#### December 3, 2001

MEMORANDUM TO: Geoffrey E. Grant, Director, Division of Reactor Projects

From: Christine A. Lipa, Chief

Reactor Projects Branch 4 /s/Christine A. Lipa

SUBJECT: SELF-ASSESSMENT RESULTS: INSPECTION REPORT

**THRESHOLDS** 

Attached is the final report of the inspection threshold self-assessment, including conclusions and recommendations for improvements. The review included 51 documented inspection findings contained in 26 reports that were issued between March and August 2001 and focused on evaluating the consistency across the Division of Reactor Projects in implementing the inspection thresholds defined in MC 0610\* by the Group 1,2, and 3, questions.

The results indicate that in most cases the division appropriately applied the Group 1 questions in determining whether issues are minor or more than minor. The conclusions regarding the Group 2 and Group 3 questions indicate that further clarification of IMC 0610\* guidance and additional training on these thresholds would help improve consistency in determining either if a cornerstone is impacted or if extenuating circumstances apply to document the finding.

The documentation of licensee-identified NCVs was evaluated and found to be somewhat inconsistent, with some inspection report writeups including the answers to the group 1 and 2 questions and explaining the SDP process to arrive at Green, and others providing only brief documentation of the requirement violated. These inconsistencies are most likely due to limited and somewhat conflicting guidance for these issues. The self-assessment also found examples of findings that were not documented in accordance with the guidance either with respect to enforcement (i.e, how was the requirement violated) or in answering the threshold questions. The specifics of these findings are included in the report.

Recommendations for improving consistency in determining which findings impact cornerstones and improving the documentation of licensee-identified NCVs include the submittal of feedback forms requesting clarification of program guidance and providing training at the upcoming inspector seminar.

Attachment: As Stated

cc w/att: S. Reynolds,DRP

J. Grobe, DRS R. Caniano, DRS

DOCUMENT NAME: G:\Branch 4\selfassmtreport.wpd

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## A. <u>Background</u>

The operating plan and several inspection manual chapters suggest that the Regions audit inspection reports for a number of attributes, including compliance with the inspection report writing guidance (IMC 0610\*), and the enforcement policy and guidance documents. A Region III inspection report self-assessment was previously conducted in October 2000 and ongoing Headquarters audit on selected reports has occurred through the implementation of the Revised Oversight Process (ROP). These evaluations and a recent article in the Inspection Program Newsletter (dated July 25, 2001) have identified areas for improvement in the consistent application of the inspection report threshold criteria contained in program guidance.

#### B. Assessors

Laura Collins, PE, Projects Branch 4, lead Christine Lipa, Chief, Projects Branch 4 Pat Louden, SRI, Clinton Duane Karjala, RE, Projects Branch 6 Brent Clayton, EICS

# C. Objective of Review

Review DRP inspection reports including routine resident/integrated reports, problem identification and resolution (PI&R) reports, special inspection and supplemental inspection reports which contain green (or greater) findings, no color findings, and/or licensee identified findings. Determine if the findings have been characterized properly according to the inspection report threshold guidance contained in the group 1, 2, and 3 questions. Each of the selected reports was reviewed for compliance to enforcement-related guidance, including the enforcement manual and IMC 0610\*.

## D. Scope of Review

Twenty-six reports that contained one or more findings and were issued after the most recent revision of 0610\* (dated 02/27/01) were selected for review. Between 3 to 5 inspection reports were selected for each DRP branch. For licensee-identified violations (NCVs) determine if group 1 threshold (more than minor) is met, classify by cornerstone and determine the reason for documenting (close LER, PI&R review, or other).

## E. <u>References/Requirements</u>

Manual Chapter O610\*, dated 02/27/01, "Inspection Reports"
Guidance for Classifying Violations as Minor Violations, dated 09/29/00

## F. Conclusions

## More than Minor Threshold (Group 1 Questions)

Overall, most findings were screened correctly using the group 1 questions. A total of 51 findings were reviewed. Of those findings, the self-assessment team concluded that up to four findings (8 percent) may not have been more than minor. Table 1 describes each of these four findings, how the group 1 question was answered in the inspection report, and why the self-assessment conclusion was different.

