Attachment 4

TECHNICAL BASIS FOR ASSESSMENT

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1 INTRODUCTION

The staff's objective in developing a new assessment program was to develop a process that would allow the NRC to integrate various information sources relevant to licensee safety performance, make objective conclusions regarding their significance, take actions based on these conclusions in a predictable manner, and effectively communicate these results to the licensees and to the public.

The following key principles were identified as having a direct effect on the assessment program design:

- Both performance indicators (PIs) and inspection results will be inputs to the assessment program.
- PIs and inspection results will have established thresholds.
- Crossing PI or inspection thresholds will have similar meaning and will result in the NRC considering a similar range of actions.

A review system was developed that provides continuous, quarterly, mid-cycle, and end-of-cycle (annual) reviews of licensee performance data (PIs and inspection results). The system is designed so that the lower level reviews are informal reviews of performance data and are not resource intensive. The Mid-Cycle Review is more formal and is focused on assessing performance to determine appropriate NRC inspection actions. The Mid-Cycle and End-of-Cycle Review meetings generate an assessment report and an inspection planning letter. An agency action review is generally reserved for plants requiring consideration of agency-wide actions. This review is analogous to the review performed at the former Senior Management Meeting (SMM), however the focus has been changed from an assessment activity to an oversight and agency-level action approval function.

An Action Matrix, Figure D-1, was developed to provide guidance for consistent consideration of actions. The actions are graded across five ranges of licensee performance in all response categories (management meeting, licensee action, NRC inspection, communications, and regulatory actions) and in terms of annual communication of assessment results. Action decisions are triggered directly from the threshold assessments of PIs and cornerstone inspection areas. For example, a single White PI or inspection finding would require the NRC to take the actions listed in the Regulatory Response Column of the Action Matrix, such as supplemental inspection to determine the cause of the assessment input degradation. More significant changes in performance, such as one degraded cornerstone, would lead to more significant actions as dictated by the Action Matrix.

The communication of assessment results involves quarterly updates of assessment data, semiannual inspection planning letters, and assessment reports. A public meeting with the licensee will be held at all plants after the conclusion of the annual assessment cycle. Annual assessment letters will be made publicly available prior to the public meetings and the annual Commission meeting.

Details of the reactor oversight process (ROP) assessment program, including the Action Matrix and examples of various assessment letters, are contained in NRC Inspection Manual Chapter (IMC) 0305, "Operating Reactor Assessment Program."

2 LEVELS OF ASSESSMENT REVIEW

The assessment period is a rolling 12-month period that contains 4 quarters of PIs and inspection findings. An inspection finding is normally carried forward in the assessment program for a total of four calender quarters. This is done to account for the fact that some inspections are only conducted once per year, and carrying inspection findings forward for 12 months allows an inspection result to have influence on the assessment program until the next inspection is conducted. Further, holding inspection findings open for 12 months allows them to accumulate with subsequent inspection findings (similar to PIs) to indicate more pervasive and significant performance problems that require an increased level of interaction per the Action Matrix. Inspection findings would not be able to accumulate in this manner if they were not held open for 12 months. However, an inspection finding will not be removed from consideration of future agency actions (per the Action Matrix) until the identified weaknesses in the root cause evaluation associated with the inspection finding have been corrected. As described in more detail later, this is done to ensure that adequate corrective actions are taken by a licensee before the performance issue is removed from consideration from the assessment program.

As shown in Table 1, the assessment program consists of different levels of review as described below. The resident inspectors and branch chiefs in each regional office continuously monitor the performance of their assigned plants using the results of the PIs and inspection findings. Inspections are conducted on a continuous basis in accordance with IMC 2515 and PIs are reported quarterly by the licensee. Assessment activities occur at quarterly intervals following every submittal of new PI data. However, if an inspection finding is identified during the quarter that has risk significance (i.e. other than Green) the regional office may address this issue without waiting until the end of the quarter, if appropriate. One of the key decisions that the staff made during the development of the ROP was that the NRC must reassess licensee performance whenever new performance data is made available. This requires that the agency have a routine quarterly assessment cycle for all plants and to reassess licensee performance whenever the evaluation of a significant inspection finding is finalized.

