



Metric Report for Calendar Year 2008

This report was prepared in support of the Calendar Year 2008
Reactor Oversight Process Self Assessment.

Prepared by: Kennard Buddenbohn

Reviewed by: Ronald Frahm Jr.

Approved by: Rani Franovich and Timothy Kobetz

April 2, 2009

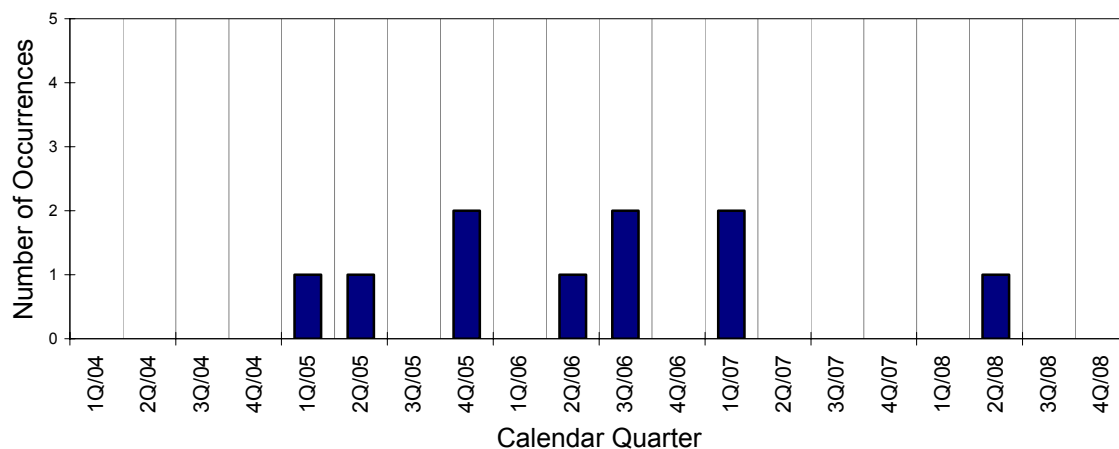
I. PERFORMANCE INDICATOR (PI) PROGRAM METRICS

PI-1 Consistent Results Given Same Guidance

Definition: Independently verify PIs using Inspection Procedure (IP) 71151, "PI Verification." Count all performance indicators (PI) 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



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, one PI crossed a threshold based on data correction after the staff determined that it was discrepant. The inspectors identified a finding associated with the licensee's reporting of unplanned scram PI data during calendar year (CY) 2007. The inspectors determined that the licensee failed to pursue resolution of the reporting discrepancy in a timely manner in accordance with established industry standards (Perry Nuclear Power Plant, U.S. Nuclear Regulatory Commission (NRC) Integrated Inspection Report No. 05000440/2008002, dated May 8, 2008).

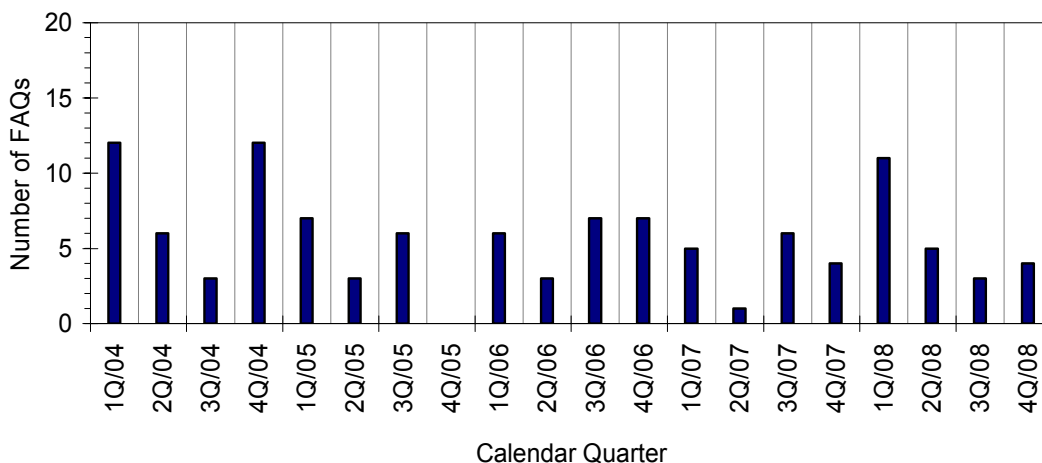
Metric Criteria Met: Yes

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 during the Reactor Oversight Process (ROP) NRC/Industry Working Group meetings held during the respective quarter.

Analysis: There is currently a stable long-term trend. The number of FAQs introduced in CY 2008 has been comparable to previous years.

The increased number in the first quarter of 2008 (1Q/2008) was largely attributed to increases in environmentally caused unplanned power changes. The industry's PI guidance document, Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guideline," at the beginning of 2008 specified that all instances of downpowers for environmental reasons be reported as an FAQ, even if they would clearly not count toward the indicator. NEI 99-02 was subsequently changed to clarify the types and magnitudes of environmental downpowers that would warrant an FAQ.

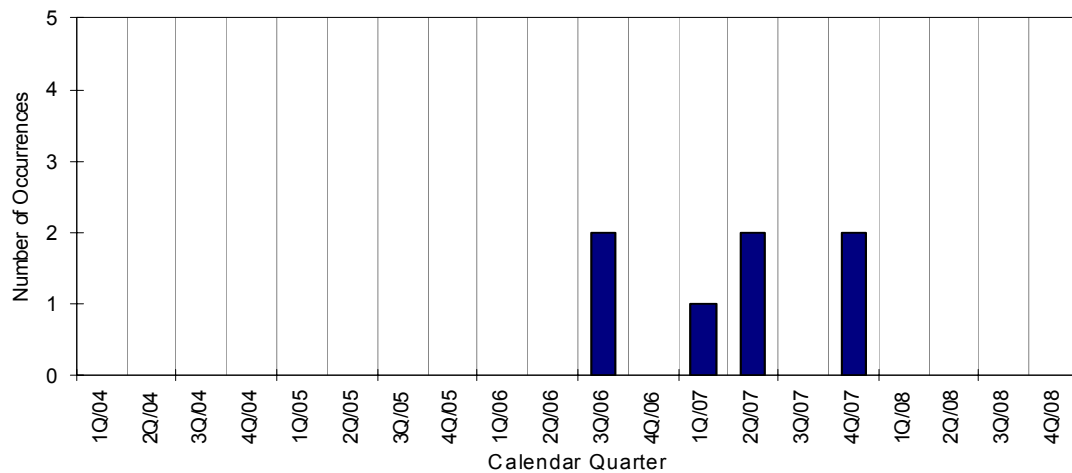
Metric Criteria Met: Yes

PI-3 Timely Indication of Declining Plant 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: Risk-Informed, Effective



Analysis: During this assessment period (CY 2008), there were no occurrences of a PI that crossed multiple thresholds. This is a change from the last assessment period (CY 2007) when the metric did not meet its criteria because three sites (four units) crossed multiple thresholds.

Metric Criteria Met: Yes

PI-4 PI Program Provides Insights to Help Ensure Plant Safety and/or Security

Definition: Survey external and internal stakeholders asking whether the PI Program provides useful insights, particularly when combined with the inspection program, to help ensure plant safety and/or security.

Criteria: Expect stable or increasingly positive perception over time.

Goals Supported: Effective, Risk-Informed, Open

This metric was changed from the previous surveys. The metric added the need to measure PI program insights regarding plant security. The staff revised the wording of this metric and the survey questions that relate to it to emphasize that the PI program is “used in conjunction with the inspection program” to provide useful insights and that the PI program is only “a contributor to” the identification of performance outliers. Three internal survey questions addressed this metric. The table below presents the questions and the percentage of agreement.

<i>Measure</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>PIs provide useful information on risk-significant areas.</i>	<i>74%</i>	<i>71%</i>	<i>67%</i>	<i>70%</i>
<i>PIs provide useful insights and, when combined with the inspection program, help ensure plant safety.</i>	<i>71%*</i>	<i>71%</i>	<i>68%</i>	<i>68%</i>
<i>PIs provide an objective indication of declining safety performance.</i>	<i>61%**</i>	<i>58%</i>	<i>45%</i>	<i>43%</i>

* In prior years’ surveys, the staff framed this question in the context of the PIs maintaining safety unilaterally, not combined with the inspection program.

** In prior years’ surveys, the staff framed this question using the term “adequate” rather than “objective.”

Analysis: The internal survey of stakeholders generally revealed that the PI program is meeting the ROP goals of providing useful information on risk-significant areas. However, internal stakeholders continue to express concerns with the PI program. The following concerns were generally expressed in stakeholder comments:

- The PI program is not predictive of declining performance.
- The PIs do not indicate current performance but rather provide a snapshot of past performance.
- The PI program lacks meaningful insights with so few PIs crossing the green-to-white threshold.

The staff will respond to this feedback in the consolidated response to

stakeholder comments from the ROP internal survey.

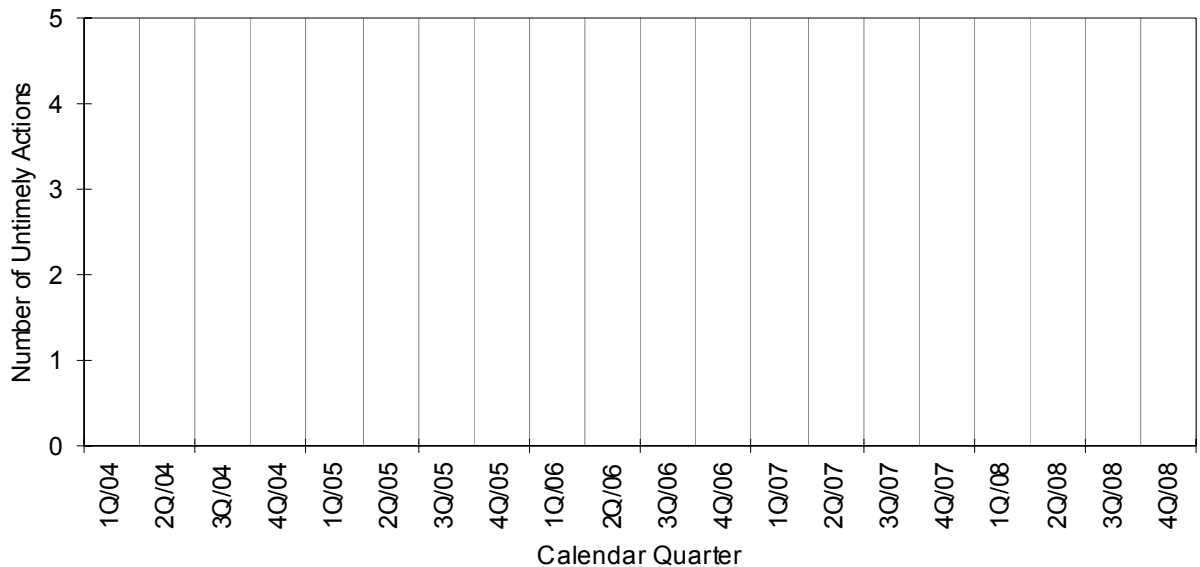
Metric Criteria Met: Yes

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: Effective, Open, Predictable



Analysis: There have been no late PI data postings on the external site since the inception of the ROP.

