

NRC INSPECTION MANUAL

NMSS/FCSE

INSPECTION PROCEDURE 88020

OPERATIONAL SAFETY

PROGRAM APPLICABILITY: 2600 and 2630

88020-01 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 *Code of the Federal Regulations* (CFR) Parts 40 and 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.

88020-02 INSPECTION REQUIREMENTS AND INSPECTION GUIDANCE

02.01 Identification of Safety Controls and Related Programs.

a. Inspection Requirements.

1. Select one or more specific process areas for detailed, in-depth inspection based on the licensee's safety basis documentation, safety/risk significance of the equipment and systems involved, past performance, significant changes, observations made during plant tours, and the regional project inspector's Focus Area Matrix.
2. Select a sample of accident sequences for the specific process area(s) based upon 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.
3. Review process safety controls or IROFS for the selected 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.
4. Review 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.

b. Inspection Guidance.

1. Selection of one or more specific process areas.

In preparation for the inspection, the inspector should consult the regional project inspector and the NMSS/FCSE inspection program risk and reliability analyst (or

designee) or licensing project manager to determine the risk-significant operations, any safety controls or IROFS availability or reliability problems (such as failures resulting in reportable events), **any areas to be inspected as part of the regional project inspector's Focus Area Matrix**, and any recent significant changes to the facility operation. Other sources of information may include the **Division of Fuel Facility Inspection (DFFI) Branch Chief responsible for the site**. In addition, as part of inspection material requests, ensure the licensee's documentation, including the ISA Summary, is the most current revision.

To determine the areas and systems of greatest risk significance during the inspection planning process, the inspector should 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. Following the above consultations and selection of specific process areas, the inspector should become familiar with the licensee's safety basis documentation for the process. This documentation includes the ISAs, license applications, safety analyses, technical evaluations, calculations, and other supporting documents used to describe facilities processes, procedures, and safety controls.

The inspector should also obtain further operational insights for inspection items from the licensee via phone when announcing the inspection, at the entrance meeting, during plant tours after arriving on site, by observation of operations, and through discussions with the operations staff.

While onsite, the inspector should determine if any infrequently performed operations will occur during the course of the inspection. If safety-significant operations are identified, the inspector should attempt to observe them in-progress, as well as any related pre-job briefings and coordination meetings.

The inspector should conduct a general plant tour promptly after arriving on site. The inspector should tour each major plant operating area (e.g., chemical conversion, ceramic production, assembly, shipping, scrap processing, waste handling, etc.), with particular attention to areas identified in the inspection plan. Observe the routine and non-routine plant operations when possible, however, it is important for the inspector to avoid interfering with the performance of operations in such a way that the safety of the operation or the facility would be compromised. In addition, inspections should minimize the impact on operations in general.

Observe housekeeping during the general plant tour, and throughout the inspection to evaluate the licensee's commitment to safety, contamination control, and emergency preparedness. See the supplemental information on housekeeping (at the end of Section 02.04).

During plant tours the inspector should be cognizant of the communication of safety issues throughout the plant. This could include observation/review of shift turnovers, operator/control room communications, coordination of operational activities with maintenance and surveillance activities, and resolution of problems affecting plant operation with the appropriate disciplines. The inspector may also be able to attend the licensee's plan of the day meeting or equivalent, or other

meetings conducted during the inspection as appropriate, to obtain the overall status of the plant and the activities that are planned or in progress. The inspector may also meet separately with the licensee to obtain the status of the facility.

Determine whether changes to the inspection plan may be warranted based on the observations made during the plant tour(s) and from information received during meetings with the licensee and/or document reviews. If additional focus areas are identified, the inspector should contact management for approval, and communicate this to the licensee as necessary.

2. Selection of accident sequences for the specific process area(s).

The inspector should select a sample of accident sequences in criticality safety, radiation safety, fire safety, and/or chemical safety aspects of operations. Generally, the inspection effort should be focused on the process areas, operations, and controls at the facility associated with increased risk significance. Less risk-significant areas, operations, and controls may also be inspected as authorized on the approved inspection plan, but the inspection effort of each area/operation/control should be in approximate proportion to its risk significance.

Additional considerations for selecting accident sequences would include: 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.

The inspector should contact the NMSS/FCSE inspection program risk and reliability analyst, Project Manager and/or the Project Inspector for guidance regarding the application of the licensee's ISA methodology for meeting the performance requirements, if needed.

