

### UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, DC 20555 -0001

February 7, 2007

#### SUBJECT: SUMMARY OF JANUARY 25, 2007, CATEGORY 3 PUBLIC MEETING WITH THE NUCLEAR ENERGY INSTITUTE AND INDUSTRY STAKEHOLDERS TO DISCUSS ASPECTS OF THE CONSTRUCTION INSPECTION PROGRAM RELATED TO THE NRC MONITORING AND ASSESSMENT OF LICENSEE PERFORMANCE (TAC NO. MB3140)

On January 25, 2007, a public meeting was held including the U.S. Nuclear Regulatory Commission (NRC), representatives of the Nuclear Energy Institute (NEI), and various nuclear industry stakeholders. The meeting was held at NRC Headquarters, Two White Flint North, 11545 Rockville Pike, Rockville, MD. The purpose of the meeting was to provide an opportunity for a dialogue among industry stakeholders regarding those aspects of the construction inspection program addressing NRC monitoring of licensee performance, and assessment of the results of NRC inspection activity.

The NRC began the meeting by providing a framework outline of assessment objectives, including current NRC thinking on construction oversight concepts, programmatic areas to be considered, inspections affecting ITAAC closure, characterization of inspection findings, and goals for complementary enforcement policies. Discussions of these assessment objectives will provide input to the development of Inspection Manual Chapter (IMC) 2505 which is currently being written to describe the process for using construction inspection results to arrive at an overall assessment of licensee performance.

Following the introductory overview (see Attachment 2), the NRC invited questions or comments from stakeholders on any topic related to inspection assessment, prior to proceeding with the structured dialogue portion of the meeting. Listed below are significant comments raised for consideration.

- Comment 1: NEI expressed agreement with earlier NRC comments that the assessment process should reflect the significance of findings in an action matrix, but would not include a detailed Significance Determination Process as exists in the ROP. Performance Indicators would not be necessary for the construction inspection program.
- Comment 2: What would differentiate between expansion of an inspection sample vs. taking enforcement action? How would the NRC determine which action is appropriate?

NRC response: At present, there is no clearly defined answer to that question. Discussions planned for the next part of the meeting will provide more insights for consideration.

Comment 3: How would the NRC consider positive aspects of a licensee's performance, or otherwise gain confidence in the licensee's performance?

NRC response: The NRC does not write inspection reports which specifically identify 'positive performance' due to the subjective nature of those judgements. Attempts in the past to identify positive performance led to inconsistencies which do not promote a predictable and repeatable process for characterization of inspection findings. Each inspector observation will be recorded. The absence of findings associated with an observation would be an indicator of successful licensee performance in that work.

Comment 4: The 2005 CIP workshop identified "Observations" as one of the four categories for inspection results. How do these observations become classified or characterized?

NRC response: An "Observation" documents what work an inspector saw being performed, and the inspector's evaluation of the success of the work. If the work was completed successfully no additional action would be needed. If the work was not successfully completed, a finding would be recorded, and follow-up by the licensee would be needed.

Comment 5: Earlier discussions of assessment objectives identified one of those objectives as the determination of the readiness of key operational programs. However, review of operational programs is an IMC 2504 activity; how does assessment enter into this process?

NRC response: IMC 2504 describes inspection requirements for operational programs. The inspection outcomes from 2504 will be treated in IMC 2505 to determine how those outcomes are classified and assessed. IMC 2504 (and 2503) defines what the inspectors do. IMC 2505 will define what the NRC managers do with the results of the 2504 (and 2503) inspections.

The next part of the meeting concentrated on a structured dialogue intended to involve all meeting attendees in the identification of possible inputs to the inspection assessment process. In order to encourage responses, each attendee was given a copy of the Action Matrix from IMC 0305. Attendees were requested to contribute their ideas on how the action matrix could be modified for use with the construction inspection program assessment process. These ideas were then listed and discussed, and appear as Meeting Interactive Exercise 1 and Meeting Interactive Exercise 2 attached to this meeting summary. These discussion points are intended to serve as focal points for decisions to be addressed during the next CIP public meeting on assessment to be conducted in late March, 2007.

This meeting summary which contains the list of meeting attendees and handouts provided by the NRC during the meeting is also available in ADAMS. (ADAMS Accession Number ML070250468).

Please direct any inquiries to Mary Ann Ashley at 301-415-1073, or MAB@nrc.gov.

