

ROP Performance Metrics

The Reactor Oversight Process (ROP) performance metrics utilize objective measures and predetermined criteria to monitor the performance of the process as described in Inspection Manual Chapter (IMC) 0307, "Reactor Oversight Process Self-Assessment Program." The staff of the U.S. Nuclear Regulatory Commission (NRC) developed metrics to monitor each major element of the ROP, as well as metrics of a more general nature intended to gauge overall ROP performance. These metrics rely on information from various sources, including the reactor program system (RPS), the inspection program, periodic independent audits, stakeholder surveys, and public comment. The staff collects data on a quarterly basis, as applicable, and analyzes the data by comparison against preestablished criteria. In most cases, success is defined as a steady or improving trend.

The staff has also developed metrics to monitor resident inspector demographics and quality-of-life issues. Attachment 7 to this paper addresses the resident demographic metrics (PR-1 through PR-5); however, the staff did not directly address the specific quality-of-life metrics defined in IMC 0307 (PR-6 through PR-10) during this assessment cycle because of the inconsistency and unreliability of the raw data. The staff plans to streamline and automate the data collection process for these metrics in the next ROP cycle and will then begin directly assessing these metrics as part of the IMC 0307 process.

The NRC solicited comments regarding the fourth year of ROP implementation from external stakeholders in a *Federal Register* notice (FRN) published on November 5, 2003. Approximately half of the 18 responses were from the utilities, while 3 were from State agencies, 5 were from public interest groups, and one was from an anonymous NRC staff member. Consistent with the biennial frequency prescribed by IMC 0307, the staff did not conduct an internal survey during this ROP cycle, so the metrics that rely on the internal survey were not applicable for this analysis.

The majority of metrics met their established criteria. All metrics in the inspection and assessment areas met their criteria, but some metrics in the Performance Indicator (PI), Significance Determination Process (SDP), and overall ROP areas did not meet their success criteria. The staff's corrective actions to address these issues are discussed in the remainder of this attachment and in the applicable program area discussions in Attachment 1 to this paper.

In reviewing the data for this reporting period, the staff found that one of the seven PI metrics did not meet its established criteria because of the negative perception that the PI program may adversely impact plant safety (PI-4), as indicated by the number of comments related to examples of issues that could potentially affect licensee actions that impact plant safety. The staff continues to evaluate several PIs in an effort to improve their effectiveness and minimize potential actions that may adversely impact plant safety. The staff also recognizes that the frequently asked questions (FAQ) process has become inefficient and overly burdensome and, therefore, plans to address these concerns in CY 2004 as discussed in the PI program area discussion in Attachment 1.

Of the nine metrics counted for the SDP, two did not meet their established criteria. Specifically, one of these two unsuccessful metrics resulted from the negative perception that the SDP results do not translate to the same level of significance for all cornerstones (SDP-5). In addition, the metric measuring SDP timeliness (SDP-8) once again failed to meet staff expectations, although SDP timeliness has improved over the past year. On a positive note, the metric measuring the accuracy of results communicated to the public (SDP-9), which failed to meet its criteria for CY 2002, improved significantly in CY 2003 (zero inaccuracies) based on the staff's implementation of new procedures requiring multiple checks before posting findings to the NRC's external Web site.

The staff continues to pursue the SDP timeliness issue, as well as negative perceptions that the SDP results do not translate to the same level of significance for all cornerstones and perceptions that the staff is not proficient in using the SDP, and the staff expects to realize improvements as the process is refined. The staff continues to address these and other issues through the SDP Improvement Plan, as discussed in the SDP program area discussion in Attachment 1 to this paper.

Of the 18 overall metrics established for the ROP, 3 failed to meet the established criteria. Specifically, the three metrics that were not met gauge the public's perception of various aspects of the ROP using information gathered through an external survey of the public. These metrics include whether the public perceives the ROP to be risk-informed (O-3), whether the public perceives the NRC to be responsive to its inputs and comments (O-15), and whether the public perceives that the ROP results in unintended consequences (O-18).

Many stakeholders questioned whether the ROP is risk-informed because of the perception that portions of the ROP are not risk-informed and create a discontinuity in the program. The staff plans to continue developing the SDPs and aspects of the ROP that are not risk-informed, while maintaining a focus on program continuity and equality between the various cornerstones. Numerous stakeholders also 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 continues to develop and enhance communication and feedback with the public, and will explore new avenues for collecting and responding to public comments. Finally, as in previous years, the ROP failed to meet the metric for unintended consequences. Many stakeholders continue to believe that the ROP has numerous unintended consequences, and the staff will continue to investigate and attempt to resolve those issues in the future.

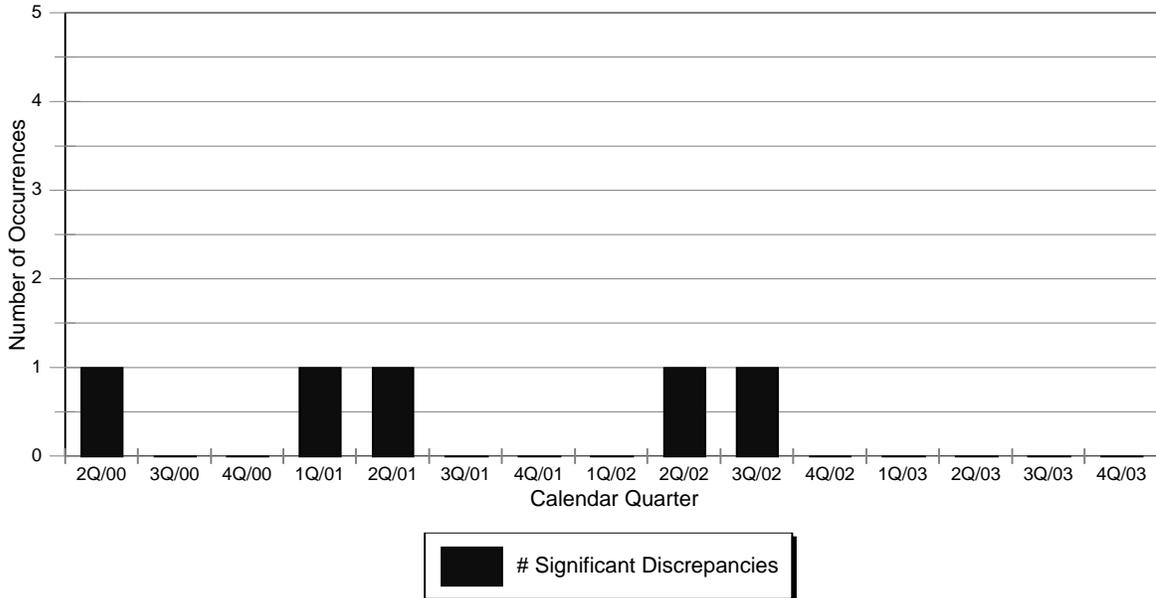
On a positive note, three overall metrics that failed to meet their criteria in CY 2002 improved in CY 2003. The staff concluded that the metric established to measure whether any programmatic voids exist in the ROP (O-9) was met based on no additional programmatic voids and significant staff progress in addressing the recommendations of the Davis-Besse Lessons Learned Task Force (DBLLTF). The staff also concluded that the metrics regarding whether the ROP maintains safety (O-7) and whether the ROP is effective, efficient, and realistic (O-11) were met this year based on an increasing positive perception (compared to last year) and a stable perception over time.

The following pages present the detailed metrics and their related analyses.

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 the acceptable range of variability.



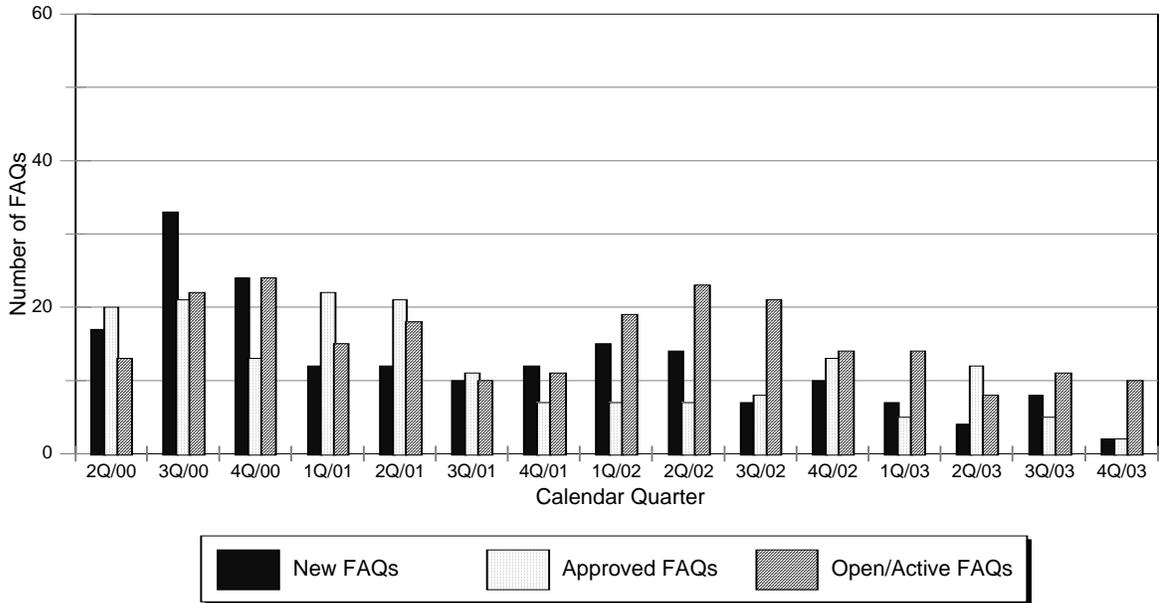
Comments: The graph represents the number of significant deficiencies reported for each quarter. Significant discrepancies are issues identified by the NRC during a PI verification inspection that caused the PI to cross a threshold.

Analysis: The metric criterion was met because no significant deficiencies were reported during this assessment period.

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.



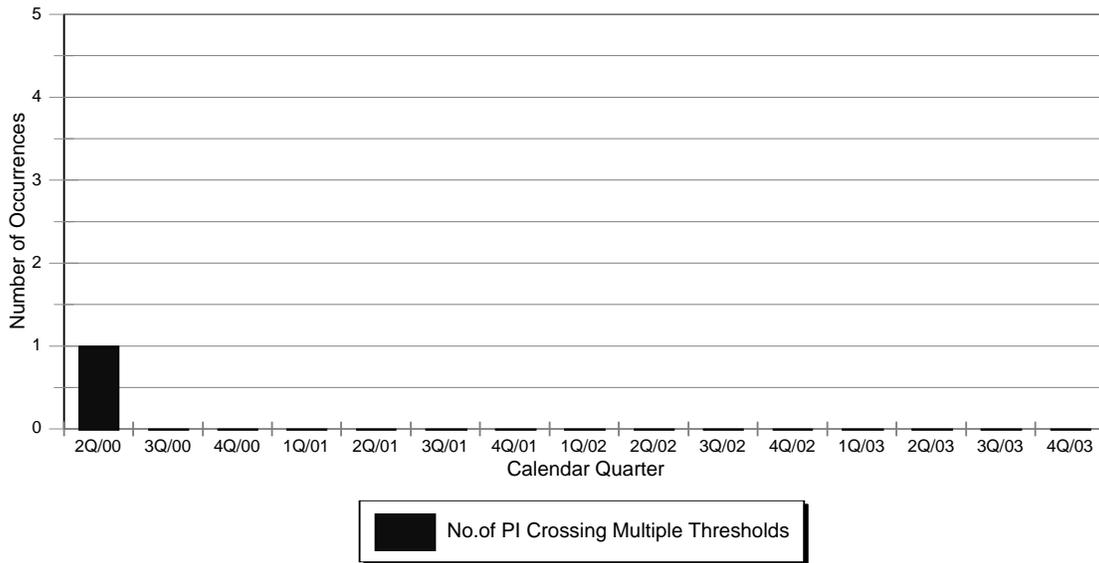
Comments: Interpretation questions regarding the PI guidance in NEI 99-02 took an upward trend during the initial stages of the ROP. This upward trend was anticipated; however, as NRC inspectors and licensees became more familiar with the guidance, and as additional guidance was provided to clarify NEI 99-02, a lower and generally stable number of questions required evaluation. For this assessment period, the number of interpretation questions has been generally low and stable. However, several of the FAQs continued to remain open for a significant period of time. As reported in the previous ROP self-assessment, the majority of these FAQs related to the Scrams with Loss of Normal Heat Removal PI. The NRC continues to work with stakeholders to resolve the open issues.