3. Review of process safety controls or IROFS for the selected accident sequences.

The inspector should review the documentation associated with the selected accident sequences to gain an understanding of how the licensee is ensuring safety with respect to criticality, radiation, fire, or chemical hazards.

The inspector **should** review design basis assumptions and features and management measures to understand how the licensee is preventing or mitigating the consequence of the associated accident sequences.

Operational safety inspectors **should** verify that the licensee's design basis assumptions and features reflect the actual conditions out in the field, and that safety controls were available and reliable to perform their intended safety function to ensure the performance requirements are being met.

Additional guidance for review of each of these safety disciplines is described below.

(a) Criticality Safety Controls

Take note of engineered and administrative controls identified to prevent a criticality accident. Since a criticality accident would be considered a high consequence event, verification of criticality controls and their support programs should be given high priority.

(b) Chemical Safety Controls

Focus only on engineered and administrative controls identified to prevent **or mitigate** hazardous chemical exposures from licensed materials. Controls preventing or mitigating chemical accidents that are considered high consequence events should be given high priority. Be aware of controls or practices used to prevent or mitigate chemical hazards that may impact NRC regulated activities. Focus only on chemical areas within NRC jurisdiction. Other chemical areas are the responsibility of the Occupational Safety and Health Administration (OSHA) and should not be inspected by the NRC. If OSHA items are identified, they should be referred to the licensee, and then to OSHA through the NRC process.

(c) Fire Safety Controls

Take note of engineered and administrative controls identified to prevent or mitigate a fire or explosion. Controls preventing or mitigating fires or explosions that would be considered high consequence events should be given high priority. Be aware of controls or practices used to prevent or mitigate other fire hazards, but review of these should be given a lower priority during the inspection. Be alert to potential improper fire safety practices observed during the inspection.

(d) Radiation Safety Controls

Take note of engineered and administrative controls or practices for preventing/limiting radiation exposures to workers and releases of radiation to the public/environment. Since most radiation hazards (except for a criticality) at fuel facilities cannot readily result in a high consequence event, these controls are typically given lower priority in an operations inspection. Be familiar with the controls and practices used to prevent the spread of contamination and airborne radioactivity within the areas to be inspected, and be alert to potential improper implementation of these controls and practices.

4. Review of management measures or other required programs.

Verify that management measures identified in the ISA Summary for IROFS in the areas being inspected are implemented. Review and become familiar with the licensee's program(s) for ensuring that IROFS and safety controls are available and reliable when called upon to perform their intended safety functions. This would typically include programs for maintenance, surveillance, and testing of the controls; training of workers to properly implement or respond to the controls; and the conduct of licensee self-audits.

Verify the effective implementation of management measures through the inspection of Process Safety Information. Process Safety Information includes information pertaining to the hazards of the materials used or produced in the process, information pertaining to the technology of the process, and information pertaining to the equipment in the process.

02.02 Implementation of Safety Controls.

- a. Inspection Requirements. Determine if safety controls identified for review in section 02.01 are being properly communicated and implemented.
 1. Confirm that engineered controls are present and capable of performing their intended safety function(s).
 2. Review a sample of operating procedures for the process areas chosen in 02.01 to determine if administrative controls have been established and properly communicated to workers.
 3. Evaluate selected controls to verify that they are functioning correctly.

Inspection Guidance. Determine whether the IROFS or safety controls are being properly communicated and implemented. Use a balanced approach by selecting documents, records, logs, training materials, and procedures for review; observing the performance of selected activities; interviewing operators; and verifying the accuracy of measurements or calculations. Consider inspecting each plant operating shift (1st, 2nd, and 3rd) either through direct observation/interviews or records reviews.

1. Confirm that engineered controls are present and capable of performing their intended safety function(s).
 - (a) Observe each engineered control within the specific process areas selected for review, and confirm that they appear likely to perform their intended safety function(s). In the process areas, observe the presence, condition, and availability of:
 - (1) Passive engineering controls, which include: drain holes not plugged, containers that are limited in size appropriate to the volume restrictions, etc. **Consider the physical separation of SNM-bearing equipment from non-SNM-bearing equipment to ensure identified accident sequences adequately account for potential breakdowns of that interface. Similarly, consider the physical separation of moderator for moderation restricted areas.**
 - (2) Active engineering controls, which include: temperature setpoints are accurate, and associated system Programmable Logic Control (PLC) logic is validated and tested with licensee's surveillance; alarms sound at correct setpoints and operators are trained to respond properly.
 - (3) Administrative controls, which include operational procedures or

testing surveillances that personnel are trained to perform.

