The Reactor Oversight Process (ROP) performance metrics use objective measures and predetermined criteria to monitor the performance of the ROP as described in Inspection Manual Chapter (IMC) 0307, “Reactor Oversight Process Self-Assessment Program.” These metrics rely on information from various sources, including the Reactor Program System (RPS), the inspection program, periodic independent audits, stakeholder surveys, and public comments. The staff collects data quarterly and uses preestablished success criteria to analyze the data. In most cases, success is defined as a steady or improving trend.

The NRC solicited comments on the fifth year of ROP implementation from external stakeholders in a Federal Register notice (FRN) in November 2004. Of the 21 responses, eleven were from the utilities, while six were from State agencies, and four were from public interest groups or public citizens. Along with the external survey, the staff conducted an internal survey in November 2004 which solicited and analyzed stakeholder feedback regarding the effectiveness of the ROP. A total of 209 responses were received from internal stakeholders, including resident/senior resident inspectors, regional-based inspectors and staff, senior reactor analysts, regional and headquarters line management, and headquarters technical and program staff.

Based on our review, most of the metrics met their established criteria. Specifically, all the metrics in the inspection area met the criteria, but a number of metrics in the performance indicator (PI), significance determination process (SDP), assessment, and overall ROP areas did not meet the success criteria. The staff’s corrective actions to address these issues are discussed in the following paragraphs, in the attached metric analyses, and in the CY 2004 ROP self-assessment Commission paper.

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Ron Frahm, NRR
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PI Results

In reviewing the data for this reporting period, the staff found that one of the eight PI metrics did not meet the established criteria because of the questions about interpretation of PI guidance (PI-2), as indicated by the increasing trend in the number and age of interpretation issues. Most of these questions concern safety system unavailability and scrams with a loss of normal heat removal (Scrams w/LONHR). The Office of Nuclear Reactor Regulation (NRR) intends to close out the older Scrams w/LONHR issues in the next three months. The staff continues to evaluate several PIs in an effort to improve their effectiveness and minimize potential actions that may adversely impact plant safety.

SDP Results

Of the nine metrics for the SDP, four did not meet the established criteria. One metric was unsuccessful because three inaccurate SDP results were communicated to the public (SDP-9), and because several findings on the Web page were not properly tied to all the reports that discussed the issue. The metric measuring SDP timeliness (SDP-8) failed to meet staff expectations and there was a stable negative perception that the SDP results do not have the same level of significance for all cornerstones (SDP-5). The metric for measuring whether the inspection staff is proficient in using the SDP and finds the SDP valuable (SDP-3), failed to meet program expectations even though an increasing trend has begun. NRR continues to address these and other issues through the SDP Improvement Plan, which is expected to produce continued SDP improvements. NRR is also assessing changes to improve SDP timeliness.

Inspection Results

The inspection program metrics meet all program expectations.

Assessment Results

In reviewing the data for CY 2004, the staff found that one of the nine assessment metrics did not meet the established criteria. The metric which measured whether subjective judgment is minimized and is not a central feature of the process and whether actions are determined by quantifiable assessment inputs (AS-1) did not meet program expectations because there was an increase in Action Matrix deviations over CY 2004. Based on a review of these deviations, IMC 0305 was revised to allow the regional offices to continue some actions that are consistent with the multiple/repetitive degraded cornerstone or degraded cornerstone columns of the Action Matrix, during the transition out these columns.

Overall Metric Results

Of the 18 overall metrics established for the ROP, two failed to meet the established criteria. These two metrics gauge the public's perception of various aspects of the ROP, using information from the external survey. One of the metrics is whether the public perceives the NRC to be responsive to its inputs and comments (O-15), and the other is whether the public perceives that the ROP has unintended consequences (O-18).
As in the last survey, numerous stakeholders felt that the NRC was not responsive to comments or, at the very least, did not provide adequate feedback on the public's comments. The staff plans to consolidate the comments by question and provide a comprehensive response to each question. As in previous years, the ROP failed to meet the metric for unintended consequences. Many stakeholders continue to believe that the ROP has unintended consequences. This is likely true for any form of regulatory program. NRR will continue efforts to balance program needs with unintended consequences.

On a positive note, one overall metric that failed to meet its criteria in CY 2003 improved in CY 2004. The staff concluded that the metric established to measure the public’s perception of the ROP to be risk-informed (O-3) was met based on an increasing positive perception over the past four years of ROP implementation.

**Inspector Profile Metrics**

The staff continues to monitor resident inspector demographics and related issues and provides a comprehensive report to the Commission as a separate attachment to the annual ROP self-assessment Commission paper. Therefore, these metrics are not captured as part of the annual metric report to eliminate unnecessary redundancy.

**Conclusions and Next Steps**

The performance metrics provide the staff with valuable insights and lessons learned that lead to continued improvements in ROP effectiveness. This report provides a significant input into the annual ROP self-assessment and the resulting Commission paper. Aspects of this report, particularly missed metrics, will be discussed in the self-assessment paper under the respective program areas. The ROP self-assessment Commission paper will be used to support the Agency Action Review Meeting in early May 2005 and the subsequent Commission briefing in late May 2005.

Attachment: As stated
As in the last survey, numerous stakeholders felt that the NRC was not responsive to comments or, at the very least, did not provide adequate feedback on the public's comments. The staff plans to consolidate the comments by question and provide a comprehensive response to each question. As in previous years, the ROP failed to meet the metric for unintended consequences. Many stakeholders continue to believe that the ROP has unintended consequences. This is likely true for any form of regulatory program. NRR will continue efforts to balance program needs with unintended consequences.

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Attachment: As stated
PI-1 Consistent Results Given Same Guidance

Definition: Independently verify PIs using Inspection Procedure (IP) 71151, “PI Verification.” Count all PIs that cross a threshold because of discrepancies as noted in the resultant inspection report. Licensees are requested per Nuclear Energy Institute (NEI) 99-02 to report changes to PI colors as soon as practical upon discovery via a “mid-quarter” report and to annotate in the comments field an explanation for the change.

Criteria: Use the first year of data as a benchmark for future comparison and to establish acceptable range of variability.

Comments: The graph represents the number of significant deficiencies reported for each quarter. Significant discrepancies are issues identified by the NRC during a PI verification inspection that caused the PI to cross a threshold.

Analysis: No significant deficiencies were reported during this assessment period. The NRC conducted a discrepant PI inspection at Davis-Besse in the fourth quarter of 2004, however, the inspection report was not issued prior to the end of the quarter. Davis-Besse initially reported the emergency preparedness alert and notification system PI as GREEN. The NRC subsequently determined that it should have been WHITE. The licensee re-submitted the PI data in November, in which they agreed that the PI should be changed to WHITE. The NRC will include this issue in the calendar quarter in which the inspection report documenting the deficiency was issued (using the report cover letter date), regardless of which calendar quarter the changed PI is reported. Therefore, the discrepant Davis-Besse PI will be included in the 1Q2005 metric data.

Metric Criterion Met: Yes. Performance during this assessment period meets program expectations.
 PI-2 Questions Regarding Interpretation of PI Guidance 

Definition: Quarterly, count the number of frequently asked questions (FAQs).

Criteria: Expect low numbers (but not as low as metric PI-1), with a stable or decreasing trend.

Comments: Each quarter represents the total number of new FAQs introduced and approved during the ROP NRC/Industry Working Group meetings held during the respective quarter.

Analysis: For this assessment period, the number of unresolved interpretation questions has increased and, several of the FAQs continue to remain open for a significant amount of time. As reported in the previous ROP self-assessment SECY paper, a number of these FAQs are related to the Scrams with Loss of Normal Heat Removal PI. NRC continues to work with stakeholders to resolve the open issues. Specifically, an ROP Working Group Task Force has been formed to address the issues with the Scrams with Loss of Normal Heat Removal PI and modifications are being made to NEI 99-02 to improve the FAQ process.

Metric Criterion Met: No. This metric does not meet its criteria based on the increasing trend in the number and age of interpretation issues.
PI-3 Timely Indication of Declining Safety Performance

**Definition:** Quarterly, track PIs that cross multiple thresholds (e.g., green to yellow or red). Evaluate and characterize these results to allow timely indication of declining performance.

**Criteria:** Expect low numbers (near zero).

**Analysis:** There were no occurrences of PIs crossing multiple thresholds during this assessment period.

**Metric Criterion Met:** Yes. This metric meets its criteria based on zero occurrences of PIs crossing multiple thresholds.
PI-4 Minimize Potential for Licensee Actions Taken in Response to the Performance Indicator Program That Adversely Impact Plant Safety

Definition: Survey stakeholders regarding PIs driving undesirable decisions. This question will be included in the overall Federal Register notice.

Criteria: Expect low numbers of unintended consequences reported, with a stable or decreasing trend.

Analysis: Overall, most of the stakeholder responses indicate that the ROP PI program promotes plant safety.