PIs are not intended to be monitored on a real time basis. However, the regional office may take the appropriate action, if based on current inputs, a PI will cross a performance threshold at the end of the quarter. Additionally, the agency will take actions as appropriate to address plants with significant performance problems. Plants with significant performance problems are those plants that are in the Multiple/Repetitive Degraded Cornerstone column or the Unacceptable Performance column of the Action Matrix. Again, this approach is based on the underlying premise that the NRC will act on performance data when it is known, and not wait for the end of an assessment period to take the appropriate actions.

The inspectors will normally use the Significance Determination Process (SDP) to evaluate inspection findings for risk significance. However, the NRC enforcement policy also applies violations for issues which the SDP process can not evaluate for risk significance (e.g., violations that may impact the NRC's ability for oversight of licensed activities and violations that involve willfulness, including discrimination). As discussed in more detail later, these issues should be considered in determining the range of agency actions within the appropriate column of the Action Matrix. While these issues can not be evaluated through the SDP and given a risk significance for follow-up actions, they are important and cumulatively may warrant consideration of a deviation from the Action Matrix. Regional

management should notify the licensee in writing if additional inspection activities are scheduled to occur within the current quarter via an Assessment Follow-Up Letter.

2.1 Quarterly Review

Each region conducts a quarterly review utilizing PI data submitted by licensees and inspection findings compiled over the previous 12 months. This review is conducted within 5 weeks after the conclusion of each quarter of the annual assessment cycle. Five weeks was chosen to ensure that the assessments were conducted in a timely manner following the submittal of the PI data by the licensee, gives the NRC sufficient time to process and post the PI data internally, and allows regional inspector staff and management sufficient time to review and analyze the data.

The responsible regional Branch Chief reviews the most recently submitted PIs and the inspection findings contained in the plant issue matrix (PIM) to identify any changes in performance trends. The Branch Chief shall utilize the Action Matrix to identify the potential scope of NRC actions not already embedded in the existing inspection plan. The regional office will notify the licensee via an Assessment Follow-Up Letter when assessment input thresholds are crossed, if a letter has not already been issued. A letter is not issued during these quarterly reviews for those plants that do not have any new PIs or inspection findings that have crossed a threshold since there are no additional agency actions to communicate and the assessment results are posted on the NRC's external web page.

An Assessment Follow-Up Letter should be issued within 2 weeks of completing the quarterly review, if applicable. The purpose of the Assessment Follow-Up letter is to communicate to all stakeholders the change in the assessment of licensee performance based on new input, and the actions planned to be taken in accordance with the Action Matrix. The letter is issued within 2 weeks following the regional assessment of licensee performance to ensure Agency actions in response to any inputs with a crossed threshold are communicated to the licensee and public in a timely manner. The regional office should still perform the supplemental inspection procedure even if a performance indicator returns to the Green band prior to conducting the supplemental inspection. Licensee corrective actions may result in a PI returning to the Green band prior to the NRC completing it's supplemental inspection. The supplemental inspection should still be conducted to independently verify that the corrective actions taken by the licensee are sufficient to evaluate the root causes and extent of condition of the underlying performance deficiency to prevent recurrence.

Additionally, for plants whose performance is in the Multiple/Degraded Cornerstone column of the Action Matrix, consideration shall be given at each quarterly review for engaging senior licensee and agency management in discussions associated with: (1) transferring the plant to the IMC 0350 process and (2) declaring licensee performance to be unacceptable. As described in more detail later in this Appendix, if the agency determines that a licensee's performance is unacceptable then a shutdown order will be issued. This is an important consideration since the assessment program is continuous and designed to respond accordingly as additional indications of performance deficiencies are received, and not wait for the regularly scheduled annual assessment meeting with senior Agency managers.

