

October 25, 2011

MEMORANDUM TO: Timothy Frye, Chief  
Construction Assessment, Enforcement,  
and Allegations Branch  
Division of Construction Inspection  
& Operational Programs  
Office of New Reactors

FROM: Jay Patel, Reactor Operations Engineer **/RA/**  
Construction Assessment, Enforcement,  
and Allegations Branch  
Division of Construction Inspection  
& Operational Programs  
Office of New Reactors

SUBJECT: SUMMARY OF NRC/INPO NEW PLANT DEPLOYMENT PERIODIC  
MEETING

On September 28, 2011, the U.S. Nuclear Regulatory Commission (NRC) held a meeting at the U.S. Nuclear Regulatory Commission, Two White Flint North Building (Floor 7, Conference Room A01, 11525 Rockville Pike, Rockville, Maryland, 20852) with the representatives of Institute of Nuclear Power Operations (INPO). The purpose of this meeting was to exchange information on the current construction related programs in place and progression of major activities being performed and planned within the Division of Construction Inspection and Operational Programs (DCIP). The meeting agenda and attendees list are provided as attachments to this meeting summary, and the presentation slides are provided as an enclosure. This meeting summary is available through the Agencywide Documents Access and Management System (ADAMS) Accession Number ML112900309. The presentation materials distributed at the meeting are contained in ADAMS ML112900323. Documents in ADAMS are available electronically at the NRC Electronic Reading Room at <http://www.nrc.gov/reading-rm/adams.html>. If you do not have access to ADAMS or have problems accessing the documents located in ADAMS, contact the NRC Public Document Room (PDR) staff at 1-800-397-4209, 301-415-4737, or [pdrr@nrc.gov](mailto:pdrr@nrc.gov). The meeting lasted from 2:00 p.m. to approximately 4:15 p.m, and a summary of the subjects covered is provided in the following sections below. The meeting began with brief introductions from all participants of the meeting and was followed by opening introductory remarks by Mr. John Tappert (DCIP Deputy Director) and Mr. Timothy Frye (CAEB Branch Chief) of the NRC staff.

Planned INPO visits:

The staff of INPO led a discussion related to future planned visits which they currently have scheduled. INPO currently plans operational readiness evaluations as well as review visits for new plants. The visits typically are performed in three phases. The first visit focuses on ensuring programs and processes are in place to support quality construction. The second visits typically looks at plans for operational readiness such as training, staffing/turnover process, etc, and looks at the progression utilities have made since their first visit. The third phase consists of a plant operational readiness evaluation.

CONTACT: Jay Patel, NRO/DCIP/CAEB  
(301) 415-6714

Overview of Construction Reactor Oversight Process:

Mr. Timothy Frye of NRC then provided a summary of the Construction Reactor Oversight Process (cROP). The cROP process diagram was briefly described and an overview was provided to highlight the development of the construction assessment programs to date. The cROP pilot program currently is scheduled to begin on January 1<sup>st</sup>, 2011 with the results anticipated to be provided to the Commission in April 2013. Currently the staff is working on preparing guidance documents and plans to issue draft pilot versions of Inspector Manual Chapters (IMC 0613P, IMC 2505P, and IMC 2519P). In addition, the staff plans to prepare and issue an Enforcement Guidance Memorandum to describe the changes to enforcement. A public meeting is tentatively scheduled to be held in March 2012 to discuss the pilot program.

