DRAFT

Safety Culture Common Language

Revised December 4, 2012

Preface

This paper was prepared to document the outcomes of public workshops held in December 2011, April 2012, and November 2012. These workshops included panelists from the Nuclear Regulatory Commission (NRC), the nuclear power industry, and the public. They were convened to develop a common language to describe safety culture in the nuclear power industry.

During the December 2011 workshop, panelists completed an affinity diagramming activity, grouping various safety culture terms and examples under common themes. The panel used the nine traits of a positive safety culture described in the NRC's Safety Culture Policy Statement (June 2011) as the primary themes. The panelists also identified an additional theme, Decision Making, as particularly important in the safety cultures of nuclear power organizations. During the April 2012 workshop, the panelists created and defined subcategories under each of the ten traits. These subcategories became the 40 attributes of a positive nuclear safety culture that are described in this paper.

The panel reconvened in November 2012 to develop examples of each attribute. These examples more fully describe the values, behaviors, and observable artifacts that a nuclear power organization and its members should demonstrate in maintaining a positive safety culture. A follow-on public workshop is planned in January 2013 to finalize the common language traits, attributes, and examples for the nuclear power industry.

This paper is a draft and represents an ongoing initiative. It has been developed solely for informational purposes. It is not an official NRC position, opinion, or guidance.

Document Key:

- Safety Culture Traits are in blue and labeled with a two-letter abbreviation (e.g., Leadership Safety Values and Actions is abbreviated as LA). The order of the traits corresponds to the order that appears in the NRC's Safety Culture Policy Statement, and is not indicative of priority or importance. Note that Decision Making was added during the December 2011 Common Language Workshop.
- Sub-categories (attributes), as revised during the April 2012 workshop, are **bold** and labeled by two-letter abbreviation and number (e.g., LA.1, LA.2, LA.3) under each trait.
- Examples discussed during the November 2012 workshop are listed under each attribute. Examples requiring further discussion appear in red.
- Footnotes are used to capture comments made during the November 2012 workshop and issues that need to be revisited at the next workshop.

Glossary of Terms¹

Nuclear Safety Culture: Core values and behaviors resulting from a collective commitment by leaders and individuals to emphasize safety over competing goals to ensure protection of people and the environment.

The Organization: The collective group of all individuals who accomplish work; the organization includes the people, 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.

Managers: Individuals assigned to managerial or supervisory positions who control, direct, guide, or advise; managers include individuals at all management levels, including senior managers.

Supervisors: Individuals who provide first- or second-line direction of the day-to-day activities of individual contributors; supervisors include foremen and workgroup leads.

Work Groups: Groups of individuals who work collaboratively to accomplish tasks; work groups exist at all levels 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 workgroup.

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

Independent Oversight Organizations: Groups from outside the line organization who independently review the performance and direction of the organization; independent oversight organizations provide support to the nuclear organization by monitoring the outcomes of

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¹ Glossary of terms will be discussed at the next workshop.

strategic decisions of executives and corporate managers to ensure changes to the organization support nuclear safety.

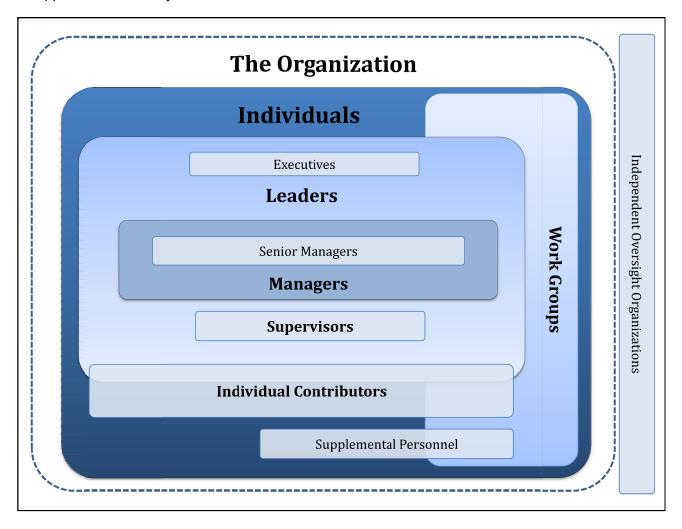


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Leadership Safety Values and Actions (LA): Leaders demonstrate a commitment to safety in their decisions and behaviors.

