's changes   **CER Defense or USNRC**   **CER Threat**   **PURE**

1. Explanation of Terms

- **Leaders**

  Individuals who influence, coach, or lead others within the organization and determine ~~the~~ vision, goals, or objectives ~~of their teams~~; leaders include executives, managers, supervisors, and others who influence individuals in the organization.

- **Managers**

  Individuals assigned to managerial positions who control, direct, guide, ~~and~~ advise, set priorities, and monitor the performance of the organization; ~~managers~~ includes ~~senior managers~~ leaders and ~~may include~~ ~~some~~ supervisors.

- **Independent Oversight Organizations**

  Groups that independently review the performance and direction of the organization.

🔑 **SPD's changes**   **CER Defense or USNRC**   **CER Threat**   **PURE**

3. Traits, Attributes, Examples
1. Leadership Safety Values and Actions (LA)

LA.1 Resources: Leaders ensure that personnel, equipment, procedures, and other resources are available and adequate to support ~~nuclear~~ utility safety. Leaders also ensure that procedures are standardized, compatible, and practicable.

LA.2 Field Presence: Leaders are commonly seen ~~in working areas of the plant~~ in all areas of the organization, observing work, coaching, and reinforcing standards and expectations. Deviations from standards and expectations are corrected promptly. Managers encourage informal leaders to model safe behaviors and high standards of accountability.

LA.3 Incentives, ~~Sanctions~~ Consequences, and Rewards: Leaders ensure incentives, ~~sanctions~~ consequences, and rewards are aligned with ~~nuclear~~ utility safety policies and reinforce behaviors and outcomes that reflect safety as the overriding priority.

LA.4 Strategic Commitment to Safety: Leaders ensure ~~plant~~ utility priorities are aligned to reflect ~~nuclear~~ utility safety as the overriding priority.

LA.5 ~~Change Management~~ Management of Change: Leaders use a systematic process for evaluating and implementing change so that ~~nuclear~~ utility safety remains the overriding priority.

SPD's changes   CER Defense or USNRC   CER Threat   PURE

3. Traits, Attributes, Examples
1. Leadership Safety Values and Actions (LA) [cont'd]

LA.6 Roles, Responsibilities, and Authorities: Leaders ensure that ~~clearly define~~ roles, responsibilities, and authorities are clearly defined and understood to ensure ~~nuclear~~ utility safety.

LA.7 Constant Examination: Leaders ensure that ~~nuclear~~ utility safety is constantly scrutinized through a variety of monitoring techniques, including assessments of ~~nuclear~~ utility practices, processes, and safety culture.

LA.8 Leader Behaviors: Leaders exhibit behaviors that set the standard for safety, including a reluctance to simplify problems.

LA.9 Accountability Policy: Corporate policies recognize the overriding importance of safety and ensure consistent application of those policies at all levels of the organization.

LA.10 Resiliency: Recognizing the introduction of new or changing threats in the operating environment. Ensuring employees (at all levels) have adequate knowledge and skills related to error management. The organization having the capacity, diversity, and redundancy to manage risk. The organization responding to unanticipated or changing conditions in a timely and effective manner.

LA.11 Production Pressure: Leaders making decisions based upon short-term business objectives without sufficient consideration of long-term impact to safety outcomes. Leaders failing to see the impact of their actions in eroding safety as an organizational value.

🔑 **SPD's changes**   **CER Defense or USNRC**   **CER Threat**   **PURE**

3. Traits, Attributes, Examples
2. Problem Identification and Resolution (PI)

PI.1 Identification: The organization implements a corrective action program with a low threshold for identifying minor and major issues. Individuals identify issues completely, accurately, and in a timely manner in accordance with the program. Self-reporting is expected and valued by the organization.

PI.2 Evaluation: The organization thoroughly evaluates problems to ensure that resolutions address causes and extent of conditions, commensurate with their safety significance.

PI.3 Resolution: The organization takes effective corrective actions to address issues in a timely manner, commensurate with their safety significance.

PI.4 Trending: The organization periodically analyzes information from the corrective action program and other assessments in the aggregate to identify programmatic and common cause issues.

