

# **NRC INSPECTION MANUAL**

**CCIB**

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MANUAL CHAPTER 2505

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PERIODIC ASSESSMENT OF CONSTRUCTION INSPECTION PROGRAM RESULTS

TABLE OF CONTENTS

2505-01 PURPOSE ..... 1

2505-02 OBJECTIVES..... 1

2505-03 APPLICABILITY..... 1

2505-04 DEFINITIONS ..... 2

2505-05 RESPONSIBILITIES AND AUTHORITIES ..... 5

2505-06 BASIC REQUIREMENTS ..... 7

    06.01 Program Overview ..... 7

    06.02 Construction Assessment Process ..... 7

    06.03 Performance Reviews ..... 8

    06.04 Program Reviews..... 11

    06.05 Annual Meeting with Licensee ..... 12

    06.06 NRC Responses to Licensee Performance ..... 13

    06.07 Additional Construction Response Table Guidance..... 17

    06.08 Corrective Action Program (CAP) Effectiveness Reviews..... 18

    06.09 CSFIs ..... 20

Exhibit 1 Process Activities

Exhibit 2 Construction Response Table

Exhibit 3 Construction Inspection Program

Attachment 1 Revision History for IMC 2505

## 2505-01 PURPOSE

01.01 To establish a transparent and predictable process that objectively evaluates licensee performance of construction activities and the effectiveness of licensee/contractor oversight and quality assurance efforts associated with construction.

01.02 This is the initial issuance of Inspection Manual Chapter (IMC) 2505. The staff recognizes that this IMC will likely undergo significant revisions during the next several years as both internal and external stakeholders provide feedback. This initial issuance is intended to promote such feedback, in order that the inspection program described in this IMC can benefit from the resulting revisions prior to the start of construction of future plants. For example, the staff intends to incorporate areas important to safety culture in the new construction assessment program; however, the final details of how areas important to safety culture will be assessed have not been fully developed to date. These areas will continue to be developed and will be incorporated into this IMC upon their completion. Time frames listed for conducting or performing various activities associated with the assessment process are considered initial estimates and any necessary changes will be made after the NRC has experience in implementing this IMC.

## 2505-02 OBJECTIVES

02.01 To collect assessment information from construction inspections.

02.02 To arrive at an objective assessment of licensee oversight performance using Construction Safety Focus Issues (CSFIs), which are under development, and violations identified during inspections.

02.03 To assist NRC management in making timely and predictable decisions regarding appropriate agency actions used to oversee, inspect, and assess licensee performance.

02.04 To provide a process for informing the licensee and the public of the NRC's assessment and resultant adjustment in inspection oversight when the changes are a result of licensee performance issues.

02.05 To provide a process to follow up on areas of concern.

## 2505-03 APPLICABILITY

This manual chapter applies to all commercial nuclear reactors in the construction phase under the 10 CFR Part 52 licensing process. Once the facility has fully transitioned to the Reactor Oversight Process (ROP) then Inspection Manual Chapter (IMC) 0305, "Operating Reactor Assessment Program," will apply. The contents of this manual chapter do not restrict the NRC from taking any necessary actions to fulfill its responsibilities under the Atomic Energy Act of 1954 (as amended). The guidance in IMC 0320, "Operating Reactor Security Assessment Program" will be used for the

assessment of security-related inspection violations.

## 2505-04 DEFINITIONS

04.01 Assessment Inputs. As used in this manual chapter, assessment inputs are the violations and CSFIs (under development) identified for a respective construction site that are combined in the assessment process in order to determine appropriate agency actions in accordance with the Construction Response Table (CRT) (Exhibit 2). Significant violations (i.e. violations resulting in escalated enforcement action) are normally considered in the assessment program for six months from the date of the inspection report in which the violation is issued or until the NRC accepts the licensee's corrective actions (i.e., the violation is closed in the Construction Inspection Program Information Management System (CIPIMS)), whichever is longer. During the semiannual performance review (SPR), the NRC will determine if CSFIs exist based on the causes of violations identified during the assessment period.

04.02 Assessment Period. A rolling 6-month assessment period which includes 2 quarters of assessment inputs.

04.03 Audit. A periodic examination of selected records or activities to verify their correctness or compliance with predetermined standards.

04.04 Communication. With regard to the CRT, communication between the licensee and the NRC is based on a graded approach. For declining licensee performance, higher levels of agency management will review and sign the assessment letters and conduct the annual public meeting.

04.05 Construction Assessment Process. A 6-month assessment period which starts after 1) a limited work authorization (LWA) and/or a combined operating license has been issued; 2) the NRC has implemented either IMC 2503 or 2504; and 3) there is sufficient activity occurring for any assessment to be meaningful. The construction assessment process will continue until the ROP has been fully implemented.

04.06 Combined License. A combined construction permit and operating license with conditions for a nuclear power facility, issued pursuant to 10 CFR Part 52, Subpart C.

04.07 Construction Activities. An NRC regulated activity associated with the design, fabrication, construction, or testing of structures, components, or systems at the construction site.

04.08 Construction Finding. A regulatory violation that is of greater-than-minor significance and is not associated with a specific ITAAC.

04.09 Construction Inspection Program Information Management System (CIPIMS). The database that provides the means to document, report, and track all NRC inspection activities and their results, including both ITAAC and non-ITAAC related inspections.

04.10 Construction Performance Review Package (CPRP). A document prepared by the regional office and used during the SPR and Agency Action Review Meeting (AARM) (if applicable). This document is prepared for all plants.

04.11 Construction Response Table (CRT). A table (Exhibit 2) that identifies the range of NRC and licensee actions and the appropriate level of communication for various levels of licensee performance. Licensee performance will be assessed quarterly to determine if assessment input thresholds in the CRT are exceeded.

04.12 Construction Safety Focus Issue (CSFI). An issue identified by the NRC during the SPR of licensee performance concerning a common cause for violations identified during the assessment period (under development).

04.13 Contractor. Any organization or individual under contract to furnish items or services to a licensee that is engaging in an NRC regulated activity. It includes the terms consultant, supplier, fabricator, constructor, vendor, and sub-tier levels of these organizations, where appropriate.

04.14 Family of ITAAC. A grouping of ITAAC that are related through similar construction processes, resulting products, and general inspection attributes.

04.15 Inspection. (1) An NRC activity consisting of examination, observation, or measurement to determine applicant/licensee/contractor/vendor conformance with requirements and/or standards. (2) Applicant/licensee/contractor/vendor quality control measures consisting of examination, observation, or measurements to determine the conformance of materials, supplies, components, parts, systems, processes or structures to pre-determined quality requirements.

