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## INSPECTION MANUAL CHAPTER 2515 APPENDIX B

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### SUPPLEMENTAL INSPECTION PROGRAM

Effective Date: 09/28/2022

#### 2515B-01 PURPOSE

- 01.01 To facilitate timely graduated inspections of increasing breadth, depth, and diagnostic rigor when, due to declining licensee performance<sup>1</sup>, baseline inspection or lower-tiered supplemental inspections alone are no longer adequate to provide the necessary information and analysis to ensure adequate protection of public health and safety and promote common defense.
- 01.02 To ensure that licensees with declining performance complete timely effective problem identification, analysis, corrective action planning and execution<sup>2</sup> to preclude repetition of significant performance issues.
- 01.03 To ensure the capture of risk-weighted insights into licensee Problem Identification and Resolution (PI&R) performance during infrequent instances when it is most important – when addressing and seeking to preclude repetition of significant licensee performance issues. These risk-weighted insights support periodic NRC assessments of licensee performance.

#### 2515B-02 OBJECTIVE

In addition to supporting Inspection Manual Chapter (IMC) 2515 objectives 02.01 and 02.02 and supplemental inspection procedures (IPs) 95001, -02, and -03 objectives, the objective of this appendix is to add clarity to supplemental inspection fundamentals common to multiple supplemental IPs including (a) differentiating between inspector requirements, regulatory obligations (e.g. regulations, license conditions, and orders), NRC expectations (e.g. licensee self-imposed standards) requisite to voluntary ROP participation and associated benefits, and, (b) scheduling considerations, (c) the relationship between general weaknesses and omissions, significant weaknesses and omissions, and findings, (d) the importance of enhanced inspection, assessment, and documentation rigor in supplemental inspections, (e) the role of supplemental inspection in facilitating follow-up baseline inspection of planned corrective actions to preclude repetition of significant issues, and (f) the role of supplemental inspection in capturing risk-important licensee PI&R performance insights for future periodic operating reactor assessment program efforts.

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<sup>1</sup> Declining licensee performance is reflected by significant (i.e., white, yellow, or red) inspection findings and/or by Performance Indicator (PI) data exceeding response thresholds - either resulting in the licensee transitioning to the right across Action Matrix columns.

<sup>2</sup> Execution of corrective actions to preclude repetition of significant performance issues will be ensured during supplemental inspection when possible; during subsequent baseline inspection otherwise.

## 2515B-03 APPLICABILITY

This Appendix applies exclusively to supplemental IPs 95001, -02, and -03 which address all strategic performance areas and associated cornerstones of safety. It applies to all NRC managers, team leads, inspectors, and staff engaged in the supplemental inspection and follow-up inspection processes conducted in accordance with (IAW) the Action Matrix in IMC 0305.

Supplemental inspection shall be initiated for greater-than-green (GTG) findings and PIs IAW IMC 0305. The inspection objectives and requirements are independent of (a) whether the issue(s) originated from a finding or PI or (b) the evaluation methodology chosen by the licensee.

## 2515B-04 DEFINITIONS

This appendix defines language used in the context of ROP supplemental IPs 95001, -02, and -03 to promote common understanding and uniform supplemental inspection implementation. Licensees may use differing nomenclature. Inspectors implementing- and managers overseeing supplemental inspection will focus on the effectiveness of licensee analyses, actions, and documentation (licensee performance) – not on licensee nomenclature.

### 04.01 Apparent Cause Evaluation (ACE)

A causal analysis type that is based on the evaluator's judgment and experience where a reasonable effort is made to determine why a performance issue occurred. This might include fact finding, analysis, interviewing, benchmarking, reviewing data or maintenance history, or other methods. See subsections 01.02, 01.03, 02.01, 04.18, 04.20, 07.01, 08.01, 08.02, 09, 10.01, 10.02, 11.01, and 11.02 of this Appendix for discussion related to precluding repetition.

### 04.02 Cause (Causal) Analysis or Evaluation

A process or method of trying to determine what may be responsible for a performance issue, problem, or condition. Two primary causal analysis types into which most methods fall are the ACE and the Root Cause Analysis (RCA).

### 04.03 Cause (Causal Factor)

An action, condition, or event that directly or indirectly shapes or influences the outcome of a performance issue, problem, or condition.

### 04.04 Common Cause Failures

When two or more failures of plant processes, programs, equipment, or human performance, are attributable to a shared cause.

### 04.05 Completed CAPR

*A CAPR (see definition of CAPR below) is Completed when it has been fully implemented and inspected by NRC inspectors to confirm the implementation was IAW an NRC-accepted plan. [C2]*

04.06 Contributing Cause

A cause that contributed to an occurrence but, by itself, would not create the occurrence.

