Simulated ITAAC Closure and Verification Demonstration

kickoff meeting

July 29, 2010

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U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

Background Information

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- The performance of ITAAC by licensees, and the inspection and closure verification by NRC are vital processes leading to the Commission's finding to start plant operations (i.e., load fuel)
- This demonstration will be facilitated by Mahmoud Jardaneh (MJ); NRC Project Engineer
- NRC project Engineer must be kept informed of any potential issues, problems, or deviation in scope or direction from the established plan

Purpose

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- Gain insights into the readiness of both the industry ITAAC closure process and NRC ITAAC closure verification process
- Test aspects of the construction assessment and enforcement programs
- Evaluate the surge in ITAAC closure submittals during the last year of construction for any insights

Participants in the Demonstration

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- DOE: Select the participating licensees and vendors
- NRC: Lead the closure and verification demonstration, including coordination with licensees and vendors
- Westinghouse and Southern Nuclear: Perform the ITAAC, prepare closure packages, and evaluate ITAAC submittals during the last year of construction

Project Scope

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The project will test and evaluate many ITAAC closure and verification attributes, including:

- ITAAC closure packages
- ITAAC closure letters
- Inspection
- Enforcement
- HQ technical staff review
- Communications between HQ staff, Regional Staff, Licensees, and vendors

ITAAC Selected for the Exercise

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Five ITAAC from AP 1000, Revision 17:

(1) ITAAC 2.1.02.07a.i – The Reactor Coolant System (RCS) Harsh Environment Type Test

(2) ITAAC 2.2.01.04a.ii – Containment System Impact Testing

(3) ITAAC 2.2.02.01 – Passive Containment Cooling Functional Arrangement

(4) ITAAC 2.2.03.08c.i – Injection Line Flow Resistance Testing and Analysis

(5) ITAAC 2.6.03.08 – DC System Fault Current Analysis

Project Plan

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The demonstration is divided into 4 stages:

(1) ITAAC Performance

(2) ITAAC Closure

(3) Exercise Workshop

(4) Lessons Learned

Stage 1: ITAAC Performance

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Expectations:

- Licensee:
  - Simulate ITAAC performance, including additional work based on inspection findings
  - Develop Documentation to support ITAAC closure
  - Prepare ITAAC closure letters (ICLs) & submit to NRC
- NRC Region II:
  - Prepare inspection plans
  - Simulate inspection using inspection documents
  - Interact with NRO technical staff as needed
  - Document simulated inspection results in CIPIMS
  - Issue inspection reports

Stage 2: ITAAC Closure

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Expectations:

- NRC HQ staff:
  - Exercise ITAAC closure verification process (ICVP) per the draft Office Instruction
  - NRO technical staff will evaluate complex technical information
  - Simulate issuance of FRN
- Other Participants
  - Provide support as needed

Stage 3: Exercise Workshop

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Expectations:

- All Participants:
  - Present results of analysis on the numbers and families of system-specific ITAAC expected during the last year of construction
  - Discuss observations on the exercise
  - Identify issues with the processes and provide solutions
  - Discuss issues associated with the expected surge in ITAAC submittals and provide insights on how the workload will be handled