2.2 Mid-Cycle Review Meeting

A Mid-Cycle Review meeting will be completed within 6 weeks of the end of the second quarter of the annual assessment cycle to ensure the timely review of the most recently submitted PIs and most recently documented inspection findings. The purpose of the Mid-Cycle Review meeting is to allow a higher level of regional management to periodically review and discuss the performance of all plants to ensure performance assessment and Agency actions are being conducted in a consistent manner across the region. The Mid-Cycle Review also provides the opportunity for regional management to review and reallocate regional inspection resources. Each regional office conducts a Mid-Cycle Review utilizing the most recent quarterly PIs and inspection findings compiled over the previous 12 months. This review incorporates activities from the quarterly review after the conclusion of the second quarter of the annual assessment cycle. This review considers the conclusions of any independent assessments of licensee performance such as the Institute of Nuclear Power Operations (INPO) and the 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 . This revision to IMC 0305 was incorporated as a result of a Davis-Besse Lessons Learned Task Force recommendation to consider independent assessments of licensee performance. Additional activities include planning inspection activities for the next 18 months as well as discussing any insights into potential cross-cutting issues (problem identification and resolution, human performance, and safety-conscious work environment). The Action Matrix will be used to determine the scope of agency actions in response to the assessment inputs. Each plant receives a Mid-Cycle assessment letter which communicates the results of the Mid-Cycle review of licensee performance and provides an updated inspection plan.

The Mid-Cycle Review Meeting is chaired by a regional Division of Reactor Projects (DRP) or Division of Reactor Safety (DRS) Division Director to ensure regional consistency in reviewing licensee performance and identifying the appropriate Agency response per the Action Matrix. 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 should coordinate with the appropriate DRP Branch Chiefs to provide adequate support for the presentation and the development of the inspection plan.

The Mid-Cycle Letter for each plant shall be issued within 3 weeks of the completion of the Mid-Cycle Review to ensure that any Agency actions to be taken in response to inputs that have crossed thresholds are communicated to the licensee and public in a timely manner. The letter should contain a summary of risk significant PIs and inspection findings (including any associated substantive cross-cutting issues) for the most recent quarter as well as discussion of previous action taken by the licensee and the agency relative to these issues. The letter may also contain a discussion of substantive cross-cutting issues. 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. Although regulatory actions are not taken on these items alone, they are mentioned in the Mid-Cycle Letter to highlight them so that actions can be taken by the licensee to address any performance issues before they result in more significant safety concerns.

2.3 End-of-Cycle Review

Each regional office conducts an End-of-Cycle Review which is a comprehensive assessment of licensee performance using the most recent PIs and inspection findings from the previous calendar year . The purpose of the End-of-Cycle Review is to perform an annual overall review and assessment of the performance of all plants, Agency actions taken in response to crossed thresholds, and the effectiveness of licensee corrective actions to address identified performance deficiencies. The End-of-Cycle Review provides senior regional and Headquarters managers the opportunity to review those plants with significant performance deficiencies and the Agency actions taken and planned in response to licensee performance issues. This review considers the conclusions of any independent assessments of licensee performance such as the Institute of Nuclear Power Operations (INPO) and the International Atomic Energy Agency (IAEA) Operational SafetyRevire Team (OSART) inspections. The purpose of considering independent assessments is to provide a means of self-assessing the NRC inspection and assessment process. This revision to IMC 0305 was incorporated as a result of a Davis-Besse Lessons Learned Task Force recommendation to consider independent assessments of licensee performance. Each plant receives an Annual Assessment Letter which communicates the results of the agency's review of licensee performance and provides an updated inspection plan. Additional activities include planning inspection activities through the next year, discussing any substantive cross-cutting issues (problem identification and resolution, human performance, and SCWE, and developing an input (if applicable) to support the Agency Action Review Meeting (AARM). The End-Of-Cycle meeting should be held within 6 weeks of the end of the assessment cycle. Six weeks was chosen to ensure that the assessments were conducted in a timely manner following the submittal of the PI data by the licensee, gives the NRC sufficient time to process and post the PI data internally, and allows regional inspector staff and management sufficient time to review and analyze the data. The Action Matrix will be used to determine the scope of agency actions in response to assessment inputs.

The End-of-Cycle Review Meeting is chaired by the Regional Administrator (or designee) with the DRP and DRS Division Directors (or designees) presenting the results of the annual review for each plant. Headquarters program offices also participate during the End-of-Cycle meeting to provide: (1) an opportunity for these offices to share their insights into license 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 within their cognizance.

An End-of-Cycle Summary Meeting may be necessary at the conclusion of the End-of-Cycle Review Meeting to summarize the results of the end-of-cycle review with the Director, Office of Nuclear Reactor Regulation (NRR), or another member of the NRR Executive Team. The End-of-Cycle Summary Meeting is an informational meeting (vice a decision-making meeting) which is conducted to review the performance of those plants with significant performance issues or substantive cross-cutting issues, and agency actions taken or planned, with senior NRC Headquarters management.

