Nuclear Safety Culture Common Language

4th Public Workshop

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Workshop Purpose

- Continue to refine the safety culture common language for power reactors by reviewing and agreeing on **examples** for each safety culture attribute.
  - Do the examples clearly describe the attribute?
  - Do the examples minimize overlap between attributes?
  - Are key terms defined?

Nuclear Safety Culture Common Language

- LA.1 Resources
- LA.2 Field Presence
- LA.3 Incentives, Sanctions & Rewards
- LA.4 Strategic Commitment to Safety
- LA.5 Change Management
- LA.6 Roles, Responsibilities & Authorities
- LA.7 Constant Examination
- LA.8 Leader Behaviors

Leadership Safety Values & Actions **LA**

- PI.1 Identification
- PI.2 Evaluation
- PI.3 Resolution
- PI.4 Trending

Problem Identification & Resolution **PI**

- PA.1 Standards
- PA.2 Job Ownership
- PA.3 Teamwork

Personal Accountability **PA**

- WP.1 Work Management
- WP.2 Design Margins
- WP.3 Documentation
- WP.4 Procedure Adherence

Work Processes **WP**

- CL.1 Operating Experience
- CL.2 Self Assessment
- CL.3 Benchmarking
- CL.4 Training

Continuous Learning **CL**

- RC.1 SCWE Policy
- RC.2 Alternative Process for Raising Concerns

Environment for Raising Concerns **RC**

- CO.1 Work Process Communications
- CO.2 Basis for Decisions
- CO.3 Free Flow of Information
- CO.4 Expectations

Effective Safety Communication **CO**

- WE.1 Respect is Evident
- WE.2 Opinions are Valued
- WE.3 High Level of Trust
- WE.4 Conflict Resolution

Respectful Work Environment **WE**

- QA.1 Nuclear is Recognized as Special and Unique
- QA.2 Challenge the Unknown
- QA.3 Challenge Assumptions
- QA.4 Avoid Complacency

Questioning Attitude **QA**

- DM.1 Consistent Process
- DM.2 Conservative Bias
- DM.3 Accountability for Decisions

Decision Making **DM**

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

- LA.1 Resources
- LA.2 Field Presence
- LA.3 Incentives, Sanctions & Rewards
- LA.4 Strategic Commitment to Safety
- LA.5 Change Management
- LA.6 Roles, Responsibilities & Authorities
- LA.7 Constant Examination
- LA.8 Leader Behaviors

Leadership Safety Values & Actions **LA**

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

Proposed Examples

1. Managers ensure staffing levels are consistent with the demands related to maintaining safety and reliability.
2. Managers ensure there are sufficient qualified personnel to maintain work hours within working hour guidelines during all modes of operation.
3. Managers ensure facilities are available and regularly maintained, including physical improvements, simulator fidelity, and emergency facilities.
4. Leaders ensure tools, equipment, procedures, and other resource materials are available to support successful work performance, including risk management tools and emergency equipment.
5. Executives and senior managers ensure sufficient corporate resources are allocated to the nuclear organization for short- and long-term safe and reliable operation.
6. Executives and senior managers ensure a rigorous evaluation of the nuclear safety implications of deferred work.

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

Proposed Examples

1. Senior managers ensure supervisory and management oversight of work activities, including contractors and supplemental personnel, such that nuclear safety is supported.
2. Leaders from all levels in the organization are involved in oversight of work activities.
3. Managers and supervisors practice visible leadership in the field and during safety significant evolutions by “placing eyes on the problem,” coaching, mentoring, reinforcing standards and reinforcing positive decision making practices and behaviors.
4. Managers and supervisors discuss their observations in detail with the group they observed and provide useful feedback about how to improve individual performance.
5. Managers encourage informal leaders to model safe behaviors and high standards of accountability.