Analysis: This metric was met based on the stable and slightly decreasing trend in interpretation issues, but the staff and many stakeholders recognize that the FAQ process has become inefficient, ineffective, and overly burdensome. The staff plans to address these concerns in CY 2004, as discussed in Attachment 1.

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: The metric criterion was met because there were no occurrences of PIs crossing multiple thresholds during this assessment period. For the given parameters that are monitored by the PIs, the PIs appear to provide timely indication of declining performance.

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.

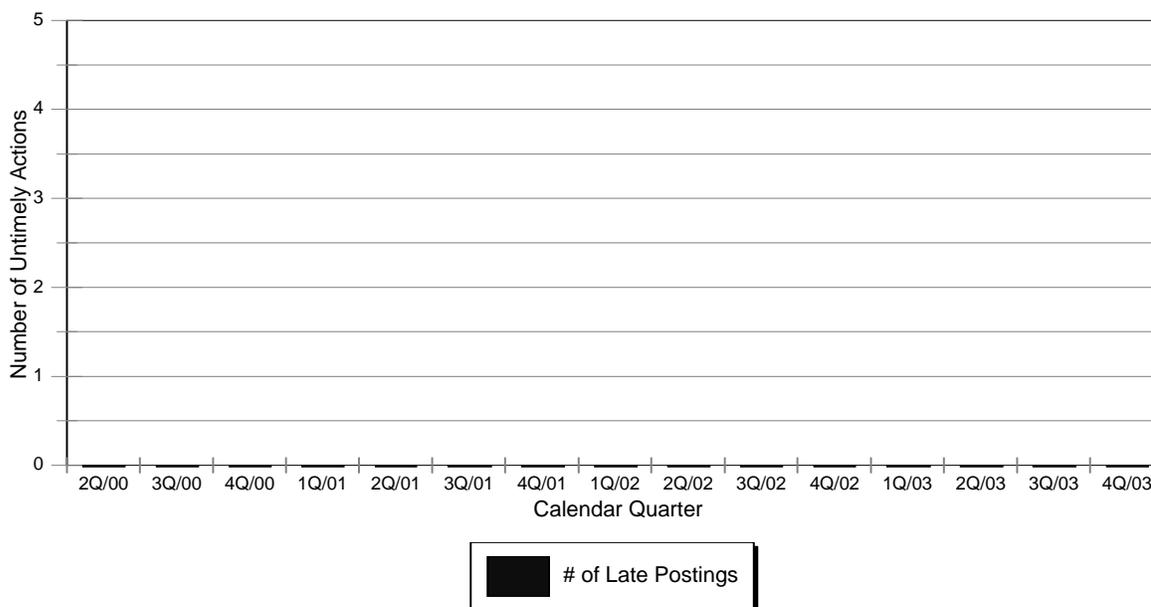
Comments: All of the utility/utility group respondents stated, or endorsed NEI's comment, that the PI program, together with the inspection program, provides incentives to minimize the potential for licensees to take actions that adversely impact plant safety. However, comments provided suggested that a few of the indicators have the potential to influence licensees to take actions that could adversely impact safety. For example, a potential exists to minimize safety system unavailability since there is no penalty for system failure [unreliability] in the PI. In addition, the current interpretation of scrams with a loss of normal heat removal could send a message that operators should focus on the status of non-safety-related equipment rather than monitoring safety-related equipment. Similarly, licensees may delay down powers to avoid an unplanned power change PI occurrence. One respondent commented that to avoid the consequences of a PI [crossing a threshold], much effort is spent developing "creative" ways around the indicator... resulting in FAQs that "stretch" the bounds of the PI. In addition, a non-utility respondent noted that excluding notices of enforcement discretion (NOEDs) from the unplanned power changes PI penalizes plants that choose to reduce power.

Analysis: Last year, the criteria for this metric were not met, primarily because of the responses received from the public interest groups. This year, the criteria for this metric were not met because a number of comments related to issues that could potentially affect licensee actions that impact plant safety. The Scrams with Loss of Normal Heat Removal PI and the Safety System Unavailability PI were specifically identified as indicators that had the potential to influence licensee actions. The staff continues to evaluate these PIs in an effort to improve their effectiveness and minimize potential actions that may adversely impact plant safety. The staff also recognizes that the FAQ process has become inefficient and overly burdensome, and plans to address these concerns in CY 2004. The staff also plans to evaluate the impact of NOEDs on the Unplanned Power Changes PI.

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: The metric criterion was met because there have been no late PI data postings on the NRC's external Web site since the inception of the ROP. However, during the 3rd quarter of 2003, one licensee submitted PI quarterly data past the expected due date set forth in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 2. The late submittal required additional NRC followup, but did not delay the Web postings beyond the required 5 weeks from the end of the quarter.

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.

Comment: Consistent with the biennial frequency of the internal ROP survey prescribed by IMC 0307, the staff did not conduct an internal survey during CY 2003, but plans to conduct this survey in CY 2004.

Analysis: All of the external survey responses received from utilities and utility groups stated, or endorsed NEI's comment that, in general, appropriate overlap exists between the PI program and the inspection program. Some respondents further commented that, if anything, there was excessive overlap in that the inspection program looks at areas that are adequately covered by PIs (e.g., in the radiation protection area and the Safety System Unavailability PI) and, in other cases, the PIs monitor areas that are already being inspected (e.g., the Scram with Loss of Normal Heat Removal PI).

External survey responses received from a non-utility group stated that there was appropriate overlap between the PIs and the Inspection Program, but the program could be improved (e.g., continue to focus on cross-cutting issues since there is no PI in this area). Another respondent indicated that this item is not easily measured; however, similar to last year when the ROP didn't identify issues related to the Davis-Besse reactor head, it didn't identify the steam dryer issues at several plants this year.

As previously mentioned, the NRC staff continues work related to the Scram with Loss of Normal Heat Removal PI and with the Safety System Unavailability PI. Comments related to specific areas not directly related to current PIs, such as cross-cutting issues and radiation protection inspections, have been forwarded to the appropriate technical staff for evaluation.

The criterion for this metric has been met based on a relatively stable perception regarding appropriate overlap.

PI-7 Reporting Conflict Reduction

Definition: Survey licensees and other external stakeholders regarding the perceived overlap between reporting requirements, such as those promulgated by the 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: Every utility/utility group respondent commented, or endorsed NEI's comment, that there are differences in reporting and definitions between the ROP, WANO/INPO, and the Maintenance Rule. These comments were similar to those made in previous years. Respondents further noted that the industry is also working to reduce the unnecessary duplicative reporting with the introduction of the Consolidated Data Entry (CDE) system being developed by INPO.

A non-utility stakeholder responded that it was appropriate for the NRC to look for unnecessary overlap, as long as such efforts do not diminish the effectiveness of the program.

Although the utility respondents commented (as they did last year) that differences exist between the ROP, WANO/INPO, and the Maintenance Rule, they identified that the NRC and the industry are continuing their efforts to reduce unnecessary differences.

This metric has been met based on the stable number of negative comments.

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: The vast majority of utility/utility group respondents commented, or endorsed the NEI's comment, that in general NEI 99-02 provides clear guidance; however, significant problems remain in the clarity of the Scrams with Loss of Normal Heat Removal and weaknesses with the Safety System Unavailability indicators. Respondents also commented that the FAQ process could be improved by NEI/industry and the NRC coming to meetings better prepared to discuss issues and doing a better job of screening issues.

A non-utility stakeholder commented that the NEI 99-02 guidance was generally helpful, but it would be more appropriate for licensees to comment. Another non-utility stakeholder commented that there appears to be room for interpretation with regard to the Alert and Notification System and Emergency Response Organization (ERO) Drill Participation indicators.

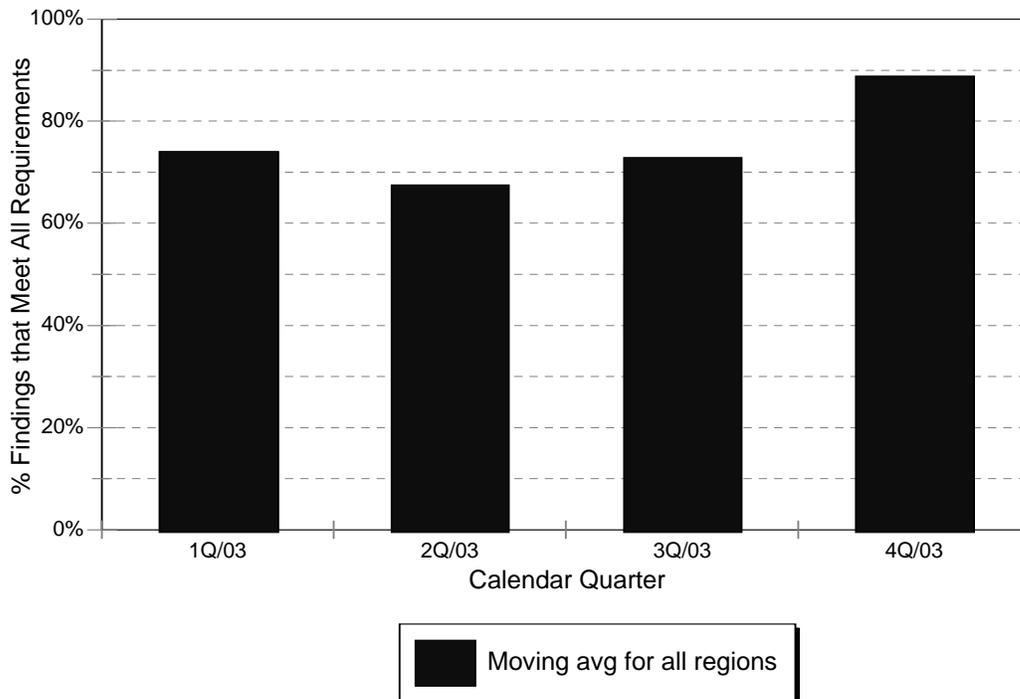
While the comments related to the Scrams with Loss of Normal Heat Removal PI directly related to the clarity of the purpose and definitions of the NEI 99-02 guidance, the comments on the Safety System Unavailability PI did not directly relate to the clarity of the PI guidance. Rather, the Safety System Unavailability PI comments related to the construct of the PI, and the staff analyzed these comments in metric PI-4. As previously noted, the NRC staff continues to work with stakeholders to resolve problems with the Scrams with Loss of Normal Heat Removal PI and the Safety System Unavailability PI, and plans to improve the efficiency and effectiveness of the FAQ process in CY 2004.

The criterion for this metric was met since the survey yielded a low number of negative comments and examples of interpretation issues.

IP-1 Percentage of Inspection Findings IAW 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, 25 percent of all other baseline reports, and all reports resulting from inspections beyond the baseline program.

Criteria: Expect a stable or 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 staff of the Inspection Program Branch (IIPB) in the NRC's Office of Nuclear Reactor Regulation (NRR), Division of Inspection Program Management. No data was available from 4th quarter 2001 through 4th quarter 2002 because the IIPB staff did not review inspection reports during this period so that inspectors could be trained on the new documentation requirements of the revised IMC 0612. The average reported for any given quarter is the integrated average for the past 4 quarters.