The output of the End-of-Cycle Review is the Annual Assessment Letter which is issued before the annual public meetings or Commission meeting. In addition to providing an overview of plant performance for the last 12 months, the letter may also contain a qualitative discussion of substantive cross-cutting issues. 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. As with the Mid-Cycle letter, although regulatory actions are not taken on these items alone, they are mentioned in the End-of-Cycle Letter to highlight them so that actions can be taken by the licensee to address any performance issues before they result in more significant safety concerns.

All of the Annual Assessment Letters shall be sent to licensees following the completion of the End-of-Cycle Meetings and before the annual public meetings and Commission meeting to ensure that the results of the annual assessments are available to the licensees' and public prior to the Commission meeting. This ensures that the assessment results for all plants are publically available to all stakeholders prior to these meetings and that they are aware of planned agency actions.

2.4 Agency Action Review Meeting

An AARM is conducted several weeks after the issuance of the Annual Assessment Letters. This meeting is attended by senior NRC managers and is chaired by the Executive Director for Operations (EDO) or designee. The purpose of this meeting is to allow a collegial review by senior NRC managers of: (1) the appropriateness of agency actions for plants with significant performance issues using the 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 material licensees with significant performance problems, and (4) the results of the ROP 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. The AARM is similar in many respects to the SMM which was conducted under the previous oversight program. One notable difference is that while the purpose of the SMM was to assess licensee performance and determine appropriate agency actions, the purpose of the AARM is to confirm the adequacy of Agency actions determined during the End-of-Cycle meeting using the Action Matrix.

The Regional Administrators (or designees) and the Director of NRR (or designees) will brief the participants on overall industry performance, ROP self-assessment results, and any plants with significant performance weaknesses as determined by the Action Matrix. Other program offices such as the Agency Allegations Advisor, Office of Investigations (OI), Office of Enforcement (OE), Office of Nuclear Regulatory Research, and Office of General Counsel (OGC) will also attend the meeting. The role of these various AARM participants is to: (1) provide an opportunity for these offices to share their insights into license performance over the course of the annual assessment period and (2) provide clarifying or ancillary remarks regarding ongoing or current issues within their cognizance.

2.5 Commission Meeting

The EDO will brief the Commission annually on the results of the AARM, including a discussion of any deviations from the ROP Action Matrix . The Commission should be briefed within 4 weeks of the completion of the AARM to ensure the timely dissemination of the assessment results.

2.6 Annual Meeting with Licensee

A public meeting with the licensee is scheduled within 16 weeks of the end of the assessment period to discuss the results of the NRC's annual assessment of the licensee's

performance. This timeliness criteria is intended to ensure that the discussion of licensee performance is still pertinent to current licensee performance as documented in the Annual Assessment Letter. 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. This flexibility allows the regional offices to focus their resources on plants with more significant performance problems immediately after the annual assessment letters are issued. 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. The annual public meeting is intended to provide a forum for a candid discussion of issues related to the licensee's performance. NRC management, as specified in the Action Matrix, will discuss the agency's evaluation of licensee performance as documented in the Annual Assessment Letter.

The Annual Assessment Letters provide the minimum 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. 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 before the conclusion of the meeting.

3 ACTION MATRIX

The Action Matrix was developed with the philosophy that, within a certain level of safety performance (i.e., 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 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.

The graded approach to assessment is applied in many different ways to improve the effectiveness and efficiency of NRC actions. Early in the development of the new assessment program, it was determined that varying levels of NRC resources and management oversight could be applied to different levels of licensee performance. For example, the scope of inspection, and inspection resources applied will be increased as the assessment inputs indicate performance deficiencies of a more significant nature. Likewise, it was decided that the level of NRC management oversight for all plants should be graded based on plant performance. For example, a plant with a single White input can have its meetings with the licensee conducted by a regional Division Director. However, a plant with more significant issues resulting in performance in the Degraded Cornerstone column of the Action Matrix would have its meetings conducted by the Regional Administrator (or designee).

The Action Matrix specifies a range of actions appropriate for each level of performance. These ranges of action are defined as follows:

- 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 order to arrive at a shared understanding of the performance issues, underlying causes, and planned licensee actions.

