May 17, 2005

MEMORANDUM TO: Chairman Diaz

Commissioner McGaffigan Commissioner Merrifield Commissioner Jaczko Commissioner Lyons

FROM: Luis A. Reyes /RA/

**Executive Director for Operations** 

SUBJECT: CROSS-CUTTING ISSUES IN REACTOR OVERSIGHT PROCESS

During the recent Regulatory Information Conference (RIC) on March 8-10, 2005, the topic of substantive cross-cutting issues in the Reactor Oversight Process (ROP) was discussed. During the discussions, the industry (see attachment) raised an issue regarding the rising number of substantive cross-cutting issues documented in the mid-cycle and annual assessment letters in the past few years. The industry's concern resided in the fact that there has not been a corresponding increase in the number of greater than green findings or performance indicators over the same period. Additionally, the industry perceived an inconsistent application of the use of substantive cross-cutting issues across the Agency and the lack of clear exit criteria.

Inspection Manual Chapter (IMC) 0305, "Operating Reactor Assessment Program" contains the guidance for determining if a substantive cross-cutting issue should be described in the midcycle or annual assessment letter. A description of a substantive cross-cutting issue would be included in the assessment letters if all of the following conditions were met: 1) There are multiple (greater than 3) green or greater-than-green findings within the current 12-month assessment period with cross-cutting aspects, 2) these findings have a common causal theme across cornerstones, and 3) the Agency has a concern with the licensee's scope of efforts or progress in addressing the cross-cutting area deficiencies.

Substantive cross-cutting issues have been part of the ROP since initial implementation at all plants on April 1, 2000. In SECY-99-007, "Recommendations for Reactor Oversight Process Improvements," the staff discussed "aspects of licensee performance (such as human performance, the establishment of a safety conscious work environment, common cause failure, and the effectiveness of licensee problem identification and corrective action programs) that are not identified as specific cornerstones, but are important to meeting the safety mission." The initial version of Inspection Manual Chapter (IMC) 0305, "Operating Reactor

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Oversight Program" dated April 24, 2000, stated that the mid-cycle and annual assessment letters shall contain "a qualitative discussion of adverse trends as indicated by substantial cross-cutting issues that have not yet resulted in performance indicators or inspection findings outside of the licensee response band."

The purpose of including substantive cross-cutting issue discussions in the assessment letters is to identify negative performance trends before the performance deficiencies manifest themselves as significant findings or events. Consistency in implementing the program office guidance has been a priority for the staff, as well as increasing the objectivity and predictability of the overall process. The regional offices prepare a detailed performance summary for every plant that has the potential for a substantive cross-cutting issue. This performance summary is discussed at the mid-cycle and end-of-cycle assessment review meetings in which staff and management from various offices participate.

Additionally, plants that are determined to have substantive cross-cutting issues are reviewed by senior management at the End-of-Cycle Summary meeting before the assessment letters are issued to the licensees.

Following the recent end-of-cycle review meetings, I believe the staff more consistently implemented the guidance. However, several lessons learned were noted during the reviews, and the staff has committed to issue a revision to the guidance in order to support the mid-cycle review meetings scheduled for August 2005.

Over the last five years, the staff has revised the guidance, as discussed below, to refine the Agency's guidance on criteria for developing a substantive cross-cutting issue, to document Agency concerns, and to add subsequent Agency follow-up actions. This, in part, explains the increase in substantive cross-cutting issues which the industry noted during the discussions at the RIC.

Important Related Revisions to Program Guidance

## February 2002

The February 2002 revision better defined cross-cutting issues by adding substantive cross-cutting issues to the definition section of IMC 0305. Specifically:

<u>Substantive Cross-Cutting Issue</u>. As used in this chapter, a common performance theme (i.e. related causal factor) as evidenced by a significant number of current inspection findings in the cross-cutting areas of human performance, problem identification and resolution, and safety-conscious working environment.