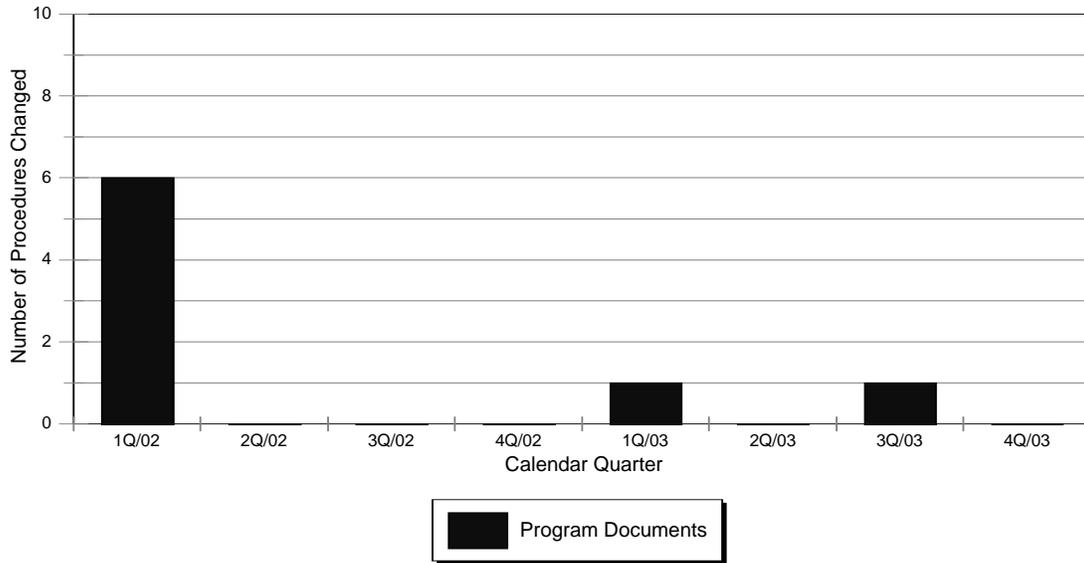
Analysis: The staff obtained the data for CY 2003 by auditing inspection reports in accordance with IIPB operating instruction BOI-002, "Inspection Report Review Process." Specifically, the staff reviewed 99 inspection reports from all four

regions, which documented a total of 254 findings. The percentage of findings documented in accordance with IMC 0612 requirements increased from 67.7 percent in the first quarter of 2003 to 88.9 percent in the fourth quarter, indicating an improving trend. Therefore, this metric was met.

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.

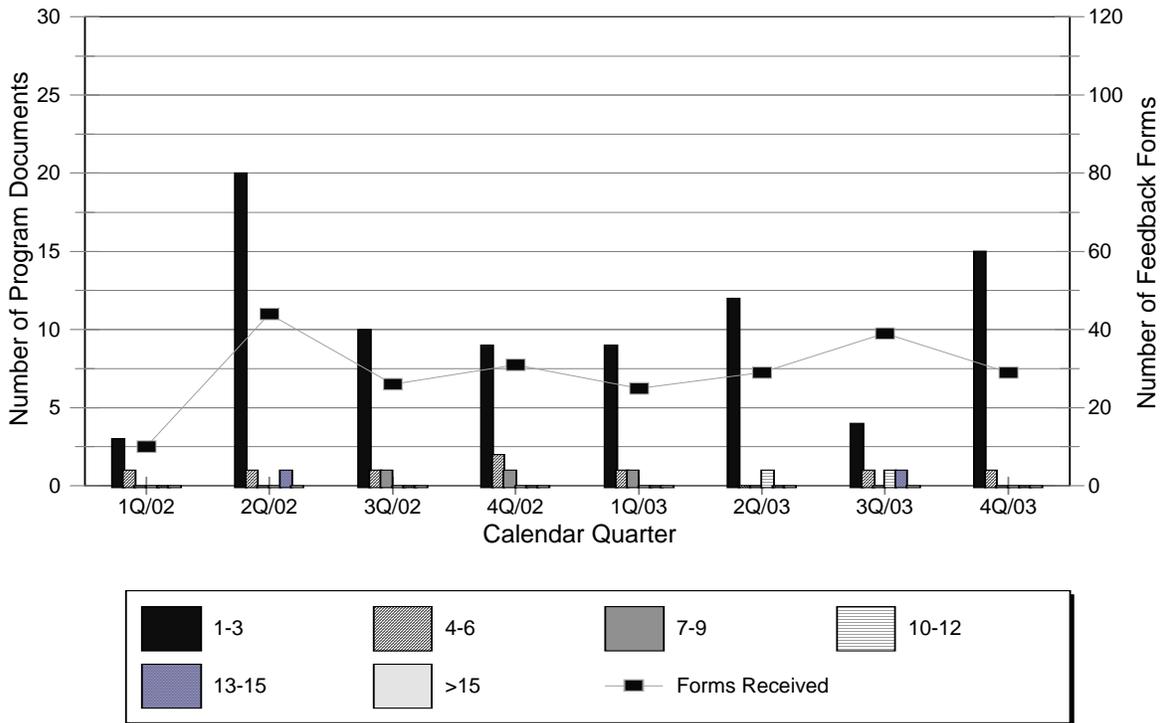


Analysis: Two changes affected the scope of the baseline inspection procedures in CY 2003. Specifically, in the first quarter, the staff revised IP 71111.05, “Fire Protection,” to provide additional inspection requirements and guidance for evaluating licensees’ manual actions in lieu of full implementation of Section III.G.2 of Appendix R to Title 10, Part 50, of the Code of Federal Regulations (10 CFR Part 50). In the second quarter, there were no procedure changes that affected either the scope or the frequency of inspections. However, in the third quarter, the staff revised IP 71152, “Problem Identification and Resolution (PI&R)” to incorporate recommendations made by the PI&R Focus Group to address several items from the DBLLTF. Specifically, the changes included enhanced requirements regarding the routine PI&R reviews conducted by resident inspectors, biennial reviews of longstanding issues, and biennial reviews of operating experience issues. Although the staff made a number of minor changes to the baseline inspection procedures, the number of significant changes during calendar years 2002 and 2003 remained stable. This metric was met based on the relatively stable trend.

IP-3 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 stable or decreasing trend in the number of feedback forms received for program documents.



Analysis: The staff received 123 feedback forms from January 1, 2003, through December 31, 2003. Approximately 55 percent of all feedback forms received during this assessment period related to issues in the areas of (1) Significance Determination Process (IMC 0609), (2) Power Reactor Inspection Reports (IMC 0612), (3) Qualification Program for the Office of Nuclear Reactor Regulation Programs (IMC 1245), and (4) Light-Water Reactor Inspection Program - Operations Phase (IMC 2515). Of these areas, IMC 0612 has the most feedback forms (approximately 20 percent of all forms received), while IMC 0609, IMC 1245, and IMC 2515 each received about 11 percent. The remaining 45 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 issued IMC 0612 in June 2003 to clarify the previously existing information regarding the order in which activities will normally be performed in the process of developing and transmitting a reactor inspection report. In addition, IMC 0612 addressed various inconsistencies that existed between other inspection program documents, including the enforcement policy. The SDP Improvement Program is ongoing and the staff is currently working with the industry to address various SDPs, such as Shutdown and Fire Protection. In addition, the staff has revised the inspector training and inspection program guidance documents (IMCs 1245 and 2515) to provide additional clarification based on regional feedback.

The number of feedback forms received in CY 2003 (123 forms) was within 10 percent of the number received in previous years (112 for CY 2002 and 118 for CY 2001). Although the metric data indicated that the number of feedback forms received increased slightly during the first quarter through third quarter, the fourth quarter data showed a slightly declining trend. The metric criteria was met; however, the concentration of feedback forms in selected program areas indicated that further improvement is needed in these areas for CY 2004.

IP-4 Completion of Baseline Inspection Program

Definition: Annual completion of baseline inspection program.

Criteria: Defined as per IMC 2515

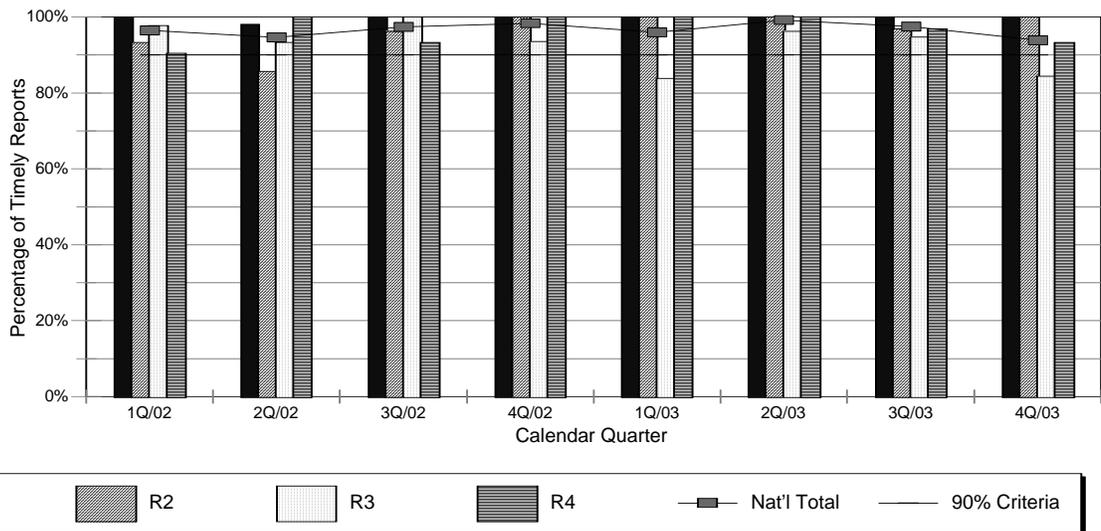
Comments: Regions report any non-completions at the end of each annual inspection cycle. Assess cumulative completion of baseline IPs during the year.

Analysis: The metric criterion was met because all four NRC regions completed the baseline inspection program during ROP cycle 4 (CY 2003) in accordance with IMC 2515. The staff did not include the Davis-Besse Nuclear Power Station in this analysis since the baseline inspection program was replaced by inspections governed by IMC 0350, "Oversight of Operating Reactor Facilities in a Shutdown Condition with Performance Problems." However, significant additional resources out of headquarters and other regions were necessary to assist certain regions in completing the baseline inspection program in CY 2003, as discussed in Attachments 1 and 6 to this paper.

IP-5 Inspection Reports are Timely

Definition: Obtain RPS data on the total number of reports issued and the number issued within timeliness goals as defined in IMC 0612

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



Comments: For inspections not conducted by a resident inspector, inspection completion is normally defined as the day of the exit meeting. For resident inspector and integrated inspection reports, inspection completion is normally defined as the last day covered by the inspection report.

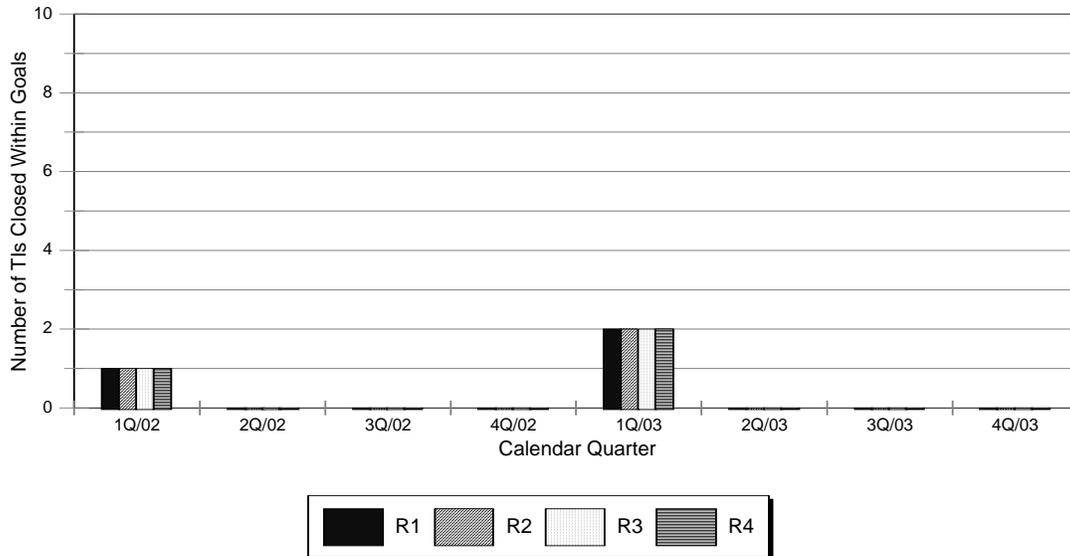
Analysis: The NRC issued a total of 527 inspection reports during CY 2003. During the first and fourth quarters, all but one region met the timeliness goals during this assessment period. The late reports were attributed to (1) the additional NRC oversight of inspection activities and the scrutiny by the public, Congress, and other stakeholders, for certain plants with performance issues; and (2) reports containing findings in the safeguards arena that were held up awaiting the Commission's decision regarding the dissemination of security-related information. Both of these factors have been addressed, so the staff believes that timeliness will improve in 2004.