04.07 Consequence

The actual or potential outcome of an identified performance issue, problem or condition.

04.08 Corrective Action to Preclude Repetition (CAPR)

*As used in this appendix or in connection with IPs 95001, -02, and -03 supplemental- and follow-up inspection, CAPR refers to licensee corrective actions necessary to preclude repetition of significant (i.e., Greater-than-Green) performance issue(s). [C2]*

04.09 Extent of Condition

The extent to which the actual condition exists with other plant processes, programs, equipment, or human performance.

04.10 Extent of Cause

The potential for the root cause(s) of an identified performance issue, condition, or problem to exist in other plant processes, programs, equipment, or human performance.

04.11 General Weakness or Omission

A weakness or omission associated with licensee actions to identify the causes of a GTG performance issue and to preclude repetition. A general weakness or omission is of enough importance to (a) warrant licensee engagement by inspectors, (b) be screened as an issue of concern IAW IMC 0612, (c) be documented IAW IMC 0611, and (d) inform NRC periodic licensee PI&R assessments. A general weakness or omission cannot preclude satisfaction of supplemental inspection objectives and requirements. A general weakness may constitute an ROP finding, a violation, a failure to satisfy an ROP fundamental expectation, or some combination thereof, and should be characterized and documented accordingly. General weaknesses shall be documented IAW IMC 0611.

04.12 Minor Weakness or Omission

A weakness or omission that may warrant informal licensee engagement by inspectors but screens as a non-finding and non-violation IAW IMC 0612 that does not warrant documentation IAW IMC 0611 nor further consideration in periodic licensee PI&R assessments.

04.13 Planned (Open) CAPR

*A licensee-planned NRC-accepted CAPR that could not be Completed (Closed) (see definition above) prior to satisfactory completion of an IP 95001 or -02 supplemental inspection. [C2]*

#### 04.14 Planned CAPR Deviation

Occurs when a licensee deviates from a previously inspected and accepted CAPR analysis or plan before the CAPR has been NRC-inspected as complete. See subsection 11.01 of this Appendix for further discussion.

#### 04.15 CAPR Tracking

*Methods established in ROP governance and software to support documentation of significant planned corrective actions associated with 95001 and 95002 supplemental inspections and to implement an efficient means for inspectors to readily identify and retrieve information about completed and planned corrective actions associated with 95001 and 95002 supplemental inspections. [C2]*

#### 04.16 Repeat occurrences

Two or more independent conditions resulting from the same basic cause(s).

#### 04.17 Root Cause

The basic reason (e.g., plant processes, programs, equipment, or human performance) for a performance issue, problem, or condition, which if corrected, will preclude repetition. Valid Root Causes generally satisfy the following four criteria: (1) The performance issue, problem, or condition would not have occurred had the root cause not been present; (2) The performance issue, problem, or condition will not recur if the root cause is corrected or eliminated; (3) Correction or elimination of the root cause will preclude repetition of similar performance issues, problems, or conditions, and (4) The root cause is sufficiently specific that it is realistically correctable by the licensee.

#### 04.18 Root Cause Analysis

A systematic evidence-based causal analysis designed to reliably and scrupulously determine the root- and contributing cause(s) of a performance issue, problem, or condition.

#### 04.19 Significant Performance Issue

A GTG finding as determined by IMC 0609, "Significance Determination Process" or a PI that exceeds the green-to-white performance threshold.

#### 04.20 Significant Weakness or Omission

A weakness or omission associated with licensee actions to identify the causes of a GTG performance issue and to preclude repetition which does not provide the level of assurance required to meet supplemental inspection objectives and requirements. Until resolved or sufficiently mitigated, it precludes satisfactory completion of a supplemental inspection. Significant weaknesses warrant prompt licensee and NRC management engagement. If identified during an IP 95003 supplemental inspection, the NRC will further assess a significant weakness to determine whether the facility should be ordered to shut down and placed under IMC 0350 and/or if other agency actions are warranted. Significant weaknesses or omissions should be dispositioned, communicated, and documented with enough detail to assure that informed readers will

understand why the significant weakness or omission prevented satisfactory completion of the supplemental inspection and the licensee actions necessary to meet all pending supplemental inspection objectives prior to completing the inspection. A significant performance issue that cannot be resolved or mitigated during the supplemental inspection requires an interim inspection report (IR) and may demonstrate the need to open a parallel PI finding. Refer to IMC 0305 for additional guidance on parallel PI findings and holding open findings in the Action Matrix.

#### 04.21 Supplemental IP

IPs that supplement baseline inspections at a licensee when that licensee is in ROP Action Matrix Column 2, 3, or 4, conducted prior to the licensee returning to ROP Action Matrix Column 1. IPs 95001, -02, and -03 are the only supplemental inspection procedures recognized or authorized by the Action Matrix and this Appendix.