04.16 Inspection History. A compilation of the inspection results for all inspections (construction and vendor inspections, Problem Identification and Resolution, etc.) conducted by the NRC.

04.17 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC). Those inspections, tests, analyses, and acceptance criteria identified in the combined license that, if met, are necessary and sufficient to provide reasonable assurance that the facility has been constructed and will operate in conformity with the license, the provisions of the Atomic Energy Act, and the Commission's rules and regulations. The ITAAC identified in a Combined License referencing a certified design will include the ITAAC defined in the Tier 1 documentation. Site-specific ITAAC, which include emergency planning ITAAC and ITAAC that are not part of the certified design, will also be included in a combined license. ITAAC are conditions of the license and must be satisfactorily completed before an affirmative 10 CFR 52.103 (g) finding occurs.

04.18 ITAAC Attributes. A number of common, descriptive characteristics for each ITAAC that can be analyzed and weighted by a methodology that allows the ITAAC to be prioritized for inspection planning.

04.19 ITAAC Finding. A regulatory violation that is greater-than-minor, is associated with a specific ITAAC for which the licensee has issued the ITAAC closure letter, and is

material to the ITAAC acceptance criteria. This type of finding could prevent the ITAAC from being closed and could require that previously closed ITAAC be re-opened. An ITAAC finding may be related to a single ITAAC or a family of ITAAC.

04.20 ITAAC Matrix. An inspection planning tool that identifies groups (i.e., families) of ITAAC, based upon common characteristics, which facilitate the ITAAC inspection sampling process and provide a consistent model for the inspection of ITAAC at plants of a similar design (see IMC 2503, Appendix B, for more details).

04.21 ITAAC-Related Construction Finding. A regulatory violation that is of greater-than-minor significance and is associated with a specific ITAAC for which the licensee has not yet issued the ITAAC closure letter, and is material to the ITAAC acceptance criteria. This type of finding could prevent the ITAAC from being closed. An ITAAC-Related Construction Finding may be related to a single ITAAC or a family of ITAAC.

04.22 Licensee Action. With regard to the CRT, Licensee Action consists of anticipated licensee actions in response to overall performance indicated by the appropriate column of the CRT. If these actions are not being taken by the licensee, then the NRC may consider increasing NRC inspections to appropriately address the area(s) of concern.

04.23 NRC Inspection. With regard to the CRT, NRC Inspection consists of the range of NRC inspection activities in response to licensee performance indicated by the appropriate column of the CRT.

04.24 Quality Assurance. Quality Assurance (QA) comprises all those planned and systematic actions necessary to provide adequate confidence that a structure, system, or component will perform satisfactorily in service. Quality Assurance includes quality control.

04.25 Regulatory Actions. With regard to the CRT, Regulatory Actions comprise the range of actions that may be taken by the NRC in response to licensee performance indicated by the appropriate column of the CRT.

04.26 Regulatory Performance Meetings. With regard to the CRT, Regulatory Performance Meetings are held between licensees and the NRC to discuss corrective actions associated with significant violations (i.e. violations resulting in escalated enforcement action). Each significant assessment input shall be discussed in one of the forums listed below in order to arrive at a shared understanding of the performance issues, underlying causes, and planned licensee actions. These meetings may take place at periodic inspection exit meetings between the NRC and the licensee, a periodic NRC management visit, conference calls, or public meetings after completion of the expanded inspection. This meeting should be documented in an inspection report or a public meeting summary, as appropriate.

04.27 Safety-Conscious Work Environment (SCWE). An environment in which employees feel free to raise safety concerns, both to their management and to the NRC, without fear of retaliation and where such concerns are promptly reviewed, given the proper priority based on their potential safety significance, and appropriately

resolved with timely feedback to employees.

04.28 Safety Culture. That assembly of characteristics and attitudes in organizations and individuals which establishes that, as an overriding priority, nuclear plant safety issues receive the attention warranted by their significance. (This definition for safety culture is used for operating reactors and may change as a result of future staff work in the development of safety culture for new reactor construction).

04.29 Semiannual Performance Review (SPR). An assessment conducted on a rolling 6-month timeframe that is principally focused on licensee performance and the need to reallocate resources and/or add resources to address licensee performance. The SPR assessment results will be communicated to the licensee and the public via an SPR assessment letter.

04.30 Site Construction Team. The core group of NRC inspectors assigned to a site under the leadership of a senior resident inspector.

04.31 Targeted ITAAC. Targeted ITAAC are ITAAC that have been rank-ordered based on attributes and associated ITAAC impact. The targeted ITAAC and others (site-specific, etc) selected for direct inspection constitute the minimum, or baseline, amount of inspection that will be done for a particular design. Inspection Procedure (IP 65001) provides more information on the selection of targeted ITAAC for direct inspection.

## 2505-05 RESPONSIBILITIES AND AUTHORITIES

05.01 Executive Director for Operations (EDO).

- a. Oversees the activities described in this manual chapter.
- b. Approves all deviations from the CRT.
- c. Informs the Commission of all approved deviations from the CRT.

05.02 Director, Office of New Reactors (NRO).

- a. Provides overall program direction for the reactor construction inspection program.
- b. Assesses the effectiveness, uniformity, and completeness of implementation of the construction inspection assessment program.
- c. Ensures that the public is informed of the results of the construction inspection assessment program as appropriate.

05.03 Deputy Regional Administrator for Construction.

- a. Provides program direction for management and implementation of the

construction assessments performed by the regional office.

- b. Ensures that the regional office staff includes adequate numbers of inspectors in the various disciplines necessary to carry out the construction assessment program as described in this chapter.
- c. Ensures that the public is informed of the results of the construction assessment program as appropriate.

05.04 Director, Office of Public Affairs.

Issues press releases following the completion of the SPRs.

05.05 Director, Division of Construction Inspection and Operational Programs (NRO/DCIP).

- a. Develops construction assessment process guidance.
- b. Collects feedback from the regional office and assesses execution of the construction inspection assessment program to ensure consistent application.
- c. Recommends, develops, and implements improvements to the construction assessment process.
- d. Concurs on proposals by the regional office to extend a violation resulting in escalated enforcement beyond that allowed by Section 06.01.
- e. Concurs on the increased targeted inspection plan for plants in the Expanded Program and Unacceptable Performance columns of the CRT.

05.06 Regional Division of Construction Projects Director.

- a. Chairs the SPR meeting.
- b. Approves proposals to re-allocate resources as a result of licensee performance issues.

05.07 Regional Division of Construction Projects Branch Chiefs.

Approve proposals to re-allocate resources for other than licensee performance issues.