Utility/utility group respondents stated, or endorsed NEI's comment, that the PI program in conjunction with the inspection program promotes safety. However, this group indicated that a few PIs have the potential to influence licensees to take actions that could adversely impact safety (e.g., a potential exists to minimize safety system unavailability since there is no penalty for train failures [unreliability] in the PI, and the current interpretation of scrams with a loss of normal heat removal sends a message that operators should focus on the status of non-safety related equipment rather than monitoring safety-related equipment). Another respondent commented that the Safety System Unavailability PIs are not risk informed and are not consistent with the Maintenance Rule Program goals in most cases, but did indicate that they are in support of the Mitigating Systems Performance Index (MSPI), which has been piloted and accepted as a replacement for the Safety System Unavailability PIs.

A public interest group stated that the PIs originally promoted safety, but the industry has figured out ways of undermining the PIs.

Although stakeholders identified two examples that could affect licensee actions that impact plant safety, these issues were identified in the past. The NRC and stakeholders have been working to resolve these issues. A ROP Working Group Task Force has been formed and is working to resolve issues with the Scrams with Loss of Normal Heat Removal PI. In addition, MSPI is planned for implementation in 2006 and will address the issues with the Safety System Unavailability PI. The NRC staff continues to improve PI effectiveness and minimize potential actions that may adversely impact plant safety.

Overall, stakeholder satisfaction, as reported in the survey responses for both initial ROP implementation and the current ROP, were generally favorable and consistent.

Metric Criterion Met: Yes. This metric meets its criteria with a stable perception over the past four years of ROP implementation.
PI-5 Timely PI Data Reporting

Definition: Within 5 weeks of the end of each calendar quarter, track (count) late PI postings on the NRC's external Web site. Also note the number of late submittals from licensees that did not meet the 21-day timeliness goal.

Criteria: Expect a low number (near zero) of late PI submittals and postings on the NRC’s external Web site.

Analysis: There were no late postings during this assessment period.

Metric Criterion Met: Yes. The criteria for this metric has been met because there have been no late PI data postings on the NRC's external web site since the inception of the ROP.
PI-6 Stakeholders Perceive Appropriate Overlap of Inspection Program and PIs

Definition: Survey stakeholders’ perceptions of overlap between PIs and the Inspection Program. This question will be included in the survey for internal stakeholders and the Federal Register notice for external stakeholders.

Criteria: Expect a low number of negative comments, with a stable or declining trend in the number of negative comments received.

Analysis: Internal Survey

One internal survey question addressed this metric. The question and it’s resultant percentage of agreement from internal stakeholders are presented below.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Nov 2004</th>
<th>Dec 2002</th>
<th>Mar 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI provides an appropriate level of overlap with inspection program</td>
<td>78%</td>
<td>74%</td>
<td>74%</td>
</tr>
</tbody>
</table>

Internal stakeholders continued to generally agree that the PI program provides an appropriate level of overlap with the inspection program. The data supporting this metric indicates a slightly increasing positive perception for this measure when compared to the previous survey in 2002 and is consistent with the positive perception in 2001.

External Survey

Overall, most of the stakeholder responses indicate that appropriate overlap exists between the inspection program and PIs.

Utility/utility group responses to the external survey stated, or endorsed NEI’s comment that, in general, appropriate overlap exists between the PI program and the inspection program and further commented that if anything, there was excessive overlap (e.g., in the radiation protection area, with the Scram with Loss of Normal Heat Removal PI, and with the Safety System Unavailability PI). Some stated that it would be a better use of resources if the NRC would reduce baseline inspection in areas where performance indicators indicate good performance, and determine what, if any, areas require more inspection, as evidenced by operating experience or newly emerging generic safety areas of concern.

A non-utility group stated that there was appropriate overlap between the PIs and the Inspection Program but it could be improved considering there are no PIs for cross-cutting areas (e.g., human performance, safety-conscious work environment, and corrective action program). Another respondent stated that the NRC should drop the PI program and devote all staff FTE to the inspection of power reactor licensees.
Overall, stakeholder satisfaction, as reported in the survey responses for both initial ROP implementation and the current ROP, were generally favorable and consistent. As mentioned previously, the NRC staff continues work on the Scram with Loss of Normal Heat Removal PI and on the replacement for the Safety System Unavailability PI.

**Metric Criterion Met:** Yes. This metric meets its criteria with a stable positive perception over the past four years of ROP implementation.
PI-7 Reporting Conflict Reduction

Definition: Survey licensees and other external stakeholders regarding the perceived overlap between reporting requirements, such as those promulgated by Institute of Nuclear Power Operations (INPO), the World Association of Nuclear Operators (WANO), and the Maintenance Rule. This question will be included in the Federal Register notice.

Criteria: Expect a low number of negative comments, with a stable or declining trend in the number of negative comments received.

Analysis: Overall, most of the stakeholder responses indicate that the reporting of PI data is efficient. Responses also indicate a slight improvement from initial implementation.

Utility/utility group respondents commented, or endorsed NEI’s comment, that there are differences in reporting and definitions among the ROP, WANO/INPO, and the Maintenance Rule. This comment was similar to those made in previous years. Respondents noted that some of these differences are being addressed by the proposed Mitigating System Performance Index which has been pilot tested and is currently planned for implementation in 2006. Respondents further noted that industry is also working to reduce the unnecessary duplicative reporting with the introduction of the Consolidated Data Entry System developed by INPO.

A non-utility stakeholder responded that since the performance indicators are lagging indicators, the timeframe for posting information is excessive and does not lead to proactive resolution of performance issues. Another non-utility respondent stated that it would be more appropriate for the licensees to provide comments on reporting of PI data.

Overall, stakeholder satisfaction, as reported in the survey responses for both initial ROP implementation and the current ROP, was generally favorable and consistent.

Metric Criterion Met: Yes. This metric meets its criteria with an increasing positive perception over the past four years of ROP implementation.
PI-8  Clarity of PI Guidance - NEI-99-02

Definition:  Survey external stakeholders’ perceptions regarding the clarity of the guidance contained in NEI 99-02. This question will be included in the Federal Register notice.

Criteria:  Expect a low number of negative comments or examples of interpretation issues, with a stable or declining trend in the number of negative comments received.

Analysis:  Overall, most of the stakeholder responses indicate that PI guidance is clear. Responses also indicate a slight improvement from initial implementation.

Utility/utility group respondents commented, or endorsed NEI’s comment, that the PI guidance is clear and that the FAQ process has been useful and efficient in resolving questions on the PI guidance. Work being performed on the Scrams with Loss of Normal Heat Removal and Safety System Unavailability PIs will make them more clearly defined.

A non-utility stakeholder responded that the guidance is not clear since a licensee was unable to follow the guidance and properly report the Alert and Notification System PI data to the NRC. Another non-utility respondent stated that it would be more appropriate for the licensees to provide comments on effectiveness of the PI guidance.

Overall, stakeholder satisfaction, as reported in the survey responses for both initial ROP implementation and the current ROP, was generally favorable and consistent. Although respondents indicated that the PI guidance is clear, the number of open FAQs has increased (See metric PI-2 for a discussion on the interpretation of the PI guidance).

Metric Criterion Met:  Yes. This metric meets its criteria with an increasing positive perception over the past four years of ROP implementation.
IP-1 Percentage of Inspection Findings Documented in Accordance With Requirements

Definition: Audit inspection reports in relation to program requirements (IMC 0612, "Power Reactor Inspection Reports") for documenting green findings, greater-than-green findings, and violations. Report the percentage of findings that meet the program requirements. Each year, audit one resident/integrated report from each plant and other selected baseline reports.

Criteria: Expect an improving trend in the percentage of findings documented in accordance with program requirements.

Comments: The graph represents the cumulative average for all inspection reports reviewed by the IIPB staff during 2004. The Office of Nuclear Reactor Regulation (NRR) staff issued IMC 0612 on April 29, 2002, to improve the program guidance on documentation of inspection findings. After a brief training period, all regions implemented the new requirements of IMC 0612 in July of 2002. To allow inspectors and regional management to become more familiar with and implement the new requirements of IMC 0612 and time to issue a sample inspection report for regional use, the staff agreed to allow the first set of inspection report audits under IMC 0612 be conducted by regional personnel. The NRR staff commenced auditing the inspection reports in CY 2003.

Analysis: The staff audited inspection reports in accordance with IIPB instruction BOI-002 "Inspection Report Review Process." During CY 2004, the staff reduced the number of inspection reports reviewed because of improvement observed during CY 2003 compared to previous years. The staff reviewed an integrated inspection report from each regional branch and a number of team inspection reports from each Region. The percentage of findings documented in accordance with IMC 0612 requirements was 97 percent.

Metric Criterion Met: Yes. This metric meets its criteria based on an increasing trend in the percentage of findings documented in accordance with program requirements.
**IP-2  Number of Baseline Inspection Procedures Significantly Changed**

**Definition:** Review all issued changes to baseline inspection procedures and count those procedures whose scope or frequency of inspection changed, and count new inspectable areas that relate to risk-informing the inspection.