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

Proposed Examples

1. Managers ensure disciplinary actions are appropriate, consistent, and support both nuclear safety and a safety conscious work environment.
2. Managers reward individuals who identify and raise issues affecting nuclear safety.
3. Leaders foster an environment that promotes accountability and hold individuals accountable for their actions.
4. Managers consider the potential chilling effects of disciplinary actions and other potentially adverse personnel actions and take compensatory actions when appropriate.
5. Leaders publicly praise behaviors that reflect a positive safety culture.

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

Proposed Examples

1. Executives and senior managers reinforce nuclear safety as the overriding priority.
2. Managers develop and implement cost and schedule goals in a manner that reinforces the importance of nuclear safety.
3. Managers ensure production requirements are established, communicated and put into practice in a manner that reinforces nuclear safety.
4. Executives and senior managers use information from independent oversight organizations to establish priorities that align with nuclear safety.
5. Executives and senior managers establish strategic and business plans that reflect the importance of nuclear safety over production.
6. Executives and senior managers ensure corporate priorities are aligned with nuclear safety.

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

Proposed Examples

1. When making decisions related to major changes, managers use a systematic process for planning, coordinating, and evaluating the safety impacts and potential negative effects on the willingness of individuals to raise safety concerns. This includes decisions concerning changes to organizational structure and functions, leadership, policies, programs, procedures, and resources.
2. Executives and senior managers ensure nuclear safety is maintained when planning, communicating, and executing major changes.
3. Managers maintain a clear focus on nuclear safety when implementing the change management process to ensure that significant unintended consequences are avoided.
4. Managers ensure that individuals understand the importance of, and their role in, the change management process.
5. Managers anticipate, manage, and communicate the effects of impending changes.
6. Managers and supervisors actively monitor and address potential distractions from nuclear safety during periods of change.

LA.6 Roles, Responsibilities, and Authorities: Leaders clearly define roles, responsibilities, and authorities to ensure nuclear safety.

Proposed Examples

1. Leaders ensure roles, responsibilities, and authorities are clearly defined, understood, and documented.
2. Managers appropriately delegate responsibility and authority to promote ownership and accountability.
3. Executives and senior managers ensure corporate managers who support the nuclear organization and managers at the station understand their respective roles and responsibilities.
4. Recommendations and feedback from corporate governance, review boards, and independent oversight organizations do not override senior managers' ultimate responsibility for decisions affecting nuclear safety.

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

Proposed Examples

1. Executives and senior managers ensure that board members and members of independent oversight organizations meet with leaders and individual contributors in their work environments to develop an understanding of the status of the organization's safety culture.
2. Executives and senior managers obtain outside perspectives of nuclear safety through selection of qualified and critical independent safety review board members with diverse backgrounds and perspectives.
3. Executives and senior managers use a variety of monitoring tools including employee surveys, self- and independent assessments, external safety review board member feedback, and employee concern investigations to regularly monitor station nuclear safety culture.
4. Leaders support and participate in candid assessments of workplace attitudes and nuclear safety culture, and act on issues that affect trust in management or detract from a positive nuclear safety culture.

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

Proposed Examples

1. Leaders “walk the talk,” modeling the correct behaviors, especially when resolving apparent conflicts between nuclear safety and production.
2. Leaders act promptly when a nuclear safety issue is raised to ensure it is understood and appropriately addressed.
3. Leaders maintain high standards of personal conduct that promote all aspects of a positive nuclear safety culture.
4. Leaders demonstrate interest in plant operations and actively seek out the opinions and concerns of workers at all levels.
5. Leaders encourage personnel to challenge unsafe behavior and unsafe conditions, and support personnel when they stop plant activities for safety reasons.
6. Leaders motivate others to practice positive nuclear safety culture behaviors.

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

- PI.1 Identification
- PI.2 Evaluation
- PI.3 Resolution
- PI.4 Trending

Problem Identification & Resolution

PI

PI.1 Identification: The organization implements a corrective action program with a low threshold for identifying issues. Individuals identify issues completely, accurately, and in a timely manner in accordance with the program.

Proposed Examples

1. Individuals recognize deviations from standards.
2. Individuals understand how to enter issues into the corrective action program.
3. Individuals ensure that issues, problems, degraded conditions, and near misses are promptly reported and documented in the corrective action program at a low threshold.
4. Individuals describe the issues entered in the corrective action program in sufficient detail to ensure they can be appropriately prioritized, trended, and assigned for resolution.