Overview of Construction Inspection Program:

Mr. Jim Beardsley of NRC then provided a presentation related to the 10 CFR Part 52 Licensing and Inspection process. Discussions were held to inform the INPO staff on the process of the NRC inspection review and describe the current IMC's in place. Inspections performed at the sites and vendor facilities, including pre-construction activities, will all be documented. IMC 2503, "Inspection of ITAAC" was briefly explained to show that ITAACs are divided into 114 possible families with only 70 that are populated. The ITAACs are divided into families to group similar ITAACs that belong together, and the families are organized in a 19 x 6 matrix which are used to organize IPs. The ITAACs are prioritized and approximately 35% are targeted (AP1000) with at least one ITAAC in each of the 70 families. All issues related to ITAAC will be documented and the CIPIMS database will maintain the status of all inspection findings. The NRC staff plans to perform the majority of their inspections well before the ITAAC closure letters are submitted. The INPO staff plans to review the utility schedules and sequences to ensure the sites are planning ahead. IMC 2504 Program Inspection was then briefly discussed with an overview of the construction programs and operational programs. Licensees must be ready to clearly handoff the construction process to the pre-operational stage and ensure a smooth transition into the ROP space. INPO plans visits to ensure the utilities have the necessary programs in place for the transition, and acknowledges a methodology for adequate knowledge transfer/transition is necessary.

INPO Materials Being Prepared:

The INPO staff then led a discussion related to current INPO materials being prepared and the process involved. The INPO staff is preparing Performance Objectives & Criteria (PO&Cs) that will be used as a basis to ensure facilities are ready for initial operational activities. In addition, the INPO staff is currently in the process of creating an oversight document which provides the guidelines for owners on how to structure their oversight programs, and will be provided to the NRC once approved. The INPO staff is also working on a computer based training program ("Principles for Excellence in Nuclear Project Construction") that will be available to their members.

Overview of Construction Experience (ConE) Program:

Mr. Timothy Frye of NRC then provided a brief overview and purpose of the Construction Experience (ConE) Program. The ConE program collects, screens, and evaluates lessons learned from nuclear construction and operating experience for application into the NRC's new reactor licensing and inspection programs. The program communicates design and construction lessons learned to NRC staff, and when necessary, to external stakeholders through generic communications. The ConE staff currently has prioritized certain issues that are related to construction, and are working on evaluating the significance of these issues. In addition, the ConE staff is currently working on creating a database for the inspectors and licensing staff that will allow for users to search for construction related events of interest.

Capturing Counterfeit, Fraudulent, and Suspect Item (CFSI) Occurrences in ConE and OpE:

Mr. Dan Pasquale of the NRC then lead a discussion related to CFSI. The staff is considering expanding on the current NRC operating and construction experience programs by incorporating CFSI information from appropriate sources (domestic and international) and related industry organizations that could apply to US commercial nuclear facilities. Discussions were held on how to communicate the CFSIs to the industry, and the method of communications. Currently the INPO operating experience (OE) program identifies reported CFSI issues and EPRI has access to INPO OE information.

INPO Activities with Supplier Members:

The final discussion of the meeting was led by the INPO staff which was related to activities they currently have with supplier members. The INPO staff currently has a staff member loaned to a supplier to assist in the development of startup/test programs. In addition, INPO holds several meetings throughout the year that allows vendors to share construction issues/events amongst other vendors for awareness.

Closing Remarks/Future Meetings:

The NRC ended the meeting with closing remarks given by Ms. Laura Dudes. Per the Memorandum of Agreement (MOA) between INPO and the NRC, both parties have agreed to meet periodically to exchange information and keep each other apprised of major activities, thus the intent of the meeting was to exchange information at a high level. Upcoming meetings include:

- New plant executive working meeting scheduled for October 6<sup>th</sup>, 2011 at INPO (NRC plans to attend).
- Next NRC/INPO New Plant Deployment Periodic Meeting to be scheduled for the Jan/Feb 2012 timeframe (subject to change).

The meeting agenda and attendee list are provided as attachments to this meeting summary, and the presentation slides are provided as an enclosure. Please direct any inquiries concerning this meeting to Jay Patel at 301-415-6714 or via e-mail to [Jay.Patel@nrc.gov](mailto:Jay.Patel@nrc.gov).