**Criteria:** Expect relatively few significant changes, with a stable or declining trend.

**Analysis:** The scope of two baseline procedures were changed. First, Inservice Inspection Activities procedure (IP 71111.08) was revised to add periodic inspection requirements and guidance for PWR vessel head penetrations and boric acid control. Secondly, Surveillance testing procedure (IP 71111.22) was revised to include RCS leak detection system surveillance testing attributes for reviewing annunciator/alarm setpoints and alarm response procedure actions.

**Metric Criterion Met:** Yes. This metric meets its criteria based on few significant changes made to the baseline inspection program.
Number of Feedback Forms per Document

Definition: Count the number of feedback forms received for each program document each quarter. Use a histogram to chart the number of documents for which feedback forms were received. Highlight those documents against which the most forms are written.

Criteria: Expect a decreasing trend in the number of feedback forms received for program documents.

Analysis: The staff received 114 feedback forms from January 1, 2004, through December 31, 2004. Approximately 66 percent of all feedback forms received during this assessment period related to issues in the areas of (1) Power Reactor Inspection Reports (IMC 0612), (2) Significance Determination Process (IMC 0609), (3) Qualification Program for the Office of Nuclear Reactor Regulation Programs (IMC 1245), (4) Inspection Procedure 71111.12, Maintenance Effectiveness, and (5) ROP Assessment (IMC 0305). Of these areas, IMC 0612 received approximately 20 percent of all feedback forms, IMC 1245 received 19 percent, IMC 0609 received 11 percent, IP 71111.12 received 8 percent, and IMC 0305 received 7 percent. The remaining 34 percent of feedback forms were spread across the other inspection manual chapters and
inspection procedures, with no individual document receiving more than 5 percent of all feedback forms.

The concentration of feedback forms in certain topical areas is consistent with the staff's current improvement efforts in the Reactor Oversight Process. In particular, the staff has formed a working group to revise IMC 0612. This working group consists of staff in the Inspection Program Branch and points-of-contact for each of the regions. This group is clarifying the guidance and the process of developing and transmitting a reactor inspection report. The SDP Improvement Program has completed its work and the staff has addressed various SDPs, such as Shutdown and Fire Protection. In addition, the staff revised the inspector training and inspection program guidance documents (IMCs 1245) to provide additional clarification based on regional feedback.

The number of feedback forms received in CY 2004 (114 forms) was within 10 percent of the number received in previous years (123 for CY 2003 and 112 for CY 2002). Metric data indicated that the largest number of feedback forms received occurred in the first quarter and showed a gradual declining trend for the remaining three quarters.

**Metric Criterion Met:** Yes. This metric meets its criteria based on a decreasing trend in the number of feedback forms received for program documents.
IP-4 Completion of Baseline Inspection Program

Definition: Annual completion of baseline inspection program.


Analysis: All four regions completed their baseline inspections in CY 2004 in accordance with IMC 2515, "Light-Water Reactor Inspection Program - Operations Phase." Each region documented completion of the program in a memorandum to the Inspection Program Branch. These memoranda can be found in ADAMS under ML050630303 (Region I), ML050620589 (Region II), ML050610305 (Region III), and ML050620177 (Region IV). In CY 2004, the baseline inspection program was completed using existing regional resources without the coping measures that were necessary the previous two inspection cycles. The resource challenges in CY 2002 and CY 2003 were addressed by increasing the regional budget for operating reactor inspection activities and revising the resident inspector policy to allow early assignment of new resident and senior resident inspectors to a site. These initiatives did improve the site staffing levels with experienced and qualified resident inspectors in CY 2004 and alleviated the resource burden in completing the baseline inspection program.

Metric Criterion Met: Yes. The metric meets its criteria because all four NRC regions completed the baseline inspection program during ROP cycle 5 (CY2004) in accordance with IMC 2515.
IP-5  **Inspection Reports are Timely**

**Definition:** Obtain RPS data on the total number of reports issued and the number issued within timeliness goals (Timeliness goals are defined in IMC 612, “Power Reactor Inspection Reports”).

**Criteria:** Expect 90 percent of inspection reports to be issued within program's timeliness goals.

**Analysis:** A total of 539 inspection reports were issued during the CY 2004. With the exception of the first quarter of 2004, all regions met the inspection report timeliness goals. Regions 2 and 3 did not meet the timeliness goals in the first quarter due to the moratorium on safeguards reports in the first quarter of 2004. Overall as an inspection program, about 97 percent of all issued inspection reports were timely.

**Metric Criterion Met:** Yes. This metric meets its criteria based on more than 90 percent of inspection reports issued within program's timeliness goals for the year.
IP-6  Temporary Instructions (TIs) are Completed Timely

**Definition:** Audit the time to complete TIs by region. Compare the completion status in RPS to TI requirements. Report by region the number of TIs closed within goals.

**Criteria:** Expect all TIs to be completed within TI requirements.

**Analysis:** TI 2515/151 (Expanded Pilot Force-On-Force Exercise Evaluation) was completed during the first quarter of 2004 within the timeliness goals by all four regions.

**Metric Criterion Met:** Yes. The metric meets program expectations because all TIs were completed within their goals.
IP-7 Public Communication Is Timely

Definition: IIPB posts inspection reports to the NRC's external (public) Web site within ROP timeliness goals using electronic version of inspection reports entered into the Agency Document Access and Management System (ADAMS) by the regions. IIPB also posts inspection findings from the Plant Issues Matrix (PIM) to the NRC's public Web site using data entered into RPS by the regions. In addition, IIPB records the number of inspection reports not available in ADAMS and the number of PIM entries not updated in RPS, as well as the number of inspection reports and PIMs that are not posted to the NRC's public Web site within goals.

Within five weeks after each quarter, IIPB posts issued inspection reports from the previous quarter, using the electronic version in ADAMS, and the associated PIM entries from RPS to the NRC's public Web site. Within nine weeks after each quarter, IIPB posts additional inspection reports and PIM entries for those not yet issued by the 5-week posting to include all inspection findings from the previous quarter.

Criteria: Expect few untimely postings of PIMs or inspection reports, with a stable or declining trend.

Analysis: There was one untimely posting of PIMs and/or inspection reports to the ROP web page.

Metric Criterion Met: Yes. This metric meets program expectations.
**IP-8 Public Communication Is Accurate**

**Definition:** Each calendar quarter, sample information on the NRC's external (public) Web site and count the number of times and reasons for regions changing PIMs or inspection reports (i.e., inaccuracy, new information).

**Criteria:** Expect few inaccuracies, with a stable or declining trend.

**Analysis:** There were very few inaccurate postings of Plant Issues Matrix (PIM) entries or inspection reports on the web during calendar year (CY) 2004. No region had more than two inaccurate postings for any of the quarters during CY 2004.

**Metric Criterion Met:** Yes. This metric meets its criteria based on few inaccurate postings during CY 2004.
**IP-9  Analysis of Inspection Hours**

**Definition:** Collect and analyze resource data (e.g. direct inspection effort, preparation/documentation, plant status hours) for Baseline, Supplemental/Plant Specific, and Safety Issues Inspections, and other ROP activities.

**Criteria:**
1. Significant deviations are not expected on an annual basis. Explore reasons for any deviations that may be evident.
2. Track and trend resource usage for the baseline inspection program and supplemental/plant-specific inspections. Analyze causes for any significant departure from established trend.
3. Track and trend resource usage for preparation, documentation, and other ROP activities, and assess the effects on budgeted resources.

**Analysis:** This metric is intended primarily for tracking and trending resource usage for the ROP. The results are used to improve the efficiency and effectiveness of the ROP and to make management and budget decisions.

The inspection effort in 2004 increased noticeably as compared to 2003. Overall staff effort was 9.1 percent greater in 2004 compared with 2003. An increase was evident in all areas of the ROP except for supplemental inspections.

Baseline inspection effort in 2004 increased 9.2 percent compared with 2003. This increase was generally evenly distributed among all baseline procedures with the exception of IP 71152B, the biennial inspection of Problem Identification and Resolution where the increase was approximately 25 percent. Effort for this procedure increased both in the number of sites inspected in 2004 and the average effort per site.

A significant increase was also seen in the 2004 inspection effort related to generic and plant-specific safety issues (GSIs and SIs). This increase was the result of the continuing high level of inspection activity associated with temporary instructions issued in 2003 and in 2004 for issues related to safeguards, material control accountability, containment sump blockage, and reactor vessel head and vessel head penetrations.

The staff has reviewed the effectiveness of the individual baseline inspection procedures and the current baseline inspection program in its entirety. The review examined the scope, frequency, productivity and costs of the existing individual baseline inspection procedures to determine if resource savings or improved effectiveness can be gained by eliminating, revising or combining the existing procedures. This review is described in Attachment 8 of the CY 2004 ROP Self-Assessment SECY Paper.

**Metric Criterion Met:** Yes. This metric meets its program expectations.
Survey of ROP Users

Definition: Survey inspectors and other NRC personnel implementing the ROP, asking whether the inspection program covers areas that are important to safety.

Criteria: Trend average level of agreement.