PI.5 Lessons Learned: Problems that have arisen in the past are given special attention for their ability to provide lessons that refine operations and/or internal processes to avoid recurrence and apply any relevant principles to other areas of operation.

SPD's changes   CER Defense or USNRC   CER Threat   PURE

3. Traits, Attributes, Examples
3. Personal Accountability (PA)

PA.1 Standards: Individuals understand the importance of adherence to ~~nuclear~~ utility standards. All levels of the organization exercise accountability for shortfalls in meeting standards. Errors and unsafe acts will not be punished when these events are unintended, unless the individual responsible acted recklessly or took an unjustifiable risk.

PA.2 Job Ownership: Individuals understand and demonstrate personal responsibility for the behaviors Jand work practices that support ~~nuclear~~ utility safety. Individuals can trust that the information they submit will be acted upon only to support increased awareness, understanding, and management of safety.

PA.3 ~~Teamwork~~ Collaboration: Individuals and workgroups communicate and coordinate their activities within and across organizational boundaries to ensure ~~nuclear~~ utility safety is maintained.

PA.4 Personal Emphasis on Safety: Safety is viewed as an investment rather than a cost, and processes, resources, and actions are configured around safety.

PA.5 Vigilance: Knowing what is going on, through a proactive surveillance process. Understanding safety information through analysis and interpretation. Everyone proactively reporting errors, near-misses, and incidents. Sharing information and interpretation to create collective understanding of current status of safety and anticipated future challenges.

🔑 **SPD's changes**   **CER Defense or USNRC**   **CER Threat**   **PURE**

3. Traits, Attributes, Examples
4. Work Processes

WP.1 Work Management: The organization implements a process of planning, controlling, and executing work activities such that ~~nuclear~~ utility safety is the overriding priority. The work process includes the identification and management of risk commensurate to the work. The work process includes vesting authority in the Individual with the greatest understanding and awareness of the risks.

WP.2 Design Margins: The organization operates and maintains ~~equipment~~ infrastructure within design ~~margins~~ standards. Margins are carefully guarded and changed only through a systematic and rigorous process. ~~Special attention is placed on maintaining fission product barriers, defense-in-depth, and safety-related equipment.~~

WP.3 Documentation: Documentation, including procedures, is complete, accurate, accessible, user-friendly, understandable, and up-to-date. Changes are tracked. ~~The organization creates and maintains complete, accurate and up-to-date documentation.~~

WP.4 Procedure Adherence: Individuals follow processes, procedures, and work instructions. Processes, procedures, and work instructions are periodically reviewed to ensure they are compatible and practicable.

WP.5 Flexibility: The organization creates redundant processes to minimize risks and respond to potential incidents.

WP.6 Safety-Oriented Process: Processes, resources, and actions are configured around safety. Safety-critical work is only given to employees or contractors who have demonstrated [functional, cognitive, and enabling] competencies.

WP.7 Tolerance of Inadequate Systems and Resources: A pervasive belief that organizational success or survival is dependent upon making do with what is available. A reactive stance towards safety management. The organization stretching human and financial resources in order to "manage" costs. The organization's failure to provide adequate skills and tools to manage risks.

🔑 **SPD's changes** **CER Defense or USNRC** **CER Threat** **PURE**

3. Traits, Attributes, Examples
5. Continuous Learning (CL)

CL.1 Operating Experience: The organization systematically and effectively collects, evaluates, and implements relevant internal and external operating experience in a timely manner.

CL.2 Self-Assessment: The organization routinely conducts self-critical and objective assessments of its programs and practices. Targeted self-assessments are performed when a more thorough understanding of an issue is required.

CL.3 Benchmarking: The organization learns from other organizations to continuously improve knowledge, skills, and safety performance.

CL.4 Training: The organization provides training and ensures knowledge transfer to maintain a knowledgeable, technically competent workforce and instill ~~nuclear~~ utility safety values.

CL.5 Learning Communication: There are processes in place to extract learning and communicate it throughout the organization and/or wherever it is most likely to become relevant.

