

### OPERATING REACTOR ASSESSMENT PROGRAM

#### 0305-01 PURPOSE

01.01 The Reactor Oversight Process (ROP) integrates the NRC's inspection, assessment, and enforcement programs. The Operating Reactor Assessment Program evaluates the overall safety performance of operating commercial nuclear reactors and communicates those results to licensee management, members of the public, and other government agencies.

01.02 The assessment program collects information from inspections and performance indicators (PIs) in order to enable the agency to arrive at objective conclusions about the licensee's safety performance. Based on this assessment information, the NRC determines the appropriate level of agency response, including supplemental inspection and pertinent regulatory actions ranging from management meetings up to and including orders for plant shutdown. The assessment information and agency response are then communicated to the public. Follow-up agency actions, as applicable, are conducted to ensure that the corrective actions designed to address performance weaknesses were effective.

#### 0305-02 OBJECTIVES

02.01 To collect information from inspection findings and PIs.

02.02 To arrive at an objective assessment of licensee safety performance using PIs and inspection findings.

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 method for informing the public and soliciting stakeholder feedback on the NRC's assessment of licensee performance.

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

## 0305-03 APPLICABILITY

This manual chapter applies to all operating commercial nuclear reactors except those sites that are under IMC 0350, "Oversight of Reactor Facilities in Shutdown Condition Due To Significant Performance And/Or Operational Concerns." 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). Refer to IMC 0320, "Operating Reactor Security Assessment Program" for guidance related to the assessment of security-related performance indicators and inspection findings.

## 0305-04 DEFINITIONS

04.01 Annual Assessment Cycle. A 12-month assessment period from January 1 through December 31 of each year.

04.02 Assessment Inputs. As used in this manual chapter, assessment inputs are the PIs and inspection findings for a particular plant that are combined in the assessment process in order to determine appropriate agency actions. As discussed in section 06.01, traditional enforcement items should be considered when determining the range of agency actions within the appropriate column of the Action Matrix.

04.03 Assessment Period. A rolling 12 month period that contains four quarters of performance indicators and inspection findings. An inspection finding is normally carried forward in the assessment process for a total of four calendar quarters and a performance indicator is recalculated on a quarterly basis.

04.04 Degraded Cornerstone. A cornerstone that has two or more white inputs or one yellow input.

04.05 Inspection Manual Chapter (IMC) 0350 Process. An oversight process that oversees licensee performance, inspections, and restart efforts for plants in shutdown conditions with significant performance and/or operational concerns.

04.06 Multiple Degraded Cornerstones. Two or more cornerstones are degraded in any one quarter.

04.07 Old Design Issue. An inspection finding involving a past design-related problem in the engineering calculations or analysis, associated operating procedure, or installation of plant equipment that does not reflect a performance deficiency associated with existing licensee programs, policy, or procedures. As discussed in section 06.06.a, some old design issues may not be considered in the assessment program.

04.08 Parallel Performance Indicator Inspection Finding. An inspection finding issued at the same significance level of a safety-significant performance indicator when the supplemental inspection reveals a substantial inadequacy 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. See section 06.06.d for more details.

04.09 Plant Performance Summary. A document prepared by the regional offices and used during the mid-cycle review, end-of-cycle review, and Agency Action Review (if applicable) meetings. This document is prepared for those plants that: (1) for any quarter during the assessment period have been in the degraded cornerstone, multiple/repetitive degraded cornerstone, or Unacceptable Performance column of the Action Matrix, or (2) have a current substantive cross-cutting issue.

04.10 Repetitive Degraded Cornerstone. A single cornerstone that is degraded (2 white inputs or 1 yellow input) for five or more consecutive quarters. This designation only applies to a single cornerstone when there are at least two separate safety significant PIs or inspection findings during this period. Additionally, this designation does not apply when the only safety-significant findings are those that have been held open greater than four quarters in accordance with section 06.06.d.

04.11 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.

04.12 Safety-Significant Finding/ Performance Indicator. An inspection finding with a safety significance greater than green or a performance indicator that is greater than green.

04.13 Significance Determination Process (SDP). A characterization process that is applied to inspection findings to determine their safety significance. Using the results of the SDP, the overall licensee performance assessment process can compare and evaluate the findings on a significance scale similar (i.e., white, yellow, red) to the performance indicators.

04.14 Substantive Cross-Cutting Issue. As used in this chapter, a common performance theme (i.e., related causal factor) as evidenced by a significant number (more than 3) of current inspection findings in the cross-cutting areas of human performance, problem identification and resolution, or safety-conscious working environment. See section 06.06.i for more details.

## 0305-05 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 Action Matrix.
- c. Informs the Commission of all approved deviations from the Action Matrix.

### 05.02 Director, Office of Nuclear Reactor Regulation (NRR)

- a. Implements the requirements of this manual chapter within NRR.

- b. Develops assessment program policies and procedures.
- c. Ensures uniform program implementation and effectiveness.
- d. Concurs on regional requests for deviation from the Action Matrix.

05.03 Regional Administrators

- a. Implements the requirements of this manual chapter within their respective regions.
- b. Develops and issues assessment letters to each licensee.
- c. Conducts assessment reviews and directs allocation of inspection resources within the regional office based on the Action Matrix.
- d. Establishes a schedule and determines a suitable location for the annual public meeting with each licensee to ensure a mutual understanding of the issues discussed in the annual assessment letter.
- e. Suspends the mid-cycle and/or end-of-year performance review for those plants that have been transferred to the Inspection Manual Chapter 0350 process (see IMC 0350).
- f. Chairs the end-of-cycle review meetings.
- g. Initiates requests for deviations from the Action Matrix.

05.04 Director, Office of Public Affairs. Issues press releases following the completion of the mid-cycle and end-of-cycle reviews.

| 05.05 Deputy Director, Division of Inspection and Regional Support (NRR/DIRS)

- a. Develops assessment program guidance.
- b. Collects feedback from the regional offices and assesses execution of the Operating Reactor Assessment Program to ensure consistent application.
- c. Recommends, develops, and implements improvements to the Operating Reactor Assessment Program.
- d. Provides oversight of the mid-cycle and end-of-cycle review meetings.
- e. Concurs on proposals by the regional offices to not count an old design issue in the assessment program in accordance with section 06.06.a.
- f. Concurs on proposals by the regional office to extend an inspection finding in the assessment process beyond the normal four quarters in accordance with section 06.06.d.

- g. Concurs on proposals by the regional office to initiate a parallel inspection finding in accordance with section 06.06.d.
- h. Concurs on the supplemental inspection plan for plants in the Multiple/Repetitive Degraded Cornerstone column of the Action Matrix.

05.06 Regional Division Directors

- a. Chairs the mid-cycle review meeting.
- b. Approves proposals by the regional offices to not count an old design issue in the assessment program in accordance with section 06.06.a.
- c. Approves proposals by the regional office to extend an inspection finding in the assessment process beyond the normal four quarters in accordance with section 06.06.d.
- d. Approves proposals by the regional office to initiate a parallel inspection finding in accordance with section 06.06.d.
- e. Approves the supplemental inspection plan for plants in the Multiple/Repetitive Degraded Cornerstone column of the Action Matrix.

05.07 Agency Allegations Advisor. Provides any significant insights from the allegations program to the regional offices in preparation for the mid-cycle and end-of-cycle review meetings.

05.08 Director, Office of Enforcement. Provides any significant insights from the enforcement program to the regional offices during the end-of-cycle review meetings.

05.09 Director, Office of Investigations. Provides any significant insights from the office of Investigations to the regional offices during the end-of-cycle review meetings.

05.10 Director, Office of Research. Provides any significant insights from the office of Research to the regional offices during the end-of-cycle review meetings.

05.11 Director, Office of Nuclear Security and Incident Response.

- a. Provides any significant insights from the Office of Nuclear Security and Incident Response to the regional offices during the end-of-cycle review meetings.
- b. Provides guidance to the regional offices on performing the assessment program for the safeguards/security cornerstone.

0305-06 BASIC REQUIREMENTS

06.01 Overall Assessment Process. Licensee performance is reviewed over a 12-month period through the operating reactor assessment process (exhibit 3).

A preliminary significant (i.e., preliminary white, yellow, or red) issue is not considered a safety-significant inspection finding and therefore not considered in the assessment process until after the final determination of significance is made through the SDP and the licensee has been informed of the decision. The safety-significant inspection finding will then be considered in the assessment process dated back to the end of inspection period, regardless of when the exit meeting was conducted, that initially resulted in designating the issue as an AV, violation (VIO), finding (FIN), or non-cited violation (NCV) in the reactor program system (RPS). Unresolved Items should be dispositioned according to IMC 0612 "Power Reactor Inspection Reports" and appropriately updated in RPS when additional information becomes available.

A safety-significant inspection finding is carried forward for four calendar quarters or until appropriate licensee corrective actions have been completed, whichever is greater. Therefore, an inspection finding will no longer be considered in the assessment process after four calendar quarters unless the region has justification to keep the finding open in accordance with section 06.06.d of this manual chapter. Additionally, findings whose technical aspects have been adequately addressed by the licensee may be closed even if there are outstanding investigations by external agencies.

Example: A preliminary white inspection finding in the second calendar year (CY) quarter whose final safety significance was determined to be white (low to moderate safety significance) during third CY quarter, would be considered a white finding in CY quarters 2, 3 and 4 plus the first quarter of the next CY.

