

March 30, 2006

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FROM: Stuart A. Richards, Deputy Director **/RA/**  
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Office of Nuclear Reactor Regulation

SUBJECT: REACTOR OVERSIGHT PROCESS ANNUAL SELF-ASSESSMENT  
PERFORMANCE METRICS

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." IMC 0307 was recently revised to support the new safety performance measures of the NRC's Strategic Plan, to better define the ROP goals and intended outcomes, and to consolidate and clarify several of the performance metrics. The calendar year (CY) 2005 ROP self-assessment was performed in accordance with the revised IMC 0307 and associated performance goals.

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 sixth year of ROP implementation from external stakeholders through a Federal Register notice (FRN) in October 2005. Of the 21 responses, nine were from the utilities, while four were from State agencies, seven were from public interest groups or public citizens, and one was anonymous. No internal survey was conducted this year consistent with the biennial periodicity established in IMC 0307.

Based on our review, most of the metrics met their established criteria. However, three metrics in the performance indicator (PI) program area, one in the inspection program, two in the significance determination process (SDP) area, and one in the assessment program failed to meet expectations. Each of the "overall ROP" metrics met their criteria. The staff's corrective actions to address the unsuccessful metrics are discussed in the following paragraphs, in the enclosed metric analyses, and in the CY 2005 ROP self-assessment Commission paper.

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### *PI Results*

In reviewing the data for this reporting period, the staff found that three of the seven PI metrics did not meet the established criteria. The recent trend in PI verification issues and discrepant PIs resulted in the failure of the consistent results given the same guidance metric (PI-1). Two metrics based on public perception as to whether the PI program provides insights that help ensure plant safety (PI-4), and whether there is an appropriate overlap between the PI and inspection programs (PI-6), also failed to meet expectations. NRR continues to evaluate several PIs, with inputs from internal and external stakeholders, in an effort to improve their effectiveness at identifying poor performance.

### *Inspection Results*

One of the eleven inspection program metrics did not meet program expectations. Specifically, the temporary instruction (TI) timeliness metric (IP-5) failed to meet the established criteria of completing all TIs within the TI requirements. NRR plans to consult with the regions and review the reasons for the untimely completion of several TIs and recommend possible program improvements in CY 2006.

### *SDP Results*

Of the eight metrics for the SDP, two did not meet the established criteria. The metric measuring SDP timeliness (SDP-7) failed to meet staff expectations, and the negative perception that the SDP does not yield an appropriate and consistent regulatory response across all ROP cornerstones continued (SDP-5). One of the eight SDP metrics (SDP-3) was not included in the CY 2005 metric report because there was no internal survey in CY 2005 consistent with its biennial frequency as defined by IMC 0307. NRR continues to address these and other issues through the SDP Improvement Plan, which is expected to produce continued improvements in SDP timeliness and consistency.

### *Assessment Results*

The staff found that one of the eleven assessment metrics did not meet the established criteria in CY 2005. 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. Further program changes are expected in CY 2006 as a result of the NRC's safety culture initiative.

### *Overall Metric Results*

In addition to the specific program area metrics, there are 17 overall ROP metrics of a more general nature. Each of these overall ROP metrics met the established criteria. Two of these metrics had failed to meet their criteria during the CY 2004 evaluation, but staff corrective actions and increased positive perception resulted in them meeting their criteria this year.

Specifically, these metrics gauge whether the public perceives the NRC to be responsive to its inputs and comments (O-8), and whether the public perceives that the ROP results in unintended consequences (O-10).

*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 April 2006 and the subsequent Commission briefing in May 2006. Similar to last year, we also plan to prepare and distribute a consolidated response to stakeholder comments from the CY 2005 external survey to ensure continued positive perception that the NRC is responsive to the public's inputs and comments on the ROP.

Enclosure: As stated

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Enclosure: As stated

DISTRIBUTION:

DRP/DRS

Adams accession number: ML060590135

\* See Previous Concurrence

OFFICE	NRR/DIRS/IPAB	NRR/DIRS/IPAB	NRR/DIRS/IRIB	NRR/DIRS/DD
NAME	RFrahm*	JAndersen*	RGibbs*	SRichards
DATE	03/15/2006	03/21/2006	03/27/2006	03/30/2006

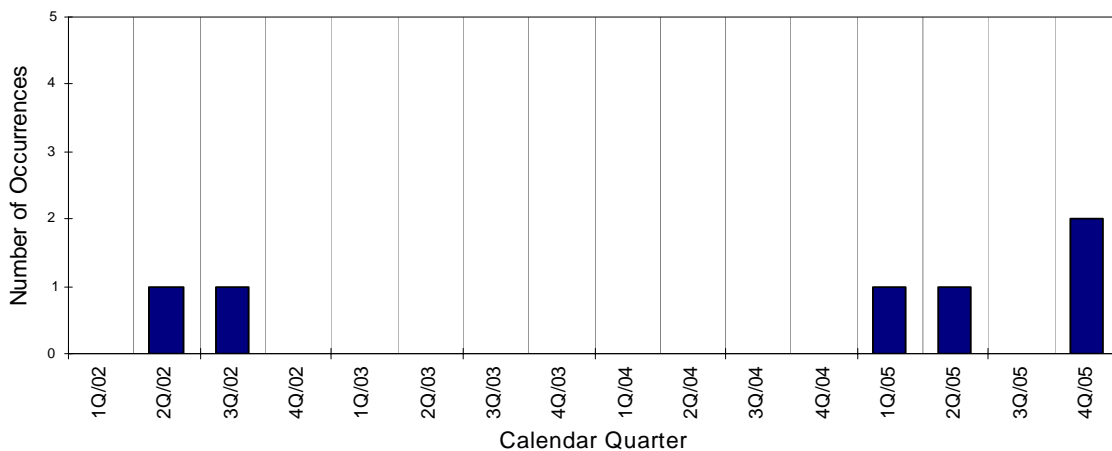
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**PI-1 Consistent Results Given Same Guidance**

**Definition:** Independently verify PIs using Inspection Procedure (IP) 71151, "PI Verification." Count all PIs that either (a) result in a crossed threshold based on a data correction by the licensee (as noted in the resultant inspection report), or (b) have been determined to be discrepant by the staff in accordance with IP 71150, "Discrepant or Unreported Performance Indicator Data."

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

**Goals Supported:** Objective, Predictable, Ensure Safety



**Comments:** The graph represents the number of significant deficiencies or discrepant PIs 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:** During this assessment period, three PIs crossed threshold based on a data correction by the licensee and one PI was identified as discrepant.

A Peach Bottom 2 Scram with Loss of Normal Heat Removal PI, and the emergency preparedness Drill/Exercise Performance PI for Diablo Canyon 1 and 2 crossed the white threshold based on data corrections from the licensees.

The Davis-Besse Alert and Notification System (ANS) Performance Indicator (PI) data was determined to be discrepant, as discussed in Special Inspection Report 05000346/2004018(DRS), dated January 13, 2005.

The NRC identified a discrepant PI at Waterford 3 in the fourth quarter of 2005 (see Waterford 3 assessment followup letter dated November 4, 2005), however,

the discrepant PI inspection has not been conducted. Waterford 3 initially reported the High Pressure Safety Injection System PI as Green. The NRC subsequently determined that the system may not have been available between November 2003 and September 2004. Consequently, the PI may be greater than Green. If the PI is determined to be greater than green, the NRC will include this issue in the calendar quarter in which the inspection report documenting the deficiency is issued (using the report cover letter date).

Note: Verification of the IE, BI, and MS performance indicators per IP 71151 was suspended in CY 2005 in order to allocate additional resources to the Mitigating Systems Performance Index (MSPI) evaluation effort.

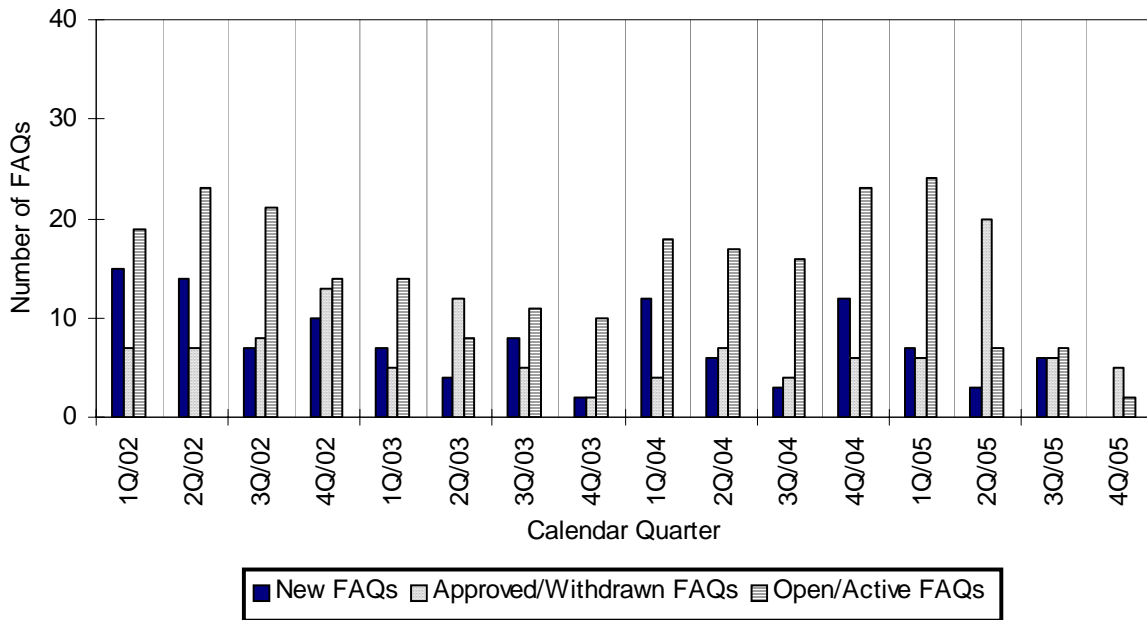
**Metric Criterion Met:** No. The number of and recent trend in discrepancies identified during this assessment period did not meet program expectations.

**PI-2 Questions Regarding Interpretation of PI Guidance**

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

**Criteria:** Expect low numbers, with a stable or declining trend.

**Goals Supported:** Understandable, Risk-Informed, Predictable



**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 decreased, and all of the FAQs that had previously remained open for a significant amount of time have been closed. Modifications were made to NEI 99-02 to improve the FAQ process. Specifically, an appeal process was put in place to resolve issues when the NRC and industry could not reach consensus. This process was used to reduce the backlog of FAQs.

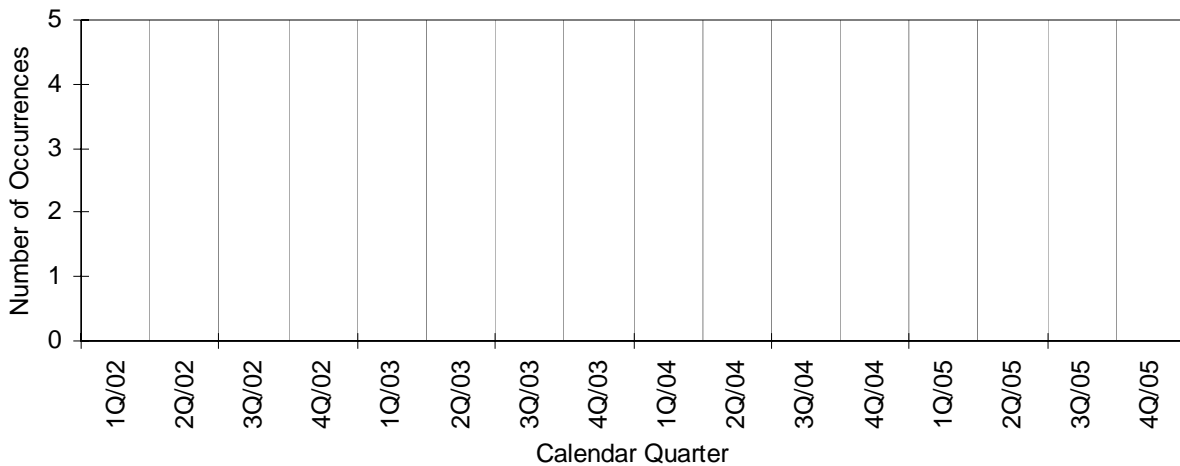
**Metric Criterion Met:** Yes. This metric met its criteria based on the decreasing trend of open interpretation issues and a relatively stable trend of new FAQs.

**PI-3 Timely Indication of Declining Safety Performance**

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

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

**Goals Supported:** Ensure Safety, Risk-Informed, Ensure Effectiveness



**Analysis:** There were no occurrences of PIs crossing multiple thresholds during this assessment period. As noted in metric PI-1, the Waterford 3 High Pressure Safety Injection System PI is under review by the NRC. The NRC is evaluating if the system was available between November 2003 and September 2004. Consequently, the PI may be greater than Green. If the Waterford 3 PI crosses multiple thresholds, it will be included in this metric (based on the issue date of the inspection report that determines the color of the PI).

**Metric Criterion Met:** Yes. This metric met its criteria based on zero occurrences of PIs crossing multiple thresholds.



**PI-4            PI Program Provides Insights to Help Ensure Plant Safety**

**Definition:**    Survey external and internal stakeholders asking whether the PI Program provides useful insights to help ensure plant safety.

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

**Goals Supported:**    Ensure Safety, Ensure Effectiveness, Risk-Informed

**NOTE:**            An internal survey was not conducted in CY 2005; therefore, the input to this metric came solely from the external survey conducted in October 2005.

**Analysis:**        Responses to this survey question show a sharp difference of opinion between public interest groups/members of the public and industry groups/industry representatives/state representatives.

Public stakeholder responses indicate that they feel the PI program promotes plant safety between “somewhat less than needed” and “far less than needed.” Comments generally reflected the opinion that the PIs have become less useful and tell the NRC and the public very little since most PIs always remain green.

In contrast to the rankings by the public stakeholders, industry and state stakeholder responses averaged between “very much” and “somewhat.” Industry comments indicate that the PI program provides useful insights to help ensure plant safety. The Safety System Unavailability and Scrams with Loss of Normal Heat Removal PIs were again called out as PIs that have the potential to cause licensees to take actions that may impact plant safety. However, these comments also pointed out the ongoing NRC/industry efforts on replacement indicators for these PIs.

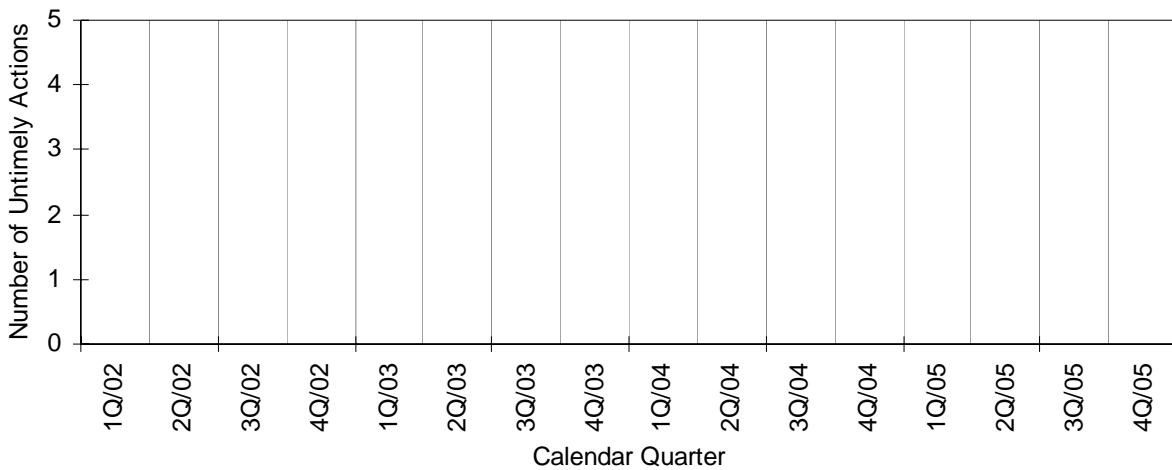
**Metric Criterion Met:** No.    This metric did not meet its criteria based partly on the slight negative trend in responses, and partly due to the sharp difference of opinion between public stakeholders and utility representatives.

**PI-5 Timely PI Data Reporting and Dissemination**

**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 few occurrences, with a stable or declining trend.

**Goals Supported:** Ensure Effectiveness, Ensure Openness, Predictable



**Analysis:** There were no late postings during this assessment period. There have been no late PI data postings on the NRC’s external web site since the inception of the ROP.

**Metric Criterion Met:** Yes. The criteria for this metric has been met.

**PI-6 Stakeholders Perceive Appropriate Overlap Between the PI Program and Inspection Program**

**Definition:** Survey external and internal stakeholders asking if appropriate overlap exists between the PI program and the inspection program.

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

**Goals Supported:** Ensure Effectiveness, Ensure Safety, Ensure Openness

**NOTE:** An internal survey was not conducted in CY 2005; therefore, the input to this metric came solely from the external survey conducted in October 2005.

**Analysis:** Similar to the comments made for metric PI-4, public interest groups/members of the public commented that it is too easy to achieve all green PIs. The comments indicated a need to increase inspections.

Similar to last year, industry groups/industry responses stated 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 and using SDPs for single equipment failures already included in the safety system unavailability PIs).

Overall, stakeholder satisfaction, as reported in the survey responses for initial ROP implementation, last year's assessment, and this year's assessment, showed a slight decrease in the satisfaction of overlap between the PI and inspection programs. In addition, most of the negative comments were associated with the PIs essentially remaining green all of the time, as also commented on in metric PI-4.

