

# Fostering a Strong Nuclear Safety Culture

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# 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**

# **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**

## 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**

# 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**

# 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**

# NSCA Process Manual has Been Upgraded

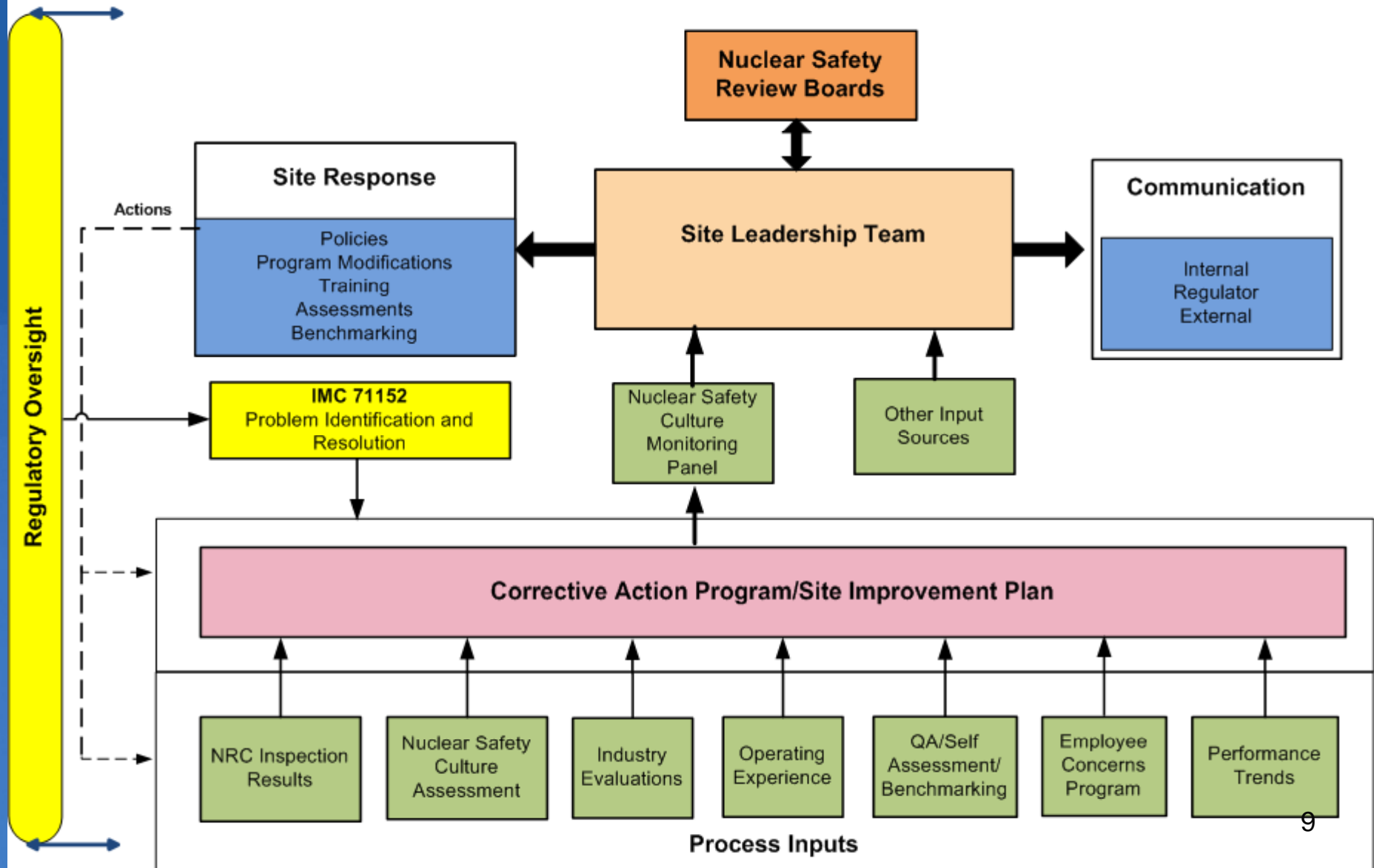
- **Modified to reflect three levels of assessment (self, independent and third party)**
- **Upgrade survey to distinguish between departments and levels in the organization**
- **Conducted validation study of process**
- **Continuous improvement built into process**