In addition, more specific guidance for making a decision on substantive cross-cutting issues was provided in IMC 0305. This guidance was based on the premise that plants which had significant performance issues in the three cross-cutting areas would be revealed through safety-significant performance indicators (PIs) or inspection findings. The regions were provided the following guidance in considering a substantive cross-cutting issue:

There are multiple green or safety significant inspection findings within the assessment period with documented causal factors in the areas of human performance, problem identification and resolution, or safety conscious work environment.

The causal factors have a common theme. Examples would be when there are numerous instances of green findings in areas such as operations department personnel failure to follow procedures, ineffective evaluation of performance deficiencies, or inadequate system engineering support of operability determinations.

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 either state that the issue has been satisfactorily resolved or summarize the agency's assessment of the licensee's progress in addressing the issue.

After the issuance of the February 2002 revision of IMC 0305, the number of substantive cross-cutting issues increased, as shown in the table below:

Assessment	Number of Sites with Substantive Cross-Cutting Issues	
End-of Cycle 2001	5	
Mid-Cycle 2001	6	
End-of Cycle 2002	8	
Mid-Cycle 2002	12	
End-of Cycle 2003	13	
Mid-Cycle 2003	17	
End-of Cycle 2004	14	
Mid-Cycle 2004	14	
End-of Cycle 2005	15	

This revision added increased clarification and emphasis on substantive cross-cutting issues in the assessment program. Previous guidance in this area had been limited and may have resulted in under-reporting of plants with substantive cross-cutting issues. After the initial increase in the number of substantive cross-cutting issues following the 2002 revision, the total number of sites with substantive cross-cutting issues has remained between 12 and 17.

## January 2004

The January 2004 guidance revision added regulatory follow-up options for those plants with substantive cross-cutting issues. Prior to this revision, a substantive cross-cutting issue would be discussed in the assessment letters, but no other interaction with the licensee was identified. After January 2004, the regional offices were provided with follow-up options for plants where a

substantive cross-cutting issue was raised in at least two consecutive assessment letters. The options include: (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 to be held with the licensee.

## December 2004

The December 2004 revision provided additional specific guidance for the determination of a substantive cross-cutting issue. Specifically:

- A significant number of findings was defined as more than three (i.e., four or more findings).
- The subcategories or bins were provided for the cross-cutting areas of problem identification and resolution (PIR) and human performance (HP). These bins were provided to aid the regions in determining if there is a common causal factor.
- Highlighted the third criteria for determining a substantive cross-cutting issue: a lack of confidence in the licensee's characterization and progress in addressing the cross-cutting theme.
- Defined 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 entrance criteria.

Following the recent end-of-cycle review meetings, the staff believes that the guidance was more consistently implemented across the regions. Lessons learned were noted during the reviews, and the staff has committed to issue a further revision to the guidance document in order to support the mid-cycle review meetings scheduled for August 2005. The staff has also asked for industry feedback on the guidance document and on the recently issued annual assessment letters.

## Summary

The staff believes that human performance, the establishment of a safety conscious work environment, and the effectiveness of licensee problem identification and corrective action programs are important in meeting the Agency's safety mission and identifying negative performance trends before the performance deficiencies manifest themselves as significant findings or events.

The staff agrees that the number of substantive cross-cutting issues has increased since the start of the ROP in 2000. However, the staff believes that this aspect of the ROP has been evolving since initial implementation, and that it wasn't until 2002 that the guidance documents adequately addressed this area. Since 2002, the numbers of sites with substantive cross-cutting issues has remained relatively consistent and the staff has continued to refine the

guidance to be more objective and predictable. Planned changes include defining a minimum threshold for including a cross-cutting element to a finding, better definitions of the human performance bins, and re-visiting the exit criteria for substantive cross-cutting issues. The staff will to continue to work with stakeholders to further refine the guidance as needed.

Attachment: As stated

cc: SECY OGC DOC OCA OPA CFO guidance to be more objective and predictable. Planned changes include defining a minimum threshold for including a cross-cutting element to a finding, better definitions of the human performance bins, and re-visiting the exit criteria for substantive cross-cutting issues. The staff will to continue to work with stakeholders to further refine the guidance as needed.

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