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

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.
- 7. Senior managers understand the safety significance of initiatives and projects that are under review for resource allocation and budget decisions.²

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.

- 1. Senior managers ensure supervisory and management oversight of work activities, including 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.

² Would this example fit better under decision making?

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.

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 raise safety concerns.
- 3. Leaders foster an environment that promotes accountability.
- 4. Leaders hold individuals accountable for their actions. ³
- 5. Managers consider the potential chilling effects of disciplinary actions and other potentially adverse personnel actions and take compensatory actions when appropriate.
- 6. 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.

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.

- Managers use a systematic process for planning, coordinating, and evaluating the safety impacts and potential chilling effects of decisions related to major changes, including 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 Do these two examples overlap with LA.8 Leadership Behaviors or PA Personal Accountability?

- 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 such that trust is maintained.
- 6. Managers and supervisors actively monitor and address potential distractions from nuclear safety during periods of change.

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

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. Although recommendations and feedback from corporate governance, review boards, and independent oversight organizations will be addressed, ultimate responsibility for decisions affecting nuclear safety remains with line management. 4

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

- 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 Sentence does not have a subject; can it be reversed to start with "line management"? Also using "line management" would be introducing a new term. Item tabled during workshop.

- 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 healthy nuclear safety culture.
- 5. Leaders candidly communicate the results of monitoring and assessments throughout the organization. The information is also provided to independent oversight organizations or the Board of Directors.^{5, 6}

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

Examples

- 1. Leaders "walk the talk," modeling correct behaviors, especially when resolving apparent conflicts between nuclear safety and production.
- 2. Leaders act promptly when a nuclear safety concern 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 safety culture behaviors.

Problem Identification and Resolution (PI): Issues potentially impacting safety are promptly 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 issues. Individuals identify issues completely, accurately, and in a timely manner in accordance with the program.

- 1. Individuals recognize deviations from standards.
- 2. Individuals understand how to enter issues into the corrective action program.
- Individuals ensure that concerns, problems, degraded conditions, and near misses are promptly reported and documented in the corrective action program at a low threshold.

⁵ Some panel members were concerned about separating board of directors from the term "independent oversight organizations". Is the board of directors an oversight organization? Should organizations be expected to provide assessment information directly to the board of directors?

⁶ Revisit this attribute and add an example about leaders encouraging individuals to provide candid information during assessments, leaders hearing this information with a candid, open mind, and communicating out the results in a candid manner.

4. Individuals describe the issues entered in the corrective action program in sufficient detail to ensure they can be appropriately prioritized, trended, and assigned to the appropriate group 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.

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 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 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.

- 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.

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.

Personal Accountability (PA): All individuals take personal responsibility for safety.

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

Examples

- 1. Individuals demonstrate a proper focus on nuclear safety and reinforce this focus through peer coaching and discussions.
- 2. Individuals hold themselves personally accountable for modeling nuclear safety behaviors.
- 3. Safety standards are consistently applied across the organization.
- 4. Individuals actively solicit and are open to performance feedback.
- 5. Individuals encourage each other to adhere to high standards and be open to performance feedback.
- 6. Individuals help supplemental personnel understand expected behaviors and actions associated with their jobs necessary to maintain nuclear safety.

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

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 concerns, including those identified by others.⁷

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⁷ Would this example be a better fit under RC.1 SCWE Policy?

- 3. Work groups integrate nuclear safety messages into daily activities such as pre-job briefs and walk-downs.
- 4. Individuals take ownership for the preparation and execution of assigned work activities.
- 5. Individuals actively participate in pre-job briefings, understanding their responsibility to raise nuclear safety concerns before work begins.
- 6. Individuals ensure that they are trained and qualified to perform assigned work.
- 7. 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 workgroups communicate and coordinate their activities within and across organizational boundaries to ensure nuclear safety is maintained. 8

Examples

- 1. Individuals demonstrate a 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.

