International Conference on Human and Organizational Aspects of Assuring Nuclear Safety -Exploring 30 Years of Safety Culture



Contribution ID: 71

Type: Dialogue Session

Dialogue Session Contributing Paper: Critical Conversations and the Role of Dialogue in Delivering Meaningful Improvements in Safety and Security Culture

Wednesday, 24 February 2016 15:45 (1h 15m)

Synopsis

Significant scholarship has been devoted to research into safety culture assessment methodologies. These focus on the development, delivery and interpretations of safety culture surveys and other assessment techniques to assure reliable outcomes that provide insights into the safety culture of an organization across multiple dimensions. The lessons from this scholarship can be applied to the emerging area of security culture assessments as the nuclear industry broadens its focus on this topic. The aim of this paper is to discuss the value of establishing mechanisms, immediately after an assessment and regularly between assessments, to facilitate a structured dialogue among leaders around insights derived from an assessment, to enable ongoing improvements in safety and security culture. The leader's role includes both understanding the current state of culture, the "what is", and creating regular, open and informed dialogue around their role in shaping the culture to achieve "what should be".

Meaningful improvements arise when leaders proactively nurture a healthy safety and security culture. The concept of critical conversations is central to the necessary engagement of leaders and provides a basis for leaders to use their own knowledge of the organization to make informed decisions on those activities and approaches that can best influence the culture and support practical improvements. The concept of critical conversations is based on that described in US-based Nuclear Energy Institute's NEI 09-07 REV1, Fostering a Healthy Nuclear Safety Culture.

There are five aspects that will be discussed in this paper; the experience of Bruce Power, a Canadian nuclear power generating company with eight Candu units (6300MW), will be used to provide practical considerations for implementation. The aspects are aligned to a Plan-Do-Check-Act cycle and support the implementation of an integrated management system, based on International Atomic Energy Agency's (IAEA) GS-R-3, The Management System for Facilities and Activities.

- Adopt a framework against which to establish a dialogue. This paper will share Bruce Power's experience on the implementation of the "Traits of a Healthy Nuclear Safety Culture" established by the World Association of Nuclear Operators (WANO) and the Institute of Nuclear Power Operations (INPO).
- 2. Limit the number of improvements, but embrace them across the organization. This paper will address the effectiveness of Bruce Power's experience with limiting the number of improvements following a safety culture assessment, compared to having a more detailed and comprehensive action plan.
- 3. Create opportunities to engage regularly in Critical Conversations. This paper will address lessons from Bruce Power's implementation of Nuclear Safety Culture Monitoring Panels based on NEI 09-07, where several times per year, mid-level and senior leaders engage in very candid dialogue about safety and security culture.

- 4. Use existing oversight mechanisms to discuss progress. This paper will provide examples of oversight and monitoring mechanisms at Bruce Power related to safety culture improvement progress and the impact of sustained engagement around assessment findings.
- 5. Innovate: try new approaches to deepen understanding of culture. This paper will describe some of the exploratory mechanisms used by Bruce Power around safety and security culture awareness and monitoring, the lessons learned and future plans.

Scholarship on techniques used to assess culture is valuable to ensure an accurate understanding of the state of safety and security culture within an organization. However, deepening understanding of "what is" is only the first part of the journey to "what should be". To successfully navigate towards an ever-improving safety and security culture, leadership must create mechanisms to regularly discuss safety and security related cultural topics; be attuned to faint signals of cultural change and take appropriate action; and create the shared space and collegial atmosphere in which to engage in critical conversations about the state of safety and security culture.

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Session Classification: Dialogue Session