INSPECTION PROCEDURE 88135 ATTACHMENT 04

RESIDENT INSPECTION PROGRAM
OPERATIONAL SAFETY

Effective Date: October 30, 2026

APPLICABILITY: IMC 2600 C

88135.04-01 INSPECTION OBJECTIVES

The objectives of this procedure are to provide the requirements and guidance for evaluating operational safety of the facility. The purpose of the operational safety inspection is to determine whether:

01.01 The licensee operates the plant safely and in accordance with Title 10 of the *Code of the Federal Regulations* (CFR) Part 70, the license, the Safety Analysis Report (SAR) or License Application (LA), and licensee policies and procedures; and,

01.02 The material condition and as-found configuration of the site, structures, equipment, documentation, personnel, and items relied on for safety (IROFS), conform to regulations and license/certificate requirements, and are appropriate to protect worker and public safety during normal, off-normal, and accident conditions.

88135.04-02 GENERAL GUIDANCE

Select a reasonable distribution of partial walkdown sample(s) each quarter.

If available, consider risk insights regarding significant initiating events or upset conditions for the given facility and/or equipment configuration. Such insights should be used to assess the licensee's awareness of the need for compensatory measures.

Select systems with a high risk significance for the current facility configuration (considering out-of-service, inoperable, or degraded condition); or a risk-significant system or train that was recently realigned following an extended system outage, maintenance, modification, or testing; or an out-of-service risk-significant system/train.

When selecting a system walkdown sample, consider the following:

- the current Integrated Safety Analysis (ISA) Summary and safety basis documentation, including the licensee's ISA methodology used by the licensee to determine the consequence and likelihood of the accident sequences;

- process safety controls or IROFS for risk-significant accident sequences, including the identification of licensee's assumptions and bounding cases as they apply to each of the selected accident sequences, safety controls, or IROFS;

- management measures for selected IROFS or other required programs for selected process safety controls to ensure that the safety controls will be available and reliable to function when needed;

- review the operational history, previous inspection reports, or safety-significant routine or off-normal events (e.g., event notifications, internal problem reports) that may have occurred in the subject facility or at similar facilities;

- any infrequently performed operations that occur during the course of the inspection;

- housekeeping to evaluate the licensee's commitment to safety, contamination control, and emergency preparedness;

- newly created or implemented sequences; sequences that have a sole IROFS or a low number of IROFS designated as controls; sequences that rely mainly on administrative controls; and/or are based upon licensee's or other facilities operational history and/or events;

- engineered and administrative controls identified to prevent a criticality accident;

- engineered and administrative controls identified to prevent or mitigate hazardous chemical exposures from licensed materials;

- engineered and administrative controls identified to prevent or mitigate a fire or explosion;

- engineered and administrative controls or practices for preventing/limiting radiation exposures to workers and releases of radiation to the public/environment;

- previous walkdown samples including reviewing the Focus Area Matrix;

- recently realigned equipment following an outage, maintenance, modification, or testing;

- configuration control for equipment and procedure changes; or

- changes in the operational safety program and qualifications of plant staff.

For each sample, conduct a routine review of problem identification and resolution activities using the guidance in Inspection Procedure (IP) 88135.02, "Plant Status," Section 03.05, "Identification and Resolution of Problems." Inspection of the deficiency reports should be performed on a continual basis, as the licensee identifies and resolves plant problems. Determine whether the deficiencies known to the inspector through other inspection activities are properly captured and resolved, as required, in the licensee's corrective action program.

88135.04-03 INSPECTION REQUIREMENTS AND INSPECTION GUIDANCE

03.01 Operations Safety Walkdown

a. Inspection Requirement. Perform a walkdown of one or more safety-significant system(s), sub-system(s) in consideration of the general guidance regarding risk significance. These systems can be associated with one or more process(s) within an

operations area, which processes licensed special nuclear material, perform the walkdown to verify that the material conditions, as-found configuration, and adequacy of IROFS and other structures, systems, and components considered important to safety are available and reliable to perform their intended safety functions, when needed.

b. Inspection Guidance. Conduct the walkdown to independently determine whether the licensee is in conformance with the license and the corresponding ISA. The walkdown should be designed to be a selective, in-depth verification of system safety operability. To the extent possible, the inspector should coordinate with the licensee in order to walk down and observe a system, and associated process, while it is being operated. While a system is shut down, normally inaccessible portions of the systems should be inspected.

The walkdown can be accomplished using the licensee's system lineup procedures; provided they have been verified as correct by the inspector before use. The as-built drawings or printouts should be verified periodically by comparing them with the selected as-installed system.

During a selective, in-depth walkdown:

1. Determine whether the procedures associated with the licensee's system are consistent with currently approved drawings and the as-built configuration.

2. Determine whether newly approved drawings match the as-built configuration.

3. Determine whether operators understand and can identify items of equipment, portions of operating procedures, and process parameters that are IROFS.

4. Determine whether IROFS instrumentation is properly installed, currently calibrated and functioning, and that IROFS-related process parameter values are consistent with normal expected values.

