NRC INSPECTION MANUAL

NMSS/DFM

INSPECTION PROCEDURE 88135

RESIDENT INSPECTION PROGRAM FOR CATEGORY I FUEL CYCLE FACILITIES

Effective Date: 01/01/2021

PROGRAM APPLICABILITY: 2600B

88135-01 INSPECTION OBJECTIVES

The objectives of this inspection procedure (IP) are to provide resident inspector program requirements and guidance to independently gather sufficient information and evaluate the licensee's performance to determine whether it conforms to regulatory requirements, license conditions and other commitments, and is in accordance with established procedures pertaining to inspectable areas within the following Performance Areas:

- a. <u>Safety Operations (SO).</u> Inspectable areas pertaining to plant operations, nuclear criticality safety, fire protection, chemical safety, and items relied on for safety (IROFS) to ensure they are available and reliable to perform their function when needed to comply with the performance requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) 70.61;
- <u>Safeguards (SG)</u>. Inspectable areas pertaining to material control and accounting (MC&A), physical protection of special nuclear material, and classified material and information security;
- c. <u>Radiological Controls (RP)</u>. <u>Inspectable areas pertaining to radiation protection, environmental protection, waste management, and transportation.</u>
- d. <u>Facility Support (FS).</u> Inspectable areas pertaining to maintenance and surveillance of safety controls, management organization and controls, operator training, emergency preparedness, emergency exercise evaluation, permanent plant modifications, and identification and resolution of problems.
- e. <u>Other Areas (OA).</u> Inspectable areas pertaining to special issues that arise for which their significance is perceived to affect the quality of licensee performance, event review and response.

88135-02 INSPECTION REQUIREMENTS AND GUIDANCE

02.01 Technical Areas of Review.

a. Inspection Requirement. Plan and perform inspections in accordance with the following attachments to this procedure:-

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IP 88135 Attachment 02: Plant Status Activities (SO, SG, RP, FS)
IP 88135 Attachment 04: Operational Safety (SO, RP, FS)
IP 88135 Attachment 05: Fire Protection (Annually/Quarterly) (SO, FS)
IP 88135 Attachment 17: Permanent Plant Modifications (FS)
IP 88135 Attachment 19: Post Maintenance Testing (FS)
IP 88135 Attachment 22: Surveillance Testing (FS)
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The above listing indicates which performance area applies to each inspection procedure. Violations identified from these inspections must be grouped by the inspector into the performance area to which they apply. Each violation must be aligned with only one performance area following significance evaluation in accordance with Inspection Manual Chapter (IMC) 0616, "Fuel Cycle Safety and Safeguards Inspection Reports," to avoid double counting during licensee performance reviews.

- b. Inspection Guidance. Detailed inspection guidance is contained within each IP attachment.
- c. In using the above inspection procedures, the inspector verifies that the licensee has entered identified problems in its corrective action program and verifies effectiveness of corrective actions.

02.02 Risk-Informed Inspection Planning.

- a. Inspection Requirement. Include risk-significant items or issues identified during plant status tours, meetings, and record reviews in inspection planning and implementation.
- b. Inspection Guidance. Use plant-specific risk information to determine what systems and activities are of higher risk significance given the plant configuration. The selection of risk-informed inspection areas should be based on the following:
 - 1. Extracting risk insights from the latest Integrated Safety Analysis (ISA) and safety basis documentation:
 - 2. Using these risk insights to select IROFS and other activities for inspection; and
 - 3. Using facility-specific insights and industry operational experience to identify IROFS for inspection.

Many of the resident inspections must be coordinated with the licensee's schedule or specific facility conditions that are not normally considered during the annual inspection planning meetings. In these cases, inspections should be planned by the inspectors using the licensee's maintenance and surveillance schedule, risk assessments, and ongoing operations. Inspectors should determine when to conduct inspections based on the plant's work scheduling process but should also factor changes in plant conditions (i.e., emergent work) into the inspection activities. During plant status tours, meetings, and record reviews the inspectors will gather real-time plant information that should be used to adjust the inspection plans accordingly. Inspection planning should identify the following:

 Periods of heightened risk from maintenance or operation activities that affect or could affect safeguards and/or safety features (i.e. IROFS), or could potentially

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- cause an initiating event or upset condition;
- Planned tests, including surveillance tests, post-modification tests, and postmaintenance tests; and
- Planned installation of modifications.

Using this information, the inspection plan can be developed to implement several inspection attachments during one maintenance activity. For example, during the unavailability of a fire protection pump, due to the implementation of a field modification or routine maintenance, the following items could be inspected:

- Proper alignment or testing of the redundant fire protection pump, if applicable, or other compensatory measures that the licensee has taken to compensate for the reduction in the level of fire protection defense-in-depth until the operability of the fire protection pump undergoing maintenance can be restored;
- Adequacy of the technical bases for the change;
- Acceptability of post-maintenance testing of the fire protection pump after maintenance.

These types of verifications would be performed using the system or fire protection walkdowns, plant modifications, and post-maintenance and surveillance testing inspection procedures. Additionally, during plant status tours (Section 03.01 of IP 88135.02, "Plant Status"), inspectors should observe plant status information that may be used to adjust their inspection plans. The inspector should utilize the appropriate inspection procedure attachment whenever inspection activities shift from collecting status information to evaluating a potential inspection issue and if an information collection activity is expected to exceed 0.5 hours for any single issue.