/RA/

S. Patrick Sekerak, Reactor Operations Engineer Construction Inspection and Allegations Branch Division of Construction Inspection & Operational Programs Office of New Reactors NRC response: The NRC does not write inspection reports which specifically identify 'positive performance' due to the subjective nature of those judgements. Attempts in the past to identify positive performance led to inconsistencies which do not promote a predictable and repeatable process for characterization of inspection findings. Each inspector observation will be recorded. The absence of findings associated with an observation would be an indicator of successful licensee performance in that work.

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ADAMS Accession No.: ML070250468

OFFICE	NRO/DCIP	NRO/DCIP					
NAME	S.P. Sekerak /RA/	M.A. Ashley /RA/					
DATE	2/7/07	2/7/07					

#### PUBLIC MEETING SIGN IN SHEET

SUBJECT: DISCUSS THE CONSTRUCTION INSPECTION PROGRAM W/ NEI DATE TIME: January 25, 2007 12:30 p.m. – 4:00 p.m. LOC: U.S. Nuclear Regulatory Commission Two White Flint North, Room T-2B1

	Name	Organization		
1	Dave Trimble	NRC		
2	Mike Bourgeois	Entergy		
3	Jim Fisicaro	NEI		
4	Marilyn Kray	Exelon		
5	Peter Hasting	Duke/NuStart		
6	Roger Lanksburg	NRC – RIII		
7	Mark Lesser	NRC – RIII		
8	Mary Ann Ashley	NRC		
9	Don Hutchings	Westinghouse		
10	Andrea Sterdis	Westinghouse		
11	Stephen Burdick	Morgan Lewis		
12	Leslie Kass	NEI		
13	Dave Waters	Progress Energy		
14	Glenn Tracy	NRC		
15	Rick Rasmussen	NRC		
16	Dennis O. Meers	TVA		
17	Raul Baron	TVA		
18	Eric Oesterle	NRC		
19	Jason Jennings	NRC		
20	Patrick Sekerak	NRC		
21	Cynthia Carpenter	NRC		
22	Loren Plisco	NRC		
23	Joe Mihalcik	Constellation/UniStar		
24	J. Alan Beard	GE Nuclear		
25	John Oddo	Shaw S+W		
26	Daniel Magnarelli	AREVA		
27	Ted Amundsom	SN/C		
28	Paul Prescott	NRC		
29	Jamie L. Bond	Duke		
30	Thom Herrity	NRC		
31	John A Nakoski	NRC		
32	Charles Knobloch	Bechtel		
33	William Futrell	Bechtel		
34	Anne Cottingham	NEI		
35	Gene Imbro	NRC		
36	Shaun M. Anderson	NRC		
37	Russ Bell	NEI		
38	Lanny Dusek	Fluor Nuclear Power		
39	Doug Starkey	USNRC		
40	Dennis Buschbaum	TXA Power		

### **Meeting Interactive Exercise 1**

### Identify the Possible Inputs to Assessment of Construction Inspection Results

- Consider Action Matrix (IMC 0305) Template for CIP Discussion
- Inspection Reports:

ITAAC findings Regulatory findings Construction findings Observations

Scope of findings (% or value)

- Extent of Condition How and when is this used to inform the Assessment process
- QA Program Effectiveness (does this carry higher weight for Assessment?)
- Corrective Action Program (CAP) Effectiveness
- Licensee's Assessment Process

Independence CAP Completion of actions

- Licensee Self-Identified, or NRC-Identified
- Third Party Assessments with Regulatory Bases

Means of gaining confidence in Licensee Assessment by NRC validation

Consideration of Quality of Engineering Done Post-COL

Design change process Design verification

- Post-COL Licensing Activities
- Level of Allegations
- Safety Conscious Work Environment / Employee Concerns

Level of Confidence / Experience of People

Licensee staff Engineer / Constructor Equipment vendors

Attribute - QA Effectiveness

Reporting history

External Agencies

FEMA DHS OSHA Tribal agencies

- Technical Basis Inspection Findings
- Schedule Created Conflicts
- Thorough Testing
- Past Performance History Trending
- Enforcement History

Deliberate Willfulness

• QA Program Effectiveness

Control of off-site work Control of vendors Input from vendor inspection program Commercial grade dedication

Use of Construction Experience

Ability to learn from others Industry issues - AP1000 or ABWR problem

- Alternate Dispute Resolution Process
- QA Control of on-site contractors

#### **Meeting Interactive Exercise 2**

### Identify What Should be Considered by NRC on a Quarterly Interval

- Inspection Findings / Observations from IMC 2503
- Inspection Findings / Observations from IMC 2504

Quality Assurance Corrective Action Program (CAP) Problem Identification & Reporting

- Vendor Inspection Findings Related to the Site
- Assessment of Inspection Results