Metric Criteria Met: Yes

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 stable or increasingly positive perception over time.

Goals Supported: Effective, Open

One internal survey question addressed this metric. The table below presents the question and the percentage of agreement.

<i>Measure</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>PIs provide an appropriate level of overlap with inspection program.</i>	<i>79%</i>	<i>78%</i>	<i>78%</i>	<i>74%</i>

Analysis: Most survey respondents believed that the PIs provide an appropriate overlap with the inspection program. Internal stakeholders provided comments regarding overlap between the PI program and the inspection program. One comment suggested any overlap is negative and that licensees can tie our hands as they appeal findings that overlap PIs. Another comment stated “some PIs are duplicates of the inspection program and the IPs (inspection procedures) should be deleted. The idea was for the PIs to replace the IPs but creep has come into the program and we are now inspecting some areas that are covered by the PIs.”

The staff will respond to this feedback in the consolidated response to stakeholder comments from the ROP internal survey.

Metric Criteria Met: Yes

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 stable or increasingly positive perception over time.

Goals Supported: Understandable, Open, Objective

Two internal survey questions addressed this metric. The table below presents the questions and the percentage of agreement.

<i>Measure</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>PIs are clearly defined.</i>	<i>79%</i>	<i>82%</i>	<i>79%</i>	<i>71%</i>
<i>PIs are understandable.</i>	<i>72%</i>	<i>82%</i>	<i>87%</i>	<i>76%</i>

Analysis: The internal survey of stakeholders generally revealed that the PI program and PIs are clearly defined and understandable. However, agreement decreased from CY 2006 to CY 2008. Many stakeholders who provided written comments wrote that the PI program has not worked in accordance with the ROP goal of being understandable. This perception most likely results from the numerous FAQs related to the PI program, changes to the NEI 99-02 guidance, and the implementation of mitigating systems performance index (MSPI). Most comments submitted by staff on PIs related to the understandability of MSPI.

The staff will respond to this feedback in the consolidated response to stakeholder comments from the ROP internal survey.

Metric Criteria Met: Yes, because of a cumulative positive perception that the PI program and PIs are clearly defined and understandable. The specific nature of the comments regarding MSPI to PI program understandability are taken into consideration.

PI-8 PI Program Contributes to the Identification of Performance Outliers in an Objective and Predictable Manner

Definition: Survey external and internal stakeholders asking if the PI program effectively contributes to the identification of performance outliers based on risk-informed, objective, and predictable indicators.

Criteria: Expect stable or increasingly positive perception over time.

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

This metric was changed from the previous survey. The staff revised the wording of this metric and the survey question that relates to it to emphasize that the PI program is “used in conjunction with the inspection program” to provide useful insights and that the PI program is only “a contributor to” the identification of performance outliers. One internal survey question addressed this metric. The table below presents the question and its percentage of agreement.

<i>Measure</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>PIs effectively contribute to the identification of performance outliers based on risk-informed, objective, and predictable indicators</i>	<i>65%*</i>	<i>61%</i>	<i>N/A</i>	<i>N/A</i>

* In prior years’ surveys, the staff framed this question in a context that emphasized the contribution of the MSPI to the identification of performance outliers.

Analysis: The internal survey of stakeholders generally revealed that the PIs provide an objective indication of declining safety performance and can be used effectively to identify outliers. The data reflect a generally positive perception. However, the survey question that supports the metric has limited data. The staff will evaluate this measure for meaningful trends in future surveys.

Many internal stakeholder comments indicated concern about the industry’s ability to manage the PIs – possibly a contributing cause of the decrease in the number of greater-than-green PIs.

The staff will respond to this feedback in the consolidated response to stakeholder comments from the ROP internal survey.

Metric Criteria Met: Yes

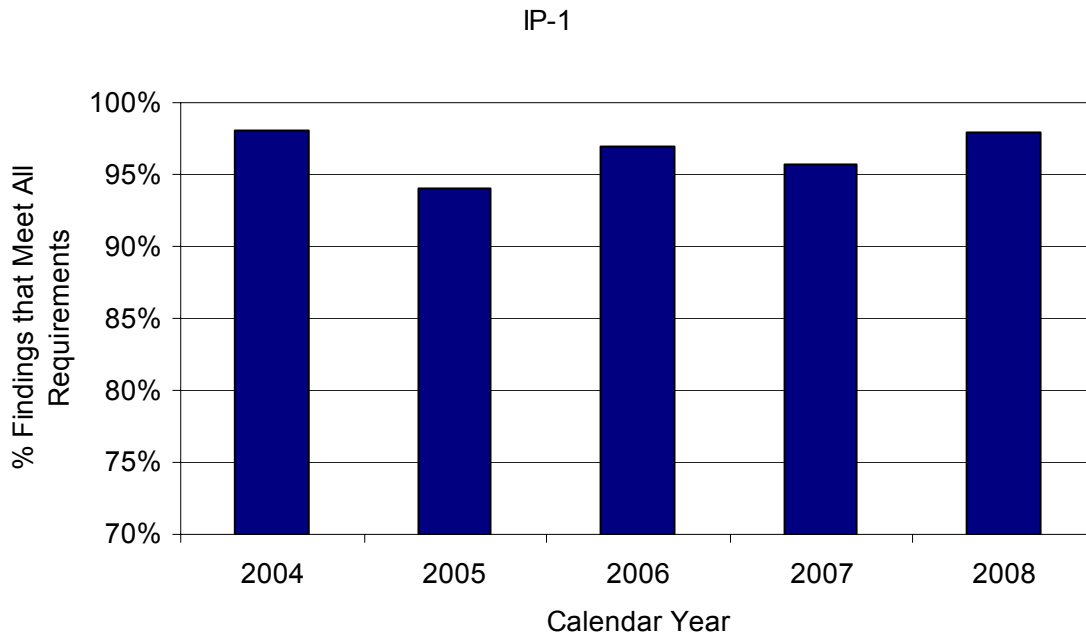
II. INSPECTION PROGRAM (IP) METRICS

IP-1 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



Analysis: The staff audited 43 integrated inspection reports from each branch and a number of team inspection reports from each region. There were 648 inspection reports issued in CY 2008. For the sample audited, 98 percent of findings were documented in accordance with IMC 0612 requirements. Overall, the data confirm that a stable trend has been maintained since CY 2005.

Metric Criteria Met: Yes

IP-2 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: Predictable, Effective

Analysis: All four regions completed their baseline inspections in CY 2008. Each region documented completion of the program in a memorandum to the Division of Inspection and Regional Support (DIRS) in the Office of Nuclear Reactor Regulation (NRR). These memoranda can be found in the Agencywide Documents Access & Management System (ADAMS) under accession number (1) ML090410750 (Region I), (2) ML090440127 (Region II), (3) ML090440495 (Region III), and (4) ML090400078 (Region IV). As in the CY 2007 inspection cycle, all regions completed their baseline inspections in CY 2008 with the allocated regional resources.

The Deputy Director, Division of Security Operations in the Office of Nuclear Security and Incident Response, documented completion of the security baseline inspection program in a memorandum to the Deputy Director, Division of Inspection and Regional Support in NRR (see ADAMS Accession No. ML090570469 and No. ML090700111). These documents are not publicly available.

Metric Criteria Met: Yes

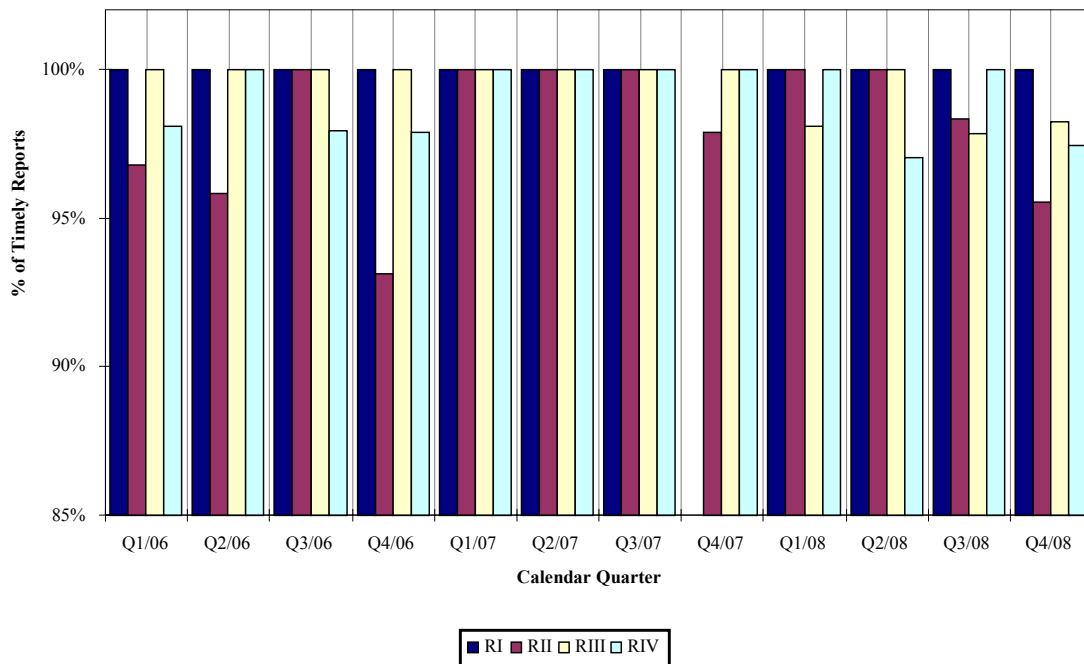
IP-3 Inspection Reports are Timely

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.