**Metric Criterion Met:** No. This metric did not meet its criteria based on the slight negative trend in responses.

**PI-7                    Clarity of Performance Indicator Guidance**

**Definition:**     Survey external and internal stakeholders asking if NEI 99-02, “Regulatory Assessment Performance Indicator Guideline,” provides clear guidance regarding performance indicators.

**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.

**Goals Supported:**    Understandable, Ensure Openness, Objective

**NOTE:**            An internal survey was not conducted in CY 2005; therefore, the input to this metric came solely from the external survey conducted in October 2005.

**Analysis:**        Utility/utility group respondents commented that the PI guidance is clear and that the recent FAQ process change has been useful and efficient in resolving questions on the PI guidance. Comments also indicated that work being performed on the Scrams with Loss of Normal Heat Removal PI will make it more objective and clearly defined.

Non-utility stakeholders, in general, had no comments or responded that it would be more appropriate for the licensees to provide comments on the effectiveness of the PI guidance.

Overall, stakeholder satisfaction, as reported in the survey responses for initial ROP implementation, last year’s assessment, and the current year’s assessment, were generally favorable and consistent.

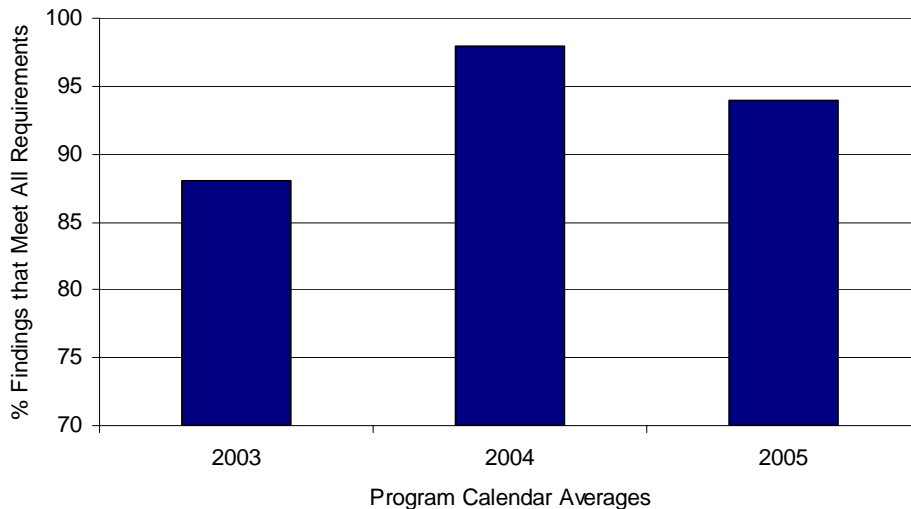
**Metric Criterion Met:** Yes. This metric met its criteria with a stable and relatively positive perception since ROP implementation.

**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.

**Criteria:** Expect a stable or improving trend in the percentage of findings documented in accordance with program requirements.

**Goals Supported:** Objective, Risk-Informed, Predictable



**Comments:** The graph represents the cumulative average for 46 inspection reports reviewed by NRR during CY 2005. The staff issued a comprehensive revision to IMC 0612 in September 2005 to clarify definitions for NRC-identified, self-revealing and licensee identified findings; to provide additional guidance on how to document cross-cutting issues; and to reflect changes made to the document based on inspector feedback to improve the program guidance on documentation of inspection findings.

**Analysis:** The staff audited integrated inspection reports from each branch and a number of team inspection reports from each region. The percentage of findings documented in accordance with IMC 0612 requirements was 94 percent, a slight decline in compliance with IMC 0612 requirements from CY 2004, and the inspection reports were well written.

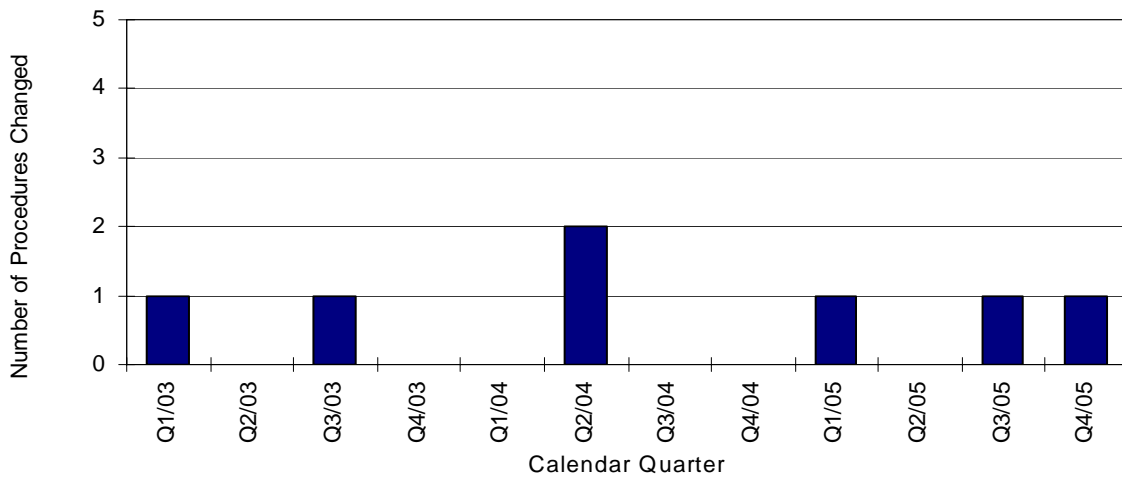
**Metric Criterion Met:** Yes. This metric met its criteria with a stable trend in the percentage of findings documented in accordance with program requirements.

**IP-2 Number of Baseline Inspection Procedures Significantly Changed**

**Definition:** Review all significant 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.

**Goals Supported:** Risk-Informed, Ensure Safety, Predictable



**Analysis:** The scope of three baseline inspection procedures (IPs) were changed in CY 2005. First, IMC-2515, Appendix D, “Plant Status,” was revised to require inspectors to monitor and trend RCS leakage indications. Additionally, IP 71111.20, “Refueling and Other Outage Activities,” was revised to add the objective of evaluating licensee activities during reduced inventory and mid-loop conditions. Lastly, IP 71111.21, “Component Design Bases Inspection,” was revised to incorporate the inspection methodology discussed in Temporary Instruction 2515/158, “Functional Review of Low Margin/Risk Significant Components and Human Actions,” and the commitments specified in SECY-05-0118, “Results of the Pilot Program to Improve the Effectiveness of NRC Inspections of Engineering and Design Issues.”

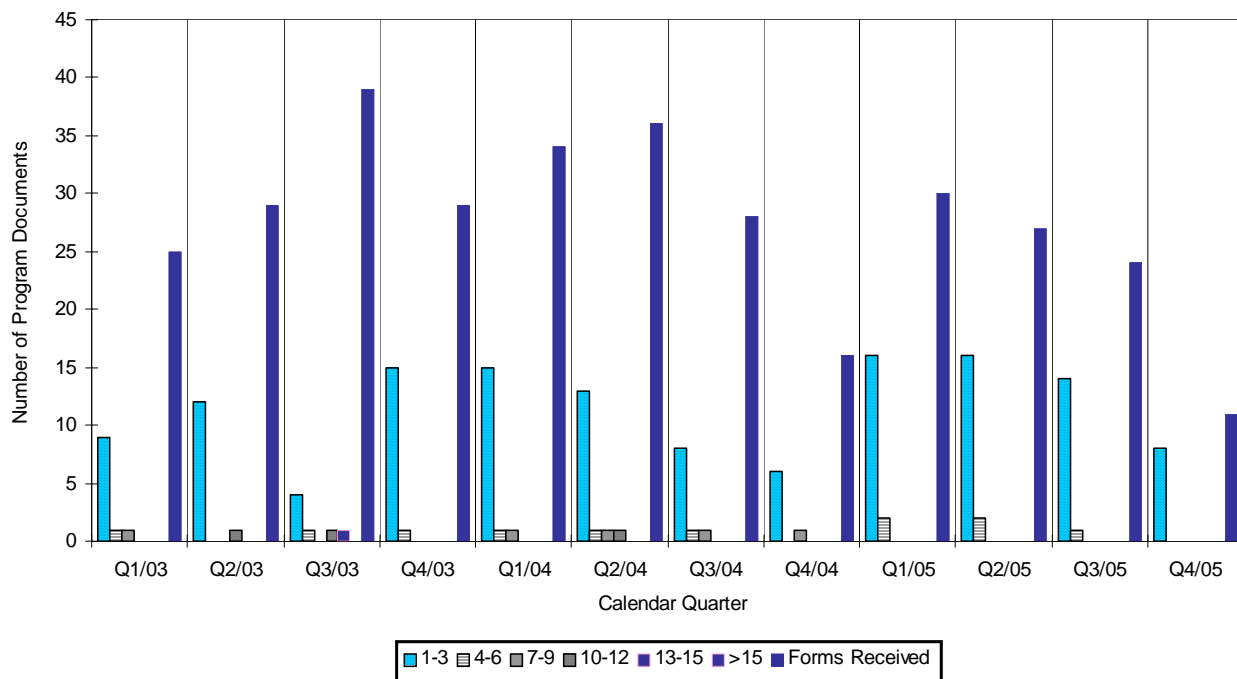
**Metric Criterion Met:** Yes. This metric met its criteria based on relatively few significant changes made to the baseline inspection program.

**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 decreasing trend in the number of feedback forms received for program documents.

**Goals Supported:** Understandable, Predictable, Objective



**Analysis:** The staff received 102 feedback forms in CY 2005. Approximately 53 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 71111.05, Fire Protection, (5) IP 71151, Performance Indicator Verification, and (6) IP 71152, Problem Identification and Resolution. Of these areas, IMC 1245 received approximately 12 percent of all feedback forms, IMC 0612 received 10 percent, IMC 0609 received 10 percent, IP 71151 received 9 percent, IP 71111.05 received 6 percent, and IP71152 received 5 percent. The remaining 47 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 older feedback forms in certain areas was reduced by completing several improvement efforts. In particular, the staff issued a revision to IMC 0612 which addressed 23 feedback issues. The SDP improvements completed 14 feedback forms and inspector training guidance documents completed 19 forms.

The staff resolved 125 feedback forms in CY 2005. This includes 63 feedback forms received during CY 2005. Seventy-six feedback forms had been brought forward from CY 2004. The staff resolved 62 forms (82 percent) leaving 14 forms remaining to be addressed in CY 2006. The three areas of focus for these remaining forms are IMC 1245, MC 0612 and IMC 0609. A total of 58 feedback forms will be brought forward into CY 2006. Fifty-two percent of the 125 feedback forms resolved resulted in changes to the inspection program document. Eighty-five forms were issued in procedure revisions this year and 32 forms are pending a change notice.

The number of feedback forms received in CY 2005 (102 forms) indicates a slight downward trend in the number of feedback forms compared to the previous three years (114 for CY 2004, 123 for CY 2003 and 112 for CY 2002). Quarterly data indicated that the largest number of feedback forms were received in the first quarter and gradually declined through the remaining three quarters.

**Metric Criterion Met:** Yes. The metric data indicated that total number of feedback forms received in CY 2005 decreased from the number of forms received in the previous three years.



**IP-4            Completion of Baseline Inspection Program**

**Definition:**    Annual completion of baseline inspection program.

**Criteria:**      Defined as per IMC 2515, "Light-Water Reactor Inspection Program - Operations Phase."

**Goals Supported:**    Ensure Safety, Predictable, Ensure Effectiveness

**Analysis:**        All four regions completed their baseline inspections in CY 2005 in accordance with IMC 2515, "Light-Water Reactor Inspection Program - Operations Phase." Each region documented completion of the program in a memorandum to the Division of Inspection and Regional Support in NRR. These memoranda can be found in ADAMS under ML060650523 (Region I), ML 060400590 & ML 060400584 (Region II), ML060390745 (Region III), and ML060300575 (Region IV). As in the 2004 inspection cycle, all regions completed their baseline inspections in 2005 with the allocated regional resources, without the need for the coping measures experienced in CY 2002 and 2003.

The NRC approved a delay in the completion of inspection activities associated with the biennial emergency preparedness exercise at Waterford 3, and the inspection is scheduled for completion during CY 2006. The biennial emergency preparedness exercise and the inspection activities associated with the exercise were initially planned for December 7, 2005. However, because of the impact from Hurricane Katrina, the licensee requested that the exercise be rescheduled to June 2006.

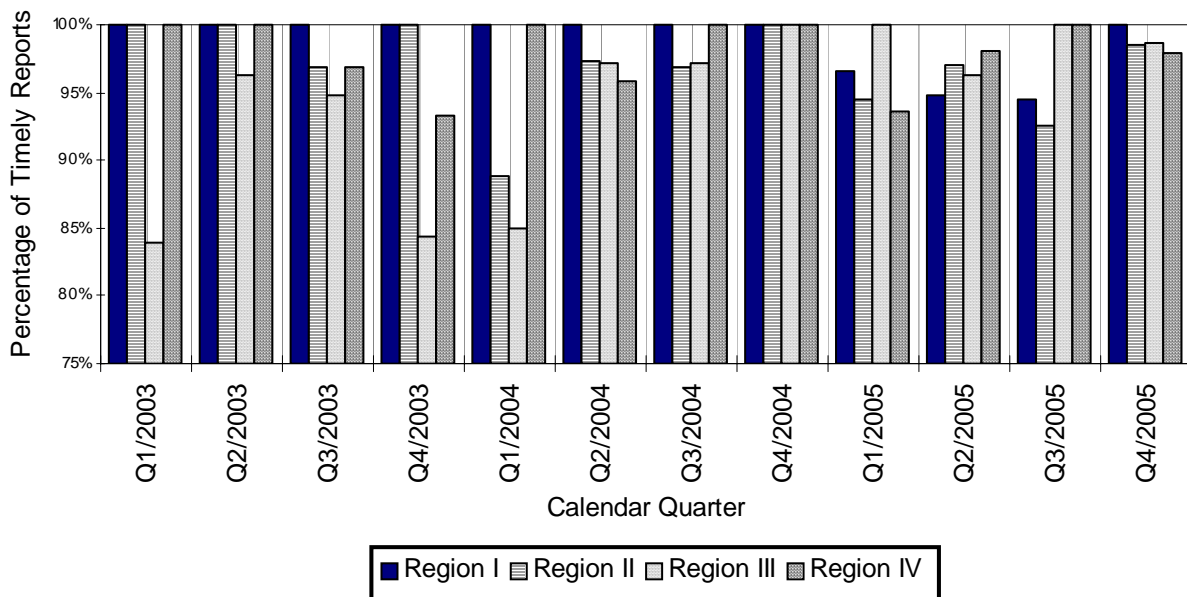
**Metric Criterion Met:** Yes. The metric met its criteria because all four NRC regions completed the baseline inspection program during ROP cycle 6 (CY 2005) in accordance with IMC 2515.

**IP-5 Inspection Reports are Timely**

**Definition:** Obtain RPS data on the total number of reports issued and the number issued within timeliness goals as stipulated in IMC 0612, "Power Reactor Inspection Reports."

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

**Goals Supported:** Ensure Effectiveness, Ensure Openness, Predictable



**Analysis:** A total of 995 inspection reports were issued during the CY 2005. The regions met or exceeded the inspection report timeliness goal of 90 percent in each quarter throughout the year. Overall, about 97 percent of all issued inspection reports were timely.

**Metric Criterion Met:** Yes. This metric met its criteria based on more than 90 percent of inspection reports issued within program's timeliness goals for the year.

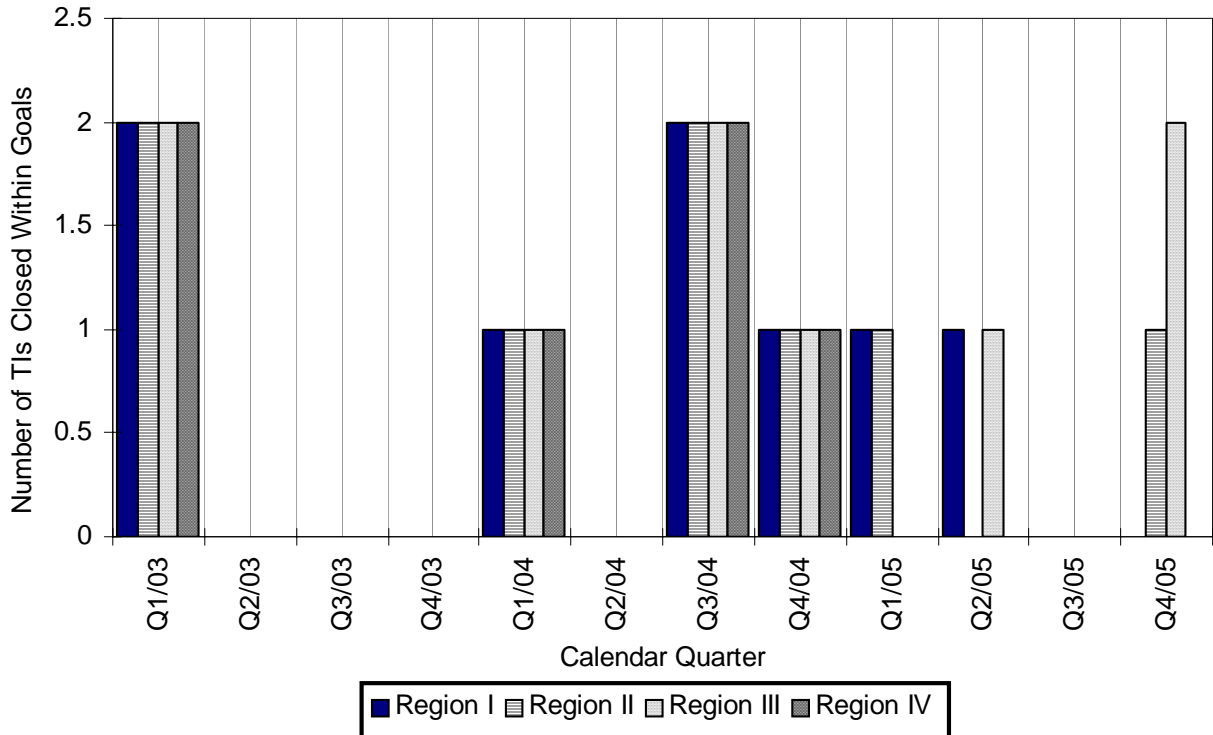
**IP-6 Temporary Instructions (TIs) are Completed Timely**

**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.

**Goals Supported:** Ensure Effectiveness, Ensure Safety, Predictable

**Analysis:** All regions were challenged in completing the six TIs during CY 2005 on time.



None of the four regions were able to meet the timeliness goal during any single quarter; however, some regions were able to complete their timeliness goals in some quarters. The staff will review the reasons for untimely completion of TIs and recommend possible solutions in CY 2006.

