



# **Spent Fuel Storage and Transportation Inspection Enhancement Initiative (IEI) Update**

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Meeting to Obtain Stakeholder Feedback on Enhancements  
to the Licensing and Inspection Programs for  
Spent Fuel Storage and Transportation

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# Background

- Staff Requirements Memorandum - COMSECY-10-0007  
Issued 12/6/2010
- Working Group Chartered 4/8/2011
- Working Group Report Completed 9/30/11
- Steering Group Evaluation Completed 12/14/11
  - (ML113350577 – includes Working Group Report)
- Management Endorsement Received 1/12/2012
- Stakeholder Feedback Obtained Throughout Process
  - 7/2011 – Public Meeting on Inspection & Licensing Enhancements
  - 11/2011 – NRC Regulatory Conference
  - 3/2012 – Regional/HQ Inspector Counterpart Meeting

# Recommendation #1

- Revise Inspection Manual Chapter (IMC) 2690 to more clearly define inspection requirements and to organize inspection procedures (IPs) around key inspection areas.

## **Update/Action on Recommendation #1**

- Revision of IMC 2690 has been drafted.
- Next step is to update 2690 after IPs (#2 and #12) have been revised.
- Other recommendations (e.g., #3, #8) will be closed out and implemented by the revision of IMC 2690.
- Completion expected by middle of FY2013.

## **Recommendation #2**

- Revise IPs to more clearly define inspection criteria to provide more consistent application and verification of inspection criteria.

## **Update/Action on Recommendation #2**

- Staff is in the process of revising IPs to clarify and combine existing IPs.
- Drafted to Regions for comment.
- IP is organized around the following primary quality-affecting activities :
  - Design Control
  - On and Off-site Fabrication
  - Construction
  - Preoperational Testing (Dry Runs)
  - Operations
  - Maintenance
  - Packaging and Transportation (10 CFR 71)

## **Update/Action on Recommendation #2 (cont.)**

- Enhance general requirements, inspection requirements, and attributes.
  - Focus on highest safety significant activities.
  - Incorporate Lessons Learned of Regional Inspectors.
  - Attribute rankings are dynamic (based on trending done per Recommendation #7).
- Completion expected by middle of FY2013.

## **Recommendation #3**

- Integrate Division of Spent Fuel Storage and Transportation (SFST) staff possessing required technical skills into inspections to review § 72.48 and §72.212 evaluations, as necessary, to support inspection teams.



## **Update/Action on Recommendation #3**

- SFST Staff is revising SFST office procedures for integration of SFST staff possessing the required technical skills to support 72.48 inspections.
  - Technical Reviewers and Project Managers may need to support (depending on complexity):
    - In office inspection of 72.48 evaluations.
    - Support on-site inspections.

## **Update/Action on Recommendation #3 (cont.)**

- SFST staff is adding guidance specific to technical staff participating in inspection activities (specifically 72.212 activities) into IMC 2690 (Recommendation #1) and IPs (Recommendation #2).
- Completion expected by middle of FY2013.

## **Recommendation #4**

- Implement and manage the inspection process to timely resolve technical, open, unresolved, or generic issues identified during inspections.

## **Update/Action on Recommendation #4**

- SFST staff is revising SFST office procedures to timely resolve non-case work technical issues identified during inspections:
  - Utilize SFST Technical Working Groups.
  - Create a schedule.
  - Provide periodic updates to management.
- Completion expected by end of FY2012.

## **Recommendation #5**

- Verify that Certificate of Compliance (CoC) holders and licensees capture and resolve conditions adverse to quality that are identified by NRC technical staff and inspectors during activities such as CoC and license application reviews and pre-operations inspections, in their respective corrective action programs.

## **Update/Action on Recommendation #5**

- Staff is revising SFST office procedures.
  - Revision will instruct SFST licensing staff to:
    - Recognize conditions adverse to quality during licensing reviews.
    - Flag Requests for Additional Information involving conditions adverse to quality to applicant for appropriate actions.
    - Communicate the issues to the inspection staff for verification of issue resolution through the applicant's corrective action process.
- Being done in parallel with Rec. #11.