SPD's changes   CER Defense or USNRC   CER Threat   PURE

3. Traits, Attributes, Examples
6. Environment for Raising Concerns (RC)

RC.1 Safety-Conscious Work Environment Policy: The organization effectively implements a policy that supports individuals' rights and responsibilities to raise safety concerns, and does not tolerate harassment, intimidation, retaliation, or discrimination for doing so. This policy applies between individuals on the same level of the organization and between individuals on different levels of the organization, including between Contractors and Leaders.

RC.2 Alternate Process for Raising Concerns: The organization effectively implements a process for raising and resolving concerns that is independent of line-management influence. Safety issues may be raised in confidence and are resolved in a timely and effective manner.

RC.3 Empowering Environment: Leaders take responsibility for this environment and are held accountable for their role in creating it; this includes empowering leaders to take safety actions and ensuring that other leaders, managers, individual contributors, and contractors know safety rules and their authority to act on those rules, including authority to stop work when appropriate.

RC.4 Committed Safety Leadership: Direct participation of leaders in the safety system. Leader inquiry and understanding of threats. Leaders taking action to address hazards and deficiencies in the system. Leaders valuing safety efforts and expertise.

SPD's changes   **CER Defense or USNRC**   **CER Threat**   **PURE**

3. Traits, Attributes, Examples
7. Effective Safety Communications (CO)

CO.1 Work Process Communications: Individuals incorporate safety communications in work activities. Leaders ensure that communications are received, understood, and acted upon.

CO.2 Basis for Decisions: Leaders ensure that the basis for operational and organizational decisions is communicated in a timely manner.

CO.3 Free Flow of Information: Individuals communicate openly and candidly, both up, down, and across the organization, and with oversight, audit, and regulatory organizations.

CO.4 Expectations: Leaders frequently communicate and reinforce the expectation that ~~nuclear~~ utility safety is the organization's overriding priority.

CO.5 Communications Objectivity: Leaders use objective criteria to measure how effectively and consistently communications are received, understood, and acted upon.

🔑 **SPD's changes** CER Defense or USNRC CER Threat PURE

3. Traits, Attributes, Examples
8. Respectful Work Environment (WE)

WE.1 Respect is Evident: Everyone is treated with dignity and respect.

WE.2 Opinions are Valued: Individuals are encouraged to voice concerns, provide suggestions, and offer questions. Differing opinions are respected.

WE.3 High Level of Trust: Trust is fostered among individuals and workgroups throughout the organization.

WE.4 Conflict Resolution: Fair and objective methods are used to resolve conflict.

WE.5 Blame-Free Environment: Blame is minimized on all levels to avoid driving serious problems out of sight of leadership.

WE.5 Empowerment and Accountability: Employee participation in safety management activities. Organization-wide safety ownership and communication. Willingness to do what is right in regards to safety. Breaking down of organizational silos.

SPD's changes   **CER Defense or USNRC**   **CER Threat**   **PURE**

3. Traits, Attributes, Examples
9. Questioning Attitude (QA)

QA.1 ~~Nuclear Is Recognized as Special and Unique~~ **Recognize Unique Risks:** Individuals understand ~~that complex technologies can fail in unpredictable ways~~. the unique risks associated with electric power and gas utility systems. Individuals understand that utility systems are complex and may fail in unforeseen ways with significant consequences.

QA.2 Challenge the Unknown: Individuals stop when faced with uncertain conditions or inadequate systems or resources. Risks are evaluated and managed before proceeding.

QA.3 Challenge Assumptions: Individuals challenge assumptions and offer opposing views when they think something is not correct.

QA.4 Avoid Complacency: Individuals recognize and plan for the possibility of mistakes, latent problems, or inherent risk, even while expecting successful outcomes.

QA.5 Data Collection: The organization formalizes the collection and analysis of safety-related information into a risk assessment system and uses that system whenever applicable.

QA.6 Complacency: Overconfidence in the safety system and its performance. The organization's inattention to critical safety data. The organization failing to learn from past events.

SPD's changes **CER Defense or USNRC** **CER Threat** **PURE**

3. Traits, Attributes, Examples
10. Decision making (DM)

DM.1 Consistent Process: Individuals use a consistent, systematic approach to make decisions. Risk insights are incorporated as appropriate. Decisions always follow the organization's standards, rules, and procedures.