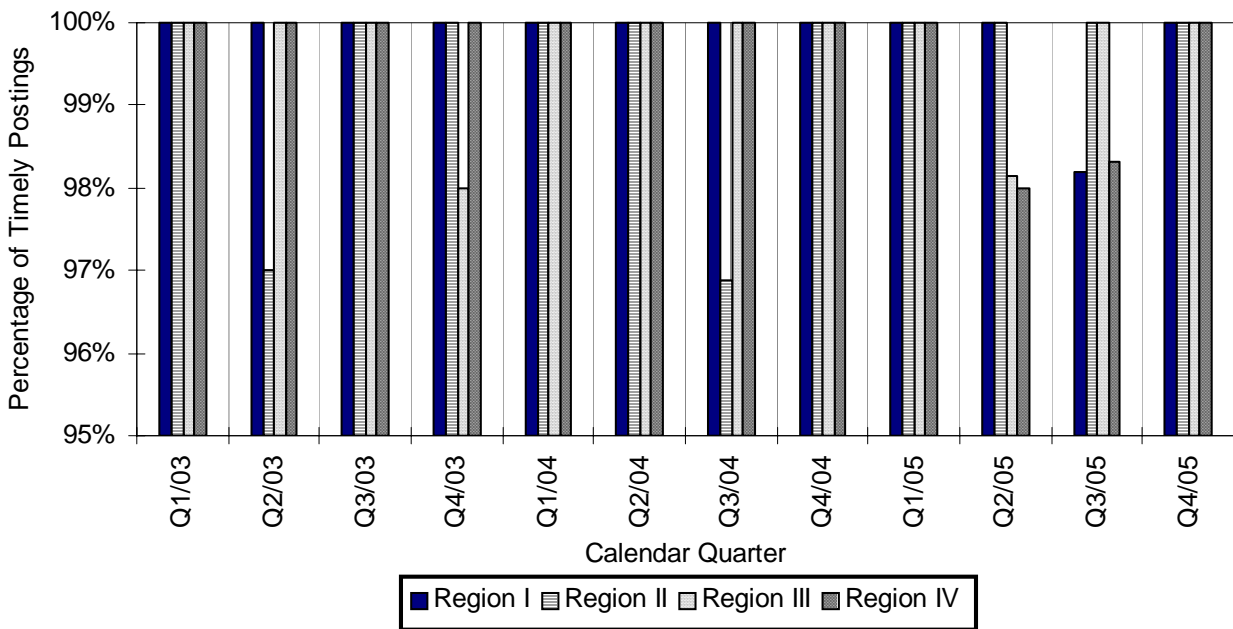
**Metric Criterion Met:** No. This metric did not meet its criteria because not all TIs were completed within their timeliness goals.

**IP-7 Public Communication Is Timely**

**Definition:** NRR/DIRS posts inspection reports to the NRC's external (public) Web site within ROP timeliness goals using the electronic version of inspection reports entered into the Agency Document Access and Management System (ADAMS) by the regions. NRR/DIRS also posts entries from the Plant Issues Matrix (PIM) to the NRC's public Web site using data entered into RPS by the regions. In addition, NRR/DIRS 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 the goals stipulated in IMC 0306, "Information Technology Support for the Reactor Oversight Process."

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

**Goals Supported:** Ensure Openness, Ensure Effectiveness. Predictable



**Analysis:** PIMs and inspection reports were posted within timeliness goals over 98% of the time for each region in each quarter of CY 2005. There were two untimely postings of inspection reports to the ROP web page during the 2<sup>nd</sup> and 3<sup>rd</sup> quarters of CY 2005. These resulted in broken links on the web for a few days, but these rare occurrences were isolated and the reports were quickly posted once they were issued.

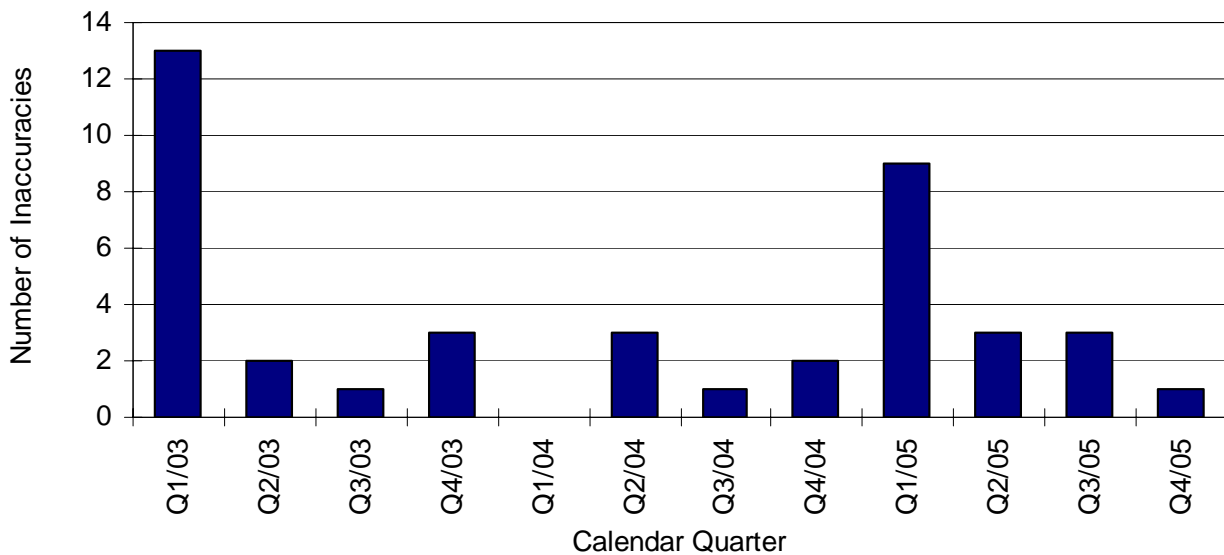
**Metric Criterion Met:** Yes. This metric met program expectations.

**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.

**Goals Supported:** Ensure Openness, Ensure Effectiveness, Understandable



**Analysis:** There were few inaccurate postings of PIM entries or inspection reports on the web identified during CY 2005. No region had more than four inaccurate postings for any of the quarters, and although there were several inaccuracies during the first quarter of 2005 across three of the four regions, these were quickly identified and corrected within days of the posting. Greater attention to detail was exhibited during the remaining quarters of CY 2005.

**Metric Criterion Met:** Yes. This metric met its criteria based on few inaccurate postings during CY 2005.

**IP-9            Inspection Reports Are Relevant, Useful, and Written in Plain Language**

**Definition:**    Survey external and internal stakeholders asking whether the information contained in inspection reports is relevant, useful, and written in plain English.

**Criteria:**        Trend average level of agreement.

**Goals Supported:**    Ensure Effectiveness, Understandable, Ensure Openness

**NOTE:**            An internal survey was not conducted in CY 2005; therefore, the input to this metric came solely from the external survey conducted in October 2005.

**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:

- Should be more explicit in what they expect the utility to do about the problems and issues identified.
- Don't like having information on a single problem spread out over 2 or 3 sections in the report. Also, it is impossible to determine what section you are reading from. The formatting and outlining approach used though is very difficult to follow and non-sensical.
- Listing in the reports of inspection scope is duplicative of the Inspection Procedures and could be eliminated.
- Recent definition changes to IMC 0612 to allow more credit for licensee identified findings (NCVs) and improvements to Appendix 'E' (adding additional examples of cross-cutting aspects) are applauded.
- One area of concern to licensees is the recent change to IMC 0612 and its expansion of what constitutes a performance deficiency. The current guidance provided imposes standards beyond those specified or committed to by a licensee in their licensing basis.
- Additionally, the use of findings has greatly increased since its inception. Observations with insights now being developed in the findings are very useful to the licensees; however, when documented as a "finding" in an inspection report and on the PIM they take on the same weight as a violation (NCV). This practice seems inappropriate and may result in inappropriate resources being applied to the issue at the expense of potentially more significant issues.
- One area that has improved but not as consistently as desired is the incorporation of simplified drawings/schematics.

Overall, stakeholder satisfaction was generally favorable and consistent.

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

**IP-10            Inspection Program Effectiveness and Adequacy in Covering Areas Important to Safety**

**Definition:**     Survey external and internal stakeholders asking whether the inspection program adequately covers areas that are important to safety and is effective in identifying and ensuring the prompt correction of performance deficiencies.

**Criteria:**        Trend average level of agreement.

**Goals Supported:**    Ensure Safety, Ensure Effectiveness, Risk-Informed

**NOTE:**            An internal survey was not conducted in CY 2005; therefore, the input to this metric came solely from the external survey conducted in October 2005.

**Analysis:**        The responses to whether the inspection program adequately covers areas that are important to safety and is effective in identifying and ensuring the prompt correction of performance deficiencies were mixed. Although the majority of the responses indicated that the inspection program covered the appropriate areas, there were some concerns raised with the adequacy of Problem Identification and Resolution inspections and the effectiveness of corrective actions taken by licensees to correct deficiencies. Comments included:

- The Inspection Program has an adequate focus. However, the NRC is weak in driving the prompt corrective actions necessary to correct performance deficiencies by weakening its stance on enforcement.
- ROP has become too burdensome for inspectors because of the complexity of forms and analysis. Need a better balance between deterministic evaluations and use of risk assessment perspective.
- ASME requirements for acceptable pressure vessel leakage was too lenient (as exemplified by the prolonged leak at Davis-Besse).
- While it may cover the appropriate areas, it is thoroughly ineffective at ensuring prompt corrective actions. Even after the NRC places a reactor in the regulatory response column, performance often continues to decline into degraded cornerstones and multiple degraded cornerstones.
- The current inspection program can be improved by performing only one ALARA inspection per cycle and combining the ALARA and Access Control to Radiologically Significant Areas Inspections.
- The new effort to replace the “Safety System Design and Performance Capability Inspection” by focusing on low margin systems/components appears to be an improvement with regard to safety focus. Given the size of the team and duration of the activity it may prove adequate to extend the frequency beyond two years for this inspection procedure.
- The NRC’s baseline inspection process and “Problem Identification and Resolution Inspection” have been providing adequate focus on actions to correct performance deficiencies.
- Inspection Program is better today than when the ROP hit the streets in April 2000. Problem Identification and Resolution (PI&R) module is quite simply inadequate and needs extensive overhaul. Its two major flaws are:

(1) poor criteria for selection of sample size and (2) poor criteria for placing findings in context. The selection criteria are almost exclusively linked to risk significance of systems/components, with some insights from recent inspection findings. What is lacking from the selection criteria is an explicit, formal attempt to probe the breadth of the corrective action process.

- The inspection program is effective in accomplishing its goals in covering areas important to safety and ensuring that performance deficiencies are identified and promptly corrected. Some of the inspected areas with demonstrated good and improving performance, such as Radiation Protection, may be over inspected. Some thought should be given to adjusting the inspection schedule to more effectively distribute the inspection resources.

**Metric Criterion Met:** Yes. Generally, the responses indicated that the inspection program was effective in covering areas important to safety.



## **IP-11 Analysis of Baseline Inspection Procedures**

**Definition:** Annually, review each baseline inspection procedure to determine its effectiveness and contribution to the overall effectiveness of the baseline inspection program. The objectives of the review are: (1) to determine if changes in scope, frequency, or level of effort are needed based on recent experience, (2) to determine if a change to the estimated hours for completion is needed, (3) to define or change what constitutes minimum completion of each inspectable area, if needed, and (4) to critically evaluate all of the inspectable areas together along with the PI program to ensure that the inspectable areas are adequately monitored for safety performance.

**Criteria:** None; trend only. Summarize and evaluate the individual inspection procedure reviews and propose program adjustments as necessary to address noted inefficiencies. Provide basis for any meaningful increase or decrease in procedure scope, frequency, or level of effort as a result of the review.

**Goals Supported:** Ensure Effectiveness, Ensure Safety

**Analysis:** The staff performed its annual review of each baseline inspection procedure during CY 2005. The period assessed was from October 2004 through September 2005. The focus of the review was to identify potential areas for improvement in the baseline inspection program and to identify any notable changes in inspection results. Based on this review, the staff did not identify any significant issues which warranted changes to the inspection program.

Additionally, the staff evaluated the number of findings associated with each inspection procedure. The staff's self-assessment of the inspection findings, internal and external feedback forms, and other independent reviews of the ROP indicated that the inspection program was generally successful in identifying performance deficiencies in many of the areas inspected. The median number of findings per 1000 hours of inspections (4.7) for CY 2005 remained about the same as compared to the results from CY 2004. As in CY 2004, the success of the inspection program in being able to identify performance deficiencies varied with each inspection procedure.

The staff also performed a more detailed analysis of the scope and level of effort of the inspection procedures in CY 2005. The review consisted of an examination of inspection results data from October 2001 through September 2004 with the purpose of identifying effectiveness of each inspection procedure to identify performance deficiencies. The desired outcome from this review was to improve the alignment of inspection resources to inspected areas which had indication of risk-significant performance deficiencies in the past. The staff's recommended changes were incorporated into seven inspection procedures as detailed in Change Notice 06-001 (reference ADAMS Accession No. ML060060380) for implementation by the inspection staff in CY 2006.

**Metric Criterion Met:** Yes. This metric met program expectations.

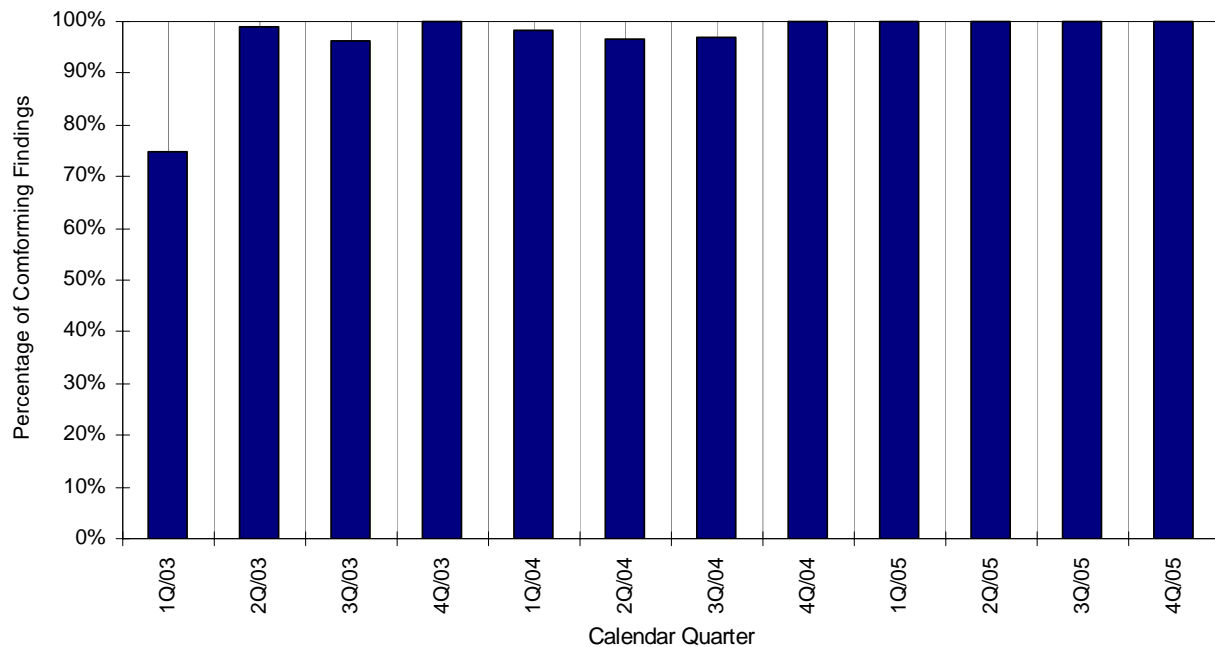
**SDP-1 The SDP Results Are Predictable and Repeatable and Focus Stakeholder Attention on Significant Safety Issues**

**Definition:** Annually, audit a representative sample (up to four per region) of inspection findings against the standard criteria set forth in IMC 0609, "Significance Determination Process," and its appendices. To the extent available, samples should include potentially greater-than-green findings that were presented to the Significance Determination Process/Enforcement Review Panel (SERP). 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% 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.

**Goals Supported:** Ensure Safety, Risk-Informed, Predictable

**Analysis:** The Division of Risk Assessment (DRA) from NRR conducted a review of green



inspection findings. The findings reviewed by DRA came from inspection reports issued in the last two quarters of CY 2004 and first two quarters of CY 2005. A total of 114 green inspection findings were reviewed. The DRA conclusion indicates that the screening process improved overall since the last report. No inspection findings were identified as having a non-conservative risk assessment or not meeting evaluation standards. The auditors determined that all findings

reviewed contained sufficient documentation to allow for any knowledgeable person to conduct an evaluation and reach the same significance color determination.