Analysis: Seven internal survey questions address this metric. These questions and their resultant percentage of agreement from internal stakeholders are presented below.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Nov 2004</th>
<th>Dec 2002</th>
<th>Mar 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline Inspection Program appropriately inspects for and identifies risk-significant issues</td>
<td>79%</td>
<td>73%</td>
<td>78%</td>
</tr>
<tr>
<td>Level of effort for conducting each inspection is consistent with that estimated in the inspection procedure</td>
<td>57%</td>
<td>58%</td>
<td>47%</td>
</tr>
<tr>
<td>Baseline Inspection Program provides appropriate coverage of plant activities and operations important to safety</td>
<td>77%</td>
<td>67%</td>
<td>63%</td>
</tr>
<tr>
<td>Procedures are adequate to address intended cornerstone attributes</td>
<td>86%</td>
<td>80%</td>
<td>81%</td>
</tr>
<tr>
<td>Procedures are clearly written</td>
<td>73%</td>
<td>78%</td>
<td>75%</td>
</tr>
<tr>
<td>Procedures adequately sample risk important aspects of each inspectable area</td>
<td>80%</td>
<td>72%</td>
<td>76%</td>
</tr>
<tr>
<td>Procedures are conducted at an appropriate frequency</td>
<td>84%</td>
<td>79%</td>
<td>73%</td>
</tr>
</tbody>
</table>

Some of the more prevalent comments on the inspection program were:

- Inspection procedure scope and level of effort need to be reviewed and adjusted as appropriate
- Issues which screen out as minor are often important and should be monitored
- More time is needed for plant status, walking around the plant, and other non-specific activities for the inspectors to follow their instincts.

Internal stakeholders continue to generally agree that the inspection program and its procedures provide appropriate coverage of plant activities and operations important to safety. The data supporting this metric indicates a stable and slightly increasing positive perception for these seven measures when compared to the previous survey in 2002 and is consistent with the positive perception in 2001.

Metric Criterion Met: Yes. Therefore, this metric meets its criteria with a stable and slightly increasing positive perception over the past four years of ROP implementation.
IP-11 Survey of Inspection Report Usefulness

Definition: Survey external stakeholders, asking about the usefulness of inspection reports. This question will be included in the Federal Register notice.

Criteria: Trend average level of agreement.

Analysis: The majority of those who provided feedback to the question on whether the information in the inspection reports were useful responded that the inspection reports were clearly written and provided a better understanding of plant operations. Other comments included:

• By the time we receive an NRC inspection report, the information is old so the report becomes archival.
• The most useful information is the analysis of any findings because the analysis has consequences to the licensee.
• The information contained in the inspection report is very useful and overall, the quality of these reports has improved.
• The organization of the inspection reports with the ties to cornerstones helps in providing better definition and focus in problem areas. The listing in the reports of inspection scope is duplicative of the inspection procedures and should be eliminated.
• Information in the inspection reports is useful and acceptably formatted. The reports should continue to focus on risk and safety significance issues, leaving any suggestions for improvements to be discussed at the inspection exit meeting.

Overall, stakeholder satisfaction, as reported in the survey responses for both initial ROP implementation and the current ROP, were generally favorable and consistent.

Metric Criterion Met: Yes. This metric meets its criteria with a stable perception over the past four years of ROP implementation.
SDP-1  The SDP Results Are Predictable and Repeatable and Focus Stakeholder Attention on Significant Safety Issues

Definition: Quarterly audit of a representative sample of reported inspection findings against the standard criteria set forth in IMC 609, “Significance Determination Process.” Findings should contain adequate detail to enable an independent auditor to trace through the available documentation and reach the same significance color characterization.

Criteria: The target goal is at least 90 percent are determined to be predictable and repeatable. Any SDP outcomes determined to be non-conservative will be evaluated and appropriate programmatic changes will be implemented.

Analysis: The Office of Nuclear Regulatory Research (RES), compared accident sequence precursor (ASP) results and SDP evaluations for ASP analyses completed during this assessment period. A total of eight (two per Region) greater than green inspection findings were reviewed. No significant differences between the SDP findings and the ASP results were identified.

A quarterly review conducted by the Division of Systems Safety and Analysis (SPSB) from NRR for Green inspection findings, indicated that the screening process improved overall since the last report. The findings reviewed by SPSB come from inspection reports dated in the last two quarters of CY 2003 and in

-22-
the first three quarters of CY 2004. A total of 231 inspection findings were reviewed, 97 percent were determined to be predictable and repeatable and 3 percent of the inspection findings were judged to be not supportable by the information in the inspection report. In last year’s review, 13 percent of inspection findings did not meet standards. Almost one-half of the inspection findings from previous reviews in 2001 and 2002 did not meet the criteria for the established standards. Therefore, a significant improvement was made over the previous review results reported in the self-assessments of 2002 and 2003. In general, the rationale for the final determination of the Green findings was clear. Most reports included excellent documentation of the evaluation process, and the majority of Green findings reviewed were reasonable.

All findings reviewed contained sufficient documentation for an independent auditor to reach the same significance color determination.

**Metric Criterion Met:** Yes. Performance during this assessment period meets program expectations.
### SDP-2 SDP Outcome Is Risk-Informed and Accepted by Stakeholders

**Definition:** Track the total number of appeals of final SDP results reported quarterly by the regions.

**Criteria:** Expect zero appeals of SDP significance that result in a final determination being overturned across all regions.

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#### Analysis:

There were no appeals of findings with final significance determination results greater than very low safety significance, Green, during CY 2004. There was one appeal of a finding of very low safety significance, Green, during this period, where the licensee provided documentation which demonstrated that the design under review had previously been accepted by NRR. However, the staff considers this metric as being met since the intent of the metric is to monitor findings of greater than very low safety significance such as findings finalized as White, Yellow or Red. This metric will be updated to reflect the staff’s intent.

**Metric Criterion Met:** Yes. Performance during this assessment period meets program expectations based on no successful appeals of SDP significance determinations that result in a final greater-than-green being overturned.
SDP-3 Inspection Staff Is Proficient and Find Value in Using the SDP

**Definition:** Survey internal stakeholders using specific quantitative survey questions that focus on training, effectiveness, and efficiency.

**Criteria:** Expect either a stable or an increasingly positive perception of the SDP process over time.

**Analysis:** Nine internal survey questions addressed this metric. These questions and their resultant percentage of agreement from internal stakeholders are presented below.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Nov 2004</th>
<th>Dec 2002</th>
<th>Mar 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDP focuses NRC attention on safety-significant issues</td>
<td>75%</td>
<td>71%</td>
<td>79%</td>
</tr>
<tr>
<td>SDP provides basis for effective communication of inspection findings to the Licensee</td>
<td>78%</td>
<td>73%</td>
<td>77%</td>
</tr>
<tr>
<td>SDP provides basis for effective communication of inspection findings to the public</td>
<td>60%</td>
<td>60%</td>
<td>59%</td>
</tr>
<tr>
<td>SDP provides for consistent results</td>
<td>63%</td>
<td>61%</td>
<td>72%</td>
</tr>
<tr>
<td>SDP training is effective</td>
<td>38%</td>
<td>33%</td>
<td>N/A</td>
</tr>
<tr>
<td>Reactor safety SDPs are easy to use</td>
<td>36%</td>
<td>20%</td>
<td>60%</td>
</tr>
<tr>
<td>Non-reactor safety SDPs are easy to use</td>
<td>41%</td>
<td>26%</td>
<td>64%</td>
</tr>
<tr>
<td>Program guidance documents are clear</td>
<td>41%</td>
<td>32%</td>
<td>N/A</td>
</tr>
<tr>
<td>Resources expenditures are appropriate</td>
<td>41%</td>
<td>32%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

The survey results indicate that the staff believes the SDP is effective in meeting important program objectives such as focusing on identifying safety significant issues and communicating results to the licensees and the public. However, inspector confidence utilizing the SDP tools, while increased somewhat since the last survey, continues to remain well below expectations. The increased inspector confidence in these tools is attributed to significant improvements made in SDP documents during the period. The staff is working towards completing additional enhancements in 2005 including revising the IMC 0609 Appendix A, phase 2 risk-informed inspection notebook, and the development of associated presolved tables. The progress of the program enhancements will continue to be tracked in the SDP Improvement Plan and the staff anticipates increased inspector proficiency as they gain more experience with these tools.

**Metric Criterion Met:** No. Although the staff could conclude that the specified criteria is being met based on similar results found from the Dec 2002 survey, the low percentages of individuals who felt that the SDP training was effective and that the SDPs were easy to use does not meet the staff’s expectations.
**SDP-4**  

**Definition:** Monitor substantive revisions made to the risk-informed inspection notebooks due to non-conservative technical flaws by tracking the number of phase 2 inspection notebooks that are issued for use and subsequently withdrawn following onsite benchmarking activities.

**Criteria:** The target goal is zero notebook retractions due to non-conservative technical flaws.

**Analysis:** The staff completed benchmarking the risk-informed inspection notebooks for all sites, which included comparing the notebooks against licensee-developed risk models using similar assumptions. No (revision 1) notebooks have been retracted or returned to Brookhaven National Laboratories for immediate revision to limit potentially non-conservative outcomes during the assessment period.