5. Verify the physical presence of passive and active engineered safety controls as described in the safety analyses.

6. Verify the implementation of administrative safety controls as described in the safety analyses.

7. Examine structures, equipment, and site areas to determine whether applicable safety controls, IROFS, limits from the ISAs and other safety analyses, and limiting condition for operations (LCOs) are adhered to with regard to radiological, chemical, toxicological, fire protection, criticality, and control of nuclear material. Verify that the controls in place adequately perform the function for which they are intended.

8. Determine whether management measures or other required programs have been established for keeping the controls available and reliable and confirm that they are being properly implemented.

9. Verify that the licensee is maintaining records in accordance with 10 CFR Part 70.62(a)(3).

10. Verify that the licensee has conducted audits or self-assessments in the area of Operations Safety and is in compliance with license requirements, if applicable.

11. Review area specific training to ensure topics such as IROFS, safe working practices, operating procedures, and the reporting of unusual events and non-routine conditions are included as applicable.

12. Only approved and current procedures are used.

13. For valves that are IROFS in the nuclear material flow path, determine the following:

    (a) Positioned correctly as required by procedure (This determination can be established either by flow indication, visual observation, or remote position indication);

    (b) Power available if required to operate the valve;

    (c) Locking device installed correctly as appropriate if required; and

    (d) Local and remote position indications are functional and indicate the same values as appropriate;

14. Determine whether other support systems essential to safety system performance are operable and that integrity has been maintained (e.g., no leaks, corrosion, or damage). Examples of support systems are interlocks, trips, cooling water, ventilation, lubrication, and compressed air.

15. Identify equipment conditions and items that might degrade plant performance. For example, determine whether:

    (a) General housekeeping is adequate, and appropriate levels of cleanliness are being maintained, sufficient to ensure that evacuation paths are clear, and the potential for accidents that could adversely affect control of nuclear material is minimized;

    (b) Freeze protection for IROFS and other safety-significant freeze protection, such as insulation, heaters, air circulation systems, and other equipment, is installed and operational;

    (c) No prohibited ignition sources or flammable materials are present in the vicinity of the system being inspected, unless proper authorization has been granted, and any required compensatory measures have been implemented (e.g., posting a fire watch, prohibiting welding, etc.);

    (d) No significant quantities of prohibited moderator materials are present in areas posted as being moderation controlled;

    (e) Major system components are properly labeled, lubricated, and cooled (cooling water/ventilation); and

    (f) IROFS and other safety system performance are not degraded by the imposition of ancillary equipment (i.e., scaffolding, ladders, tape, electrical cords, portable air samplers, etc.).

    Assess the overall conditions observed during the walkdown to identify any problems that could have an impact on system performance or adversely affect

safety. Consult operator logs where applicable to compare any safety-significant process parameter instrumentation readings with those observed during the walkdown. Request that the licensee explain any discrepancies or abnormal readings.

16. Determine if any maintenance request tags attached to risk-significant equipment (i.e. IROFS) are outdated, or if items in apparent need of maintenance (i.e., valve packing leaks, corroded electrical terminals) are safe for continued operation, and if so, that they have been entered into the licensee's maintenance request systems. Note that a single problem may not make a system inoperable, but multiple problems may interrelate and render the system inoperable or only marginally safe.

    Observation of situations that pose an imminent threat to safety should be immediately reported to the operators and line management.

17. Review a sample of safety or safeguards risk-significant corrective maintenance and deficiency reports (or non-conformance reports) and assess if there are any adverse cumulative effects on the system/process. If the inspector observes a significant number of deficiencies threatening safety, and of which the licensee is unaware, or if the licensee is found to be remiss in correcting problems more than minor in significance, take action to increase the licensee management awareness in this area, to prevent recurrences and to foster timely corrective actions.

88135.04-04 RESOURCE ESTIMATE

The annual resources to complete this inspection are estimated to be 80 hours. This estimate is only for direct inspection effort and does not include preparation for and documentation of the inspection. Time spent conducting activities associated with this procedure should be charged to IP 88135.04. Completion of the walkdowns should be documented in the quarterly inspection report for the quarter in which they were performed.

88135.04-05 PROCEDURE COMPLETION

This procedure is completed when the inspection requirements are performed with a minimum of one system, sub-system, or process within an operating area inspected per quarter, and a total of four different operating areas inspected per year.

88135.04-06 REFERENCES

10 CFR 70.62, “Safety Program and Integrated Safety Analysis”

Inspection Procedure 88020, “Operational Safety”

Inspection Procedure 88025, “Maintenance and Surveillance of Safety Controls”

END

Attachment: Revision History for IP 88135.04

Attachment 1: Revision History for IP 88135.04

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 Number (Pre-Decisional, Non-Public Information)
N/A	ML13233A172 01/31/14 CN 14-004	Initial issuance. IP 88135.04, "ISA Implementation," is a new attachment to IP 88135 (which is being revised in its entirety)	N/A	ML13354B892
N/A	ML18099A291 10/01/18 CN 18-033	IP 88135.04 revised in its entirety to align with IP 88020 due to the annual Category I Fuel Facility Operational Safety resources being absorbed by the Resident Inspector Program	N/A	N/A
N/A	ML20302A471 12/02/20 CN 20-067	IP 88135.04 revised in its entirety to align with the Smarter Inspection Program recommendations (ML20077L247 and ML20073G659).	Completed by December 2020	N/A
N/A	ML26295A199 Date CN	Advance Act, Section 507 related changes.	N/A	N/A