In addition, 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 17 greater than green inspection findings were reviewed. No significant differences were found between the SDP findings and the ASP results.

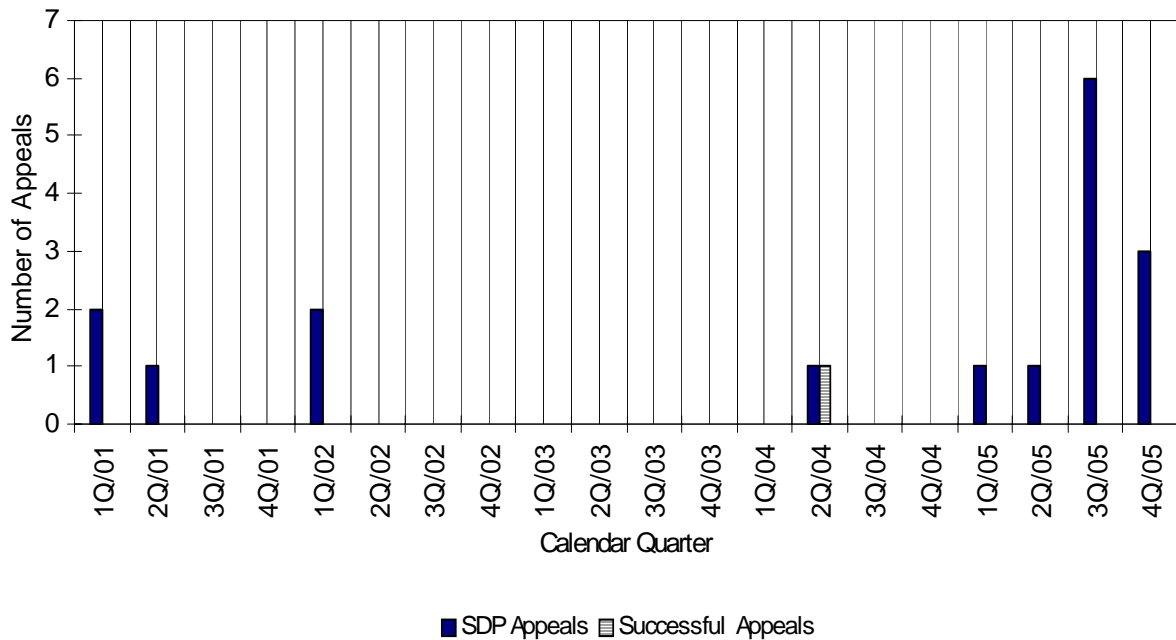
**Metric Criterion Met:** Yes. Performance during this assessment period met program expectations.

**SDP-2 SDP Outcomes Are Risk-Informed and Accepted by Stakeholders**

**Definition:** Track the total number of appeals of final SDP results.

**Criteria:** Expect zero appeals of SDP significance that result in a final determination being overturned across all regions. All successful appeals will be assessed to determine causal factors and to recommend process improvements.

**Goals Supported:** Risk-Informed, Objective, Predictable



**Analysis:** There were ten appeals by licensees of SDP significance outcomes. Nine of the appeals were aimed at findings of very low safety significance, GREEN. There was one appeal of a WHITE finding for a security issue. In each case, the final outcome was unchanged.

**Metric Criterion Met:** Yes. Performance during this assessment period met program expectations based on no successful appeals.

**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.

**Goals Supported:**    Ensure Effectiveness, Understandable, Risk-Informed

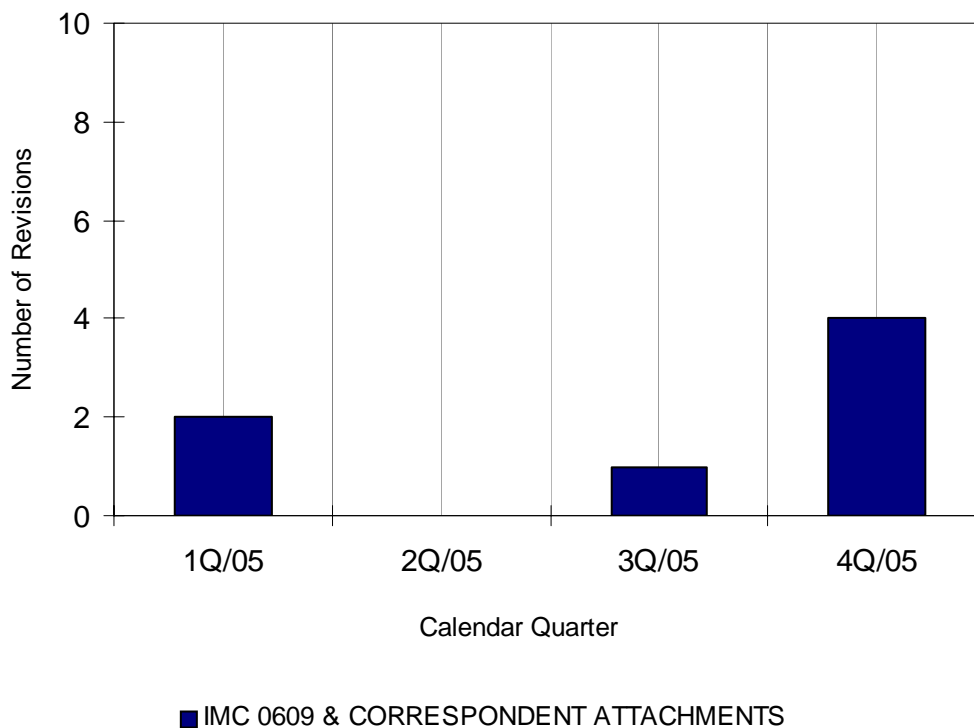
**NOTE:**            There was no internal survey in CY 2005 consistent with its biennial frequency as defined by IMC 0307. The next survey to internal stakeholders will be conducted during the fourth quarter of CY 2006.

**SDP-4 SDP Guidance is Stable Enough To Be Perceived as Predictable and SDP Tools Reflect Current Plant Design and Licensee Operating Practices**

**Definition:** Count the number of revisions to IMC 0609 and its appendices and substantive revisions to the Phase 2 risk-informed inspection notebooks due to non-conservative technical flaws.

**Criteria:** Expect few revisions to IMC 0609 and its appendices, with a stable or declining trend. Expect zero notebook retractions due to non-conservative technical flaws.

**Goals Supported:** Predictable, Risk-Informed, Ensure Safety



**Analysis:** There were seven significant changes in calendar year 2005 that affected IMC 0609 and its appendices. The Fire Protection SDP (IMC 0609, App F and its appendices) was revised in 1Q2005 to change all references for expected and high confidence fire intensity values and add additional applicable correlations from NUREG-1805. The Shutdown Operations SDP (IMC 0609, App G and its appendices) was revised in 1Q2005 to clarify the definition of “available.” The Operator Re-qualification Human Performance SDP (IMC 0609, App I) was revised in 3Q2005 to match current revisions to IP71111.11 (Operator Requalification) and to fix several flaws that have been identified. In 4Q2005, IMC 0609, 0609 App A, 0609.01 and 0609.02 were revised to reflect a concerted

effort to provide guidance which will help meet the Commission's guidance on the timeliness for finalizing the significant determination of inspection findings.

**Metric Criterion Met:** Yes. This metric met its criteria based on relatively few significant changes made to the SDP program documents and no notebook retractions due to non-conservative technical flaws.

**SDP-5            Results of the Same Color Are Perceived by the Public to Warrant the Same Level of Regulatory Attention for All Cornerstones**

**Definition:**     Survey external and internal stakeholders asking if the SDP yields an appropriate and consistent regulatory response across all ROP cornerstones.

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

**Goals Supported:**    Understandable, Objective, Predictable

**NOTE:**            An internal survey was not conducted in CY 2005; therefore, the input to this metric came solely from the external survey conducted in October 2005.

**Analysis:**        Participants in the external ROP survey included 9 industry representatives, 4 State or local government agencies, and 7 private citizens or public interest groups. Most responses skewed toward the negative but for varying reasons. Two believe that the NRC handling of the Davis-Besse risk evaluation is a clear example of the lack of equivalency between the cornerstones. Three responses pointed to the lack of inconsistent outcome between the risk-informed and the more deterministic SDP formats. One respondent stated that there is a lack consistency, however, was not sure how to assess the question of equivalency between the cornerstones when risk informing findings. The general tone of the responses is similar to that of the previous assessment period, that the SDP did not yield equivalent results for issues of similar significance in all ROP cornerstones. The survey question and resultant metric were revised in CY 2005 to clarify the staff's intent that it is the level of regulatory attention (versus the level of significance) that is expected to be consistent between the cornerstones.

Stakeholders have expressed concern about this issue since the early inception of the ROP. However, the staff continues to believe that relative parity has been achieved among the cornerstones, based on the potential impact on public health and safety and the designated NRC response to specific findings.

**Metric Criterion Met:** No.    This metric does not meet its criteria based on a stable negative perception over the past six years of ROP implementation.

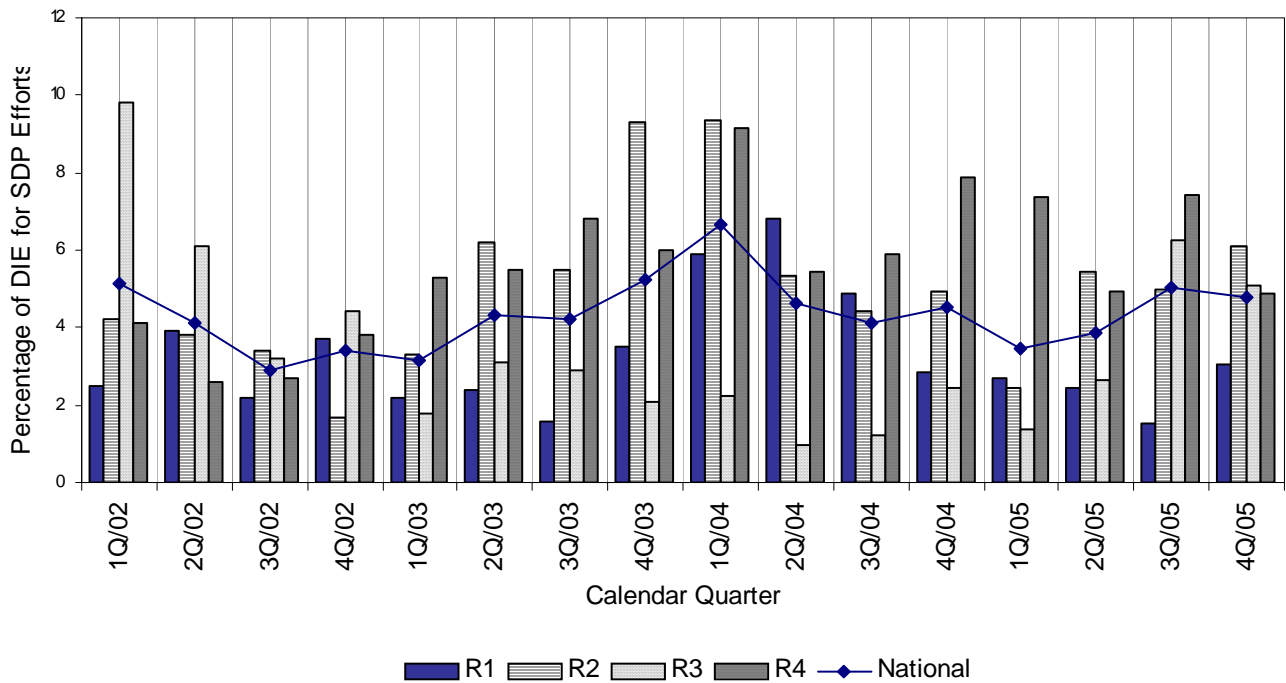


**SDP-6 The Resources (Direct Charges and Support Activities) Expended Are Appropriate**

**Definition:** Track the percentage of total resource expenditures attributed to SDP activities to determine 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 declining trend.

**Goals Supported:** Ensure Effectiveness, Predictable



**Analysis:** Regional expenditures associated with SDP evaluations remain stable and below the target goal.

**Metric Criterion Met:** Yes. Performance during this assessment period met program expectations.

**SDP-7a**

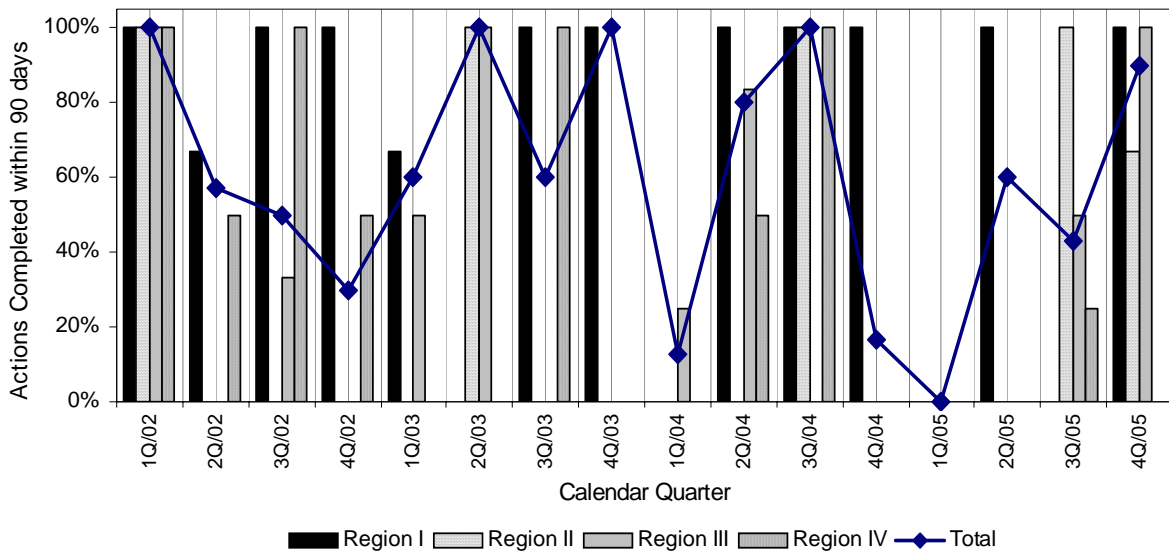
**Final Significance Determinations Are Timely**

**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 apparent violation pending completion of a significance determination and not counted in either of the above categories.

**Criteria:** At least 85% of all SDP results that are counted per the criteria above (increasing to 90% in CY 2006) should be finalized within 90 days. All issues greater than 90 days will be assessed to determine causal factors and to recommend process improvements.

**Goals Supported:** Ensure Effectiveness, Ensure Openness, Predictable



**Analysis:** Timeliness of final significance determinations increased from 48% in FY 2004 to 68% for FY 2005. However, the percentage of completed findings remained below the associated timeliness metric - 85 percent within 90 days in FY 2005. This was due in part to the impact of closing several longstanding issues as discussed further in the performance metric discussion. The staff noted that 5 of the 7 late issues missed the limit by 6 or fewer days, with the oldest issue taking 191 days to finalize. However, had the five issues that missed the limit by 6 or

fewer days been completed on time, then 91 percent of the final significance determinations would have been timely and the metric would have been met.

Although timeliness in reaching final significance remains a challenge, the revised and new SDPs with the associated training, the standardized risk-informed inspection notebooks, the Phase 2 pre-solved tables, the enhanced SPAR models, and other SDP process changes are all intended to achieve efficiencies and improve the process.

**Metric Criterion Met:** No. Performance during this assessment period does not meet program expectations.

**SDP-7b Final Significance Determinations Are Timely**

**Definition:** Conduct a quarterly audit of issues that were assessed by the Significance Determination Process/Enforcement Review Panel (SERP) to identify the total number of inspection items finalized as green or 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, otherwise documented in an inspection report as an “AV” pending completion of a significance determination, or
- (2) the date the item was presented to the SERP for review.

**Criteria:** At least 90% of all SDP results that are counted per the criteria above should be finalized within 90 average days and 100% in 180 days. All issues greater than 180 days will be assessed to determine causal factors and to recommend process improvements.

This metric is being piloted as a potential replacement for the existing SDP timeliness metric.

**Goals Supported:** Ensure Effectiveness, Ensure Openness, Predictable

**Analysis:** This metric is being piloted as a potential replacement for the existing SDP timeliness metric and will be reported for the first time in the CY 2006 ROP Performance Metric Report.

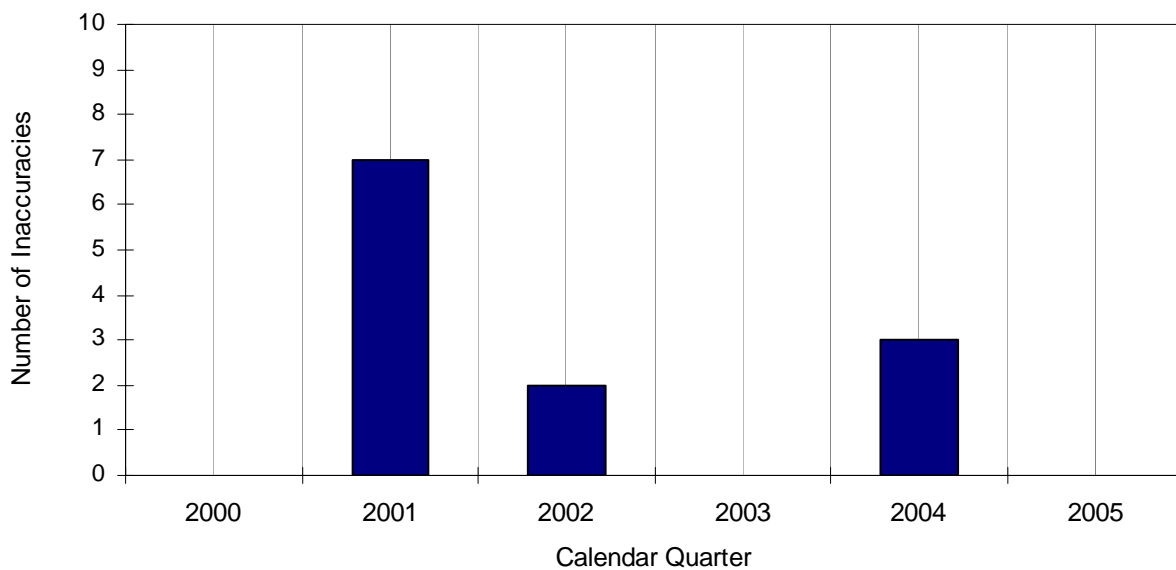
**Metric Criterion Met:** Not Applicable.