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

Goals Supported: Effective, Open, Predictable



Analysis: During CY 2008, the NRC issued 648 inspection reports. Regions met or exceeded the inspection report timeliness goal of 90 percent in each quarter throughout the year. In CY 2008, 640 out of 648 (99 percent) inspection reports met the timeliness requirement per IMC 0612.

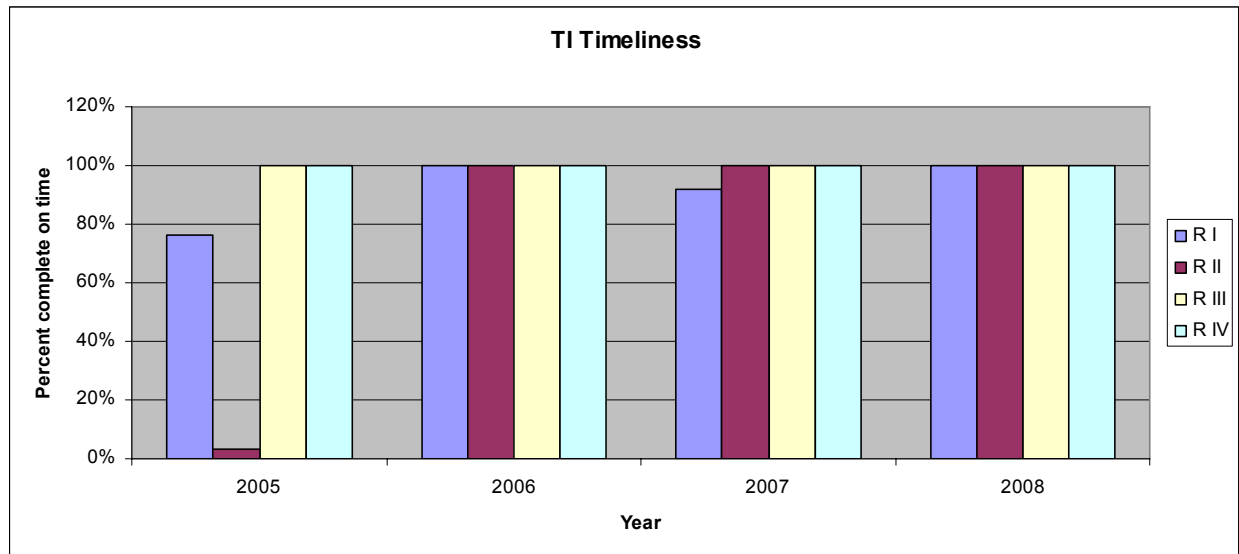
Metric Criteria Met: Yes

IP-4 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: Effective, Predictable



Analysis: Three TIs, which were required to be completed in CY 2008, were performed before they reached their prescribed deadlines. The following TIs were completed in CY 2008: (1) TI 2515/166, Revision 1, "Pressurized Water Reactor Containment Sump Blockage (NRC Generic Letter 2004-02)," (2) TI 2515/171, "Verification of Site Specific Implementation of B.5.b Phase 2 & 3 Mitigating Strategies," and (3) TI 2515/176, "Emergency Diesel Generator Technical Specification Surveillance Requirements Regarding Endurance and Margin Testing."

Metric Criteria Met: Yes

IP-5 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: Expect stable or increasingly positive perception over time.

Goals Supported: Effective, Understandable, Open

Seven internal survey questions addressed this metric. The table below presents the questions and the percentage of agreement.

<i>Measure</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>The information contained in inspection reports is relevant *</i>	88%	N/A	N/A	N/A
<i>The information contained in inspection reports is useful *</i>	77%	N/A	N/A	N/A
<i>The information contained in inspection reports is written in plain English *</i>	85%	N/A	N/A	N/A
<i>The information contained in inspection reports is communicated in a timely fashion</i>	95%	94%	N/A	N/A
<i>The information contained in inspection reports is communicated accurately.</i>	93%	96%	87%	93%
<i>Security inspection reports and their cover letters provide sufficient information to licensees **</i>	87%	N/A	N/A	N/A
<i>Security inspection reports and their cover letters provide sufficient information to the public **</i>	47%	N/A	N/A	N/A

* These new questions provide additional detail about information contained in inspection reports. In surveys from prior years, the questions focused on general ROP communication effectiveness and ROP Web page understandability.

** These new questions focus on security cornerstone IPs.

Analysis: Since CY 2002, perceptions regarding the communication of accurate information in inspection reports have shown a stable trend. This metric reveals a generally positive perception. However, six of the seven survey questions that support the metric have limited data. The staff will continue to evaluate the measures for meaningful trends in future surveys.

The majority of those who provided feedback felt that the reports are useful and clearly written. Inspectors generally indicated a positive view of the information contained in inspection reports. Internal stakeholders provided the following

recommendations to ensure inspection reports continue to be relevant, useful, and written in plain language:

- Inspection reports are largely filled with boilerplate information. If the boilerplate was removed and only conclusions were documented, the reports would be shorter, easier to read, and more useful to the public.
- Inspection reports spend too much effort on the scope, which adds little value. The report would be more useful to all stakeholders if it focused on findings rather than scope and documents reviewed.
- Although we have templates to reduce the administrative burden, there is little value in documenting normal activities. The inspection report should be limited to only documenting off-normal activities. We could significantly reduce the documentation of samples to a summary page. Also, inspection reports are limited in the way they can capture the chronology of events, which makes it difficult for stakeholder trying to figure out what the past history was regarding a specific inspection effort.
- Substantial improvements in efficiency, effectiveness, and consistency might be achieved in the future by transitioning inspection reports from template, free-form text documents to a relational database structure. A database structure would provide an improved inspection data structure, context-sensitive user guidance, automated error-prevention, enhanced search, retrieval, sorting, and analysis of inspection information, timely and accurate internal sharing of developing inspection-related issues, and less expended effort on word processing.

The staff will respond to this feedback in the consolidated response to stakeholder comments from the ROP internal survey.

Metric Criteria Met: Yes

IP-6 Inspection Program Effectiveness and Adequacy in Covering Areas Important to Plant Safety and/or Security

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

Criteria: Expect stable or increasingly positive perception over time.

Goals Supported: Effective, Risk-Informed, Open

Twenty internal survey questions address this metric. Five questions solicit perceptions of the baseline inspection program covering areas important to plant safety. Ten questions solicit perceptions of the effectiveness and adequacy of baseline and supplemental IPs. Five new questions solicit perceptions about the security baseline inspection program, baseline IPs, and resources. The table below presents the questions and the percentage of agreement.

<i>Measure</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>Baseline Inspection Program appropriately inspects for and identifies risk-significant issues</i>	88%	89%	79%	73%
<i>Baseline inspection program leads to objective findings whose significance can be clearly documented</i>	84%	81%	73%	69%
<i>Baseline Inspection Program provides appropriate coverage of plant activities and operations important to safety</i>	81%	83%	77%	67%
<i>Baseline Inspection Program provides sufficient latitude to allow inspectors to pursue potential areas of concern (via Plant Status, PI&R samples, smart samples,...) **</i>	73%	N/A	N/A	N/A
<i>Baseline Inspection Program appropriately ensures the prompt correction of performance deficiencies**</i>	71%	N/A	N/A	N/A
<i>Baseline inspection procedures provide estimates that reflect the effort required to complete the procedure</i>	58%	65%	57%	58%
<i>Baseline inspection procedures are adequate to address intended cornerstone attributes</i>	91%	94%	86%	80%
<i>Baseline inspection procedures are conducted at an appropriate frequency</i>	86%	86%	84%	79%

<i>Measure</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>Baseline inspection procedures are clearly written</i>	<i>77%</i>	<i>85%</i>	<i>73%</i>	<i>78%</i>
<i>Baseline inspection procedures place sufficient emphasis on field observation and inspections</i>	<i>78% ***</i>	<i>83%</i>	<i>N/A</i>	<i>N/A</i>
<i>Baseline inspection procedures adequately sample risk significant aspects of each inspected area</i>	<i>90%</i>	<i>87%</i>	<i>80%</i>	<i>72%</i>
<i>Baseline inspection procedures provide adequate guidance on safety culture aspects</i>	<i>59%</i>	<i>65%</i>	<i>N/A</i>	<i>N/A</i>
<i>Supplemental inspection procedures provide sufficient information to confirm the adequacy of a licensee's root cause and corrective action effort</i>	<i>87%</i>	<i>90%</i>	<i>N/A</i>	<i>N/A</i>
<i>Supplemental inspection procedures provide adequate guidance on safety culture aspects</i>	<i>65%</i>	<i>65%</i>	<i>N/A</i>	<i>N/A</i>
<i>Issuing NCV's and relying on licensee's corrective action program provides for an adequate approach to resolve issues of very low safety significance (ie, green findings)</i>	<i>84%</i>	<i>80%</i>	<i>N/A</i>	<i>N/A</i>
<i>The Security baseline procedures cover all the areas important to plant security *</i>	<i>89%</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<i>The force-on-force evaluations provide a reasonable test of the plant's security force effectiveness *</i>	<i>78%</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<i>The baseline inspection resources are sufficient to gain an accurate measure of plant security performance *</i>	<i>80%</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<i>The baseline inspection procedures are conducted at an appropriate frequency. *</i>	<i>90%</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
<i>Baseline Inspection Program provides appropriate coverage of plant activities and operations important to security *</i>	<i>89%</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>

* These new questions in the CY 2008 survey focus on the security cornerstone.

** These new questions in the CY 2008 survey focus on baseline inspection program inspector perceptions and the prompt correction of performance deficiencies.

*** The staff revised this question in the CY 2008 survey to shift emphasis from “planning” to “field observations and inspections.”

Analysis: The data reflect a generally positive perception. Five measures that have been used since CY 2002 reveal an overall stable trend and positive perception about the baseline inspection program and procedures. However, three measures show a stable trend since CY 2002 with an outlier in CY 2006. The staff will evaluate the stability of the trend again following the next internal survey in CY 2010. Also, 12 of the 20 survey questions that support the metric have limited data. The staff will evaluate these measures for meaningful trends in future surveys.