DM.2 Conservative Bias: Individuals use decision making practices that emphasize prudent choices over those that are simply allowable. A proposed action is determined to be safe to proceed, rather than unsafe in order to stop.

DM.3 Accountability for Decisions: Single-point accountability is maintained for ~~nuclear~~ utility safety decisions.

DM.4 Flexibility: The organization creates redundant processes to minimize risks and respond to potential incidents.

DM.5 Normalization of Deviance: The organization failing to provide adequate or effective systems, processes, and procedures for work being performed. The organization failing to provide necessary financial, human, and technical resources. Impracticable rules, processes, and procedures, which make compliance and achievement of other organizational outcomes mutually exclusive. Employees finding workarounds in response to operational inadequacies. The organization failing to provide employees with effective mechanisms to resolve operational inadequacies.

SPD's changes   CER Defense or USNRC   CER Threat   PURE

II- SPD Questions

2. In addition to the 10 positive safety culture dimensions, should the framework include negative dimensions or "cultural threats?" Please explain. For reference, The Canada Energy Regulator (CER) states that negative dimensions act as cultural threats that breach or degrade the protective layers within the safety system. CER includes four Cultural Threats within its Statement on Safety Culture: (1.) Production Pressure; (2.) Complacency; (3.) Normalization of Deviance; and (4.) Tolerance of Inadequate Systems and Resources.

Cal Advocates included the CER threats as attributes under traits to respond to Q2, but if SPD prefers to add the four threats as one additional trait, or as multiple additional traits, Cal Advocates also supports adding the threats in that format.

II- SPD Questions

1. Whether the ten traits and their respective attributes adequately describe the most important aspect of safety culture for the regulated utilities.

2. Whether the framework should include negative dimensions or "cultural threats." For reference, The Canada Energy Regulator (CER) negative dimensions.

3. Whether information specific to the electric and gas utility industries should be added.

4. Whether industry-specific examples to further describe the traits should be developed. For reference, USNRC's Safety Culture Common Language document.

5. Whether parties agree with SPD's modifications and recommendations.

II- SPD Questions

3. Is there information specific to the electric and gas utility industries that should be added to the framework? For example, under WP.2 (Design Margins) or QA.1 (Questioning Attitude).

Cal Advocates recommends keeping the framework general to include electric and gas utilities and <u>gas storage operators</u>.

If there is a need to add information specific to a single type of utility, the specific information should be linked to the electric and gas utilities and gas storage operators <u>separately</u>.

II- SPD Questions

4. Would developing industry-specific examples be helpful to further describe the traits? For reference, please see the examples included within the USNRC's Safety Culture Common Language document for each of the attributes.

Cal Advocates recommends developing industry-specific examples in the near future. When traits are well defined and supported by examples, that will benefit the utilities, assessors and shall eliminate confusion in the future safety culture assessments.

III - Future Steps

Cal Advocates is looking forward to SPD staff proposal regarding:

1. Schedule

2. Third-party assessor selection process

3. The process after safety culture assessment

4. Cost recovery

The Public
ADVOCATES
OFFICE

Thank you!

Joint Utility Presentation

10:15am-10:30am | Jason Egan (SoCalGas); Tom Cohenno III (PG&E); Melvin Brown (SCE); Elizabeth Peters (SDG&E)

IOU Responses to Draft Safety Culture Assessment Framework Questions

Technical Working Group Meeting
Safety Culture Assessment OIR (R.21-10-001)
February 24, 2023

The INPO 10 Traits and Attributes Adequately Describe Important Aspects of a Healthy Safety Culture

» Question 1: Do the 10 traits and their respective attributes adequately describe the most important aspect of safety culture for the regulated utilities? If not, are there other traits and/or attributes that may be more important to highlight than the ones presented?

- Yes – We believe the 10 traits adequately describe the most important aspects of a healthy safety culture. The Safety Policy Division (SPD) proposal provides a solid foundation on which to build a safety culture assessment process and framework. The process could evolve as we learn and improve.

