**NRC INSPECTION MANUAL** IRIB

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| INSPECTION MANUAL CHAPTER 2515 APPENDIX B |

SUPPLEMENTAL INSPECTION PROGRAM

2515B-01 OBJECTIVES AND PHILOSOPHY OF THE SUPPLEMENTAL INSPECTION PROGRAM

The supplemental inspection program is designed to support the NRC’s goals of maintaining safety, enhancing openness, improving the effectiveness, efficiency and realism of the regulatory process, and reducing unnecessary regulatory burden. While the baseline inspection program and performance indicators are expected to provide sufficient information to allow the NRC to meet the goal of assuring licensees are maintaining safety at facilities with an absence of risk significant performance issues, supplemental inspections are generally required[[1]](#footnote-2) to provide enhanced information regarding safety at facilities where risk significant performance issues have been identified. These performance issues may be identified either by inspection findings evaluated as greater-than-green using the significance determination process (SDP) or when green performance indicator thresholds are exceeded.

The breadth and depth of the supplemental inspections increase in proportion to the relative risk significance of the identified performance issues and will be based upon the governance provided in Inspection Manual Chapter (IMC) 0305, “Operating Reactor Assessment Program” for the NRC’s assessment “Action Matrix.”

2515B-02 APPLICABILITY

The supplemental inspections contained in this Appendix apply to all strategic performance areas and associated cornerstones of safety. The inspection report written for the supplemental inspections contains the NRC’s assessment for each inspection requirement. These inspection requirements are independent of whether the performance issues were the result of performance indicators or inspection findings. The resource estimates provided in each supplemental inspection procedure (IP) are estimates only. Inspection effort may vary considerably due to the complexity of the issue(s) and the thoroughness of the licensee’s own evaluations and proposed corrective actions.

2515B-03 DESCRIPTION OF SUPPLEMENTAL INSPECTION PROGRAM

The supplemental inspection program contains three procedures which become deeper and broader as the safety significance of the performance issues increases. IMC 0305 contains governance on when to perform each type of supplemental inspection.SUPPLEMENTAL INSPECTION OVERVIEW

|  |  |  |
| --- | --- | --- |
| Supplemental Inspection Procedure (IP) | Scope | Assessment of Supplemental Inspection Findings |
| IP 95001, “Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area” | Inspection reviews licensee’s evaluation of root and contributing causes extent of condition and cause, and corrective actions. It is limited to specific issue(s) or performance area of concern. | Significant weaknesses in the licensee’s evaluation may result in expansion of the inspection to independently acquire the information necessary to satisfy the inspection objectives. The original issue may be “Held Open” in the Action Matrix until the weaknesses in the evaluation are addressed and corrected (refer to IMC 0305 for additional governance). |
| IP 95002, “Supplemental Inspection for One Degraded Cornerstone or any Three White Inputs in a Strategic Performance Area” | Inspection reviews licensee’s evaluation of root and contributing causes, extent of condition and cause, and corrective actions for both for individual and collective issues. It determines if safety culture components caused or significantly contributed to risk significant performance issues and independently assesses the licensee’s extent of condition using inspection procedures selected from Attachment 1. |
| IP 95003, “Supplemental Inspection for Repetitive Degraded Cornerstones, Multiple Degraded Cornerstones, Multiple Yellow Inputs or One Red Input” | Inspection evaluates the key attributes of affected strategic performance areas to determine if continued operation of the facility is acceptable and whether additional regulatory actions are necessary. It independently assesses the extent of risk significant issues, the adequacy of the programs and processes used to identify, evaluate, and correct performance issues and evaluates the adequacy of programs and processes in the affected strategic performance areas. It develops insights into the overall root and contributing causes of identified performance deficiencies, determines if the NRC oversight process provided sufficient warning to significant reductions in safety, evaluates the licensee’s third-party safety culture assessment and conducts a graded assessment of the licensee’s safety culture based on evaluation results. | Results of this supplemental inspection will be assessed to determine if additional agency actions are warranted and whether the facility warrants a shut down order and subsequent inspection under IMC 0350. |