The majority of those who provided feedback felt that the inspection program is effective and adequate in covering areas important to plant safety. However, internal stakeholders have provided the following recommendations to ensure the inspection program continues to effectively and adequately cover areas important to reactor safety and/or security:

- I think where the ROP directs us to look is appropriate but there should be more flexibility. One way to add flexibility to the inspection program would be to increase the band of samples in a specific inspectable area but keep minimum sample levels. This would allow inspectors to tailor the ROP to their site. It would also decrease the amount of samples taken solely because a sample is needed and increase the amount of samples taken because the plant has issues in this area.
- There are too many minimum samples to complete the baseline procedures to the depth defined within each inspection procedure. The overall number of samples should be reduced across the board which would slightly increase the hours per sample within each inspection procedure. This would allow a more in depth inspection.
- The ROP should provide appropriate coverage of human performance in the area of maintenance. Inspectors should conduct specific inspections as part of the program on maintenance activities for a number of samples and set frequency.

The staff will respond to this feedback in the consolidated response to stakeholder comments from the ROP internal survey.

Metric Criteria Met: Yes

IP-7 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. In addition, a more detailed review and realignment of inspection resources will be performed at least biennially in accordance with Appendix B to this Chapter. The focus of this effort is to adjust existing inspection resources to improve the effectiveness of the inspection program in identifying significant licensee performance deficiencies.

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: Effective, Risk-Informed

Analysis: The staff performed its annual review of each baseline IP for fiscal year (FY) 2008 (October 2007 through September 2008). The review focused on identifying potential areas for improvement in the baseline inspection program and any notable changes in inspection results. The staff's annual evaluation of the IPs did not reveal significant weaknesses in the inspection program's ability to identify risk-significant issues. The staff did identify areas in which additional inspection resources may be warranted based on the staff's analysis of the IPs and internal feedback received from inspectors. Additionally, the staff determined that an evaluation of health physics IPs (IP 71121 and 71122 series) is warranted to improve their effectiveness and to ensure that these IPs relate more closely to the health physics programs at operating nuclear power plants. The staff plans to complete a more indepth ROP realignment process during CY 2009 and will incorporate any changes resulting from the ROP realignment review into the baseline inspection program for CY 2010.

Metric Criteria Met: Yes

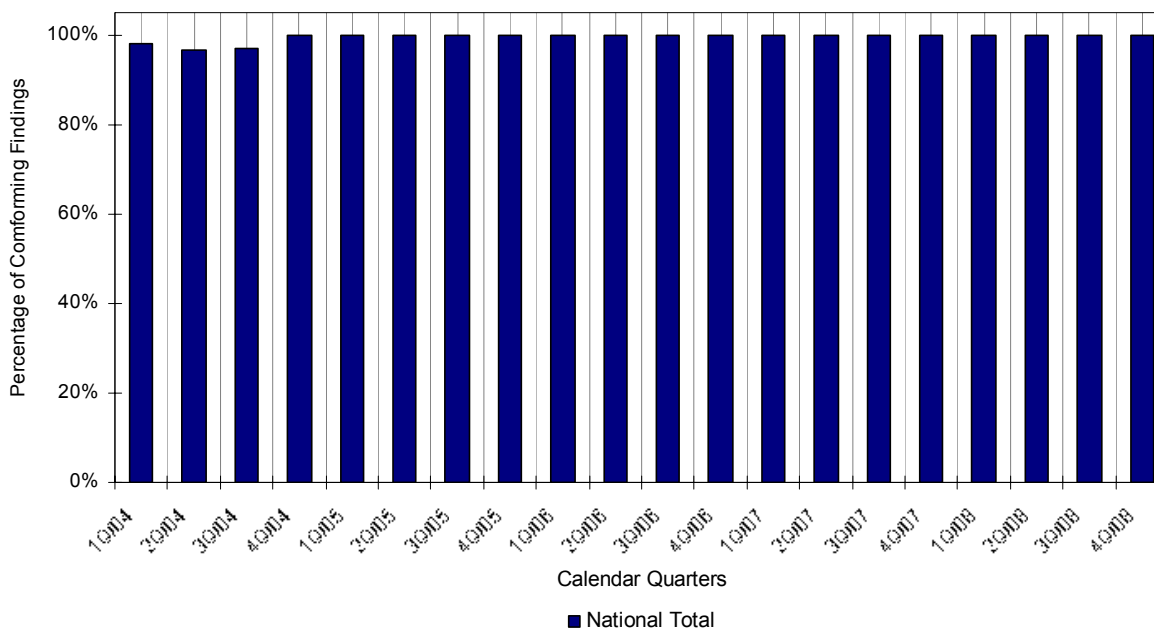
III. SIGNIFICANCE DETERMINATION PROCESS (SDP) METRICS

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 percent are determined to be predictable and repeatable. Any SDP outcomes determined to be non-conservative will be evaluated and appropriate programmatic changes will be implemented.

Goals Supported: Risk-Informed, Predictable



Analysis: The staff audited a sample size of 8 out of 16 findings that meet the criteria. Each sample represents a finding evaluated using the risk-informed process detailed in Appendix A, "Determining the Significance of Reactor Inspection Findings for At-Power Situations," to IMC 0609. All samples included adequate detail to be predictable and repeatable.

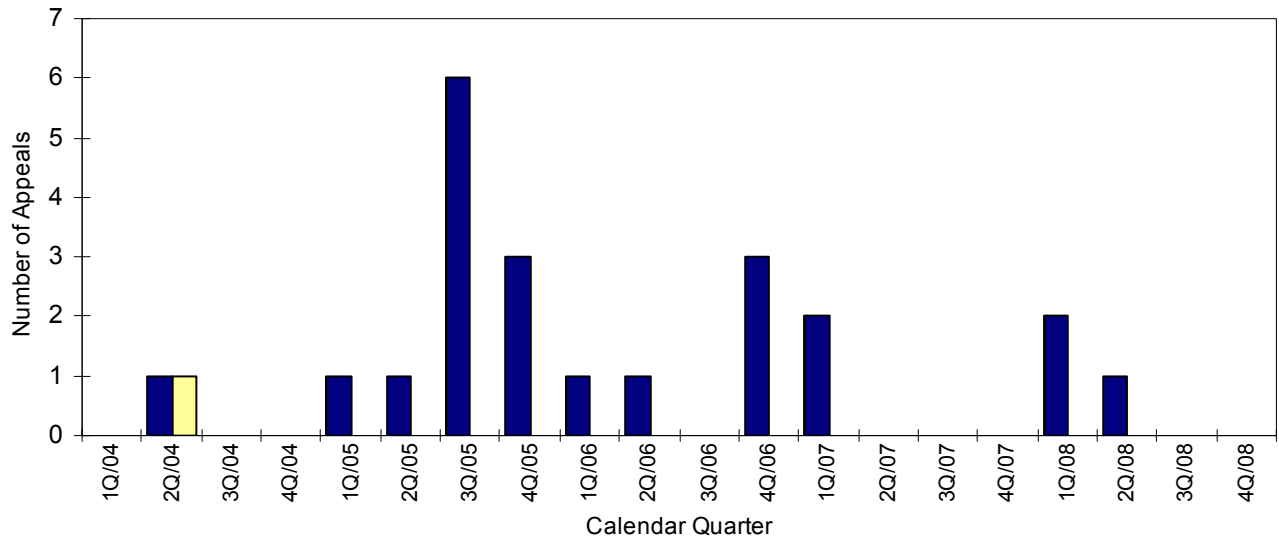
Metric Criteria Met: Yes

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: Licensees submitted three appeals of SDP findings of very low significance (green) in the first two quarters of FY 2008. The appeals did not result in changes to the final outcome of the findings.

Metric Criteria Met: Yes

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: Effective, Understandable, Risk-Informed

This area of the survey included nine questions. The table below presents the questions and the percentage of agreement.

<i>Measure</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>Reactor safety SDPs are easy to use</i>	63%	54%	36%	20%
<i>Non-reactor safety SDPs are easy to use</i>	57%*	57%	41%	26%
<i>SDP training is effective</i>	55%	56%	38%	33%
<i>Program guidance documents are clear</i>	66%	63%	41%	32%
<i>Resource expenditures are appropriate</i>	68%	60%	41%	32%
<i>SDP focuses NRC attention on safety-significant issues</i>	85%	83%	75%	71%
<i>SDP provides basis for effective communication of inspection findings to the Licensee</i>	83%	84%	78%	73%
<i>SDP provides basis for effective communication of inspection findings to the public</i>	68%	73%	60%	60%
<i>SDP results correctly characterize the risk-significance of inspection findings</i>	74%	76%	66%	61%
<i>SDP focuses appropriate NRC attention on security - significant issues **</i>	83%	N/A	N/A	N/A

* Nonreactor safety SDPs are not used frequently. Forty-six percent of the total respondents selected “unable to answer” or did not answer this question.

** This new question in the CY 2008 survey focuses on the SDP and the security cornerstone.

Analysis: The survey data indicate that the staff remains proficient overall and continues to find value in the SDP. The survey results indicate that the staff believes the SDP is effective in meeting important program objectives such as focusing on identifying safety-significant issues and communicating results to the licensees. However, the survey indicates less confidence in communication with the public than in CY 2006, although confidence remained higher than in all the previous years. Inspectors’ proficiency using SDP tools was consistent with previous surveys.

A majority of the respondents believe that the SDPs are easy to use and that program guidance documents are clear. However, several respondents noted that SDP training could be improved and additional refresher training would be helpful. Although the NRC established specific training (P-108) for the fire protection SDP (Appendix F) several years ago, some respondents stated that the fire protection SDP remains complex. The staff has initiated efforts to improve basic SDP training for new employees and inspectors and refresher training for experienced inspectors. It plans to conduct the training in CY 2009.

Metric Criteria Met: Yes

SDP-4 The SDP Results in an Appropriate Regulatory Response to Performance Issues

Definition: Survey external and internal stakeholders asking if the SDP results in an appropriate regulatory response to performance issues.

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

Goals Supported: Understandable, Objective, Predictable, Open

Eight internal survey questions addressed this metric. The following table presents the questions and the percentage of agreement.

<i>Measure</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>SDP results provide for an appropriate regulatory response to performance issues</i>	77%	N/A	N/A	N/A
<i>SDP results are verifiable</i>	85%	85%	76%	76%
<i>SDP results are realistic</i>	76%	78%	69%	62%
<i>SDP results are consistent and repeatable*</i>	74%	74%	N/A	N/A
<i>SDP results are based upon clear standards</i>	62%	69%	56%	46%
<i>SDP results are predicable and understandable</i>	68%	N/A	N/A	N/A
<i>SDP results are accurate</i>	71%	75%	66%	59%
<i>SDP results are timely</i>	75%	68%	N/A	N/A

* The staff revised this measure in CY 2008 to include the word “repeatable.”