#### 04.22 Weakness or Omission

A deficiency associated with licensee actions to identify the causes of a GTG performance issue and to preclude repetition. A weakness or omission can be associated with established or omitted facts, assumptions, analysis, or documentation associated with (a) identifying the GTG performance issue(s), (b) determining the root- and contributing cause(s), extent of condition, and/or extent of cause, (c) identifying, planning, or implementing corrective actions to preclude repetition, and/or (d) identifying, planning, or implementing an effectiveness review. Weaknesses and omissions may be categorized and dispositioned as (a) minor, (b) general, or (c) significant. See General- and Significant Weakness or Omission for additional discussion.

### 2515B-05 RESPONSIBILITIES AND AUTHORITIES

See IMC 2515, "Light-Water Reactor Inspection Program - Operations Phase."

### 2515B-06 OVERVIEW

The supplemental inspection program is detailed further in this appendix and in IPs 95001, -02, and -03. Combined, these documents facilitate graded regulatory oversight increasing in depth and breadth and becoming more intrusive and diagnostic with the significance and breadth of licensee performance issues that move licensees to the right across the Action Matrix.

Supplemental inspection requirements apply to both single inspection findings and to PIs that might represent more than one independent event (e.g., multiple scrams). Unless a second White input occurs in the same cornerstone, the inspection must be accomplished either by independently evaluating each occurrence or by collective evaluation as appropriate. The licensee's evaluation is expected to address each of the occurrences when multiple occurrences exist *and the potential for programmatic weaknesses when a second white input occurs in the same cornerstone.* [C3]

To reduce unnecessary regulatory burden, supplemental inspection effort and scope are managed to the minimum necessary to satisfy inspection objectives and requirements which, in turn, are necessary to restore reasonable assurance of public safety following significant (i.e., GTG) licensee performance issues. IMC 0305 Figure 1: "Reactor Oversight Process (ROP)

Action Matrix” summarizes conditions warranting column placement and associated expectations regarding regulatory and licensee response and communications. The following table further highlights the similarities and differences between supplemental IPs 95001, -02, and -03:

Supplemental Inspection Selection Table		
Supplemental IP	Scope	Assessment of Supplemental Inspection Findings
IP 95001, “Supplemental Inspection Response to Action Matrix Column 2 (Regulatory Response Column) Inputs”	Intent is to review and selectively challenge aspects of the licensee’s causal evaluation (e.g., problem identification, causal analysis, operating experience, extent of cause, extent of condition, safety culture, corrective actions to preclude repetition, and effectiveness review) for the individual and collective risk significant performance issues that warranted supplemental inspection, but not to perform an independent assessment of the performance issue.	These two supplemental inspections are intended to provide the information the NRC needs in order to assess safety. The NRC can acquire this information by performing independent inspections or reviewing the licensee’s efforts to assess the root cause of the issue. Significant weaknesses in the licensee’s evaluation or corrective action plans, until resolved, preclude satisfactory completion of supplemental inspection and may result in the expansion of the inspection as necessary to independently complete the inspection requirements. (Refer to IMC 0305 for additional governance.)
IP 95002, “Supplemental Inspection Response to Action Matrix Column 3 (Degraded Performance Column) Inputs”	Objective is to review and selectively challenge aspects of the licensee’s root cause evaluation for the individual and collective risk significant performance issues that warranted this supplemental inspection. Also requires an independent NRC inspection to determine adequacy of the licensee’s extent of condition determination. It determines if safety culture components caused or significantly contributed to significant performance issues and independently assesses the adequacy of the licensee’s extent of condition and extent of cause using IPs selected from Attachment 1.	NRC assessment of licensee PI&R performance in resolving GTG issues is also a risk-informed input to the IMC 0305 Operating Reactor Assessment Program. Weaknesses must be identified, dispositioned, and documented accordingly.

Supplemental Inspection Selection Table		
Supplemental IP	Scope	Assessment of Supplemental Inspection Findings
IP 95003, "Supplemental Inspection Response to Action Matrix Column 4 (Multiple/ Repetitive Degraded Cornerstone, Column) Inputs"	Intended to determine the breadth and depth of safety, organizational, and programmatic issues; is more diagnostic than indicative and includes reviews of programs and processes not inspected as part of the baseline inspection program. Allows focus to be applied to areas where performance issues have been previously identified but requires that some sample reviews be performed for all key attributes of the effected strategic performance areas. Incorporates ROP self-assessment.	Results assessed to determine whether the facility warrants a shutdown order and subsequent inspection under IMC 0350 or if other agency actions are warranted. NRC assessment of licensee PI&R performance in resolving GTG issues is also a risk-informed input to the IMC 0305 Operating Reactor Assessment Program. Weaknesses must be identified, dispositioned, and documented accordingly.