**SDP-8 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, with a stable or declining trend. All inaccuracies must be addressed.

**Goals Supported:** Ensure Openness, Understandable, Ensure Effectiveness



**Analysis:** During the current assessment period no inaccuracies were identified.

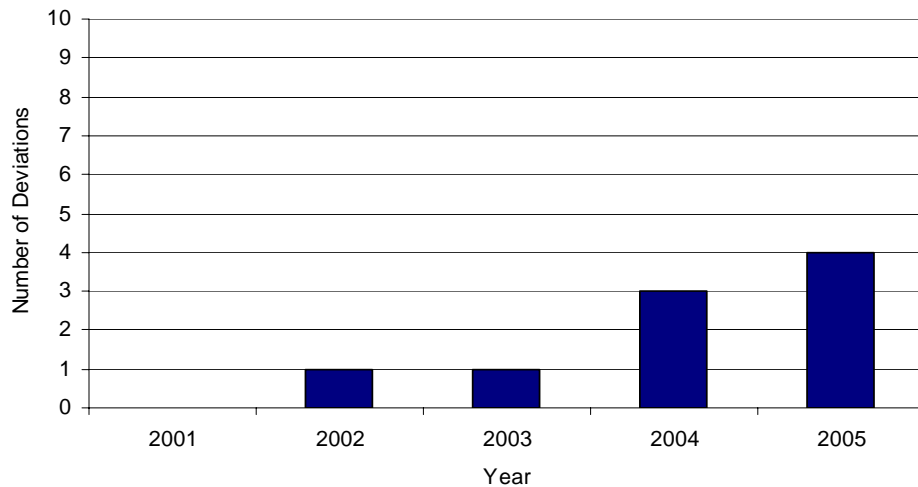
**Metric Criterion Met:** Yes. Performance during this assessment period met program expectations.

**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. Evaluate the causes for these deviations and identify changes to the ROP, if any, to improve the guidance documents.

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

**Goals Supported:** Objective, Predictable, Ensure Openness



**Analysis:** There have been a total of nine (9) deviations from the Action Matrix since the beginning of the Reactor Oversight Program in Calendar Year 2000. Four of these deviations occurred in Calendar Year 2005.

- Point Beach deviation dated December 23, 2005, to not require a separate supplemental inspection of a white finding in the emergency preparedness cornerstone. This finding was an old inspection item that was not reflective of current licensee performance and was delayed in resolution due to investigations by the Office of Investigations and the Department of Justice.
- Indian Point 2 deviation dated October 28, 2005, to closely monitor the utility's performance in addressing issues associated with the unit 2 spent fuel pool, including on-site tritium contamination, and improving the reliability and availability of the Alert and Notification System, including implementation of the backup power requirements in the Energy Policy Act of 2005.
- Salem/Hope Creek deviation dated July 29, 2005, to renew the deviation that

was dated August 20, 2004.

- Davis-Besse deviation dated May 16, 2005, to allow for increased level of oversight as Davis-Besse transitioned out of the IMC 0350 Process to the normal ROP assessment on July 1, 2005.
- Salem/Hope Creek deviation dated 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 dated 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 dated April 2, 2004, to closely monitor the utility's performance following the station's recovery from longstanding problems.
- Indian Point 2 deviation dated March 18, 2003 to provide for heightened oversight of the facility.
- Oconee 1 deviation dated 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.

The staff's evaluation of the 2005 Action Matrix Deviations concluded the following:

(1) Based on a review of the Davis-Besse deviation, IMC 0305 was revised to allow for the regional offices to utilize additional follow-up actions for plants that are exiting the IMC 0350 Process. These actions were previously available for plants exiting the multiple/repetitive degraded cornerstone of the Action Matrix. The programmatic changes made as a result of this deviation will prevent the need for similar deviations in the future.

(2) The Salem/Hope Creek deviation was an extension of the previous deviation in CY 2004. The results of the NRC's safety culture initiative, as directed in the Commission SRM's dated August 20, 2004, and December 21, 2005, will dictate the appropriate programmatic changes.

(3) The Indian Point 2 deviation was issued to address a variety of performance issues unique to the site and represented a customized approach as envisioned in IMC 0305. No programmatic changes are anticipated as a result of this deviation.

(4) The Point Beach deviation represented a unique situation where the NRC decided not to re-inspect an old inspection item that was not reflective of current licensee performance. The performance deficiency associated with this finding had been previously inspected in accordance with IP 95003, "Supplemental Inspection for Repetitive Degraded Cornerstones, Multiple Degraded Cornerstones, Multiple Yellow Inputs, or One Red Input." As part of the IP 95003 inspection, the NRC also performed attachment 95003.01, "Additional Emergency Preparedness Cornerstone Inspection."

This finding was delayed in resolution due to investigations by the Office of Investigations and the Department of Justice. No programmatic changes are anticipated as a result of this deviation.

**Metric Criterion Met:** No. This metric does not meet its criteria based on the number of deviations increasing during CY 2005.

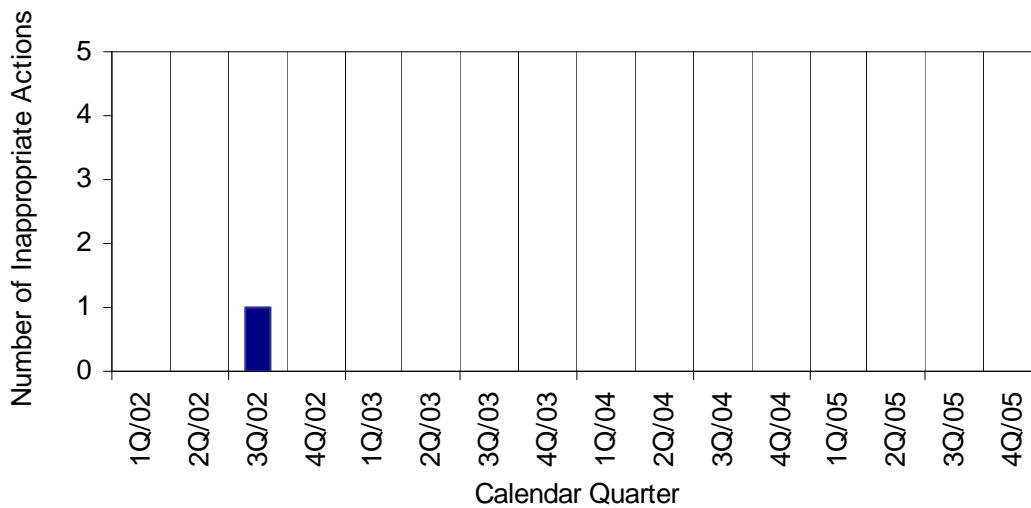


**AS-2 The Program Is Well-defined Enough to Be Consistently Implemented**

**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.

**Goals Supported:** Objective, Predictable, Ensure Effectiveness



**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 2005.

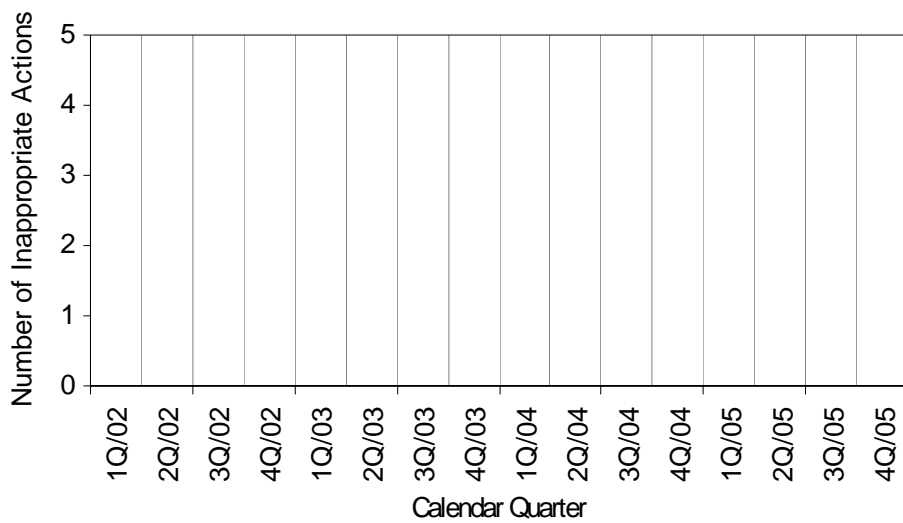
**Metric Criterion Met:** Yes. This metric met its criteria based on no departures from the requirement of IMC 0305 or 0350 and the trend is considered stable.

**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.

**Goals Supported:** Risk-Informed, Ensure Effectiveness, Ensure Safety



**Analysis:** All actions taken by the regional offices were consistent with the Action Matrix during the period between January and December 2005. However, additional actions were taken at Salem and Hope Creek that were initiated through the Allegations Program in CY 2004. A deviation was issued on August 20, 2004 and July 29, 2005, to provide heightened NRC oversight to closely monitor the licensee's actions to address significant issues associated with safety conscious work environment (SCWE). The results of the NRC's safety culture initiative, as directed in the Commission SRM's dated August 20, 2004, and December 21, 2005, will dictate the appropriate programmatic changes.

**Metric Criterion Met:** Yes. This metric met 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 stable or declining trend.

**Goals Supported:** Understandable, Predictable, Objective

**Analysis:**        The AARM was held on May 4, 2005, in Flintstone, Maryland. The participants confirmed the appropriateness of agency actions for Point Beach 1 and 2, Perry, Davis-Besse and Cooper. The participants did not recommend any additional actions, beyond those already taken or planned. The next Agency Action Review Meeting is scheduled for April 2006.

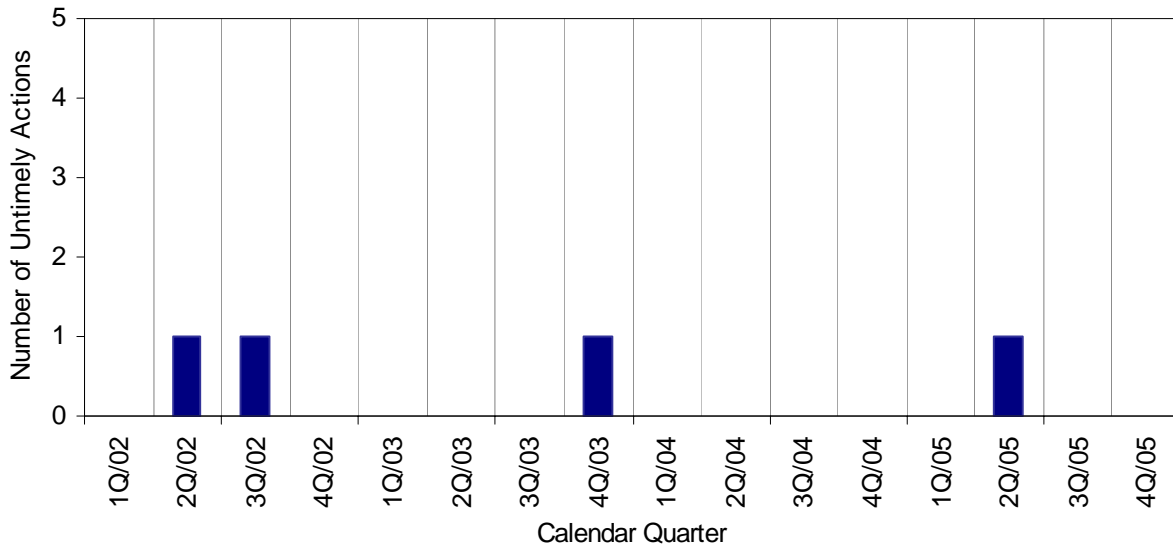
**Metric Criterion Met:** Yes.    This metric met its criteria based on no recommended additional actions beyond those already taken or planned.

**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.

**Goals Supported:** Ensure Effectiveness, Ensure Openness, Predictable



**Analysis:** 4Q/2005: All quarterly reviews and three assessment follow-up letters were completed within timeliness goals.

3Q/2005: All mid-cycle review meetings and mid-cycle letters were conducted within timeliness goals. Additionally, one public meeting was completed within timeliness goals.

2Q/2005: All quarterly assessment reviews and two assessment follow-up letters were completed within timeliness goals. Additionally, forty-eight out of forty-nine public meetings were completed within timeliness goals.

1Q/2005: All end-of-cycle meetings and annual assessment letters and one assessment follow-up letter were completed within timeliness goals. Additionally, thirteen public meetings were completed within timeliness goals.

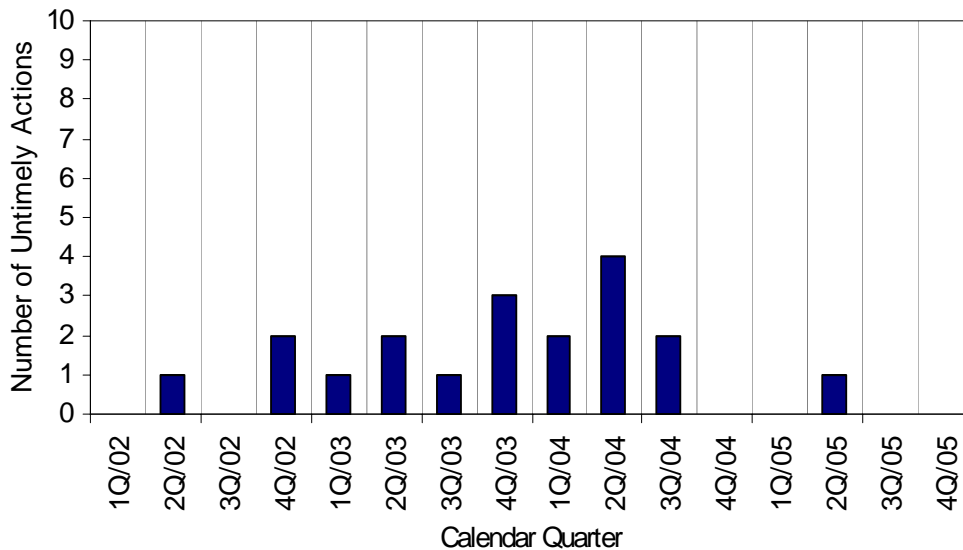
**Metric Criterion Met:** Yes. This metric met its criteria based on the timeliness goals were met and have a stable trend.

**AS-6 Public Availability of Assessment Letters Is Timely**

**Definition:** Record the number of letters not available in ADAMS and number of letters not posted to the Web site within goals as stipulated in IMC 0305, "Operating Reactor Assessment Program."

**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.

**Goals Supported:** Ensure Effectiveness, Ensure Openness, Predictable



**Analysis:** 4Q/2005: All three assessment follow-up letters were posted to the web within timeliness goals.

3Q/2005: All of the mid-cycle letters were posted to the web within timeliness goals.

2Q/2005: One of the two assessment follow-up letters was not posted to the web within timeliness goals.

1Q/2005: All annual assessment letters and one assessment follow-up letter were posted to the web within timeliness goals.

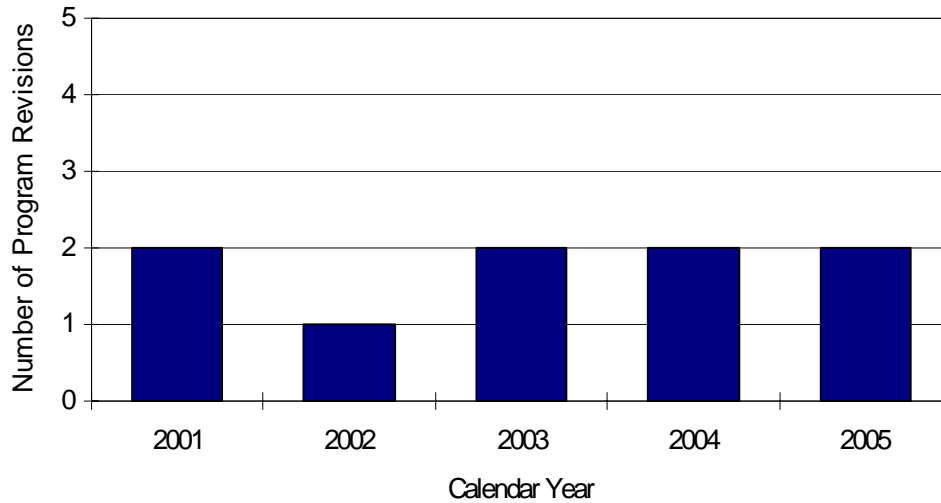
**Metric Criterion Met:** Yes. This metric met its criteria based on the overall web posting timeliness goal being met.

**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.

**Goals Supported:** Predictable, Understandable



**Analysis:** During CY 2005, there was one revision to IMC 0305, “Operating Reactor Assessment Program” and IMC 0350, “ Oversight of Reactor Facilities in a Shutdown Condition Due to Significant Performance and/or Operational Concerns”, which were issued on November 15, 2005 and December 21, 2005, respectively.