The self-assessment team attempted to review issues that were minor and not documented and requested that inspectors provide any issues where they had a question in applying the group 1 threshold but ultimately concluded the issue was minor. Inspectors sent in four issues that were screened out as minor using the group one questions. Of the four issues reviewed, the self-assessment team concluded that one of the four issues was not initially evaluated correctly against the group 1 questions. This particular issue involved the reactor core isolation cooling system (RCIC). The inspectors, in conjunction with guidance from regional staff, concluded that the RCIC issue could not have a credible impact on safety because RCIC was not a safety system and was not used in the Chapter 15 Accident Analysis. This was not a correct answer to the Group 1 question, as RCIC is a mitigating system that is credited in PRAs and included in the SDP worksheets. However, after discussion with the Branch Chief, inspectors, and SRAs, the self-assessment team concluded that the issue appeared to be minor after reconsidering all of the group 1 questions.

The other issues sent in by inspectors did not clearly meet the more than minor threshold but indicated that inspectors continue to be uncomfortable with the threshold guidance. For example, one issue involved a system failure that was not captured by the licensee in the performance indicators. The guidance clearly states that unless a threshold is crossed, the issue is minor.

#### Affects a Cornerstone Threshold (Group 2 Questions)

The self-assessment team found that some interpretations of the group 2 questions were not always consistent with the intent of the guidance and resulted in no-color findings which could have been characterized as green findings. The team concluded that 4 of 13 no-color findings reviewed may have impacted a cornerstone and could have been processed by the SDP and screened as green. These inspection findings are described in Table 2 which also includes the group 2 answer documented in the inspection report and the self-assessment finding related to the group 2 answer.

The team found that the staff had varying intrepretations of what is meant by "affecting a cornerstone". Several examples, particularly involving corrective action violations, were documented as not affecting a cornerstone. As a result, these findings were documented as No-Color findings but were more appropriately Green findings. In some cases, it appeared that the staff interpreted "affecting a cornerstone" to mean the performance deficiency resulted in equipment unavailability/inoperability. Therefore, several findings which did not ultimately affect equipment operability were screened out of Group 2 questions as not impacting a cornerstone. Based on discussions with NRR staff, the intention of Group 2 questions is to determine if the finding has any impact on

cornerstone objectives (e.g., to ensure availability, operability, reliability... of Mitigating Systems) and should consider if any of the attributes (e.g., design, procedure quality, configuration control, etc.) of the cornerstone are impacted. Further, if the performance deficiency impacts a cornerstone, then the effect of the performance deficiency on availability of equipment should be evaluated by the SDP. If equipment availability has not been impacted, then the finding would screen out of phase 1 of the SDP and be Green. Recent changes to MC 0610\* and additional training may help to improve consistency in determining which findings affect cornerstones and are processed by the SDP and which findings do not affect a cornerstone and become green non-SDP findings.

Two of the these four no-color findings discussed in Table 2 were documented as substantive cross-cutting issues (Group 3 question) after they were determined to not affect a cornerstone. Per MC 0610\* guidance, in order to have a substantive cross-cutting issue, there must have been multiple individual findings that alone met the more than minor threshold, were evaluated using the SDP, and were documented in either the current report or a previous inspection report. These two findings did not involve multiple individual findings as required by the guidance.

## Extenuating Circumstances Threshold (Group 3 Questions)

The self-assessment identified 2 of 13 no-color findings that did not meet the group 3 question threshold. This threshold is intended allow a small set of very specific findings that don't otherwise meet the other thresholds to be documented. Among these issues for which extenuating circumstances apply are those findings that should be processed through the traditional enforcement process and be assigned severity levels. In both of the self-assessment findings the extenuating circumstance threshold of either impacting the NRC's regulatory function or increased regulatory concern was not met. Table 3 describes the findings related to Group 3 questions.

#### Enforcement-Related Self-assessment Findings

Table 4 describes all issues related to enforcement for each of the inspection reports selected for review. The enforcement self-assessment had the following overall conclusions:

- There were few problems involving the threshold between minor violation and NCVs.
- For issues that sounded like they may have been violations but were not, the reports usually stated why there was no violation.
- As seen from the comments on specific reports, for a number of NCVs the report did not clearly describe the requirements and/or how they were violated.
- Several report cover letters inappropriately discussed the substance of NCVs.
- Two green findings were also described as severity level IV violations. Findings processed through the SDP are not assigned severity levels.

The specific issues for each report reviewed are described in Table 4.