- 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.

- NRC Inspection. The range of NRC inspection activities in response to performance indicated by the appropriate column of the Action Matrix.

- 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.

- Communication. Identifies the appropriate level of NRC management to communicate the assessment results to the licensee and public.

The Action Matrix lists expected NRC and licensee actions based on the inputs to the assessment program. Actions are graded such that the agency becomes more engaged as licensee performance declines. The thresholds for each column of the Action Matrix were established in a risk-informed manner to indicate declining licensee performance of a more pervasive and systemic nature as you proceed from the left-most column across the Action Matrix. As assessment inputs (inspection findings and PIs) that have crossed thresholds accumulate (both in quantity of inputs and significance of thresholds crossed), required NRC actions become more significant in resources applied, scope of inspection, and level of NRC management oversight. This is described in more detail below in the description of expected NRC and licensee actions for each column of the Action Matrix:

- 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. The NRC will periodically review and evaluate the licensee corrective action taken for identified deficiencies through routine problem identification and resolution inspections conducted under the baseline program.

- Regulatory Response Column - Assessment inputs result in one or two White inputs (in different cornerstones) in a Strategic Performance Area. One or two White inputs in different cornerstones indicate the need for NRC interaction above the baseline level of inspection since licensee corrective actions were unable to maintain a level of performance within the Green band. However, indications at this level indicate performance deficiencies that appear to be isolated in nature, and warrant the lowest level of supplemental inspection by the NRC. 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 conduct of supplemental inspection procedure (IP) 95001. Due to the apparent isolated nature of these performance deficiencies, the purpose of conducting IP 95001 is to independently review the licensees corrective actions to determine if they are appropriate to correct the underlying deficiency and prevent recurrence.

- Degraded Cornerstone Column - Assessment inputs result in a degraded cornerstone or 3 White inputs to any Strategic Performance Area. A degraded cornerstone may result from two or more White inputs in a single cornerstone, or a single Yellow input in a cornerstone. These different combinations warrant increased NRC interaction since they represent a more substantial degradation focused on a particular aspect of licensee performance, with a minimal reduction in safety margin overall. 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, along with an independent assessment of the extent of condition, during supplemental IP 95002. An independent assessment of the extent of condition of the performance deficiency is performed to ensure that the licensee has throughly evaluated the causes of the problems.

- Multiple/Repetitive Degraded Cornerstone Column - Assessment inputs result in a repetitive degraded cornerstone, multiple degraded cornerstones, multiple Yellow inputs or a single Red input. These different combinations warrant an increase in the level of interaction from the previous column since the quantity of cornerstones affected, length of time a single cornerstone is degraded, or the number of significant inputs indicates a systemic and pervasive degradation of licensee performance. Performance in this column also warrants the consideration of additional regulatory actions (e.g., Confirmatory Action Letter or Order) as necessary since these performance deficiencies may represent a significant reduction in safety margin. 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 NRC will perform supplemental IP 95003 to determine the breadth and depth of the performance deficiencies. Following the completion of the inspection, the NRC will decide whether additional agency actions are warranted, including additional supplemental inspection, a demand for information, or issuance of an order, up to and including a plant shutdown. A Confirmatory Action Letter (CAL) will, at a minimum, document licensee commitments contained in their Performance Improvement Plan. These regulatory actions may also be considered prior to the completion of the supplemental inspection, if warranted. While these regulatory actions are not mandatory, except for issuance of a CAL, the regional office should consider each of them when significant new information regarding licensee performance becomes available. These regulatory actions should be implemented, when appropriate, in accordance with the NRC Enforcement Manual. Due to the depth and breadth of performance issues reflected by a plant being in this column, it is prudent to ensure actual performance improvements have been made prior to closing out the inspection findings and exiting this column of the Action Matrix. IMC 0305 includes specific information to consider prior to closing out inspection findings, customized follow-up actions, and documentation of Agency decisions.

- Unacceptable Performance Column - Licensee performance is unacceptable and continued plant operation is not permitted within this column. In general, it is expected that entry into the Multiple/Repetitive Degraded Cornerstone column of the Action Matrix and completion of supplemental IP 95003 will precede consideration of whether a plant is in the Unacceptable Performance Column. If the agency determines that a licensee's performance is unacceptable then a shutdown order will be issued in accordance with the NRC Enforcement Manual. Additional information on the determination of unacceptable performance can be found in Section 6 of this Appendix.