2515B-07 ENHANCED INSPECTION, ASSESSMENT, AND SUCCESSFUL COMPLETION

07.01 Enhanced Inspection – Challenging Aspects of Licensee PI&R Performance

Once a significant (i.e., GTG) performance issue has occurred, inspectors need to ensure the licensee takes actions to identify the causes of the performance issue(s) and to preclude repetition. It is expected that the licensee's evaluation of the issue(s) triggering supplemental inspection will generally need to address each of the inspection requirements; however, the depth of licensee analysis may vary depending on the significance and complexity of the issue(s).

Supplemental IPs examine licensee performance relative to regulatory requirements and obligations and self-imposed standards. Absent non-compliance with a regulatory obligation or failure to satisfy a self-imposed standard, a licensee failure to satisfy a fundamental ROP expectation will not generally prompt an enforcement action or the documentation of an ROP finding. It can, however, alter the outcome of a supplemental inspection. A significant weakness in licensee actions to identify the causes of the performance issue(s) and to preclude repetition, until resolved or sufficiently mitigated, will preclude satisfactory completion of a supplemental inspection.

The depth of the NRC evaluation may vary depending on the complexity of the performance issue(s). In some instances, the satisfaction of specific inspection requirements will be self-evident with little additional review or analysis required by the inspectors.

NRC inspectors are generally not required to perform an independent evaluation of the performance issue(s) but shall verify licensee performance of issue identification, evaluation, and corrective plans and activities, sufficiently challenging aspects and assessing the adequacy of licensee performance in each of these areas to ensure that the GTG performance issues and their cause(s) have been properly identified and that

corrective plans and actions are in place to promptly and effectively address and preclude repetition.

Supplemental inspection is required to provide increasingly rigorous, diagnostic and programmatic assessments of expanded breadth and depth as the significance of licensee performance issues increases beyond the regulatory response band (Green) to White, to Yellow, or to Red and result in crossing increasing Action Matrix thresholds. These changes are factored into the supplemental inspection program through the assessment process, as further discussed in Sections 07 and 08 of IMC 2515 “Light-Water Reactor Inspection Program—Operations Phase.”

Unless flexibility is explicitly stated, inspectors, staff, and managers engaged in the inspection, in dispositioning, and in documenting the inspection shall satisfy all applicable inspection requirements. *The IR should clearly communicate the outcomes to an independent reader.* [C1]

#### 07.02 Assessment of Extent of Condition during IP 95002 and -03 Inspection

In addition to the above, during IP 95002 and IP 95003 inspections, inspectors shall independently assess the extent of condition with the aid of IPs referenced in Attachment 1 to this Appendix. However, these reference IPs shall not be substituted for completing and documenting the NRC’s assessment regarding each applicable IP 95002 or -03 supplemental IP requirement.

Attachment 1 IPs include baseline IPs (portions of which can be repeated with additional samples); procedures that were part of the old inspection program core, regional initiative, and temporary instructions; and new IPs written solely for augmenting supplemental inspection. A combination of procedures or portions of procedures can also be used as appropriate.

The objective of the independent extent of condition review is to ensure that the licensee has properly identified the scope (extent) of the significant issues and that the proposed and completed corrective actions are sufficiently comprehensive. Inspection hours utilized in fulfilling this inspection requirement shall be charged to IP 95002 or IP 95003 as appropriate, regardless of the specific Attachment 1 procedure(s) chosen.

#### 07.03 Multiple GTG Action Matrix Inputs

*While the inspection requirements are generally written to address individual performance issues, supplemental IPs may also be used to assess the adequacy of the licensee’s evaluations associated with multiple performance issues associated with transition to Action Matrix Column 2. When performed in connection with a second White input in the same cornerstone as the first, the inspection must evaluate the adequacy of the licensee’s common cause analyses to consider the potential for programmatic weaknesses in the licensee’s performance.* [C3]

#### 07.04 NRC Assessment of Each Applicable Inspection Requirement

Each IR produced to document a supplemental inspection will contain the NRC’s assessment for each applicable inspection requirement. These inspection requirements are independent of whether the performance issues were the result of PIs or inspection findings and the licensee’s causal analysis method. The resource estimates provided in



each supplemental 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.

#### 07.05 Cross-Cutting Issue Follow-up

Activities taken to follow-up and close cross-cutting issues may be performed in conjunction with a supplemental inspection in the event a supplemental inspection is scheduled within an appropriate timeframe for cross-cutting issue follow-up. See IMC 0305, Operating Reactor Assessment Program, for additional guidance.

