

NRC INSPECTION MANUAL

FCSS

ATTACHMENT 88135.04

RESIDENT INSPECTION PROGRAM
INTEGRATED SAFETY ANALYSIS IMPLEMENTATION

88135.04-01 INSPECTION OBJECTIVES

The objectives of this procedure are to provide requirements and guidelines for independently assess the conditions and adequacy of Items Relied On For Safety (IROFS) to ensure that IROFS 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.

88135.04-02 INSPECTION REQUIREMENTS AND INSPECTION GUIDANCE

02.01 Quarterly Safety-Related System Walkdown.

- a. **Inspection Requirement.** Perform a safety-related system walkdown to verify that the conditions and adequacy of equipment 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 Integrated Safety Analysis. The walkdown should be designed to be a selective, in-depth verification of system operability.

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. While a system is shut down, normally inaccessible portions of the systems should be inspected.

Select safety-significant systems involved with the processing of licensed nuclear material and perform 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 process parameter values that are IROFS are consistent with normal expected values.
5. 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;
Locking device installed correctly as appropriate if required; and
 - (c) Local and remote position indications are functional and indicate the same values as appropriate;
6. 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.
7. 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.).
8. 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;

02.02 Identification and Resolution of Problems.

a. Inspection Requirement.

1. Verify that the licensee is identifying issues related to this selected safety-significant system(s) at an appropriate threshold and entering them in the corrective action program. For a sample of selected issues documented in the corrective action program, if applicable, verify that the corrective actions are appropriate.
2. Determine if any maintenance request tags attached to equipment are outdated, or if items obviously in 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.
3. If applicable, review a sample of the deficiency reports (or non-conformance reports) based on their safety or safeguards risk significance and use information available from other sources in selecting the sample.

Determine whether the deficiencies known to the inspector through other inspection activities are properly included in licensee's problem identification system.

b. Inspection Guidance.

1. The inspector should use the guidance in Attachment 02, "Plant Status," Section 02.05, "Identification and Resolution of Problems," when verifying the effectiveness of corrective actions.
2. 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.
3. 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's awareness in this area, to prevent recurrences and to foster timely corrective actions.

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

Inspection of the deficiency reports should be performed on a continual basis, as the licensee identifies and resolves plant problems.

88135.04-03 RESOURCE ESTIMATE

The resources to complete this inspection are estimated to be 128 hours for sites with two resident inspectors, and 80 hours for sites with only one resident inspector. Time spent conducting activities associated with this procedure should be charged to IP 88135. Completion of the walkdowns should be documented in the quarterly inspection report for the quarter in which they were performed.

88135.04-04 REFERENCES

04.01 10 CFR 70.62, "Safety Program and Integrated Safety Analysis"

88135.04-05 PROCEDURE COMPLETION

Inspection of the minimum sample size will constitute completion of this procedure. The minimum sample size is recommended to consist of at least one walkdown per quarter with a total of 5 walkdowns per year for sites with one resident inspector and at least one walkdown per quarter with a total of 7 walkdowns per year for sites with two resident inspectors.

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 and Feedback Resolution Accession Number
N/A	ML13233A172 01/31/14 CN 14-004	IP 88135 revised in its entirety, IP 88135.04 is a new attachment ¹	N/A	ML13354B892

¹ Specific changes include:

- 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.
- Revised format to comply with the requirements of IMC 0040.