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

Proposed Examples

1. Issues are properly classified, prioritized, and evaluated according to their safety significance.
2. Operability and reportability determinations are developed when appropriate.
3. Apparent and root cause investigations identify primary and contributing causal factors as required.
4. Extent of condition and extent of cause evaluations are completed in a timely manner, commensurate with the safety significance of the issue.
5. Issues are thoroughly investigated according to their safety significance.
6. Root cause analysis is rigorously applied to identify and correct the fundamental cause of significant issues.
7. The underlying organizational and safety culture contributors to issues are thoroughly evaluated and are given the necessary time and resources to be clearly understood.
8. Cause analyses identify and understand the basis for decisions that contributed to issues.
9. Managers conduct effectiveness reviews of significant corrective actions to ensure that the resolution effectively addressed the causes.

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

Proposed Examples

1. Corrective actions are completed in a timely manner.
2. Deferrals of corrective actions are minimized; when required, due dates are extended using an established process that appropriately considers safety significance.
3. Appropriate interim corrective actions are taken to mitigate issues while more fundamental causes are being assessed.
4. Corrective actions resolve and correct the identified issues, including causes and extent of condition.
5. Corrective actions prevent the recurrence of significant conditions adverse to quality.
6. Trends in safety performance indicators are acted upon to resolve problems early.

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.

Proposed Examples

1. The organization develops indicators that monitor both equipment and organizational performance, including safety culture.
2. Managers use indicators that provide an accurate representation of performance and provide early indications of declining trends.
3. Managers routinely challenge the organization's understanding of declining trends.
4. Organizational and departmental trend reviews are completed in a timely manner in accordance with program expectations.

All individuals take personal responsibility for safety.

- PA.1 Standards
- PA.2 Job Ownership
- PA.3 Teamwork

Personal Accountability **PA**

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

Proposed Examples

1. Individuals encourage each other to adhere to high standards.
2. Individuals demonstrate a proper focus on nuclear safety and reinforce this focus through peer coaching and discussions.
3. Individuals hold themselves personally accountable for modeling nuclear safety behaviors.
4. Individuals across the organization apply nuclear safety standards consistently.
5. Individuals actively solicit and are open to feedback.
6. Individuals help supplemental personnel understand and practice expected behaviors and actions.

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

Proposed Examples

1. Individuals understand their personal responsibility to foster a professional environment, encourage teamwork, and identify challenges to nuclear safety.
2. Individuals understand their personal responsibility to raise nuclear safety issues, including those identified by others.
3. Individuals take ownership for the preparation and execution of assigned work activities.
4. Individuals actively participate in pre-job briefings, understanding their responsibility to raise nuclear safety concerns before work begins.
5. Individuals ensure that they are trained and qualified to perform assigned work.
6. Individuals understand the objective of the work activity, their role in the activity, and their personal responsibility for safely accomplishing the overall objective.

PA.3 Teamwork: Individuals and work groups communicate and coordinate their activities within and across organizational boundaries to ensure nuclear safety is maintained.

Proposed Examples

1. Individuals demonstrate of strong sense of collaboration and cooperation in connection with projects and operational activities.
2. Individuals work as a team to provide peer-checks, verify certifications and training, ensure detailed safety practices, actively peer coach new personnel, and share tools and publications.
3. Individuals strive to meet commitments.

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

- WP.1 Work Management
- WP.2 Design Margins
- WP.3 Documentation
- WP.4 Procedure Adherence

Work Processes **WP**

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

Proposed Examples

1. Work is effectively planned and executed by incorporating risk insights, job site conditions, and the need for coordination with different groups or job activities.
2. The work process appropriately prioritizes work and incorporates contingency plans, compensatory actions, and abort criteria as needed.
3. Leaders consider the impact of changes to the work scope and the need to keep personnel apprised of work status.
4. The work process ensures individuals are aware of plant status, the nuclear safety risks associated with work in the field, and other parallel station activities.
5. Insights from probabilistic risk assessments are considered in daily work activities and change processes.
6. Work activities are coordinated to address conflicting or changing priorities across the whole spectrum of activities contributing to nuclear safety.
7. The work process limits temporary modifications.