- (b) As part of the process area walk down, safety basis documentation reviews, and interviews, verify that limits and controls identified in the safety evaluation are in existence and being used. Also:
 - (1) Verify the physical presence of passive and active engineered safety controls as described in the safety analyses;
 - (2) Verify that the safety controls are capable of providing the safety function as described in the safety analyses;
 - (3) Observe the condition of the safety controls to verify operability; and
 - (4) Verify that potential accident scenarios are covered.

In addition, review work-arounds or compensatory measures that have been put in place to provide the essential function(s) of a non-functioning safety control to ensure that the safety of the system remains within acceptable limits. Confirm the system would be able to respond to an upset condition that could affect safety. Determine whether the operator work-around is incorporated into temporary operating inspections, postings, etc.

- 2. Review a sample of operating procedures for the process areas chosen in 02.01 to determine if administrative controls have been established and properly communicated to workers.

Determine whether required actions identified in the ISA Summary or safety analyses have been correctly transcribed into written operating procedures and are available to operators. A sampling of risk significant operating procedures should be reviewed to determine whether they contain safety limits on controlled parameters and safety control systems. Evaluate the procedures' contents with respect to process operating limits, operator responses for upset conditions, safety systems and functions, precautions, and warnings.

Evaluate whether procedures adequately address various operational aspects, including startup, temporary operation, and shutdown as required by license condition or licensee policy/procedure. Instructions and criteria for shutdown and actions to be taken during abnormal operations should be specified, including the limits selected for a commitment to action.

Determine whether operators and technicians are adequately implementing safety controls in selected procedures. This can be done by observing operators' performance to determine if they are adhering to applicable safety procedures, particularly with regard to the adequacy of precautions taken for radiological, chemical, toxicological, fire protection, and control of nuclear material. Observe and talk with operators to determine whether operators know and understand process conditions, safety limits on controlled parameters and safety controls, and whether they have the skill to follow the procedures. Be alert to any conditions that are unsafe, and note whether or not they are being performed in

accordance with approved procedures, regulatory requirements, or license commitments.

Verify that observed deviations from procedures and unforeseen process changes affecting nuclear criticality, chemical, radiological, and fire safety are reported to management, are documented, and are investigated promptly. Evaluate corrective actions performed, as applicable.

Determine whether postings and other operator aids are current, reflect safety controls, and are followed by operators and technicians.

3. Evaluate selected controls to verify if they are functioning correctly.

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.

One way to determine if safety controls are functioning correctly is to identify whether significant plant parameters and indications are at expected values for current plant conditions; whether any significant trends exist; and whether the safety and risk-significant systems, including their support systems, are appropriately aligned and operable. **Examples of support systems are interlocks, trips, cooling water, ventilation, lubrication, compressed air, and component labeling.** This could be performed as part of a control room panel review or observation of process area instrumentation. Other examples include the examination of combustible gas monitoring equipment and results, conductivity or pH monitors, and/or liquid-level instrumentation, to verify safety devices are operative and within specified safe ranges. **In addition, safety-significant freeze protection, especially for IROFS, should be installed and operational where required, such as insulation, heaters, and air circulation systems.**

The inspection scope should not normally include a review of ISA event sequences that were classified as either not credible or of low consequence. The main focus of the inspection should be on event sequences that required the application of IROFS in order to meet the Part 70.61 performance requirements. However, in certain situations, the inspector may suspect that the licensee has improperly screened out an event as either not credible or of low consequence. If this situation is encountered, attempt to verify that the licensee's assumptions and/or bounding cases were properly included in the licensee's determination that the event is not credible/low consequence. Consider the following:

- (a) Do the events/conditions contain uncredited controls, assumptions, and/or bounding cases that are not designated as IROFS?
- (b) Is the uncredited control, assumption, and/or bounding case needed for the licensee to meet performance requirements?
- (c) What programs/processes/controls are in place to ensure the licensee

assumptions are valid and will function as intended when needed?

A difference between the licensee's assumptions and the actual configuration of equipment/procedures may result in the need for the identification of IROFS to mitigate or prevent the consequences of the event. **The inspector may discuss** this issue with the NMSS/FCSE inspection program risk and reliability analyst or project manager to determine if there are any extenuating circumstances or insights the inspector is not aware of (e.g., pending changes to the ISA, closed RAls, etc...).