**Metric Criterion Met:** Yes. This metric met its criteria based on the fact that the number of IMC 0305 and IMC 0350 revisions have remained stable.

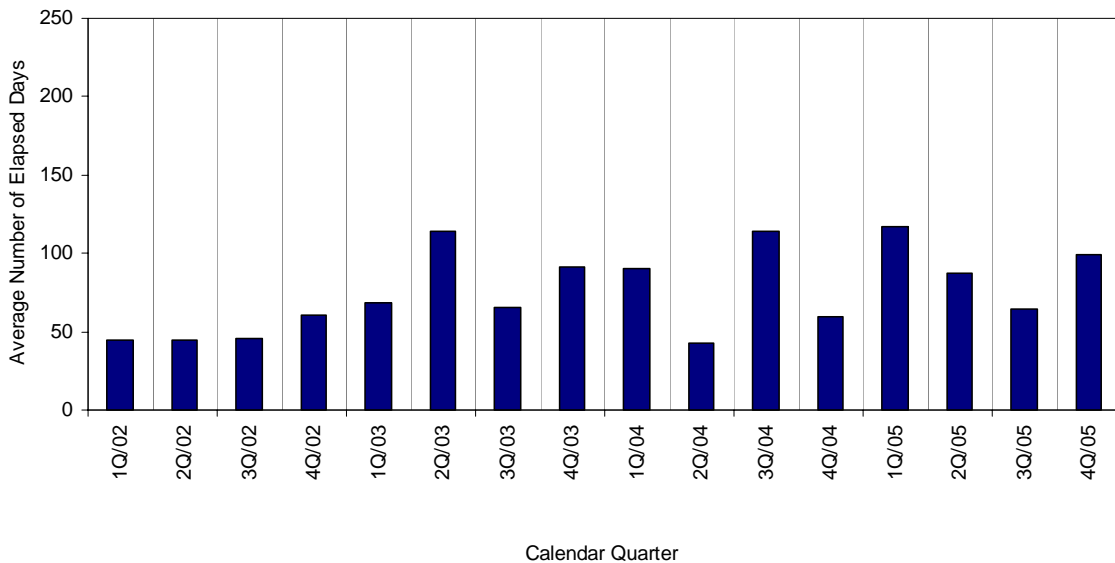


**AS-8 The NRC's Response to Performance Issues Is Timely**

**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.

**Goals Supported:** Ensure Safety, Ensure Effectiveness



**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 staff will continue to monitor this data set to determine if an adverse trend exists.

**Metric Criterion Met:** Yes. This metric met its criteria based on the relatively stable long term trend regarding the NRC's timeliness in responding to performance issues.

**AS-9            NRC Takes Appropriate Actions to Address Performance Issues**

**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.

**Goals Supported:** Ensure Safety, Ensure Effectiveness, Understandable

**NOTE:**            An internal survey was not conducted in CY 2005; therefore, the input to this metric came solely from the external survey conducted in October 2005.

**Analysis:**        The industry and States generally agreed that actions taken by the NRC for plants outside of the licensee response column have been appropriate. Public interest groups were generally critical of NRC actions. Specific concerns were expressed with NRC actions at plants with significant performance problems such as Cooper, Davis-Besse, and Perry. The level of external stakeholder satisfaction in this area was generally favorable and similar to previous years.

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

**AS-10      Assessment Reports Are Relevant, Useful, and Written in Plain Language**

**Definition:** Survey internal and external stakeholders asking whether the information contained in assessment reports is relevant, useful, and written in plain English.

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

**Goals Supported:** Understandable, Ensure Effectiveness, Ensure Openness

**NOTE:** An internal survey was not conducted in CY 2005; therefore, the input to this metric came solely from the external survey conducted in October 2005.

**Analysis:** The industry and States generally agreed that the information contained in assessment reports is relevant, useful, and written in plain English. One public interest group stated that the assessment letters contained too much boilerplate information which precluded substantive insights about performance at individual sites. The level of external stakeholder satisfaction in this area was generally favorable and similar to previous years.

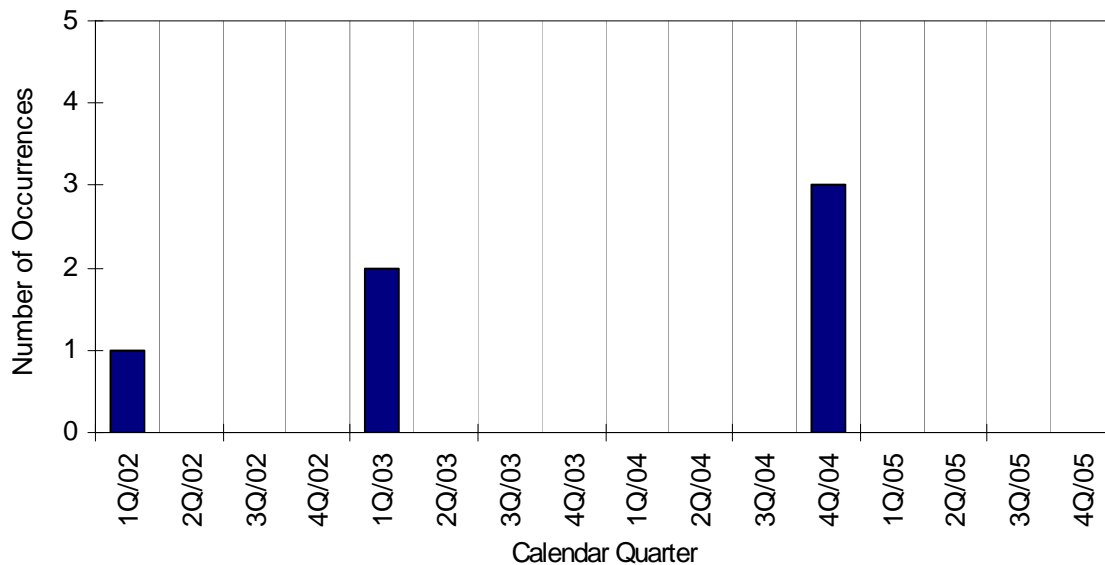
**Metric Criterion Met:** Yes. This metric met its criteria with a stable positive perception over the past six years of ROP implementation.

**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.

**Goals Supported:** Risk-informed, Ensure Safety, Predictable



**Analysis:** Only one reactor site moved more than one column to the right in the Action Matrix over the past few years. Palo Verde Units 1, 2, and 3 moved from the licensee response column to the degraded cornerstone column in 4Q/2004 due to a yellow finding associated with a failure to maintain design control of containment sump recirculation piping. This finding was documented in the final significance determination letter dated April 8, 2005 and began counting in the assessment process at the end of inspection period which ended in 4Q/2004.

**Metric Criterion Met:** Yes. This metric met its criteria based on the fact that only one site (with all three units impacted by the finding) moved two or more columns to the right during the period in CY 2005.

**O-1 Stakeholders Perceive the ROP To Be Predictable and Objective**

**Definition:** Survey external and internal stakeholders asking if ROP oversight activities are predictable (i.e., controlled by the process) and reasonably objective (i.e., based on supported facts, rather than relying on subjective judgment).

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

**Goals Supported:** Objective, Predictable, Ensure Effectiveness

**NOTE:** An internal survey was not conducted in CY 2005; therefore, the input to this metric came solely from the external survey conducted in October 2005.

**Analysis:** External stakeholders generally perceive the ROP to be predictable and reasonably objective, particularly when compared to the previous process, but both industry and public stakeholders stated some concerns and recommended that additional improvements be considered.

The responses from State and local agencies were favorable and did not identify any specific concerns.

Public perception was fairly neutral, though some public stakeholders stated that the ROP is too predictable in that most issues are assessed as Green and that the bar needs to be raised, and that the ROP is too influenced by industry input that allows downgrading of the significance of problems.

Industry stakeholders generally agreed that the ROP was predictable and objective, and acknowledged the improved guidance on documenting cross-cutting issues. Some industry responses expressed concerns with “reverse SDP” techniques (i.e., predetermining significance of issues and then developing the supporting arguments), the definition and use of “performance deficiency” in identifying and documenting inspection findings, the secrecy of the security area, and documenting fire protection issues.

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

**O-2 Stakeholders Perceive the ROP To Be Risk-Informed**

**Definition:** Survey external and internal stakeholders asking if the ROP is risk-informed, in that actions and outcomes are appropriately graduated on the basis of increased significance.

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

**Goals Supported:** Risk-Informed, Ensure Effectiveness, Ensure Openness

**NOTE:** An internal survey was not conducted in CY 2005; therefore, the input to this metric came solely from the external survey conducted in October 2005.

**Analysis:** External stakeholders generally acknowledged that the ROP is risk-informed and that actions and outcomes are appropriately graduated on the basis of increased significance, but both public and utility stakeholders expressed some concerns and noted that further improvements could be made.

Public perception was neutral to slightly negative indicating their concern that the ROP is somewhat less risk-informed than needed. Some members of the public indicated that the ROP should be more rigorous and less open for manipulation by licensees.

State and local agencies responded positively and did not identify any specific concerns.

Similar to last year, the industry perceived that some SDPs are deterministic and not appropriately characterized by risk insights. These SDPs include the emergency preparedness, radiation protection, fire, and security areas. Industry respondents stated that implementation of the Mitigating Systems Performance Index will be an improvement in risk-informing the ROP.

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

**O-3 Stakeholders Perceive the ROP To Be Understandable**

**Definition:** Survey external and internal stakeholders asking if the ROP is understandable and if the processes, procedures, and products are clear and written in plain English.

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

**Goals Supported:** Understandable, Ensure Effectiveness, Ensure Openness

**NOTE:** An internal survey was not conducted in CY 2005; therefore, the input to this metric came solely from the external survey conducted in October 2005.

**Analysis:** External stakeholders generally acknowledged that the ROP is understandable and that the processes, procedures, and products are clear and written in plain English, but some public stakeholders expressed concerns and noted that further improvements could be made.

Public responses to this question were fairly neutral to slightly negative, indicating their concern that the ROP is somewhat less understandable than needed. Some public stakeholders stated that the ROP is too complex and cumbersome and that the organization of ROP information on the Website was not easily accessible. However, there was acknowledgment that inspection reports are generally well written in response to another survey question (see metric IP-9).

State agencies and industry stakeholders agreed that the ROP is understandable and written in plain English. The industry recognized improvements in the inspection manual regarding cross-cutting issues and the definitions of “licensee-identified,” “NRC identified,” and “self-revealing” findings, but noted that the fire protection and steam generator SDPs were highly technical and difficult to follow.

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

**O-4 Stakeholders Perceive That the ROP Provides Adequate Regulatory Assurance That Plants Are Operated and Maintained Safely**

**Definition:** Survey external and internal stakeholders asking if the ROP provides adequate regulatory assurance, when combined with other NRC regulatory processes, that plants are being operated and maintained safely.

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

**Goals Supported:** Ensure Safety, Ensure Effectiveness, Ensure Openness

**NOTE:** An internal survey was not conducted in CY 2005; therefore, the input to this metric came solely from the external survey conducted in October 2005. The wording for this metric and the corresponding survey question has changed to reflect the revision to the NRC's performance goals as stipulated in the Strategic Plan. The previous goal to maintain safety was replaced with the current goal to ensure protection of public health and safety and the environment.

**Analysis:** Overall, external stakeholders generally acknowledged that the ROP provides adequate regulatory assurance that plants are being operated and maintained safely. However, public stakeholders were on the opposite end of the spectrum from utility and State stakeholders.

Public responses to this question were fairly negative, indicating their concern that the ROP is somewhat less to far less adequate than needed to provide assurance that plants are being operated and maintained safely. Examples of their concerns include that all of the Green PIs give a false sense of safety, that the NRC does not identify safety issues in a timely manner, and that there is no evidence to support a positive response.

However, both state and industry stakeholder responses were very positive indicating that they believe the ROP adequately assures that the plants are operated and maintained safely. Responses from State and local agencies were far more positive than they had been in previous years.

**Metric Criterion Met:** Yes. This metric met its criteria with an increasingly positive perception over the past six years of ROP implementation.



**O-5 Stakeholders Perceive the ROP To Be Effective, Efficient, Realistic, and Timely**

**Definition:** Survey external and internal stakeholders asking whether the ROP is effective, efficient, realistic, and timely.

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

**Goals Supported:** Ensure Effectiveness, Ensure Openness

**NOTE:** An internal survey was not conducted in CY 2005; therefore, the input to this metric came solely from the external survey conducted in October 2005. The wording for this metric and the corresponding survey question has changed to reflect the revision to the NRC's performance goals as stipulated in the Strategic Plan. The current goal added "timely" to the previous goal of ensuring that NRC actions are effective, efficient, and realistic.

**Analysis:** Overall, external stakeholders generally acknowledged that the ROP is effective, efficient, realistic, and timely, particularly when compared to previous processes. Most of the negative comments focused on the timeliness of the SDP which is captured by metric SDP-7.

Public perception was fairly negative, noting their concern with the timely identification and evaluation of performance issues. One member of the public stated that the ROP is cumbersome for inspectors and promotes cleverness on the part of the utility in answering versus fixing plant problems.

State and local agencies responded positively and did not identify any specific concerns.

Industry stakeholders generally agreed that the ROP was effective, efficient, realistic, and timely, noting that inspections are more focused, findings are evaluated using a more structured tool, and performance assessment is more objective. They further acknowledged the improvement in SDP timeliness. Some industry responses noted that the NRC should consider reevaluating the frequency of certain inspections, that certain SDPs have become too complex, and the need to improve the transparency and communication in the security area.

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

**O-6 Stakeholders Perceive That the ROP Ensures Openness**

**Definition:** Survey external and internal stakeholders asking if the ROP ensures openness in the regulatory process.

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

**Goals Supported:** Ensure Openness, Ensure Effectiveness

**NOTES:** An internal survey was not conducted in CY 2005; therefore, the input to this metric came solely from the external survey conducted in October 2005. The wording for this metric and the corresponding survey question has changed to reflect the revision to the NRC's performance goals as stipulated in the Strategic Plan. The previous goal to enhance public confidence was basically replaced with the current goal to ensure openness in the regulatory process.

**Analysis:** External stakeholders generally acknowledged that the ROP ensures openness in the regulatory process, but both public and utility stakeholders expressed some concerns and noted that further improvements could be made.

Public perception was neutral to slightly negative indicating their concern that the ROP is somewhat less open than needed. One stakeholder noted that public perception is that the NRC change from the SALP process to the ROP is hand-holding with the industry to provide elevated assessments of plant safety performance.

The responses from State and local agencies were very favorable and one stakeholder noted that their participation in the process is an example of the openness.

Utility stakeholders reiterated that the ROP is generally a very open process, but pointed out the security process and the Significance Determination Process and Enforcement Review Panel (SERP) activities as specific areas that should be more open and allow for greater stakeholder involvement.

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

**O-7 Opportunities for Public Participation in the Process**

**Definition:** Survey external and internal stakeholders asking if there are sufficient opportunities for the public to participate in the process.

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

**Goals Supported:** Ensure Openness, Ensure Effectiveness

**NOTE:** An internal survey was not conducted in CY 2005; therefore, the input to this metric came solely from the external survey conducted in October 2005.

**Analysis:** External stakeholders generally agreed that there are sufficient opportunities for the public to participate in the process, though some stakeholders noted that further improvements could be made.

Public perception was neutral to slightly positive, indicating their general agreement that the public has ample opportunity to participate in the process. One respondent suggested that a more significant effort be made to seek comments from nuclear professionals, while another felt that their comments have often been ignored in the past. Another respondent acknowledged the numerous opportunities for public participation (monthly public meetings at NRC headquarters, annual public meetings conducted in the reactor communities, annual solicitation of public comments, annual ROP Commission briefing, and the staff's consolidated response to last year's comments), but suggested that the NRC improve its feedback to public inputs and comments received during the annual assessment meetings.

The responses from State and local agencies were very favorable and one stakeholder noted their participation in the process as an example.

Industry stakeholder responses were generally very positive, but pointed out that the public does not have adequate opportunity to participate in the security process.

**Metric Criterion Met:** Yes. This metric met its criteria with mostly positive comments and a stable perception over the past six years of ROP implementation.

**O-8 Stakeholders Perceive the NRC To Be Responsive to its Inputs and Comments**

**Definition:** Survey external and internal stakeholders asking if the NRC is responsive to the public's inputs and comments on the ROP.

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

**Goals Supported:** Ensure Openness, Ensure Effectiveness

**NOTE:** An internal survey was not conducted in CY 2005; therefore, the input to this metric came solely from the external survey conducted in October 2005.

**Analysis:** External stakeholders generally acknowledged that the NRC has been responsive to the public's inputs and comments on the ROP, and noted that the staff's efforts in CY 2005 to improve staff responsiveness were effective.

This metric did not meet its criteria during the previous self-assessment due to an increasing negative perception over time. To address the continued concerns that the NRC has been unresponsive to stakeholder feedback, the staff consolidated the comments from the CY 2004 external survey responses by question and provided a comprehensive response to each question. This consolidated response, along with this Commission paper and the annual ROP performance metric report, was posted to the ROP Web page and sent to each respondent to the survey in August 2005.

Public perception was fairly neutral, with one stakeholder acknowledging that the consolidated response to the CY 2004 survey was very good, and that if that effort was matched by comparable feedback provided to public inputs and comments received during the annual assessment meetings, their assessment would be that the NRC was very responsive to public input and comments on the ROP.

The responses from State and local agencies were very favorable and one stakeholder noted their first hand experience as a supporting comment.