- IMC 0350 Column - The criteria for entrance into the IMC 0350 process 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.

Some distinct issues may result in simultaneously crossing a PI threshold and generating a safety significant inspection finding. Although an attempt was made during the development of the ROP to minimize this kind of double-counting between PIs and inspection, some double-counting is desirable. This is because the PIs generally count and aggregate single occurrences, and therefore are often not good at reflecting the significance of a particular event. For example a PI might count personnel overexposures, but a particularly egregious and significant overexposure would not be counted any differently than one that was just over the personnel exposure limit. Therefore, in situations like this, the SDP is relied upon to place the proper safety significance on the individual occurrence. However, this would result in two assessment inputs from the same occurrence combining to cause increased regulatory action per the Action Matrix. Therefore, issues with the same underlying cause should not be double-counted in the assessment program to ensure that inappropriately excessive regulatory action is not taken in response to a single event. However, the most conservative significance characterization related to the PI and the inspection finding (i.e., Yellow vs. White) shall be used to determine the appropriate agency action according to the Action Matrix. This is not considered a deviation from the Action Matrix.

The date used for consideration in the assessment program is the date of the end of the pertinent inspection period for the finding regardless of the date of the exit meeting. This ensures that the 12-month time frame for consideration of the inspection finding in the assessment program starts at the date of discovery for the finding. After final determination of the significance of an inspection finding the regional office shall refer back to the appropriate date to determine if any additional action would have been taken had the significance of the inspection finding been known at that time. This is done to ensure that the significance of the finding is applied to the appropriate period of time that is reflective of licensee performance, and NRC actions previously taken are reconsidered to determine what the appropriate action would have been if the new finding had been known at the time.

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 (PI 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. In general, licensees should be given an opportunity to correct any identified deficiencies prior to re-inspection. For inspection findings, the original performance issue will remain open beyond the normal four quarters and will not be removed from consideration in the assessment program until the weaknesses in the evaluation are addressed and corrected. This allows the NRC to continue to consider the original performance deficiency in the assessment program until the licensee adequately addresses and corrects the problem. For significant weaknesses in the licensee's evaluation of a performance issue that are associated with a PI, a parallel inspection finding will be opened and given the same color as the PI. However, this finding will not be double-counted in the assessment program. Due to the nature of how PIs are calculated, a PI may return to the Green band in spite of the fact that the licensee has not taken adequate corrective actions to address the underlying performance issue. The issuance of a parallel inspection finding ensures that this performance deficiency can continue to be considered in the assessment program until the licensee adequately addresses and corrects the problem. The finding will be removed from consideration of future agency actions (per the Action Matrix) when the inadequacies in the licensees efforts to address the issue have been corrected.

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 to either increase or decrease agency action. A deviation is defined as any regulatory action taken that is inconsistent with the range of actions described in the pertinent column of the Action Matrix. The EDO shall approve all deviations from the Action Matrix. The EDO was chosen as the approval authority to provide an appropriate level of senior Agency management oversight to assure agency-wide consistency in considering the need for a deviation from the Action Matrix. Approved Action Matrix deviations will be discussed at the AARM and subsequent Commission meeting on the results of the AARM.

Figure 2 provides a summary of the scope and basis of the assessment program and Action Matrix, and provides a summary of the significant changes to the scope and basis that have been made.

4 TREATMENT OF ITEMS ASSOCIATED WITH OLD DESIGN ISSUES AND ENFORCEMENT DISCRETION

An Old Design Issue is 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 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.

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.

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:

1. 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.

2. 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.

3. It was not likely to be identified by recent ongoing licensee efforts such as normal surveillance or quality assurance activities, or evaluation of industry information.

4. The finding does not reflect a current performance deficiency associated with existing licensee programs, policy, or procedure.

A finding that includes a violation that meets all applicable requirements for enforcement discretion and meets the criteria for old design issues will be processed as specified below. The intent of this approach 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 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 the appropriate 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 <u>not</u> 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.

