



**U.S.NRC**

UNITED STATES NUCLEAR REGULATORY COMMISSION

*Protecting Public Health and Safety*

# THE REACTOR OVERSIGHT PROCESS SAFETY CULTURE APPROACH

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NEA/IAEA

WORKSHOP ON MAINTAINING OVERSIGHT OF  
LICENSEE SAFETY CULTURE

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# What are we doing and when do we do it?

Stayed within the framework of the Reactor Oversight Process (ROP)

Continued with the graded approach to regulatory oversight

- Baseline Inspection Program
- Assessment Process
- Event response and Supplemental Inspections

# How gather safety culture information?

## Safety Culture Components in the Three Cross-Cutting Areas

Human Performance	Problem Identification & Resolution	Safety Conscious Work Environment
Decision-Making	Corrective Action Program	Environment for Raising Concerns
Resources	Operating Experience	Preventing, Detecting, & Mitigating Perceptions of Retaliation
Work Control	Independent Self-Assessments	
Work Practices		

9 above plus Accountability, Continuous Learning Environment, Organizational Change Management, and Safety Policies applied in 2 Baseline and 2 Special Reactive Inspections and in Supplemental Inspections

# How gather safety culture information?

(cont.)

## Baseline Inspection Program and Assessment Process

- Inspection findings (performance deficiencies) and associated aspects of safety culture components
- Substantive Cross-Cutting Issue (SCCI) – 4 or more safety culture aspects, with a common theme, and other criteria
- Recurring SCCI over 3 Assessment Periods – Option to ask licensee to do Safety Culture Self-Assessment
- Identification and Resolution of Problems Inspection Procedure

# How gather safety culture information?

(cont.)

- Event response inspections
- Supplemental inspections (graded response)
  - Review licensee safety culture self-assessment
  - Review licensee independent safety culture assessment
  - Review licensee third-party safety culture assessment
  - NRC conduct independent safety culture assessment

# How gather safety culture information?

(cont.)

## NRC Independent Assessment of Licensee's Safety Culture

- Inspectors and Safety Culture Assessors on Inspection Team
- Conduct Interviews & Focus Groups
- Conduct Behavioral Observations
- Conduct Document Reviews

# How use safety culture information?

- Regulatory follow-up
- Licensee follow-up expectations

# Lessons Learned

- Frequent interactions with external stakeholders during development process
- Inspector training prior to implementation
- 18 month implementation period (from July '06)
- Communicate regularly with internal and external stakeholders to address questions/gain feedback during implementation period
- Report to Commission at end of implementation period

# Future

- Part of Reactor Oversight Process annual assessment
- Continue to make improvements, as identified
- Apply knowledge transfer to fuel cycle facility licensees