02.03 Safety Control Support Programs.

- a. Inspection Requirements. 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.
 1. Verify that the selected management measures, i.e. preventive maintenance, calibration, and periodic surveillance, as required by the ISA Summary or safety evaluation for the selected safety controls, are being adequately conducted.
 2. Determine whether the licensee is identifying issues in the area of Operations Safety at an appropriate threshold and entering them into the corrective action program, if required by the license. Verify that the licensee is appropriately addressing and correcting safety-significant condition reports.
 3. Verify that the licensee is maintaining **failure and degradation** records in accordance with 10 CFR Part 70.62(a)(3).
 4. Determine whether the licensee has implemented a program of review that evaluates safety-significant events in the area of Operations Safety, and that it meets the requirements of the license.
 5. 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.
 6. Review training in the area of Operations Safety, and confirm that the training is in compliance with license or certificate requirements.
 7. Verify that safety-significant changes to procedures in the area of Operations Safety are in compliance with license requirements. Verify that safety-significant changes have been made in accordance with the licensee's procedure revision process, if required by the license.
 8. Determine whether any change occurred in the Operations Safety program organization that would be subject to the position-specific requirements of the license. If so, verify that the new manager or staff member meets the criteria of the license requirements. Verify that any changes to the organizational structure in the area of Operations Safety are in compliance with license requirements, if applicable.
 9. Determine whether housekeeping has had a negative impact on safety.

b. Inspection Guidance.

1. Verify that the management measures required for the selected safety controls are being adequately conducted.
 - (a) Understand the management measures the licensee is crediting for the selected IROFS or process safety controls. This information can be obtained by reviewing the ISA Summary and other safety basis documentation, discussions with the **NMSS/FCSE** inspection program risk and reliability analyst, project manager, or resident inspector, and from interviews with the licensee.
 - (b) From the selected management measures, verify that the management measures ensure that the IROFS or safety control will perform its intended safety function. Verify that the functional tests/surveillances performed actually test the proper aspect of the safety control or parameter.
 - (1) For example, an active engineering control IROFS is a temperature element that for its setpoint, PLC logic will automatically shut process area valves. One of the management measures selected is a testing surveillance. If the surveillance only validates the temperature element setting, this may not be adequate to ensure the IROFS will perform its safety function. In this case, verify that the licensee is performing additional testing of the automatic closure of the valves in another surveillance.
 - (2) Another example, the construction and design of a favorable geometry column is a passive engineered IROFS. The IROFS is designed to maintain favorable geometry for criticality safety purposes. The IROFS should be reviewed to ensure no interfaces with other equipment are vulnerable to degradation such that SNM migrates to other components or equipment such as unfavorable geometry process chemical tanks. The same considerations should be made for potential water intrusion into moderation restricted areas.
 - (3) Another example, for IROFS valves that are in the nuclear material flowpath, consider: correct positions as required by procedure, motive force is available to operate the valve, locking devices are installed correctly as required, and local and remote position indications are functional.
 - (4) Administrative IROFS may have associated hardware components that also require functional testing. Consider whether management measures adequately address such hardware components. An example of this is an alarm that instigates operator action. While the operator's actions may be the designated IROFS, receiving the appropriate management measures to test the operator's ability to perform his/her required action, the functionality of the alarm should

also be tested as the success of the IROFS depends on the operability of the alarm.

- (c) Verify that the management measures are being performed satisfactorily and as required, at an established frequency, and that written documentation exists to direct the performance of the management measure, i.e. surveillance, and that failures of the management measure are appropriately corrected and documented in the corrective action program and/or through incident investigations, as required. For any management measure failures that are identified during inspection, determine whether the failure resulted in a failed or degraded IROFS or safety control, and confirm that the licensee is still meeting performance requirements. Consider contacting the project inspector and/or NMSS/FCSE inspection program risk and reliability analyst, or licensing project manager to obtain additional guidance regarding the significance of a potential failure to meet the associated performance requirements.
 - (d) In the license application, ISA Summary, and/or safety basis documentation, requirements to maintain proper configuration management of the facility IROFS and process safety controls are defined. These may include uncredited controls, assumptions, and/or bounding cases.
 - (1) For the selected IROFS, safety controls, and the associated management measures, verify that procedures, maintenance, functional testing, surveillances, and drawings are current and in accordance with the licensee's configuration management requirements. Review the licensee's reliability evaluation of equipment failures to confirm the equipment reliability remains within the assumed reliability stated in the ISA.
 - (2) Requirements should be documented for measurement control. Measurement techniques employed should be identified and the technical basis for their validity verified. Confirm that replacement parts for safety controls systems, as they relate to the selected items in 02.01, are controlled according to the licensee's program requirements, and have been approved for use in the safety analyses.
 - (3) Observe operations which are being modified during the inspection, or have been recently modified. If any modifications are identified that may require an in-depth review, such as a modification that would require an amendment prior to use, review the modified operation according to Inspection Procedure (IP) 88070, "Plant Safety Modifications." The applicable Branch Chief, licensing project manager and project inspector should be informed of the modification and the results of the review during the inspection debrief.
2. Determine whether the licensee is identifying issues in the area of Operations Safety at an appropriate threshold and entering them into the corrective action

