

# Normative Safety Culture Framework for California's Investor-Owned Utilities

## 1 Overview

This normative framework is based on the framework developed by the U.S. Nuclear Regulatory Commission (U.S. NRC) and Institute for Nuclear Power Operations (INPO)<sup>1</sup> and adapted for California's IOUs. It consists of 10 traits, each with a set of attributes, and explanation of terms used.

## 2 Explanation of Terms

Organizations have different structures and terms for organizational roles and positions. Each organization can determine how these terms apply to its unique organizational structure.

**Organization:** The collective group of all individuals, the reporting structure, and the procedures, policies, and practices that individuals use to set goals and make decisions, to accomplish tasks, and to implement and maintain a healthy utility safety culture.

**Individuals:** All people at all levels of the organization; individuals include all leaders, individual contributors, and contractors.

**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.

**Executives:** Corporate decision makers who are responsible for setting the long-term strategic goals for the organization; executives develop and implement corporate policies.

**Managers:** Individuals assigned to managerial positions who control, direct, guide, advise, set priorities, and monitor the performance of the organization; includes senior managers and supervisors.

**Work Groups:** Groups of individuals who work collaboratively to accomplish tasks; work groups may exist at any level of the organization.

**Individual Contributors:** Individuals who operate individually or as members of work groups to accomplish tasks; individual contributors may include leaders when leaders are acting in a nonsupervisory capacity or are accomplishing tasks as members of a work group.

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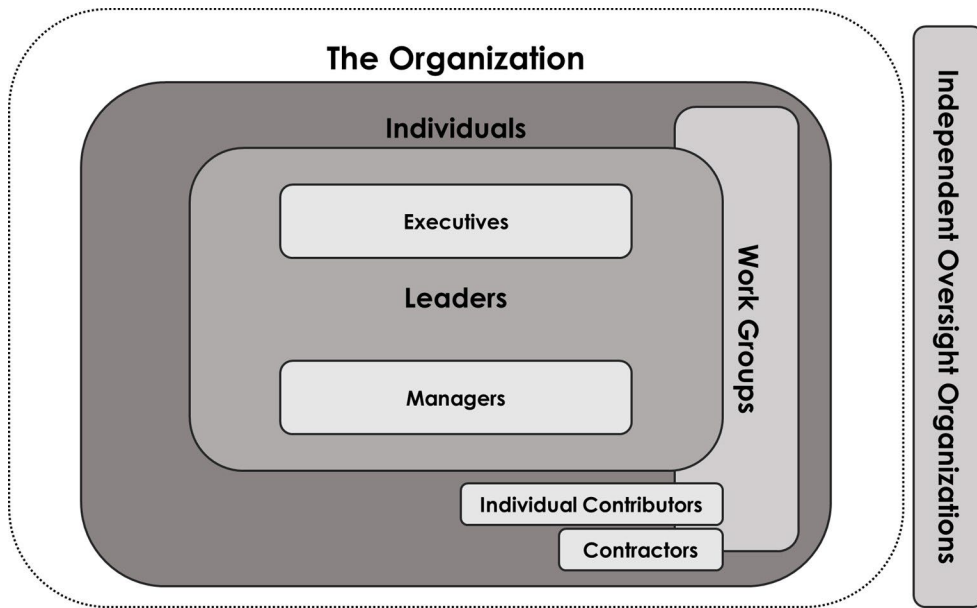
<sup>1</sup> USNRC's NUREG-2165, Safety Culture Common Language. (INPO has also published this common language in INPO 12-012, "Traits of a Healthy Nuclear Safety Culture").

**Contractors:** Individuals who accomplish work for but are not employees of the organization; including short- and long-term contractors and individuals who are not employed by the organization but occasionally perform work related to utility safety.

**Independent Oversight Organizations:** Groups that independently review the performance and direction of the organization.