05.08 Regional Construction Inspection Staff.

- a. Administers and implements the construction inspection program and issues inspection reports.
- b. Provides NRO with the status of inspections related to specific ITAAC.
- c. Acts as the licensee's primary NRC contact for the construction inspection

program.

- d. Coordinates the development of, and revision to, the site inspection plan.
- e. Integrates all of the inspection violations and other inputs to develop an overall assessment of licensee performance.

## 2505-06 BASIC REQUIREMENTS

06.01 Program Overview. Licensee performance is reviewed using the construction assessment process (Exhibit 1) to periodically evaluate the inspection history of selected construction activities, other inspection activities (i.e., Problem Identification and Resolution (PI&R), etc.), enforcement history, allegations, and safety culture (to be developed) to determine licensee/contractor/vendor effectiveness in assuring construction quality. Based on the assessment results, NRC management will determine the appropriate level of response to licensee performance in accordance with the CRT which is Exhibit 2 to this IMC. Exhibit 3 illustrates how the assessment process fits into the overall construction inspection program.

06.02 Construction Assessment Process. The construction assessment process will begin after a Limited Work Authorization (LWA) and/or a Combined License has been issued, the NRC has implemented either IMC 2503 or 2504, and there is sufficient activity occurring for any assessment to be meaningful. The NRC will notify the licensee when the construction assessment process begins. The construction assessment process consists of a rolling 6 month assessment period that contains two quarters of assessment inputs and will continue until the ROP has been fully implemented. The assessment period will use the anniversary date that the construction assessment process began. Once a plant transitions to the ROP, the assessment process will revert to the calendar year process outlined in IMC 0305, "Operating Reactor Assessment Program."

The assessment program collects oversight information from continuous NRC inspections of ongoing construction activities, the results of periodic PI&R inspections conducted using Inspection Procedure (IP) 40504, "Part 52, Identification and Resolution of Construction Problems", enforcement history, allegation trends, and safety culture to provide an integrated assessment of licensee performance. The assessment process will examine inspection observations and violations documented in the Construction Inspection Program Information Management System (CIPIMS) to determine if the licensee has demonstrated that its control and oversight of construction programs and processes has resulted in quality products.

The construction assessment process is divided into three basic parts: continuous assessment, quarterly assessment, and SPR assessment. The site construction team (including the Branch Chief) will continuously assess licensee performance in accordance with Section 06.03.a of this IMC by evaluating violations as they are identified and monitoring the licensee's schedule and will make inspection plan adjustments as necessary. A mid-quarter assessment letter may be issued when an escalated enforcement action has been issued. Quarterly assessments will be

conducted by the site construction team (including the Branch Chief) in accordance with Section 06.03.b of this IMC. The team will evaluate violations identified during the most recent quarter and will determine the appropriate CRT column that applies to licensee performance. If the licensee has entered a CRT column requiring increased regulatory response from the previous quarter and a mid-quarter assessment letter has not been issued, a quarterly assessment letter will be issued to the licensee. Semiannual performance review assessments will be conducted in accordance with Section 06.03.c of this IMC. Violations identified during the previous 6 months or remaining open from previous quarters will be evaluated to determine if a common cause exists for the violations warranting the identification of a CSFI (this concept is under development). The existence of violations resulting in escalated enforcement and CSFIs, if any, will be used as inputs to determine the appropriate column of the CRT that applies to the licensee's performance. The SPR assessment results will be communicated to the licensee and the public via an SPR assessment letter. Agency response to assessment results will also be communicated to the licensee and the public when changes are made as a result of licensee performance issues. Follow-up agency actions, as applicable, are conducted to ensure that the licensee's/contractor's/vendor's corrective actions designed to address performance weaknesses were effective.

The baseline inspection program is the lowest level of required NRC inspections at each facility which are implemented at a given frequency stated in the respective inspection procedures. The protocol for selecting ITAAC for inspection in the baseline program is contained in IMC-2503 and IP 65001, "Inspections of Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Related Work". The protocol for conducting non-ITAAC inspections which are part of the baseline inspection program is contained in IMC-2504. As set forth in both IMC-2503 and IMC-2504, the observation of construction activities will also include monitoring the implementation of the Quality Assurance (QA) program by the licensee and its contractors to evaluate the ability to find and appropriately characterize and resolve any occurrences of conditions adverse to quality.

Since the NRC utilizes a sampling methodology, significant issues that are identified could potentially have broader implications on the licensee's performance than just the single issue. Based on this, significant issues (escalated enforcement actions or CSFIs) are the input to the CRT and will result in the inspection program being expanded beyond the baseline inspection program to review either additional samples in the area of concern or to review non-targeted ITAAC in the area of concern. Significant violations (i.e. violations resulting in escalated enforcement action) are normally considered in the assessment program for six months from the date of the inspection report in which the violation is issued or until the NRC accepts the licensee's corrective actions (i.e., the violation is closed in CIPIMS), whichever is longer. A significant violation will no longer be considered in the assessment process starting with the quarter after the above conditions have been met unless the NRC has justification to keep the violation open in accordance with Section 06.07.b. CSFIs will be carried forward until closed in a SPR assessment letter.

06.03 Performance Reviews. The overall process for the assessment of licensee performance consists of the series of actions that are listed below.

- a. Continuous Review. The site construction team (including the Branch Chief) will continuously monitor the performance of their assigned construction sites by evaluating findings as they are identified and monitoring the licensee's schedule and will make inspection plan adjustments as necessary. The region may issue a mid-quarter assessment letter to address an issue, in accordance with the CRT, between the normal quarterly assessments if a significant inspection violation (i.e. violations resulting in escalated enforcement action) is identified.
- b. Quarterly Review. The site construction team (including the Branch Chief) will conduct a quarterly (3 month) review utilizing inspection findings, enforcement history, allegation trends, and safety culture inputs compiled over the previous 6 months. This review should be conducted within 4 weeks after the conclusion of each quarter of the semiannual assessment period. The CRT shall be utilized to identify NRC Actions that should be taken which are not already in the existing inspection plan. If the licensee has entered a CRT column requiring NRC Actions beyond those that were identified during the previous assessment, a quarterly assessment letter will be issued to the licensee within 2 weeks after the quarterly review is completed.

If, based on the continuous review discussed above, the region issued a mid-quarter assessment letter for any significant inspection violations identified during the past quarter, a subsequent quarterly assessment letter would not be necessary if its only purpose is to re-iterate any issues that had been previously addressed to the licensee.