**Metric Criterion Met:** Yes. Performance during this assessment period meets program expectations.
SDP-5 Results of the Same Color are Perceived by the Public to Translate to the Same Level of Significance for All Cornerstones.

Definition: Publish a *Federal Register* notice to survey external stakeholders using specific questions asking for examples of where the SDP-determined significance of findings does not appear to be consistent across ROP cornerstones.

Criteria: Expect stable or increasingly positive perception of the SDP over time.

Analysis: Several of the respondents to the external survey expressed concern to the question of, “Does the Significance Determination Process yield equivalent results for issues of similar significance in all ROP cornerstones?” One respondent believes that the structure for risk informing reactor safety-related findings tends to produce consistent results for similar issues, however, the more deterministic SDPs fail to produce equivalent results. The latter is attributed to the subjective NRC impressions of licensee programmatic inadequacies influencing the outcome. According to the comment the triple constraint of risk-informing findings, accurate, timely and resource efficient, has not been achieved. All but one responder was concerned with the emergency planning and radiation protection SDPs.

Overall, stakeholder satisfaction, as reported in the survey responses for both initial ROP implementation and the current ROP, were generally not favorable and consistent.

Metric Criterion Met: No. This metric does not meet its criteria based on a stable negative perception over the past four years of ROP implementation.
SDP-6  The Resources (Direct Charges and Support Activities) Expended Are Appropriate

**Definition:** Track the percentage of total inspection resource expenditures attributed to SDP activities. Calculate the effort expended by the regions in completing SDP evaluations as a percentage of the total regional direct inspection effort. Use RPS codes for SDP processing activities.

**Criteria:** Total SDP expenditures should not exceed 10 percent of the total regional direct inspection effort (DIE) with a stable or decreasing trend.

**Analysis:** Regional expenditures associated with SDP evaluations remain stable and below the target goal. There was a slight increase in the average due to significant resource expenditures on Hope Creek, Oyster Creek, Oconee, Cooper and ANO fire protection issues. These issues contributed significantly to the large increase in expenditures in Regions I, II and IV.

**Metric Criterion Met:** Yes. Performance during this assessment period meets program expectations.
SDP-7  Appropriateness of Regulatory Impact from the SDP

**Definition:** Monitor the trend of regulatory impact forms that are critical of the SDP and assessment processes.

**Criteria:** Expect a stable or decreasing trend.

**Analysis:** The number of regulatory impact forms critical of the SDP increased from two reported during the previous assessment period to three in this period. However, this slight increase occurred during a 100 percent increase in the number of SDP assessments processed. The relatively stable number of critical forms and the significant increase in the number of SDPs processed appear to indicate that licensees have clearer expectations regarding the SDP process.

**Metric Criterion Met:** Yes. Performance during this assessment period meets program expectations.
SDP-8 Final Significant Determinations Are Timely

**Definition:** Conduct a quarterly audit of RPS data to identify the total number of inspection items finalized as greater than Green that were under review for more than 90 days since:

1. the date of initial licensee notification of the preliminary significance in an inspection report, or
2. the date the item was formally transmitted to an NRR technical branch for SDP assistance, or
3. the item was otherwise documented in an inspection report as an unresolved item pending completion of a significance determination and not counted in either of the above categories.

**Criteria:** In FY 2003, at least 75 percent of all SDP results that are counted per the criteria above should be finalized within 90 days, increasing 5 percent per year to 90 percent in FY 2006. All issues greater than 90 days will be assessed to determine causal factors and to recommend process improvements.

**Analysis:** Timeliness of final significance determinations decreased from 73 percent in FY 2003 to 48 percent for FY 2004. There was a total of 29 issues closed during this assessment period, and 14 of 29 issues were finalized within the 90 days. This metric reflects the fact that the total number of greater-than-Green SDP results increased 100 percent (from 15 to 29) since FY 2003 due to a higher closure rate of old items. About two thirds of the 15 untimely items in FY 2004 were greater than 365 days old. The increased closure rate is a result of increased management attention. The average age of open items dropped from...
301 days as of September 30, 2003, to 238 days on September 30, 2004. The issues that contributed in the decrease in timeliness include Oconee, Surry, Comanche Peak, and ANO fire protection issues. In accordance with IMC 0307, issues not meeting the timeliness metric are assessed to determine causal factors and to recommend process improvements. SDP timeliness remains a challenge and continues to be addressed along with other improvements being considered by the SDP Improvement Task Action Plan.

**Metric Criterion Met:** No. Performance during this assessment period does not meet program expectations.
SDP-9  SDP Results Are Communicated Accurately to the Public

**Definition:** Each calendar quarter, track the number of inspection findings that are inaccurately communicated to the public (color of findings is inaccurately reported), by auditing the inspection findings summary information available on the NRC web. The detailed review will include item type, significance characterization, enforcement action status, and text descriptions of greater-than-Green inspection findings prior to release to external stakeholders.

**Criteria:** The target goal is zero inaccuracies. All inaccuracies must be addressed.

![Bar chart showing inaccuracies by calendar quarter]

**Analysis:** During the current assessment cycle three inaccuracies were identified. Two instances were identified in which the findings had the wrong date entered. As a result, the findings were not posted in a timely manner on the NRC's external web site. The third instance involved the effective date of a finding. The performance summary page showed a White finding occurred in the fourth quarter of 2003. However, the footnote from the action matrix summary stated that the finding occurred in the second quarter of 2004. The footnote was corrected to maintain consistency with the performance summary page. Additionally, IMC 0306 requires that all reports that update the status of an issue be assigned a report number and associated with the original finding to provide traceability of an issue from discovery to final resolution. These reports include the initial inspection reports, final significance determinations, supplemental inspection reports, and any other reports that discuss the specific issue. The IIPB identified numerous instances where this practice was not being followed and is working with the regions to resolve these specific issues and prevent their recurrence in the future.

**Metric Criterion Met:** No. Performance in this area does not meet program expectations.
**Subjective Judgment Is Minimized and Is Not a Central Feature of the Process. Actions Are Determined by Quantifiable Assessment Inputs (Examine PIs and SDP Results)**

**Definition:** Audit all assessment-related letters and count the number of deviations from the Action Matrix.

**Criteria:** Expect few deviations, with a stable or declining trend.

**Analysis:** There have been a total of five (5) deviations from the Action Matrix since the beginning of the Reactor Oversight Program in Calendar Year 2000.

- Salem/Hope Creek deviation approved August 20, 2004, to provide heightened NRC oversight to closely monitor the licensee’s actions to address significant issues associated with safety conscious work environment (SCWE).

- Cooper deviation approved April 12, 2004, to provide heightened NRC oversight to monitor the actions confirmed by the Confirmatory Action Letter (CAL), dated January 30, 2003.

- Indian Point 2 deviation approved April 2, 2004, to closely monitor the licensee’s performance following the station’s recovery from longstanding problems.

- Indian Point 2 deviation approved March 18, 2003, to provide for heightened oversight of the facility.

- Oconee 1 deviation approved on August 23, 2002, to permit for agency actions consistent with the degraded cornerstone column, including the performance of an IP 95002 vice IP 95003 supplemental inspection.

**Metric Criterion Met:** No. This metric does not meet its criteria based on the number of deviations increasing over CY 2004. Based on a review of these deviations, IMC 0305 was revised to allow the regional offices to continue some of the actions that are consistent with the multiple/repetitive degraded cornerstone or degraded cornerstone columns of the Action Matrix, during a plant’s transition out of those columns. The regional offices may exercise some of these options for a period of one year after the original findings have been closed out without the need for a deviation.
AS-2 The Program Is Well-defined Enough to Be Consistently Implemented

Definition: Audit all assessment letters and count the number of significant departures from requirements in IMCs 0305, “Operating Reactor Assessment Program,” and 0350, “Oversight of Operating Reactor Facilities in an Extended Shutdown as a Result of Significant Performance Problems.” Timeliness goals are counted in metric AS-5.

Criteria: Expect few departures, with a stable or declining trend.

Analysis: There were no significant departures from the requirements of IMC 0305 or 0350 as a result of an audit of assessment letters during the period between January and December 2004.

Metric Criterion Met: Yes. This metric meets its criteria based on no departures from the requirement of IMC 0305 or 0350 and the trend is considered stable.
AS-3 **Actions Taken Are Commensurate with the Risk of the Issue and Overall Plant Risk**

**Definition:** Review actions taken for greater-than-green inspection findings and PIs. Track the number of actions (or lack of actions) taken by the regions that are not appropriate for the significance of the issues and are non consistent with the Action Matrix.

**Criteria:** Expect few departures, with a stable or declining trend.

**Analysis:** All actions taken by the regional offices were consistent with the Action Matrix during the period between January and December 2004. However, additional actions were taken at Salem and Hope Creek that were initiated through the Allegations Program. A deviation was approved on August 20, 2004, to provide heightened NRC oversight to closely monitor the licensee’s actions to address significant issues associated with safety conscious work environment (SCWE).