### 3 Relationships Among Roles

The Figure below is a visualized graphical representation of the interrelationships among the terms defined above:



### 4 Traits and Attributes

#### 1. Leadership Safety Values and Actions (LA)

Leaders demonstrate a commitment to safety in their decisions and behaviors.

**LA.1 Resources:** Leaders ensure that personnel, equipment, procedures, and other resources are available and adequate to support utility safety.

**LA.2 Field Presence:** Leaders are commonly seen in in all areas of the organization, observing work, coaching, and reinforcing standards and expectations. Deviations from standards and expectations are corrected promptly.

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

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

**LA.5 Management of Change<sup>2</sup>:** Leaders use a systematic process for evaluating and implementing change so that utility safety remains the overriding priority.

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

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

**LA.8 Leader Behaviors:** Leaders exhibit behaviors that set the standard for safety.

## 2. **Problem Identification and Resolution (PI)**

Issues potentially impacting safety are systematically identified, fully evaluated, and promptly addressed and corrected commensurate with their significance.

**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.<sup>3</sup> 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.

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<sup>2</sup> Management of Change (MOC) refers to the approach used to ensure that changes do not inadvertently introduce new hazards or unknowingly increase risk of existing hazards. This includes changes to any aspect of operating the utility, i.e., technical, physical, procedural, operational, or organizational changes. For purposes of this document, and consistent with management system practices, we differentiate MOC from the term “Change Management.” Change Management refers to one aspect of the MOC process – dealing with the people side of change, or changing people’s behavior to bring them through a change (i.e., training, tools, communication) – while MOC is the entire life cycle of the change process, from identifying the need for a change, all the way through its implementation, monitoring and learning from the change experience.

<sup>3</sup> API 1173 defines Corrective Actions as the steps established to either correct nonconforming aspects of the Pipeline Safety Management System (PSMS) identified during an audit or evaluation, or actions taken to manage threats recognized during day-to-day activities.

**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.

### 3. **Personal Accountability (PA)**

All individuals take personal responsibility for safety.

**PA.1 Standards:** Individuals understand the importance of adherence to utility standards. All levels of the organization exercise accountability for shortfalls in meeting standards.

**PA.2 Job Ownership:** Individuals understand and demonstrate personal responsibility for the behaviors and work practices that support utility safety.

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

### 4. **Work Processes (WP)**

The process of planning and controlling work activities is implemented so that safety is maintained.

**WP.1 Work Management:** The organization implements a process of planning, controlling, and executing work activities such that utility safety is the overriding priority. The work process includes the identification and management of risk commensurate to the work.

**WP.2 Design Margins:** The organization operates and maintains infrastructure within design standards. Margins are carefully guarded and changed only through a systematic and rigorous process.

**WP.3 Documentation:** Documentation, including procedures, is complete, accurate, accessible, user-friendly, understandable, and current. Changes are tracked.

**WP.4 Procedure Adherence:** Individuals follow processes, procedures, and work instructions.

### 5. **Continuous Learning (CL)**

Opportunities to learn about ways to ensure safety are sought out and implemented.

**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 utility safety values.

**6. Environment for Raising Concerns (RC)**

A safety-conscious work environment (SCWE) is maintained where personnel feel free to raise safety concerns without fear of retaliation, intimidation, harassment, or discrimination.

**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.

**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.

**7. Effective Safety Communication (CO)**

Communications maintain a focus on safety.

**CO.1 Work Process Communications:** Individuals incorporate safety communications in work activities.

**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, vertically (up and down) and horizontally (across the organization), as well with oversight, audit, and regulatory organizations.

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

**8. Respectful Work Environment (WE)**

Trust and respect permeate the organization.

**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.

**9. 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.

**QA.1 Recognize Unique Risks:** Individuals understand 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. 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.

**10. Decision making (DM)**

Decisions that support or affect utility safety are systematic, rigorous, and thorough.

**DM.1 Consistent Process:** Individuals use a consistent, systematic approach to make decisions. Risk insights are incorporated as appropriate.

**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 utility safety decisions.