WP.2 Design Margins: The organization operates and maintains equipment within design margins. 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.

Proposed Examples

1. The work process supports nuclear safety and maintenance of design margins by minimizing long-standing equipment issues, preventative maintenance deferrals, and maintenance and engineering backlogs.
2. The work process ensures focus on maintaining fission product barriers, defense in depth, and safety-related equipment.
3. Design and operating margins are carefully guarded and changed only with great thought and care.
4. Safety-related equipment is operated and maintained well within design requirements.

WP.3 Documentation: The organization creates and maintains complete, accurate and up-to-date documentation.

Proposed Examples

1. Plant activities are governed by comprehensive, high-quality programs, processes, and procedures.
2. Design documentation, procedures, and work packages are complete, thorough, accurate, and current.
3. Components are labeled clearly, consistently, and accurately.
4. The backlog of document changes is understood, prioritized, and actively managed to ensure quality.

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

Proposed Examples

1. Individuals follow procedures.
2. Individuals understand and use human error reduction techniques.
3. Individuals review procedures and instructions prior to work to validate that they are appropriate for the scope of work and that required changes are completed prior to implementation.
4. Individuals manipulate plant equipment only when appropriately authorized and directed by approved plant procedures or work instructions.
5. Individuals ensure the status of work activities is properly documented.

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

- CL.1 Operating Experience
- CL.2 Self Assessment
- CL.3 Benchmarking
- CL.4 Training

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.

Proposed Examples

1. There is a process to ensure a thorough review of operating experience provided by internal and external sources.
2. Operating experience is effectively implemented and institutionalized through changes to station processes, procedures, equipment, and training programs.
3. Operating experience is used to understand equipment, operational, and industry challenges and adopt new ideas to improve performance.
4. Operating experience is used to support daily work functions with emphasis on the possibility that “it could happen here.”
5. Station operating experience is shared in a timely manner.

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

Proposed Examples

1. Self- and independent assessments, including nuclear safety culture assessments, are thorough and effective, and used as a basis for improvements.
2. The organization values the insights and perspectives provided through assessments.
3. Self-assessments are performed on a variety of topics, including the self-assessment process itself.
4. Self-assessments are performed at a regular frequency and provide objective, comprehensive, and self-critical information that drive corrective actions.
5. Targeted self-assessments are performed when a more thorough understanding of an issue is required.
6. A balanced approach of self-assessments and independent oversight is used and periodically adjusted based on changing needs.
7. Self-assessment teams include individual contributors and leaders from within the organization and from external organizations when appropriate.

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

Proposed Examples

1. The organization uses benchmarking as an avenue for acquiring innovative ideas to improve nuclear safety.
2. The organization participates in benchmarking activities with other nuclear and non-nuclear facilities.
3. The organization seeks out better practices by using benchmarking to understand how others perform the same functions.
4. The organization uses benchmarking to compare station standards to the industry and make adjustments to improve performance.
5. Individual contributors are actively involved in benchmarking.

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

Proposed Examples

1. The organization fosters an environment where individuals value and seek continuous learning opportunities.
2. Individuals, including supplemental workers, are adequately trained to ensure technical competency and an understanding of standards and work requirements.
3. Individuals master reactor and power plant fundamentals to establish a solid foundation for sound decisions and behaviors.
4. The organization develops and effectively implements knowledge transfer and knowledge retention strategies.
5. Knowledge transfer and knowledge retention strategies are applied to capture the knowledge and skill of experienced individuals to advance the knowledge and skill of less experienced individuals.
6. Leadership and management skills are systematically developed.
7. Training is developed and continuously improved using input and feedback from individual contributors and subject matter experts.
8. Executives obtain the training necessary to understand basic plant operation and the relationships between major functions and organizations.