## **Update/Action on Recommendation #5 (cont.)**

- If staff identifies issues having broad applicability we may issue a generic communication.
  - Will help prevent recurrence of similar issues.
  - Will help prevent subsequent inspection findings and observations.
- Completion expected by middle of FY2013.

## **Recommendation #6**

- Develop a method for evaluating and classifying the severity of inspection findings (for those determined to be less than Severity Level IV violations) to consistently classify findings within the context of the SFST Inspection Program.



## **Update/Action on Recommendation #6**

- The steering committee did not endorse this recommendation in the December 14, 2011 report (ML113350577).
- Steering committee directed SFST staff to implement the other working group recommendations then re-evaluate Recommendation #6.

## **Recommendation #7**

- Develop a method to track inspection findings and perform trend analysis to identify emerging negative trends to inform the inspection program process.

## **Update/Action on Recommendation #7**

- SFST staff is developing a methodology to track and trend Part 71 and 72 inspection scope and findings.
  - Will identify trends and modify the inspection program.
  - Will feed into IPs (Recommendations #2 and #12) attributes.
- Other tracking and trending methods.
- Completion expected by end of FY2012.

## **Recommendation #8**

- Write inspection reports consistent in format and content to allow findings to be assessed and trended.

## **Update/Action on Recommendation #8**

- SFST is working with Regions to document Independent Spent Fuel Storage Installation (ISFSI) inspections consistently.
  - Right now IMC 0610, “*Nuclear Material Safety and Safeguards Inspection Reports*,” or IMC 0612, “*Power Reactor Inspection Reports*,” are used to document and report ISFSI inspections.
  - Revision to the guidance of using 0612 may occur to ensure proper communication of ISFSI inspector findings and/or observations.
- Recommendation #8 will be implemented in the revision of IMC 2690 (Recommendation #1).
- Completion expected by middle of FY2013.

## **Recommendation #9**

- Enhance the existing lessons learned process used by Regional and headquarters inspectors.

## **Update/Action on Recommendation #9**

- Staff is revising internal guidance on knowledge management (KM).
  - Revision will better incorporate lessons learned through the inspection process.
    - Existing version of guidance was really focused on licensing.
    - Will provide a repository of inspection knowledge and experience.
    - Will take advantage of new KM technology.
- Completion expected by middle of FY2013.

## Recommendation #10

- **Encourage** Regional inspectors to accompany headquarters inspectors on design and fabrication inspections at CoC holders and storage cask fabrication vendors. Also **encourage** SFST licensing staff to participate in transportation and storage inspections.



## **Update/Action on Recommendation #10**

- Staff is revising office procedures.
  - The revision will provide specific guidance to allow for regional inspectors and licensing staff to accompany HQ inspectors on Design and Fabrication inspections.
  - Currently incorporating SFST staff comments.
- Completion expected by middle of FY2013.

## **Recommendation #11**

- Enhance the existing licensing review process to integrate SFST inspection staff into the licensing process.

## **Update/Action on Recommendation #11**

- Staff is revising SFST licensing process guidance.
  - The revision will provide specific guidance for the integration of inspectors into the staff performing a license **application review** as part of the licensing process.

## **Update/Action on Recommendation #11 (cont.)**

- The revision will provide specific guidance for the integration of inspectors into the staff performing an **acceptance review** for a requested licensing action.
- Currently out for SFST staff comment.
- This is being done in parallel with Recommendation #5.
- Completion expected by middle of FY2013.

## Recommendation #12

- Develop an IP to address aging management inspections as detailed in NUREG-1927, “*Standard Review Plan for Renewal of Spent Fuel Dry Cask Storage System Licenses and Certificates of Compliance.*”

## **Update/Action on Recommendation #12**

- A new IP will be created in the future.
  - The IP will ensure that ISFSI aging management programs that were developed for ISFSI renewals are appropriately implemented.
- Completion expected by end of FY2013.

## IEI Conclusions

- Staff is actively addressing 11 of the 12 working group recommendations per Steering Group evaluation/endorsement.
- IEI *completion* planned by end of FY2013.



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