### Licensee-Identified Violations

Documentation of Licensee-Identified Non-Cited Violations was found to be somewhat inconsistent, most likely due to lack of guidance in MC 0610\*. The guidance states that licensee-identified NCVs that are recognized as being of very low safety significance will normally be only briefly documented in section 4OA7 and will include the NRC tracking number, requirement violated, a one sentence description of the requirement violated and a reference to the licensee's corrective action program number. This brief documentation does not provide enough information to accurately and consistently document these findings in the PIM as required.

The assessment team had the following specific findings:

- Group 1,2, and 3 questions were not consistently answered within the inspection report and as a result, it was difficult to tell that the violation was more than minor and if it affected a cornerstone.
- Some PIM entries documented an affected cornerstone and/or a color that was not described in the inspection report. Some of these entries reported the significance determination to be N/A which is inconsistent with the definition of a more than minor finding that affects a cornerstone.
- Some PIM entries listed the licensee-identified NCV as NRC identified and there
  was no information in the report that the inspectors identified problems with the
  licensee's identification, evaluation or correction of the issue. (This may be one
  reason to document NCVs initially identified by the licensee as NRC identified
  issues)
- Some reports clearly stated that the findings were licensee-identified NCVs but
  the findings were documented as NRC identified NCVs. Also, in this case the
  report did not provide any information that the inspectors identified problems with
  the licensee's identification, evaluation, or correction of the issue.
- The reason for documenting a licensee-identified NCV was not always clear and the procedure used in the review and disposition of the licensee-identified NCV was not always documented. However, this information is required in the PIM entry.

Recent changes to 0610\* provide additional guidance for licensee identified NCVs and will no longer require entry of these NCVs into the PIM. This will fix some of the problems noted above.

#### Other Documentation Issues

The self assessment also identified the following types of discrepancies related to enforcement or other documentation requirements.

- Findings that are not violations are not always being numbered and listed at the back of the inspection report as required by MC 0306.
- The answers to the group 1, 2, and 3 questions were not always clearly documented.

# G. <u>Actions/Recommendations</u>

The first recommendation to improve consistency in applying the thresholds is to improve the MC 0610\* guidance by submitting feedback forms to NRR. Specifically the feedback forms will request clarification on how to determine if an issue impacts a cornerstone and can be processed by the SDP, how to determine if an issue has a recognizable impact on a cornerstone, and how to document licensee identified violations. Suggestions on how to change the guidance are included with each feedback form. These suggestions involve rewording or changing several of the threshold questions to clarify the intent of the guidance.

The second recommendation is to provide training during the next inspector seminar on the latest revision to MC 0610\* with special emphasis on the minor/more than minor threshold, how to determine if an issue impacts a cornerstone, and documentation of licensee identified violations. Currently, an IIPB staff member is on the seminar schedule to discuss 0610\*.

The third recommendation is to provide a copy of this report to all DRP staff, and suggest that branch chiefs discuss the self-assessment findings with their staff.

The fourth recommendation is to perform a follow-up self assessment 6-8 months after implementation of the next revision of MC 0610\*.

Table 1 Self-assessment Findings Related to Group 1 Questions

Finding	Group 1 Question Answer	Self-assessment Finding
No Color Finding for not identifying test problems on condition reports. (Quad Cities 2001-09)	More than minor because if left uncorrected, the issue could become a more significant safety concern.	Threshold for more than minor is same issue under same condition, if uncorrected could become a more significant safety concern. Seemed like a PI&R observation rather than a finding. Problems were identified on condition reports later and were corrected.
Green NCV. TS violation - testing of EDGs was not conducted within 24 hours as required after an EDG failure. The EDGs were tested at 26 and 29 hours and passed. (Point Beach 2001-10)	More than minor and a credible impact on safety since susceptibility of the Unit 1 "A" safeguards emergency AC bus standby emergency power sources to common mode failure was not demonstrated within the TS prescribed time frame.	The testing delay of 2 and 5 hours respectively seemed minor given that the tests were successful.
Green NCV. Procedure violation for failure to ensure proper clearance maintained between stored equipment and a torus temperature indicator cable. (Dresden 2001-013)	Question not answered in report.	Finding appeared to be minor. Stored equipment was 12" away from cable vs. required 24" away. Actual affect on equipment not clear.
Green NCV. Procedure violation for failing to include the independent verification requirement in a calibration procedure for Scram Discharge volume high level instruments. (Monticello 2001-11)	More than minor because a credible impact on safety existed if components were mispositioned they would be TS inoperable.	Finding appeared to be minor. No components were mispositioned. An independent verification was conducted but did not meet the licensee's procedural requirements for independent verification.