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 SCWE Policy
- RC.2 Alternative Process for Raising Concerns

Environment for Raising Concerns RC

RC.1 SCWE 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.

Proposed Examples

1. Individuals feel free to raise nuclear safety concerns without fear of retribution, with confidence that their concerns will be addressed.
2. Executives and senior managers set and reinforce expectations for establishing and maintaining a safety conscious work environment.
3. Policies and procedures reinforce that individuals have the right and responsibility to raise nuclear safety concerns.
4. Policies and procedures define the responsibilities of leaders to create an environment where individuals feel free to raise safety concerns.
5. Policies and procedures establish the expectation that leaders will respond in a respectful manner and provide timely feedback to the individual raising the concern.
6. Leaders are trained to take ownership when receiving and responding to concerns, recognizing confidentiality if appropriate, and ensuring they are adequately addressed in a timely manner.
7. Individuals are trained that behaviors or actions that could prevent concerns from being raised, including harassment, intimidation, retaliation, or discrimination, will not be tolerated, and are violations of law and policy.
8. All claims of retaliation are investigated and any necessary corrective actions are taken in a timely manner, including actions to mitigate any potential chilling effect.

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.

Proposed Examples

1. Executives establish, support, and promote the use of alternative processes for raising concerns, and ensure corrective actions are taken.
2. Leaders understand their role in supporting alternate processes for raising concerns.
3. Processes for raising concerns or resolving differing professional opinions that are alternatives to the corrective action program and operate outside the influence of the management chain are communicated and accessible to individuals.
4. Alternative processes are independent, include an option to raise concerns confidentially, and ensure these concerns are appropriately resolved in a timely manner.
5. Individuals receive feedback in a timely manner.
6. Individuals have confidence that issues raised will be appropriately resolved.
7. Individuals assigned to respond to concerns have the appropriate competencies.

Communications maintain a focus on safety.

- CO.1 Work Process Communications
- CO.2 Basis for Decisions
- CO.3 Free Flow of Information
- CO.4 Expectations

Effective Safety Communication **CO**

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

Proposed Examples

1. Communications within work groups are timely, frequent, and accurate.
2. Work groups and supervisors communicate work status with other work groups and supervisors during the performance of their work activities.
3. Individuals communicate with each other such that everyone has the information necessary to accomplish work activities safely and effectively.
4. Communications during shift turnovers and pre-job briefs provide information necessary to support nuclear safety.
5. Work groups integrate nuclear safety messages into daily activities and meetings.

CO.2 Bases for Decisions: Leaders ensure that the bases for operational and organizational decisions are communicated in a timely manner.

Proposed Examples

1. Leaders promptly communicate expected outcomes, potential problems, planned contingencies, and abort criteria for important operational decisions.
2. Leaders share information on a wide range of issues with individuals and periodically verify their understanding of the information.
3. Leaders take steps to avoid unintended or conflicting messages that may be conveyed by operational decisions.
4. Leaders encourage individuals to ask questions if they do not understand the basis of an operational or management decision.
5. Executives and senior managers communicate the reasons for resource allocation decisions, including the nuclear safety implications of those decisions.

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.

Proposed Examples

1. Leaders encourage the free flow of information.
2. Individuals share information openly and candidly.
3. Leaders respond to individuals in an open, honest, and non-defensive manner.
4. Individuals provide complete, accurate, and forthright information to oversight, audit, and regulatory organizations.
5. Leaders actively solicit feedback, listen to concerns, and communicate openly with all individuals.
6. Leaders candidly communicate the results of monitoring and assessments throughout the organization and with independent oversight organizations.

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

Proposed Examples

1. Executives and senior managers communicate expectations regarding nuclear safety so that individuals understand that safety is the highest priority.
2. Executives and senior managers implement a strategy of frequent communication using a variety of tools to reinforce that nuclear safety is the overriding priority.
3. Executives and senior managers reinforce the importance of nuclear safety by clearly communicating its relationship to strategic issues including budget, workforce planning, equipment reliability, and business plans.
4. Leaders communicate desired nuclear safety behaviors to individuals, providing examples of how behaviors positively or negatively affect nuclear safety.
5. Leaders routinely verify that communications on the importance of nuclear safety have been heard and understood.
6. Leaders ensure supplemental personnel understand expected behaviors and actions necessary to maintain nuclear safety.