The INPO Process Adequately Captures Negative Dimensions/Cultural Threats

» Question 2: In addition to the 10 positive safety culture dimensions, should the framework include negative dimensions or "cultural threats?" Please explain. For reference, The Canada Energy Regulator (CER) states that negative dimensions act as cultural threats that breach or degrade the protective layers within the safety system. CER includes four Cultural Threats within its Statement on Safety Culture: (1) Production Pressure; (2) Complacency; (3) Normalization of Deviance; and (4) Tolerance of Inadequate Systems and Resources.

- No – We believe that the broader INPO process – e.g., assessments, gap closure plans, training, site visits and learning teams – will reveal both strengths and opportunities. In other words, the ten traits will already capture these dimensions. To illustrate, please see slide entitled "Cultural Threats Mapping to SPD Draft Proposal" included in the appendix.

INPO Should be Carefully Reviewed Before New Information is Introduced

» Question 3: Is there information specific to the electric and gas utility industries that should be added to the framework? For example, under WP.2 (Design Margins) or QA.1 (Questioning Attitude).

- No – We don't believe that we should add electric and gas specific language at this time. We believe we should use the INPO traits and associated processes, as written, until we learn more. A preliminary list of INPO resources to explore can be found on the slide entitled "Helpful INPO Resources" in the appendix.

Additional Industry-Specific Examples May be Helpful At a Later Time

» Question 4: Would developing industry-specific examples be helpful to further describe the traits? For reference, please see the examples included within the USNRC's Safety Culture Common Language document for each of the attributes.

▪ Yes – We agree that industry specific examples would be helpful, but this effort should not be prioritized over developing other aspects of the framework. We propose this topic would be valuable to discuss further in working group sessions.

Agree with SPD's Modifications but Further Discussion on INPO is Needed

» Question 5: Do parties agree with SPD's modifications described above? If not, what areas of the framework do you not agree with and what recommendations would you suggest changing to make it better?

- Yes – We generally agree but suggest that a better understanding of the CPUC's rationale and goals for the modifications would support further discussion; and note that necessary modifications may be uncovered as the framework is finalized.
  - For example, the draft framework omits INPO's designation of an independent third-party role in the SCA process; however, the IOUs agree that the benefits of this third-party entity warrants further discussion.
- We suggest that additional discussion is needed on how the INPO safety culture framework can be operationalized. To achieve this, the IOUs propose a collaborative working team approach.

Additional Considerations

» The IOUs are supportive of SPD's proposed safety culture framework

- INPO model provides decades of knowledge, experience and references with demonstrated results.

- Draft proposal provides a strong foundation on which to build the safety culture assessment framework, by describing what should be achieved through the framework.

» When considering how these results might be achieved, the IOUs respectfully recommend conducting a comprehensive review of major INPO documentation and collaborating to develop a framework applicable to electric and gas utilities. To facilitate these discussions, the IOUs propose the following process:

- SPD convenes subgroups focused on specific aspects of the INPO framework with IOUs, SPD representatives and INPO-experienced professionals, among others.

  - Subgroups collaborate on operationalizing the INPO safety culture framework for gas and electric utilities (e.g., via information sharing, continuous learning, peer-review, independent oversight) and share findings with larger Technical Working Group.

- Continue to collectively support SPD in finalizing the Safety Culture Assessment Framework (including in developing industry-specific examples).

Appendix

Cultural Threats Mapping to SPD Draft Proposal

Negative Dimensions/Cultural Threats	SPD Draft Proposal (INPO Traits)
Production Pressure	• Incentives, Consequences, and Rewards (LA.3): Leaders ensure incentives, consequences, and rewards are aligned with utility safety policies and reinforce behaviors and outcomes that reflect safety as the overriding priority. • Strategic Commitment to Safety (LA.4): Leaders ensure utility priorities are aligned to reflect utility safety as the overriding priority.
Complacency	• Questioning Attitude (QA) - Individuals avoid complacency and continuously challenge existing conditions and activities in order to identify discrepancies that might result in error or inappropriate action. • Avoid Complacency (QA.4): Individuals recognize and plan for the possibility of mistakes, latent problems, or inherent risk, even while expecting successful outcomes.
Normalization of Deviance	• Field Presence (LA.2): Leaders are commonly seen in all areas of the organization, observing work, coaching, and reinforcing standards and expectations. Deviations from standards and expectations are corrected promptly. • Problem Identification and Resolution (PI) - Issues potentially impacting safety are systematically identified, fully evaluated, and promptly addressed and corrected commensurate with their significance.
Tolerance of Inadequate Systems and Resources	• Resources (LA.1): Leaders ensure that personnel, equipment, procedures, and other resources are available and adequate to support utility safety. • Constant Examination (LA.7): Leaders ensure that utility safety is constantly scrutinized through a variety of monitoring techniques, including assessments of nuclear utility safety culture.