Table 2 Self-assessment Findings Related to Group 2 Questions

Finding	Group 2 Answers	Self-assessment Finding
No Color Finding for not identifying test problems on condition reports. (Quad Cities 2001-09)	Answered no to Group 2 questions because there was no direct impact on equipment operation (SBO EDGs.)	Self-assessment considered this first to be minor, but if more than minor would more appropriately be a green finding since failure to identify problems with the SBO EDGs could impact the MS cornerstone.
No Color Corrective Action Violation for the failure to take appropriate corrective actions for a deficient plant condition (did not perform an adequate operability determination). (Dresden 2001-13)	Report states this is a cross- cutting issue of problem identification and resolution.	Self-assessment considered this first to be minor, but if more than minor would more appropriately be a green finding since inadequate operability determinations for torus temperature detectors does impact the MS and BI cornerstones.
No Color Criterion XII (Control of M&TE) violation for the failure to assure that M&TE used was properly calibrated. (Quad Cities 2001-09-01)	Report states no specific cornerstone impacted.	Improperly calibrated or out of calibration M&TE could affect IE, MS, and BI cornerstones depending on where it was used. Issue appeared to be more than minor and green.
No Color Corrective Action Violation for the failure to take effective corrective action for equipment configuration control concerns. (Prairie Island 2001-11)	Report states no specific cornerstone impacted.	Examples used in report involve inadvertent RCS draining, containment sump, RCP seals, and other equipment that affects IE, MS, or BI cornerstones. Issue appeared to be more than minor and green.

Table 3 Self-assessment Findings Related to Group 3 Questions

Finding	Group 3 Question Answered	Self-assessment Finding
No Color Corrective Action Violation for the failure to identify that radiation monitors were inoperable. (LaSalle 2001-07)	Answered yes to group 3 question that the issue had the potential to impact the NRC's ability to perform its' regulatory function since the issue involved the 50.59 process.	No 50.59 violation processed. Inoperability of rad monitors can affect one or more cornerstones. Issue appeared to be more than minor and green.
No Color MR (a)(3) minor violation. (Kewaunee 2001-09)	Answered yes to group 3 question that the issue had extenuating circumstances due to increased regulatory concern due to the fact that the licensee had neglected the MR program for several years and the licensee was currently in the process of attempting to make the program work again.	Regulatory concern per the Group 3 questions is a small set of specific issues which involve willfulness, licensee refusal to comply or discrimination. This is not a proper example of regulatory concern.

Table 4 Enforcement Self-assessment Findings

Plant	IR number	EICS Review Findings
Dresden	2001013	For NCV-01, there is inadequate description in the report to determine if the violation was properly dispositioned. (Depending on what the "equipment" stored too close to the TI cable was (e.g., lead bricks or styrofoam) this could be a minor violation or an NCV.)
		The corrective action NCV-02 for untimely correction of the same issue seems somewhat redundant and punitive. (However, this may be justified depending on how significant the original violation was.)
		For NCV-02 the report discusses several issues regarding how the licensee addressed the issue once the inspectors identified it, but the statement of the NCV does not include how the requirements of Criterion XVI were violated.
Dresden	2001016	This inspection was a special inspection. The cover letter discussed the substance of the green finding/NCV rather than just stating that there was one. This is not consistent with the 0610* guidance but may be appropriate for special inspections. No specific guidance exists for documenting special inspections.
Quad Cities	2001005	The NCV regarding preconditioning is described at two places in the report as a violation of Criterion XI and once as a violation of Criterion V.
Quad Cities	2001008	No comments
Quad Cities	2001009	The cover letter should not discuss the substance of the NCV.  Section 4OA2 includes a finding that no CR was written for out-of-tolerance instruments. This appears to be a violation of the licensee's admin procedure but it is not dispositioned as such.
Duane Arnold	2001003	The cover letter should not discuss the substance of the NCV. Section 4OA2 includes an Appendix B, Criterion V violation (NCV). Because the procedure violated was an admin procedure, TS and Regulatory Guide 1.33 would be a better basis for the violation.