program, if required by license requirements. Verify that the licensee is appropriately addressing and correcting safety-significant condition reports.

- (a) Perform a screening review of items entered into the corrective action program. Identify safety-significant or repetitive failures that fall within the scope of the inspection. In addition, be alert to conditions, such as repetitive equipment failures or human performance issues that might indicate a trend or warrant additional follow-up.
- (b) Use direct observation of operations, discussions with relevant plant staff, and a sample review of applicable documentation to:

- (1) Determine whether corrective actions commensurate with the significance of the issue have been identified and implemented by the licensee. Review a sample of issues to determine whether the licensee has appropriately classified the issue.

Determine whether equipment, human performance, and program issues are being identified by the licensee at an appropriate threshold and are being entered into the problem identification and resolution program.

- (2) Consider licensee identified issues (e.g., issues identified during audits or self-assessments) and issues identified through an employee concerns program, if applicable.

- (3) Review a sample of safety-significant issues to determine whether the licensee has taken appropriate short- and long-term corrective actions.

- 3. Verify that the licensee is maintaining records in accordance with 10 CFR Part 70.62(a)(3). Part 70 licensees are required to maintain records of IROFS or management measures that have failed to perform their function upon demand or have degraded such that the performance requirements are not satisfied. These records should be readily retrievable and inspected. These records should identify the IROFS or management measure that has failed and the safety function affected, the date of discovery, date (or estimated date) of the failure, duration (or estimated duration) of the time that the item was unable to perform its function, any other affected IROFS or management measures and their safety function, affected processes, cause of the failure, whether the failure was in the context of the performance requirements or upon demand or both, and any corrective or compensatory action that was taken. A failure should be recorded at the time of discovery and the record of that failure updated promptly upon the conclusion of each failure investigation of an IROFS or management measure.

- 4. Determine whether the licensee has implemented a program **for evaluating safety significant events that meets license requirements**.

- (a) Review the events occurring since the last inspection to determine compliance with the license or certificate including, as appropriate:

- (1) The prompt review and evaluation of non-routine events and unusual occurrences;
 - (2) Assessment of the significance of non-routine events and unusual occurrences, and reporting them, both internally, and to the NRC;
 - (3) Evaluation of extent of condition of findings; and
 - (4) Completion of corrective actions related to non-routine events and unusual occurrences.
5. 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.
- (a) Determine if the licensee is required to conduct audits or self-assessments. Select internal or contracted audits performed since the previous inspection, and examine the records documenting selected audits to determine whether there was a written plan for the audit, the audit adequately reviewed the audited area, appropriate corrective actions were taken whenever deficiencies were found, and whether there was a check of the effectiveness of the corrective action.
 - (b) Determine by interviewing the licensee's representatives, how the licensee ensures the effectiveness of audits, such as by use of contractor audits, use of a secondary (or follow-up) audit system on a periodic basis, and audit conducted by a member of management or a senior technician not directly responsible for the system audited.
 - (c) Determine if safety-significant audit findings are being tracked through completion by the corrective action program, if required.
6. Review training in the area of Operations Safety and evaluate if training is in compliance with license or certificate requirements.
- (a) Review area specific training to ensure that the following topics are included, as appropriate:
 - (1) IROFS, process safety information elements (such as safety and health hazards, relevant material safety data sheets (MSDSs), personal protective equipment, etc.)
 - (2) Safe work practices (such as confined space entry, lockout/tagout procedures, opening process equipment, hot work, control of entry into hazardous areas, etc.)
 - (3) Process technology (as required)
 - (4) Operating procedures for all phases of operation
 - (5) Emergency procedures (such as Hazard Waste Operations and Emergency Response (HAZWOPER))

- (6) Reporting unusual events or non-routine operations.