Analysis: This data reflect a generally positive perception. The survey data indicate that the majority of the staff remains confident that the SDP results in an appropriate regulatory response to performance issues. The survey results indicate that the staff generally believes that the SDP provides consistent results and is effective in meeting important program objectives, such as being scrutable, accurate, repeatable, timely, and based on clear standards.

Although the CY 2006 survey revealed higher agreement that SDP results were based on clear standards, this metric represented a generally short-lived improvement over earlier surveys and is considered an outlier. The staff will evaluate the trend again following the next internal survey in CY 2010.

Four of the eight survey questions that support the metric provide limited data. The staff will evaluate these measures for meaningful trends in future surveys.

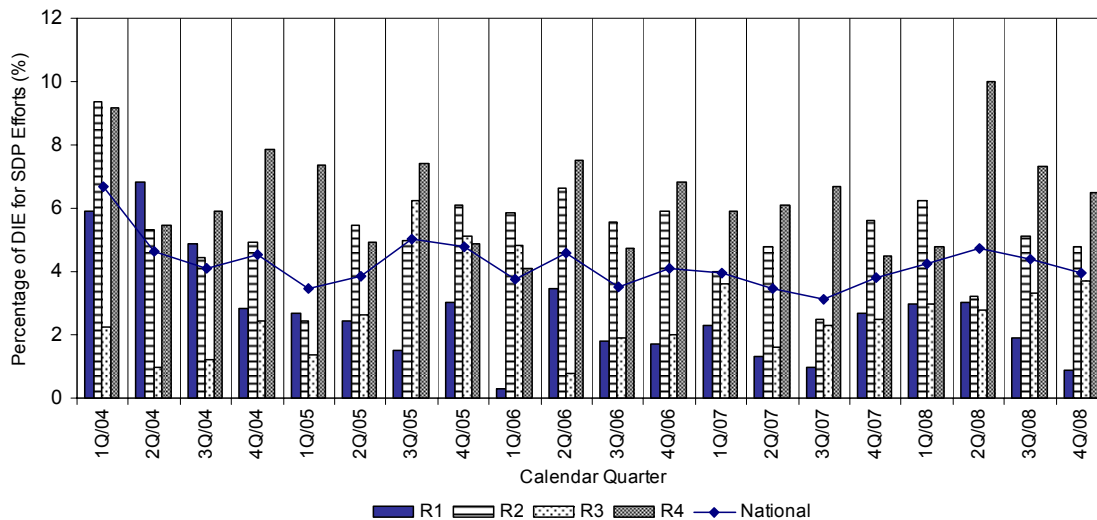
Metric Criteria Met: Yes.

SDP-5 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: Effective, Predictable



Analysis: Regional expenditures associated with SDP evaluations remain below the target goal. The national average has remained consistent over the past three years.

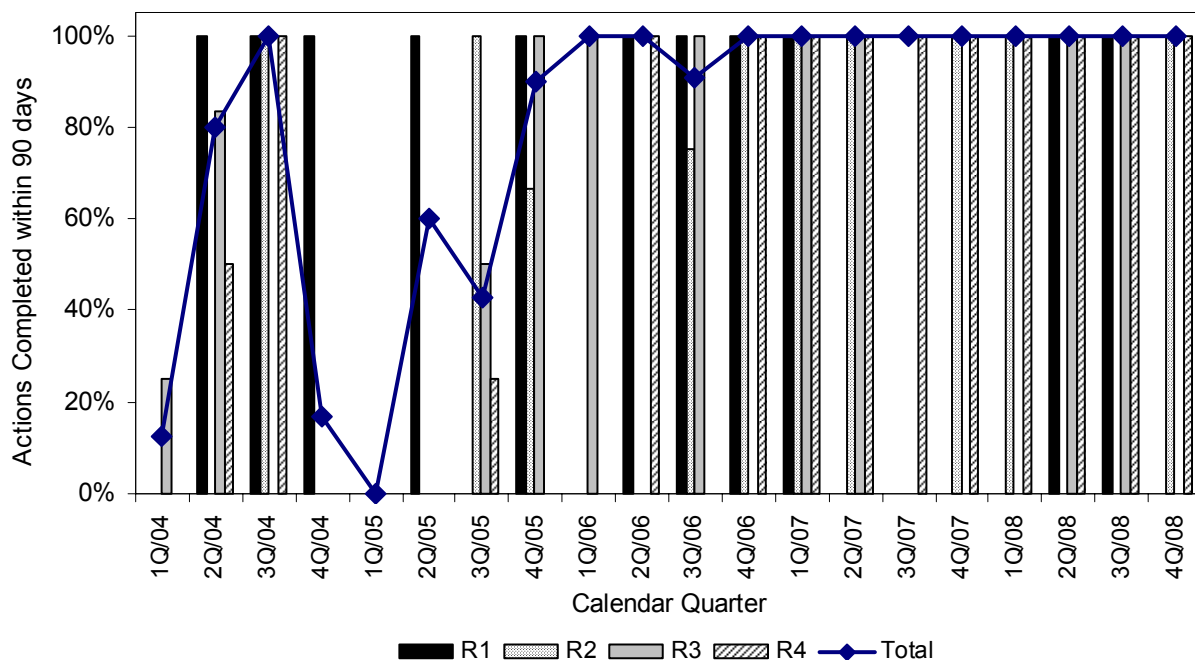
Metric Criteria Met: Yes

SDP-6 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 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 90 percent of all SDP results that are counted per the criteria above 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: Effective, Open, Predictable



Analysis: Timeliness of final significance determinations increased from 96 percent in CY 2006 to 100 percent in CY 2007 and has remained stable at 100 percent in CY 2008.

Metric Criteria Met: Yes

IV. ASSESSMENT PROGRAM (AS) METRICS

AS-1 **Actions are Determined by Quantifiable Assessment Inputs (i.e., PIs and SDP Results) and are Commensurate with the Risk of the Issue and Overall Plant Risk**

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, Risk-Informed, Open

Analysis: There have been a total of 16 deviations from the action matrix since the beginning of the ROP in CY 2000. One of these deviations occurred in CY 2008. This metric meets its criteria based on the approval of only one deviation pertaining to oversight of the Indian Point Energy Center. The staff intends to continue to closely monitor the licensee's actions in CY 2009 to address issues associated with the characterization and mitigation of onsite ground-water contamination. The actions for the Indian Point Energy Center represent a customized approach that considers factors beyond each unit's action matrix categorization. This approach is consistent with the underlying concepts of IMC 0305, "Operating Reactor Assessment Program."

Metric Criteria Met: Yes

AS-2 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: Expect few additional actions, with a stable or declining trend.

Goals Supported: Understandable, Predictable, Objective

Analysis: The AARM took place on May 2, 2008, in Bethesda, Maryland. The participants confirmed the appropriateness of agency actions for the Perry Nuclear Power Plant and the Palo Verde Nuclear Generating Station. The participants did not recommend any additional actions beyond those already taken or planned. The next AARM is scheduled for April 22, 2009.

Metric Criteria Met: Yes

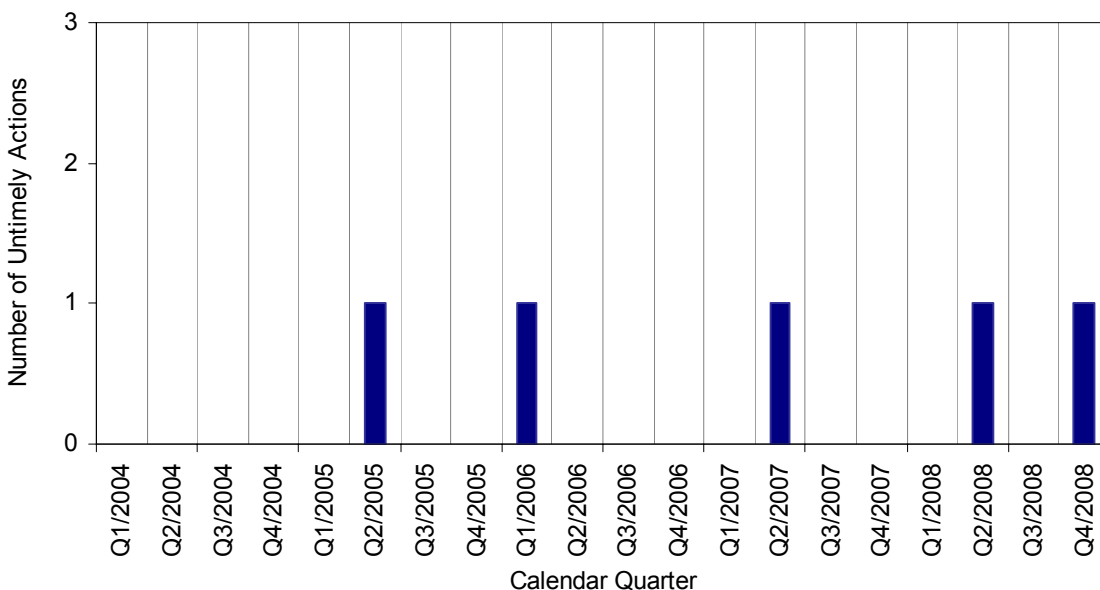
AS-3 Assessment Program Results (Assessment Reviews, Assessment Letters and Public Meetings) are Completed in a Timely Manner

Definition: Track the number of instances in which the timeliness goals stipulated in IMC 0305, "Operating Reactor Assessment Program," were not met for: (1) the conduct of quarterly, mid-cycle, and end-of-cycle reviews; (2) the issuance of assessment letters; and (3) the conduct of public meetings.

Criteria: Expect few instances in which timeliness goals were not met, with a stable or declining trend. Timeliness goals for the following activities are as follows:

- (1) quarterly reviews - within 5 weeks of the end of quarter
- (2) mid-cycle reviews - within 7 weeks of the end of the 2nd quarter
- (3) end-of-cycle reviews - within 7 weeks of the last quarter
- (4) issuance of assessment letters - within 2 weeks of the quarterly review, within 9 weeks of the mid-cycle review, and within 9 weeks of the end-of-cycle review
- (5) Conduct of public meetings - within 16 weeks of the end of the assessment period.

Goals Supported: Effective, Open, Predictable



Analysis: 4Q/2008: All quarterly reviews and assessment followup letters were completed or issued within timeliness goals. However, one assessment followup letter was not issued within timeliness goals. Additionally, all public meetings were conducted within timeliness goals.