For plants whose performance is in the Expanded Program or Unacceptable Performance columns of the CRT, consideration shall be given at each quarterly review for engaging senior licensee and agency management in discussions associated with taking additional regulatory actions to address licensee performance issues. If there are significant changes in the inspection plan for a plant in the Expanded Program column of the CRT, the region should issue a separate quarterly assessment letter in order to ensure the licensee is aware of these changes.

- c. Semiannual Performance Review. The regional office will conduct an SPR utilizing the inspection findings compiled over the previous 6 months. This review incorporates activities from the previous SPR and quarterly review, including consideration of the conclusions of any independent assessments. The purpose of considering independent assessments is to provide a means of self-assessing the NRC inspection and assessment processes. References to independent assessments will not be included in the assessment letters. The output of this review is an SPR assessment letter to the licensee. The SPR and subsequent SPR assessment letters should only discuss issues identified during inspections that were completed prior to the end of the assessment period. Additional SPR activities include planning inspection activities through the next 6 months, discussing any potential CSFIs, and developing an input (if applicable) to support the AARM. The SPR meeting should be held within 6 weeks of the end of the assessment period. The CRT will be used to determine the scope of agency actions in response to assessment inputs.

In preparation for the SPR's, the regional office shall develop a meeting agenda and a Construction Performance Review Package (CPRP) which includes the proposed inspection plan for the plant being assessed. The CPRP will assist the regional office in conducting the meeting and will form the basis for the SPR assessment letter. These packages will also be used at the Performance Review Summary Briefing with NRO Senior Management (if applicable) at the AARM (if applicable). The CPRP should include background on the facility, the applicable CRT column, any significant violations, any CSFIs with an evaluation of each, the status of NRC/licensee actions if other than in the Baseline Program column, the status of the CAP effectiveness reviews, any recommendations, and any other areas of interest (i.e., ITAAC closure status, allegation trends, etc), as well as a proposed inspection plan. The regional Allegations Coordinator or the Agency Allegations Advisor should be consulted during development of the CPRP as necessary if any allegations have been raised. Each page of the meeting agenda and CPRP should be clearly marked as "pre-decisional" to ensure that the document is handled properly and not inadvertently released to the public.

To aid in the discussion and integration of plant issues, the regional office should prepare a plant-specific CRT summary that identifies the plant-specific items and issues that meet the criteria given in the Results row for each CRT column, as applicable. The plant-specific CRT summary should display the quarterly status of significant violations, CSFIs, and the associated CRT column over a sufficient time line.

The SPR meeting is chaired by the DCP Division Director or his/her designee. The regional Branch Chiefs (or designee) present the results of the semiannual review to the Deputy Regional Administrator for Construction (or designee). Other routine participants should include the applicable regional and resident inspectors, a representative from the NRO Construction Inspection and Allegations Branch (CCIB), applicable Project Managers from Division of New Reactor Licensing, and any other additional participants deemed necessary by the regional office. The average time allocated for each plant review is intended to be between 30 minutes and 2 hours and should be consistent with the number and significance of plant issues.

The output of the SPR is the SPR assessment letter to the licensee. These letters shall be issued within 3 weeks of the completion of the SPR meeting. Signature authority for each SPR assessment letter is determined by the most significant column of the CRT that the plant has been in over the two quarters of the assessment period. This letter shall contain:

1. A summary of significant violations (violations resulting in escalated enforcement action) that were inputs into the assessment as well as discussion of previous action taken by the licensee and the agency relative to these issues. Performance issues from previous quarters may be discussed if:

- (a) The agency's response to an issue had not been adequately captured in previous correspondence to the licensee.
  - (b) These issues, when combined with assessment inputs from the most recent quarter, result in increased regulatory action per the CRT that would not be apparent from reviewing only the most recent quarter's results.
2. A discussion of any deviations from the CRT during the assessment period.
3. A qualitative discussion of CSFIs, if applicable.
4. A discussion of the licensee's progress in addressing a CSFI, if documented in the previous SPR assessment letter.
5. A discussion of significant (Severity Level III or greater) enforcement actions.
6. A statement of any actions to be taken by the agency in response to safety significant issues, as well as any actions taken by the licensee.
7. An inspection plan consisting of approximately 6 months of activities (from the issuance of the SPR assessment letter).

A Performance Review Summary Briefing may be necessary prior to the AARM to summarize licensee performance results with NRO senior management. The regional staff will summarize the results of the SPR for those plants whose performance in one or more quarters in the previous 12 months has been in the Increased Focus Program column, Expanded Program column, or Unacceptable Performance column of the CRT. The Performance Review Summary Briefing will be scheduled approximately 1 month prior to the AARM.

During the Performance Review Summary Briefing, the Director of NRO (or designee) will preside over the briefing while the Deputy Regional Administrator for Construction (or designee) will lead the discussion for the region. The Performance Review Summary Briefing is intended to provide information to senior NRO management regarding licensee performance. In preparation for the briefing, CCIB will develop an agenda for the meeting with input from the regional office. The regional office should provide their input to CCIB 3 working days prior to the briefing. The purpose of this briefing is for regional management to engage headquarters management on those discussion plants in order to ensure awareness of the plants to be discussed at the AARM and those agency actions already taken in response to plant performance.

#### 06.04 Program Reviews

- a. Agency Action Review Meeting. The AARM is an annual meeting that is chaired by the Executive Director for Operations (EDO) or designee and is attended by

appropriate senior NRC managers. This meeting will include a review of the results of the construction inspection program, including a review of approved deviations from the CRT, and a discussion about sites under construction with significant performance weaknesses (i.e., sites that are in the Expanded Program or Unacceptable Performance columns of the CRT). This meeting is more completely described in Management Directive 8.14, "Agency Action Review Meeting."

- b. Commission Meeting. The EDO will brief the Commission semiannually to convey the results of the AARM, including a discussion of any deviations from the CRT. The Commission should be briefed within approximately four weeks of the AARM, consistent with Commission availability, to ensure that the information presented is as current as possible.