For the program as a whole, 96.6 percent of all issued inspection reports were timely. This metric was met because more than 90 percent of the inspection reports were issued within the program's timeliness goals.

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.



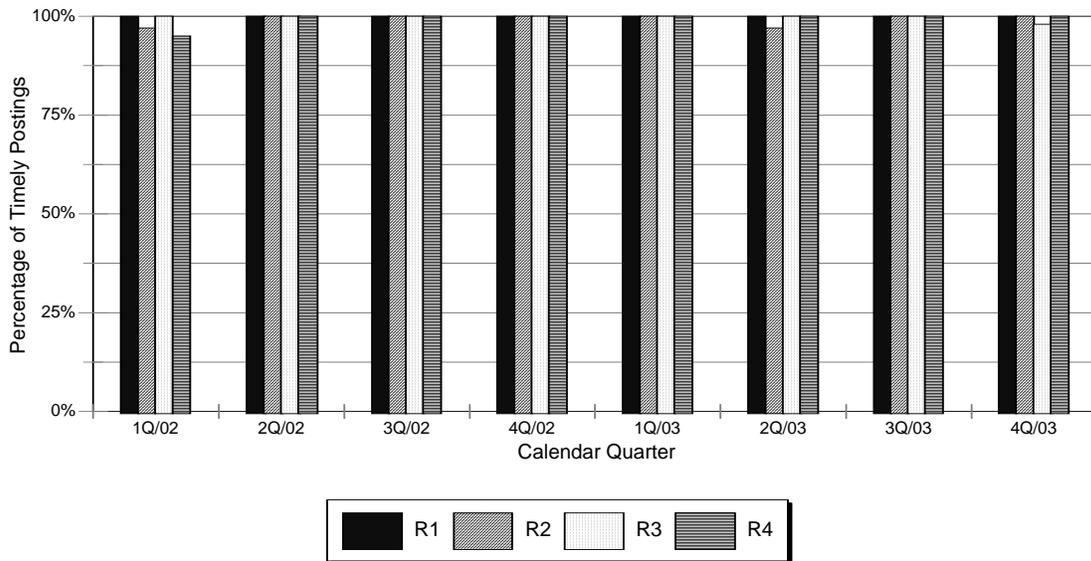
Analysis: The staff completed TI 2515/145, “Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles” (NRC Bulletin 2001-01), and TI 2515/146, “Hydrogen Storage Locations,” during the first quarter of 2003 within the timeliness goals. The staff was not required to complete any other TIs during this calendar year. The metric criterion was met because all TIs were completed within TI requirements.

IP-7 Public Communication Is Timely

Definition: The Inspection Program Branch (IIPB) within NRR posts inspection reports to the NRC’s external (public) Web site within ROP timeliness goals using electronic versions of inspection reports entered into the NRC’s Agencywide Documents Access and Management System (ADAMS) by the regions. IIPB also posts entries from the Plant Issues Matrix (PIM) to the NRC’s public Web site using data entered into the Reactor Program System (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 5 weeks of the end of 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 9 weeks of the end of each quarter, IIPB posts additional inspection reports and PIM entries for those not yet issued by the 5-week posting to include all findings from the previous quarter.

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



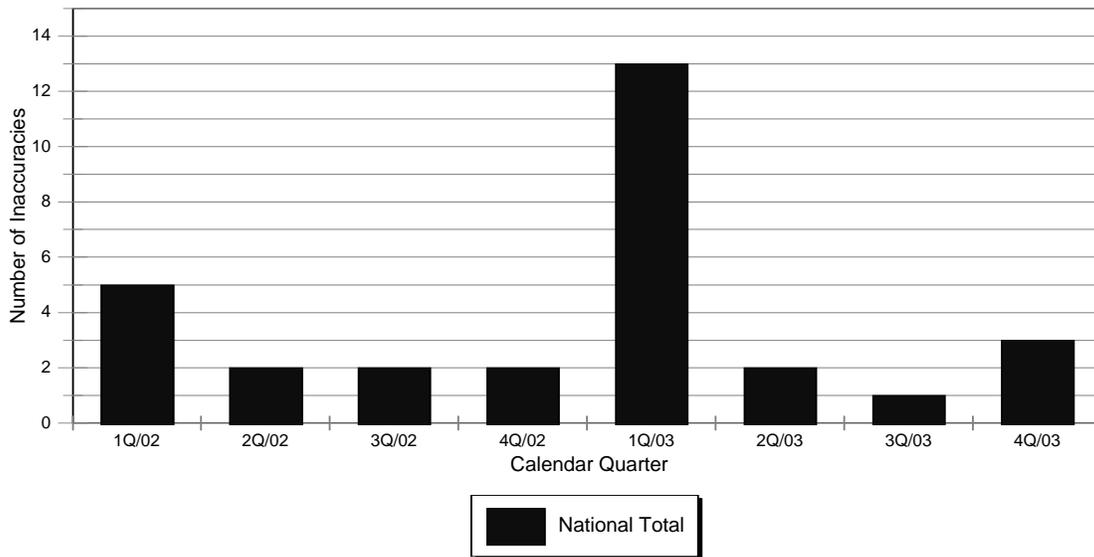
declining trend.

Analysis: There continue to be very few untimely postings of PIMs and/or inspection reports to the ROP Web page. The few exceptions appear to be isolated and not indicative of a systematic problem. However, the percentage of timely postings has consistently been at or very near 100 percent for each quarter, with a stable trend in untimely postings. Therefore, the metric criterion was met.

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: The increase in the inaccurate postings of PIM entries or inspection reports on the Web during the first quarter of CY 2003 was attributed to errors by one region. That region has taken actions to reduce the number of inaccuracies, as evidenced by very few inaccuracies in the subsequent quarters. The metric criterion was met based on a stable trend of few inaccuracies.

IP-9 Analysis of Inspection Hours

Definition: Collect and analyze RPS data (i.e., number of samples, regular hours, and overtime hours) for each inspection procedure (including plant status). Collect preparation and documentation time.

- Criteria:**
- (1) Expect no significant deviations (less than 20 percent per procedure across all plants in region), and explore reasons for such deviations.
 - (2) Track and trend overtime for the baseline inspection program and the underlying reasons, and use first year data to establish a baseline.
 - (3) Track and trend preparation, documentation, travel, and communication times to establish a baseline, and assess the effects on budgeted resources.

Analysis: As reported in Table 1 of Attachment 6 to this report, the baseline inspection effort in CY 2003 reflects a return toward the nominal inspection effort described in each baseline inspection procedure and a downward trend in the rate of resource usage comparable to the reductions seen during the first 2 years of implementation. Plant-specific inspection effort increased significantly during CY 2003 compared with the previous evaluation periods (from approximately 16,000 hours to 24,600 hours). This increase is primarily attributable to the effort required at DBNPS for the IMC 0350 restart inspections and the followup efforts associated with inspection findings and performance issues at Point Beach Nuclear Plant.

A significant increase was also seen in the CY 2003 inspection effort for generic and plant-specific safety issues. This increase is the result of the high level of activity for TIs issued during CY 2003 for issues related to safeguards, material accountability, containment sump blockage, and reactor vessel head and vessel head penetration inspections. The metric criterion was met based on no significant deviations in inspection hours from the nominal effort.

IP-10 **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 the average level of agreement.

Comment: The staff did not capture this metric during CY 2003, but will analyze the survey results next year, consistent with the biennial frequency of the internal ROP survey prescribed by IMC 0307. The staff will conduct the next survey in CY 2004 and will discuss the results in the next annual ROP self-assessment.

Analysis: None

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 the average level of agreement.

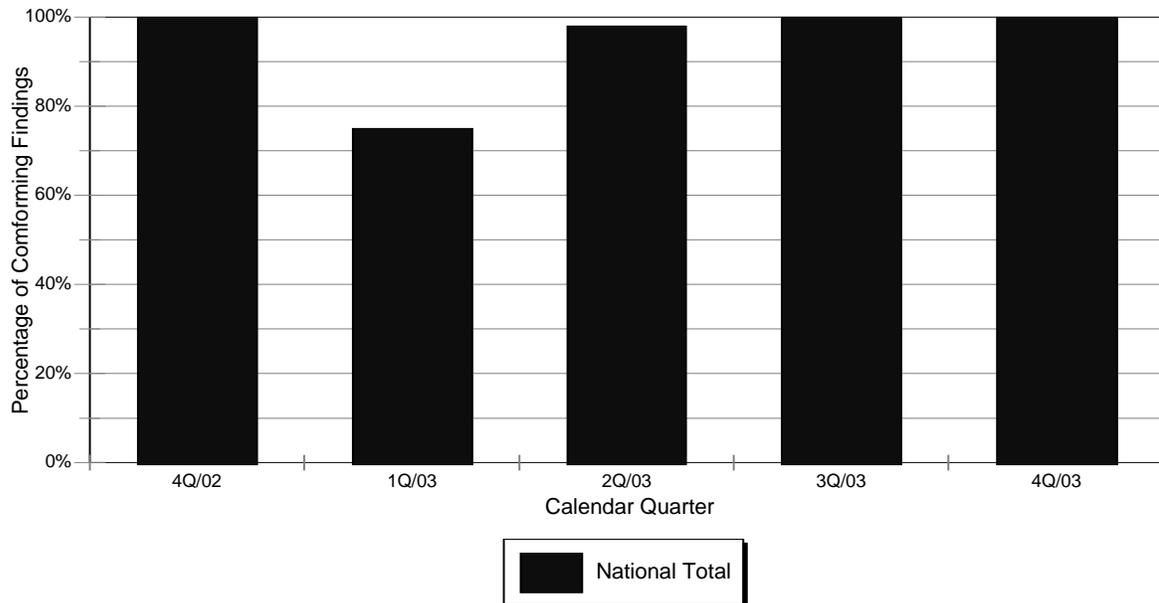
Analysis: Of the 19 comments received in response to a *Federal Register* notice issued in November 2003, 11 addressed the question concerning the usefulness of inspection reports. Of those 11 comments, 10 indicated that the inspection reports contain useful information and the overall the quality of the reports has improved. However, one respondent stated that the inspection reports would be more useful if they contained more information to allow trending or evaluation of less-significant events.

This metric was met based on a similar level of positive response compared to the previous survey.

SDP-1 The SDP Results Are Predictable and Repeatable and Focus Stakeholder Attention on Significant Safety Issues

Definition: Quarterly audit a representative sample of reported inspection findings against the standard criteria set forth in IMC 0609, "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 that at least 90 percent of the SDP results are predictable and repeatable. Any SDP outcomes that are determined to be non-conservative will be evaluated and appropriate programmatic changes will be implemented.