Security-related issues identified during tours of the facility shall be referred to security specialists in the region for follow-up inspection(s), as appropriate. The inspector should seek the concurrence of the site branch chief prior to making this transition.

To manage progress in completing the resident inspection program, each calendar quarter the senior resident inspector and regional Division of Fuel Facility Inspection (DFFI) branch chief should review the completion status of the attachments to this procedure for their assigned inspections.

02.03 Third-Party Reports.

- a. Inspection Requirement. As they occur, review the results of third-party reports as applicable. Determine whether the licensee evaluated the results and initiated corrective actions.
- b. Inspection Guidance. Third-party reviews may be initiated to address and resolve significant safety issues identified by the licensee, U.S. Nuclear Regulatory Commission or other agencies.

When a third-party report is reviewed and evaluated, record only the fact that the evaluation was performed. Do not record any of the specific findings that were contained within the report.

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88135-03 RESOURCE ESTIMATE

The total estimated hours to complete the resident inspection program is estimated to be 752 hours of direct inspection as specified in IMC 2600, Appendix B, with a variance of $\pm 10\%$. Inspection hours should be charged to the appropriate inspection procedure attachment.

88135-04 PROCEDURE COMPLETION

- 04.01 <u>Technical Areas of Review</u>. Implementation of each attachment will constitute completion of this procedure. Areas to be inspected and the breadth of review needed will be determined by the inspector based on the risk-significance of the activity and the extent of the activity or records available when specific sample sizes are not prescribed in the inspection guidance section.
- O4.02 <u>Risk-Informed Inspection Planning</u>. Implementation of each attachment will constitute completion of this procedure. Areas to be inspected and the breadth of review needed will be determined by the inspector based on the degree to which requirements have been complied with, the risk-significance of the activity, and the extent of the activity or records available when specific sample sizes are not prescribed in the inspection guidance section.
- 04.03 <u>Third-Party Reports.</u> There are no specific sample sizes required by this section. However, if an inspector reviews a third-party report, the review should be documented in the quarter in which it was completed.

88135-05 REFERENCES

- 1. 10 CFR 70.61, "Domestic Licensing of Special Nuclear Material," Subpart H, "Performance Requirements"
- 2. 10 CFR 70.62, "Safety Program and Integrated Safety Analysis"
- 3. Manual Chapter 2600, "Fuel Cycle Facility Operational Safety and Safeguards Inspection Program"
- 4. Manual Chapter 2604, "Licensee Performance Review"
- 5. Manual Chapter 2515, Appendix D, "Objectives and Philosophy of Plant Status Activities"

END

ATTACHMENTS:

IP 88135 Attachment 02: Resident Inspection Program Plant Status Activities (SO)

IP 88135 Attachment 04: Resident Inspection Program ISA Implementation (FS)

IP 88135 Attachment 05: Resident Inspection Program Fire Protection (Annual and Quarterly) (SO)

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IP 88135 Attachment 19: Resident Inspection Program Post-Maintenance Testing (FS)
IP 88135 Attachment 17: Resident Inspection Program Permanent Plant Modifications (FS)
IP 88135 Attachment 22: Resident Inspection Program Surveillance Testing (FS)

Attachment:

Revision History for IP 88135

Attachment 1 -Revision History for IP 88135

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment and Feedback Resolution Accession Number (Pre-Decisional, Non-Public)
N/A	ML061940260 09/25/2006 CN 06-025	IP 88135 (Resident Inspection Program for Category I Fuel Cycle Facilities) has been issued because of the need for a new inspection procedure for the Resident Inspection Program for Category I Fuel Cycle Facilities.	N/A	N/A
N/A	ML13233A169 02/07/14 CN 14-005	Revised in its entirety. Specific changes include: Where it was determined that to maintain specific program elements within the 88135 base procedure (such as elements related to fire protection) would make the procedure too cumbersome, these elements were broken out separately using attachments. Breakout of inspection requirements into attachments. Incorporated specific language requiring that inspection planning be risk-informed. Incorporated specific language requiring inspectors to address corrective action program effectiveness when performing inspections. Incorporated program weaknesses identified in the July 2010 Self-Assessment of the Division of Fuel Facility Inspection Program recommending inspection procedures focus less on the observation of maintenance procedures and more on post-maintenance testing and surveillance testing. When developing a numbering system for the Attachments, an effort was made to maintain numbering that would coincide with the numbering of Attachments used	N/A	ML13354B883

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment and Feedback Resolution Accession Number (Pre-Decisional, Non-Public)
		in the ROP (i.e. 71111 series of IPs). Where no corresponding Attachment number existed, a reserved number was used. This was done with a consideration that the fuels inspection program might more closely align with the reactor inspection program in the future. Revised format to comply with the requirements of IMC 0040.		
N/A	ML20302A469 12/02/20 CN 20-067	Revision to implement the recommendations from the Smarter Inspection Program (ML20077L247 and ML20073G659). Annual inspection of emergency drills and force-on-force transferred to 88135.02 attachment.	Complete by December 2020	N/A