Industry stakeholder responses were generally very positive, but pointed out that the NRC remains relatively unresponsive to public input on the security process. Examples of NRC responsiveness included the consolidated response to the CY 2004 survey, the action item list used to track and status issues discussed at the monthly ROP meetings, and the NRC's efforts to encourage participation at the monthly public ROP meetings and the annual performance review meetings, in which public comments are received, evaluated, and dispositioned in a professional manner.

**Metric Criterion Met:** Yes. This metric met its criteria with a stable perception over the past six years of ROP implementation and a recently increasing positive perception.

**O-9 Stakeholders Perceive That the ROP Is Implemented as Defined**

**Definition:** Survey external and internal stakeholders asking if the ROP has been implemented as defined by program documents.

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

**Goals Supported:** Predictable, Understandable, Ensure Openness

**NOTE:** An internal survey was not conducted in CY 2005; therefore, the input to this metric came solely from the external survey conducted in October 2005.

**Analysis:** External stakeholders generally agreed that the ROP has been implemented as defined by program documents, though some stakeholders noted that further improvements could be made.

Public perception was essentially neutral to slightly positive, indicating their general agreement that the ROP has been implemented as defined by program documents. One respondent indicated that the ROP program documents are difficult to find on the NRC Website, making it difficult to determine if the NRC is abiding by them while implementing the ROP.

The responses from State and local agencies were very favorable and did not identify any specific concerns.

Industry stakeholder responses were generally very positive, recognizing the improved guidance relative to cross-cutting issue identification, characterization, and evaluation, but also pointed out that the security area was neither scrutable nor predictable.

**Metric Criterion Met:** Yes. This metric met its criteria with mostly positive comments and a stable positive perception over the past six years of ROP implementation.

**O-10 Stakeholders Perceive That the ROP Does Not Result in Unintended Consequences**

**Definition:** Survey external and internal stakeholders asking if the ROP results in unintended consequences.

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

**Goals Supported:** Ensure Safety, Ensure Effectiveness

**NOTE:** An internal survey was not conducted in CY 2005; therefore, the input to this metric came solely from the external survey conducted in October 2005.

**Analysis:** External stakeholders generally agreed that the ROP minimizes unintended consequences, though both public and utility stakeholders had some concerns and provided specific examples of unintended consequences. As one of the respondents noted, this question was poorly worded (“does the ROP result in unintended consequences”) in the survey since positive responses are on the other side of the scale when compared to all other questions. This made it difficult to determine the external stakeholders relative perception of whether the ROP results in unintended consequences. The staff will reword the question in future surveys to “does the ROP minimize unintended consequences?” which will provide a more consistent response.

Public perception was essentially neutral to slightly negative, indicating their concern that the ROP does result in some unintended consequences. Some public respondents stated that licensees use poor judgment and waste a lot of time and effort trying to avoid greater-than-green issues.

Industry stakeholder responses were essentially neutral to slightly positive, noting that the recent revision to IMC 0612 which better defined “licensee-identified” avoids an unintended consequence and will encourage licensees to openly identify problems. Noted examples of potential unintended consequences included the recent practice of identifying cross-cutting aspects for essentially all NRC findings, two performance indicators that have the potential to cause licensees to take actions that can adversely impact plant safety, and the security “no comment policy” could have the unintended consequence of undermining public trust and confidence. The responses from State and local agencies did not identify any specific concerns.

This metric did not meet its criteria during the previous self-assessment due to an increasing negative perception over time. However, this year’s responses included some positive comments and had fewer negative comments.

**Metric Criterion Met:** Yes. This metric met its criteria based on an increasing positive perception when compared to the past few years of ROP implementation.

**O-11            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 NRR/DIRS to identify any weaknesses.

**Criteria:**        Expect no major programmatic voids.

**Goals Supported:**    Ensure Safety, Ensure Effectiveness

**Analysis:**        No IITs nor AITs were conducted during the 2005 ROP cycle. Additionally, no feedback forms were received for IP 93800.

**Metric Criterion Met:** Yes. This metric met its criteria based on no current programmatic voids.

**O-12            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.

**Goals Supported:**    Ensure Safety, Ensure Effectiveness

**Analysis:**        The Office of Nuclear Regulatory Research (RES) compared ASP results and SDP evaluations for ASP analyses completed during this assessment period. A total of 17 greater than green inspection findings were reviewed. No significant differences between the SDP findings and the ASP results were noted and no programmatic voids were identified.

**Metric Criterion Met:** Yes.    This metric met its criteria based on no identified programmatic voids.



## **O-13      Analysis of Inspection Hours and Resource Expenditures**

**Definition:** Annually, 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.

**NOTE:** 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.

**Goals Supported:** Ensure Effectiveness, Predictable

**Analysis:** Overall staff effort in 2005 was 5.4 percent higher compared with 2004. An increase was evident in all areas of the ROP except for performance assessment which has remained relatively constant during the past few years.

Baseline inspection effort in 2005 increased 6.1 percent compared with 2004. This increase was generally evenly distributed among all baseline procedures. The largest increase was in plant status activities due to increased requirements in this area for daily corrective action review and Reactor Coolant System leakage trend reviews resulting from Davis-Besse lessons learned. Overall effort for plant-specific inspections remained unchanged at approximately 22,700 hours. The only area where a significant increase was seen was in the 2005 inspection effort for generic and safety issues. This increase was the result of the high level of inspection activity associated with temporary instructions continuing from 2004 into 2005, primarily in the area of safeguards, grid reliability, and material control and accountability.

The increased inspection effort in 2005 was most likely the result of increased regional inspection activity due to additional requirements that have been imposed on the inspection staff in recent years. These additional requirements include corrective action reviews, activities resulting from Davis-Besse lessons learned, increased generic safety issues inspections, and increased efforts in the areas of safety culture, security, performance indicators, and inspection procedure development. The staff intends to further investigate the reasons for the inspection resource increase over the past few years. A detailed ROP resource analysis is included in Enclosure 8 of the CY 2005 ROP Self-Assessment Commission paper.

**Metric Criterion Met:** Yes. This metric met its program expectations.

**O-14            Analysis of Resident Inspector Demographics and Experience**

**Definition:**     Annually, collect and analyze data in order to determine the relevant inspection experience of the resident inspector (RI) and senior resident inspector (SRI) population. The following five parameters will be measured and analyzed for both RIs and SRIs to ensure that the NRC maintains a highly qualified resident inspection staff:

- (1)     NRC time - the total time the individual has accumulated as an NRC employee.
- (2)     Total resident time - the total time the individual has accumulated as an RI or SRI.
- (3)     Qualified total resident time - the total time the individual has been assigned to an RI or SRI position after completing the reactor operations inspector qualification requirements of IMC 1245.
- (4)     Current site time - the total time the individual has spent as an RI or SRI at the current site.
- (5)     Relevant non-NRC experience - the total time the individual has gained relevant nuclear power experience outside of the NRC.

**Criteria:**        None; trend only. Provide reasons for any meaningful increase or decrease in these resident demographic metrics.

**NOTE:**            This metric is intended primarily for tracking and trending resident inspection experience. The results are used to make any necessary modifications to the RI and/or SRI programs in order to attract and retain highly qualified inspectors to the respective programs.

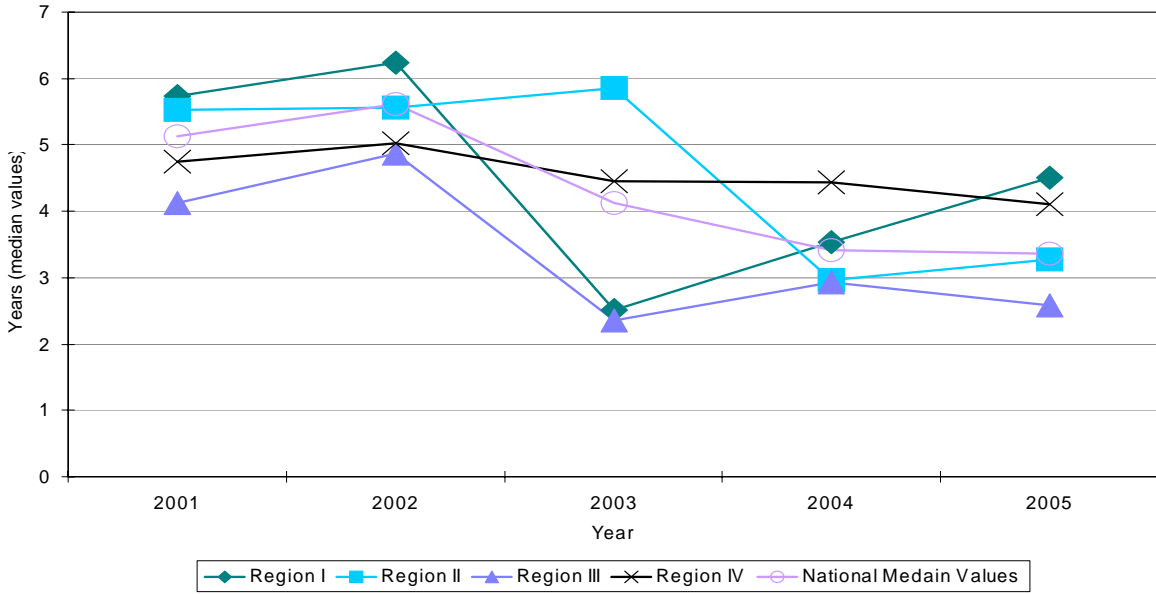
**Goals Supported:**    Ensure Safety, Ensure Effectiveness

**Analysis:**        See charts on following pages. A detailed resident demographic and staffing analysis is included in Enclosure 9 of the CY 2005 ROP Self-Assessment Commission paper.

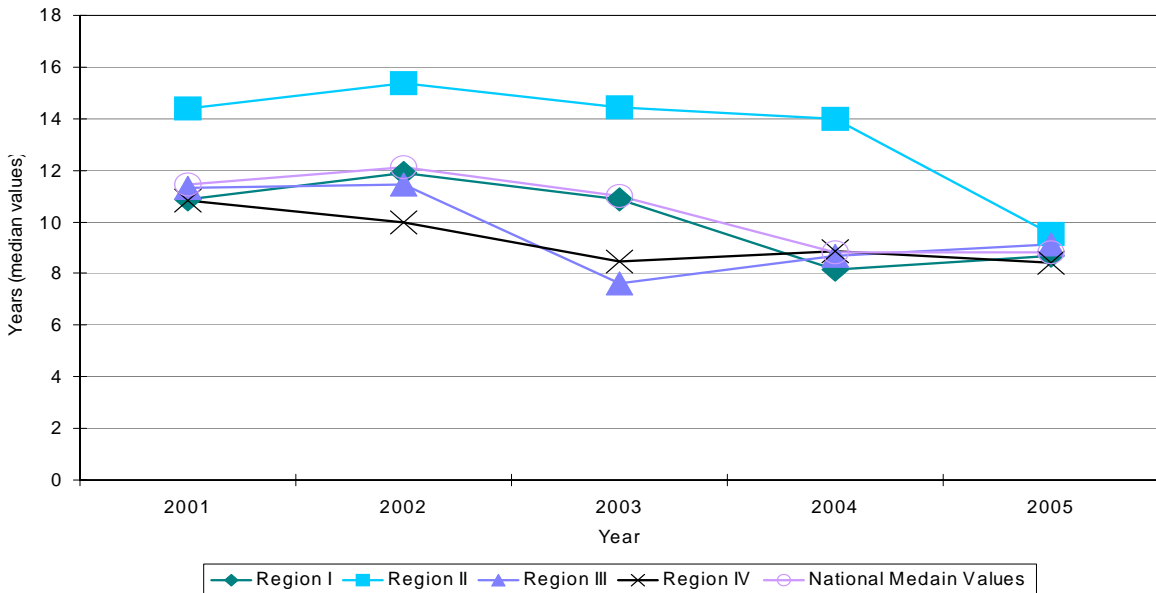
**Metric Criterion Met:** Yes. This metric met its program expectations.

- (1) **NRC Time:** NRC time for RIs increased in Regions I and II and decreased in Regions III and IV. NRC time for SRIs increased in Regions I and III and decreased in Regions II and IV.

NRC Time (RIs)

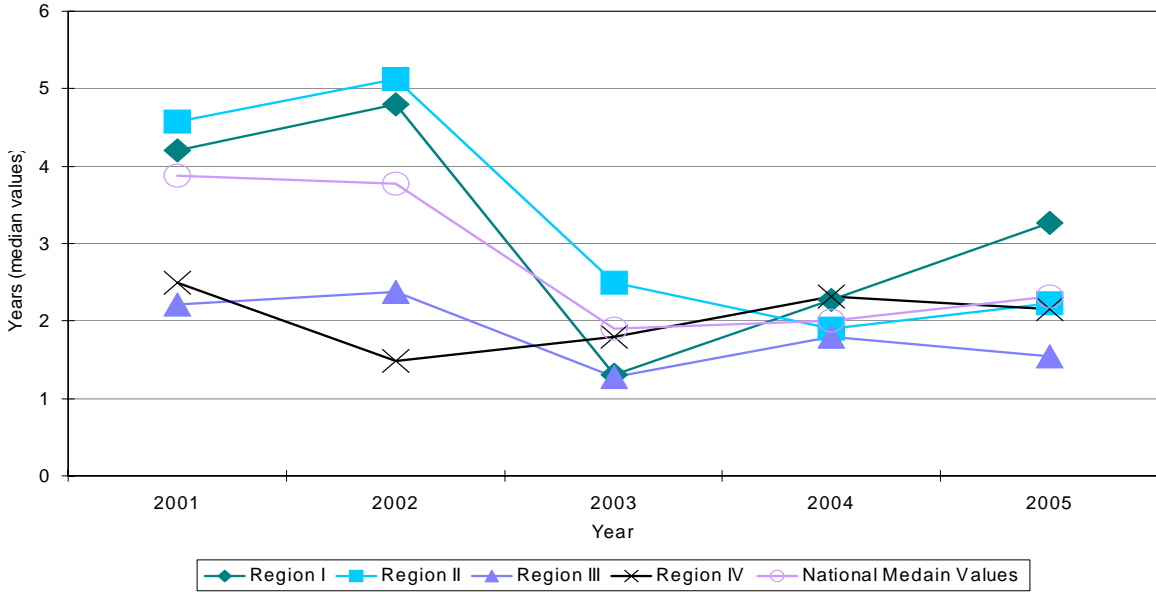


NRC Time (SRIs)

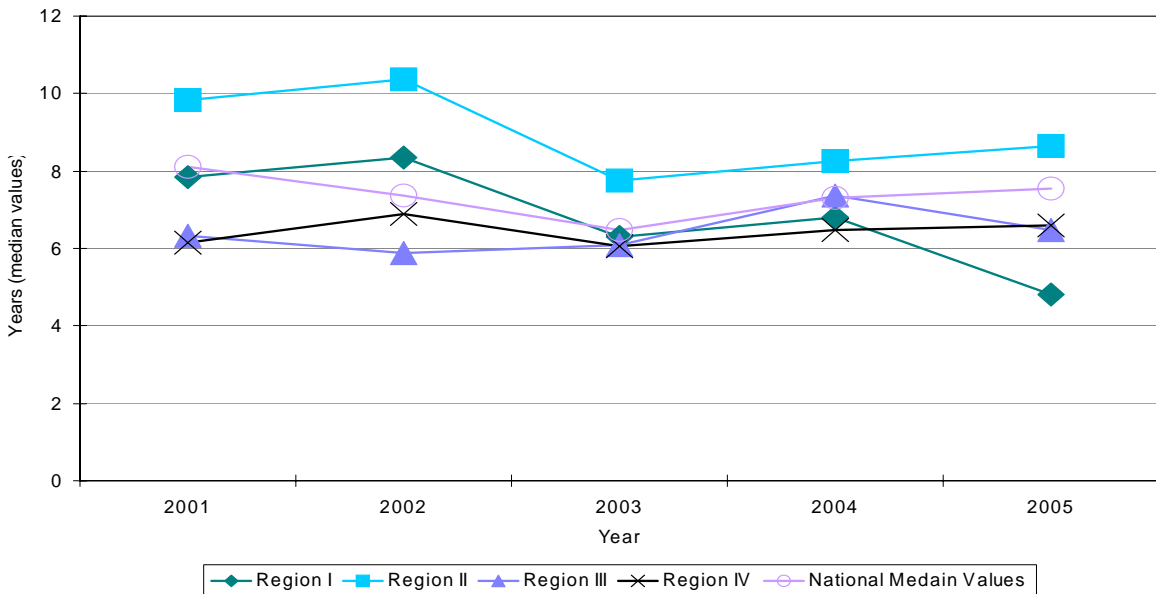


- (2) **Total Resident Time:** Total resident time for RIs increased for Regions I and II and decreased in Regions III and IV. Total resident time for SRIs increased in Regions II and IV and decreased in Regions I and III.