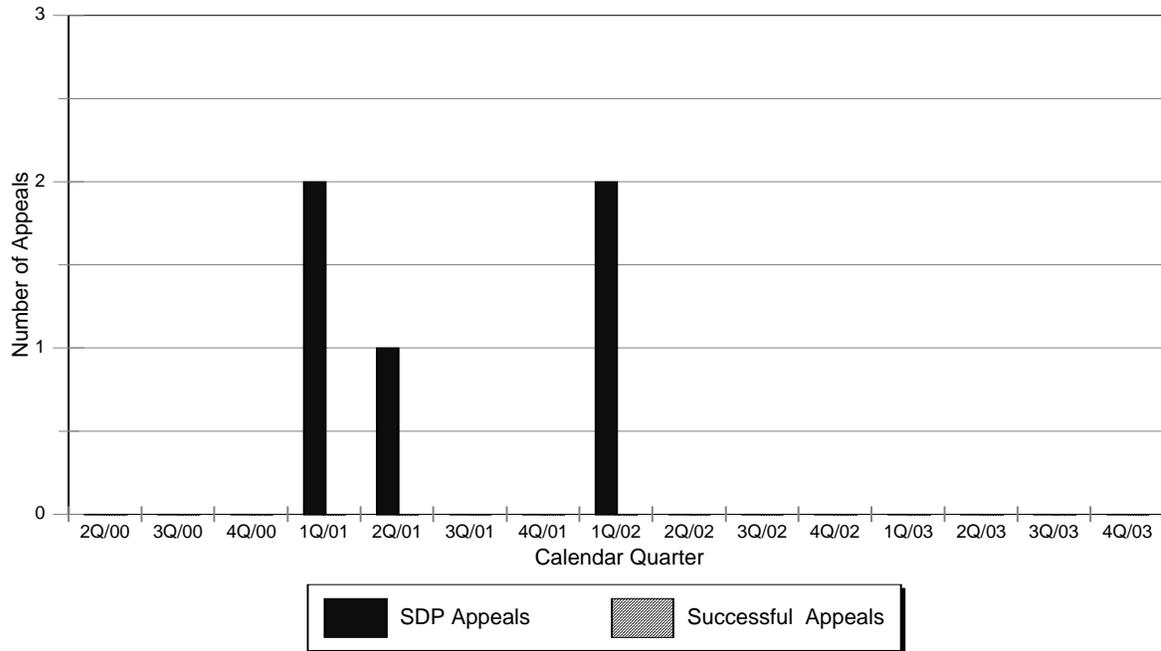
Analysis: A quarterly review, conducted by the NRC's Office of Nuclear Regulatory Research (RES), of greater-than-green inspection findings in the initiating events, mitigating systems, and barrier integrity cornerstones determined that documentation to support the overall SDP risk conclusions was sufficient in all cases reviewed during this ROP cycle. In addition, inspection program staff reviewed documentation for inspection findings that were not reviewed by RES across all cornerstones. All findings reviewed contained sufficient documentation for an independent auditor to reach the same significance color determination.

Performance during this assessment period met program expectations.

SDP-2 SDP Outcome Is Risk-Informed and Accepted by Stakeholders

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

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



Analysis: There were no appeals of final SDP results during the current ROP cycle across all regions.

Performance during this assessment period met program expectations.

SDP-3 Inspection Staff Is Proficient and Find Value in Using the SDP

Definition: Survey internal stakeholders over time using specific quantitative survey questions that focus on proficiency, effectiveness, and efficiency.

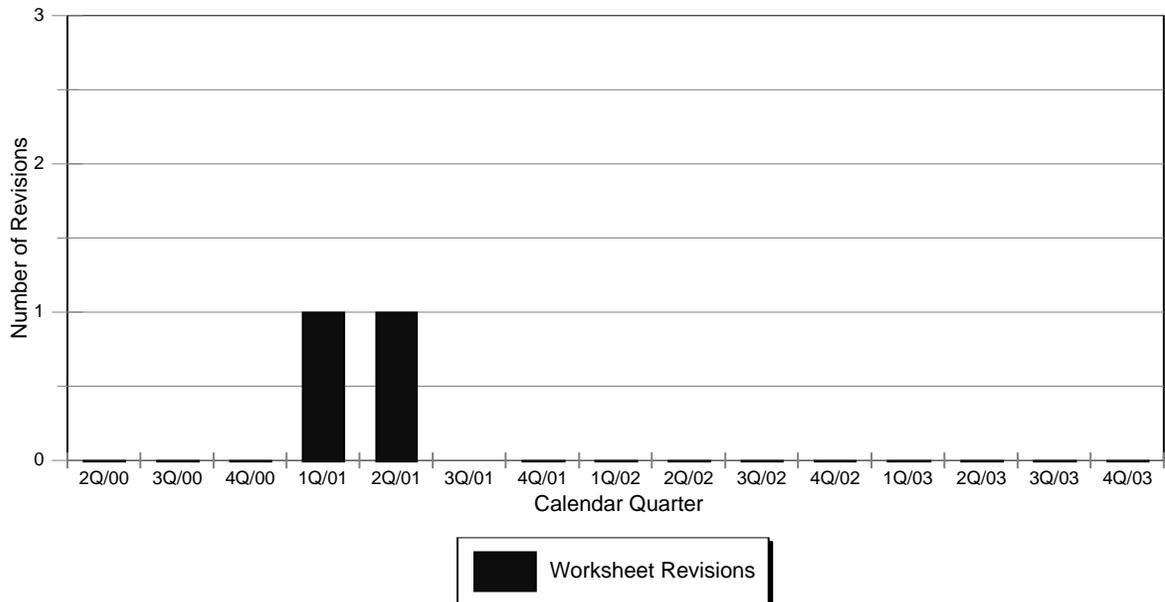
Criteria: Expect either a stable or increasingly positive perception of the SDP process over time.

Comments: The staff did not capture this metric during CY 2003, but will analyze the survey results next year, consistent with the biennial frequency of the internal ROP survey prescribed by IMC 0307. This metric was not met during the CY 2002 self-assessment cycle, but the staff continues to implement the SDP Improvement Initiative and anticipates a stable or increasing proficiency in using the SDP based on CY 2004 internal survey results.

SDP-4 SDP Tools for Evaluating Inspection Findings Reflect Current Plant Design and Licensee Operating Practices

Definition: Monitor the number of 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 are subsequently withdrawn following onsite benchmarking activities conducted by the staff.

Criteria: The target goal is zero notebook retractions because of non-conservative technical flaws following onsite benchmarking.



Analysis: During CY 2003, the staff finished benchmarking the risk-informed inspection notebooks for all remaining 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.

Performance during this assessment period met 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 SDP-determined significance of findings does not appear to be consistent across ROP cornerstones.

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

Analysis: External stakeholder survey results regarding the SDP in response to a *Federal Register* notice issued in November 2003 were nearly identical to those received during the previous year. Industry respondents did not believe that same color findings represent the same level of significance across all ROP cornerstones. Rather, they felt that the reactor safety cornerstones were consistent, but were dissatisfied with SDP results for emergency preparedness, radiation safety, and physical protection. The impression was that these SDPs were not risk-informed, but “a deterministic escalation for various types of regulatory noncompliance” and, in general, that these SDPs were subjective in nature. The results also indicated that the non-green thresholds for these SDPs overstate the significance of findings. One concern of deterministic SDPs was the tendency to aggregate findings of minor risk significance to create a final determination out of proportion to the risk of an individual finding. Respondents did note, however, that the NRC is making progress in improving the SDPs for radiation safety and emergency preparedness, while the physical protection SDP is still under development.

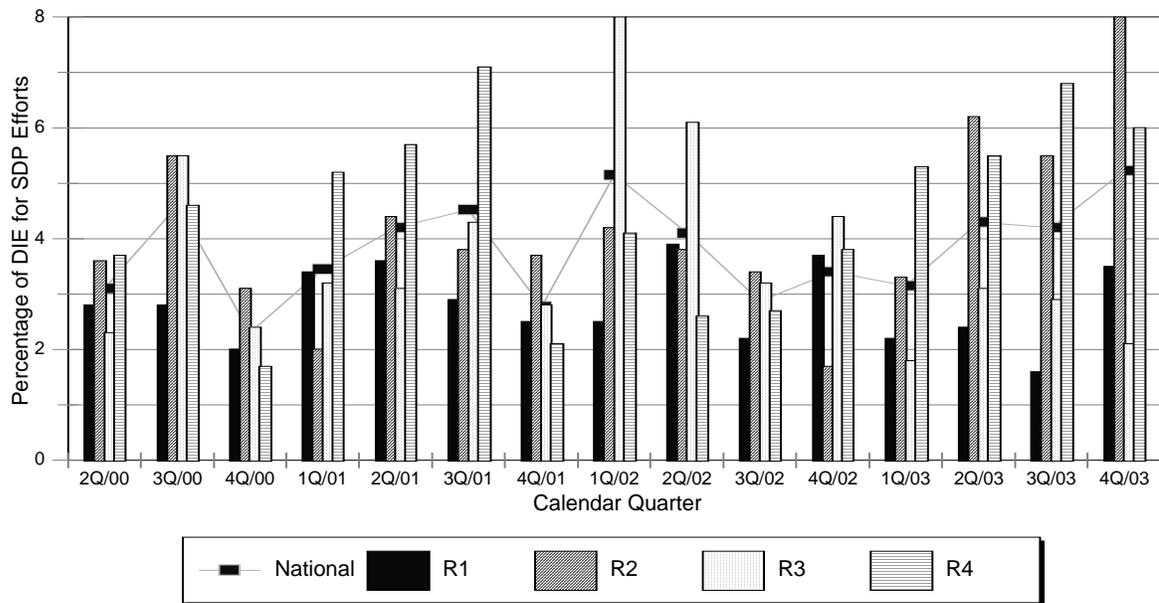
Citizens' groups and State agencies agreed with industry respondents that same color findings did not represent the same level of significance across all cornerstones. One respondent indicated that cornerstones are not directly comparable, so they can't yield equivalent results. It is believed that downgrading of initial significance determinations indicates that significance is not easily determined (e.g., the Indian Point steam generator tube rupture analysis), and that since cross-cutting issues are not taken into consideration, equivalence doesn't always exist across cornerstones. Some respondents also felt that the SDP is subjective and can be manipulated to “justify” any color, referencing the Davis-Besse vessel head analysis. In addition, some believe that the process is not repeatable, as illustrated by reductions in significance from preliminary to final determinations.

Performance during this assessment period did not meet program expectations.

SDP-6 The Resources (Direct Charges and Support Activities) Expended Are Appropriate

Definition: Track the percentage of total inspection resource expenditure 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.

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 as a result of significant resource expenditures on fire protection issues at Surry Power Station, St. Lucie Plant, North Anna Power Station, and Arkansas Nuclear One (ANO), as well as a complicated issue at River Bend Station involving a condensate valve. These issues contributed significantly to the large increase in resource expenditures in Regions II and IV.

Performance during this assessment period met 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 that provided critical licensee feedback with regard to the SDP declined from nine reported during the previous assessment period to two in this period. This decline occurred even though the number of SDP assessments remained constant. The decline in critical feedback is a positive sign and appears to indicate that licensees now have a more favorable opinion of the SDP process.

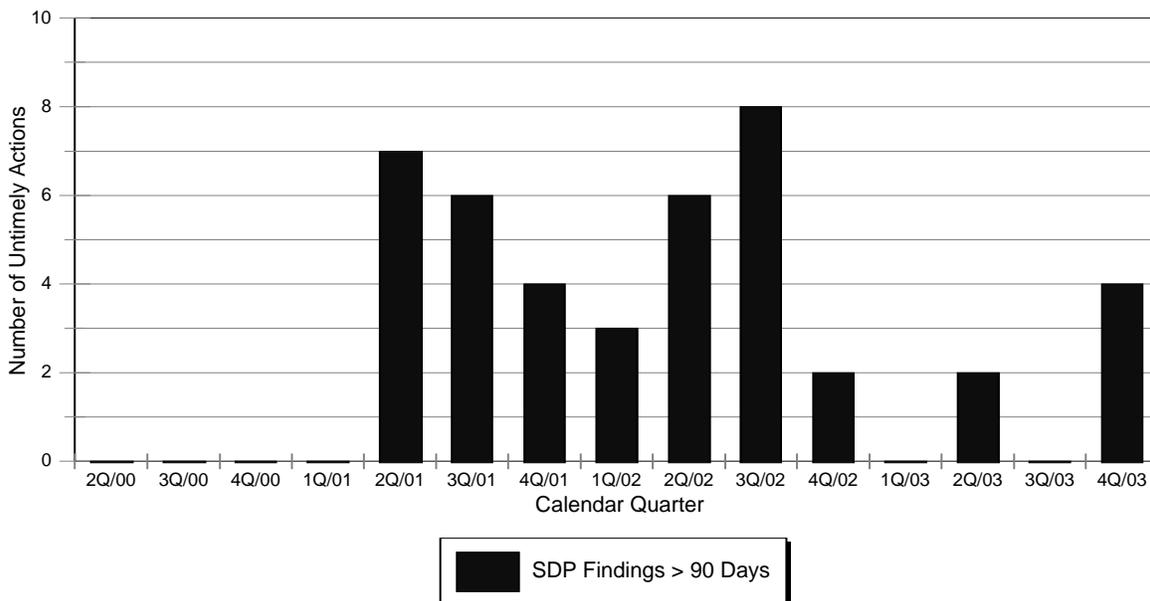
Performance during this assessment period met program expectations.