#### 07.06 Successful Supplemental Inspection Completion

Once an Action Matrix input is identified that causes a licensee to be moved out of Action Matrix Column 1, the Licensee Response Column, the applicable supplemental IP requirements and objectives must be satisfied to return the licensee to Column 1 of the action matrix. The return of a triggering PI to green is insufficient to return the licensee to Action Matrix Column 1. A successfully completed and documented supplemental inspection is necessary.

### 2515B-08 INITIATING, DELAYING, SUSPENDING OR EXPANDING INSPECTION

#### 08.01 Scheduling and Initiating Supplemental Inspection

IP 95001 and -02 supplemental inspections should be scheduled and initiated in a timely manner in response to a licensee request following a licensee transition out of the licensee response column of the Action Matrix. Prior to requesting one of these supplemental inspections, the licensee is expected to have completed thorough problem identification, causal analysis, and corrective action plans to preclude repetition of the associated significant (i.e., GTG) action matrix input(s) and to have implemented any prompt risk-mitigation measures, as appropriate. The evaluation should be documented with enough rigor and detail to enable inspectors to satisfy supplemental IP objectives and requirements. Effective licensee preparation will promote timely and efficient supplemental inspection, closure of associated findings and violations, and a prompt return to the licensee response column of the Action Matrix with minimal regulatory burden.

Planned CAPRs need not be fully implemented prior to supplemental inspection but those CAPRs that are not implemented and inspected during the supplemental inspection will be verified during a future follow-up inspection – typically a baseline inspection sample – to have been promptly and satisfactorily implemented IAW the NRC-inspected and accepted CAPR plan, as further discussed in section 2515B-11.

With the exception of the first phase of IP 95003 supplemental inspection, no licensee should be subject to supplemental inspection until it has signaled readiness. Unlike IP 95001 and -02 supplemental inspections, IP 95003 supplemental inspections may be conducted in two parts. The first phase of IP 95003 is conducted to obtain timely additional information necessary for the NRC to conduct an independent interim assessment of the associated risk significant issues. This interim assessment is used in determining whether the continued operation of the facility is acceptable, whether interim licensee and/or NRC actions are necessary pending completion of licensee assessment

and corrective actions and pending satisfaction of remaining IP 95003 supplemental inspection objectives. For this reason, the first phase of IP 95003 supplemental inspection is not contingent on licensee readiness. However, the licensee should signal readiness before the second phase of IP 95003 supplemental inspection is scheduled.

#### 08.02 Delaying Supplemental Inspection

A reasonable time is expected for the licensee staff to complete an evaluation, develop, and begin implementation of corrective action plans in preparation for a supplemental inspection. This period is generally proportional to the significance and complexity of the GTG issue(s) prompting the supplemental inspection. If the licensee does not complete preparations and request supplemental inspection within a reasonable time following a GTG performance issue, regional management should (a) prompt the licensee to provide the basis for the delay including significance insights, (b) encourage the licensee to promptly complete analysis and corrective action plan to preclude repetition, and (c) coordinate with the licensee to schedule a timely supplemental inspection.

**Should** a significant<sup>3</sup> concern regarding licensee readiness arise **during inspection preparation or prior to the start of the direct inspection period**, the inspectors will promptly inform NRC management and the licensee regarding the concern, its basis, and recommended remedial actions to prepare for a successful supplemental inspection. The licensee may be offered the opportunity to defer<sup>4</sup> or reschedule the supplemental inspection<sup>5</sup> but shall be made to understand that, in the event the inspection is **deferred**:

- a. A second inspection preparation effort will be necessary
- b. In the subsequent IR, inspectors will follow-up, disposition, and document:
  1. the weakness prompting the **deferral of** the supplemental inspection,
  2. the duration of the delay,
  3. the cause of the weakness, and
  4. the effectiveness of corrective actions to address the weakness.

**The decision to defer, reschedule, or continued as planned the supplemental inspection should be determined by NRC management after discussion of the potential concerns with licensee management. The NRC decision should account for the need of the inspectors to perform adequate inspection preparation and review any licensee changes prior to the start of the direct inspection period.**

#### 08.03 Suspending Supplemental Inspection

If, at any time after **the start of direct inspection**, the inspection team lead is given reason to anticipate the satisfactory completion of the ongoing supplemental inspection will be delayed or will require an additional site visit due to a significant weakness or omission, **they** shall inform regional management, the program office (e.g., NRR/DRO/IRIB), and

<sup>3</sup> A significant concern would be a concern sufficient to anticipate an unsatisfactory or delayed completion.