The inspectors normally use the SDP to evaluate inspection findings for safety significance. In addition, the NRC's enforcement policy may apply to issues which the SDP process can not evaluate for safety significance (e.g., violations that involve willfulness, including discrimination). These issues should be considered when determining the range of agency actions within the appropriate column of the Action Matrix. Additionally, if applicable, the underlying technical issue should be separately evaluated using the Significance Determination Process and the results considered in the assessment program.

**06.02 Performance Reviews.** The assessment process consists of a series of reviews which are described below.

- a. **Continuous Review.** The resident inspectors and branch chiefs in each regional office continuously monitor the performance of their assigned plants using the results of the performance indicators and inspection findings. Inspections are conducted on a continuous basis in accordance with IMC 2515 and performance indicators are reported quarterly by the licensee.

The region may issue an assessment follow-up letter and address an issue, in accordance with the Action Matrix, between the normal quarterly assessments if, (1) a safety significant inspection finding is finalized, or (2) if a performance indicator will cross a performance threshold at the end of the quarter based on current inputs.

- b. Quarterly Review. Each region conducts a quarterly review utilizing PI data submitted by licensees and inspection findings compiled over the previous twelve months. This review is conducted within five weeks after the conclusion of each quarter of the annual assessment cycle. The most recent quarter of performance indicators and applicable inspection findings shall be considered in determining agency actions per the Action Matrix.

The responsible DRP branch chief reviews the most recently submitted PIs (which should be submitted 21 days after the end of the quarter) and the inspection findings contained in the plant issues matrix (PIM) to identify any performance trends. The branch chief shall utilize the Action Matrix to help identify where there are NRC actions that should be considered which are not already embedded in the existing inspection plan. Assessment follow-up letters are normally issued within two weeks after the quarterly review for any new safety significant PIs or inspection findings.

If based on the continuous review, as discussed above, the region issued an assessment follow-up letter for inspection findings or performance indicators during the past quarter, a subsequent quarterly assessment follow-up letter would not be necessary if its only purpose is to reiterate any issues that had been previously addressed to the licensee.

Note: The regional office should still perform a supplemental inspection procedure even if a PI returns to the green band prior to conducting the supplemental inspection.

Due to the fact that inspection findings count in the assessment process for four quarters, the staff may become aware that a plant will reach a repetitive degraded cornerstone categorization prior to five consecutive quarters actually being completed. Upon determination that a plant will reach a repetitive degraded cornerstone, the regional office should issue an assessment letter stating that the changes to the planned actions are consistent with the Multiple/Repetitive Degraded Cornerstone in the Action Matrix and make the appropriate change to the Action Matrix Summary.

Additionally, for plants whose performance is in the Multiple/Repetitive Degraded Cornerstone column of the Action Matrix, consideration shall be given at each quarterly review of engaging senior licensee and agency management in discussions associated with (1) transferring the plant to the IMC 0350 process, (2) declaring licensee performance to be unacceptable in accordance with the guidance contained within this manual chapter, and (3) taking additional regulatory actions (as appropriate). If there are significant changes in the inspection plan for a plant in the Multiple/Repetitive Degraded Cornerstone column of the Action



Matrix, the regions should issue a separate assessment follow-up letter in order to ensure the licensee is aware of these changes.

- c. Mid-Cycle Review. Each regional office conducts a mid-cycle review utilizing the most recent quarterly performance indicators and inspection findings compiled over the previous twelve months. This review incorporates activities from the quarterly review that followed the end of the first quarter of the CY. The review should consider the conclusions of any independent assessments of a licensee, such as Institute of Nuclear Power Operations (INPO) and International Atomic Energy Agency (IAEA) Operational Safety Review Team (OSART) inspections. The purpose of considering independent assessments is to provide a means of self-assessing the NRC inspection and assessment process. References to INPO conclusions will not be included in the assessment letters. The output of this mid-cycle review is a mid-cycle letter. The mid-cycle review and subsequent mid-cycle letter should only discuss issues where the inspection was completed prior to the end of the mid-cycle assessment period. Additional activities include planning inspection activities for approximately 18 months, as well as discussing any insights into potential substantive cross-cutting issues (problem identification and resolution, human performance, and safety-conscious work environment). The Action Matrix is used to determine the scope of agency actions in response to the assessment inputs. The mid-cycle review will be completed within six weeks of the end of the second quarter of the annual assessment cycle.

In preparation for the mid-cycle reviews, the regional offices shall develop a meeting agenda as well as provide the plant issues matrix, the results of the PIs, and the proposed inspection plan for all plants. The meeting agenda provides the areas that should be addressed by the regional offices for all plants except those that are required to prepare a Plant Performance Summary. A single written agenda is sufficient to conduct the meeting. The regional offices shall develop a Plant Performance Summary for those plants whose performance has been in the Degraded Cornerstone column, Multiple/Repetitive Degraded Cornerstone column, or Unacceptable Performance column of the Action Matrix during any quarter of the past twelve months. A Plant Performance Summary shall also be developed for those plants that the regional offices consider to have current substantive cross-cutting issues that should be included in the mid-cycle letter. In order to determine the need for a Plant Performance Summary, the existence of a potential substantive cross-cutting issue should be discussed by the regional office prior to the mid-cycle review meeting. The Plant Performance Summary packages will assist the regional offices in conducting the meeting and will form the basis for the mid-cycle letter, as well as providing input to the next end-of-cycle review meeting. The Plant Performance Summary should include an operating summary, a performance overview (current overall assessment and previous assessment results), inspection and PI results by cornerstones, other issues (i.e., cross-cutting issues, PI verification, and non-SDP enforcement actions of at least severity level III), as well as a proposed inspection plan. Each page of the meeting agenda and Plant Performance Summary should be clearly marked as “pre-decisional” to ensure that the document is handled properly and not inadvertently released to the public.



In order to aid in the discussion and integration of plant issues, the regional offices should prepare a plant specific action matrix that details the timeline and consideration of PIs and inspection findings in the assessment program as an attachment to the Plant Performance Summary. The plant specific action matrix should display the quarterly status of safety significant inspection findings and PIs and the associated action matrix column over a sufficient timeline. The regional offices do not need to prepare this matrix for plants that are being discussed only for the purpose of having a potential substantive cross-cutting issue.

The mid-cycle review meeting is chaired by a Division of Reactor Projects (DRP) or Division of Reactor Safety (DRS) Division Director (DD). The DRP branch chiefs responsible for their plants should take the lead in presenting the overall results of the review to the division director. The DRS branch chiefs shall coordinate with the appropriate DRP branch chiefs to provide adequate support for the presentation and the development of the inspection plan. Other participants shall include applicable resident inspectors and a representative from the Division of Inspection and Regional Support (DIRS). Additional participants may include the regional allegations coordinator or the agency allegations advisor, and any other additional resources deemed necessary by the regional offices. A senior reactor analyst (SRA) is not required to attend the meeting if their insights on safety significant performance issues have been provided before the meeting. The agency allegations advisor will provide any significant insights to the regional offices at least one week in advance of the mid-cycle meeting. The average time allocated for each plant review is intended to be between 20 minutes and one hour. The time allotted per review should be consistent with the number and significance of plant issues.

The mid-cycle letter shall be issued within three weeks of the completion of the mid-cycle reviews. The three-week requirement begins when all of the regional offices complete their mid-cycle reviews. Signature authority for the mid-cycle letter is determined by the most significant column of the Action Matrix that the plant has been in over the first two quarters of the current assessment cycle. For example, findings from the previous assessment cycle that were no longer active in the assessment process during the first two quarters of the current assessment cycle would not factor in to the signature authority determination. This letters shall contain:

1. A summary of safety significant PIs and inspection findings for the most recent two quarters 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 Action Matrix that would not be apparent from reviewing only the most recent quarter's results.

2. A discussion of any deviations from the Action Matrix during the assessment period.
  3. A qualitative discussion of substantive cross-cutting issues, if applicable. Safety-conscious work environment (SCWE) issues shall only be discussed if the agency has previously engaged the licensee via a meeting or docketed correspondence regarding a potential or actual SCWE concern or issue.
  4. A discussion of the licensee's progress in addressing a substantive cross-cutting issue, if documented in the previous mid-cycle or annual assessment letter.
  5. A discussion of non-SDP (severity level III or greater) enforcement actions.
  6. A discussion of findings that are currently being evaluated by the significance determination process that may affect the inspection plan.
  7. 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.
  8. An inspection plan consisting of approximately 18 months (from the issuance of the mid-cycle letter) of activities. The inspection plan will consist of report 22 from the Reactor Program System (RPS).
- d. End-of-Cycle Review. Each regional office conducts an end-of-cycle review utilizing the most recent quarterly PIs and inspection findings compiled over the previous 12 months. This review incorporates activities from the mid-cycle and quarterly reviews, including consideration of the conclusions of any independent assessments, such as Institute of Nuclear Power Operations (INPO) and International Atomic Energy Agency (IAEA) Operational Safety Review Team (OSART) inspections. The purpose of considering independent assessments is to provide a means of self-assessing the NRC inspection and assessment process. References to INPO conclusions will not be included in assessment letters. The output of this review is an annual assessment letter. The end-of-cycle review and subsequent annual assessment letters should only discuss issues where the inspection was completed prior to the end of the assessment period. Additional activities include planning inspection activities for approximately 18 months, discussing any potential substantive cross-cutting issues, and developing an input (if applicable) to support the Agency Action Review Meeting. The end-of-cycle review meeting should be held within six weeks of the end of the assessment cycle. The Action Matrix will be used to determine the scope of agency actions in response to assessment inputs.