**Metric Criterion Met:** Yes. This metric meets its criteria based on no departures from the ROP regarding actions taken in response to greater-than-Green findings or PIs.
AS-4 The Number And Scope of Additional Actions Recommended as a Result of the Agency Action Review Meeting (AARM) Beyond Those Actions Already Taken Are Limited

Definition: Review the results of the Agency Action Review Meeting (AARM).

Criteria: Few additional actions, with a steady or declining trend.

Analysis: The AARM was held on April 14, 2004, in Leesburg, Virginia. The participants confirmed the appropriateness of agency actions for Point Beach 1 and 2 and Cooper. The participants recommended one additional action, beyond those already taken or planned, for Cooper. The recommendation was to consider updating the CAL for Cooper to incorporate actions associated with findings subsequent to the CAL issuance. The next Agency Action Review Meeting is scheduled for May 2005.

Metric Criterion Met: Yes. This metric meets its criteria based on the AARM made only one recommendation for consideration.
AS-5 Assessment Program Results (Assessment Reviews, Assessment Letters and Public Meetings) Are Completed in a Timely Manner

Definition: Track the number of instances in which timeliness goals established in IMC 0305 were not met. The regions will collect timeliness data for the conduct of quarterly reviews (within 5 weeks of the end of quarter); mid-cycle, and end-of-cycle reviews (within 6 weeks of the end of quarter); issuance of assessment letters (within 2 weeks of the quarterly review and 3 weeks of the mid-cycle and end-of-cycle reviews); assessment follow-up letters (on or before the next quarterly review); and public meetings (within 16 weeks of the end of the assessment period).

Criteria: Expect few instances in which timeliness goals were not met, with a stable or declining trend.

Analysis: 4Q/2004: All sixty four quarterly reviews and three assessment follow-up letters were completed within timeliness goals.

3Q/2004: All sixty four mid-cycle review meetings were conducted within timeliness goals. Additionally, all 64 mid-cycle mid-cycle letters and two assessment follow-up letters were completed within timeliness goals.

2Q/2004: All sixty four quarterly assessment reviews and all five assessment follow-up letters were completed within timeliness goals.
1Q/2004: All sixty four¹ end-of-cycle meetings, all sixty four¹ annual assessment letters, and the two(2) assessment follow-up letter were completed within timeliness goals.

**Metric Criterion Met:** Yes. This metric meets its criteria based on the timeliness goals being met and with a stable trend.

**AS-6 The Web Posting and Availability via ADAMS of Assessment Letters Is Timely**

**Definition:** Review the posting of letters to the NRC’s external Web site and availability in ADAMS and compare to the timeliness goals. Record the number of letters not available in ADAMS and number of letters not posted to the Web site within goals.

**Criteria:** IIPB posts assessment letters to the NRC’s external Web site using the electronic version in ADAMS within 10 weeks after the end of mid-cycle and end-of-cycle assessment periods and within 8 weeks of the end of intervening quarters.

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¹ Previously, it was reported that sixty six (66) assessment meetings and letters were completed. Prior to the 2003 Mid-Cycle Assessment, Indian Point was treated as two different sites with two assessment letters. For the 2003 Mid-Cycle Assessment and subsequent assessments, one assessment letter was issued for both Indian Point units. In addition, Davis-Besse was under the IMC 0350 process and therefore did not receive an ROP Assessment letter.
Analysis:

4Q/2004: All three assessment follow-up letters were posted to the web within timeliness goals.

3Q/2004: All of the sixty four mid-cycle letters were posted to the web within timeliness goals. Two assessment follow-up letters were not posted to the web within timeliness goals.

2Q/2004: Four assessment follow-up letters were not posted to the web within timeliness goals.

1Q/2004: All sixty four annual assessment letters were posted to the web within timeliness goals. Two assessment follow-up letters were not posted to the web within timeliness goals.

Between January and December 2004, 94 percent of the assessment letters (end-of-cycle, mid-cycle, and follow-up) were posted within timeliness goals. The metric result for calendar year 2004 is consistent with the 94 percent timeliness reported during the previous review period (January - December 2003). IIPB has recently begun requesting that the regional offices provide their input to the action matrix summary web page prior to posting this information publically. As a result, all of the 4Q/2004 assessment follow-up letters were posted within timeliness goals.

IIPB will be taking additional steps to ensure that assessment follow-up letters continue being posted to the web in a timely manner.

There are two reasons that the follow-up assessment letters were not being posted in a timely manner: (1) regions are not consistently sending the follow-up assessments to the IIPB email address (RidsNrrDipmlipb@nrc.gov) as specified in IMC 0306; and (2) IIPB is not consistently checking the inbox in the IIPB email address (RidsNrrDipmlipb@nrc.gov).

Metric Criterion Met: Yes. This metric meets its criteria based on the overall web posting timeliness goal being met. However, the data shows that the assessment follow-up letters, as a whole, are not being posted on the web in a timely manner.
AS-7  Assessment Program Procedures Are Stable Enough to Be Perceived as Predictable

Definition:  Count the number of revisions to IMCs 0305 and 0350.

Criteria:  Expect few revisions, with a stable or declining trend.

Analysis:  During calendar year 2004, there were two revisions to IMC 0305, “Operating Reactor Assessment Program” which were issued on January 29, 2004 and December 21, 2004.

Metric Criterion Met:  Yes. This metric meets its criteria based on IMC 0305 revisions have remained stable.
AS-8  The NRC’s Response to Performance Issues Is Timely

Definition:  Count the number of days between issuance of an assessment letter discussing an issue of more than very low safety significance and completion of the supplemental inspection (by exit meeting date, not issuance of the inspection report).

Criteria:  Expect a stable or declining trend.

Comments:  The data represents an average timeliness for the supplemental inspections completed in each region in any given quarter.

Analysis:  Data collected to date indicates a relatively stable long term trend regarding the elapsed time between the issuance of an assessment letter and the completion of the corresponding supplemental inspection. The data is also well within the timeliness goals specified in the NRR operating plan; 100 percent of supplemental inspections complete (exit meeting conducted) within 180 days of licensee notification of readiness. In fact, the majority of those occurrences that exceeded the 180 days for this metric were a result of the licensee not being ready for the inspection, which had not been considered when gathering this data and would not count against the operating plan measure. IIPB will continue to monitor this data set to determine if an adverse trend exists.

Metric Criterion Met:  Yes. This metric meets its criteria based on the relatively stable long term trend regarding the elapsed time between NRCs response to performance issues.
The Agency Takes Appropriate Actions to Address Performance Issues for Licensees Outside of the Licensee Response Column of the Action Matrix

Definition: Solicit feedback on the appropriateness of regulatory attention given to licensees with performance problems via a survey question to both internal and external stakeholders.

Criteria: Expect stable or improved perception.

Analysis: Internal Survey

One internal survey question addresses this metric. The question and its resultant percentage of agreement from internal stakeholders are presented below.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Nov 2004</th>
<th>Dec 2002</th>
<th>Mar 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>The agency takes appropriate actions to address performance issues for those licensees outside of the Licensee Response Column of the action matrix</td>
<td>85%</td>
<td>80%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Internal stakeholders continued to agree that the agency takes appropriate actions to address performance issues for licensees outside of the licensee response column of the Action Matrix. The data supporting this metric indicates a slightly increasing positive perception for this measure when compared to the previous survey in 2002 and was not specifically asked during the March 2001 internal survey.

External Survey

The industry and the majority of the State and Local agencies generally agreed that actions taken by the NRC for plants outside of the licensee response column have been appropriate. However, one State was critical of the timeliness and scope of NRC supplemental inspections. One public interest group responded positively but maintained that improvement was warranted in the agency’s follow-up to deficiencies in the cross-cutting areas. This survey participant recommended that the NRC develop a mechanism, such as a greater than green finding, to allow for early NRC engagement of licensees when a substantive cross-cutting issue is identified and clearly delineate NRC actions in the assessment letter. The level of external stakeholder satisfaction in this area was similar to the internal survey discussed in SECY-03-0062 dated April 21, 2003.

Overall, stakeholder satisfaction, as reported in the survey responses for initial ROP implementation, was generally favorable.

Metric Criterion Met: Yes. This metric meets its criteria with a stable positive perception over the past four years of ROP implementation.
AS-10  Information Contained in Assessment Reports Is Relevant, Useful, and Written in Plain Language

Definition: Perform surveys to determine internal and external stakeholder views on assessment reports.

Criteria: Expect stable or improved perception of the relevance, usefulness, and understandability of assessment reports.

Analysis: Internal Survey

One internal survey question address this metric. The question and its resultant percentage of agreement from internal stakeholders are presented below.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Nov 2004</th>
<th>Dec 2002</th>
<th>Mar 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Contained in Assessment Reports Is Relevant, Useful, and Written in Plain Language</td>
<td>79%</td>
<td>74%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Internal stakeholders continued to agree that the information contained in assessment reports is relevant, useful, and written in plain language. The data supporting this metric indicates a slightly increasing positive perception for this measure when compared to the previous survey in 2002 and was not specifically asked during the March 2001 internal survey.