<sup>4</sup> **Moving the direct inspection period back from the scheduled date for a short period (e.g., a week) should be considered a rescheduled inspection and is not considered a deferred inspection.**

<sup>5</sup> Note IP 95003 phase-one inspection exception above.

the licensee. A coordinated decision will be made either to suspend the inspection pending licensee resolution of the significant weaknesses or omissions or to continue the inspection in parallel with licensee efforts to resolve the significant weakness. **The NRC will communicate to the licensee that continuing the inspection in parallel with licensee efforts to resolve a significant weakness can result in additional onsite or offsite inspection effort.**

Should the supplemental inspection proceed in parallel with licensee efforts to resolve the significant weakness, the inspection shall disposition and document the issues both as found and, if applicable, as resolved. Should the inspection be suspended, an interim IR shall be issued that dispositions and documents the significant weakness or omission and addresses licensee actions necessary prior to scheduling a return inspection to resolve the significant weakness or omission. The final IR must confirm and document the resolution of the significant weakness or omission.

#### 08.04 Expanding Supplemental Inspection

Expansion of a supplemental inspection may become necessary for inspectors to independently acquire, evaluate, and document additional information necessary to satisfy inspection objectives and requirements. This may occur (a) if a licensee has not thoroughly completed and documented an adequate and scrutable causal analysis and planned CAPRs to enable inspectors to satisfy supplemental IP objectives and requirements, (b) due to other significant weaknesses or omissions in licensee PI&R efforts, (c) as a result of an unusually complex licensee performance issue, or some combination thereof. Such an expansion would constitute a continuation or expansion of the supplemental inspection – not a separate inspection.

If, at any time, regional management or the inspection team lead anticipates that inspection expansion will exceed 130 percent of the maximum IP resource estimate (e.g., exceeding 52 hours for one white input, 156 hours for two white inputs in an IP 95001 supplemental inspection), the program office (e.g., NRR/DRO/IRIB) shall be promptly consulted and the licensee shall be informed. An explanation should be provided along with a revised estimate of the resources required to complete the inspection.

When licensee 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.

When continued or additional supplemental inspections are conducted, the inspection scope is normally limited to verifying those licensee actions necessary to meet previously unmet supplemental inspections objectives and requirements. Licensees shall be afforded reasonable opportunity to correct identified deficiencies or weaknesses prior to scheduling continued or additional inspection. A final supplemental inspection report must be issued when all inspection objectives and requirements are met.

#### 2515B-09 FINDINGS, VIOLATIONS, GENERAL- AND SIGNIFICANT WEAKNESSES

New or additional licensee performance issues identified during supplemental inspection including those identified by the licensee during their evaluation, must be inspected, screened,

and dispositioned IAW IMC 0612 to determine whether the issues constitute findings or violations, and documented IAW IMC 0611 Appendix C. Issues that constitute violations must be dispositioned IAW the Enforcement Policy. Additionally, these issues must be assessed to determine whether they constitute general- or significant weaknesses as defined and discussed in Section 04.

Any identified weakness or omission associated with licensee actions to identify the causes of a GTG performance issue and to preclude repetition should be assessed by the supplemental inspection team to determine whether it constitutes a minor-, general-, or significant weakness. Minor weaknesses, unless they also constitute findings or violations, do not generally warrant documentation and may be resolved informally. General and significant weaknesses must be dispositioned, communicated, and documented IAW IMC 0611 and their respective definitions and discussion in Section 04 of this appendix.

Findings, violations, weaknesses, and planned corrective actions identified during supplemental inspections may warrant follow-up inspection.

## 2515B-10 INSPECTION REQUIREMENTS, LICENSEE REGULATORY OBLIGATIONS, AND ROP EXPECTATIONS

### 10.01 Inspection Requirements vs. Licensee Regulatory Obligations

Supplemental IP requirements communicate “must-do” inspector activities and criteria generally necessary for inspectors to satisfy inspection objectives and to complete the inspection, address the associated GTG action matrix inputs, close associated findings and violations, and return the licensee to Column 1 of the Action Matrix. Portions of other recently completed inspections may be credited to the extent that they documented satisfaction of requirements and objectives equivalent or superior to the supplemental IP requirements and objectives.

Supplemental inspection reports must document the NRC’s assessment of the licensee’s evaluation for each inspection requirement IAW IMC 0611, “Power Reactor Inspection Reports,” Appendix C, “Guidance for Supplemental Inspection Reports.”

If a supplemental inspection is suspended after the entrance meeting, an interim inspection debrief shall be held with the licensee and an interim inspection report must be issued to document the circumstances of the suspension including those inspection requirements and objectives satisfied, those not satisfied, and the licensee actions necessary to satisfy the requirements and objectives.