NOTE: On-the-job training should, as a minimum, include: equipment familiarization, completing log sheets, equipment startup/shutdown activities, limiting operating conditions, control of process variables, and applying operating procedures in the field.

During the inspection, if training issues are identified and indicate a potential programmatic concern, the responsible Branch Chief, project inspector, and licensing project manager should be informed and given the opportunity to provide inspection guidance, and help in determining if additional inspection activities are warranted.

7. Review any safety-significant changes to procedures for the area being inspected since the last inspection. If there were safety-significant changes, review them to determine if they followed the procedure revision process regarding the following aspects:
 - (a) Only approved and current procedures are used;
 - (b) Personnel affected by a procedure are adequately and timely informed of changes in the procedures;
 - (c) Changes to procedures, other than editorial and typographical, conformed with the ISA and had an engineering basis; and
 - (d) Previously approved field changes have been incorporated into the changed procedure within an established time period.

If there were any new procedures developed for the area being inspected, confirm the development of the new procedures followed the procedure development process.

8. Evaluate whether a change occurred in the Operations Safety program organization that is effected by the position-specific requirements of the license. If so, verify that the new manager or staff member meets the criteria of the license requirements. Verify that any changes to the organizational structure in the area of Operations Safety are in compliance with license requirements, if applicable.
 - (a) Through discussions with licensee staff and management, and review of documentation, determine whether the licensee's organizational structure is in accordance with the license. Through discussions with selected licensee managers who are new to their positions since the last inspection, and where appropriate review of documentation, determine whether these managers meet the training and experience requirements for their positions as specified in the license.
 - (b) Focus on whether the qualifications of involved plant staff meet the requirements of the license, including years of relevant experience,

educational background, and training required for the newly assigned responsibilities.

- (c) Examine changes in organization and organizational structure involving changes in personnel, qualifications of personnel, functions, responsibilities, and/ or authorities.
- (d) If no significant changes have occurred in the organization since the previous inspection, then limit time spent on this section.

9. Housekeeping.

During the review of operations, observe any stored combustibles that may be located in areas where hazardous materials are located, especially in those posted as moderation-controlled areas (for criticality prevention). Be alert and able to recognize areas where 'hot-work' is in progress (i.e., where the use of welding equipment or other activities are being conducted that may temporarily increase the potential for a fire or explosion). Also determine whether emergency egress routes are unblocked by storage of materials.

Observe control of containers that may contain hazardous substances, which could affect the safety of workers or the safe control of nearby nuclear material. Observe the separation of incompatible chemicals, e.g. acids and bases, oxidizers and organics. Determine whether operators understand and adhere to procedures for the safe handling and storage of nuclear or hazardous material.

Observe whether radiological cleanup operations are performed when needed for purposes of limiting contamination and minimizing radiological and toxicological exposure.

88020-03 RESOURCE ESTIMATE

An inspection performed according to this inspection procedure is estimated to require **approximately** 60 hours of inspector resources. This estimate is only for the direct inspection effort and does not include preparation for and documentation of the inspection.

88020-04 REFERENCES

IMC 2606, "Assessment of the Change in Risk Resulting From a Violation at a Fuel Cycle Facility," Issue date **04/01/16**

88020-05 PROCEDURE COMPLETION

Implementation of this IP is complete when each inspection requirement has been addressed. The Individual samples to be inspected, and the breadth of the review will be determined by the inspector based on the degree of compliance with the requirements observed, the risk-significance of the activity, and the extent of the activity or records available.

END

Attachment 1 - Revision History for IP 88020

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	09/05/06 CN 06-020	This document has been revised to: (1) emphasize the risk-informed, performance-based approach to inspection, (2) impose changes to the core inspection program based on operating experience, and (3) remove completed or obsolete MCs and incorporate other fuel cycle MCs into a central location.	N/A	ML061940282
N/A	ML13311A678 01/23/14 CN 14-003	The proposed revision represents significant changes. These changes made were to add details regarding the inspection of the licensee's ISA, specifically focused on performing a cradle-to-grave type inspection. The IP revision added details and examples for the inspector to verify the licensee's accident sequences and IROFS are adequate to meet the performance requirements and aligned with the licensee's ISA methodology. The proposed revision also clarifies NRC internal communication and coordination expectations regarding ISA or ISA-summary related issues. There were no changes in the recommended inspection hours or frequency from the current program.	N/A	ML13347B044
N/A	ML18099A292 10/01/18 CN 18-033	Editorial changes to reflect changes to IMC 2600 resource estimates.	N/A	N/A