In preparation for the end-of-cycle review meetings, the regional offices shall develop a meeting agenda as well as provide the plant issues matrix, the results of the PIs, and the proposed inspection plan for all plants. The meeting agenda provides the areas that should be addressed by the regional offices for all plants except those that are required to prepare a Plant Performance Summary. A single agenda is sufficient to conduct the meeting. The regional offices shall develop a

Plant Performance Summary for those plants whose performance has been in the Degraded Cornerstone column, Multiple/Repetitive Degraded Cornerstone column, or Unacceptable Performance column of the Action Matrix during any quarter of the past twelve months. A Plant Performance Summary shall also be developed for those plants that the regional offices consider to have current substantive cross-cutting issues that should be discussed in the annual assessment letter. In order to determine the need for a Plant Performance Summary, the existence of a preliminary substantive cross-cutting issue should be discussed by the regional office prior to the end-of-cycle review meeting. The Plant Performance Summary packages will assist the regional offices in conducting the meeting and will form the basis for the annual assessment letters. These packages will also be used at the end-of-cycle summary meeting, as well as providing input to the Agency Action Review Meeting (if applicable). The Plant Performance Summary should include an operating summary, a performance overview (current overall assessment and previous assessment results), inspection and performance indicator results by cornerstones, other issues (i.e., cross-cutting issues, PI verification, and non-SDP enforcement actions of at least severity level III), as well as a proposed inspection plan. Each page of the meeting agenda and Plant Performance Summary should be clearly marked as “pre-decisional” to ensure that the document is handled properly and not inadvertently released to the public.

In order to aid in the discussion and integration of plant issues, the regional offices should prepare a plant specific action matrix that details the timeline and consideration of PIs and inspection findings in the assessment program as an attachment to the Plant Performance Summary. The plant specific action matrix should display the quarterly status of safety significant inspection findings and PIs and the associated action matrix column over a sufficient timeline. The regional offices do not need to prepare this matrix for plants that are being discussed only for the purpose of having a potential substantive cross-cutting issue.

The end-of-cycle review meeting is chaired by the regional administrator or his/her designee. The regional division directors and/or branch chiefs present the results of the annual review to the regional administrator (or designee). Other routine participants should include DRP and DRS branch chiefs, applicable regional and resident inspectors, a representative from the Division of Inspection and Regional Support (DIRS), the regional Allegations Coordinator or the Agency Allegations Advisor, and any other additional participants deemed necessary by the regional offices. The following representatives should also participate if there are pertinent performance issues that should be factored into the performance for a particular plant: senior representatives from the Division of Operating Reactor Licensing, Office of Investigations, Office of Enforcement, Office of Nuclear Security and Incident Response, and Office of Research. The role of the various headquarters participants during the end-of-cycle meeting is to provide: (1) an opportunity for these offices to share any significant insights into licensee performance over the course of the annual assessment period, (2) an independent validation of the regional office’s assessment of licensee performance from their office’s perspective, and (3) clarifying or ancillary remarks regarding ongoing or current issues under their cognizance. A senior reactor analyst (SRA) is not required to attend the meeting if their insights on safety significant performance issues have

been provided before the meeting. The average time allocated for each plant review is intended to be between 20 minutes and one hour. The time allotted per review should be consistent with the number and significance of plant issues.

An end-of-cycle (EOC) summary meeting may be necessary at the conclusion of the end-of-cycle meeting to summarize the results of the end-of-cycle review with the Director of NRR (or another member of the NRR Executive Team). The regional staff will summarize the results of the end-of-cycle review for those plants whose performance in one or more quarters in the past twelve months has been in the Degraded Cornerstone column, Multiple/Repetitive Degraded Cornerstone column, or Unacceptable Performance column of the Action Matrix. Plants that are under the IMC 0350 process will also be discussed at this meeting. The regional staff will also present the results for those plants that the regional office consider to have current substantive cross-cutting issues that would be included in the annual assessment letter. The EOC summary meetings for each of the regions will be scheduled simultaneously on the third Wednesday of February. This meeting will occur after the completion of all the EOC meetings but before the issuance of the annual assessment letters.

During the EOC summary meeting, the Director of NRR (or another member of the NRR Executive Team) will preside over the meeting while each regional administrator will lead the discussion for his/her region. The EOC summary meeting is an informational meeting vice a decision-making meeting. In preparation for the meeting, IIPB will develop an agenda for the meeting with input from the regional offices. The regional offices should provide their input to IIPB three working days prior to the meeting. The purpose of this meeting 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.

The output of the end-of-cycle review is an annual assessment letter. These letters shall be issued within three weeks of the completion of the end-of-cycle reviews. The three-week requirement begins when all of the regional offices complete their end-of-cycle reviews. Signature authority for each annual assessment letter is determined by the most significant column of the Action Matrix that the plant has been in over the four quarters of the assessment cycle. The letters shall contain:

1. A summary of safety significant PIs and inspection findings for the most recent two quarters as well as 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 Action

Matrix that would not be apparent from reviewing only the most recent quarter's results.

2. A discussion of any deviations from the Action Matrix during the assessment period.
3. A qualitative discussion of substantive cross-cutting issues, if applicable. Safety-conscious work environment (SCWE) issues shall be discussed only if the agency has previously engaged the licensee via a meeting or docketed correspondence regarding a potential or actual SCWE concern or issue.
4. A discussion of the licensee's progress in addressing a substantive cross-cutting issue, if documented in the previous mid-cycle or annual assessment letter.
5. A discussion of non-SDP (severity level III or greater) enforcement actions.
6. A discussion of findings that are currently being evaluated by the significance determination process that may affect the inspection plan.
7. 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.
8. An inspection plan consisting of approximately 18 months of activities (from the issuance of the annual assessment letter). The inspection plan will consist of report 22 from the Reactor Program System (RPS).

#### 06.03 Program Reviews

- a. Agency Action Review Meeting. An Agency Action Review Meeting (AARM) is conducted several weeks after issuance of the annual assessment letters. This meeting is attended by appropriate senior NRC managers and is chaired by the Executive Director for Operations (EDO) or designee. This meeting is a collegial review by senior NRC managers of (1) the appropriateness of agency actions for plants with significant performance issues using data compiled during the end-of-cycle review, (2) trends in overall industry performance, (3) the appropriateness of agency actions concerning fuel cycle facilities and other materials licensees with significant performance problems, and (4) the results of the reactor oversight process self-assessment, including a review of approved deviations from the Action Matrix. Plants with significant performance weaknesses are those plants that are in the Multiple/Repetitive Degraded Cornerstone or Unacceptable Performance columns of the Action Matrix. Plants that are under the IMC 0350 process will also be discussed at this meeting. This meeting is more completely described in Management Directive 8.14, "Agency Action Review Meeting."
- b. Commission Meeting. The EDO will brief the Commission annually to convey the results of the Agency Action Review Meeting, including a discussion of any deviations from the ROP Action Matrix. The Commission should be briefed within approximately four weeks of the Agency Action Review Meeting, consistent with



Commission availability, to ensure that the information presented is as current as possible.

#### 06.04 Annual Meeting with Licensee

- a. Scheduling. A public meeting with the licensee is conducted after issuance of the annual assessment letters to discuss the results of the NRC's annual assessment of the licensee's performance. For plants that have been in the Degraded Cornerstone, Multiple/Repetitive Degraded Cornerstone, or Unacceptable Performance column of the Action Matrix, these meetings should be scheduled within 16 weeks of the end of the assessment period. These meetings should be conducted no earlier than one week after the annual assessment letters are issued in order to allow time for the licensee to review the contents of the letter. The 16-week requirement may occasionally be exceeded to accommodate the licensee's schedule or regional scheduling conflicts. These meetings may be scheduled within six months of the issuance of the annual assessment letters for plants that have been in the Licensee Response or Regulatory Response column of the Action Matrix during the entire assessment period. 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 offices should use this meeting as an opportunity to engage interested stakeholders on the performance of the plant and the role of the agency in ensuring safe plant operations. NRC management, as specified in the Action Matrix, conducts the public meeting. The appropriate level of NRC management to chair this meeting is determined by the most significant column of the Action Matrix that the plant has been in over the assessment cycle. The highest level of NRC management, as allowed in the plant's performance column of the Action Matrix, should chair the annual public meeting for those plants that currently have substantive cross-cutting issues as described in the annual assessment letter.
- b. Meeting Preparation. The region shall notify those on distribution for the annual 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 annual assessment letter. Commensurate with the level of historical interest and/or performance issues, the regional offices 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 the plant and the role of the agency in ensuring safe plant operations. NRC management, as specified in the Action Matrix, will discuss the agency's evaluation of licensee performance as documented in the annual assessment letter. This meeting is considered to be a category 1 meeting in accordance with the Commission's policy on public meetings.

The annual assessment letters provide the minimum performance information that should be conveyed to the licensee in 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 annual 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.