The portions of the licensee’s evaluation concerning extent of condition will be assessed independently by the NRC during both the IP 95002 and IP 95003 inspections. This independent assessment shall be conducted using inspection procedures selected from tables that list the procedures by cornerstone and key attribute provided in Attachment 1 to this Appendix. The objective of this inspection will be to ensure that the licensee has properly identified the scope (extent) of the issues and that the proposed corrective actions are sufficiently comprehensive. The inspection procedures listed in the Attachment 1 tables include: baseline inspection procedures (portions of which can be repeated with additional samples); procedures that were part of the core, regional initiative, and temporary instruction portions of the old inspection program; and new inspection procedures written solely for the purpose of performing supplemental inspection. A combination of procedures or portions of procedures can also be used as appropriate. Inspection hours utilized in fulfilling this inspection requirement shall be charged to IP 95002 or IP 95003 as appropriate, regardless of the specific procedure(s) chosen for implementation.

2515B-04 ASSESSING INSPECTION FINDINGS

If significant weaknesses are identified in the licensee’s actions to address a performance issue, including a substantial inadequacy in the licensee’s evaluation of the root causes of the original performance issue, determination of the extent of the performance issue, or the actions taken or planned to correct the issue; during IP 95001 or 95002, the supplemental inspection shall be expanded as necessary to satisfy the inspection objectives. The original performance issue shall be “Held Open” in the Action Matrix until the significant weaknesses in the licensee’s evaluation are addressed and corrected (refer to IMC 0305 for additional governance). When the licensee’s performance indicates the need to open a parallel PI finding or to hold a finding open in the Action Matrix past four quarters, an inspection report shall be issued that describes specific licensee deficiencies and clearly states the necessary licensee actions required to meet all supplemental inspection objectives.

General weaknesses associated with the licensee’s evaluation of the performance issue shall be briefly described in the transmittal letter and documented as observations in the summary of findings and details sections in the inspection report. Additional focus may be given to those areas during the next biennial problem identification and resolution baseline inspection conducted in accordance with IP 71152, “Problem Identification and Resolution”.

New or additional performance issues identified during supplemental inspections shall be inspected and screened in accordance with IMC 0612, Appendix B, “Issue Screening.”

Significant weaknesses identified during performance of IP 95003 shall be assessed to determine if additional agency actions are warranted and whether the facility shall be ordered to be shut down. In such cases, the facility will be placed under IMC 0350.

END

ATTACHMENT 1

INSPECTION PROCEDURES TO BE USED FOR

ASSESSING EXTENT OF CONDITION

INITIATING EVENTS

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Protection Against External Events | Human  Performance | Procedure Quality | Equipment Performance | Design | Configuration Control |
| 71111.01  71111.05  71111.06 | 41500  71715  71841 | 42700  72701 | 50002  55050  55100  56700  61726  62700  62706  62709  71111.07  71111.08  71111.12  71111.13  93805 | 50002  52003  93803  93807  93811 | 62709  71111.04  71111.13  71111.20 |
| General Inspection Procedures | | | | | |
| 90700  90712  92700 | | | 93801  93802  93806 | | |

See <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html> for the complete list of all current non-security inspection procedures.

MITIGATING SYSTEMS

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Design | Protection Against External Events | Configuration Control | Equipment Performance | Procedure Quality | Human Performance |
| 52003  56700  62710  71111.17  71111.18  71111.21  93803  93807  93810  93811 | 71111.01  71111.05  71111.06 | 62709  71111.04  71111.13  71111.20 | 38703  49001  55050  55100  56700  57050  57060  57070  57080  57090  61726  62002  62700  62706  62708  62709  62710  70370  71111.07  71111.12  71111.13  71111.15  71111.17  71111.18  71111.19  71111.21  71111.22  73756  93805  93810  93811 | 42001  42700  72701  73052 | 36301  41500  71111.11  71715  71841 |
| General Inspection Procedures | | | | | |
| 90700  90712  92700  93801 | | | 93802  93803  93804  93806 | | |

See <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html> for the complete list of all non-security related inspection procedures.