Number of each kind of finding CAP for issues related to those findings Progress toward completion of planned inspection program

• Outcomes of Quarterly Assessments (also Semi-Annual and Annual Assessments)

Identify need to modify inspection plan for following quarter Identify need to engage licensee Identify generic issues Conclude that no action is required

• 10 CFR 52.103(g) Finding

Recommendation is informed by assessment, but on a different path Considers entire body of evidence <u>Not</u> done on a quarterly basis

Annual Meetings

Outcomes based on performance / assessment results Status of ITAAC completion Operational readiness status

#### **Decisions / Questions**

#### Issues Tabled for Final Consideration / Resolution at Next Meeting on Assessment

- Format of Action Matrix appears workable
  - Further considerations: How many columns? Thresholds? Weights, i.e., importance factors?
- Assessment Process should address:

Outcomes from IMC 2503 and IMC 2504 "Bin" the findings: Observations Construction Regulatory ITAAC Identify criteria which will determine relative importance of findings Assign importance factors to binned findings Predictable, repeatable process Decide how to characterize "positive" findings

• Which Outcomes of Assessment Meetings Become Public Information



## Stakeholder Meeting on IMC-2505 Assessment Process During Construction January 25, 2007

Attachment 2

## **Meeting Agenda**

- Welcome
- Opening Comments
- Overview of Assessment
- Review of discussion topics
- Group discussion
- Wrap up

## **Assessment Objectives During Construction**

- Objectively determine overall licensee
  performance
- Objectively determine the readiness of key operational programs
- Timely and predictable decisions about agency actions in response to licensee performance
  - Outcome from the assessment process provides an input in determining the level of inspection sampling and scope

## **Assessment Concepts**

### • Initial 2005 Workshop with Stakeholders

- Need for classification of findings
- Need for Enforcement Policy supplement
- Provide assessment performance summary
- Be consistent and predictable

### • IMC-2505 is under development

## Current Thinking on Principles

- Be simple and transparent
- Consider the key Reactor Oversight Process Assessment (IMC-0305) attributes
- Provide bins for findings, including those prior to an application
- Reflect significance and NRC response in an action matrix no SDP
- Provide for periodic assessment and stakeholder meetings

### In the end: Need transition to ROP

Transition by cornerstones and potentially gradual

## Assessment Concepts (cont'd)

### • Programmatic areas for consideration

- Quality assurance
  - Construction
  - Engineering
- Problem identification and resolution
- Reporting
- Training and qualification
- Contractor oversight and control
- Work planning

### • Inspection, Test, Analysis and Acceptance Criteria (ITAAC)

- Closure is a specific regulatory action
- Sampling inspection level based on findings from those sampled and level of programmatic issues that impact ITAAC

ITAAC receiving a review of Licensee ITAAC Determination Basis



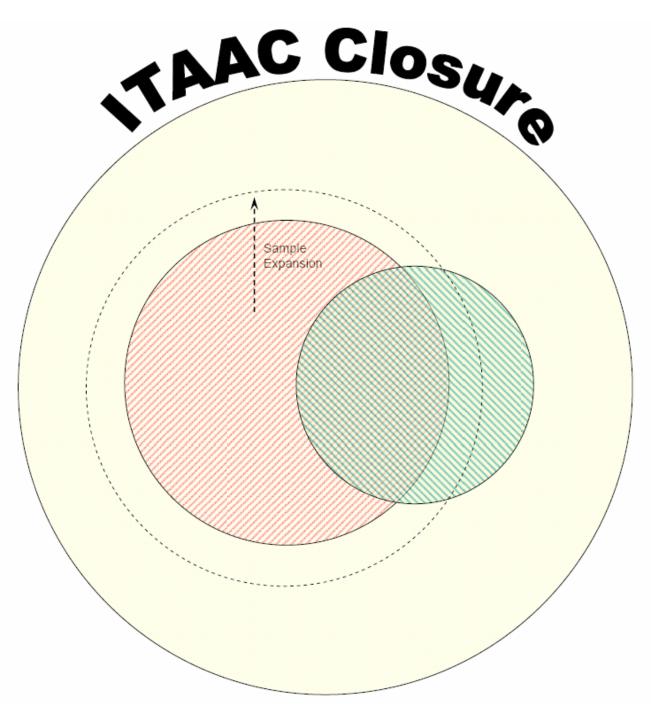
ITAAC receiving field inspection



ITAAC subject to review by technical staff



ITAAC receiving inspection / technical review



# **Enforcement Concepts**

- Goal: Effect corrective actions while avoiding unnecessary expenditure of resources to characterize and classify
- Enforcement policy will complement the development of the assessment process
- Several options have been initially reviewed
- Initial proposal is Modified Traditional Enforcement
  - Screen minor violations
  - Provide for NOV and response
  - Provide for NCV process once licensee corrective action program is established and demonstrated
  - ITAAC are not considered enforcement matters
  - Enforcement against findings related to licensee programs would be considered for impact upon ITAAC