External Survey

The industry and the majority of the State and Local agencies agreed that the information contained in assessment reports was relevant, useful, and written in plain English. However, one State regulator was critical of the scope and length of discussions in the assessment letters. One public interest group stated that the assessment letters contained too much boilerplate information and lacked clear distinction between the best performing plants and the worst performing plants. The level of external stakeholder satisfaction in this area was similar to the internal survey discussed in SECY-03-0062 dated April 21, 2003.

Overall, stakeholder satisfaction as reported in the survey responses for both initial ROP implementation and the current ROP was generally favorable and consistent.

Metric Criterion Met: Yes. This metric meets its criteria with a stable positive perception over the past four years of ROP implementation.
**AS-11** Degradations in Plant Performance, as Measured in the Action Matrix, are Gradual and Allow Adequate Agency Engagement of the Licensees

**Definition:** Track the number of instances each quarter in which plants move more than one column to the right in the Action Matrix (as indicated on the Action Matrix Summary).

**Criteria:** Expect few instances in which plant performance causes a plant to move more than one column to the right in the Action Matrix. Provide a qualitative explanation of each instance in which this occurs. Expect a stable or declining trend from the first-year benchmark.

**Analysis:** During the period from January through December 2004, there were no reactor plants that moved more than one column to the right in the Action Matrix. Point Beach Units 1 and 2 moved from the regulatory response column to the multiple/repetitive degraded cornerstone column in 1Q/2003 and was the last plant to be counted in this metric.

**Metric Criterion Met:** Yes. This metric meets its criteria because no plants moved two or more columns to the right during the period of January - December 2004.
O-1 Public Perceives the ROP to Be Predictable and Objective

Definition: Annually survey external stakeholders through a Federal Register notice asking if decisions are overly reliant on judgement, or not controlled by the process.

Criteria: Expect a stable or increasing positive perception over time.

Analysis: Overall, a majority of the respondents (including utilities, state agencies and public interest groups) stated the ROP is predictable and objective in comparison to the previous process. The responses from licensees were similar to those from previous years and indicate a belief in the continuing effort to improve in this area. Some utilities believe it is far too subjective and based on pre-determined individual judgement. Some utilities also expressed concerns with the subjective nature of crosscutting issues. While there is not complete agreement on the objectivity of the process, there is some agreement that it is moving in the right direction.

The stakeholder satisfaction as reported in the survey responses for both initial ROP implementation and the current ROP was generally favorable and consistent.

Metric Criterion Met: Yes. This metric meets its criteria with a stable perception over the past four years of ROP implementation.

O-2 NRC Perceives the ROP to Be Predictable and Objective

Definition: Annually survey internal stakeholders, asking if decisions are overly reliant on judgement, or not controlled by the process.

Criteria: Expect stable or increasingly positive perception over time.

Analysis: Three internal survey questions addressed this metric. These questions and their resultant percentage of agreement from internal stakeholders are presented below.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Nov 2004</th>
<th>Dec 2002</th>
<th>Mar 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROP increases predictability</td>
<td>73%</td>
<td>69%</td>
<td>75%</td>
</tr>
<tr>
<td>ROP provides appropriate objectivity</td>
<td>81%</td>
<td>82%</td>
<td>85%</td>
</tr>
<tr>
<td>ROP increases objectivity</td>
<td>79%</td>
<td>76%</td>
<td>79%</td>
</tr>
</tbody>
</table>

Internal stakeholders continue to generally agree that the ROP is predictable and objective. The data supporting this metric indicates a slightly increasing positive perception for these three measures when compared to the previous survey in 2002 and is consistent with the positive perception in 2001.

Metric Criterion Met: Yes. This metric meets its criteria with a stable perception over the past four years of ROP implementation.
O-3 Public Perceives the ROP to Be Risk-informed

Definition: Annually survey external stakeholders through a Federal Register notice asking if ROP actions and outcomes are appropriately graded according to the significance of the issues at the plants.

Criteria: Expect stable or increasingly positive perception over time.

Analysis: Overall, a majority of the respondents believe the ROP is more risk informed than the previous process. State agencies do express concern for the way the findings are handled by the NRC and the licensees. Utilities state that the areas covered by Manual Chapter 0609, Appendix A are the most risk-informed. However, similar to previous surveys, the utility respondents believe the actions resulting from findings that are classified based on SDPs that are still deterministic in nature, skews the perception of the actual significance. A public interest group added that if the SDPs were fixed, the NRC's responses under the ROP would be more commensurate with the significance of the performance deficiencies.

In summary, stakeholder satisfaction as reported in the survey responses for both initial ROP implementation and the current ROP was generally favorable and consistent.

Metric Criterion Met: Yes. This metric meets its criteria with an increasing positive perception over the past four years of ROP implementation.

O-4 NRC Perceives the ROP to Be Risk-Informed

Definition: Annually survey internal stakeholders asking if ROP actions and outcomes are appropriately graded according to the significance of the issues at the plants.

Criteria: Expect stable or increasingly positive perception over time.

Analysis: Two internal survey questions addressed this metric. These questions and their resultant percentage of agreement from internal stakeholders are presented below.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Nov 2004</th>
<th>Dec 2002</th>
<th>Mar 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROP provides an effective risk-informed approach to oversight</td>
<td>74%</td>
<td>73%</td>
<td>82%</td>
</tr>
<tr>
<td>ROP is more risk-informed</td>
<td>90%</td>
<td>91%</td>
<td>96%</td>
</tr>
</tbody>
</table>

Internal stakeholders continue to generally agree that the ROP provides an effective risk-informed approach to oversight. The data supporting this metric indicates a stable positive perception for these two measures when compared to the previous survey in 2002 and is consistent with the positive perception in 2001.
**Metric Criterion Met:** Yes. This metric meets its criteria with a stable perception over the past four years of ROP implementation.

**O-5 Public Perceives the ROP to Be Understandable**

**Definition:** Annually survey external stakeholders through a *Federal Register* notice asking if they understand the process, procedures, and outputs, and if products are clear and written in plain English.

**Criteria:** Expect stable or increasingly positive perception over time.

**Analysis:** In general, most of the stakeholders stated that the ROP is understandable and that products are written in clear and plain English. Both Licensees and State agencies expressed reservations about the public’s ability to understand the SDP (e.g., Fire Protection, Shutdown, and Steam Generators SDPs). Utilities also stated that there is no guidance or established process for the closing of a substantive crosscutting issue. As in the previous survey, the SDP is recognized to be the most complex portion of the ROP requiring some technical background for understanding.

Overall, the objective measure of stakeholder satisfaction as reported in the survey responses for both initial ROP implementation and the current ROP was generally favorable and consistent.

**Metric Criterion Met:** Yes. This metric meets its criteria with a stable perception over the past four years of ROP implementation.

**O-6 NRC Perceives the ROP to Be Understandable**

**Definition:** Annually survey internal stakeholders asking if they understand the process, procedures, and output products, and if products are clear and written in plain English.

**Criteria:** Expect stable or increasingly positive perception over time.

**Analysis:** Two internal survey questions addressed this metric. These questions and their resultant percentage of agreement from internal stakeholders are presented below.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Nov 2004</th>
<th>Dec 2002</th>
<th>Mar 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROP is understandable and written in plain English</td>
<td>89%</td>
<td>87%</td>
<td>89%</td>
</tr>
<tr>
<td>ROP is understandable and the procedures and output products are clear and written in plain English</td>
<td>72%</td>
<td>74%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Internal stakeholders continue to generally agree that the ROP is understandable and written in plain English. The data supporting this metric indicates a stable positive perception for these two measures when compared to the previous survey in 2002 and is consistent with the positive perception in 2001.
Metric Criterion Met: Yes. This metric meets its criteria with a stable perception over the past four years of ROP implementation.

O-7 Public Perceives the ROP Maintains Safety

Definition: Annually survey external stakeholders through a Federal Register notice asking if the ROP adequately assures that plants are being safely operated and maintained.

Criteria: Expect stable or increasingly positive perception over time.

Analysis: Majority of utility stakeholders believed the ROP maintains safety while some of non-utility stakeholders (State agencies and public interest groups) feel it does not. The recent findings at Davis-Besse dominate the negative comments on this topic. Also mentioned were the issues from Hope Creek and Salem. These comments are consistent with past surveys that have had some negative comments on the ROP maintaining safety.

Overall, stakeholder satisfaction as reported in the survey responses for both initial ROP implementation and the current ROP was generally favorable and consistent.

Metric Criterion Met: Yes. This metric meets its criteria with a stable perception over the past four years of ROP implementation.

O-8 NRC Perceives the ROP Maintains Safety.

Definition: Annually survey internal stakeholders.

Criteria: Expect stable or increasingly positive perception over time.

Analysis: One internal survey question addressed this metric. This question and its resultant percentage of agreement from internal stakeholders are presented below.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Nov 2004</th>
<th>Dec 2002</th>
<th>Mar 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROP maintains safety</td>
<td>78%</td>
<td>76%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Internal stakeholders continue to generally agree that the ROP maintains safety. The data supporting this metric indicates a stable positive perception for this measure when compared to the previous survey in 2002.

