



Fostering a Strong Nuclear Safety Culture

Tom Houghton
Director, Safety-Focused Regulation
Nuclear Energy Institute



Challenges with the Existing Situation

- Different NRC/INPO terminology creates confusion
- Industry has the responsibility, but has not taken the lead
- Inspection findings are a very limited set of data
- Industry is not taking full advantage of all the possible indications of safety culture weaknesses
- There is no industry-wide guidance for conducting safety culture assessments – self, independent, or third party



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Objective: Achieve A Strong Nuclear Safety Culture Across Industry

- A common language of nuclear safety culture
- Industry responsible and leading; NRC providing appropriate and transparent oversight
- Use all available assessment tools to assess, identify and correct weaknesses
- A common methodology for conducting assessments, including third party



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Alignment is Proceeding in Three Areas

- Nuclear Safety Culture workshop Feb 2-4, 2009 began work on creating a common language
- A common industry approach using all available tools to assess and address issues, and with effective NRC oversight, has been submitted to NRC
- A common industry approach for conducting self, independent and third party assessments has been submitted to NRC



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Nuclear Safety Culture Assessment

- NRC and industry dissatisfied with 95003 safety culture assessment experience at Palo Verde
- NEI agreed to develop industry guideline
- Established task force to develop guideline that could be used for self, independent and third party assessments
- All sites required to perform biennial self assessments
 - Required by INPO SOER 02-4
 - Some use contractors for surveys and/or assessments
 - No industry-wide consistency
 - USA has a methodology it has used successfully for five years
- Also reviewed IAEA Safety Culture Assessment Review Team



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NSCA Process

- Structured on INPO's *Principles and Attributes for a Strong Nuclear Safety Culture*; results are provided in that context
- Pre-assessment automated survey and document review
- Assessment of leadership and worker attitudes, opinions, and perceptions through structured interviews and behavioral observations
- Can be adjusted to address issues of interest to the site



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NSCA Process Manual has Been Upgraded

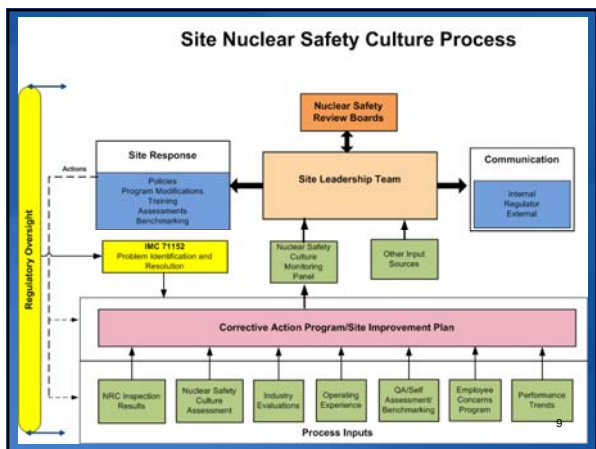
- Modified to reflect three levels of assessment (self, independent and third party)
- Upgrade survey to distinguish between departments and levels in the organization
- Conducted validation study of process
- Continuous improvement built into process

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NEI 09-07 Fostering a Strong Nuclear Safety Culture

- Uses multiple inputs to the CAP and other key inputs including external assessments
- Licensee monitoring, oversight and communication
 - Trends and analyzes input data
 - Ensures effective corrective action
 - Communicated to key stakeholders
- Monitoring review panel and site leadership team conduct periodic reviews
- Provides systematic approach
- Assessment bins will be modified when common language is achieved

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NRC's Role: Independently and Transparently Assess Licensee Actions

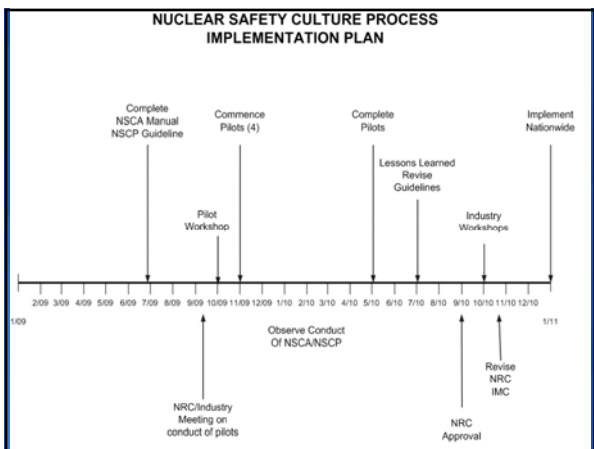
- **Enhanced PI&R inspections**
 - Effectiveness of licensee program in identifying weaknesses
 - Corrective action effectiveness
- **Observation/assessment of licensee process**
- **Continue identifying crosscutting aspects in inspection findings, but without problematic SCCI**
- **Maintain SCWE and traditional enforcement**
- **Document oversight in inspection reports and assessment letters**

NRC 10

Key Steps Going Forward

- **Establish a pilot program to test industry approach against success criteria**
- **NRC observe pilots in parallel with current oversight approach**
- **Jointly assess success of the pilot program and apply lessons learned to governing documents**
- **Conduct industry workshops and implement nationwide**

NRC 11



Pilot Plants


- Hope Creek
- North Anna
- Braidwood
- South Texas Project



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Pilot Plant Objectives


- Exercise the NSCA at N Anna, STP and Braidwood
- Exercise NEI 09-07 at all four pilots
- Assess pilot against success criteria
- NRC observe and comment
 - Mid pilot meeting Feb 24
 - Additional comments following pilot
- Check and adjust: modify NSCA and NEI 09-07



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Pilot Activities

- NSCA survey and onsite
- Use of previous surveys/assessments
- Nuclear Safety Culture Monitoring Panel Meetings
- Site Leadership Team Meetings
- Action Plans/Corrective Actions
- Nuclear Safety Review Board



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NRC Involvement

- Continue baseline inspection program
- Observe Nuclear Safety Culture Assessment
 - N. Anna 12/13-18
 - STPEGS 1/10-15
 - Braidwood 1/24-29
- Observe Nuclear Safety Culture Monitoring Panels
- Observe Site Leadership Team meetings
- Comment on NSCA and NEI 09-07



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Post Pilot Activities

- Lessons Learned, plus, deltas
- Success Criteria met?
- Process Modifications
- Request NRC to modify its current approach
- Train in the Fall and implement Jan 2011



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In conclusion

- Efforts continue to develop common language
- Industry has completed two guidelines and has provided them for NRC comment:
 - NEI 09-07 Fostering a Strong Nuclear Safety Culture
 - Nuclear Safety Culture Assessment Process Manual
- NRC has been observing pilot plants
- Industry is interested in refining the approach, including NRC's oversight role, for Commission consideration in 2010 and implementation in 2011



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