#### 06.05 NRC Responses to Licensee Performance

- a. Description of the Action Matrix. The Action Matrix (exhibit 4) was developed with the philosophy that, within a certain level of safety performance (e.g., the licensee response band), 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 Action Matrix identifies the range of NRC and licensee actions and the appropriate level of communication for varying levels of licensee performance. The Action Matrix describes a graded approach in addressing performance issues. A few terms are used throughout the discussion of the Action Matrix. These are:
  1. Regulatory Performance Meetings. Regulatory performance meetings are held between licensees and the agency to discuss corrective actions associated with safety significant inspection findings. Each safety 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 supplemental 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 indicated by the appropriate column of the Action Matrix. If these actions are not being taken by the licensee then the agency may consider expanding the scope of the applicable supplemental inspection to appropriately address the area(s) of concern. This would not be considered a deviation from the Action Matrix in accordance with section 06.06.f of this manual chapter.

3. NRC Inspection. The range of NRC inspection activities in response to performance indicated by the appropriate column of the Action Matrix.
  4. Regulatory Actions. Range of actions that may be taken by the agency in response to performance indicated by the appropriate column of the Action Matrix.
  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 Action Matrix Column. The Action Matrix 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 Action Matrix:
1. Licensee Response Column. All assessment inputs are green. The licensee will receive only the baseline inspection program and identified deficiencies will be addressed through the licensee's corrective action program.
  2. Regulatory Response column. Assessment inputs result in no more than one white input in any cornerstone and no more than two white inputs in any strategic performance area. 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 inspection procedure 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area." 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. The regulatory performance meeting will normally occur at an inspection exit meeting, at a periodic NRC management visit, or a conference call between the licensee and the appropriate branch chief (or division director).
  3. Degraded Cornerstone Column. Assessment inputs result in a degraded cornerstone (2 or more white inputs or one yellow input) or 3 white inputs to any Strategic Performance Area. 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 inspection procedure 95002, "Supplemental Inspection for One Degraded Cornerstone Or Any Three White Inputs in a Strategic Performance Area." 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 Appendix B to Inspection Manual Chapter 2515. Following completion of the inspection, the division director or regional administrator should discuss the performance deficiencies and the licensee's

proposed corrective actions with the licensee. The regulatory performance meeting will normally consist of a public meeting between the licensee and the appropriate division director (or regional administrator).

4. Multiple/Repetitive Degraded Cornerstone column. Assessment inputs result in a repetitive degraded cornerstone (2 white or 1 yellow input for five or more consecutive quarters), multiple degraded cornerstones, multiple yellow inputs or a red input. Regarding repetitive degraded cornerstone, if the only greater than green findings in the fifth quarter have been held open greater than four quarters, the repetitive degraded cornerstone does not apply. If, however, one of the greater than green findings is still within the original four quarters and one or more findings has been held open greater than four quarters, the repetitive degraded cornerstone does apply. In this instance, the plant would stay in the Multiple/Repetitive Degraded Cornerstone column until there was only one greater than green finding, regardless of the length of time the findings have been opened.

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.

Inspection procedure 95003, "Inspection for Repetitive Degraded Cornerstones, Multiple Degraded Cornerstones, Multiple Yellow Inputs, or One Red Input," will be performed to review the breadth and depth of the performance deficiencies. The supplemental inspection plan must be approved by the appropriate regional division director with concurrence of the Deputy Director of the Division of Inspection and Regional Support (DIRS).

Following the completion of the inspection, the EDO or his designee, in conjunction with the regional administrator and the Director of NRR, will decide whether additional agency actions are warranted. These actions could include additional supplemental inspection, a demand for information, a confirmatory action letter, or issuance of an order, up to and including a plant shutdown. At a minimum, the regional office will issue a confirmatory action letter 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 inspection procedure 95003, if warranted. The regulatory performance meeting will normally consist of a public meeting between the licensee and the regional administrator (or Executive Director for Operations).

Note: Other than the CAL, the regulatory actions listed in this column of the Action Matrix 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 Multiple/Repetitive Degraded Cornerstone column of the Action Matrix, it is prudent to ensure that actual performance improvements (which typically take longer than several quarters to achieve) have been made prior to closing out the inspection findings and exiting the multiple/repetitive Degraded Cornerstone column of the Action Matrix. In making this determination, the regional offices should consider whether:

- (a) New plant events or findings do not reveal similar significant performance weaknesses.
- (b) NRC and licensee performance indicators do not indicate similar significant performance weaknesses that have not been adequately addressed.
- (c) The licensee's performance improvement program has demonstrated sustained improvement.
- (d) NRC supplemental inspections show licensee progress in the principal areas of weakness.
- (e) There were no issues that led the NRC to take additional regulatory actions beyond those listed in the Multiple/ Repetitive Degraded Cornerstone Column of the Action Matrix. Additionally, the licensee has made significant progress on any regulatory actions which were imposed (i.e. CALs, orders, 50.54 (f) letters) because of the performance deficiencies which led to the multiple/repetitive degraded cornerstone designation.

After the original findings have been closed out, the licensee will return to the Action Matrix column that is represented by the other outstanding safety-significant inspection findings and performance indicators. Additionally, for a period of up to one year after the initial findings have been closed out, the regional offices may utilize some actions that are consistent with the Degraded Cornerstone or Multiple/Repetitive Degraded Cornerstone column of the Action Matrix in order to ensure the appropriate level of agency oversight of licensee improvement initiatives. These actions, which do not constitute a deviation from the Action Matrix, 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), non-baseline IP 95003 and CAL followup inspections (not to exceed 200 hours of direct inspection without concurrence from the Deputy Director of the Division of Inspection and Regional Support (DIRS), the annual public meetings, and authorization of the contents of the subsequent assessment letters. The actions taken above those required by the Action Matrix shall be discussed at the following mid-cycle and end-of-cycle review 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 mid-cycle and annual assessment letters until the end of the extended period of time. All assessment letters that address these additional actions shall include the NRR Performance Assessment Branch (IPAB) on concurrence.

The regional offices must convey the specific actions that the licensee needs to address to remove the findings that caused the licensee to enter the Multiple/Repetitive Degraded Cornerstone column from consideration in the assessment program. The correspondence to the licensee describing the extension of the inspection finding(s) in the assessment program beyond the normal four quarters must be authorized by the appropriate regional division director with the concurrence of the Deputy Director of the Division of Inspection and Regional Support (DIRS).

5. Unacceptable Performance column. Licensee performance is unacceptable and continued plant operation is not permitted within this column. In general, it is expected, but not required, that entry into the multiple/repetitive Degraded Cornerstone column of the Action Matrix and completion of supplemental inspection procedure 95003 will precede consideration of whether a plant is in the Unacceptable Performance column. The Commission will meet with senior licensee management in a regulatory performance meeting to discuss the licensee's degraded performance and the corrective actions which will need to be taken before operation of the facility can be resumed. The NRC oversight of plant performance will also be placed under the guidance of IMC 0350. Unacceptable performance represents situations in which the NRC lacks reasonable assurance that the licensee can or will conduct its activities to ensure protection of public health and safety. Examples of unacceptable performance may include:
  - (a) Multiple significant violations of the facility's license, technical specifications, regulations, or orders.
  - (b) Loss of confidence in the licensee's ability to maintain and operate the facility in accordance with the design basis (e.g., multiple safety significant examples where the facility was determined to be outside of its design basis, either due to inappropriate modifications, the unavailability of design basis information, inadequate configuration

management, or the demonstrated lack of an effective problem identification and resolution program).

- (c) A pattern of failure of licensee management controls to effectively address previous significant concerns to prevent recurrence.

Note: If the agency determines that a licensee's performance is unacceptable then a shutdown order will be issued.

- 6. IMC 0350 Process Column. The criteria for entrance into the IMC 0350 process, as discussed in section 06.06.g of this manual chapter, has been met. Subsequent management review of licensee performance has determined that entrance into the Unacceptable Performance column is not warranted at this time. Additionally, NRC management will review licensee performance on a quarterly basis to determine if entrance into the Unacceptable Performance column is warranted. The licensee is expected to place the identified deficiencies into their performance improvement plan and perform an evaluation of the root and contributing causes for both the individual and collective causes.

As discussed in IMC 0350, the regional offices will conduct baseline and supplemental inspections as appropriate, as well as special inspections per the restart checklist. Performance indicator data should continue to be gathered in accordance with IMC 0608, "Performance Indicator Program," to the extent that it is applicable to shutdown conditions.

Plants under the IMC 0350 process are considered to be outside of the normal assessment process and under the auspices of IMC 0350. However, this column has been added to the Action Matrix for illustrative purposes to demonstrate comparable agency response and communications and is not necessarily representative of the worst level of licensee performance. Plants under the IMC 0350 process should be discussed at the mid-cycle and end-of-cycle reviews to integrate inspection planning efforts across the regional office and to keep internal stakeholders abreast on ongoing inspection and oversight activities. Mid-cycle or annual assessment letters are generally not issued for these plants. Annual public meetings will not be conducted for these plants as the regional office conducts periodic public meetings to discuss licensee performance. As discussed in section 06.06.h, the regional offices may utilize some actions that are consistent with the Degraded Cornerstone or Multiple/Repetitive Degraded Cornerstone column of the Action Matrix in order to ensure the appropriate level of agency oversight of licensee improvement initiatives as the licensee exits the IMC 0350 Process.

