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Attachment 4

Nuclear Safety Culture

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1. PROGRAM OVERVIEW

1.1 This program directive (PD) sets forth the commitment to maintain a healthy nuclear safety culture and a safety conscious work environment (SCWE).

1.2 The concept of a healthy nuclear safety culture applies to every employee in the nuclear organization, from the board of directors to the individual contributor, with the focus on nuclear safety. Executive and senior managers are the leading advocates of nuclear safety; however, nuclear safety is a collective responsibility, and no one in the organization is exempt from the obligation to ensure safety first.

1.3 While the same principles apply to radiological safety, industrial safety, and environmental safety; nuclear safety is the first value adopted at a nuclear station and is never abandoned.

1.4 Nuclear power plants are designed, built, and operated to produce power in a safe, reliable, efficient manner. Most plants today achieve high levels of safety, impressive production records, and competitive costs; all reinforced by decisions and actions made with a long-term view of safety being the overriding priority for the station and for each individual associated with it.

2. APPLICABILITY

2.1 This PD applies to nuclear generation business unit employees and supplemental personnel working at Diablo Canyon.

3. DEFINITIONS

3.1 Nuclear Safety Culture: The core values and behaviors resulting from a collective commitment from leaders and individuals to emphasize safety over competing goals to ensure the protection of people and the environment. The terms nuclear safety culture and safety culture are synonymous. For the purposes of this document, nuclear safety culture should be understood to include safety conscious work environment (SCWE).

3.2 Organizational Culture: The shared basic assumptions that are developed in an organization as it learns and copes with problems. The basic assumptions that have worked well enough to be considered valid are taught to new members of the organization as the correct way to perceive, think, act, and feel. Culture is the sum total of a group's learning. Culture is for the group what character and personality are for the individual.

3.3 Safety Conscious Work Environment (SCWE): An environment in which employees feel free to raise safety concerns, both to their management and to the NRC, without fear of retaliation and where such concerns are promptly reviewed, given the proper priority based on their potential safety significance, and appropriately resolved with timely feedback to employees. SCWE is a critical element of a healthy nuclear safety culture.

4. PROGRAM OBJECTIVES AND REQUIREMENTS

4.1 The attributes of a SCWE are described by the NRC as including:

4.1.1 A management attitude that promotes employee involvement and confidence in raising and resolving concerns.

4.1.2 A clearly communicated management policy that safety has the utmost importance, overriding, if necessary, the demands of production and project schedules.

4.1.3 A strong, independent quality assurance organization and program.

4.1.4 A training program that encourages a positive attitude toward safety.

4.1.5 A safety ethic at all levels that is characterized by an inherently questioning attitude, attention to detail, prevention of complacency, a commitment to excellence, and personal accountability in safety matters.

4.2 The traits for a healthy nuclear safety culture are described by INPO as including:

4.2.1 Personal Accountability (PA): All individuals take personal responsibility for safety. Responsibility and authority for nuclear safety are well defined and clearly understood. Reporting relationships, positional authority, and team responsibilities emphasize the overriding importance of nuclear safety.

4.2.2 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. All employees are watchful for assumptions, values, conditions, or activities that can have an undesirable effect on plant safety.

4.2.3 Effective Safety Communication (CO): Communications maintain a focus on safety. Safety communication is broad and includes plant-level communication, job-related communication, worker-level communication, equipment labeling, operating experience, and documentation. Leaders use formal and informal communication to convey the importance of safety. The flow of information up the organization is seen as important as the flow of information down the organization.

4.2.4 Leadership Safety Values and Actions (LA): Leaders demonstrate a commitment to safety in their decisions and behaviors. Executive and senior managers are the leading advocates of nuclear safety and demonstrate their commitment both in word and action. The nuclear safety message is communicated frequently and consistently, occasionally as a stand-alone theme. Leaders throughout the nuclear organization set an example for safety. Corporate policies emphasize the overriding importance of nuclear safety.

4.2.5 Decision-Making (DM): Decisions that support or affect nuclear safety are systematic, rigorous, and thorough. Operators are vested with the authority and understand the expectation, when faced with unexpected or uncertain conditions, to place the plant in a safe condition. Senior leaders support and reinforce conservative decisions.

4.2.6 Respectful Work Environment (WE): Trust and respect permeate the organization. A high level of trust is established in the organization, fostered, in part, through timely and accurate communication. Differing professional opinions are encouraged, discussed, and resolved in a timely manner. Employees are informed of steps taken in response to their concerns.

4.2.7 Continuous Learning (CL): Opportunities to learn about ways to ensure safety are sought out and implemented. Operating experience is highly valued, and the capacity to learn from experience is well developed. Training, self-assessments, and benchmarking are used to stimulate learning and improve performance. Nuclear safety is kept under constant scrutiny through a variety of monitoring techniques, some of which provide an independent "fresh look."

4.2.8 Problem Identification and Resolution (PI): Issues potentially impacting safety are promptly identified, fully evaluated, and promptly addressed and corrected commensurate with their significance. Identification and resolution of a broad spectrum of problems, including organizational issues, are used to strengthen safety and improve performance.

4.2.9 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. The station creates, maintains, and evaluates policies and processes that allow personnel to freely raise concerns.

4.2.10 Work Processes (WP): The process of planning and controlling work activities is implemented so that safety is maintained. Work management is a deliberate process in which work is identified, selected, planned, scheduled, executed, closed, and critiqued. The entire organization is involved in and fully supports the process.

