

Effective Date: 06/12/2018

### FUEL CYCLE FACILITY INSPECTION PLANNING

#### ANNUAL INSPECTION PLANNING

##### Core Inspections.

During the calendar year, inspections should be planned and scheduled to complete the Core Inspections required by this Inspection Manual Chapter (IMC) with any areas of emphasis within the Core Inspections based on Licensee Performance Review (LPR) results.

##### Supplemental Inspections.

Supplemental inspections, based on LPR decisions, on planned new facilities, recent performance issues, enforcement actions, etc., should be included in the Plan.

##### Inspector Accompaniment Considerations.

Unqualified inspectors and other staff members may accompany qualified inspectors for qualification, familiarization, or other purposes. Accompaniments should not impact annual inspection planning.

#### PLANNING INDIVIDUAL INSPECTIONS

Elements of Inspection Planning. Planning individual inspections consists of developing an initial plan, coordinating the plan, preparing a written plan, and obtaining supervisory approval of the written plan. An inspection plan template is attached.

a. Initial Planning.

1. Inspection Procedures. For planning purposes, the inspection procedures contain estimates of inspection hours to complete the procedure. This guidance is the starting point for inspection planning.
2. Recent Safety/Safeguards Inspections (prior two years). Planning should include a review of safety/safeguards inspection reports for trends and issues. A report of current issues [i.e., Reactor Programs System (RPS) or Plant Issues Matrix (PIM)] should also be obtained to facilitate review.
3. Regional Project Inspector Focus Area Matrix. Planning should include a review of the Regional Project Inspector's Focus Area Matrix for areas to be included as part of the inspection sample.

4. LPR Areas Needing Improvement. Specific concerns and safety/safeguards focus should be obtained from the most recent LPR if comments were made in the area of focus. The entire LPR should be reviewed for issues concerning the area of focus. In addition, the licensee's response to the LPR issues should be reviewed. For long-term actions scheduled for completion after the inspection, final verification should be scheduled for a later inspection.
  5. License Requirements. The inspectors should be familiar with any license requirements or safety/safeguards conditions applicable to the planned inspection and relevant background documents (i.e., an Integrated Safety Analysis Summary, a Nuclear Criticality Safety Evaluation, a Fundamental Nuclear Material Control Plan, etc.)
  6. Event History. Inspectors should be familiar with the reportable event history for each facility and should review carefully any event occurring since the last inspection.
  7. Improvement Program Items. If a licensee has a safety or safeguards improvement program ongoing, inspectors should review the action items and status to identify actions recently completed and available for inspection.
  8. Enforcement Actions. If a licensee has open items or a confirmatory order from a recent enforcement action, inspectors should review the open items and status.
- b. Coordination.
1. Technical Reviewer Feedback. For licensing actions, all requests for input from technical reviewers should be coordinated with the Project Manager. Technical reviewers should be approached for insight into specific technical issues that may be addressed during the inspection. Technical reviewers may also provide suggestions regarding the risk significance of proposed inspection activities.
  2. Resident Inspector Input. If the facility has a Resident Inspector, coordination should be conducted to identify issues and to avoid duplication of inspection effort.
  3. Regional Project Inspector Input. Regional fuel cycle staff should be approached for insight into specific licensee issues and the significance of identified issues. Coordination with regional staff will also help to avoid duplication of inspection effort. Project Inspectors should maintain historical information (official records, not inspector notes) for each major inspection area to reduce the effort by individual inspectors and maintain knowledge during staff changes. **Project Inspectors should also maintain a Focus Area Matrix to ensure that all operations at his/her facility potentially involving licensed material are part of an inspection sample at least once every five calendar years.**
  4. Project Manager Input. The Project Manager for the facility being inspected should be approached for insight into specific licensing issues, ISA Summary changes, or concerns that can be addressed during the inspection.