Trust and respect permeate the organization.

- WE.1 Respect is Evident
- WE.2 Opinions are Valued
- WE.3 High Level of Trust
- WE.4 Conflict Resolution

Respectful Work Environment

WE

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

Proposed Examples

1. The organization regards individuals and their professional capabilities and experiences as its most valuable asset.
2. Individuals at all levels of the organization treat each other with dignity and respect.
3. Individuals treat each other with respect within and between work groups.
4. Individuals do not demonstrate or tolerate bullying or humiliating behaviors.
5. Leaders monitor for behaviors that can have a negative impact on the work environment and address them promptly.
6. Leaders ensure policies and expectations are enforced fairly and consistently for individuals at all levels of the organization.
7. Individuals treat decision-makers with respect, even when they disagree with a decision.
8. Leaders ensure facilities are conducive to a productive work environment and housekeeping is maintained.

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

Proposed Examples

1. The organization encourages individuals to offer ideas, concerns, suggestions, differing opinions, and questions to help identify and solve problems.
2. Leaders are receptive to ideas, concerns, suggestions, differing opinions, and questions.
3. The organization promotes robust discussions, recognizing that differing opinions are a natural result of differences in expertise and experience.
4. Individuals value the insights and perspectives provided by quality assurance, the employee concerns program, and independent oversight organizations.

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

Proposed Examples

1. Leaders promote collaboration among work groups.
2. Leaders respond to questions and concerns in an open and honest manner.
3. Leaders, sensitive to the negative impact of a lack of information, share important information in an open, honest, and timely manner such that trust is maintained.
4. Leaders ensure that plant status and important work milestones are communicated throughout the organization.
5. Leaders acknowledge positive performance and address negative performance promptly and directly with the individual involved; confidentiality is maintained as appropriate.
6. Leaders welcome performance feedback from throughout the organization and modify their behavior when appropriate.

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

Proposed Examples

1. The organization implements processes to ensure fair and objective resolution of conflicts and differing views.
2. Leaders ensure conflicts are resolved in a balanced, equitable, and consistent manner, even when outside of defined processes.
3. Individuals have confidence that conflicts will be resolved respectfully and professionally.

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 Nuclear is Recognized as Special and Unique
- QA.2 Challenge the Unknown
- QA.3 Challenge Assumptions
- QA.4 Avoid Complacency

Questioning Attitude

QA

QA.1 Nuclear Is Recognized as Special and Unique: Individuals understand that complex technologies can fail in unpredictable ways.

Proposed Examples

1. The organization ensures that activities that could affect reactivity are conducted with particular care, caution, and oversight.
2. Individuals recognize the special characteristics and unique hazards of nuclear technology including radioactive byproducts, concentration of energy in the core, and decay heat.
3. Individuals recognize the particular importance of features designed to maintain critical safety functions, such as core and spent fuel cooling.
4. Executives and senior managers ask probing questions to understand the implications and consequences of anomalies in plant conditions.
5. Executives and senior managers challenge managers to ensure degraded conditions are fully understood and appropriately resolved, especially those involving equipment important to nuclear safety.

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

Proposed Examples

1. Leaders reinforce expectations that individuals take the time to do the job right the first time, seek guidance when unsure, and stop if an unexpected condition or equipment response is encountered.
2. Individuals maintain a questioning attitude during pre-job briefs and job-site reviews* to identify and resolve unexpected conditions.
3. Individuals challenge unanticipated test results rather than rationalize them. For example, abnormal indications are not automatically attributed to indication problems, but are thoroughly investigated before activities are allowed to continue.
4. Individuals communicate unexpected plant responses and conditions to the control room.
5. Individuals stop work activities when confronted with an unexpected condition, communicate with supervisors, and resolve the condition prior to continuing work activities . When appropriate, individuals consult system and equipment experts.
6. If a procedure or work document is unclear or cannot be performed as written, individuals stop work until the issue is resolved.