#### 06.05 Annual Meeting with Licensee

- a. Scheduling. A public meeting with the licensee will be conducted on an annual basis following issuance of every second SPR assessment letter to discuss the results of the NRC's assessment of the licensee's performance over the prior 12 month period. For plants that have been in the Expanded Program column or Unacceptable Performance column of the CRT during the previous 12 months, these meetings should be scheduled within 8 weeks of the end of the assessment period. These meetings should be conducted no earlier than 1 week after the SPR assessment letter is issued in order to allow time for the licensee to review the contents of the letter. The 8-week requirement may occasionally be exceeded to accommodate the licensee's schedule or regional scheduling conflicts. These meetings may be scheduled within 3 months of the issuance of the SPR assessment letters for plants that have been in the Baseline Program or Increased Focus Program column of the CRT during the previous 12 months. The meeting is conducted onsite or in the vicinity of the site and should be scheduled to ensure that it is accessible to members of the public. The regional office should use this meeting as an opportunity to engage interested stakeholders on the performance of construction at the plant and the role of the agency in ensuring that the plant is being constructed in accordance with the design and NRC regulations. NRC management, as specified in the CRT, conducts the public meeting. The appropriate level of NRC management to chair this meeting is determined by the most significant column of the CRT that the plant has been in during the previous 12 months. The highest level of NRC management, as allowed in the plant's performance column of the CRT, should chair the annual public meeting for those plants that currently have CSFIs as described in the SPR assessment letters.
- b. Meeting Preparation. The region shall notify those on distribution for the SPR assessment letters of the meeting with the licensee. The region shall notify the media and State and local government officials of the meeting with the licensee and the issuance of the SPR assessment letter. Commensurate with the level of historical interest and/or construction issues, the regional office should use the following additional tools to inform members of the public of the meeting, as appropriate: press releases, advertisements in local newspapers, or letters

soliciting attendance to known interested parties.

- c. Conduct of Licensee Meeting. The annual public meeting is intended to provide an opportunity for the NRC to engage interested stakeholders on the performance of construction of the plant and the role of the agency in ensuring that the plant is being constructed in accordance with the design and NRC regulations. NRC management, as specified in the CRT, will discuss the agency's evaluation of licensee performance as documented in the SPR assessment letter. This meeting is considered to be a Category 1 meeting in accordance with the Commission's policy on public meetings.

The last two SPR assessment letters provide the minimum performance information that should be conveyed to the licensee during the annual public meeting. However, this does not preclude the presentation of additional plant performance information when placed in the proper context. The licensee should be given the opportunity to respond at the meeting to any information contained in the SPR assessment letter. The licensee should also be given the opportunity to present to the NRC any new or existing programs that are designed to maintain or improve their current performance.

The annual meeting will be a public meeting with the exception that the meeting must be closed for such portions which may involve matters that should not be publicly disclosed under Section 2.390 of Title 10 of the Code of Federal Regulations (10 CFR 2.390). Members of the public, the press, and government officials from other agencies are considered as observers during the conduct of the meeting. However, attendees should be given the opportunity to ask questions of the NRC representatives after the conclusion of the meeting.

#### 06.06 NRC Responses to Licensee Performance

- a. Description of the Construction Response Table. The CRT (Exhibit 2) was developed with the philosophy that, within a certain level of performance (i.e., the Baseline Program column), licensees would address their performance issues without additional NRC engagement beyond the baseline inspection program. Agency action beyond the baseline inspection program will normally occur only if assessment input thresholds are exceeded. The CRT identifies the range of NRC and licensee actions and the appropriate level of communication for varying levels of licensee performance.

Overall response to licensee performance will be determined by the number of violations that rise to the level of escalated enforcement (Severity Level I, II, or III) in combination with the number of CSFIs (CSFI concept is under development). The NRC will utilize a graded approach in determining the response to the identified issues. This graded approach will result in an increase in sampling in the area(s) of concern, an increase in the ITAAC being inspected, and/or the issuance of a Confirmatory Action Letter (CAL), Demand for Information, and/or the issuance of an Order. Increased inspection, whether increased sampling or the selection of additional ITAAC, will be conducted

through the use of expanded inspections.

A few terms are used throughout the discussion of the CRT. These are:

1. **Regulatory Performance Meetings.** Regulatory performance meetings are held between licensees and the agency to discuss corrective actions associated with significant violations (i.e. violations resulting in escalated enforcement action). Each significant assessment input shall be discussed in one of the forums listed below in order to arrive at a shared understanding of the performance issues, underlying causes, and planned licensee actions. These meetings may take place at periodic inspection exit meetings between the agency and the licensee, a periodic NRC management visit, conference calls, or public meetings after completion of the expanded inspection. This meeting should be documented in an inspection report or a public meeting summary, as appropriate.
  2. **Licensee Action.** Anticipated actions by the licensee in response to overall performance are indicated by the appropriate column of the CRT. If these actions are not being taken by the licensee, then the agency may consider increasing the scope of the applicable expanded inspection to appropriately address the area(s) of concern. This would not be considered a deviation from the CRT in accordance with Section 06.07 of this manual chapter.
  3. **NRC Inspection.** The range of NRC inspection activities in response to performance indicated by the appropriate column of the CRT.
  4. **Regulatory Actions.** The range of actions that may be taken by the agency in response to performance indicated by the appropriate column of the CRT.
  5. **Communication.** Communication between the licensee and the NRC is based on a graded approach. For declining licensee performance, higher levels of agency management will review and sign the assessment letters and conduct the annual public meeting.
- b. Expected Responses for Performance in Each Construction Response Table Column. The CRT lists expected NRC and licensee actions based on the inputs to the assessment process. Actions are graded such that the agency becomes more engaged as licensee performance declines. Listed below are the ranges of expected NRC and licensee actions for each column of the CRT:
1. CRT Baseline Program Column. Violations that are not greater than Severity Level IV and there are no CSFIs. The licensee will receive only the baseline inspection program and identified deficiencies will be addressed through the licensee's corrective action program.
  2. CRT Increased Focus Program Column. There are no more than a combination of two Severity Level III violations and/or CSFIs. The

licensee is expected to place the identified deficiencies in its corrective action program and perform an evaluation of the root and contributing causes. The licensee's evaluation will be reviewed during expanded inspection procedure (IP) 90001, "Increased Focus Program Inspection." Following completion of the inspection, the branch chief or division director should discuss the performance deficiencies and the licensee's proposed corrective actions with the licensee during a regulatory performance meeting which will normally occur at an inspection exit meeting, at a periodic NRC management visit, or during a conference call with the licensee.

3. CRT Expanded Program Column. A combination of three Severity Level III violations and/or CSFIs, or one Severity Level II violation. The licensee is expected to place the identified deficiencies in its corrective action program and perform an evaluation of the root and contributing causes for both the individual and the collective issues.

The licensee's evaluation will be reviewed during IP 90002, "Expanded Program Inspection." Also, an independent assessment of the extent of condition will be performed by the region using appropriate inspection procedures chosen from the tables contained in IP 90002. Following completion of the inspection, the Deputy Regional Administrator (or designee) should discuss the performance deficiencies and the licensee's proposed corrective actions with the licensee during a Regulatory Performance Meeting which will normally consist of a public meeting with the licensee.