Metric Criterion Met: Yes. This metric meets its criteria with a stable perception over the past four years of ROP implementation.
O-9 Analysis of NRC’s Responses to Significant Events

Definition: Review reports from incident investigation teams (IITs) and augmented inspection teams (AITs) to collect lessons learned regarding programmatic deficiencies (i.e., did the baseline inspection program inspect the area? Did the SDP accurately characterize resultant findings?). IITs already have the provision to determine NRC program deficiencies. AITs will be reviewed by IIPB to identify any weaknesses.

Criteria: Expect no major programmatic voids.

Analysis: No IITs were conducted during the 2004 ROP cycle. AITs were conducted at Peach Bottom and Palo Verde. IIPB reviewed the Peach Bottom and Palo Verde AIT reports, and did not identify any ROP programmatic deficiencies. However, the Palo Verde AIT indicated that guidance is required on charging hours for AIT followup, i.e., when to charge against IP 93800 “Augmented Inspection Team,” and when to charge to a baseline IP. No feedback forms were received for IP 93800.

Metric Criterion Met: Yes. This metric meets its criteria based on no current programmatic voids and continued staff progress in addressing the DBLLTF recommendations.

O-10 Analysis of Significant Events

Definition: Annually review all Accident Sequence Precursor (ASP) events that have a risk significance of more than 1E-6 to identify any ROP programmatic voids (i.e., did the baseline inspection program inspect this area, did the SDP accurately characterize resultant findings, etc).

Criteria: Expect no major programmatic voids.

Analysis: The NRC’s Office of Nuclear Regulatory Research (RES) compared ASP results and SDP evaluations for ASP analyses completed during the assessment period. No significant differences between the SDP findings and the ASP results were identified. During the period, several ASP reviews were initiated and were still in progress at the time of this assessment.

Metric Criterion Met: Yes. This metric meets its criteria based on no identified major programmatic voids.
O-11 Public Perceives the ROP to Be Effective, Efficient, Realistic

Definition: Annually survey external stakeholders through a Federal Register notice asking specific questions (based on NRC Strategic Plan) regarding whether the ROP is effective, efficient, and realistic.

Criteria: Expect stable or increasingly positive perception over time.

Analysis: In general, the respondents believe that the ROP is effective, efficient, and realistic in comparison to previous programs. However, from the responses of utility stakeholders as well as non-utility stakeholders, there was a consensus for improvement in all areas. A common concern among most respondents is the efficiency of the SDP in regards to the timeliness of performance deficiencies along with the determination of the final SDP findings.

Overall, stakeholder satisfaction as reported in the survey responses for both initial ROP implementation and the current ROP was generally consistent.

Metric Criterion Met: Yes. This metric meets its criteria with a stable perception over the past four years of ROP implementation.

O-12 NRC Perceives the ROP to Be Effective, Efficient, Realistic

Definition: Annually survey internal stakeholders asking specific questions (based on NRC Strategic Plan) regarding whether the ROP is effective, efficient, and realistic.

Criteria: Expect a stable or increasingly positive perception over time.

Analysis: Three internal survey questions address this metric. These questions and their resultant percentage of agreement from internal stakeholders are presented below.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Nov 2004</th>
<th>Dec 2002</th>
<th>Mar 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROP increases effectiveness</td>
<td>55%</td>
<td>56%</td>
<td>57%</td>
</tr>
<tr>
<td>ROP increases efficiency</td>
<td>71%</td>
<td>70%</td>
<td>75%</td>
</tr>
<tr>
<td>ROP increases realism</td>
<td>63%</td>
<td>65%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Internal stakeholders tend to agree that the ROP increases effectiveness, efficiency, and realism. The data supporting this metric indicates a stable perception for these three measures when compared to the previous survey in 2002 and is consistent with the positive perception in 2001.

Metric Criterion Met: Yes. This metric meets its criteria with a stable perception over the past four years of ROP implementation.
O-13  Public Perceives the ROP Enhances Public Confidence

Definition:  Annually survey external stakeholders through a Federal Register notice asking if the ROP enhances public confidence.

Criteria:  Expect stable or increasingly positive perception over time.

Analysis:  Many of the utility and State agency respondents, with the exception of a few, believe that the ROP provides the right framework and mechanisms to enhance public confidence. However, utility stakeholders expressed concerns with the communication breakdown when it comes to inspection information being processed in the Regions. One public interest group noted concerns on the closed-door efforts for the Davis-Besse Lessons Learned Task Force recommendations resolutions, and the removal of security-related information from the ROP on August 4, 2004.

Overall, stakeholder satisfaction as reported in the survey responses for both initial ROP implementation and the current ROP was generally favorable and consistent.

Metric Criterion Met:  Yes. This metric meets its criteria with a stable perception over the past four years of ROP implementation.

O-14  Opportunities for Public Participation in the Process

Definition:  Annually survey external stakeholders through a Federal Register notice asking if there are sufficient opportunities for the public to participate in the process.

Criteria:  Expect positive responses or an improving trend over time.

Analysis:  A majority of respondents, (as in previous years), believe there is adequate opportunity for the public to participate in the ROP along with providing inputs and comments. Many stakeholders continued to express concern that the public as a whole is not seizing those opportunities to provide input to the program.

Overall, stakeholder satisfaction as reported in the survey responses for both initial ROP implementation and the current ROP was generally favorable and consistent.

Metric Criterion Met:  Yes. This metric meets its criteria with mostly positive comments and a stable perception over the past four years of ROP implementation.
O-15  The Public Perceives the NRC to Be Responsive to its Inputs and Comments

**Definition:** Annually survey external stakeholders through a Federal Register notice asking if the NRC is responsive to the public's inputs and comments.

**Criteria:** Expect positive responses or an improving trend over time.

**Analysis:** The majority of utility stakeholders believe that the NRC is responsive to inputs and comments, while many non-utility stakeholders feel that the NRC needs to improve on this aspect of the ROP, which was a similar response to previous surveys. Non-utility stakeholders continue to feel that the NRC is slow to respond, if it responds at all, to many comments and inputs.

To address the continued concerns that the NRC has been unresponsive to stakeholder feedback, the staff plans to consolidate the comments by question and provide a comprehensive response to each question separately. This consolidated response, along with this Commission paper and the annual ROP performance metric report, will be posted to the ROP web page and sent to each respondent to the survey.

Overall, stakeholder satisfaction as reported in the survey responses for both initial ROP implementation and the current ROP was generally not favorable and consistent.

**Metric Criterion Met:** No. This metric does not meet its criteria with an increasing negative perception over the past four years of ROP implementation.

O-16  Public Perceives the ROP Was Implemented as Defined

**Definition:** Annually survey external stakeholders through a Federal Register notice asking if the ROP has been implemented as designed.

**Criteria:** Expect stable or increasingly positive perception over time.

**Analysis:** In general, licensees and state agencies believe the ROP is being implemented as defined. A few utility stakeholders expressed concern that more program definition is needed in the area of cross-cutting issues and how to document and close these issues. Licensees also pointed out that occasional differences in interpreting the ROP documents have occurred, the most noticeable being the way some inspectors interpret NEI 99-02, "Regulator Assessment Performance Indicator Guideline."

Overall, stakeholder satisfaction as reported in the survey responses for both initial ROP implementation and the current ROP was generally favorable and consistent.

**Metric Criterion Met:** Yes. This metric meets its criteria with mostly positive comments and an increasing positive perception over the past four years of ROP implementation.
O-17 Public Perceives the ROP Reduces Unnecessary Regulatory Burden

Definition: Annually survey external stakeholders through a Federal Register notice asking if the ROP reduces unnecessary regulatory burden.

Criteria: Expect stable or increasingly positive perception over time.

Analysis: The majority of respondents including utility stakeholders and non-utility stakeholders, (as in previous surveys), believe that the ROP does reduce unnecessary regulatory burden. However, one utility stakeholder feels that this is only the case for newer plants and is the exact opposite for older plants.

Overall, satisfaction as reported in the survey responses for both initial ROP implementation and the current ROP was generally favorable and consistent.

Metric Criterion Met: Yes. This metric meets its criteria with mostly positive comments and an increasing positive perception over the past four years of ROP implementation.

O-18 Public Perceives the ROP Does Not Result in Unintended Consequences

Definition: Annually survey external stakeholders through a Federal Register notice asking if the ROP results in unintended consequences.

Criteria: Expect stable or increasingly positive perception over time.

Analysis: Similar to previous surveys, the majority of stakeholders responding indicate that they believe the ROP results in some unintended consequences. Examples include the scrams with loss of normal heat removal PI and the safety system unavailability PI. While the actual consequences have changed, the number and gravity of their impact has remained constant.

Overall, stakeholder satisfaction as reported in the survey responses for both initial ROP implementation and the current ROP was generally not favorable.

Metric Criterion Met: No. This metric does not meet its criteria based on an increasing negative perception over the past four years of ROP implementation.