#### 06.06 Additional Action Matrix Guidance

- a. Treatment of Items Associated with Enforcement Discretion



A finding that includes a violation that meets all applicable requirements for enforcement discretion and meets the criteria discussed below, will be processed as specified in this section. The intent of this section is to establish ROP guidance that supports the objective of enforcement discretion, which is to encourage licensee initiatives to identify and resolve problems, especially those subtle issues that are not likely to be identified by routine efforts.

Findings that include a violation subject to enforcement discretion must be dispositioned under one of the following categories:

1. Treatment of Old Design Issues in the Assessment Process. The NRC may refrain from considering safety significant inspection findings in the assessment program for a design-related finding in the engineering calculations or analysis, associated operating procedure, or installation of plant equipment that meets all of the following criteria:
  - A. It was licensee-identified as a result of a voluntary initiative such as a design basis reconstitution. For the purposes of this manual chapter, self-revealing issues are not considered to be licensee-identified. Self-revealing issues are those deficiencies which reveal themselves to either the NRC or licensee through a change in process, capability or functionality of equipment, or operations or programs.
  - B. It was or will be corrected, including immediate corrective action and long term comprehensive corrective action to prevent recurrence, within a reasonable time following identification (this action should involve expanding the initiative, as necessary, to identify other failures caused by similar root causes). For the purpose of this criterion, identification is defined as the time from when the significance of the finding is first discussed between the NRC and the licensee. Accordingly, issues being cited by the NRC for inadequate or untimely corrective action are not eligible for treatment as an old design issue.
  - C. It was not likely to be previously identified by recent ongoing licensee efforts such as normal surveillance, quality assurance activities, or evaluation of industry information.
  - D. The finding does not reflect a current performance deficiency associated with existing licensee programs, policy, or procedure.

The finding would be brought to a Significance and Enforcement Review Panel (SERP) and a Regulatory Conference, if applicable. The finding would be discussed in the appropriate inspection report cover letter and displayed on the NRC's web site with its actual safety significance after the final safety significance is determined.

If enough information is already known to determine whether the finding meets the old design issue criteria, the licensee should be notified in the

inspection report cover letter that the finding has been determined to be an old design issue. The regional offices should then perform an IP 95001 supplemental inspection for a white finding or an IP 95002 for a yellow or red finding to review the licensee's root cause evaluation and corrective action plan for that particular issue.

If additional information is needed to determine whether the finding meets the old design issue criteria, the inspection report cover letter should state that the finding is being considered for treatment as an old design issue. The regional offices should then perform an IP 95001 supplemental inspection for a white finding or an IP 95002 for a yellow or red finding to review the licensee's root cause evaluation of that particular issue and to gather the additional information required to determine whether the finding meets the old design issue criteria. If the finding is determined not to have met the criteria for an old design issue, the regional office should conduct the additional supplemental inspection effort needed for the appropriate Action Matrix column.

For example, the regional office does not have enough information to determine if a red finding meets the criteria for an old design issue. The regional office would perform an IP 95002 inspection to review the root cause evaluation and gather additional information on whether the finding meets the criteria for an old design issue. As a result of the inspection, the regional office determines that the criteria has not been met. The regional office would then perform the additional inspection activities to complete supplemental inspection requirements for an IP 95003 inspection.

If the finding meets all the old design issue criteria, it would not aggregate in the Action Matrix with other performance indicators and inspection findings nor would additional agency actions be taken. If the finding is determined not to meet the old design issue criteria, it would be treated similar to any other inspection finding and additional agency actions would be taken in accordance with the Action Matrix.

Example: The NRC has concluded that a white finding in the mitigating systems cornerstone meets the criteria for an old design issue for Plant A. Plant A also had a previous white PI in the mitigating systems cornerstone. This plant would be considered in the Regulatory Response column of the Action Matrix due to the white PI, and agency actions would be in accordance with that column including a 95001 supplemental inspection for the white PI. The old design issue does not aggregate for Plant A in determining the Action Matrix column or required agency response. Therefore, the white old design issue would be considered independently and a 95001 supplemental inspection for that issue would be conducted.

The purpose of this approach is to place a premium on licensees initiating efforts to identify and correct safety-significant issues that are not likely to be identified by routine efforts before degraded safety systems are called upon to work. The assessment program evaluates current performance issues and this approach excludes old design issues from consideration of overall licensee performance in the Action Matrix. The DRP or DRS division director will authorize the treatment of findings as old design issues with the concurrence of the Deputy Director of the Division of Inspection and Regional Support (DIRS). This is not considered a deviation from the Action Matrix in accordance with section 06.06.f.

2. Violations in Specified Areas of Interest Qualifying for Enforcement Discretion. Findings that include violations subject to the following enforcement discretion may be dispositioned as described below:

1) enforcement discretion in accordance with the Interim Enforcement Policy Regarding Enforcement Discretion for Certain Fire Protection Issues (10CFR50.48(c)) included in the Commission's Enforcement Policy, and

2) enforcement discretion for violations involving fire protection circuits as authorized by Office of Enforcement in Section 8.1.7.1 of the NRC Enforcement Manual.

The NRC will normally refrain from processing the related inspection finding through SDP and into the Action Matrix if applicable. The finding must be documented in an inspection report noting that the related violation meets all applicable requirements for enforcement discretion as explicitly provided for in the associated authorizing document, and further meets the criteria listed below.

- A. The licensee places the finding into their corrective action program.
- B. In cases where the authorizing document requires that a finding being given discretion must not be evaluated as Red, the staff may meet this

provision if they determine that an NRC response at a level for a Red finding is not necessary to assure public health and safety. The staff does not need to complete an SDP to make this determination.

- C. The licensee performs an operability evaluation (when applicable) using the guidelines in GL 91-18 to demonstrate that safety will be maintained during operation (both power operation and shutdown, as applicable) with compensatory measures as appropriate.

If the above criteria are not met, the staff may take whatever action is deemed necessary and appropriate, including the issuance of enforcement action, entry into the SDP and (if applicable) the Action Matrix, and implementation of supplemental inspections.

The cover letter that informs the licensee of the staff's exercise of enforcement discretion should include a clear explanation of the staff's basis for exercising enforcement discretion, including a reference to the applicable authorizing document(s) and this section of IMC 0305. Also, cover letters should be consistent with the guidance provided in Chapter 6 of the Enforcement Manual.

Note: If a single finding has multiple related violations of which only a subset are eligible to be granted enforcement discretion, then the finding will be dispositioned in accordance with the normal SDP and Action Matrix process using the assumption that only the violations not subject to enforcement discretion existed. The violations subject to enforcement discretion will be processed and documented as findings in accordance with the provisions of this section.

- b. "Double-Counting" of Performance Indicators and Inspection Findings. Some issues may result in simultaneously crossing a performance indicator threshold and generating a safety significant inspection finding. This would result in two assessment inputs combining to cause increased regulatory action per the Action Matrix. For example, two white assessment inputs in the mitigating systems cornerstone would result in increased regulatory action per the Degraded Cornerstone column of the Action Matrix.

Issues with the same underlying causes should not be "double-counted" in the assessment program. However, the most conservative significance characterization related to the performance indicator and the inspection finding (i.e., yellow vs. white) shall be used to determine the appropriate agency action according to the Action Matrix.

Another example may include an inoperability of a support system that causes a white inspection finding as well as several performance indicators to cross the green/white threshold. Because the SDP characterization of the finding pertains to the same underlying issue, this should be considered a single white issue within a cornerstone and not "double-counted" in the assessment program. These

examples are not considered a deviation from the Action Matrix as defined in section 06.06.f of this manual chapter.

- c. Timeframe to Begin “Counting” Inspection Findings in the Assessment Program. The start date used for consideration of inspection findings in the assessment program is the end of the inspection period that designates the issue as an AV, violation (VIO), finding (FIN), or non-cited violation (NCV) in the reactor program system (RPS). Unresolved Items should be dispositioned according to IMC 0612 “Power Reactor Inspection Reports”, and appropriately updated in RPS when additional information becomes available. For integrated inspection reports, this date should be the end of the quarterly inspection period regardless of when the exit meeting was conducted. After final determination of the significance of an inspection finding, the regional office shall refer back to the appropriate date discussed above to determine if any additional action would have been taken had the significance of the inspection finding been known at that time.

For example, the performance indicator for Unplanned Scrams was white (low to moderate safety significance) for the second quarter of the assessment cycle. Additionally, there was an inspection finding in the same cornerstone from the second quarter of the assessment cycle whose final safety significance was determined to be white (low to moderate safety significance) in the third quarter of the assessment cycle. In this case, the appropriate action would be to perform supplemental inspection procedure 95002 vice 95001 since there were two white assessment inputs in the same cornerstone for the second quarter of the assessment cycle. This would be communicated to the licensee in the appropriate assessment letter.

- d. Timeframe for Including Performance Indicators and Inspection Findings in the Assessment Program. Inspection findings are normally considered in the assessment program for four quarters. However, there may be instances in which the corresponding supplemental 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 (performance indicator or inspection finding) may be subject to additional agency action, including additional enforcement actions or an expansion of the supplemental inspection procedure as necessary to independently acquire the necessary information to satisfy the inspection requirements. Also, for inspection findings, the original performance issue will remain open and will not be removed from consideration in the assessment program until the weaknesses in the evaluation are addressed and corrected. The regional offices must convey the specific weaknesses that the licensee needs to address in order to remove this finding from consideration in the assessment program. The finding will be removed from consideration of future agency actions (per the Action Matrix) when the inadequacies in the licensee’s efforts to address the issue have been corrected and four quarters of consideration of the original finding in the assessment program have been completed. This notification should be included in the cover letter of the supplemental inspection report and the finding will be removed from consideration in the assessment program after the end of

that quarter. In other words, the inspection finding will no longer be considered in the assessment program starting with the next calendar quarter. The correspondence to the licensee describing the extension of an inspection finding in the assessment process beyond the normal four quarters must be authorized by the appropriate regional division director with concurrence of the Deputy Director of the Division of Inspection and Regional Support (DIRS).