Regulatory Obligations are conditions or actions that are legally binding requirements imposed on licensees through applicable rules, regulations, orders, and licenses (including technical specifications and license conditions). They are addressed further in LIC-100, Revision 1, “Control of Licensing Bases for Operating Reactors” (ADAMS Accession No. [ML033530249](#) (non-publicly available)). IPs may reference obligations, but they may never establish them. A licensee cannot be cited for failure to meet supplemental IP requirements and objectives but would rather be cited for the failure to meet a related obligation revealed by the inspection.

Consequently, while a supplemental IP cannot establish a regulatory obligation compelling a licensee to complete thorough problem identification, causal analysis, and

corrective action plans to preclude repetition of the significant (i.e., GTG) action matrix input(s) or compel the licensee to document the evaluation with rigor and detail, the licensee benefits from doing so as this will enable inspectors to satisfy supplemental IP requirements and objectives and thus complete a more timely and efficient supplemental inspection, closure of associated findings and violations, and facilitate the prompt return to Column 1 of the Action Matrix with minimal licensee burden.

New performance issues and new examples of previously identified performance issues revealed within the scope of the supplemental inspection shall be dispositioned and documented IAW IMCs 0612 and 0611, as in the baseline inspection program, allowing for differences specified in this appendix. Unresolved performance issues that rise to the level of findings but do not preclude satisfaction of supplemental IP requirements and objectives shall be characterized as “general weaknesses” while those that preclude satisfaction of requirements and objectives shall be characterized as “significant weaknesses.” Significant weaknesses that are not resolved prior to the completion of the scheduled supplemental inspection period are sufficient cause to expand or continue the inspection.

## 10.02 ROP Expectations of Licensee Performance

Participation in the ROP is voluntary and beneficial to all parties but is preconditioned upon the ongoing satisfaction of requisite self-imposed standards. A lapse in satisfaction of a requisite self-imposed standard cannot, in and of itself, trigger enforcement action but it could lead to reductions in one or more benefits of voluntary ROP participation.

As with other expectations requisite to full voluntary ROP participation, supplemental IP requirements and objectives are not contingent on whether significant performance issues are subject to Title 10 of the Code of Federal Regulations Part 50 Appendix B or other regulatory obligations. ROP inspection requirements and objectives are primarily predicated on risk and licensee performance. A licensee preparing for a successful supplemental inspection outcome will generally complete a systematic evidence-based causal analysis designed to reliably and scrupulously determine the root- and contributing cause(s) of a performance issue, problem, or condition; complete or plan prompt analysis-driven CAPRs; and provide inspectors with sufficient objective evidence for the inspectors to conclude that the supplemental IP requirements and objectives have been satisfied without significant weaknesses.

The NRC’s expectations increase with findings of increasing significance. The significance determination process, action matrix, and the supplemental inspection program determine and respond to a performance issue’s significance without consideration of the issue’s enforcement status. The ROP supplemental inspection program expects licensees to conduct the same rigorous causal analysis and corrective action for a given issue significance (i.e., white, yellow, or red) regardless of whether the issue is in the form of a PI, non-violation finding, or cited violation.

## 2515B-11 FOLLOW-UP INSPECTION OF PLANNED CORRECTIVE ACTIONS

### 11.01 General Discussion Regarding Follow-up Inspection

In order to provide for adequate protection of public health and safety, once a risk significant (i.e. GTG) performance issue is identified, the NRC needs to ensure that

licensees take actions to (a) identify the causes of the performance issue and (b) preclude repetition. A satisfactory supplemental inspection completion ensures identification of the causes, item (a). It can also ensure that repetition is precluded, item (b), but only if the licensee has completed- and inspectors were able to verify satisfactory implementation of all CAPRs IAW the inspected plan. Otherwise, follow-up inspection, generally scheduled consistent with the NRC-accepted CAPR completion date as part of a baseline inspection sample, is necessary and sufficient to ensure the licensee has implemented CAPRs IAW the previously inspected plan. The inspection shall be executed IAW the selected IP requirements and documented IAW IMC 0611.

#### 11.02 Documenting CAPR Plans & Implementation

*Supplemental- and follow-up inspection of licensee completed and planned CAPRs associated with IP 95001 and 95002 supplemental inspections shall be appropriately centralized to ensure inspectors are able to readily and efficiently identify and retrieve information about these CAPRs. [C2]*

END

Attachment 1: Suggested IPs for Reference Use  
In Assessing Extent of Condition in IPs 95002 and 95003

Publicly available IPs, including IPs not listed in Attachment 1, are available at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>.

A complete listing of non-publicly available IPs regarding security inspection are internally available at the NRR/DRO internal SharePoint pages.

Any IP may be referenced as needed within the scope of the supplemental inspection.