***Job-site review:** An action performed by an individual or group to improve situational awareness at the job site; also known as two minute drill, timeout, two minute rule, take-a-minute, two minute timeout

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

Proposed Examples

1. Leaders solicit challenges to assumptions when evaluating nuclear safety issues.
2. Individual contributors ask questions to fully understand the bases of operational and management decisions that appear to be contrary to nuclear safety.
3. Managers question assumptions, decisions, and justifications that do not appear to sufficiently consider impacts to nuclear safety.

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

Proposed Examples

1. The organization is aware that latent conditions can exist, addresses them as they are discovered, and considers the extent of the conditions and their causes.
2. Prior to authorizing work, individuals verify procedure prerequisites are met rather than assume they are met based on general plant conditions.
3. Individual contributors perform a thorough review of the work site and planned activity every time work is performed rather than relying on past successes and assumed conditions.
4. Leaders ensure specific contingency actions are discussed and understood during job planning and pre-job briefs.
5. Individuals consider potential undesired consequences of their actions prior to performing work and implement appropriate error reduction tools .

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

- DM.1 Consistent Process
- DM.2 Conservative Bias
- DM.3 Accountability for Decisions

Decision Making **DM**

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

Proposed Examples

1. The organization establishes a well-defined decision-making process, with variations allowed for the complexity of the issue being decided.
2. Individuals demonstrate an understanding of the decision-making process and use it consistently.
3. Leaders seek inputs from different work groups or organizations as appropriate when making safety- or risk-significant decisions.
4. When previous operational decisions are called into question by new facts, leaders re-evaluate these decisions to ensure they remain appropriate.
5. The organization uses the results of effectiveness reviews to improve future decisions.

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 in order to proceed, rather than unsafe in order to stop.

Proposed Examples

1. Managers ensure that conservative assumptions are used when determining whether emergent or unscheduled work can be conducted safely.
2. Leaders take a conservative approach to decision-making, particularly when information is incomplete or conditions are unusual.
3. Leaders consider long-term consequences when determining how to resolve emergent concerns.
4. Managers take timely action to address degraded conditions commensurate with their safety significance.
5. Executives and senior managers reinforce the expectation that the reactor will be shut down when procedurally required, when the margin for safe operation has degraded unacceptably, or when the condition of the reactor is uncertain. Managers implement this expectation.
6. Individuals do not rationalize assumptions for the sake of completing a task.

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

Proposed Examples

1. The on-shift licensed operators have the authority and responsibility to place the plant in a safe condition when faced with unexpected or uncertain conditions.
2. A designated, on-shift licensed senior reactor operator has the authority and responsibility to determine equipment operability.
3. Managers maintain single-point accountability for important safety decisions.
4. The organization ensures that important nuclear safety decisions are made by the correct person at the lowest appropriate level.

Glossary of Terms (1)

Companies have different organizational structures and terms for organizational roles and positions. This glossary defines terms for the purpose of this document. Each company can determine how these terms apply to its unique organizational structure.

- **The 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 strong nuclear safety culture.

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

- **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.

- **Senior Managers:** Those managers who are responsible for the execution of business activities, including setting priorities for and monitoring the performance of the organization.

Glossary of Terms (2)

- **Managers:** Individuals assigned to managerial positions who control, direct, guide, and advise; managers include senior managers, and may include some supervisors.