For significant weaknesses in the licensee's evaluation of a performance issue that are associated with a performance indicator, a parallel performance indicator inspection finding will be opened and given the same color as the performance indicator. However, this finding will not be double-counted in the assessment process. The finding should be discussed at a SERP prior to notifying the licensee of the issuance of a parallel performance indicator inspection finding. In electing this option, there must be a strong causal link between the original performance deficiency and the ineffective corrective actions. The regional offices must convey the specific weaknesses that the licensee needs to address in order to remove this finding from consideration in the assessment process. The finding will be removed from consideration of future agency actions (per the Action Matrix) when the inadequacies in the licensee's efforts to address the issue have been corrected. This notification should be included in the cover letter of the supplemental inspection report and the finding will be removed from consideration in the assessment process after the end of that quarter. In other words, the inspection finding will no longer be considered in the assessment program starting with the next calendar quarter. The correspondence to the licensee describing the parallel inspection finding must be authorized by the appropriate regional division director with concurrence of the Deputy Director of the Division of Inspection and Regional Support (DIRS).

If this approach is taken by the agency, the regions should issue a violation under 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," if applicable.

- e. Additional Supplemental Inspection Guidance. Generally, the supplemental inspection procedure associated with the most significant applicable column of the Action Matrix should only be performed on one occasion. One exception (see section 06.06.d for more details) is when the regional office has determined that the licensee has taken ineffective corrective actions associated with a safety significant PI or inspection finding.

Supplemental inspection procedure scopes should include all white, yellow, or red performance issues in the associated degraded cornerstone or strategic performance area. For example, if a 95002 inspection is being performed due to a yellow PI in the mitigating systems cornerstone, the inspection scope should also include any white PIs and inspection findings in that cornerstone. If a 95002 procedure is being performed due to three white findings in the reactor safety strategic performance area, the inspection scope should include any white PIs and inspection findings in the reactor safety strategic performance area.

If a white inspection finding or PI subsequently occurs in an unrelated cornerstone or strategic performance area, the associated supplemental inspection should be



conducted at the appropriate level. For example, two white findings are discovered in the Initiating Events cornerstone which the region inspects using IP 95002. Additionally, a white inspection finding is discovered in the occupational radiation safety cornerstone. The regional office should inspect this finding using IP 95001.

- f. Deviations from the Action Matrix. There may be rare instances in which the regulatory actions dictated by the Action Matrix may not be appropriate. In these instances, the agency may deviate from the Action Matrix (which is described in section 06.05.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 06.05 of this manual chapter. Deviations from the Action Matrix shall be documented in the appropriate letter to the licensee (i.e., assessment follow-up letter, mid-cycle or annual assessment letter) or separate docketed correspondence. The Executive Director for Operations (EDO) shall approve all deviations from the Action Matrix 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 Action Matrix should be initiated by the applicable regional administrator to the EDO and should go through the Office Director of NRR for program office approval. Any deviations from the Action Matrix shall be documented in the subsequent mid-cycle or annual assessment letter.

Letters requesting deviations from the Action Matrix should include a synopsis of the licensee performance deficiencies, the required NRC actions per the Action Matrix for these inputs, the proposed alternative actions, and the region's rationale for requesting the deviation. Examples of when deviations from the Action Matrix may be considered are: (1) multiple examples of non-SDP Severity Level III or greater enforcement actions, or (2) a type of finding unanticipated by the SDP that results in an inappropriate level of regulatory attention when entered into the Action Matrix.

- g. Transitioning to the IMC 0350 Process. The normal criteria for considering a plant for the IMC 0350 process is (1) plant performance is in the Multiple/Repetitive Degraded Cornerstone column or the Unacceptable Performance column of the Action Matrix, or a significant operational event has occurred as defined by Management Directive 8.3; (2) the plant is shutdown or has committed to shutdown the plant to address these performance issues (whether voluntary or via an agency order to shutdown); (3) a regulatory hold is in effect, such as a Confirmatory Action Letter (CAL) or an agency order; and (4) an agency management decision is made to place the plant in the IMC 0350 process. Management considerations in placing a plant under the IMC 0350 process are discussed in IMC 0350. At this point, periodic assessment (quarterly, mid-cycle, and end-of-cycle) of licensee performance is no longer under the auspices of this manual chapter but is now under the IMC 0350 process. This process is more completely described in IMC 0350.

The following are examples of the appropriate level of regulatory engagement between the agency and a licensee once a plant has entered the

Multiple/Repetitive Degraded Cornerstone column of the Action Matrix and how IMC 0350 may be applied:

1. Plant A continues to operate and regulatory engagement is dictated by the Multiple/Repetitive Degraded Cornerstone column of the Action Matrix. The agency performs supplemental inspection procedure 95003 (if not already performed) and the plant remains under the level of oversight dictated by this manual chapter and is not transferred to the IMC 0350 process.
  2. Plant B performs a voluntary shutdown to address performance issues. The agency performs supplemental inspection procedure 95003 (if not already performed) and issues a confirmatory action letter (CAL) to document licensee commitments to the agency. The plant remains under the level of oversight dictated by this manual chapter and is not transferred to IMC 0350 process.
  3. Plant C performs a voluntary shutdown to address performance issues. The agency issues a CAL to ensure a common understanding of licensee commitments to address the underlying performance deficiencies. The entry conditions for IMC 0350 have been met and agency management determines that this process should be implemented using the criteria in IMC 0350. At this point, periodic assessment of licensee performance is no longer dictated by this manual chapter and is transferred to the IMC 0350 process. Plant performance is not determined to be unacceptable.
  4. Plant D voluntarily shuts down to address performance issues. The agency determines that one of the criteria in paragraph 06.05.b for unacceptable performance is met. The plant is considered to be in the Unacceptable Performance column of the Action Matrix and a shutdown order is issued by the agency. The plant is transferred to the IMC 0350 process.
  5. Plant E, which is operating, is issued an order by the agency to shutdown because it is considered to have met one of the criteria in paragraph 06.05.b. The licensee's performance is declared to be unacceptable and the plant will be transferred to IMC 0350.
- h. Transitioning out of the IMC 0350 Process. Once the conditions for restart have been completed, as discussed in section 06.04 of IMC 0350, the regional administrator will issue a restart authorization letter. The restart authorization letter will include the basis for restart and the extent of continued Restart Oversight Panel engagement. The panel will determine the duration of their oversight activities and the date of the licensee's return to the routine oversight process.

Additionally, for a period of up to one year after the plant has exited the IMC 0350 process, the regional offices may utilize some actions that are consistent with the Degraded Cornerstone or Multiple/Repetitive Degraded Cornerstone column of the Action Matrix in order to ensure the appropriate level of agency oversight of licensee improvement initiatives. These actions, which do not constitute a deviation from the Action Matrix, 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), the annual public meetings, authorization of the contents of the subsequent assessment letters, and non-baseline Order and CAL followup inspections (not to exceed 200 hours of direct inspection without concurrence from the Deputy Director of the Division of Inspection and Regional Support (DIRS). The actions taken, above those required by the Action Matrix, shall be discussed at the following mid-cycle and end-of-cycle review meetings. These actions will also be described in the following mid-cycle and annual assessment letters until the end of the extended period of time. All assessment letters that address these additional actions shall include the NRR Performance Assessment Branch (IPAB) on concurrence.

- i. Substantive Cross-Cutting Issues. The ROP was developed with the presumption that plants which had significant performance issues with cross-cutting areas would be revealed through the existence of safety-significant PIs or inspection findings. Accordingly, in identifying a substantive cross-cutting issue, there must be an NRC concern that the licensee has had multiple performance deficiencies that had commonality in the central cross-cutting aspects. In order to determine whether substantive cross-cutting issues exist at a site, an assessment must be performed during the preparation for the mid-cycle and end-of-cycle assessment meetings. This is a three step process:

- 1) The finding (and any subsequent developments associated with the issue) must be reviewed by the inspector to determine the principal cause or concern associated with each cross-cutting aspect. In order to support the binning of findings with cross-cutting aspects, the inspectors should provide sufficient detail in the PIM and provide periodic updates as new information becomes available in accordance with IMC 0306 and IMC 0612.

- 2) The finding is assigned to the appropriate bin associated with the central cause. The binning of findings with cross-cutting aspects should occur in preparation for the mid-cycle and end-of-cycle review meetings and not when the findings are initially entered into the PIM. There should usually only be one principal cause and one bin assigned to each cross-cutting aspect of a finding.

- 3) Once all findings with cross-cutting aspects are binned, the findings in each bin should be examined to determine if any commonality exists which may be indicative of a substantive cross-cutting issue. Substantive cross-cutting issues in the safety-conscious work environment (SCWE) area shall only be discussed if the agency has previously engaged the licensee via a meeting or docketed correspondence regarding a potential or actual SCWE concern or issue.