Stage 4: Lessons Learned

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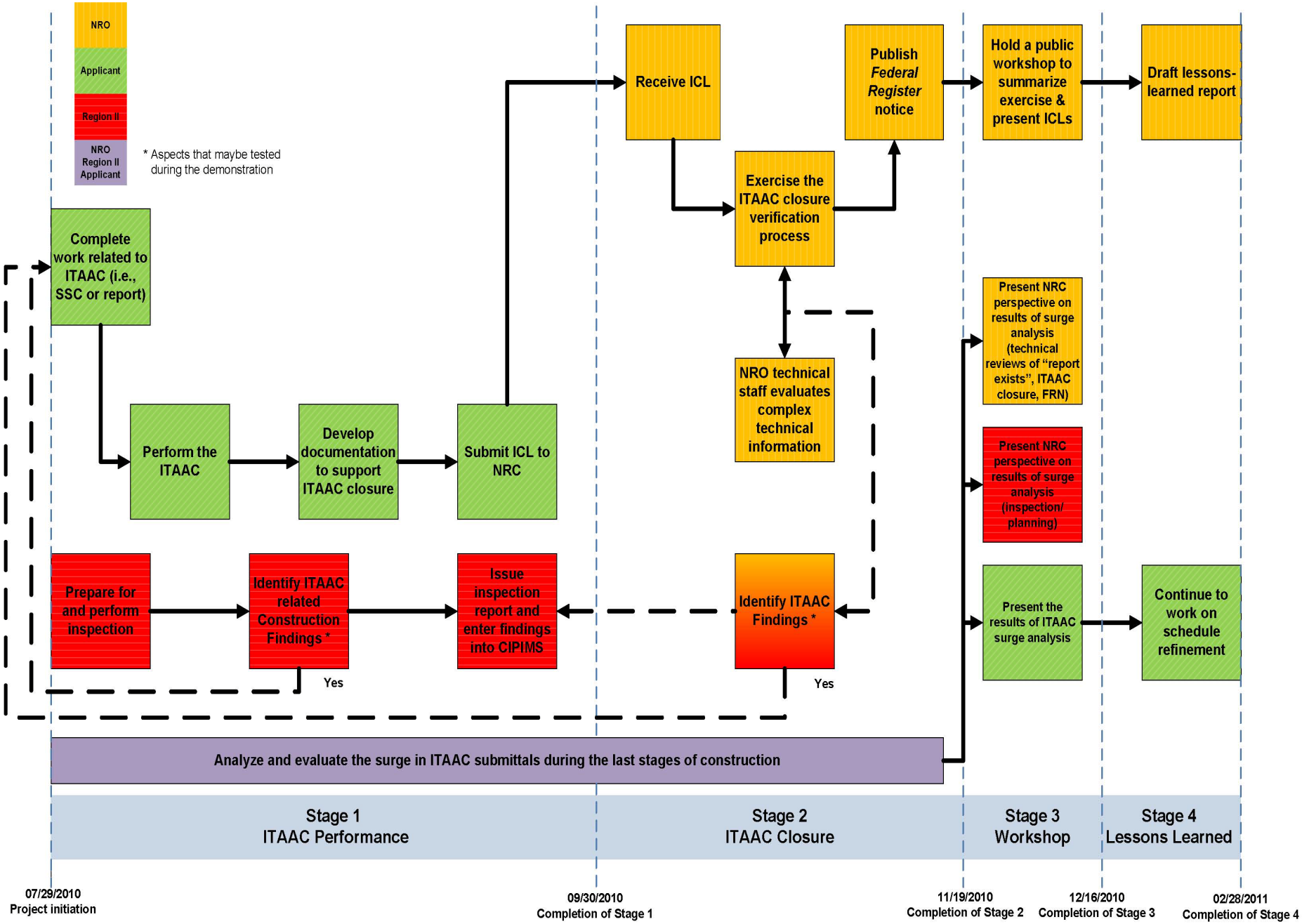
Expectations:

- NRC HQ staff:
  - Gather lessons learned from participants
  - Draft and issue lessons learned report

NRO/DCIP/CIT
July 27, 2010

Simulated ITAAC Closure and Verification Demonstration Flowchart



Milestones

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Project Development Meeting	Complete
Abstract Development	Complete
NRO Management Endorsement	Complete
DOE/Westinghouse/SNC Endorsement	Complete
Public Meeting/Project Initiation	July 29, 2010
Stage 1 Complete (ITAAC Performance)	September 30, 2010
Stage 2 Complete (ITAAC Closure)	November 19, 2010
Stage 3 Complete (Exercise Workshop)	December 16, 2010
Stage 4 Complete (Lessons Learned)	February 28, 2011

Questions and Discussion