5. Site Access. – The inspector is responsible for ensuring that all requirements for site access are in place before the inspection.
- c. Written Plan. Finally, a written plan should be prepared that specifically addresses the selected inspection procedures to be inspected and the focus of the inspection. Maintain the inspection focus on issues with substantive risk significance based on the ten risk bases listed below. Any special requirements identified by line management should be listed.
- d. Risk Focus. For the review areas defined in the inspection procedure, the inspectors develop a risk focus based on the following ten risk bases:
  1. Dominant Hazards.
  2. Dominant Risks/Scenarios.
  3. Dominant Controls for Hazards/Risks.
  4. Principle Management Measures.
  5. Dominant Root Causes.
  6. Backlog of Risk Significant Issues.
  7. Unexpected Conditions Identified, Resolved, and Corrected.
  8. Recurring Unexpected Conditions and Root Causes.
  9. Internal Self Assessments.
  10. Safety Conscious Work Environment.
- e. Supervisory Approval. Inspection plans shall be approved by the Project Inspector and the applicable Branch Chief.

END

## ENTRANCE MEETING OUTLINE

### Introductory Statement

- Inspection number, members
- NRC coordination (licensing and region)
- Risk focus

### Primary Inspection Areas

- Plant operations
- Recent events and internal infractions
- Open items (IFI, VIO, URI)

### Coordination with Licensee

- Schedule walkdowns
- Schedule each major inspection area (am or pm)
- Request documentation

### Questions

### Closing Statement

## EXIT MEETING OUTLINE

### Introductory Statement

- Inspection number, members
- Reiterate coordination
- Reiterate risk focus

### Walkdowns

- Areas reviewed
- Issues identified

### Inspection Focus Areas

- Reiterate inspection focus areas
- Review findings area by area
- Discuss any commitments by licensee

### Open Items

- Current status of each item

### Summary

- Review all new issues (IFI, VIO, URI)
- Review all commitments by licensee

### Questions

### Closing Statement

FUEL FACILITY INSPECTION PLAN TEMPLATE

<u>Inspection of:</u>	
<u>Inspection Dates:</u>	
<u>Type of Inspection:</u>	
<u>Inspection Report No.:</u>	
<u>Docket Number:</u>	
<u>Inspection Procedures:</u>	

<u>Project Inspector:</u>			
<u>Signature:</u>		<u>Date:</u>	
<u>Approving Branch Chief:</u>			
<u>Signature:</u>		<u>Date:</u>	
<u>Branch Chief Instructions:</u>			
<u>Inspectors:</u>			
<u>Accompanying Personnel:</u>			

<u>Purpose of Inspection:</u>	
<u>Planned Inspection Hours:</u>	
<u>Licensee Contact Information:</u>	

Inspection Details

1.0 Summary of Inspection Objectives:

2.0 Inspection Scope:

The inspection scope will include direct field observations when possible, interviews with licensee’s subject matter experts, and reviews of records that provide objective evidence of program implementation and compliance.

The inspectors will implement the procedures listed below to accomplish the scope of the inspection.

Table 1 - Inspection Scope

<u>Inspection Procedure (IP)</u>	<u>Inspector(s)</u>	<u>Hours</u>	<u>Focus Areas</u>

(add rows as necessary)

3.0 Inspection Activities

[Provide a list of items being inspected, i.e., items relied on for safety (IROFS), key measurement systems, key records, safety/security plans, etc.]

Table 2 - Targeted Items List (N/A if not applicable)

<u>Key Items</u>	<u>Description</u>	<u>IROFS Type</u>	<u>Accident Type</u>	<u>Targeted IROFS</u>	<u>Crosscutting Inspection Areas</u>
<u>SUMMARY OF INSPECTION EFFORTS</u>					

(add rows as necessary)

4.0 Cross-Cutting Inspection Opportunities

*(These are examples and are not all-inclusive; they may not be applicable for all inspections, and should be conducted time permitting.)*

1. Conduct a general plant tour with all inspectors following the entrance meeting.  
Observe housekeeping, Radiation/Contamination postings, Nuclear Criticality Safety

(NCS) postings, material storage, control of combustibles, out-of-service tags, implementation of assigned mods, and general equipment condition.

2. Observe control room activities, shift turnovers, plan-of-the-day meetings, and coordination of maintenance and surveillance (M&S) activities [(INSPECTOR LAST NAME)].
3. Determine awareness of applicable [operating/maintenance] experience and generic lessons learned [(INSPECTOR LAST NAME)].
4. Observe/review maintenance, surveillance, and testing activities for targeted IROFS [(INSPECTOR LAST NAME)].
5. Determine whether opportunities exist to apply a team concept to evaluating activities on-site. For example, a radioactive waste shipment could involve radiation protection, radioactive waste management, and transportation IPs with associated IROFS.