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 nuclear safety is the overriding priority. The work process includes the identification and management of risk commensurate to the work.

- 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.

⁸ Some panel members suggested moving the attribute "Teamwork" and its examples out of Personal Accountability and into the Work Processes or Effective Safety Communication trait.

- 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.

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.

Examples

- 1. Plant activities are governed by comprehensive, high-quality processes and procedures.
- 2. Design documentation, procedures, and work packages are complete, 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.

- 1. Individuals follow procedures.
- 2. Individuals understand and use human error reduction techniques.

- 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 beginning work.
- 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.

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.

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, emphasizing that this has happened or 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.

<u>Examples</u>

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

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

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.

- 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.
- 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.

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.

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 individuals raising concerns.
- 6. Leaders are trained to take ownership when receiving and responding to concerns, recognizing confidentiality if appropriate and ensuring the concerns 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.

- 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. Alternate 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.

Effective Safety Communication (CO): Communications maintain a focus on safety.

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

Examples

- 1. Communications within workgroups are timely, frequent, and accurate.
- 2. Work groups communicate across workgroup boundaries with other plant workers and supervision in the completion of their work assignments.
- 3. Individuals communicate with each other such that everyone has the information necessary to accomplish work activities safely and effectively.
- 4. Shift turnovers are coordinated to clearly support nuclear safety.
- 5. Pre-job briefs promote discussion of potential impacts to safety.

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

Examples

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

Examples

- 1. Leaders encourage 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.

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

- 1. Executives and senior managers communicate expectations on nuclear safety so that personnel understand that safety is of the highest priority.
- 2. Executives and senior managers implement a strategy of constant 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 and teach desired nuclear safety behaviors to individuals, including examples of how they can positively and 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 associated with their jobs necessary to maintain nuclear safety.

Respectful Work Environment (WE): Trust and respect permeate the organization.9

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

Examples

- 1. Individuals and their professional capabilities and experiences are regarded as the nuclear organization's most valuable asset.
- 2. Individuals are treated with dignity and respect by all levels of the organization.
- 3. Leaders do not demonstrate or tolerable bullying or humiliating behaviors, either formally or informally.
- 4. Individual work spaces are clean, well-supplied, and well- maintained.
- 5. Work group members treat each other and other groups with respect.
- 6. Policies and expectations are enforced fairly and consistently for all individuals, including managers.
- 7. Leaders are sensitive to the negative impact that intimidation and personal attacks have on trust and on maintaining a safety-conscious work environment.

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

Examples

- 1. Individuals are encouraged to offer innovative ideas, concerns, suggestions, differing opinions, and questions to help identify and solve problems.
- 2. When solving problems, robust discussions and healthy conflict are recognized as a natural result of differences in expertise and experience.
- 3. Individuals value the insights and fresh perspectives provided by quality assurance, assessments, the employee concerns program, and independent oversight organizations.
- 4. Individuals respect each other's role in decision making.

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

- 1. Trust is evident among leaders and individual contributors; leaders and line organizations; and between organizations.
- 2. Leaders respond to guestions in an open and honest manner.
- 3. Managers openly share information, such as important plant information and changes that are expected.

⁹ All examples under the Respectful Work Environment trait need to be reviewed at the next workshop.

- 4. Leaders handle performance issues directly with individuals and not "behind their back."
- 5. Leaders accept performance feedback and change their behavior.

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

Examples

- 1. When needed, fair and objective methods, such as "dispute resolution," are available to resolve conflict and unsettled differing professional opinions.
- 2. When leaders resolve conflicts, outcomes are perceived as fair and reasonable.
- 3. Conflict is respectfully and professionally resolved.