SDP-8 Final Significance 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 in accordance with the above criteria 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 improved from 57 percent in FY 2002 to 73 percent in FY 2003, but fell short of the 75 percent goal. The issues that were late involved complex engineering analyses at DBNPS for the boric acid corrosion of the vessel head, Dresden Nuclear Power Station for a water hammer issue involving inoperability of the high-pressure coolant injection (HPCI) system, and DC Cook for a loss of essential service water (ESW) due to debris intrusion. Untimely issues increased in the fourth quarter of CY 2003 as a

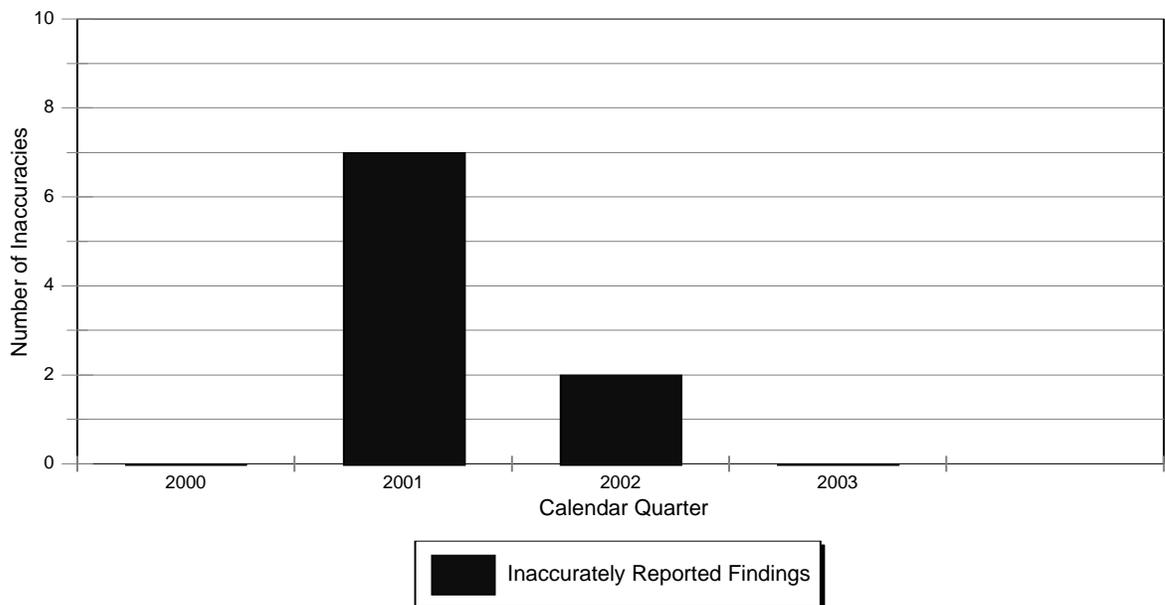
result of a focused effort to close out longstanding open issues at Oconee Nuclear Station, River Bend Station, and Point Beach Nuclear Plant. In accordance with IMC 0307, the staff assesses all issues that fail to meet the timeliness metric to determine the causal factors and recommend process improvements. SDP timeliness remains a challenge and continues to be addressed by the SDP Improvement Task Action Plan.

Performance during this assessment period did 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 site. 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.



Analysis: During the current assessment cycle, no instances were identified in which the status of documented inspection findings were inaccurately reported on the NRC’s external Web site when looking at Action Matrix information developed from the reported Plant Issues Matrix (PIM) data. New procedures requiring multiple checks before posting findings to the external Web site have improved the performance in this metric, which failed to meet its performance criteria last year.

Performance in this area met program expectations.

AS-1 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.

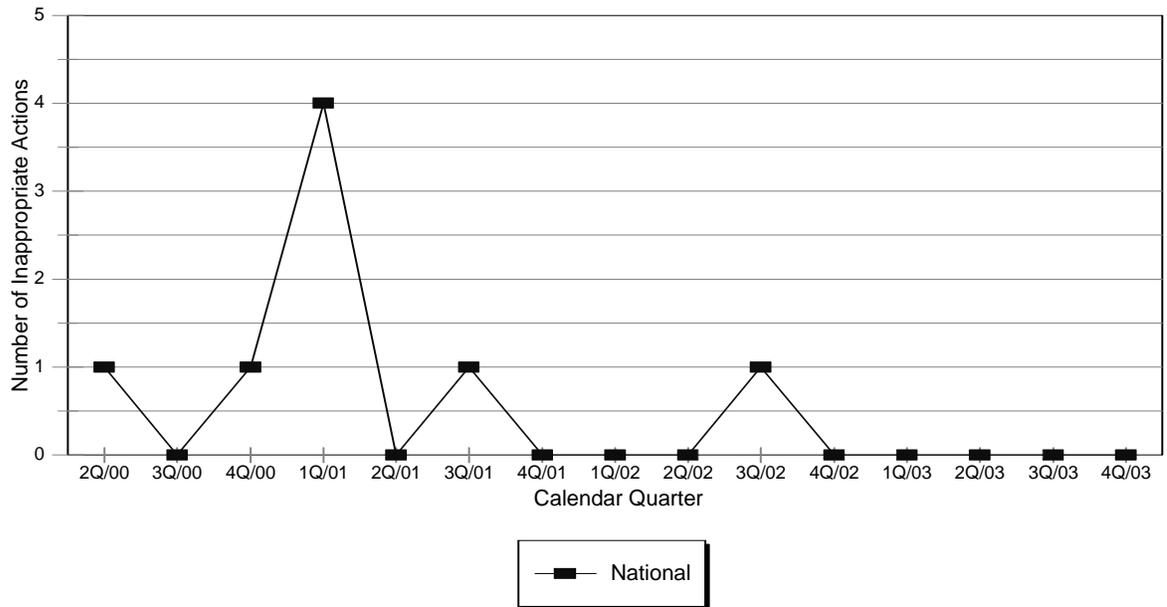
Criteria: Expect few deviations, with a stable or declining trend.

Analysis: A total of two deviations from the Action Matrix have occurred since the beginning of the Reactor Oversight Process. Therefore, the metric criterion was met. The most recent deviation was approved on March 18, 2003, to allow for heightened oversight of Indian Point Station, Unit 2. In addition, on August 26, 2002, the NRC approved a deviation from actions required by IMC 0305 "Operating Reactor Assessment Program" for Oconee Nuclear Station, Unit 1, which was in the multiple/repetitive degraded cornerstone of the Action Matrix. This deviation allowed for agency actions consistent with the degraded cornerstone column, including the performance of an IP 95002 rather than an IP 95003 supplemental inspection.

AS-2 The Program Is Well-Defined Enough To Be Consistently Implemented

Definition: Audit all assessment letters and assessment followup letters. 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.

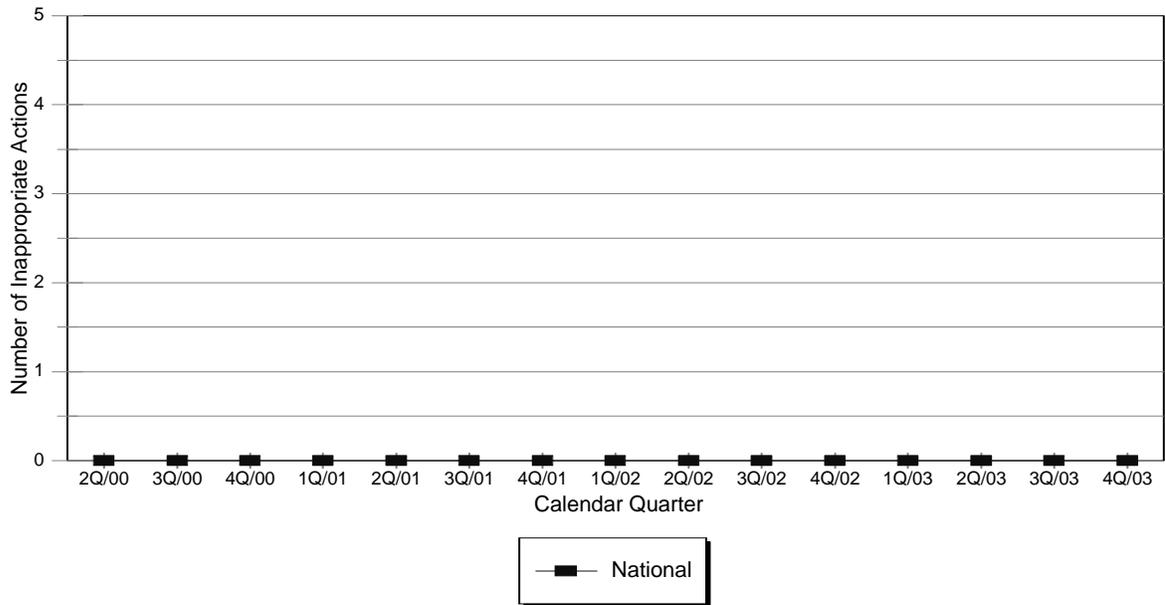


Analysis: There were no significant departures from the requirements of IMCs 0305 or 0350 as a result of an audit of assessment letters during the review period. Therefore, this metric criterion was met.

AS-3 Actions Taken Are Commensurate with the Risk of the Issue and Overall Plant Risk

Definition: Review actions taken for greater than green findings and performance. Track the number of actions (or lack of actions) taken by the regions that are not appropriate for the significance of the issues, based on inputs from PIs and inspection findings, and compared to the Action Matrix.

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



Analysis: The metric criterion was met because all actions taken by the regional offices were consistent with the Action Matrix during the review period. One deviation was approved as noted in metric AS-1.

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).

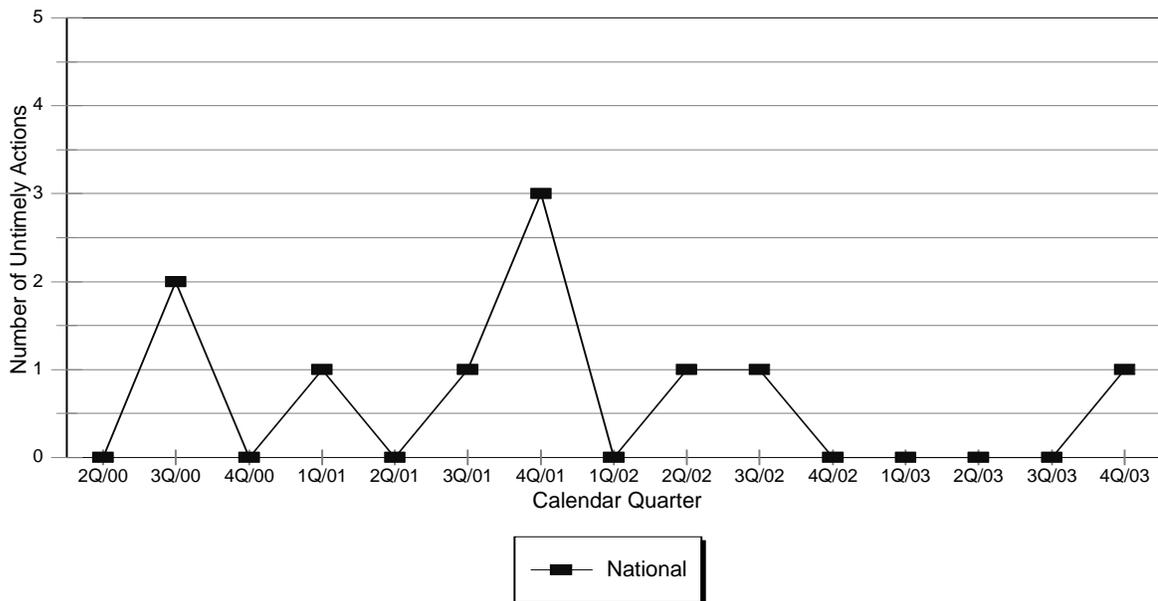
Criteria: The AARM should recommend few additional actions, with a stable or declining trend.