5 ROLE OF CROSS-CUTTING ISSUES, TRADITIONAL ENFORCEMENT, AND ALLEGATIONS

There are other inputs, beside PIs and inspection findings, which can have an influence on the actions taken through the assessment program. These items for the most part include documented substantive cross-cutting issues, issues for which traditional enforcement actions were taken, and allegations. While NRC regulatory actions per the Action Matrix are not be taken in response to these issues alone, they can influence the range of actions taken when PI and inspection thresholds are crossed. This influence, for example, can be in the form of adjusting the scope of the supplemental inspection performed in response to White inspection finding to focus some inspection effort on the performance deficiencies highlighted by a previously documented significant adverse trend in a cross-cutting issue.

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. Entry criteria for a substantive cross-cutting issue is greater than 3 inspection findings with a common theme in the current 12-month assessment period with documented cross-cutting aspects in one of the three cross-cutting areas. Additionally, the Agency must have 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. 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
- resources
- organization

Problem Identification and Resolution:
- identification
- evaluation
- corrective action

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).

If the regional office determines that a substantive cross-cutting issue exists, the mid-cycle or annual assessment letter should summarize the specific substantive cross-cutting issue 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.

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. This approach allows for varying level of licensee engagement depending upon the scope of the substantive cross-cutting issue, licensee efforts to date, and how long the issue has been open.

6 TRANSITIONING TO THE IMC 0350 PROCESS

The purpose of IMC 0350, "Oversight of Operating Reactor Facilities in a Shutdown Condition With Performance Problems," is to establish criteria for the oversight of plants that are in a shutdown condition as a result of significant performance problems or events. The normal criteria for considering a plant for the IMC 0350 process are: (1) plant performance is in the Multiple/Repetitive Degraded Cornerstone column or the Unacceptable Performance column of the Action Matrix, (2) the plant is shutdown 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 or an agency order, and (4) an agency management decision is made to place the plant in the IMC 0350 process. At this point, periodic assessment (quarterly, mid-cycle, and end-of-cycle) of licensee performance would no longer be under the auspices of the routine IMC 0305 assessment program, but would be transferred to the IMC 0350 process.

7 UNACCEPTABLE PERFORMANCE

Unacceptable performance represents situations in which the NRC lacks reasonable assurance that the licensee can or will conduct its activities without undue risk to public health and safety. Examples of unacceptable performance may include:

- Multiple significant violations of the facility's license, technical specifications, regulations, or orders.

- 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).

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

During the development of the new assessment program, the staff attempted to develop more objective criteria to identify unacceptable performance and the need for the regulatory actions described in the Unacceptable Performance Column of the Action Matrix. However, the staff determined that it was too difficult to identify adequate objective measures that could be relied upon to indicate unacceptable performance. The staff concluded that the

determination of unacceptable performance must remain a subjective decision by senior Agency management with the application of the regulatory actions taken in accordance with the guidance of the Enforcement Manual. However, the use of PIs and inspection findings with risk-informed performance thresholds, used in conjunction with the above noted examples of unacceptable performance, should make the decision of unacceptable licensee performance more understandable to the licensees and public.

8 ASPECTS OF THE ASSESSMENT PROGRAM CONSIDERED BUT NOT INCLUDED

Table 2 provides a detailed discussion of various aspects of the assessment program that were considered during its development, and the basis for not including them.

Figure 1

		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[1]	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.

Basis Summary Sheet	
Procedure No.: IMC 0305	**Title:** Operating Reactor Assessment Program

Scope: IMC 0305 applies to all operating commercial nuclear reactors, except those sites that are under IMC 0350, "Oversight of Operating Reactor Facilities in Shutdown Condition with Performance Problems." The assessment program as described in IMC 0305 does not restrict the NRC from taking any necessary actions to fulfill its responsibilities under the Atomic Energy Act of 1954 (as amended).

Basis: The assessment program uses PIs and inspection findings with risk-informed performance thresholds as indications of degradation of licensee performance. Based on the accumulation of these inputs, a range of appropriate NRC actions is specified by the Action Matrix. A graded approach to NRC inspection resources, scope of inspections, and management oversight is applied to the actions taken for different levels of licensee performance. For example, those plants without any inputs with crossed thresholds only receive the baseline inspection effort and performance is reviewed at a lower level of NRC management. However, as plants accumulate inputs with crossed thresholds, supplemental inspection above the baseline is conducted and higher levels of NRC management are involved in the assessment of licensee performance. Other factors that can affect the assessment program are significant cross-cutting issues, traditional enforcement items, and allegations. While agency action in the assessment program is not taken for these items alone, they can influence the range of actions taken when a PI or inspection finding crosses a threshold.