A substantive cross-cutting issue would exist if all of the following three criteria are met:

1. There are multiple green or safety significant inspection findings in the PIM for the current 12-month assessment period with documented cross-cutting aspects in the areas of human performance, problem identification and

resolution, or safety conscious work environment. Observations or violations that are not findings should not be considered in this determination.

2. The causal factors have a common theme. A substantive cross-cutting issue should be corroborated by the existence of a significant number (more than three (3)) of findings. The findings should share a common performance characteristic more specific than the three cross-cutting areas and should be from more than one cornerstone. However, it is recognized that given the significant inspection effort applied to the mitigating systems cornerstone, that a substantive cross-cutting issue may be observed through inspection findings associated with only this one cornerstone.

In order to assist in determining if there is a substantive cross-cutting issue, causal factors can be binned in the following subcategories:

Human Performance:

- Personnel - Attributes required for successful task performance including: fitness for duty, knowledge and skills, attention to detail (including failure to follow procedures)
- Resources - Items that support the task performance such as complete and accurate procedures, complete and accurate reference documents, appropriate tools, equipment, supervision, and staff.
- Organization - Items that facilitate performance such as effective written and verbal communications, inter and intra-group coordination, planning and scheduling.

Problem Identification and Resolution:

- Identification - Attributes that result in issues being identified at the appropriate threshold and entered into the corrective action program.
- Evaluation - Attributes that result in corrective actions commensurate with the significance of the issue including adequate extent of condition.
- Corrective Action - Attributes that result in immediate disposition, short-term, and long-term corrective actions that are appropriate and effective.

Note: There must be a common theme within a particular bin. For example, two findings binned in personnel for fitness-for-duty casual factors and two findings binned in personnel for failure to follow procedures casual factors would not be sufficient to meet the criteria of “more than three findings with a common theme”

These specific performance characteristic examples can be used to help determine if the cross-cutting aspects have a common performance characteristic. Examples would be when there are numerous instances of green findings in areas such as operations department personnel failure to

follow procedures (human performance: personnel), ineffective evaluation of performance deficiencies (problem identification and resolution: evaluation), or inadequate system engineering support of operability determinations (human performance: resources).

3. The Agency has a concern with the licensee's scope of efforts or progress in addressing the cross-cutting area performance deficiency for the agency to highlight a substantive cross cutting issues.

The assessment letter should summarize the specific substantive cross-cutting issue in one to two paragraphs of text including:

- identifying the findings and their common cross-cutting aspects used to identify the substantive cross-cutting issue,
- placing the cross-cutting issue into the proper safety perspective,
- describing the agency's action in the baseline program to monitor the issue, specifically indicating how the substantive cross cutting issue will be followed up. The following are examples of how to follow up:
  - < through semi-annual trend reviews conducted during the End of Cycle and Mid-Cycle reviews;
  - < as a PI&R follow-up inspection item in accordance with Inspection Procedure 71152, "Identification And Resolution of Problems," Section 03.02, "Selected Issue Follow-up Inspection;" or
  - < during a PI&R Team Inspection in accordance with Inspection Procedure 71152, "Identification And Resolution of Problems."
- stating the agency's assessment of the licensee's ability to address the substantive cross-cutting issue or the licensee's progress to correct the issue, and
- defining criteria for clearing the cross-cutting issue (for example, fewer number of findings with same causal factor or more confidence in the licensee's corrective action program and their ability to correct issues). In the absence of clarification in the assessment letter, the criteria for continuing to highlight a cross-cutting issue in the next assessment will be the criteria used to initiate a cross-cutting issue, i.e. the findings for a 12 month assessment window will be analyzed against the three above listed conditions.

A plant that has an outstanding CAL with improvement issues similar to cross-cutting areas does not have to meet the three listed conditions to continue to follow-up and assess those issues, as completion of the licensee's commitments as specified in the CAL takes precedence.

If a substantive cross-cutting issue is discussed in a mid-cycle or annual assessment letter, then the next annual or mid-cycle assessment letter should address the licensee's performance in this area. The regional office will evaluate the current 12-months of findings with cross-cutting aspects against the above listed criteria and the criteria for clearing the cross-cutting issue as outlined in the assessment letter. The next mid-cycle or annual assessment letter will either state

that the issue has been satisfactorily resolved and reference the inspection report that documented the follow-up or summarize the agency's assessment against the above listed criteria, as well as summarizing the licensee's progress in addressing the issue.

The regional office may consider the following options for those plants where a substantive cross-cutting issue has been raised in at least two consecutive assessment letters. These options include requesting that: 1) the licensee provide a response at the next annual public meeting, 2) the licensee provide a written response to the substantive cross-cutting issues raised in the assessment letters, or 3) a separate meeting be held with the licensee. For the third option, the same guidance discussed in section 06.05.b for a regulatory performance meeting will be used to determine the appropriate level of management to chair the meeting and whether a public meeting is required. The regional branch chief or division director should chair the meeting for plants within the Licensee Response column of the Action Matrix.

- j. Problem Identification and Resolution (PI&R) Inspections. Each time a facility enters the Degraded Cornerstone column of the Action Matrix, the region should assess the benefit of performing an additional PI&R team inspection in accordance with IP 71152. A maximum of one additional inspection should be considered for the two-year period following the quarter in which the facility reached the Degraded Cornerstone column of the Action Matrix. In those instances where an additional inspection is deemed appropriate, the region should provide the basis for its decision to conduct the inspection in the appropriate assessment letter (annual assessment letter, mid-cycle letter, or assessment follow-up letter) to the licensee.

Note: Sample assessment letters, plant performance summary, and assessment meeting agenda, as well as the schedule of assessment activities are located at <http://nrr10.nrc.gov/rop-digital-city/index.html>