Analysis: The AARM was held on April 22–23, 2003, in Annapolis, Maryland. The participants confirmed the appropriateness of agency actions for Indian Point 2, Oconee 1, Point Beach 1 and 2, and Cooper. The metric criterion was met because the participants did not recommend any additional actions beyond those already taken or planned. The next AARM is scheduled for April 14, 2004.

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 after end of quarter); mid-cycle, and end-of-cycle reviews (within 6 weeks after end of quarter); issuance of assessment letters (within 2 weeks after quarterly reviews and 3 weeks after mid-cycle and end-of-cycle reviews); assessment followup 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/2003: All 66 quarterly assessment reviews and 3 out of 4 assessment followup letters were completed within timeliness goals.

3Q/2003: All 66 mid-cycle review meetings were conducted within timeliness goals. Additionally, all 66 mid-cycle letters and 1 assessment followup letter were completed within timeliness goals.

2Q/2003: All quarterly assessment reviews, 42 annual public meetings, and 2 assessment followup letters were completed within timeliness goals.

1Q/2003: All 66 end-of-cycle meetings, annual assessment letters, and 22 annual public meetings were completed within timeliness goals.

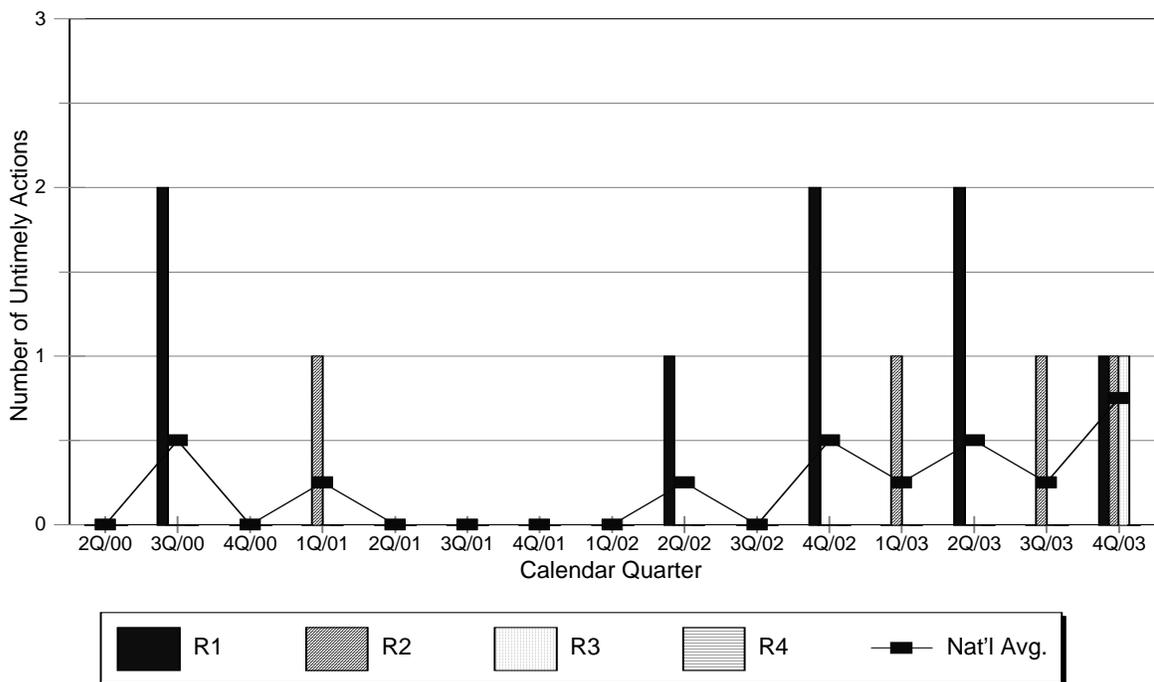
4Q/2002: All quarterly assessment reviews and 2 assessment followup letters were completed within timeliness goals.

The metric criterion was met based on the low and stable level of untimely actions.

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 8 weeks after the end of intervening quarters.



Analysis:

4Q/2003: Three assessment followup letters were not posted to the Web within timeliness goals.

3Q/2003: All 66 mid-cycle letters were posted to the Web within timeliness goals. One assessment followup letter was not posted to the Web within timeliness goals.

2Q/2003: Two assessment followup letters were not posted to the Web within timeliness goals.

1Q/2003: All 66 annual assessment letters were posted to the Web within timeliness guidelines. One assessment follow-up letter was not posted to the Web within timeliness goals.

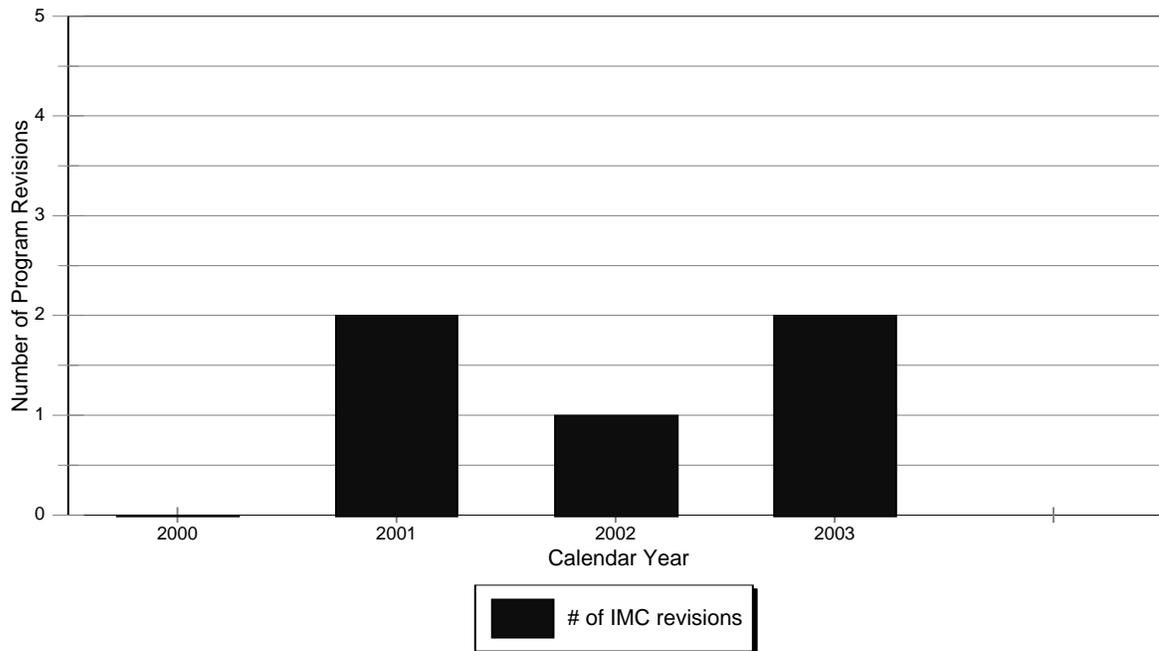
4Q/2002: Two assessment followup letters were not posted to the Web within timeliness goals.

The metric criterion was met because 94 percent of the assessment letters were posted within timeliness goals, with relatively few untimely postings. However, IIPB will undertake additional steps to ensure that assessment followup letters are posted to the Web in a timely manner. IIPB recently began requesting that the regional offices provide their input to the Action Matrix Summary Web page before posting this information publically.

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.

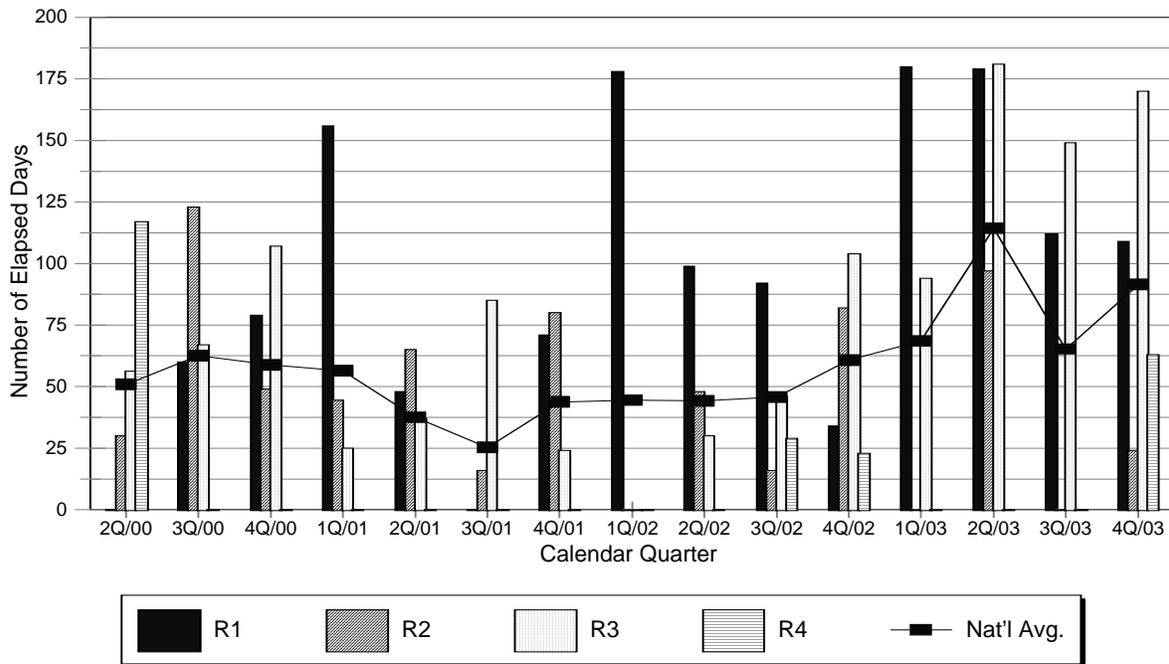


Analysis: During CY 2003, there was one revision to IMC 0305, which was issued on February 19, 2003, and one revision to IMC 0350, which was issued on December 31, 2003. A revision to IMC 0305 is planned for early in CY 2004. The metric criterion was met based on the stable trend of revising the assessment program documents once per year.

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 represent an average timeliness for the supplemental inspections completed in each region in any given quarter.

Analysis: The metric criterion was met based on the relatively stable long-term trend regarding the elapsed time between the issuance of an assessment letter and the completion of the corresponding supplemental inspection. However, there is some concern regarding the slight increase in elapsed time for the past three quarters. IIPB will continue to monitor this data set to determine if an adverse trend exists.

AS-9 The Agency Takes Appropriate Actions to Address Performance Issues for Those 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 a stable or improving perception.

Analysis: The industry and State respondents generally agreed that the NRC is taking appropriate actions for those plants that are outside of the licensee response column of the Action Matrix. One anonymous NRC staffer questioned the NRC's response to the Indian Point steam generator tube failure and the head degradation at DBNPS. The metric criterion was met based on a stable perception that the staff takes appropriate actions to address performance issues.

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.