3Q/2008: All midcycle review meetings, midcycle letters, and quarterly assessment reviews were conducted or issued within timeliness goals. Additionally, all public meetings were conducted within timeliness goals.

2Q/2008: All quarterly assessment reviews were completed within timeliness goals. However, one assessment followup letter was not issued within timeliness goals. All public meetings were conducted within timeliness goals.

1Q/2008: All end-of-cycle reviews, assessment letters, quarterly assessment reviews, and assessment followup letters were completed or issued within timeliness goals. Additionally, all public meetings were conducted within timeliness goals.

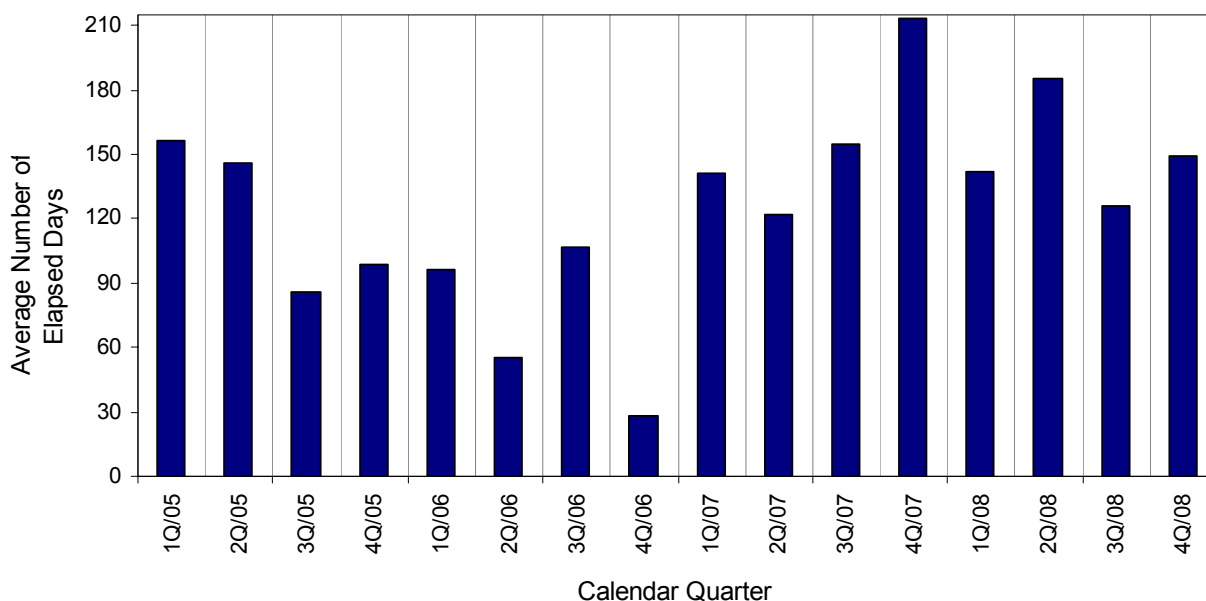
Metric Criteria Met: Yes

AS-4 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: Effective, Predictable



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

Analysis: Data collected in CY 2008 revealed a slightly decreasing trend on the elapsed time between the issuance of an assessment letter and the completion of the corresponding supplemental inspection over the last year. This is an improvement from the last assessment period (CY 2007). At that time, the delays in performing the followup inspections were often attributed to licensees not being ready for the inspection. This had caused the metric to trend higher by the end of CY 2007.

Metric Criteria Met: Yes

AS-5 NRC Takes Appropriate Actions to Address Performance Issues

Definition: Survey external and internal stakeholders asking whether the NRC takes appropriate actions to address performance issues for those plants outside the Licensee Response Column of the Action Matrix.

Criteria: Expect stable or increasingly positive perception over time.

Goals Supported: Effective, Understandable, Open

Thirteen internal survey questions address this metric. The following table presents the questions and the percentage of agreement.

<i>Measure</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>The assessment process provides an appropriate range of regulatory actions in response to safety issues</i>	92%	89%	80%	78%
<i>The assessment process provides for timely resolution of issues commensurate with safety significance</i>	80%	74%	N/A	N/A
<i>The assessment process properly incorporates enforcement actions</i>	84%	82%	N/A	N/A
<i>The assessment process focuses resources on areas of greatest safety significance</i>	82%	78%	81%	80%
<i>The assessment process minimizes duplication/rework in preparation for assessment meetings (i.e., mid-cycle, end-of-cycle, agency action review, public meetings)</i>	59%	65%	N/A	N/A
<i>The assessment process provides objective levels of assessment</i>	81%	88%	84%	78%
<i>The assessment process provides understandable regulatory guidance to assess licensee performance</i>	81%	91%	77%	76%
<i>The assessment process uses appropriate actions to address performance issues for those licensees outside of the Licensee Response Column of the action matrix.</i>	87%	87%	85%	80%

<i>Measure</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>The assessment process provides sufficient attention to licensees whose performance is in the Licensee Response Column (i.e., appropriateness of the baseline inspection and performance indicators for these licensees).</i>	88%	88%	81%	76%
<i>The assessment process establishes reasonable timeliness goals for documentation, data collection, etc.,</i>	85%	89%	N/A	N/A
<i>The assessment process provides an appropriate range of regulatory actions in response to security issues*</i>	88%	N/A	N/A	N/A
<i>The assessment process provides for timely resolution of issues commensurate with security significance*</i>	89%	N/A	N/A	N/A
<i>The assessment process focuses resources on areas of greatest security significance*</i>	93%	N/A	N/A	N/A

* These new questions focus on the security cornerstone assessment processes.

Analysis: The data reflect a generally positive perception. Internal stakeholders continued to agree that the NRC takes appropriate actions to address performance issues. Four of the measures supporting this metric reveal a stable or improved perception as compared with previous surveys. However, 7 of the 13 survey questions that support the metric provide limited data. Two measures show a stable trend since CY 2002 with an outlier in CY 2006. The staff will evaluate these measures for meaningful trends in future surveys.

Metric Criteria Met: Yes

AS-6 Assessment Reports are Relevant, Useful, and Written in Plain Language

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

Criteria: Expect stable or increasingly positive perception over time.

Goals Supported: Understandable, Effective, Open

Five new internal survey questions address this metric. The table below presents the questions and the percentage of agreement.

<i>Measure</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>The information contained in the assessment letters is relevant</i>	90%*	N/A	N/A	N/A
<i>The information contained in the assessment letters is useful</i>	79%*	N/A	N/A	N/A
<i>The information contained in the assessment letters is written in plain English</i>	83%*	N/A	N/A	N/A
<i>The information contained in the assessment letters is communicated in a timely fashion</i>	90%*	N/A	N/A	N/A
<i>The information contained in the assessment letters is communicated accurately</i>	94%*	N/A	N/A	N/A

* In prior years' surveys, the staff framed general questions in the context of ROP communication in official correspondence and through the ROP Web page. These general questions were transferred to overall ROP metrics (O-3). The new questions were added to be more specific and are expected to provide greater insight to assessment product improvement.

Analysis: Internal stakeholders generally agree that the information contained in assessment reports is relevant, useful, and written in plain language. The data supporting this metric indicate a positive perception of this measure. The staff will evaluate these measures for meaningful trends in future surveys.

Metric Criteria Met: Yes

AS-7 Degradations in Plant Performance 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.

Goals Supported: Risk-Informed, Predictable

Analysis: There were no instances in CY 2008 in which plants moved more than one column to the right in the action matrix. This is an improvement from the last assessment period (CY 2007). This metric did not meet its criteria in CY 2007 because four distinct sites (five units) moved two or more columns to the right in the action matrix, which was an increasing trend from previous years.

Metric Criteria Met: Yes

AS-8 Perceived Effectiveness of Safety Culture Enhancements to ROP

Definition: Survey external and internal stakeholders asking whether the ROP safety culture enhancements help in identifying licensee safety culture weaknesses and focusing licensee and NRC attention appropriately.

Criteria: Expect stable or increasingly positive perception over time.

Goals Supported: Effective, Open

Three internal survey questions related to the assessment process addressed this metric. The table below presents the questions and the percentage of agreement.

<i>Measure*</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>The assessment process allows effective consideration of safety culture aspects</i>	68%	67%	N/A	N/A
<i>The assessment process integrates and provides insights into substantive crosscutting issues</i>	66%	70%	N/A	N/A
<i>The ROP safety culture enhancements (in both assessment and inspection areas) help in identifying licensee safety culture weaknesses and focusing licensee and NRC attention appropriately.</i>	59%	62%	N/A	N/A

* The inspection program metrics and overall ROP metrics now include additional safety culture measures.

Analysis: The data reflect a generally positive perception. However, the survey questions that support the metric provide limited data. The staff will evaluate these measures for meaningful trends in future surveys to evaluate the significant action being taken to improve the processes.

Internal stakeholders provided comments regarding safety culture enhancements to the ROP. Some stakeholders noted that safety culture guidance (i.e., cross-cutting aspects and issues) was too complex, subjective, and not always worth the effort expended. Internal stakeholders expressed diverse opinions as to the value of the program changes made as a result of the safety culture initiative. Notwithstanding the written comments, more than half of the internal respondents continue to indicate that the changes to the ROP will help to identify weaknesses in licensee safety culture and to focus both licensee and NRC resources accordingly. Responses to related questions about the adequacy of the supporting ROP infrastructure (process, procedures and training) again indicate that more than half of the respondents continue to believe that the

current infrastructure is adequate. The inspection and assessment guidance related to safety culture was modified in January 2009 to provide additional guidance, and the staff plans to continue to evaluate the effectiveness of the safety culture initiative, including inspector training, in CY 2009.

The staff will respond to this feedback in the consolidated response to stakeholder comments from the ROP internal survey.

Metric Criteria Met: Yes

V. OVERALL ROP (O) METRICS

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, Effective, Open

Three internal survey questions addressed this metric. The table below presents the questions and the percentage of agreement.

<i>Measure**</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>ROP generally provides appropriate objectivity to the process</i>	<i>87%</i>	<i>88%</i>	<i>81%</i>	<i>82%</i>
<i>ROP generally provides a predictable approach to oversight</i>	<i>91%</i>	<i>88%*</i>	<i>73%</i>	<i>69%</i>
<i>ROP generally provides a consistent approach to oversight</i>	<i>85%</i>	<i>85%*</i>	<i>84%</i>	<i>85%</i>

* In prior years' surveys, the staff framed these two questions in the context of comparing the attributes with the previous oversight process.