BARRIER INTEGRITY

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Fuel Cladding Perfor-mance | RCS Equip. & Barrier Perfor-mance | Contain-ment SSC & Barrier Perfor-mance | Human Perfor-mance | Procedure Quality | Design Control | Config-uration  Control |
| 61705  61706  61707  61708  61709  61710 | 55050  55100  56700  57050  57060  57070  57080  57090  61728  62700  62706  62709  71111.08  71111.12  71111.13  71111.17  71111.18  71111.22  73051  73753  73755  73756  93805 | 38703  49001  50002  55050  55100  56700  57050  57060  57070  57080  57090  61715  61720  62002  62003  62700  62706  62709  70313  70323  70370  71111.12  71111.13  71111.17  71111.18  71111.22  93805 | 41500  71111.11  71715  71841 | 42700  70307  72701  73052 | 50002  71111.17  71111.18  93803  93811 | 62709  71111.04  71111.13  71111.20 |
| General Inspection Procedures | | | | | | |
| 90700  90712  92700  93801 | | | | | | |

See <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html> for the complete list of all non-security related inspection procedures.

EMERGENCY PREPAREDNESS

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ERO Readiness | Facilities and Equipment | Procedure Quality | ERO Performance | Offsite EP |
| 71114  82001  82201  82202 | 71114  82001  82201  82202 | 71114  82001  82201  82202 | 82001 | No NRC inspection of this key attribute. - Evaluation performed by FEMA |

See <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html> for the complete list of all non-security related inspection procedures.

PUBLIC RADIATION SAFETY

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Facilities/Equipment | | Program/Process | | Human Performance | |
| 83502  83502.01  83502.02  83521  83527 | 84522  84523  84524  84750  86750 | 42400  80521  83502  83502.01  83502.02  83502.03 | 84522  84524  84750  86740  86750 | 41500  71841  83502  83502.01  83502.02  83502.03 | 83523  83723  84524  84750  86740  86750 |

See <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html> for the complete list of all non-security related inspection procedures.

OCCUPATIONAL RADIATION SAFETY

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Facilities and Equipment | | Program/Process | | Human Performance | |
| 83527  83528 | 83724  83725 | 42400  79702  83501  83528 | 83724  83725  83728  83750 | 41500  71841  83501  83528 | 83723  83724  83750 |

See <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html> for the complete list of all non-security related inspection procedures.

SECURITY

|  |  |  |  |
| --- | --- | --- | --- |
| Physical Protection System | Access Authorization System | Access Control System | Response to Contingency Events |
| 71130.01  71130.02  71130.03  71130.04  71130.05  71130.06  71130.07  71130.08  71130.14  65001.17 | 71130.01  71130.02  71130.04  71130.05  71130.07  71130.08  65001.17 | 71130.02  71130.04  71130.05  71130.07  65001.17 | 71130.01  71130.02  71130.03  71130.04  71130.05  71130.06  71130.07  71130.08  71130.14  65001.17 |

Refer to the internal Web page for the complete list of all security-related inspection procedures.

<http://nrr10.nrc.gov/rop-digital-city/insp-documents/inspection-manual-reports.html>

END

Attachment 2 – Supplemental Inspection Best Practices

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # and Title | Best Practice | ROP FF | IP | Refer-enced  in IP | |
| 1. Inspection preparation | Due to the extremely large volume of information for the inspection team to review and the significant degree of overlap in the areas to be inspected, a great deal of emphasis was placed on inspection preparation. This included a week of just-in-time training that provided the NRC’s perspective of the licensee and the history of issues to be inspected, and the expectations of how the team should interact to ensure an effective and thorough inspection. In addition, due to the large number of root cause analyses to be reviewed, the team was provided root cause refresher training with a focus on the Brown’s Ferry process. The preparation also included an onsite orientation week, during which the licensee explained their recovery process, and their perspectives of the significant issues related to the inspection. During the site orientation badging and site tours were completed as well as establishing the point of contact for each inspection area. | [95003-1976](http://fusion.nrc.gov/nrr/team/dirs/irib/ROP_Feedback_Forms/Open%20Feedback%20Forms/95003-1976.docx) | 95002  95003 | Yes | |
| 1. Emphasis on Observations of In-Plant Activities | Based on the licensee’s history of being able to develop processes that were on par with the rest of the industry, but having difficulties implementing these processes and sustaining improvement, the team focused observations on in-plant activities. To allow this to happen, the team completed a majority of the document reviews during the preparation weeks. Also, all observations, whether positive, negative or neutral, were collected and tracked in a database to allow the development of trends. In addition, due to the concerns regarding safety culture, coordination between the technical inspectors and the safety culture assessors was vital to the success of the inspection, so, the two groups worked together in the field and during interviews as well as in the team discussion to ensure both the technical aspects and the safety culture aspects were captured. | [95003-1976](http://fusion.nrc.gov/nrr/team/dirs/irib/ROP_Feedback_Forms/Open%20Feedback%20Forms/95003-1976.docx) | 95002  95003 | Yes |