Significant Changes and Basis:

March 2001 - Added EDO responsibility for authorizing all deviations from the Action Matrix. This was done, by Commission direction, to ensure consistency and the appropriate level of senior NRC management oversight for deviating from the Action Matrix. Added the performance of an End-of-Cycle summary meeting between the regional offices and the Director of NRR. This was done to ensure senior NRR management was aware of the NRC actions being taken by the regions for those plants with significant performance issues. Added a note that the regulatory actions listed in the Multiple/Repetitive Degraded Cornerstone column of the Action Matrix are not mandatory. This was done to clarify the fact that these actions are those that should be considered for performance in this column of the Action Matrix, and they do not all have to be performed.

February 2002 - Added a discussion on the treatment of old design issues, provided a definition of a substantive cross-cutting issue, and included examples of when deviations from the Action matrix should be considered.

February 2003 - Added guidance to the regions for closing out findings for plants in the multiple/repetitive degraded cornerstone column, clarified guidance on the treatment of old design issues, and clarified the time frame for counting inspection findings in the assessment program.

January 2004 - Provided guidance on interface issues between the IMC 0350 process and the normal assessment program, added response options for plants that have been determined to have substantive cross-cutting issues, and clarified when to start counting inspection findings in the assessment program

December 2004 - Added a requirement to consider independent assessments during the mid-cycle and end-of-cycle assessment reviews (DBLLTF 3.3.3.1), added more guidance on defining and following up on substantive cross-cutting issues, and incorporated commitments from several feedback forms.

Figure 2 Assessment Basis Summary Sheet

Table 1 Levels of Assessment Review

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 only if thresholds crossed
Quarterly	Once per quarter/ 5 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 only if thresholds crossed
Mid-Cycle	At mid-cycle/ 6 weeks after end of second quarter	DRS or DRP Division Director (DD)*, DRP and DRS BCs	Detect trends, plan inspection	Mid-Cycle letter with an inspection plan through the next 18 months
End-of-Cycle	At end-of-cycle/ 6 weeks after end of assessment cycle	DRS or DRP DD, RAs*, BCs, principal inspectors, SRAs, HQ offices as appropriate	Assessment of plant performance, oversight and coordination of regional actions	Annual Assessment Letter with an inspection plan through the next 18 months
End-of-Cycle Summary Meeting	Seven weeks after the end of the fourth quarter	DIR NRR, RA s, BCs, IIPB, OE, OI, other HQ offices as appropriate	Summarize results of the end-of-cycle review meetings	Information to be discussed at the Agency Action Review Meeting
Agency Action Review	Annually/ several weeks after issuance of annual assessment letters	EDO*, DIR NRR, RAs, DRS/DRP DDs,IIPB, OE, OI, other HQ offices as appropriate	Review of the appropriateness of agency actions	Commission briefing, followed by public meetings with individual licensees to discuss assessment results

Table 2 Assessment Program Aspects Considered But Not Included	
Program Aspect Considered	**Basis for Not Including**
Regulatory Conference versus Regulatory Performance Meeting	The meeting with a licensee described in the first row of the Action Matrix was originally called a Regulatory Conference. The purpose of these meetings was originally envisioned to cover a broad spectrum of topics, including meetings necessary to discuss the significance of individual inspection findings as they were processed through the SDP and meetings to discuss licensee performance, such as following supplemental inspections. Implementation of the ROP proved that it was difficult to differentiate the purposes of these different meetings. To provide clarification, the term Regulatory Conference was applied to those licensee meetings conducted in accordance the SDP and Regulatory Performance meeting was applied to those meetings conducted to discuss licensee performance.
Number of white findings for entry into the degraded cornerstone column of the Action Matrix	The staff wrote a SECY memorandum in response to an SRM dated June 10, 2003 that asked the staff, among other things, to evaluate increasing the threshold for a degraded cornerstone column to three white findings or performance indicators. The Commission memorandum (ADAMS accession # Ml031900342) concluded that the staff does not support changing the threshold.