# 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**



# Site Nuclear Safety Culture Process



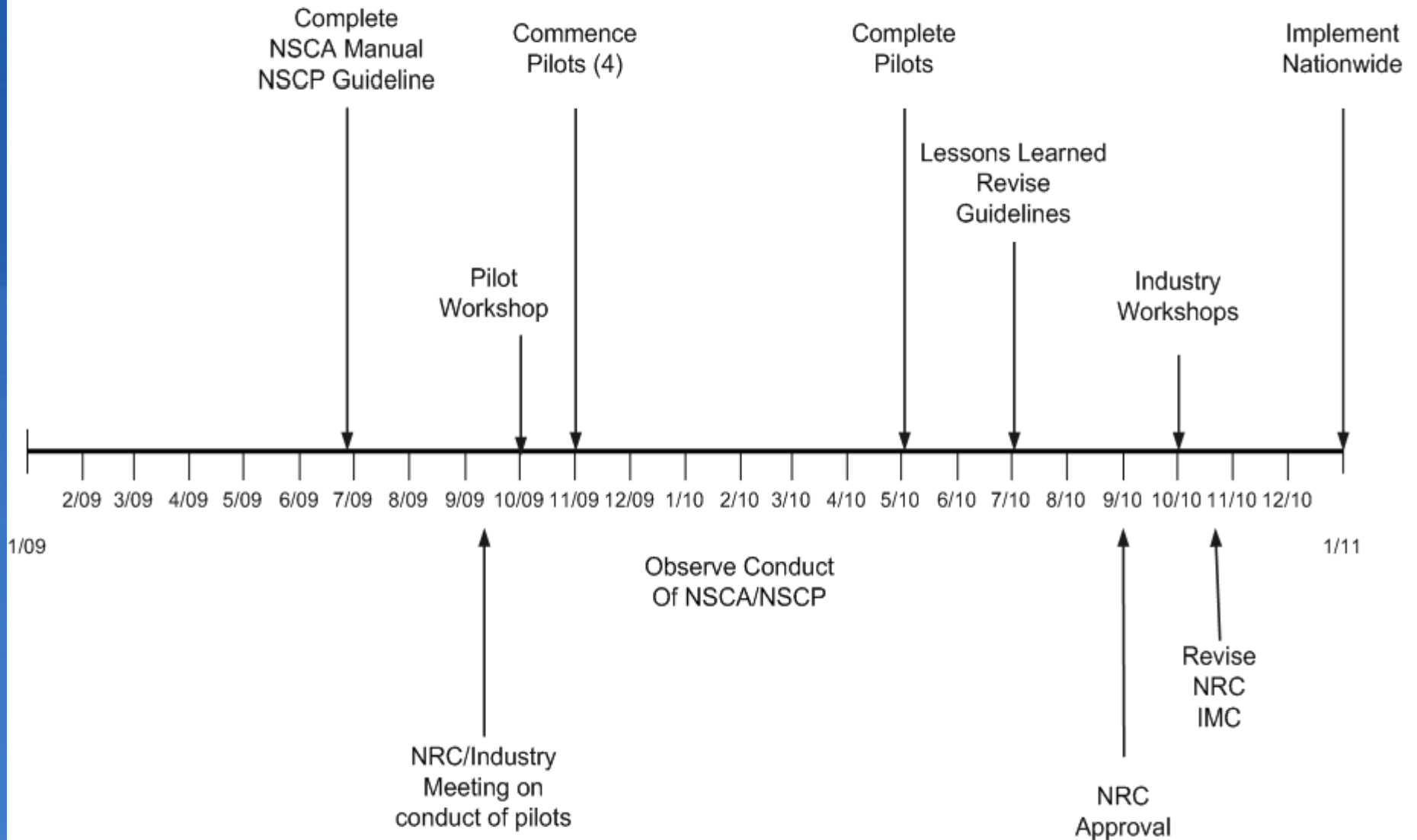
# **NRC's Role: Independently and Transparently Assess Licensee Actions**

- **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**

## 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**

# NUCLEAR SAFETY CULTURE PROCESS IMPLEMENTATION PLAN



# Pilot Plants

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

# 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

# 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**

# 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**



# 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**

## **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**