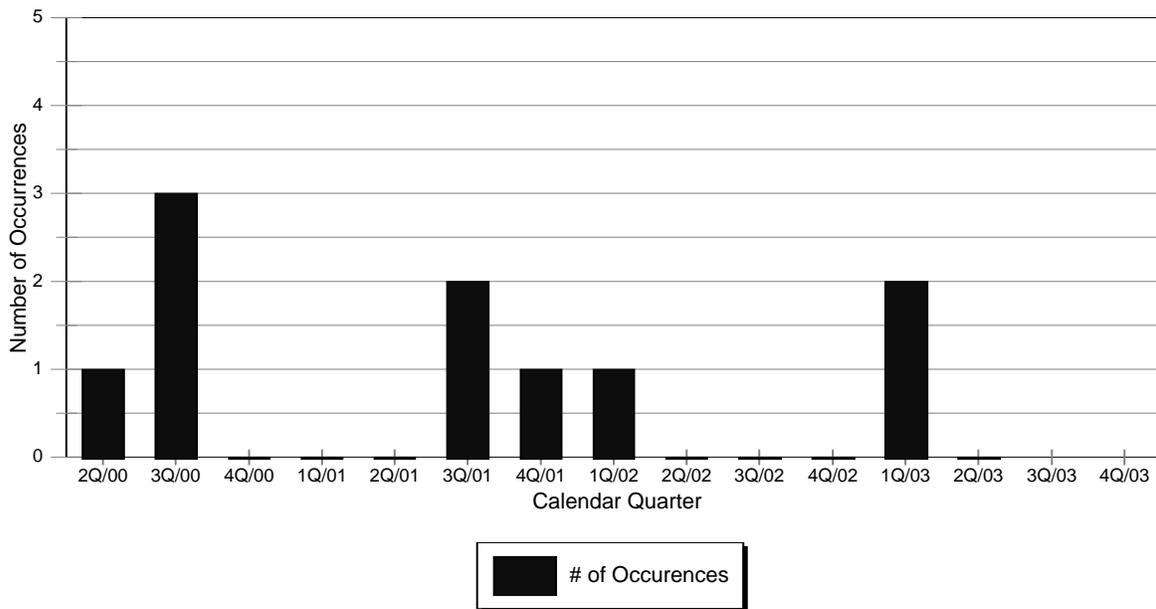
Criteria: Expect a stable or improving perception of the relevance, usefulness, and understandability of assessment reports.

Analysis: The industry respondents generally agreed that the information contained in assessment reports is relevant, useful, and written in plain language. One State respondent stated that the reports were initially stilted and unclear, but have continued to improve. One public interest group stated that the assessment letters contained too much boilerplate information. The metric criterion was met based on a stable perception of the relevance, usefulness, and understandability of assessment reports.

AS-11 Degradations in Plant Performance, as Measured in the Action Matrix, Is Gradual and Allows 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.



Analysis: During the period of October 2002 – December 2003, two reactor plant units moved more than one column to the right in the Action Matrix in a single quarter. Specifically, in 1Q/2003, Point Beach Units 1 and 2 moved from the regulatory response column to the multiple/repetitive degraded cornerstone column as a result of a red finding in the mitigating systems cornerstone. of the relevance, usefulness, and understandability of assessment reports. The metric criterion was met because the number of plants moving two or more columns to the right in the Action Matrix has been few and within the expected frequency.

O-1 Public Perceives the ROP To Be Predictable and Objective

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

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

Analysis: A majority of respondents (primarily utilities and State agencies) believe that the ROP as a whole is predictable and objective, specifically mentioning the inspection planning and straightforward nature of inspection report writing as examples. The SDP appears to be the leading concern for all respondents in the area of predictability and objectivity. Public interest groups that addressed the ROP believe it is actually losing its objectivity and clarity. As a whole, the responses are similar to the surveys of previous years.

This metric met its criteria with a stable trend of positive perception.

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

Definition: Survey internal stakeholders asking if decisions are overly reliant on judgment, or not controlled by the process.

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

Comment: Consistent with the biennial frequency prescribed by IMC 0307, the staff did not conduct an internal survey during this ROP cycle.

Analysis: Not applicable

O-3 Public Perceives the ROP To Be Risk-Informed

Definition: 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 a stable or increasingly positive perception over time.

Analysis: As with previous surveys, the overwhelming belief is that the portions of the ROP that are not risk-informed create a discontinuity in the system. The utility respondents believe that the deterministic nature of those cornerstones that are not risk-informed, and specifically SDPs, skews the perception of the actual significance of many findings. At the same time, some public interest groups believe that the deterministic approach is too subjective and, therefore, skews the perception of significance in the other direction. A majority of comments addressed the deterministic nature of portions of the ROP, and specifically SDPs, and while these comments are similar to those received in previous surveys, they are increasingly negative.

This metric did not meet its criteria due to an increasingly negative perception.

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

Definition: Survey internal stakeholders asking if ROP actions and outcomes are appropriately graded according to the significance of the issues at the plants. Report survey results by strategic performance area.

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

Comment: Consistent with the biennial frequency prescribed by IMC 0307, the staff did not conduct an internal survey during this ROP cycle.

Analysis: Not applicable

O-5 Public Perceives the ROP To Be Understandable

Definition: 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 a stable or increasingly positive perception over time.

Analysis: A majority of respondents believe that the ROP is understandable. Inspection report clarity is mentioned as an example of a recent improvement. The SDP is a common example of the “less understandable” parts of the ROP. The utility respondents note that it is complex and requires technical background, but is not beyond what might be expected. Others (including some State agencies and utilities) believe the SDP is complicated and not always reasonably clear. Additionally, some public interest groups stated that the subjectivity and complexity directly erode the understandability of the ROP. These comments are similar to those received in previous surveys, and most respondents recognize that the need to be objective (and sometimes complex) must be balanced with the goal to be understandable.

This metric met its criteria with a stable trend of positive perception.

O-6 NRC Perceives the ROP To Be Understandable

Definition: Survey internal stakeholders asking if they understand the process, procedures, and outputs, and if products are clear and written in plain English.

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

Comment: Consistent with the biennial frequency prescribed by IMC 0307, the staff did not conduct an internal survey during this ROP cycle.

Analysis: Not applicable

O-7 Public Perceives That the ROP Maintains Safety

Definition: Survey external stakeholders through a *Federal Register* notice asking if the ROP adequately ensures that plants are being safely operated and maintained.

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

Analysis: Similar to previous surveys, the utility and State agency respondents (on average) believe that the ROP maintains safety, while many public interest groups continue to believe that the ROP allows licensees to operate with less oversight and control. This metric was not met last year as a result of a decreasing positive perception based primarily on the findings at DBNPS. However, this survey had fewer mentions of DBNPS and numerous respondents cited the bottom head issue at South Texas Project as an example of ROP success. As a whole, compared to last year, this survey had more positive comments about ROP safety and the current safety trends within the nuclear industry.

This metric met its criteria with a trend of increasingly positive perception.

O-8 NRC Perceives That the ROP Maintains Safety.

Definition: Survey internal stakeholders.

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

Comment: Consistent with the biennial frequency prescribed by IMC 0307, the staff did not conduct an internal survey during this ROP cycle.

Analysis: Not applicable

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 ROP programmatic deficiencies (i.e., did the baseline inspection program inspect this 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 2003 ROP cycle. One AIT was conducted at Peach Bottom. IIPB reviewed the Peach Bottom AIT report, and did not identify any ROP programmatic deficiencies. No feedback forms were received for IP 93800, "Augmented Inspection Team." Based on two feedback forms, IIPB revised IP 71153, "Event Followup," with regard to (1) the risk metrics for events (conditional core damage probability, or CCDP) and degraded conditions (incremental CCDP) and (2) examples of events in cornerstones outside of reactor safety.

This metric was not met last year because of the programmatic deficiencies identified by the DBLLTF, but was met in CY 2003 based on no additional programmatic voids and significant 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 10^{-6} to identify any ROP programmatic voids (i.e., did the baseline inspection program inspect this area? did the SDP accurately characterize resultant findings?).

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 this assessment period. In so doing, the RES staff did not identify any significant differences between the ASP results and the SDP findings. Several ASP analyses had previously been initiated and were still in progress at the time of this assessment. The ASP findings for DC Cook low ESW flow were consistent with the SDP, but there were differences attributable to several factors. However, the SDP result was within the uncertainty bounds of the ASP results.

This metric met its criteria of no identified major programmatic voids.

O-11 Public Perceives the ROP To Be Effective, Efficient, and Realistic

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

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

Analysis: In general, and with only a few exceptions, the respondents believe that the ROP is effective, efficient, and realistic. Specifically, utility respondents agree that the ROP is both effective and realistic, but believe the staff can increase its efficiency with better communication early in the process of determining issue significance and the implementation of certain initiatives such as licensee self-assessment. Some public interest groups argue that the ROP is not effective, efficient, or realistic because of incomplete inspection effort, incomplete lessons learned, and insufficient detail in documentation. As in previous surveys, the most significant negative theme relates to the effectiveness and efficiency of the SDP.

This metric was not met last year because of an apparent increase in negative perception (compared to previous years). However, this metric met its criteria this year based on an increasing positive perception compared to last year and a stable perception over time.

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

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

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

Comment: Consistent with the biennial frequency prescribed by IMC 0307, the staff did not conduct an internal survey during this ROP cycle.

Analysis: Not applicable

O-13 Public Perceives That the ROP Enhances Public Confidence

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

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

Analysis: Many of the utility and State agency respondents believe that the ROP provides the right framework and mechanisms to enhance public confidence. The concern continues to be the overwhelming lack of public participation, despite the efforts of the ROP to provide the right communication channels and a relatively consistent message. One public interest group noted that while this effort to increase communication is commendable, some of the NRC's efforts to enhance public confidence are unsuccessful. Specifically, they cited the difficulty of finding information on the Web pages and the increasing complexity of various aspects that seem to move the process further from understandability.

This metric met its criteria with a stable perception.

O-14 Opportunities for Public Participation in the Process

Definition: 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.

Analysis: Almost every response that addressed this issue stated that the ROP provides more opportunities for the public to participate than ever before. Many continued to address the fact that the public does not take advantage of this opportunity and, therefore, much of its benefit is lost.

This metric met its criteria with a trend of increasingly positive perception.

O-15 Public Perceives the NRC To Be Responsive to Its Inputs and Comments

Definition: 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.

Analysis: As in previous surveys, utility respondents believe that the NRC is responsive to input and comments, while many other respondents feel that the NRC needs to improve on this aspect of the ROP. A large number of respondents (including some utilities) feel that the NRC is slow to respond, if it responds at all, to many comments and inputs. Numerous survey responses call for a formal system for public input and comment, as well as a feedback mechanism from the NRC. Many feel that their comments are submitted and never acted on because they get no formal response or feedback from the NRC. A few respondents even submitted comments labeled as the same one from the last survey because they believe they were not addressed. At the same time, many of the comments on NRC inaction relate to policies and comments that the NRC considered but decided not to adopt.

This metric did not meet its criteria due to an increasingly negative perception.

O-16 Public Perceives That the ROP Is Implemented as Defined

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

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

Analysis: As in previous surveys, most respondents believe that the NRC is implementing the ROP as defined. Utility respondents expressed concern regarding the consistent application of the ROP across the various regions, as well as some concern regarding the clarity of a couple of PIs. Some public interest groups cited examples that they believe to be inconsistent application of the ROP (compared to the guidance documents), such as coping measures to overcome not completing the baseline inspection requirements.

This metric met its criteria with a stable positive perception.

O-17 Public Perceives That the ROP Reduces Unnecessary Regulatory Burden

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

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

Analysis: A majority of respondents believe that the ROP does reduce unnecessary regulatory burden. Some public interest groups still feel that the ROP goes too far in this vein and, consequently, sacrifices some safety. Utility respondents believe that the NRC can continue to reduce unnecessary regulatory burdens with improved SDPs and practices within the SDP process.

This metric met its criteria with a stable perception.

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

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

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

Analysis: Similar to previous surveys, many respondents stated that numerous unintended consequences result from the ROP. The identified consequences varied according to whether the respondent was a utility or public interest group, but the examples cited were similar to those cited in the previous survey. The same unintended consequences continue to arise as a result of undue concern regarding changing preliminary SDP colors and concerns about manipulation of PI results.

This metric did not meet its criteria because of the stable but negative perception.