Total Resident Time (RIs)

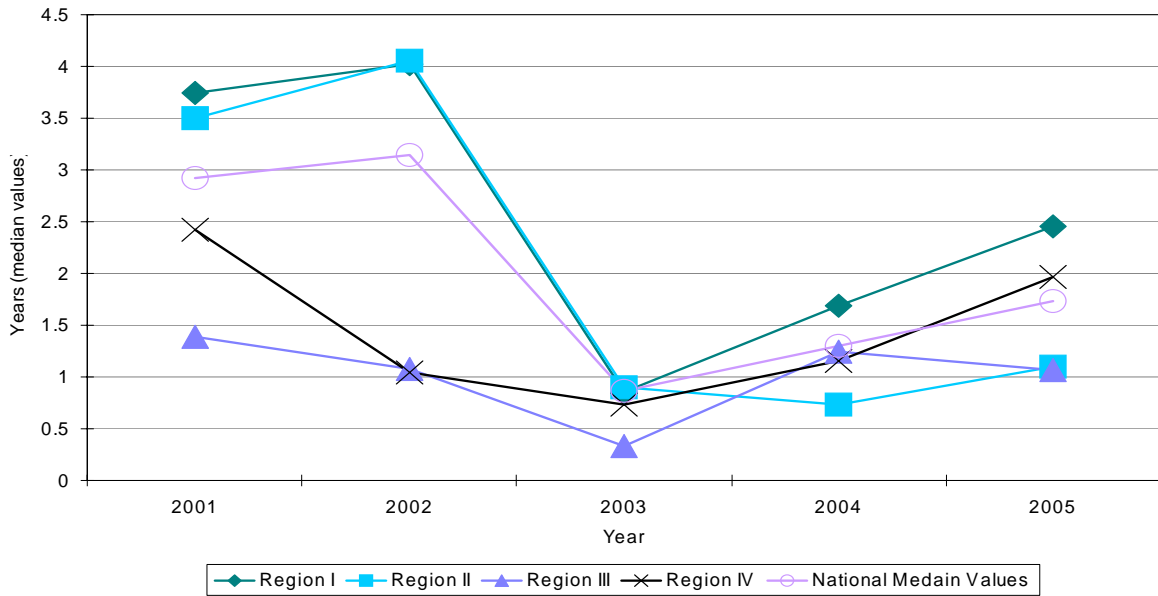


Total Resident Time (SRIs)

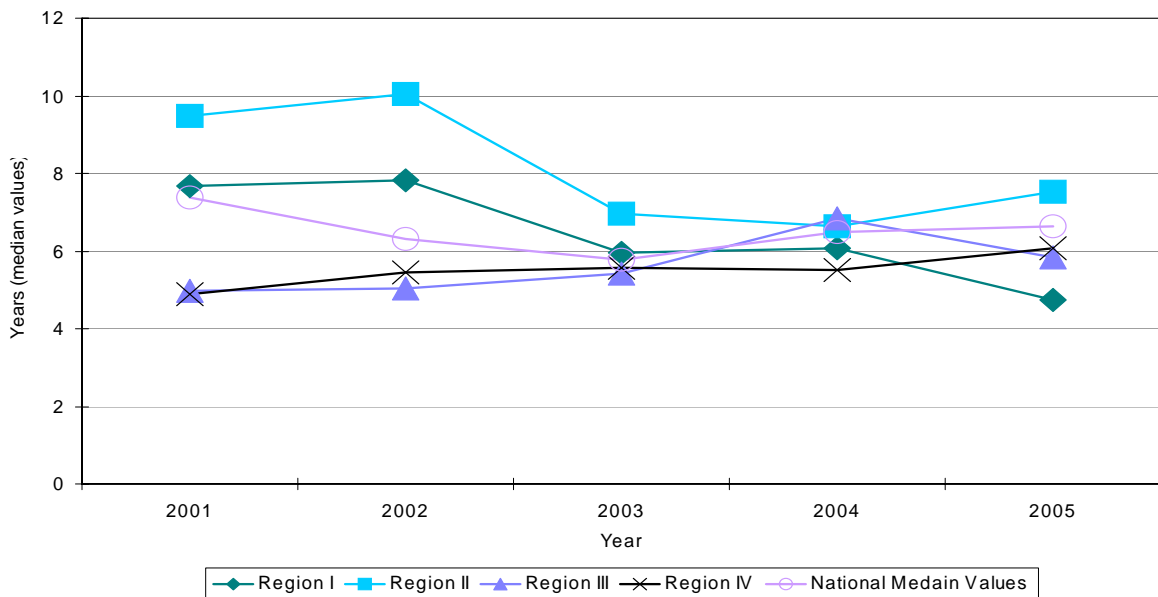


- (3) **Qualified Total Resident Time:** Qualified total resident time for RIs increased in Regions I, II, and IV and decreased in Region III. Qualified total resident time for SRIs increased in Regions II and IV and decreased in Regions I and III.

Qualified Total Resident Time (RIs)

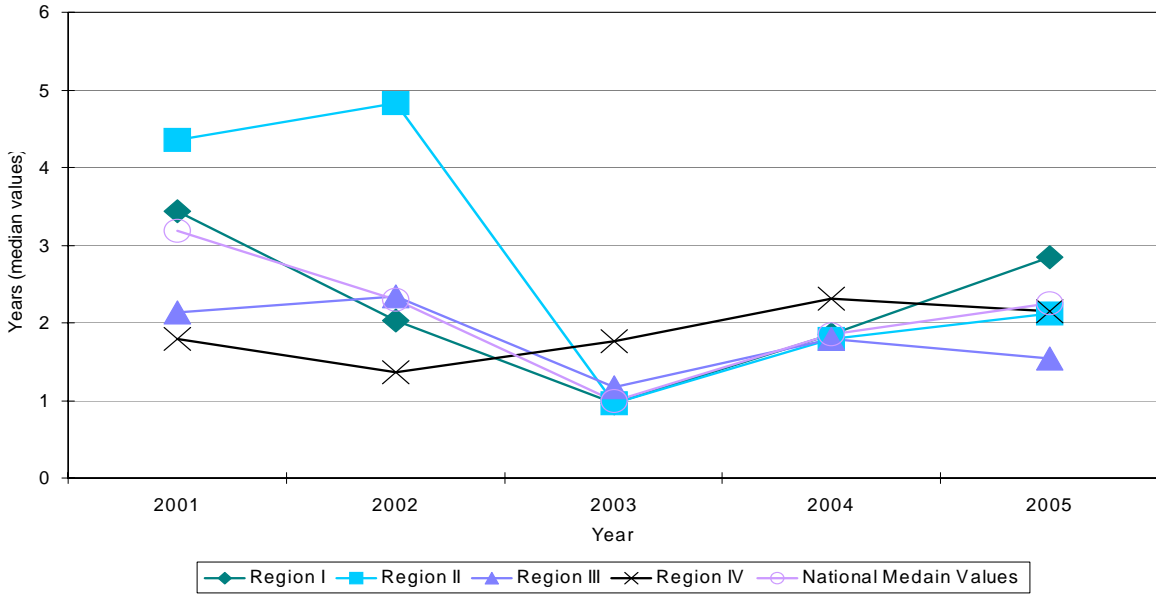


Qualified Total Resident Time (SRIs)

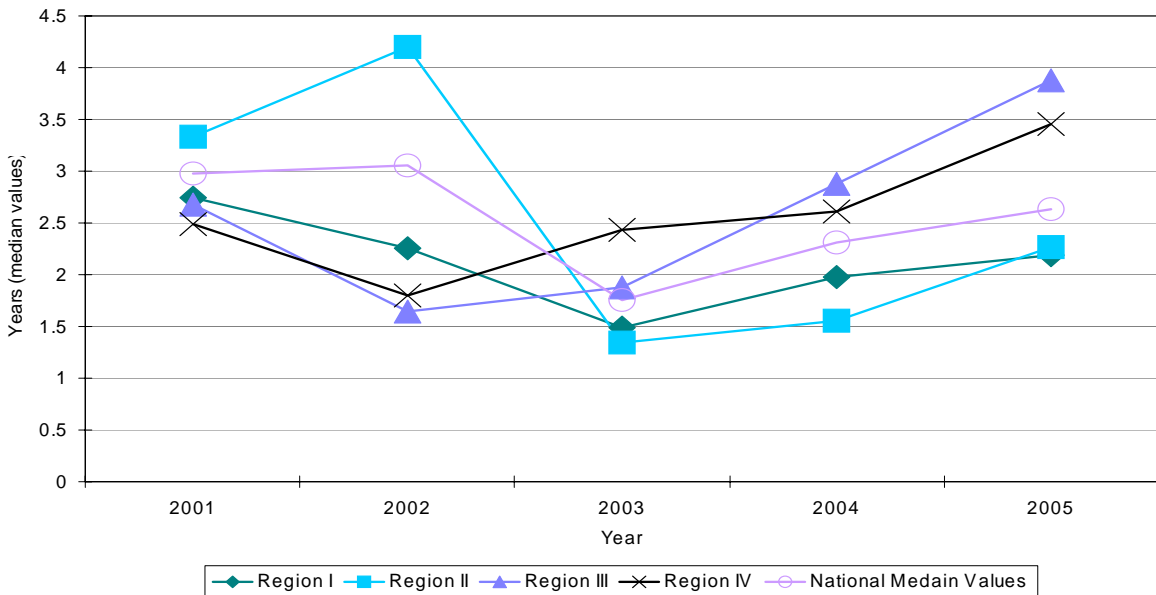


- (4) **Current Site Time:** Current site time for RIs increased in Regions I and II and decreased in Regions III and IV. Current site time for SRIs increased in all the Regions.

Current Site Time (RIs)

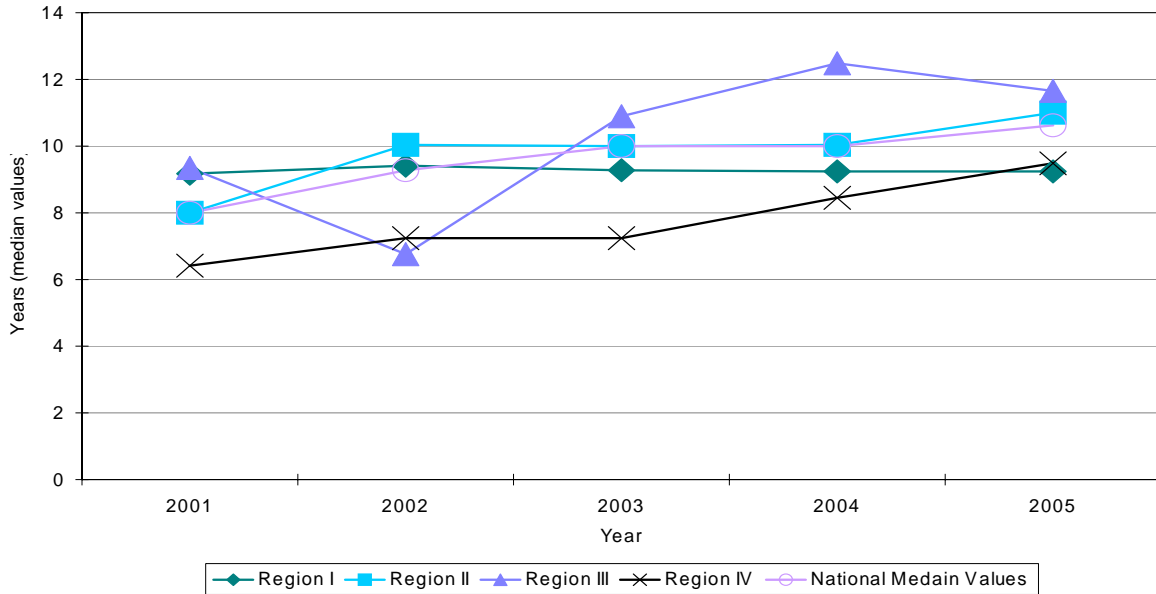


Current Site Time (SRIs)

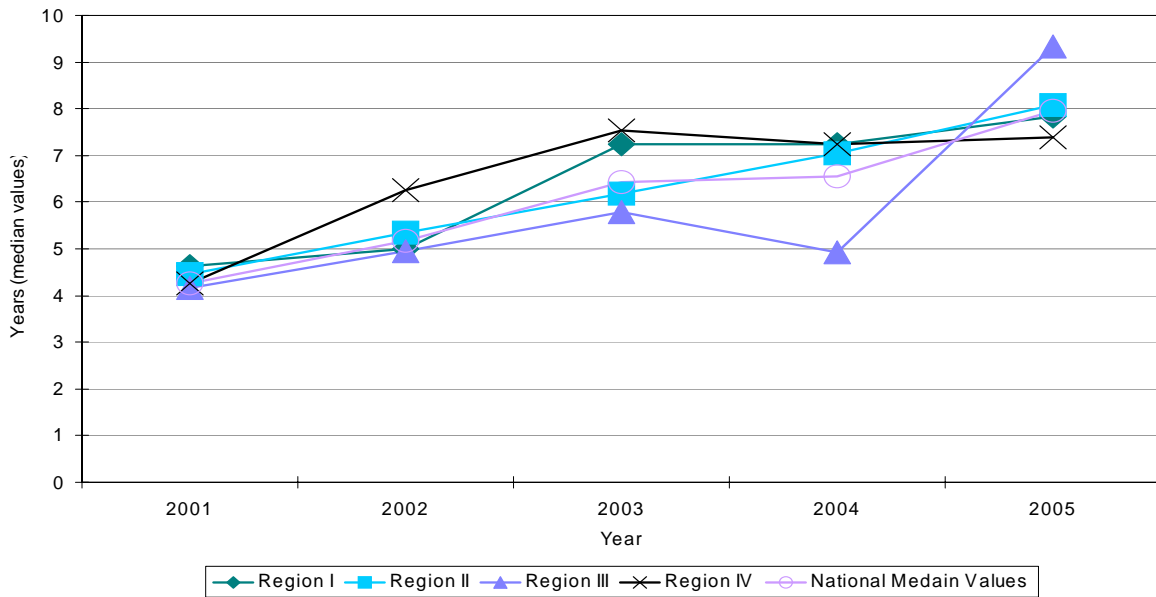


- (5) **Relevant Non-NRC Experience:** Relevant non-NRC experience increased or remained the same for RIs in all Regions with the exception of Region III. Relevant non-NRC experience for SRI's increased in all of the regions.

Relevant Non-NRC Time (RIs)



Relevant Non-NRC Time (SRIs)



**O-15            Analysis of Site Staffing**

**Definition:**    Semiannually, collect and analyze data in order to measure the permanent inspector staffing levels at each of the reactor sites for both RIs and SRIs in order to evaluate the agency's ability to provide continuity of regulatory oversight.

**Criteria:**        None; trend only. Provide reasons for any meaningful increase or decrease in the inspector staffing level at reactor sites.

**NOTE:**            This metric is intended primarily for tracking and trending the staffing levels of RIs and SRIs.

**Goals Supported:**    Ensure Safety, Ensure Effectiveness

**Analysis:**        The metric counts (1) RIs and SRIs who are permanently assigned to the site and (2) inspectors who are on rotational assignments to the site for 6 weeks or longer. Only inspectors who have attained at least a basic inspector certification status, as defined by IMC 1245, are counted. The metric does not count permanently assigned RIs and SRIs who are away from their sites for longer than 6 weeks. Inspectors who are assigned to sites for less than 6 weeks are not counted towards satisfying the metric.

The success criteria for the metric is 90 percent coverage for each site. This year, the average site coverage for the regions was 98.2 percent, with all regions exceeding 97 percent. However, three sites did not meet the success criteria of 90 percent (their scores were 85 percent and higher), primarily because of the assignment of the SRI to special work. The staff's evaluation determined that oversight continuity was maintained and that these three sites were adequately covered for one or more of the following reasons: (1) the permanent RI was present, (2) an experienced SRI was temporarily assigned, and/or (3) the site was covered with qualified inspectors on assignments for less than 6 weeks. At no time did these sites remain without qualified inspectors. It is important to note that for all three of these sites the permanent SRIs were temporarily assigned for periods of up to 5 months to participate in projects related to nuclear security.

**Metric Criterion Met:** Yes. This metric met its program expectations.



**O-16            Analysis of ROP Training and Qualifications**

**Definition:**     Annually, evaluate the implementation of IMC 1245, "Qualification Program for the Office of Nuclear Reactor Regulation Programs," particularly as it pertains to ROP implementation.

**Criteria:**        None; trend only. Summarize and evaluate the training accomplished over the previous year and propose program improvements as necessary to address noted concerns.

**NOTE:**            This metric is intended primarily for tracking and trending the effectiveness of the ROP training and qualifications programs.

**Goals Supported:**    Ensure Effectiveness, Ensure Safety

**Analysis:**        The staff continued its efforts to improve the inspector training programs and techniques in accordance with IMC 1245. During CY 2005, the staff developed and distributed the first survey on inspector training effectiveness. The responses to the survey were favorable and indicated that regional managers have maintained an environment that encourages inspectors to identify performance deficiencies and improve the inspection program. The staff developed and implemented Web-based read-and-sign training on substantive cross-cutting issues, documenting findings in inspection reports, and revisions to the SDP guidance. An evaluation of training effectiveness is included in Enclosure 6 of the CY 2005 ROP Self-Assessment Commission paper.

**Metric Criterion Met:** Yes. This metric met its program expectations.

**O-17            Analysis of Regulatory Impact**

**Definition:**    Annually, collect and analyze licensee feedback and develop a summary of regulatory impact forms that are critical of the ROP.

**Criteria:**        None; trend only. Summarize and evaluate the feedback received and propose program improvements as necessary to address common concerns.

**NOTE:**            This metric is intended primarily for tracking and trending regulatory impact.

**Goals Supported:**    Ensure Effectiveness, Ensure Safety

**Analysis:**        The staff receives and evaluates feedback from licensees on an annual basis as part of the regulatory impact process, established in 1991 based on Commission direction to develop a process for obtaining feedback from licensees and reporting the feedback to the Commission. Over the past year, the staff received feedback from 91 reactor licensees on 253 issues. The staff also received feedback from the Regulatory Information Conference in March 2005. Of the comments received, 83 percent were favorable and 17 percent were unfavorable. The comments fell into three main categories: formal communication with licensees, inspector performance, and security and safeguards activities. A summary of the feedback received, the staff's evaluation, and the proposed improvement actions are provided in Enclosure 7 of the CY 2005 ROP Self-Assessment Commission paper.

**Metric Criterion Met:** Yes. This metric met its program expectations.