### 5.0 Inspection Charge Codes

<u>[PLANT NAME] [YEAR]</u>			
	<u>Inspection Report #</u>	<u>Task</u>	<u>Procedure</u>
<u>Prep</u>		APP	N/A
<u>Travel</u>		AT	N/A
<u>Direct Inspection Effort</u>		CO	[IP NUMBER]
<u>Documentation</u>		APP	N/A

### 6.0 Detailed Inspection Schedule:

Inspection Preparation	[MONTH DATES, YEAR] Review Safety Analysis Report (SAR), Integrated Safety Analysis (ISA) Summary, and License Application in the applicable areas. Ensure inspectors are on the [PLANT] 277 and/or Good Guy Letter. If classified information/material/processes are within the scope of the inspection, confirm that the inspector(s) has (have) the need-to-know, and make the necessary arrangements with the licensee.
Team Kickoff Meeting	[MONTH DATE, YEAR – TIME] Meeting in [MEETING LOCATION]. The agenda will be the inspection plan.
Travel to [LOCATION]	[MONTH DATE, YEAR]
Entrance Meeting	[MONTH DATE, YEAR – TIME] Plan to arrive at [PLANT] at least one hour prior to the meeting to process in if you have not been to the site during [YEAR]
On-site Inspection	[MONTH DATES, YEAR] 0800-1700, except when hour must be adjusted to accommodate plant activities
Daily Team Debriefs	[MONTH DATES, YEAR] – 1600 Team members are to provide status 30 minutes ahead of time
Exit Meeting	[MONTH DATE, YEAR – TIME]
Travel Home	[MONTH DATE, YEAR]
Report Inputs due	[MONTH DATE, YEAR]

7.0 Inspection References and Documents

*(These are examples of documents you should request. Add documents as necessary)*

1. SAR, ISA Summary, License Application, Nuclear Criticality Safety Evaluations (NCSEs), Fundamental Nuclear Material Control Plan (FNMCP), etc.
2. Organization chart along with names and contact information of key licensee personnel needed during the onsite inspection
3. Copies of most current [PLANT] procedures for [INSPECTION AREA]
4. Copies of any corrective actions related to [INSPECTION AREA]
5. Training records on [INSPECTION AREA]
6. Audit records [INSPECTION AREA]

8.0 Past plant performance in this inspection area

*(Review Licensee Performance Review (LPR) for the two previous performance periods. Seek additional input from the project manager, project inspector, and other staff members as necessary.)*

9.0 Open Items

*(This should also include allegation information, events, and other pertinent information that will be inspected.)*

\*Ensure you notify the applicable project inspector or point of contact for RPS updates once inspection is complete!

[Review RPS/Reports/IP/23 Planning Considerations for these items]

<u>Item</u>	<u>Description Summary/Follow-Up Information</u>

ATTACHMENT 1

Revision History for IMC 2600, Appendix D

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment Resolution and Closed Feedback Form Accession Numbers (Pre-Decisional, Non-Public Information)
N/A	ML070610213 04/26/07 CN-07-014	<p>Revised to incorporate the new inspection procedures developed to address changes to 10 CFR Part 70 and to reflect enhancements made to the fuel facility inspection program.</p> <p>This Appendix was formerly Appendix E in the previous revision of this IMC. Changes that were made to the inspection program led to the removal of Appendix D and changing Appendix E to D.</p>	None	ML070610222
N/A	ML072070175 08/15/07 CN-07-025	Remove OFFICIAL USE ONLY - SENSITIVE INTERNAL INFORMATION" designation from entire manual chapter to make publicly available.	None	ML072070430
N/A	ML080660618 03/21/08 CN 08-011	Revised to add enforcement actions to inspection planning.	None	N/A

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment Resolution and Closed Feedback Form Accession Numbers (Pre-Decisional, Non-Public Information)
N/A	ML15134A067 09/24/15 CN 15-018	Added inspection plan template and guidance to maintain historical information and improve coordination.	None	ML15134A064
N/A	ML18099A227 06/12/18 CN 18-015	Added new inspection planning and coordination requirements for regional staff.	None	N/A