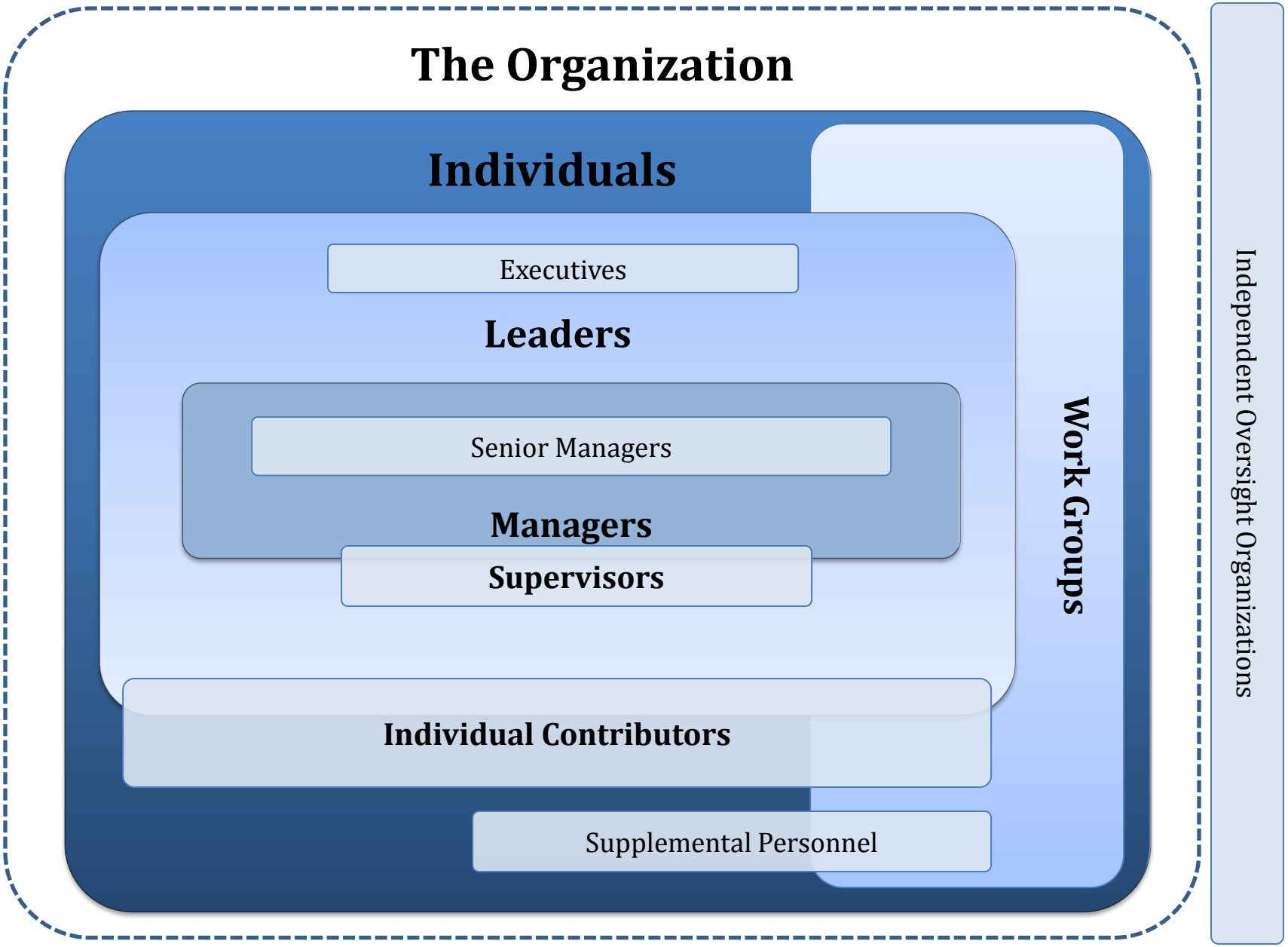
- **Supervisors:** Individuals who provide direction of the day-to-day activities of individual contributors; supervisors may include superintendents, foremen, or work group leads.

- **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.

- **Supplemental Personnel:** Individuals who accomplish work for but are not employees of the organization; supplemental personnel include short- and long-term contractors and individuals who are not employed by the organization but occasionally perform work related to nuclear safety.

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


The Organization
Individuals
Executives
Leaders
Senior Managers
Managers
Supervisors
Work Groups
Individual Contributors
Supplemental Personnel
Independent Oversight Organizations