** Additional measures related to the objectivity of the ROP are included under the different program areas.

Analysis: Internal stakeholders continue to generally agree that the ROP is predictable and objective. The data supporting this metric indicate a generally stable trend and positive perception for these measures when compared with the previous survey in CY 2006.

Metric Criteria Met: Yes

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, Effective, Open

One internal survey question addressed this metric. The table below presents the question and the percentage of agreement.

<i>Measure*</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>ROP provides an effective risk-informed approach to oversight</i>	<i>83%</i>	<i>79%</i>	<i>74%</i>	<i>73%</i>

* Additional measures related to the risk-informed aspects of the ROP are included under the different program areas.

Analysis: Internal stakeholders generally agree that the ROP provides an effective risk-informed approach to oversight. The data supporting this metric indicate a stable trend and positive perception for the measure when compared with the previous survey in CY 2006.

Metric Criteria Met: Yes

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, Effective, Open

Six internal survey questions addressed this metric. The table below presents the questions and the percentage of agreement.

<i>Measure</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>The ROP generally provides appropriate communication effectiveness through use of plain English in official correspondence (e.g., inspection reports, assessment reports, letters to licensees)</i>	86%	82%	79%	74%
<i>The information on plant performance (e.g., inspection reports, PI data, PIM data, etc.) provided on the ROP Web page is timely</i>	91%	94%	N/A	N/A
<i>The information on plant performance provided on the ROP Web page is understandable and written in plain English</i>	88%	93%	89%	87%
<i>The information on plant performance provided on the ROP Web page is accurate</i>	95%	95%	N/A	N/A
<i>The information on plant performance provided on the ROP Web page is adequate to keep NRC internal stakeholders informed</i>	89%	94%	N/A	N/A
<i>The information on plant performance provided on the ROP Web page is organized for easy retrieval</i>	81%	87%	N/A	N/A

Analysis: The data reflect a generally positive perception. Internal stakeholders continue to generally agree that the ROP is understandable and written in plain English. However, four of the six survey questions that support the metric provide limited data. One measure shows a stable trend since CY 2002 with an outlier in CY 2006. The staff will evaluate these measures for meaningful trends in future surveys.

Metric Criteria Met: Yes

O-4 Stakeholders Perceive that the ROP Provides Adequate Regulatory Assurance that Plants are Operated and Maintained Safely and Securely

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 and securely.

Criteria: Expect stable or increasingly positive perception over time.

Goals Supported: Effective, Open

Three internal survey questions addressed this metric. The questions and the percentage of agreement are presented below:

<i>Measure*</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>The ROP generally provides appropriate assurance that plants are being operated safely</i>	<i>89%</i>	<i>90%</i>	<i>84%</i>	<i>80%</i>
<i>The ROP generally provides appropriate regulatory attention to licensees with performance problems</i>	<i>88%</i>	<i>88%</i>	<i>81%</i>	<i>76%</i>
<i>The ROP generally provides appropriate identification of declining safety performance before there's a significant reduction in safety margins</i>	<i>73%</i>	<i>68%</i>	<i>57%</i>	<i>51%</i>

* Additional measures related to security aspects of the ROP are included under the different program areas.

Analysis: Internal stakeholders continue to generally agree that the ROP maintains safety. The data supporting this metric indicate a stable trend and a positive perception for these measures when compared with the previous surveys. However, internal stakeholder comments noted concerns with the ROP's ability to detect declining performance in a timely manner. The staff will respond to these concerns in the consolidated response to stakeholder comments from the ROP internal survey.

Metric Criteria Met: Yes

**O-5 Stakeholders Perceive the ROP to be Effective
(e.g., High Quality, Efficient, Realistic, and Timely)**

Definition: Survey external and internal stakeholders asking whether NRC actions related to the ROP are high quality, efficient, realistic, and timely.

Criteria: Expect stable or increasingly positive perception over time.

Goals Supported: Effective, Open

Three internal survey questions addressed this metric. The table below presents the questions and the percentage of agreement.

<i>Measure</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>The ROP generally provides a realistic approach to oversight</i>	86%	84%	75%	74%
<i>The ROP generally provides a timely approach to oversight</i>	90%	79%*	67%	64%
<i>The ROP generally provides appropriate efficiency and effectiveness to the oversight process</i>	78%	77%*	71%	70%

* In prior years' surveys, the staff framed these two questions in the context of comparing the attributes with the previous oversight process.

Analysis: Most internal stakeholders agree that the ROP provides a realistic, timely, efficient, and effective approach to oversight. The data supporting this metric reveal an improving trend and a positive perception for these measures when compared with the previous surveys.

Metric Criteria Met: Yes

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: Open, Effective

Two internal survey questions addressed this metric. The table below presents the questions and the percentage of agreement.

<i>Measure</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>The ROP generally provides sufficient information to keep the public informed of the agency oversight activities related to the plants</i>	<i>85%</i>	<i>89%</i>	<i>77%</i>	<i>78%</i>
<i>The ROP generally provides appropriate inspector and licensee communication</i>	<i>93%</i>	<i>95%</i>	<i>86%</i>	<i>82%</i>

Analysis: Internal stakeholders continue to generally agree that the ROP ensures openness. The data supporting this metric indicate a stable trend and an overall positive perception for these measures when compared with the previous years' survey results.

Metric Criteria Met: Yes

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 stable or increasingly positive perception over time.

Goals Supported: Open, Effective

Analysis: There were no internal survey measures or comments on this metric. Past surveys provided responses from external stakeholders for purposes of self-assessment. The next external survey will occur during 4Q/2009. The staff will evaluate internal stakeholder survey measures for this metric for incorporation into the next internal survey in CY 2010.

Metric Criteria Met: Not applicable

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 stable or increasingly positive perception over time.

Goals Supported: Open, Effective

Four internal survey questions addressed this metric. The table below presents the questions and the percentage of agreement.

<i>Measure</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>Responses from feedback forms sent to headquarters are responsive and address the issues raised</i>	73%	68%	60%	54%
<i>Responses from feedback forms sent to headquarters are accurate</i>	84%	79%	76%	64%
<i>Responses from feedback forms sent to headquarters are understandable and written in plain English</i>	86%	78%	77%	69%
<i>Responses from feedback forms sent to headquarters are timely</i>	58%	50%	47%	30%

Analysis: Internal stakeholders continue to generally agree that the agency is responsive to their feedback and input. The ROP feedback process allows the NRC staff to identify concerns or issues and to recommend improvements related to ROP policies, procedures, or guidance. Based on the results of the recent internal survey, the staff believes that improvements made in CY 2006 for tracking feedback forms increased timeliness and stakeholder satisfaction with the internal feedback process. In spite of improvements in this area, timely response to feedback forms remains a challenge. In addition, some respondents state that the feedback process could be improved to make it more effective and responsive. The data supporting this metric indicate a stable trend and a positive perception for these measures when compared with the previous survey in CY 2006.

Metric Criteria Met: Yes

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, Open

Analysis: There were no internal survey measures or comments on this metric. Past surveys provided responses from external stakeholders for purposes of self-assessment. The next external survey will occur during 4Q/2009. The staff will evaluate internal stakeholder survey measures for this metric for incorporation into the next internal survey in CY 2010.

Metric Criteria Met: Not Applicable

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: Effective, Open

Three internal survey questions addressed this metric. The table below presents the questions and the percentage of agreement.

<i>Measure</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>The ROP generally provides assurance that there will be no un-intended consequences.*</i>	64%	N/A	N/A	N/A
<i>The ROP generally provides appropriate resources needed to oversee licensees</i>	74%	75%	N/A	N/A
<i>The ROP generally provides encouragement to the licensees for self improvement</i>	82%	67%	N/A	N/A

* This new internal survey question addresses this metric and is expected to be evaluated by the staff in future surveys.

Analysis: The data reflect a generally positive perception. However, the survey questions that support the metric provide limited data. The staff will evaluate the measures for meaningful trends in future surveys. One internal stakeholder felt the process for identifying and processing substantive cross cutting issues is not predictable or consistent and may lead to unintended consequences. The staff will respond to this feedback in the consolidated response to stakeholder comments from the ROP internal survey.

Metric Criteria Met: Yes

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: Effective, Predictable

Analysis: There were no AITs or IITs in CY 2008.

Metric Criteria Met: Yes

O-12 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 for planning and future budgeting formulation. A detailed ROP resource analysis is included in the annual ROP self-assessment Commission paper.

Goals Supported: Effective, Predictable

Analysis: Overall staff effort in FY 2008, as reflected in expended hours, decreased by 4.3 percent as compared with FY 2007. Baseline inspection hours decreased in 2008. The staff's review indicates that the decrease primarily resulted from reduced frequency in performing IP 7111121, "Component Design Bases Inspection," from biennial to triennial starting in 2008. Additionally, fewer hours were charged to IP 71152. The staff performed fewer of these major inspections in 2008, and together they account for almost 70 percent of the reduction in direct baseline inspection hours. The hours charged to other baseline procedures remained relatively unchanged.

Plant-specific inspection efforts increased in FY 2008 as compared with FY 2007 because of the IP 95003 supplemental inspection at the Palo Verde Nuclear Generating Station. Additional contributors to the plant-specific effort include reactive inspections at several sites and other significant inspections that were conducted in FY 2008, including those for the security cornerstone.

Generic safety issues inspections are typically one-time inspections of specific safety issues with significant variability in effort possible from year to year. The increased effort related to generic safety issue inspections in FY 2008 reflects the conduct of several TIs, including (1) TI 2515/166, "Pressurized Water Reactor Containment Sump Blockage," (2) TI 2515/171, "Verification of Site Specific Implementation of B.5.b Phase 2 & 3 Mitigating Strategies," (3) TI 2515/172, "Reactor Coolant System Dissimilar Metal Butt Welds," and (4) TI 2515/176, "Emergency Diesel Generator Technical Specification Surveillance Requirements Regarding Endurance and Margin Testing."

The effort reported for “other activities,” including inspection-related travel, SDP, and routine communication (which now encompasses regional support, enforcement support, and review of technical documents), also decreased slightly in 2008. The effort for these activities tends to respond in concert with baseline inspection effort.

The regional effort for licensee performance assessment continued to decline in 2008. This continuing trend most likely indicates the maturing staff familiarity with the performance assessment process.