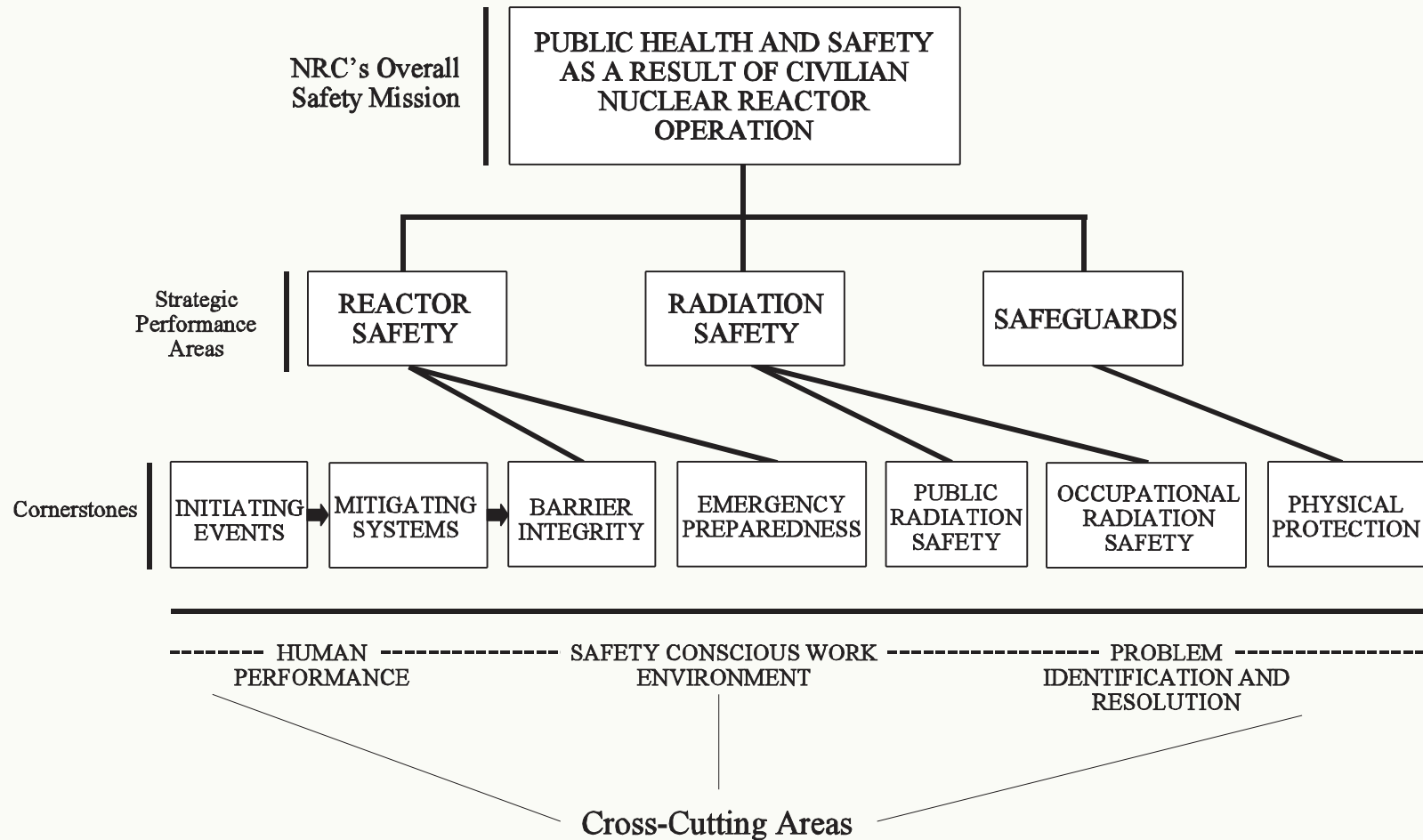
END

#### EXHIBITS:

1. Regulatory Framework
2. Reactor Oversight Process
3. Process Activities
4. Action Matrix

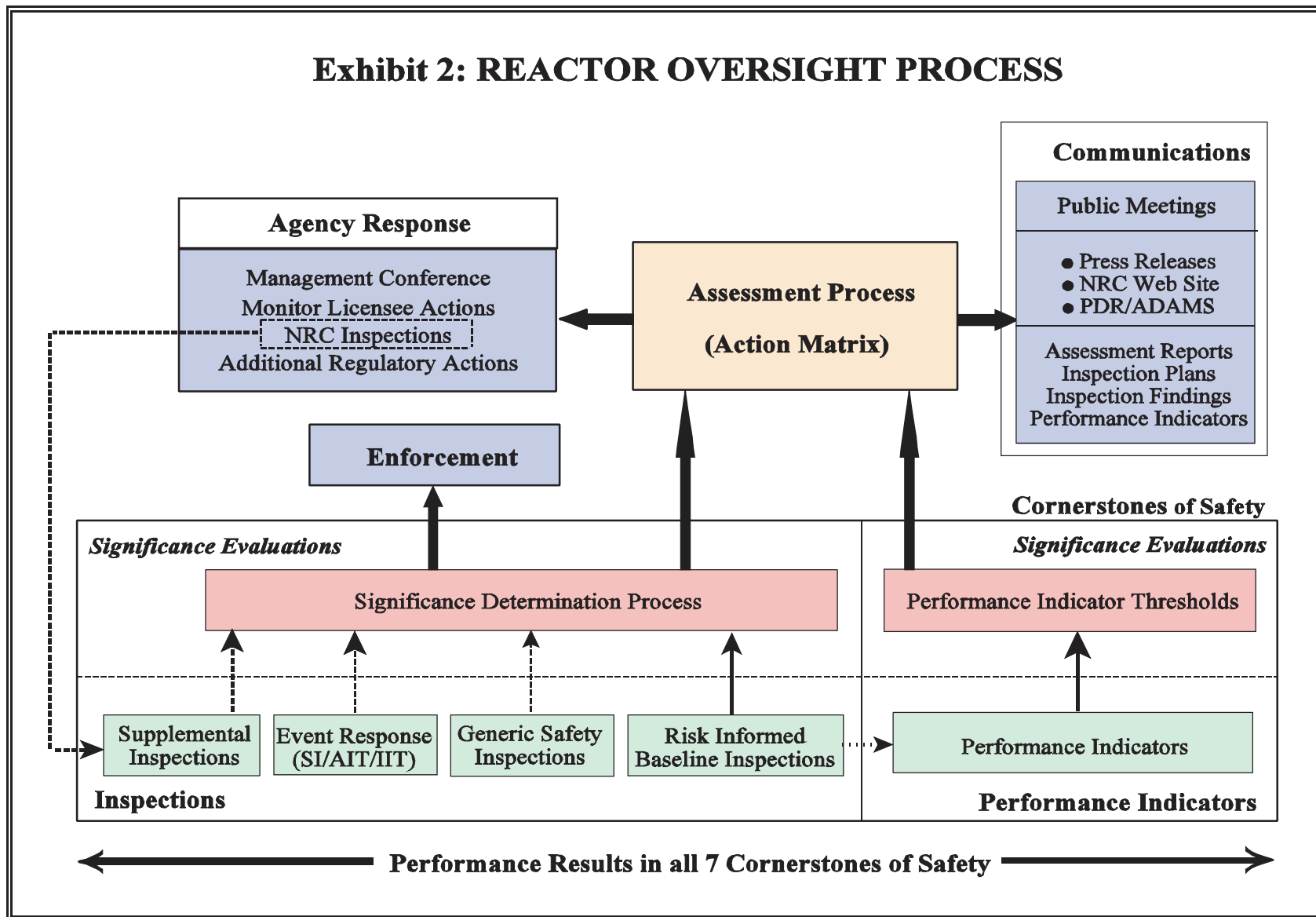


## Exhibit 1: REGULATORY FRAMEWORK



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## Exhibit 2: REACTOR OVERSIGHT PROCESS



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### Exhibit 3 - Process Activities

Level of Review	Frequency/ Timing	Participants (* indicates chairperson)	Desired Outcome	Communication
Continuous	Continuous	SRI, RI, regional inspectors, SRAs	Performance awareness	None required, notify licensee by an Assessment Follow-Up letter <u>only</u> if thresholds crossed
Quarterly	Once per quarter/ Five weeks after end of quarter	DRP: BC*, PE, SRI, RI	Input/verify PI/PIM data, detect early trends	Update data set, notify licensee by an Assessment Follow-Up letter <u>only</u> if thresholds crossed
Mid-Cycle	At mid-cycle/ Six weeks after end of second quarter	Divisions of Reactor Safety (DRS) or DRP DD*, DRP and DRS BCs	Detect trends, plan inspection	Mid-cycle letter with an inspection plan of approximately 18 months
End-of-Cycle	At end-of-cycle/ Six weeks after end of assessment cycle	DRS or DRP DD, RAs*, BCs, principal inspectors, SRAs, HQ offices as appr.	Assessment of plant performance, oversight and coordination of regional actions	Annual assessment letter with an inspection plan of approximately 18 months
End-of-Cycle Summary Meeting	Seven weeks after the end of the fourth quarter	DIR NRR, RAs, BCs, DIRS, OE, OI, other HQ offices as appr.	Summarize results of the end-of-cycle review	Information to be discussed at Agency Action Review Meeting
Agency Action Review	Annually/ Several weeks after issuance of the annual assessment letters	EDO*, DIR NRR, RAs, DRS/DRP DDs, DIRS, OE, OI, other HQ offices as appr.	Review of the appropriateness of agency actions	Commission briefing, followed by public meetings with individual licensees to discuss assessment results

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## Exhibit 4 - ACTION MATRIX

	Licensee Response column		Regulatory Response column	Degraded Cornerstone column	Multiple/ Repetitive Degraded Cornerstone column	Unacceptable Performance column	IMC 0350 Process
RESULTS		All Assessment Inputs (Performance Indicators (PIs) and Inspection Findings) Green; Cornerstone Objectives Fully Met	One or Two White Inputs (in different cornerstones) in a Strategic Performance Area; Cornerstone Objectives Fully Met	One Degraded Cornerstone (2 White Inputs or 1 Yellow Input) or any 3 White Inputs in a Strategic Performance Area; Cornerstone Objectives Met with Moderate Degradation in Safety Performance	Repetitive Degraded Cornerstone, Multiple Degraded Cornerstones, Multiple Yellow Inputs, or 1 Red Input; Cornerstone Objectives Met with Longstanding Issues or Significant Degradation in Safety Performance	Overall Unacceptable Performance; Plants Not Permitted to Operate Within this Band, Unacceptable Margin to Safety	Plants in a shutdown condition with performance problems placed under the IMC 0350 process
RESPONSE	Regulatory Performance Meeting	None	Branch Chief (BC) or Division Director (DD) Meet with Licensee	DD or Regional Administrator (RA) Meet with Licensee	RA (or EDO) Meet with Senior Licensee Management	Commission meeting with Senior Licensee Management	RA (or EDO) 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 with NRC Oversight		Licensee Performance Improvement Plan / Restart Plan with NRC Oversight
	NRC Inspection	Risk-Informed Baseline Inspection Program	Baseline and supplemental inspection procedure 95001	Baseline and supplemental inspection procedure 95002	Baseline and supplemental inspection procedure 95003		Baseline and supplemental as practicable, plus special inspections per restart checklist.
	Regulatory Actions <sup>1</sup>	None	Supplemental inspection only	Supplemental inspection only	-10 CFR 2.204 DFI -10 CFR 50.54(f) Letter - CAL/Order	Order to Modify, Suspend, or Revoke Licensed Activities	CAL/order requiring NRC approval for restart.
COMMUNICATION	Assessment Letters	BC or DD review/sign assessment report (w/ inspection plan)	DD review/sign assessment report (w/ inspection plan)	RA review/sign assessment report (w/ inspection plan)	RA review/sign assessment report (w/ inspection plan)		N/A. RA (or 0350 Panel Chairman) review/ sign 0350-related correspondence
	Annual Public Meeting	SRI or BC Meet with Licensee	BC or DD Meet with Licensee	RA (or designee) Discuss Performance with Licensee	RA or EDO Discuss Performance with Senior Licensee Management		N/A. 0350 Panel Chairman conduct public status meetings periodically
	Commission Involvement	None	None	None	Plant discussed at AARM	Commission Meeting with Senior Licensee Management	Commission meetings as requested, restart approval in some cases.
	INCREASING SAFETY SIGNIFICANCE ----->						

Note 1: Other than the CAL, the regulatory actions for plants in the Multiple/Repetitive Degraded Cornerstone column and IMC 0350 column are not mandatory agency actions. However, the regional office should consider each of these regulatory actions when significant new information regarding licensee performance becomes available.

Note 2: The IMC 0350 Process column is included for illustrative purposes only and is not necessarily representative of the worst level of licensee performance. Plants under the IMC 0350 oversight process are considered outside the auspices of the ROP Action Matrix. See IMC 0350, "Oversight of Operating Reactor Facilities in a Shutdown Condition with Performance Problems," for more detail.