APPENDIX B

SUPPLEMENTAL INSPECTION PROGRAM

A. OBJECTIVES AND PHILOSOPHY OF THE SUPPLEMENTAL INSPECTION PROGRAM

The supplemental inspection program is designed to support the NRCs 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 should 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, additional supplemental inspections are generally required[[1]](#footnote-1) 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 using the significance determination process (SDP) or when 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 guidance provided in Inspection Manual Chapter (IMC) 0305, “Operating Reactor Assessment Program” for the NRCs assessment Action Matrix.

B. 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 should contain the NRCs 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, and may vary considerably due to the complexity of the issue(s) and the thoroughness of the licensees own evaluations and proposed corrective actions.

C. 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 guidance 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” | Review licensees evaluation of root and contributing causes, extent of condition and cause, and corrective actions. Inspection limited to specific issue(s) or performance area of concern. | Significant weaknesses in the licensees 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 guidance). |
| IP 95002, “Supplemental Inspection for One Degraded Cornerstone or any Three White Inputs in a Strategic Performance Area” | Review licensees evaluation of root and contributing causes, extent of condition and cause, and corrective actions for both for individual and collective issues. Determine if safety culture components caused or significantly contributed to risk significant performance issues. Independently assess the licensees 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. Independently assess the extent of risk significant issues, the adequacy of the programs and processes used to identify, evaluate, and correct performance issues. Independently evaluate the adequacy of programs and processes in the affected strategic performance areas. Gain insights into the overall root and contributing causes of identified performance deficiencies. Determine if the NRC oversight process provided sufficient warning to significant reductions in safety. Evaluate the licensees third-party safety culture assessment and conduct 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 should be ordered to shut down and be placed under IMC 0350. |

The portions of the licensees evaluation concerning extent of condition will be assessed independently by the NRC during both the IP 95002 and IP 95003 inspections. This independent assessment should 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 should be charged to IP 95002 or IP 95003 as appropriate, regardless of the specific procedure(s) chosen for implementation.

D. ASSESSING INSPECTION FINDINGS

If, significant weaknesses are identified in the licensees 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 would generally be expanded as necessary to satisfy the inspection objectives. The original performance issue would generally 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 guidance). When the licensee’s performance indicates the need to open a parallel PI finding or holding open a finding past four quarters in the Action Matrix, an inspection report should be issued which describes specific licensee deficiencies and clearly states the necessary licensee actions required to meet all supplemental inspection objectives.

General weaknesses associated with the licensees 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 should be inspected and screened in accordance with IMC 0612, Appendix B, “Issue Screening.”

Significant weaknesses identified during performance of IP 95003 will be assessed to determine if additional agency actions are warranted and whether the facility should 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 Performance | RCS Equip. & Barrier Performance | Containment SSC & Barrier Performance | Human Performance | Procedure Quality | Design Control | Configuration  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 – Revision History for IMC 2515 Appendix B

| Commitment Tracking Number | Issue Date | Description of Change | Training Needed | Training Completion Date | Comment Resolution Accession Number |
| --- | --- | --- | --- | --- | --- |
|  | 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. |  |  |  |
| 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 |  |
| 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, Power-Operated Gate Valve Pressure Locking and Thermal Binding. | N/A | N/A | N/A |
| N/A | 3/23/2005  [ML050770156](http://adamswebsearch2.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML050770156)  [CN 05-008](http://www.nrc.gov/reading-rm/doc-collections/insp-manual/changenotices/2005/05-008.html) | Revised to add IP 56700, 82201, 82202, and 90700 to Attachment 1. | N/A | N/A | N/A |
| N/A | 01/26/07  [ML061580281](http://adamswebsearch2.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML061580281)  [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 | N/A | [ML063460228](https://nrodrp.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML063460228) |
| N/A | 10/29/09  [ML092300213](http://adamswebsearch2.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML092300213)  [CN 09-025](http://adamswebsearch2.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML092990445) | Revised to add IP 52003 and remove references to previously deleted procedures. | N/A | N/A | N/A |
| N/A | 02/09/11  ML102090718  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 | N/A | [ML110130130](https://nrodrp.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML110130130) |
| N/A | 08/18/11  ML111870266  CN 11-013 | Updated Attachment 1 to reflect the current security and radiation safety procedures. | N/A | N/A | N/A |

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