Metric Criteria Met: Yes

O-13 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 four 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" is the total number of years the individual has accumulated as an NRC employee.
- (2) "Total resident time" is the total number of years the individual has accumulated as an RI or SRI.
- (3) "Current site time" is the total number of years spent as an RI or SRI at the current site.
- (4) "Relevant non-NRC experience" is nuclear power experience acquired outside of the NRC. Examples of relevant non-NRC experience are operation, engineering, maintenance, or construction experience with commercial nuclear power plants, naval shipyards, U.S Department of Energy facilities, or the U.S. Navy nuclear power program.

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. A detailed resident demographic and staffing analysis, including additional graphs, data, and analysis for this metric is included in the annual ROP self-assessment Commission paper.

Goals Supported: Ensure Safety, Ensure Effectiveness

Analysis: Analysis of 2008 RI Group

The RI demographic data for 2008 (see Tables 1 and 2) indicates that the RI turnover rate has remained high (31 percent) in 2008. This is especially significant given the 46 percent turnover rate in 2007. The attrition that has occurred over the last several years has resulted in a median RI work experience level of about 1 year. The decrease in RI work experience of the RI group is somewhat balanced by this group's increased regulatory experience of approximately 4.5 years and relevant non-NRC experience of 9 years.

It should be noted that 82 percent of the RIs who left the RI program remained with the NRC. Of the 22 RIs who left, 10 were promoted to SRI positions, 8 were either promoted or laterally reassigned to a regional office or Headquarters, 1 retired, and 3 resigned from the NRC.

Table 1
RI Turnover (# of Inspectors)

	2004	2005	2006	2007	2008
Promoted to SRI	3	10	11	13	10
Promoted/ Reassigned	3	9	2	13	8
Retired	0	2	1	3	1
Resigned	0	2	0	4	3
Total	6	23	14	33	22
Turnover Rate	8%	32%	20%	46%	31%

Table 2
RI Time (# of years)

	2004	2005	2006	2007	2008
NRC Time	3.42	3.36	4.04	4.25	4.48
Total Resident Time	2.00	2.31	2.39	1.87	1.28
Current Site Time	1.85	2.25	2.23	1.85	1.28
Relevant Non- NRC Experience	10.00	10.63	10.75	10.38	9.00

Analysis of 2008 SRI Group

SRI demographic data for 2008 (see Tables 3 and 4) indicates that the SRI turnover rate (18%) and the relevant non-NRC experience level have remained steady. In 2008, 12 of 66 SRIs left the RI program. Of those 12, 5 were promoted, 4 were laterally reassigned to Headquarters or a regional office, 1 retired, and 2 resigned from the NRC. These data do not include SRIs who were laterally reassigned to another site.

Table 3
SRI Turnover (# of Inspectors)

	2004	2005	2006	2007	2008
Promoted	0	5	7	7	5
Reassigned	3	4	7	7	4
Retired	2	1	1	1	1
Resigned	0	0	1	2	2
Total	5	10	16	17	12
Turnover Rate	8%	15%	24%	26%	18%

Table 4
SRI Time (# of years)

	2004	2005	2006	2007	2008
NRC Time	8.80	8.84	9.28	10.11	10.86
Total Resident Time	7.32	7.54	7.77	7.93	7.30
Current Site Time	2.31	2.63	3.21	2.52	2.28
Relevant Non- NRC Experience	6.55	7.96	9.08	10.04	9.38

Analysis Summary

The staff concluded that the staffing of RI and SRI positions with knowledgeable employees continues to be adequate to protect public health and safety. The RI program continues to attract experienced engineers as indicated by the high level of relevant non-NRC experience found in this group. However, the high turnover rates in recent years have resulted in a decline of onsite inspection experience, challenges in filling vacant RI positions, and a significant amount of effort by management and inspection staff to provide continuity of regulatory oversight. These current issues may present challenges in implementing the inspection program.

Because of the number of challenges that regions face associated with staffing vacant RI positions in a timely manner, meeting operating plan metrics, and maintaining an experienced and stable RI program, program enhancements to improve the flexibility and timely hiring of RIs are recommended.

Metric Criteria Met: Yes

O-14 Analysis of Site Staffing

Definition: Annually, 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.

The staff developed a site staffing metric of 90 percent program wide in response to a recommendation by the Davis-Besse Lessons Learned Task Force (DBLLTF). The purpose of the metric is to evaluate the agency's ability to provide continuity of regulatory oversight through timely assignment of permanent resident inspector staff. Specifically, DBLLTF item 3.3.5.3 recommended that the staff establish a measurement for RI staffing, including program expectations to satisfy minimum staffing levels.

Criteria: The criteria is set at 90 percent program-wide. Any single site that falls below 90 percent will be individually evaluated. Provide reasons for any meaningful increase or decrease in the inspector staffing level at reactors sites.

NOTE: Inspectors assigned to the site permanently or through a rotation with a minimum duration of six weeks shall be counted. Inspectors on six week or longer rotational assignments will be identified as such. Inspectors assigned to the site for less than six weeks will not be counted, but should be indicated as such. Additionally, the regions shall indicate sites where permanently assigned resident or senior resident inspectors are away from the site for an extended period of time (one continuous time period which is greater than six weeks). Only inspectors who have attained at least a basic inspector certification status, as defined by Appendix A to Inspection Manual Chapter 1245, shall be counted.

Data will indicate number of days a qualified resident and senior resident inspector are permanently assigned to the site during the year divided by the number of days in the year. Number of days spent on training; meetings away from the site; participation in team inspections; leave; or other temporary duties (e.g. acting for branch chiefs in his/her absence) will not be counted against the metric unless the absence exceed 6 continuous weeks.

Goals Supported: Ensure Safety, Ensure Effectiveness

Analysis: Despite the turnover rates in the RI and SRI positions, the regions succeeded in meeting their site staffing metric of 90 percent. The average site staffing for all regions was 98 percent in calendar year 2008. However, five sites fell below the 90 percent site staffing requirement. All five sites were staffed above the 86 percent level and were supplemented by region based inspectors to assist in completing the baseline inspection program. Given the continued high turnover rates experienced in 2008, meeting this metric was challenging and had a significant impact on inspectors and management. Table 1 tracks the number of sites since 2005 that were under the 90 percent site staffing goal.

Table 1
Number of Sites Under 90 Percent Site Staffing

	2005	2006	2007	2008
Number of Sites	3	1	9	5

Metric Criteria Met: Yes

O-15 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. A discussion of training effectiveness is included in the annual ROP self-assessment Commission paper.

Goals Supported: Effective, Predictable, Understandable

Six internal survey questions, started in 2006, addressed this metric. The table below presents the questions and the percentage of agreement.

<i>Measure</i>	<i>2008</i>	<i>2006</i>	<i>2004</i>	<i>2002</i>
<i>Adequate training is provided to effectively implement the ROP</i>	70%	75%	N/A	N/A
<i>Training, in addition to that specified in IMC-1245, is made available to assist in professional development</i>	76%	78%	N/A	N/A
<i>Rotational opportunities are available to assist in professional development</i>	81%	82%	N/A	N/A
<i>Inspectors are encouraged to identify issues that do not immediately fit into the ROP inspection procedures</i>	69%	68%	N/A	N/A
<i>Inspectors are encouraged to maintain a questioning attitude</i>	91%	94%	N/A	N/A
<i>Adequate training is available for the safety culture aspects of the ROP inspection procedures and manual chapters</i>	54%	59%	N/A	N/A

Analysis: Although the data reflect a generally positive perception, the survey questions that support the metric provide limited data. Of particular note is the decline in the perception of safety culture training. The staff will evaluate these measures for meaningful trends in future surveys.

The staff continued to improve the initial and continuing inspector training programs in order to produce and maintain well-qualified, competent inspectors.

Recommendations identified by the staff were reviewed in accordance with the ROP feedback process, and the improvements were incorporated into inspection standards, as appropriate.

Based on the internal survey, inspectors were generally satisfied with the training to implement the ROP but slightly less satisfied than they were during the previous survey. In the survey, inspectors requested more training on the SDP, safety culture, and the computer system used to track inspection reports and findings (Reactor Program System). Several qualified inspectors requested more opportunities for continuing training.

Over the last year, the staff continued the development of, or completed, a number of training initiatives that will respond to and improve each of the issues raised in the survey. Specifically, the staff received approval to develop a prequalification one-week training course to improve inspector understanding of the SDP and ROP. The staff is continuing efforts to develop safety culture training as part of a larger effort to create a safety culture assessor qualification program. The adequacy of safety culture training will be evaluated after completion of the assessor qualification program. The staff updated direction for writing inspection reports and performed training at the regional counterpart meetings on how inspectors should assign and document cross-cutting aspects for their inspection findings. In response to regional feedback, the staff conducted classroom training and developed Web-based training on the Reactor Program System to improve inspection scheduling and the reporting of inspection issues. To give inspectors more continuing training options, the staff completed the development of postqualification training for inservice inspection and fire protection inspectors, and it continued the development of similar training in the electrical and mechanical area. In addition, the Office of Nuclear Security and Incident Response staff completed the development of a comprehensive agency security training curriculum that will enhance security inspector competencies. The CY 2008 ROP self-assessment Commission paper provides additional discussion of training effectiveness.

Metric Criteria Met: Yes

O-16 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. A detailed regulatory impact summary is included in the annual ROP self-assessment Commission paper.

Goals Supported: Effective, Open, Understandable

Analysis: On December 20, 1991, the Commission issued a staff requirements memorandum directing the staff to develop a process for obtaining continual feedback from licensees and to report the feedback on the process to the Commission each year. The staff described the continual feedback process in SECY-92-286, "Staff's Progress on Implementing Activities Described in SECY-91-172, 'Regulatory Impact Survey Report—Final,'" dated August 18, 1992.

The feedback process requires regional management to solicit informal feedback from its licensees during routine visits to reactor sites. The managers record this feedback and forward the feedback forms to the Office of Nuclear Reactor Regulation (NRR) and the Office of Nuclear Security and Incident Response (NSIR). The regions, NRR, and NSIR then evaluate the concerns identified and take any necessary corrective actions. This process, which was implemented in October 1992, has given licensees frequent opportunities to comment on regulatory impact.

During the previous fiscal year, the staff received feedback from 70 reactor licensees regarding 146 issues. The comments fell into two main categories—inspector performance and formal communication with licensees. Of the comments received, 92 percent were favorable and 8 percent were unfavorable.

Metric Criteria Met: Yes