END

Attachment 3 – Revision History for IMC 2515 Appendix B

| 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) |
| --- | --- | --- | --- | --- |
|  | 04/03/00  [CN 00-003](http://www.nrc.gov/reading-rm/doc-collections/insp-manual/changenotices/2000/00-003.html) | Updated for ROP to include list of procedures that can be used to follow up on risk significant inspection activities. |  |  |
|  | 09/12/00  [CN 00-018](http://www.nrc.gov/reading-rm/doc-collections/insp-manual/changenotices/2000/00-018.html) | Revised to include newly issued IP 62708, "Motor-Operated Valve Capability,” and to delete IP 50001, "Steam Generator Replacement Inspection." IP 50001 has been moved to IMC 2515, Appendix C, “Special and Infrequently Performed Inspections.” |  |  |
| N/A | 03/06/01  [CN 01-006](http://www.nrc.gov/reading-rm/doc-collections/insp-manual/changenotices/2001/01-006.html) | Revised to include new IP 62710, "Power-Operated Gate Valve Pressure Locking and Thermal Binding." | N/A |  |
| N/A | 1/17/2002  [CN 02-001](http://www.nrc.gov/reading-rm/doc-collections/insp-manual/changenotices/2002/02-001.html) | Revised to include new IP 62710. | N/A | N/A |
| N/A | [ML050770156](http://adamswebsearch2.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML050770156)  3/23/2005  [CN 05-008](http://www.nrc.gov/reading-rm/doc-collections/insp-manual/changenotices/2005/05-008.html) | Revised to add IP 56700, “Calibration,” IP 82201, Emergency Detection and Classification “,” IP 82202, “Protective Action Decision Making,” and IP 90700, “Feedback of Operational Experience Information at Operating Power Reactors,” to Attachment 1. | N/A | N/A |
| N/A | [ML061580281](http://adamswebsearch2.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML061580281)  01/26/07  [CN 07-004](http://adamswebsearch.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML070240216) | Added IP 61726, “Surveillance Observations,” to list of IPs to be used for assessing extent of condition (FF IMC2515B-919). Completed 4 year historical change notice search. | N/A | [ML063460228](https://nrodrp.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML063460228) |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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 | [ML092300213](http://adamswebsearch2.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML092300213)  10/29/09  [CN 09-025](http://adamswebsearch2.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML092990445) | Revised to add IP 52003, “Digital Instrumentation And Control Modification Inspection,” and remove references to previously deleted procedures. | N/A | N/A |
| N/A | [ML102090718](https://adamsxt.nrc.gov/WorkplaceXT/getContent?objectStoreName=Main.__.Library&id=current&vsId=%7bCB97D36F-1EAF-4E98-8ECF-E9FD3F18F844%7d&objectType=document)  02/09/11  CN 11-001 | Revised to remove redundant and contradicting assessment guidance since this guidance resided in IMC 0305. Updated Attachment 1 to reflect currently available procedures. Deleted the old Attachment 2 and since it is redundant to the information maintain on the web. Renamed Attachment 3 to Attachment 2. | N/A | [ML110130130](https://nrodrp.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML110130130) |
| N/A | [ML111870266](https://adamsxt.nrc.gov/WorkplaceXT/getContent?objectStoreName=Main.__.Library&id=current&vsId=%7b6C0FBB29-3BA3-424D-A431-18716B776D3C%7d&objectType=document)  08/18/11  CN 11-013 | Updated Attachment 1 to reflect the current security and radiation safety procedures. | N/A | N/A |
| N/A | ML15204A007  12/18/15  CN 15-031 | Partially addressed ROPFF 95003-1976 (Include the best practices as guidance in the Inspection Procedures 95003 and 95002). The ROPFF will be closed upon subsequent revisions to both IP 95003 and IP 95002 to reference Attachment 2. Terminology enhancements and clarifications associated with “should vs. shall” and “governance vs. requirement vs. guidance” were incorporated. Grammatical, typographical, formatting, and code transfer issues were also corrected. | N/A | [ML15204A516](https://adamsxt.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML15204A516) |

1. Note that IMC 0305 allows for possible exceptions. [↑](#footnote-ref-2)