Helpful INPO Resources

» Overview of how INPO works today:

- Robert F. Willard, President and Chief Executive Officer Institute of Nuclear Power Operations U.S. Senate Committee on Environment and Public Works November 13, 2019. An excerpt from the *Convention on Nuclear Safety Report: The Role of the Institute of Nuclear Power Operations in Supporting the United States Commercial Nuclear Power Industry's Focus on Nuclear Safety.*

- **Link:** [Institute of Nuclear Power Operations (senate.gov)](senate.gov)

» Further detail on how INPO and member utilities interact and function on a day-to-day basis:

- NEI 09-07, Revision 1, *Fostering a Healthy Nuclear Safety Culture* March 2014

- **Link:** [NEI 09-07, Revision 1, "Fostering a Healthy Nuclear Safety Culture." (nrc.gov)](nrc.gov)

» INPO Ten Traits, including behavior examples:

- INPO 12–012, April 2013, *Traits of a Healthy Nuclear Safety Culture Revision 1*

- A copy is attached.

BREAK

10:30am-10:45am

Discussion and Next Steps

10:45am-11:45am

Discussion Questions

1. Do the 10 traits and their respective attributes adequately describe the most important aspect of safety culture for the regulated utilities? If not, are there other traits and/or attributes that may be more important to highlight than the ones presented?

2. Do parties agree with SPD's modifications to the framework? If not, what areas of the framework do you not agree with and what recommendations would you suggest changing to make it better?

   a) *What ground rules, if any, should we set for making changes to the framework?*

   b) *What process should be put in place to consider framework improvements in the future? Should they be considered, for example, during the comprehensive assessments or on a rolling basis?*

   c) *Could the Joint Utilities explain which statement about third parties was omitted? Does this refer to the definition of "Independent Oversight Organizations" from the US NRC framework?*

   d) *What criteria did Cal Advocates use for suggesting modifications to the framework? Are there certain revisions that could be used to inform focus areas for the improvement self-evaluations or indicators used within each trait, instead of changing the traits/ attributes themselves?*

Discussion Questions (continued)

3. In addition to the 10 positive safety culture dimensions, should the framework include negative dimensions or "cultural threats?" Please explain. For reference, The Canada Energy Regulator (CER) states that negative dimensions act as cultural threats that breach or degrade the protective layers within the safety system. CER includes four Cultural Threats within its Statement on Safety Culture: (1.) Production Pressure; (2.) Complacency; (3.) Normalization of Deviance; and (4.) Tolerance of Inadequate Systems and Resources.

    a) *If negative dimensions are included, where should they be included? Would mixing positive and negative attributes under a single trait be confusing?*

    b) *CER included negative attributes because they found that negative attributes did not always have a positive counterpart. Do parties agree? Disagree?*

4. Is there information specific to the electric and gas utility industries that should be added to the framework? For example, under WP.2 (Design Margins) or QA.1 (Questioning Attitude).

    a) *If we use a more general framework now, how could this utility-specific information be suggested, vetted, and incorporated in the future?*

5. Would developing industry-specific examples be helpful to further describe the traits? For reference, please see the examples included within the USNRC's Safety Culture Common Language document for each of the attributes.

    a) *Do parties agree with the Joint Utility suggestion to convene subgroups focused on specific aspects of the framework with IOUs, SPD representatives and experienced professionals, and others? What level of participation do parties desire or have capacity for (e.g., weekly, monthly, quarterly meetings?)*

Next Steps

Refine safety culture framework based on feedback

Develop content and guidance for Annual Improvement Self-Evaluations based on revised framework, including focus areas and leading indicators

Complete draft staff proposal; release for comment

Closing Remarks

11:45am-12:00pm

Questions

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

THANK YOU