Duane Arnold	2001004	Section 4OA7 includes an Appendix B, Criterion V violation (NCV). Because the procedure violated was an admin procedure, TS/Reg Guide 1.33 would be a better basis for the violation. Also, this possibly could be cited as a design control violation if the design change was actually implemented (couldn't tell from report).
LaSalle	2001007	Section 4OA7 includes two licensee-identified violations of Criterion III. The report does not describe how the requirements were violated.
LaSalle	2001009	No findings.
Monticello	2001005	The cover letter should not include the subject of the NCVs, just that violations were identified and are being dispositioned as NCVs.
		The summary states that a non-cited violation was "issued." NCVs are not "issued."
Braidwood	2001007	One green finding was also characterized as a SL IV violation. SDP findings are not assigned severity levels.
Byron	2001008	Section 4OA3 states the inspectors "issued" a non-cited violation in a previous report. NCVs are not "issued."
Byron	2001009	No comments.
Davis Besse	2001006	No comments.
Perry	2001008	No comments.
Perry	2001009	The report includes an NCV for a Criterion III violation. While the report accurately states the requirements, the paragraph stating the violation does not clearly state how the requirements were not satisfied. (It just says that the failure to properly design, manufacture and install new dampers is a violation - not

Kewaunee	2001009	The report summary discusses a finding and states that it is of very low safety significance but the finding is considered to be of regulatory concern. The ROP and revised enforcement policy have minimized addressing issues because of regulatory significance, essentially limiting those issues to willful violations, refusing to comply, and impacting the regulatory process. It would be better not to use the term "regulatory concern."  The report discusses three Maintenance Rule violations. All maintenance rule issues discussed in inspection reports (including licensee-identified ones) must be paneled and an EA number assigned. In this case, it appears that a panel reviewed the issues and an EA number was assigned; however, OE failed to issue a strategy form and the division failed to put the assigned EA number on the report.  The Criterion XVI NCV in section 1R19 is poorly worded. The report says the licensee identified that a valve was degraded and failed to take adequate corrective action. The description of the NCV says they failed to identify the deficient condition of the valve. The statement of the NCV should have addressed the licensee's failure to promptly correct a condition adverse to quality. Also, the report Summary states the NCV was "issued"; NCVs are not "issued."
		One green finding was also characterized as a SL IV violation. SDP findings are not assigned severity levels.
Point Beach	2001008	No comments.
Point Beach	2001010	Report includes an NCV for not testing backup diesels within 24 hours as required by TS after one diesel failed test. Since the diesels were tested with successful results at 24 and 29 hours, there was no apparent actual or credible impact on safety. Therefore, this violation would have been more appropriately characterized as minor.

Prairie Island	2001011	The cover letter should not discuss the substance of the NCV.
		A Criterion XVI violation (NCV) is described as a failure to correct a configuration control problem in the context of a broad problem at the plant in that events had involved most major work groups and a variety of administrative controls. Because Criterion XVI addresses conditions adverse to quality of structures, systems and components (as opposed to administrative controls), this is not a good citation. You could cite (or non-cite) a Criterion XVI violation with numerous specific examples of configuration control problems (each of which was a condition adverse to quality) if you can make the case that they were "significant" conditions adverse to quality and the licensee failed to identify root cause and prevent recurrence. Or you could cite a procedure violation if you can make a tie to some safety related function or system (either Criterion V or TS/Reg Guide 1.33 as appropriate).
Prairie Island	2001013	No comments.
DC Cook	2001007	The cover letter should not discuss the substance of the NCV.
DCCook	2001009	No comments.
Palisades	2001006	No comments.
Palisades	2001007	While it is clear that a design control violation occurred, NCV-01 is not well worded in that it doesn't clearly describe how the requirements of Criterion III were violated. It says that "licensee personnel failed to identify that the sump screen system was not controlled, constructed or maintained in accordance with the design basis." (Criterion III doesn't require the licensee to identify this.)

Monticello	2001011	The substance of the NCVs should not be discussed in the cover letter.
		Section 4OA2.a describes an inadequate procedure NCV because the procedure did not require independent verification of instrument valve alignment. The discussion says that because the alignment wasn't independently verified for each instrument prior to proceeding to calibrate the next one, this "technically" rendered multiple instruments inoperable. Since the verification performed later determined the line-ups were correct, there was nothing technical that made the instruments inoperable. The report should have said they were "administratively" inoperable.
		Section 4OA2.c includes a Criterion XVI NCV. The report fails to state the requirements of Criterion XVI and doesn't state clearly how they were violated.