4.3 Objectives

4.3.1 Establish effective methods for communicating between employees and management involved in nuclear activities.

4.3.2 Establish programs that ensure matters brought to the attention of management are promptly and adequately addressed.

4.3.3 Maintain a SCWE where individuals feel free to raise nuclear safety issues without fear of reprisal.

4.3.4 Develop management behaviors that foster employee confidence to raise nuclear safety concerns.

4.3.5 Use INPO's, "Traits for a Healthy Nuclear Safety Culture," as a guideline to assess and assure the essential attributes of a healthy nuclear safety culture are adequately addressed.

4.4 Program Requirements

4.4.1 The responsibility and authority for nuclear safety are well defined and clearly understood.

4.4.2 The Davis-Besse case study, or a similar case study, is discussed with new managers and supervisors and with all managers and supervisors in the nuclear organization on a periodic basis.

4.4.3 Self-assessments are performed periodically to evaluate the organization's nuclear safety culture and to confirm that nuclear safety is not compromised by production priorities.

4.4.4 A method is established to ensure that senior management is made aware of significant abnormal conditions in a timely manner.

4.4.5 Significant abnormal conditions are investigated to determine their root causes, evaluated for their actual or potential effects on plant safety and reliability, and resolved in a manner that is timely and prevents recurrence.

5. RESPONSIBILITIES

5.1 Nuclear executives (Chief Nuclear Officer, vice presidents, and directors) are responsible for:

5.1.1 Communicating the nuclear safety message frequently and consistently, occasionally as a stand-alone theme.

5.1.2 Ensuring corporate policies emphasize the overriding importance of nuclear safety.

5.1.3 Providing the reporting relationships, positional authority, staffing and budget commensurate with supporting a healthy nuclear safety culture and SCWE.

5.1.4 Aligning the system of rewards and sanctions with strong nuclear safety policies and reinforcing desired behaviors and outcomes.

5.1.5 Communicating production goals in a manner to avoid sending mixed signals on the importance of nuclear safety.

5.1.6 Supporting and reinforcing conservative decisions.

5.1.7 Modeling the behaviors expected of all personnel for a healthy nuclear safety culture and SCWE.

5.2 Managers and supervisors are responsible for:

5.2.1 Communicating the company's commitment to nuclear safety culture and a SCWE, the importance of raising nuclear safety concerns, the various methods to raise concerns, and the company's intolerance of retaliation for raising nuclear safety issues.

5.2.2 Regularly communicating to the workforce important decisions and their bases.

5.2.3 Supporting and reinforcing conservative decisions.

5.2.4 Resolving employee issues in a timely manner and providing timely feedback to employees who raise issues.

5.2.5 Modeling the behaviors expected of all personnel for a healthy nuclear safety culture and SCWE.

5.3 Contract managers and contract supervisors are responsible for:

5.3.1 Understanding nuclear safety culture and SCWE expectations, encouraging concern identification, performing timely evaluation of concerns, and providing timely feedback to individuals who raise concerns.

5.3.2 Contacting Employee Concerns Program (ECP) staff for assistance, as needed.

5.3.3 Supporting and reinforcing conservative decisions.

5.3.4 Modeling the behaviors expected of all personnel for a healthy nuclear safety culture and SCWE.

5.4 Employees and supplemental personnel are responsible for:

5.4.1 Understanding that everyone is personally responsible for nuclear safety and reporting nuclear safety concerns.

5.4.2 Modeling the behaviors expected of all personnel for a healthy nuclear safety culture and SCWE.

6. KEY IMPLEMENTING DOCUMENTS

6.1 An inter-departmental administrative procedure (IDAP) shall be issued to describe implementation, maintenance, and monitoring of the organizational nuclear safety culture.

6.2 Departments should develop DLAPs, as needed, to assign responsibilities and to implement the program requirements specified in this PD and associated IDAPs.

6.3 Additional programs that promote a healthy nuclear safety culture fall under other PDs:

- Corrective Action Program - OM7, "Corrective Action Program"
- Employee Concerns Program - OM3, "Communications"
- Personnel Training - TQ1, "Personnel Training and Qualification"
- Self-Assessments - OM15, "Performance Monitoring and Improvement"
- Plant Health Committee - OM4, "Nuclear Oversight Program"
- Notification Review Team - OM4, "Nuclear Oversight Program"

7. CLOSELY RELATED PROGRAMS

None

8. RECORDS

None

9. REFERENCES

9.1 INPO 12-012, "Traits for a Healthy Nuclear Safety Culture," April 2013

9.2 INPO "Principles for Effective Operational Decision-Making," December 2001

9.3 INPO SOER 2002-4, Revision 1, "Reactor Pressure Vessel Head Degradation at Davis-Besse Nuclear Power Station," January 27, 2006

9.4 NRC Policy Statement, "Freedom of Employees in the Nuclear Industry to Raise Safety Concerns Without Fear of Retaliation," May 14, 1996

9.5 NRC SECY-97-260, "Resolution of Public Comments in Response to Request for Public Comments in the Federal Register Notice, 'Safety Conscious Work Environment,'" November 4, 1997

9.6 NUREG/BR-0240, "Reporting Safety Concerns to the NRC"

9.7 Section 211 of the Energy Reorganization Act of 1974

9.8 10 CFR 19, "Notices, Instruction and Reports to Workers: Inspection and Investigations"

9.9 10 CFR 50.7, "Employee Protection"