4. CRT Unacceptable Performance Column. One Severity Level I violation, multiple Severity Level II violations, or a combination of the following: One Severity Level II and a total of four Severity Level III violations/CSFIs; or a total of seven Severity Level III violations/CSFIs. The licensee is expected to place the identified deficiencies in its corrective action program and perform an evaluation of the root and contributing causes for both the individual and the collective issues. This evaluation may consist of a third party assessment.

Expanded inspection procedure IP 90003, "Unacceptable Performance Inspection" will be performed to review the breadth and depth of the performance deficiencies. The expanded inspection plan must be approved by the appropriate regional division director with concurrence of the Director of the Division of Construction Inspection and Operational Programs (DCIP).

Following the completion of the inspection, the EDO (or designee), in conjunction with the Regional Administrator and the Director of NRO, will decide whether additional agency actions are warranted. These actions could include additional expanded inspection, a Demand for Information, a CAL, or issuance of an Order, up to and including a stop work order. At a minimum, the regional office will issue a CAL to document the licensee's

commitments as discussed in their performance improvement plan, as well as any other written or verbal commitments. The Regional Administrator should document the results of their decision in a letter to the licensee. These regulatory actions may also be considered prior to the completion of expanded inspection procedure IP 90003, if warranted. A Regulatory Performance Meeting will be conducted which will normally consist of a public meeting between the licensee and the EDO (or designee).

Note: Other than the CAL, the regulatory actions listed in this column of the CRT are not mandatory. However, the regional office should consider each of these regulatory actions when significant new information regarding licensee performance becomes available.

Due to the depth and/or breadth of performance issues reflected by a plant being in the Unacceptable Performance column of the CRT, it is prudent to ensure that actual performance improvements (which may take two or more quarters to achieve) have been made prior to closing out the significant violations and exiting the Unacceptable Performance column of the CRT. In making this determination, the regional office should consider whether:

- (a) New plant issues or violations that do not reveal similar significant performance weaknesses.
- (b) The licensee's performance improvement program has demonstrated sustained improvement.
- (c) NRC expanded inspections show licensee progress in the principal areas of weakness.
- (d) There were no issues that led the NRC to take additional regulatory actions beyond those listed in the Unacceptable Performance column of the CRT. Additionally, the licensee has made significant progress on any regulatory actions that were imposed (i.e., CALs, orders, 50.54(f) letters) because of the performance deficiencies that led to the Unacceptable Performance column designation.

After the original significant violations have been closed out, the licensee will return to the CRT column that is represented by the other outstanding inputs to the CRT. Additionally, for a period of up to one year after the initial significant violations have been closed out, the regional office may utilize some actions that are consistent with the Expanded Program column or Unacceptable Performance column of the CRT in order to ensure the appropriate level of agency oversight of licensee improvement initiatives. These actions, which do not constitute a deviation from the CRT, include senior management participation at periodic meetings/site visits focused on reviewing the results of improvement initiatives (such as

efforts to reduce corrective action backlogs and progress in completing the Performance Improvement Plan), expanded inspection procedure IP 90003 and CAL follow up inspections (not to exceed 240 hours of direct inspection without concurrence from the Director, DCIP). The actions taken above those required by the CRT shall be discussed at the following SPR meetings to ensure an appropriate basis for needing the additional actions to oversee the licensee improvement initiatives. These actions will also be described in the following SPR assessment letters until the end of the extended period of time that the actions consistent with the Expanded Program column or Unacceptable Program column are taken to address licensee performance issues. All assessment letters that address these additional actions shall include CCIB on concurrence.

The regional office must convey the specific actions that the licensee needs to address to remove the significant violations that caused the licensee to enter the Unacceptable Performance column from consideration in the assessment program. The correspondence to the licensee describing the extension of the significant violation(s) in the assessment program beyond the normal period discussed in Section 06.01 must be authorized by the appropriate regional division director with the concurrence of the Director, DCIP.

#### 06.07 Additional Construction Response Table Guidance

- a. Deviations from the CRT. There may be rare instances in which the regulatory actions dictated by the CRT may not be appropriate. In these instances, the agency may deviate from the CRT (which is described in Section 06.06.a of this manual chapter) to either increase or decrease agency action. A deviation is defined as any regulatory action taken that is inconsistent with the range of actions discussed in Section 06.06 of this manual chapter. Deviations from the CRT shall be documented in the appropriate letter to the licensee (i.e., quarterly or SPR assessment letter) or separate docketed correspondence. The EDO shall approve all deviations from the CRT and inform the Commission when deviations are approved and annually at the Commission meeting on the results of the AARM. Memorandums requesting deviations from the CRT should be initiated by the Regional Administrator to the EDO and should go through the Director of NRO for program office approval. Any deviations from the CRT shall be documented in the subsequent SPR assessment letter. Letters requesting deviations from the CRT should include a synopsis of the licensee performance deficiencies, the required NRC actions per the CRT for these inputs, the proposed alternative actions, and the region's rationale for requesting the deviation.
  
- b. Timeframe for Significant Violations in the Assessment Program. Significant violations (i.e. violations resulting in escalated enforcement action) are normally considered in the assessment program for six months from the date of the inspection report in which the violation is issued or until the NRC accepts the licensee's corrective actions (i.e., the violation is closed in CIPIMS), whichever is longer. There may be instances in which the corresponding expanded

inspection reveals substantive inadequacies in the licensee's evaluation of the root causes of the original performance deficiency, determination of the extent of the performance problems, or the actions taken or planned to correct the issue. Significant weaknesses in the licensee's evaluation of the performance issue may be subject to additional agency actions, including additional enforcement actions or an expansion of the expanded inspection procedure as necessary to independently acquire the necessary information to evaluate the licensee's actions to address the performance issue. The regional office must convey the specific weaknesses that the licensee needs to address in order to remove this violation from consideration in the assessment process. This notification should be included in the cover letter of the expanded inspection report.

The correspondence to the licensee describing the extension of an inspection violation in the assessment process beyond the normal time frame must be authorized by the regional division director with concurrence of the Director of the Division of Construction Inspection and Operational Programs (DCIP). If this approach is taken by the agency, the region should issue a violation under 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," if applicable.