## Enclosures:

1. NRC/INPO Info Exchange Meeting Presentation Slides

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 JJimenez, NRO

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<b>OFFICE</b>	NRO/DCIP/CAEB	NRO/DCIP/CAEB: BC
<b>NAME</b>	JPatel	TFrye
<b>DATE</b>	10/17/2011	10/25/2011

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## **ATTACHMENT 1: NRC/INPO NEW PLANT DEPLOYMENT PERIODIC MEETING AGENDA**

**Wednesday, September 28, 2011**

**2:00 p.m. – 4:00 p.m.**

- PLANNED INPO VISITS (INPO)
  - OPERATIONAL READINESS EVALUATIONS
  - PLANNED REVIEW VISITS
    - WHAT IS THE FOCUS OF THESE INPO SITE VISITS (e.g., ITAAC CLOSURE, CONSTRUCTION PROGRAMS)
  - INPO BENCHMARKING TRIP TO MODULAR FABRICATION FACILITY IS BEING PLANNED
- NRC CONSTRUCTION REACTOR OVERSIGHT PROCESS (cROP) OVERVIEW (NRC)
  - KEY DIFFERENCES FROM CURRENT CONSTRUCTION OVERSIGHT
  - PLANS FOR PILOT AND FULL IMPLEMENTATION
  - STATUS OF CONSTRUCTION INSPECTION PROGRAM
- INPO MATERIALS BEING PREPARED (INPO)
  - PO&CS FOR OPERATIONAL READINESS EVALUATIONS
  - OVERSIGHT DOCUMENT PROJECT
  - COMPUTER BASED TRAINING FOR “PRINCIPLES FOR EXCELLENCE IN NUCLEAR PROJECT CONSTRUCTION”
  - LATEST ON INPO VIEW OF CORRECTIVE ACTION PROGRAMS DURING CONSTRUCTION, NEI 08-02
  - INPO REVIEW OF SAFETY CULTURE AND SCWE DURING CONSTRUCTION
- CONSTRUCTION EXPERIENCE/OPERATING EXPERIENCE (INPO/NRC)
  - CONSTRUCTION EXPERIENCE (CE) PROGRAM UPDATE AND CONTINUED DISCUSSION ON OBTAINING CE INFORMATION FROM THE NRC
    - FOR EXAMPLE, HOW IS AN ITEM SUCH AS ALKALI SILICA REACTION (ASR) IN BASEMAT CONCRETE AND WATERPROOF MEMBRANE DAMAGE DURING CONSTRUCTION AT SEABROOK BEING DISSEMINATED TO INDUSTRY
  - INCORPORATION OF LESSONS LEARNED FROM FUKUSHIMA DAIICHI/POTENTIAL EFFECTS ON NEW PLANT PROJECTS
  - STATUS OF NRC CONSTRUCTION EXPERIENCE (ConE) PROGRAM
    - INCORPORATING IDENTIFIED INCIDENTS OF COUNTERFEIT, FRAUDULENT AND SUSPECT ITEMS (CFSI)
- INPO ACTIVITIES WITH SUPPLIER MEMBERS (INPO)
  - INPO LOANED AN EMPLOYEES TO SUPPLIERS
  - SUPPLIER LOANED EMPLOYEEESTO INPO
  - SUPPLIER TO VISIT INPO TO SPEAK ON SMRs
  - INPO ROLE IN PREVENTING CFSI IN THE NUCLEAR SUPPLY CHAIN
- NEW PLANT EXECUTIVE WORKING MEETING TO BE HELD OCTOBER 6 AT INPO (NRC TO PARTICIPATE) (INPO)

## ATTACHMENT 2: Attendance Sheet

### ***NRC/INPO NEW PLANT DEPLOYMENT PERIODIC MEETING***

Wednesday, September 29, 2011

2:00pm - 4:00pm

U.S. Nuclear Regulatory Commission, Rockville MD (Room T7A01)

<u>Name</u>	<u>Affiliation</u>	<u>Contact Information - Email</u>
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\* Participated via video teleconference