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
IPs related to this table that may not be uniquely specific to one of the attributes above					
90700 90712 92700			93801 93802 93806		

MITIGATING SYSTEMS					
Design	Protection Against External Events	Configuration Control	Equipment Performance	Procedure Quality	Human Performance
52003 56700 62710 71111.18 71111.21 93803 93807 93810 93811	71111.01 71111.05 71111.06	62709 71111.04 71111.13 71111.20	49001 55050 55100 56700 57050 57060 57070 57080 57090 61726 62002 62700 62706 62708 62709 62710 71111.07 71111.12 71111.13 71111.15 71111.17 71111.18 71111.21 71111.24 73756 93805 93810 93811	42001 42700 72701 73052	41500 71111.11 71715 71841
IPs related to this table that may not be uniquely specific to one of the attributes above					
90700 90712 92700 93801			93802 93803 93804 93806		



BARRIER INTEGRITY						
Fuel Cladding Performance	RCS Equip. & Barrier Performance	Containment System, Structure and Component & Barrier Performance	Human Performance	Procedure Quality	Design Control	Configuration Control
61705	55050	38703	41500	42700	50002	62709
61706	55100	49001	71111.11	70307	71111.17	71111.04
61707	56700	50002	71715	72701	71111.18	71111.13
61708	57050	55050	71841	73052	93803	71111.20
61709	57060	55100			93811	
61710	57070	56700				
	57080	57050				
	57090	57060				
	61728	57070				
	62700	57080				
	62706	57090				
	62709	61715				
	71111.08	61720				
	71111.12	62002				
	71111.13	62003				
	71111.17	62700				
	71111.18	62706				
	71111.24	62709				
	73051	70313				
	73753	70323				
	73755	71111.12				
	73756	71111.13				
	93805	71111.17				
		71111.18				
		71111.24				
		93805				
IPs related to this table that may not be uniquely specific to one of the attributes above						
90700						
90712						
92700						
93801						

EMERGENCY PREPAREDNESS				
Emergency Response Organization (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

PUBLIC RADIATION SAFETY					
Facilities/Equipment		Program/Process		Human Performance	
71124	84522	71124	84522	41500	83502.03
83502	84750	83502	84750	71124	83523
83502.01	86750	83502.01	86740	71841	83723
83502.02		83502.02	86750	83502	84750
		83502.03		83502.01	86740
				83502.02	86750

OCCUPATIONAL RADIATION SAFETY					
Facilities and Equipment		Program/Process		Human Performance	
71124	83724	71124	83724	41500	83723
	83725	79702	83725	71124	83724
		83501	83728	71841	83750
			83750	83501	

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

END

Attachment 2: Supplemental Inspection Best Practices

# and Title	Best Practice	ROP Feedback Form	IP	Referenced 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.	<a href="#">95003-1976</a>	95002 95003	Yes
2. 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 on observations of in-plant activities. To allow this to happen, the team completed most 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.	<a href="#">95003-1976</a>	95002 95003	Yes

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 Resolution and Closed Feedback Form Accession Number (Pre-Decisional, Non-Public Information)
N/A	04/03/00 CN 00-003	Updated for ROP to include list of procedures that can be used to follow up on risk significant inspection activities.		
N/A	09/12/00 CN 00-018	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	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	Revised to include new IP 62710.	N/A	N/A
N/A	<a href="#">ML050770156</a> 3/23/2005 CN 05-008	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	<a href="#">ML061580281</a> 01/26/07 CN 07-004	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	<a href="#">ML063460228</a>
N/A	<a href="#">ML092300213</a> 10/29/09 CN 09-025	Revised to add IP 52003, "Digital Instrumentation And Control Modification Inspection," and remove references to previously deleted procedures.	N/A	N/A

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	<a href="#">ML102090718</a> 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	<a href="#">ML110130130</a>
N/A	<a href="#">ML111870266</a> 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	<a href="#">ML15204A516</a>
C1	<a href="#">ML20052E649</a> 10/21/20 CN 20-054	This is a major revision. Commitment C1 is established in response to the EDO ASSESSMENT and Decision on Pages 8 and 9 of DPO-2018-001 Case File [OUO – Sensitive Internal Information – Limited Distribution (ML19214A199)] to enhance direction regarding supplemental inspections as follows:  a. Highly qualified inspectors are entrusted with the responsibility to inspect to the requirements of the procedure;	IP Lead to partner with regional supplemental inspection POC to conduct training (in person or via webinar) during Spring 2020	ML20157A018  FBF 2515B-2331 <a href="#">ML20157A063</a>



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	ML22189A179 09/28/22 CN 22-019	Expanded definitions of terms and clarified supplemental inspection flexibilities given significant concerns under sections 08.02, 08.03, and 08.04.  Section 07.05 added based on corresponding change to IMC 0305 related to cross-cutting issue follow-up from cross-cutting issue effectiveness review	None	ML22189A180  FBF 2515B-2456 ML22110A173