# **Discussion Topics**

- Identify the possible inputs to assessment
- Describe how each might be used in an assessment process
  - how should each contribute to an overall assessment of licensee performance
  - are all inputs equal? how much 'weight' each should receive?
- Describe an appropriate NRC response to different levels of overall licensee performance
  - Is an 'action matrix' appropriate?

### **Exhibit 4 - ACTION MATRIX**

		Licensee Response column	Regulatory Response column	Degraded Cornerstone column	Multiple/ Repetitive Degraded Cornerstone column	Unacceptable Performance column	IMC 0350 Process
RESULTS		All Assessment Inputs (Performance Indicators (PIs) and Inspection Findings) Green; Cornerstone Objectives Fully Met	One or Two White Inputs (in different cornerstones) in a Strategic Performance Area; Cornerstone Objectives Fully Met	One Degraded Cornerstone (2 White Inputs or 1 Yellow Input) or any 3 White Inputs in a Strategic Performance Area; Cornerstone Objectives Met with Moderate Degradation in Safety Performance	Repetitive Degraded Cornerstone, Multiple Degraded Cornerstones, Multiple Yellow Inputs, or 1 Red Input; Cornerstone Objectives Met with Longstanding Issues or Significant Degradation in Safety Performance	Overall Unacceptable Performance; Plants Not Permitted to Operate Within this Band, Unacceptable Margin to Safety	Plants in a shutdown condition with performance problems placed under the IMC 0350 process
RESPONSE	Regulatory Performance Meeting	None	Branch Chief (BC) or Division Director (DD) Meet with Licensee	DD or Regional Administrator (RA) Meet with Licensee	RA (or EDO) Meet with Senior Licensee Management	Commission meeting with Senior Licensee Management	RA (or EDO) Meet with Senior Licensee Management
	Licensee Action	Licensee Corrective Action	Licensee root cause evaluation and corrective action with NRC Oversight	Licensee cumulative root cause evaluation with NRC Oversight	Licensee Performance Improvement Plan with NRC Oversight		Licensee Performance Improvement Plan / Restart Plan with NRC Oversight
	NRC Inspection	Risk-Informed Baseline Inspection Program	Baseline and supplemental inspection procedure 95001	Baseline and supplemental inspection procedure 95002	Baseline and supplemental inspection procedure 95003		Baseline and supplemental as practicable, plus special inspections per restart checklist.
	Regulatory Actions <sup>1</sup>	None	Supplemental inspection only	Supplemental inspection only	-10 CFR 2.204 DFI -10 CFR 50.54(f) Letter - CAL/Order	Order to Modify, Suspend, or Revoke Licensed Activities	CAL/order requiring NRC approval for restart.
COMMUNICATION	Assessment Letters	BC or DD review/sign assessment report (w/ inspection plan)	DD review/sign assessment report (w/ inspection plan)	RA review/sign assessment report (w/ inspection plan)	RA review/sign assessment report (w/ inspection plan)		N/A. RA (or 0350 Panel Chairman) review/ sign 0350-related correspondence
	Annual Public Meeting	SRI or BC Meet with Licensee	BC or DD Meet with Licensee	RA (or designee) Discuss Performance with Licensee	RA or EDO Discuss Performance with Senior Licensee Management		N/A. 0350 Panel Chairman conduct public status meetings periodically
	Commission Involvement	None	None	None	Plant discussed at AARM	Commission Meeting with Senior Licensee Management	Commission meetings as requested, restart approval in some cases.
	INCREASING SAFETY SIGNIFICANCE>						

Note 1: Other than the CAL, the regulatory actions for plants in the Multiple/Repetitive Degraded Cornerstone column and IMC 0350 column are not mandatory agency actions. However, the regional office should consider each of these regulatory actions when significant new information regarding licensee performance becomes available. Note 2: The IMC 0350 Process column is included for illustrative purposes only and is not necessarily representative of the worst level of licensee performance. Plants under the IMC 0350 oversight process are considered outside the auspices of the ROP Action Matrix. See IMC 0350, "Oversight of Reactor Facilities in a Shutdown Condition due to Significant Performance and/or Operational Concerns," for more detail.