



New Reactor Construction Safety Culture

Construction Assessment Program

Topics to be discussed

- Definition of Safety Culture
- NRC Inspection During Construction
- Feedback from previous meeting
- Near term approach under consideration
- Handout and discussion
- Other approaches and next steps

Definition of Safety Culture

- That assembly of characteristics and attitudes in organizations and individuals which establishes that, as an overriding priority, nuclear plant safety issues receive the attention warranted by their significance
- Current wording in IMC2505, should it be modified?

NRC Inspection During Construction

- Completion of ITAAC ensures the plant is constructed in compliance with the design (IMC2503)
- NRC will address all ITAAC for adequate closure and inspect a sample of ITAAC (“Targeted ITAAC”)
- Non-ITAAC Inspections

Areas of importance to Safety Culture during construction inspection

- Near term goal to incorporate Safety Culture inspection guidance into IMC2505
- Determine the threshold and number of violations to become an issue
- Long term goal - consider and pilot program alternatives

Feedback from previous workshop

- The new nine characteristics are still under development and not endorsed by the Commission
- The existing ROP 13 have already been in use and could be modified for construction
- It might be best to start from scratch
- Concern with drilling down to vendors and supply chain
- Stakeholders may be starting to see the link to quality.
- Safety culture should be driven by licensee leadership (INPO principles) not regulations or NRC oversight
- Safety culture is an organizational program and should be treated as such

Near-term approach being developed

- Modify IMC0305 components and aspects for use in the construction environment
- Assign aspects to findings
- Use multiple occurrences of the same aspect to identify Construction Safety Focus Issues (CSFI)

Near-term approach being considered

- Option 1 – Use the nine components and associated aspects in the Baseline inspection and four in the supplemental inspection matching ROP guidance
- Option 2 – Use the Industry Concept Construction Oversight Program “Elements of Construction Safety Culture” to group components (all 13 in baseline)
- Option 3 – Unique construction mix of baseline and supplemental (TBD)

Handout for Discussion

- The components were reviewed and adjusted for applicability to construction
- The aspects were modified for the type of work that would occur during construction
- Early draft with limited review
 - Do we need a follow up meeting to continue detailed work?
 - Would another workshop be helpful?

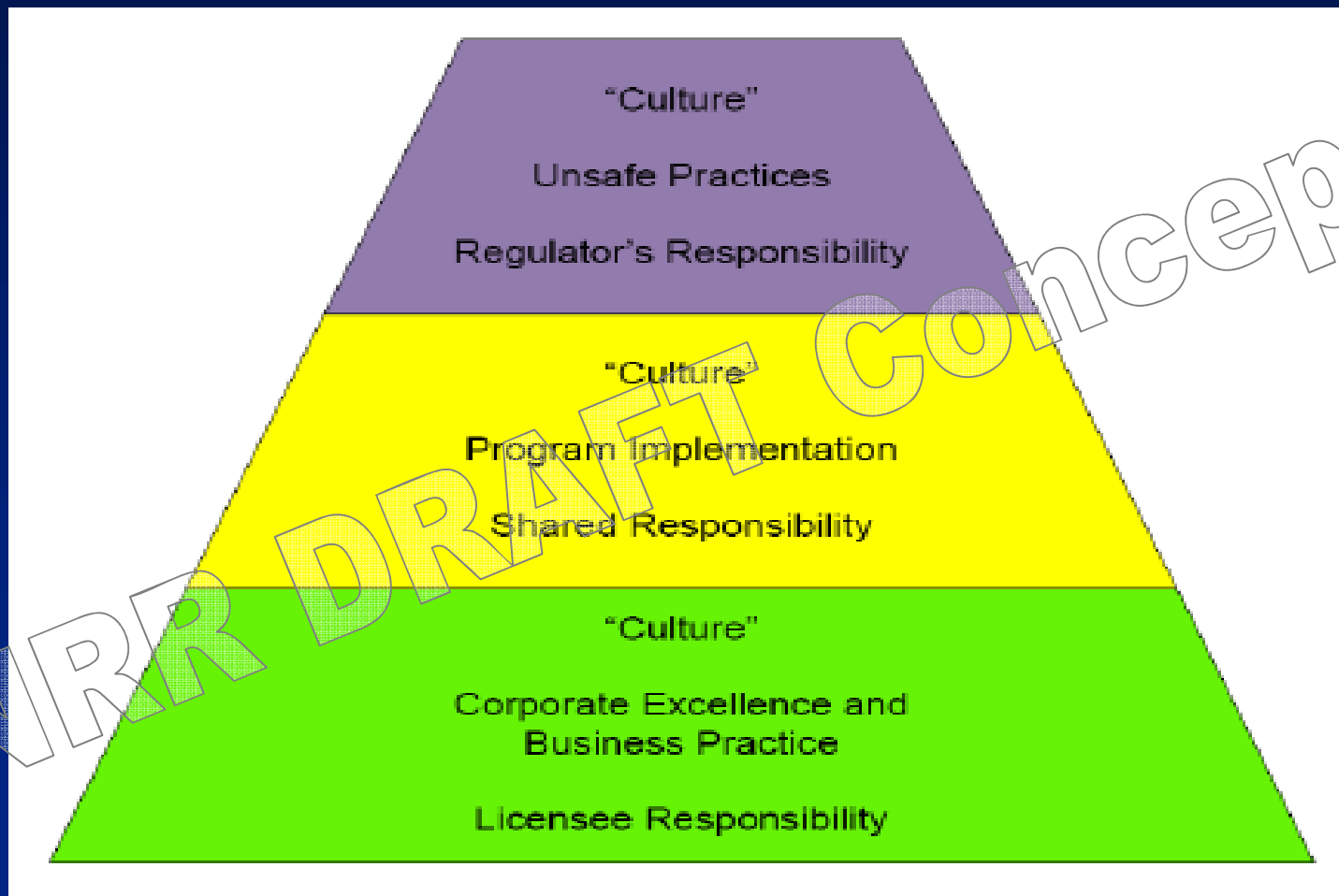
Early feedback on draft components and aspects

- Does the component match the work environment during construction?
- Does the aspect contain observable behavior for construction?
- How frequently would an aspect be tagged in a six month period for a site with a positive safety culture?

Approaches under consideration

- Industry proposal – Construction Inspection Assessment Process includes: “Elements of Construction Safety Culture”
 - Quality Assurance
 - Safety Conscious Work Environment
 - Problem Identification and Resolution
- NEI 09-07 “Fostering a Strong Nuclear Safety Culture”
Will an equivalent be developed for construction?
- INSAG15 – “Key Practical Issues in Strengthening Safety Culture” (IAEA)
- Others – NRR graded approach (next slide)

Approaches under consideration



Other Long-term Approaches

- Other approaches that could be developed for future use
 - Early IP95003 type NRC team Safety Culture Assessment
 - Early licensee self-assessment
 - Identification of corrective action trends
 - Industry initiatives

Next Steps

- Commission feedback on Policy Statement
- Continue to work with stakeholders to understand and address concerns
- Develop 13 components and associated aspects for implementation
- Safety Culture Framework for Construction Inspection Program in place by end of January 2010
- Handout is available for more detailed review and written feedback is requested



Questions