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.¹⁰

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

Examples

- 1. Activities that could affect core reactivity are conducted with particular care and caution.
- 2. Features designed to maintain critical safety functions, such as core cooling, are recognized as particularly important.
- Executives and senior managers ask questions to fully understand anomalies in
 plant conditions, especially how rigorously and the extent to which these anomalies
 are investigated. They challenge managers to fully resolve degraded conditions,
 especially those of nuclear safety equipment.
- 4. Executives and senior managers reinforce the expectation that the reactor be shut down when procedurally required, when the margin for safe operation has degraded unacceptably, or when the condition of the reactor is uncertain.

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

Examples

Managers reinforce expectations that individuals take the time to do the job right the
first time and to seek advice when unsure. They reinforce the expectation to stop
when plant conditions do not match expected responses during field evolutions.

¹⁰ All examples under the Questioning Attitude trait need to be reviewed at the next workshop.

- Supervisors reinforce the performance of job-site reviews to identify and correct conditions that could impede the safe completion of the assigned task or the safe operation of the plant.
- 3. Unanticipated test results are challenged, not rationalized. For example, abnormal indications are not attributed to indication problems, but are thoroughly investigated before a procedure or work document is allowed to continue.
- 4. Individuals communicate unexpected plant conditions or responses to the control room for evaluation prior to continuation of work activities.
- If a procedure or work document is unclear or cannot be performed as written, individuals stop work until the issue is resolved by the appropriate level of management.
- 6. Individuals stop work activities when confronted with an unexpected condition and resolve the condition with supervisors and, as appropriate, system and equipment experts prior to continuing work activities.

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

Examples

- 1. Leaders encourage dialogue and debate when evaluating nuclear safety issues.
- 2. Individual contributors question leaders to fully understand the bases of operational and management decisions that appear to be contrary to nuclear safety.
- 3. Managers question analysis assumptions during decision making.
- 4. Managers question 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.

- 1. Procedure prerequisites are verified by the individual authorizing the work, not assumed to be met based on general plant conditions.
- 2. Individual contributors perform a review of the work site to identify and correct jobsite conditions that are not as expected or that potentially impact the safe completion of the assigned task.
- 3. Individual contributors take the time to do the job right the first time and seek advice when unsure. They stop if plant conditions are not as expected.
- 4. Individuals ask, "What is the most likely undesired consequence of this action?" to validate appropriate contingency actions and ensure operational and nuclear safety impacts are appropriately identified prior to beginning work.

Decision Making (DM): Decisions that support or affect nuclear safety are systematic, rigorous, and thorough.¹¹

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

Examples-

- 1. Individuals use a formal process for making decisions.
- 2. Individuals demonstrate an understanding of the decision making process. The process is well-defined and consistently used, with variations allowed for the complexity of the issue being decided.
- 3. Leaders make safety-significant or risk-significant decisions using a systematic process.
- 4. Leaders consider risk insights in the decision-making process.
- 5. Leaders seek interdisciplinary inputs or reviews when making safety- or risk-significant decisions.
- 6. When previous operational decisions are called into question by new facts, decisions are reviewed to improve the quality of future decisions.
- 7. Effectiveness reviews of safety-significant decisions are conducted to determine how 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.

Examples

- 1. Individuals demonstrate how a proposed action is safe before proceeding, rather than demonstrating that it is unsafe so as to stop an action.
- 2. Individuals handle emergent or unscheduled work with extreme caution.
- 3. Leaders take a conservative approach to decision-making, particularly when information is incomplete or conditions are off-normal or anomalous.
- 4. Leaders consider both long-term consequences as well as the immediate presenting problem when making decisions.
- 5. Managers demonstrate a bias for action to fully resolve degraded conditions.
- 6. Managers ensure 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.

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

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¹¹ All examples under the Decision Making trait need to be reviewed at the next workshop.

- 1. Managers formally define the authority and roles for decisions affecting nuclear safety, communicate these roles to applicable personnel, and implement these roles and authorities as designed.
- 2. Operations are vested with the authority to place the plant in a safe condition when faced with unexpected or uncertain conditions.
- 3. Managers maintain single-point accountability for important safety decisions.
- 4. Important nuclear safety decisions are made at the correct level.
- 5. Decisions are made at the lowest level allowed by policies, procedures and practices.