06.08 Corrective Action Program (CAP) Effectiveness Reviews. A fundamental goal of the NRC's oversight of new construction activities is to establish confidence that licensees (and their contractors/vendors) are detecting and correcting problems in a manner that ensures quality and safety are top priorities and that construction activities will be completed in a manner that ensures each plant is constructed in accordance with the design and will operate safely. A key premise of NRC oversight is that weaknesses in a licensee's CAP will manifest themselves as performance issues that will be identified during the inspection program. Completion of these objectives is accomplished by resident inspectors screening CAP issues on a frequent basis, by performing a semiannual trend review, by sampling issues during each inspection, by follow-up of selected NRC identified issues, and by performing periodic PI&R team inspections.

The use of non-cited violations (NCVs) as part of the enforcement process is predicated on a licensee having an adequate CAP into which identified issues are entered and effectively resolved in a timely manner. Because the CAP at construction sites will be new and implemented initially by individuals with limited experience with the new program and because construction will involve program implementation by contractors, the NRC will delay the use of NCVs pending confirmation that the new program is adequate and being adequately implemented. Therefore, prior to or near the beginning of construction for each plant, PI&R inspections will be conducted to allow the NRC to gather sufficient information to make a timely decision that the licensee's CAP has been adequately demonstrated for the purposes of issuing NCVs. After the staff has concluded that a licensee's CAP is adequate, the PI&R inspections will be conducted in accordance with a normal schedule.

Inspections will be conducted in accordance with IP 40505, "Effectiveness of Process to Identify, Resolve, and Prevent Construction Problems," to review the CAP program and to review the licensee's implementation of the CAP. These inspections can be done

either as a single inspection or as two separate inspections. The inspections will be conducted following the licensee's notification to the NRC that it is ready for the inspection to be conducted. Since a licensee would need to have a CAP in place prior to the start of construction, the program review could be completed before construction begins. For the implementation inspection, the licensee would need to determine that sufficient CAP activity has occurred prior to notifying the NRC that it is ready for the inspection to be conducted. The results of resident and other inspections (vendor, remote location, specialist inspections, etc) should be considered along with the results of the PI&R inspections in formulating a decision.

In order for the licensee to successfully demonstrate to the NRC the effectiveness of their CAP, the inspections (PI&R, baseline, vendor, etc) conducted previously cannot have identified any significant issues related to the CAP. Significant issues are considered to be any Severity Level I, II, or III violations or any CSFIs related to an area of the CAP. If significant issues have been previously identified then review of the licensee's corrective actions for those issues should be conducted to ensure that effective corrective actions have been taken to resolve the issues such that there is reasonable assurance that they will not recur. Both a programmatic and implementation inspection should be conducted to conclude the licensee's CAP is adequate and being adequately implemented before a conclusion can be reached on its effectiveness. The determination of whether or not the licensee's CAP has been adequately demonstrated for the purpose of issuing NCVs shall be documented and communicated to the licensee in the PI&R inspection report(s). The determination will also be documented in the first assessment report issued following this determination. The criteria for making a determination of CAP effectiveness are:

- The licensee has established an adequate program.
- The licensee has demonstrated adequate effectiveness in identifying and documenting problems (indicated by the lack of significant violations involving failure to identify and document adverse conditions).
- The licensee has demonstrated adequate effectiveness in correcting problems and preventing recurrence (indicated by the lack of significant violations involving failure to take corrective action and prevent recurrence).

If a licensee's demonstrated CAP implementation degrades then it will be necessary to evaluate the extent of the degradation to determine if the enforcement process should revert to no longer issuing NCVs. This decision will be made based on the nature of identified issues that indicate a significant degradation of the licensee's CAP. The staff expects that if the identified issues are significant, then the staff will have taken escalated enforcement measures in accordance with the NRC enforcement policy for new construction. Therefore, the issuance of a Severity Level II violation against the licensee's CAP will be considered one indicator that the program has sufficiently degraded such that reverting to issuing Notices of Violations (NOVs) for all NRC identified violations is appropriate. If the decision is reached to revert to issuing NOVs, then it should be communicated to the licensee as part of the assessment of licensee performance (i.e. included in the SPR assessment letter or in a letter communicating the results of the NRC quarterly assessment review). Following the licensee's

corrective actions to restore the effectiveness of their CAP, the process described above to allow the NRC to issue NCVs would need to be repeated as appropriate (i.e., if the degradation was limited to implementation and not the program then the programmatic portion of the inspection need not be re-done).

#### 06.09 CSFIs.

This section is under development. An NRC working group has been tasked with developing the guidance for this section with input from NRC stakeholders and upon the completion of NRC's operating reactor efforts in this area. After completion of the development work this section will be revised to reflect the updated guidance.

END

#### EXHIBITS:

1. Construction Assessment Process Activities
2. Construction Response Table
3. Construction Inspection Program

Attachment: Revision History for IMC 2505

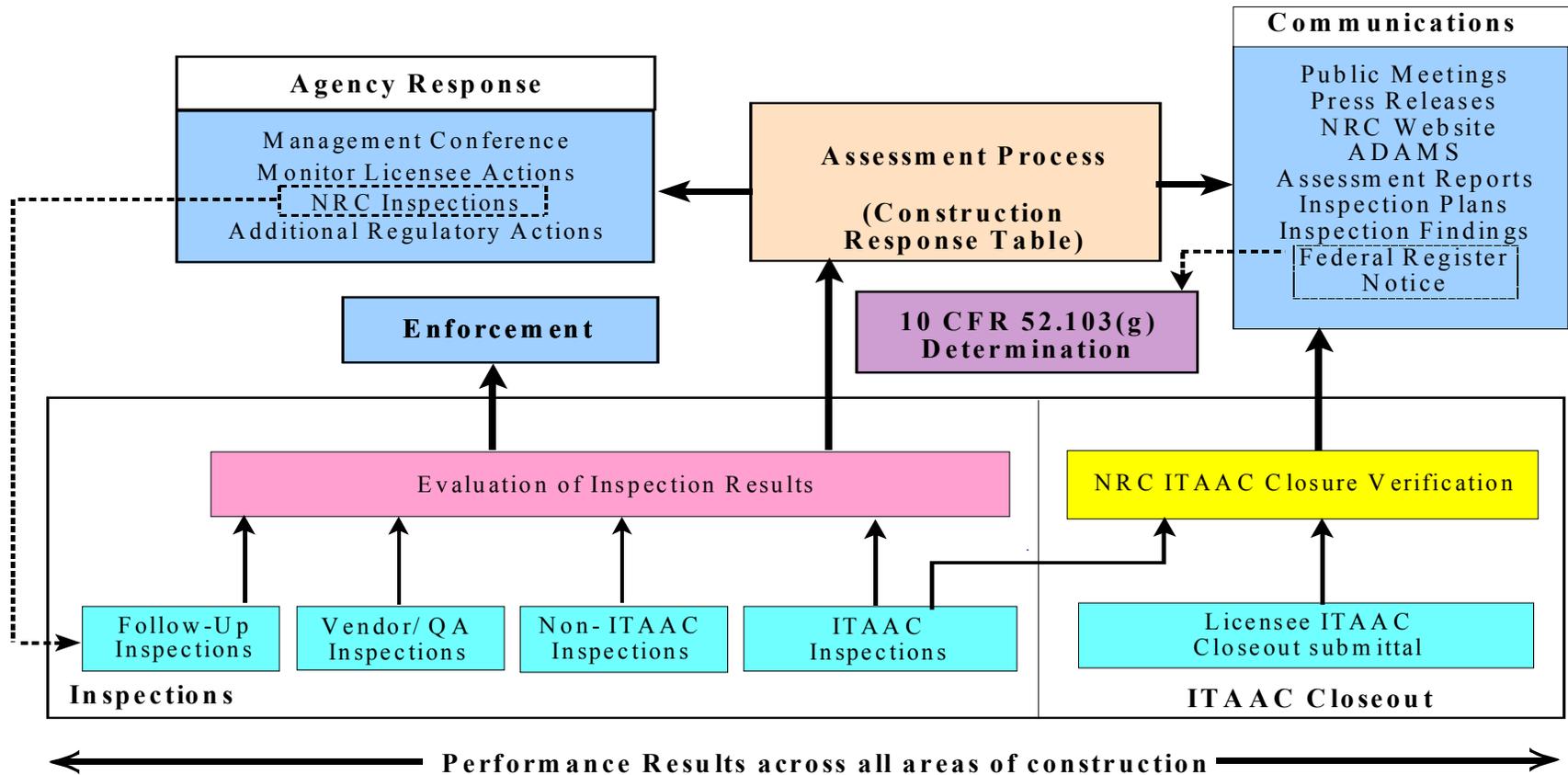
Exhibit 1 – Construction Assessment Process Activities

