**NRC INSPECTION MANUAL** NMSS/DFM

INSPECTION MANUAL CHAPTER 2600 APPENDIX D

FUEL CYCLE FACILITY INSPECTION PLANNING

Effective Date: 06/26/2025

# 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.

1. 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 2 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)] 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.
2. 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, Integrated Safety Analysis (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.
3. 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.
4. Risk Focus. For the review areas defined in the inspection procedure, the inspectors develop a risk focus based on the following 10 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.
5. Supervisory Approval. Inspection plans shall be approved by the Project Inspector and the applicable Branch Chief.

END

List of Exhibits:  
1. Entrance and Exit Meeting Outline  
2. Fuel Facility Inspection Plan Template  
3. Example Inspection Plan Details

List of Attachments:  
Attachment 1: Revision History for IMC 2600 Appendix D

Exhibit 1: Entrance and Exit Meeting Outline

Guidance on Holding Entrance and Exit Meetings

Typically, entrance and exit meetings are held with licensee management as part of every inspection. Formal entrance and exit meetings are not required if both licensee management and the lead inspector agree they are not needed. This should result in time saved for licensee management and inspectors of up to 30 minutes per meeting. Please see Guidance in IMC 2600, Section 11, “Conducting Inspections.”

ENTRANCE MEETING OUTLINE

Introductory Statement

Inspection number, members

NRC coordination (licensing and region)

|  |
| --- |
| Example Script: “Good Afternoon,  This is the entrance meeting for the NRC inspection that will be taking place this week. I'm [Name Here], team lead for the inspection, I'll be doing the [TYPE] portion of the inspection using inspection procedure [88XXX]. With me is [INSPECTOR NAME HERE], who will be doing the [TYPE] portion of the inspection using inspection procedure [88YYY].  The results of the inspection will be documented in quarterly report [20XX-00X], due to be issued [XX] days from inspection completion.”  Optional: “Additionally, [TRAINEE NAME] is here on training and will not be charging to the inspection.” |

Primary Inspection Areas

Risk focus

Recent events and internal infractions

Open items (e.g., VIO, URI)

|  |
| --- |
| Example Script: “For the TYPE portion of the inspection, I'll be covering [DISCUSS INSPECTION AREAS]. Additionally, I'll be following up on [DESCRIBE OPEN ITEMS (e.g., URI 07001257/2024002-01, “CAAS Coverage of Subsurface Areas.)]” |

Coordination with Licensee

Confirm Points of Contact

Schedule walkdowns and meetings

Discuss plant operations and schedule

Request additional documentation as needed

|  |
| --- |
| Example Script: “I understand that [LICENSEE STAFF NAMES] will be our POCs for the [TYPE] portion of the inspection, is that right?”  Can you schedule a [GENERAL SITE OR AREA TOUR] for [XXX]?  We would like to observe the [XXX activity/attend XXX meetings/walkdown XXX areas…]  If any new activities related to our inspection come up or schedules change, please let us know.  If you wish we can hold daily debriefs with your staff at [XXX…]” |

Questions

Closing Statement

EXIT MEETING OUTLINE

Introductory Statement

Inspection number, members

Summarize findings/open items and reiterate risk focus

Reiterate coordination (i.e., say thank you)

|  |
| --- |
| Example Script: “Good afternoon,  This is the exit meeting for the NRC inspection this week, which consisted of [TYPE], using Inspection Procedure [88XXX], and [TYPE] using Inspection Procedure [88XXX]. I'm [TEAM LEAD NAME], the lead inspector for the inspection. With me is [INSPECTOR NAME], who did the [TYPE] inspection.” Optional: “… and [TRAINEE NAME] who was here for training and did not charge to the inspection because they are in training status.”  The inspection will be documented in NRC Inspection Report [20XX-00X], which is due to be issued [XX] days from inspection completion. All the results we discuss here are preliminary and subject to further management review and approval. [That said, we did not identify any findings or violations/We identified XXX finding in the area of TYPE.] [We will also be closing the open URI…]" [Briefly summarize findings and open items as needed.]  First, I would like to thank you all for your support, we asked for quite a number of documents before and while on-site this week. Your help providing information was essential in completing the inspection. Also, we'd like to thank your staff for being open and responsive to our questions.” |

Inspection Focus Areas (start with any findings in order of significance)

Discuss all findings by inspection area

Discuss any commitments by licensee

Reiterate inspection focus areas in less detail

Offer to discuss observations after the end of the formal exit meeting

|  |
| --- |
| Example Script: “The [TYPE] portion of the inspection identified a violation in the area of [DESCRIBE FINDING, including “contrary to” and how its significance was screened]. We also focused on [DESCRIBE INSPECTION AREAS (e.g., observing work in PLANT AREA, a sample of the items relied on for safety (IROFS) your credited in AREA and reviewing documented evidence of the management measures you impose to keep them reliable, reviewed CAP entries)].” [Also DESCRIBE inspection to close OPEN ITEMS, as applicable.]  “The [TYPE] portion of the inspection focused on [DESCRIBE INSPECTION AREAS….]” |

Summary

Review all new issues (VIO, URI) (skip if there aren’t many issues)

Review any commitments by licensee

Questions

Closing Statement

Optional: Discuss observations

Exhibit 2: Fuel Facility Inspection Plan Template

|  |  |
| --- | --- |
| Inspection of: |  |
| Inspection Dates: |  |
| Type of Inspection: |  |
| Inspection Report No.: |  |
| Docket Number: |  |
| Inspection Procedures: |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Project Inspector: |  | | |
| Signature: |  | Date: |  |
| Approving Branch Chief: |  | | |
| Signature: |  | Date: |  |
| Branch Chief Instructions: |  | | |
| Inspectors: |  | | |
| Accompanying Personnel: |  | | |

|  |  |
| --- | --- |
| Purpose of Inspection: |  |
| Planned Inspection Hours: |  |
| Licensee Contact Information: |  |

Exhibit 3: Example Inspection Plan Details

1.0 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

|  |  |  |  |
| --- | --- | --- | --- |
| Inspection Procedure (IP) | Inspector(s) | Hours | Focus Areas |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

(add rows as necessary)

2.0INSPECTION ACTIVITIES

Provide a list of items being inspected, i.e., IROFS, key measurement systems, key records, safety/security plans, etc.

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

| Key Items | Description | IROFS Type | Accident Type | Targeted IROFS | Cross-cutting Inspection Areas |
| --- | --- | --- | --- | --- | --- |
|  | | SUMMARY OF INSPECTION EFFORTS | | | |
|  |  |  | | | |
|  |  |  | | | |

(add rows as necessary)

3.0 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.

4.0 INSPECTION CHARGE CODES

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

5.0 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] |

6.0 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]

7.0 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.

8.0 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]

|  |  |
| --- | --- |
| Item | Description Summary/Follow-Up Information |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

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 | 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.  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. | 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 |
| 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 |
| N/A | ML25097A231  06/26/25  CN 25-021 | Edited the Entrance and Exit meeting section to update and provide more detail to help implement the ADVANCE Act. | None | N/A |