Level of Review	Frequency/ Timing	Participants (*indicates chairperson)	Desired Outcome	Communication
Continuous	Continuous	BC, PE, SRI, RI, regional inspectors, SRAs	Performance awareness	None required, notify licensee by a Quarterly assessment letter <u>only</u> if thresholds crossed
Quarterly	Once per quarter; Four weeks after end of quarter	BC, PE, SRI, RI, regional inspectors, SRAs	Input/verify CIPIMS data, detect early trends	Update data set, notify licensee by a Quarterly assessment letter <u>only</u> if thresholds crossed
Semiannual Performance Review	At Semiannual Performance Review; Six weeks after end of second quarter	DCP* and DCI DD, DCP and DCI BCs	Detect trends, plan inspections, assess plant performance, oversight, and coordinate regional actions	Semiannual Performance Review letter with an inspection plan of approximately 6 months
Performance Summary Meeting	Two weeks after the end of the Semiannual Performance Review	NRO Senior Management, DRA, Regional BCs, DCIP, other HQ offices as appropriate	Summarize results of the Semiannual Performance Review for plants in other than the CRT Baseline Program Review column	Information to be discussed at Agency Action Review Meeting
Agency Action Review	Annually/ Several weeks after issuance of the ROP annual assessment letters	EDO*,DIR NRO, DRA, DCI/DCP DDs, DCIP, OE, OI, other HQ offices as appropriate	Review of the appropriateness of agency actions	Commission briefing

**Exhibit 2 - CONSTRUCTION RESPONSE TABLE**

		Baseline Program column	Increased Focus Program column	Expanded Program column	Unacceptable Performance column
<b>RESULTS</b>		Only SL IV violations and no Construction Safety Focus Issues (CSFIs).	One or two SLIII violations and/or CSFIs.	Any combination of three SL III violations or CSFIs, or one SL II violation.	One SL I violation, multiple SLII violations, or a combination of the following: 1 SL II and a total of four SL III violations/CSFIs; or a total of seven SL III violations and /or CSFIs.
		License requirements fully met	License requirements met with some challenges to licensee	License requirements met with some significant challenges to licensee	Loss of Confidence to construct within licensing requirements in areas of concern
<b>RESPONSE</b>	Regulatory Performance Meeting	None	Branch Chief (BC) or Division Director (DD) Meet with Licensee	Deputy Regional Administrator (DRA) or designee meet with senior licensee management	Executive Director for Operations (EDO) or designee meet with senior licensee management
	Licensee Action	Licensee Corrective Action	Licensee root cause evaluation and corrective action with NRC Oversight	Licensee cumulative root cause evaluation with NRC Oversight.	Licensee Performance Improvement Plan and Independent inspection with NRC Oversight.
	NRC Inspection	Baseline Inspection Program	Limited increase in NRC oversight of area(s) of concern. Expanded Inspection in accordance with IP 90001.	Expanded NRC oversight in area(s) of concern. ITAAC sample increased as appropriate. Expanded inspection in accordance with IP 90002.	Reactive team inspection in area(s) of concern. Expanded inspection in accordance with IP 90003.
	Regulatory Actions	None (Additional actions considered for plants exiting Expanded Program column or Unacceptable Performance column).	Additional inspection only. (Additional actions considered for plants exiting Expanded Program column or Unacceptable Performance column).	Additional inspection only. Evaluate continued use of non-cited violations. (Additional actions considered for plants exiting Unacceptable Performance column).	At minimum, issue Confirmatory Action Letter. Evaluate need for Demand for Information and/or Order. Discontinue use of non-cited violations
<b>COMMUNICATION</b>	Assessment Letters	BC or DD review/sign assessment report (w/ inspection plan)	DD review/sign assessment report (w/ inspection plan)	DRA review/sign assessment report (w/ inspection plan)	RA or EDO review/sign assessment report (w/ inspection plan)
	Annual Public Meeting	SRI or BC Meet with Licensee	BC or DD Meet with Licensee	DRA (or designee) Discuss Performance with Licensee	EDO (or designee) Discuss Performance with Licensee
	Commission Involvement	None	None	None	Commission Meeting with Senior Licensee Management
	<b>INCREASING SAFETY/REGULATORY SIGNIFICANCE -----&gt;</b>				

### Exhibit 3 - Construction Inspection Program



Attachment 1 - Revision History for IMC 2505

Commitment Tracking Number	Issue Date	Description of Change	Training Required	Training Completion Date	Comment Resolution Accession Number
N/A	10/20/08 CN 08-029	New Issue to support Licensing under 10CFR52.  CNs for the past 4 years were reviewed and no commitments found.	None	N/A	ML082480657