

## Stakeholder Survey Results

Consistent with the guidelines prescribed by Inspection Manual Chapter (IMC) 0307, "Reactor Oversight Process Self-Assessment Program," the staff of the U.S. Nuclear Regulatory Commission (NRC) conducted an internal survey during this self-assessment cycle to solicit and analyze stakeholder feedback regarding the effectiveness of the Reactor Oversight Process (ROP). Consistent with the biennial frequency prescribed by IMC 0307, the staff did not conduct an external survey in calendar year (CY) 2008. In accordance with the current schedule of alternating years, the next external survey will occur in CY 2009, and the next internal survey will occur in CY 2010.

The NRC conducted previous surveys in November 2006, November 2004, December 2002, March 2001 (in the initial year of ROP implementation), and November 1999 (during the pilot phase). Most of the internal survey questions and responses contributed directly to the annual ROP performance metrics. A general analysis of the stakeholder responses to the internal survey is summarized below, while a more detailed analysis is available in the annual ROP performance metric report (ADAMS Accession No. ML090690616) and the applicable performance area discussions in Enclosure 1 to this paper.

The staff announced the survey through multiple channels to encourage internal stakeholders to participate. Nevertheless, fewer respondents participated in CY 2008 (159 respondents) than in CY 2006 (266 respondents). The respondents were internal NRC stakeholders including resident and senior resident inspectors, region-based inspectors and staff, senior reactor analysts, regional and headquarters line management, and headquarters technical and program staff employees. The staff also received fewer internal survey comments in CY 2008 (285 comments) than in CY 2006 (589 comments). Overall, the comments reflected frank and honest feedback. The overall percentage of questions deemed "unable to answer" or "did not answer" remained about the same in CY 2008 (17 percent) and CY 2006 (15 percent). Some internal stakeholders voiced concerns over certain aspects of the ROP as discussed in the pertinent sections below.

The staff made several changes to the CY 2008 ROP internal survey to reflect lessons learned from previous surveys. Survey topic areas were reordered to conform to ROP guidance. A new survey topic area, "Security," was added to obtain more focused feedback on security-related issues. A few questions on information contained in assessment letters were added to the "Assessment Process" section. Inspection program area questions previously separated into program and procedure sections were combined into one topic area, "Inspection Programs." Several performance indicator (PI) questions were rewritten to reinforce the fundamental ROP concept that PIs combine with the inspection program as inputs to the ROP assessment process. The Significance Determination Process (SDP) questions previously separated into SDP process and SDP results were combined into one topic area. Questions regarding the effectiveness of the Reactor Program System were also added. The CY 2008 survey included 114 questions, whereas the CY 2006 survey included 86 questions.

The respondents selected answers from a computer-based program in the following topic areas: (1) Demographics, (2) Assessment Program, (3) Inspection Program, (4) PIs, (5) SDP, (6) ROP Web Page and Reactor Program System, (7) Feedback Forms, (8) Training Issues, (9) Security, and (10) Overall ROP. Each section of the survey allowed for additional comments. All survey responses and comments were provided anonymously, and each question had five possible answers (strongly agree, agree, disagree, strongly disagree, and unable to answer).

The results of the survey sections are provided below. Note that the numbers in parentheses (where applicable) represent the combined percentages of respondents who endorsed the stated view versus the opposing view. Responses of “unable to answer” were not factored into these percentages.

Demographics - Survey respondents made selections for each of four demographic issues: position, work location, grade, and years of service with the NRC. Most of the respondents are inspectors directly implementing the ROP. More than 130 of the 159 respondents are regional staff including resident inspectors, region-based inspectors, senior reactor analysts, and managers. Regional participation breakdowns are as follows: Region I had 31 respondents, Region II had 32, Region III had 44, and Region IV had 30. Headquarters had 22 respondents accounting for 14 percent of the respondents.

Assessment Process – This area of the survey included 18 questions versus 10 in the 2006 survey. The increase in questions was in response to several factors. A few questions on information contained in assessment letters were added. Several questions in the “Other Issues” section of the 2006 survey were consolidated into the “Assessment Process” section of this survey and clarification was added to several questions from the 2006 survey to improve the 2008 survey. The relatively high percentage of agreement in all questions generally demonstrated a stable or improving trend.

Respondents agree that the assessment process provides an appropriate range of regulatory actions in response to safety issues (92 percent). Most respondents (80 percent) agree that the assessment process provides for timely resolution of issues commensurate with safety significance. Eighty-four percent of the respondents feel that the assessment process properly incorporates enforcement actions. The staff completed efforts in late 2008 to define ways to better integrate traditional enforcement outcomes into the assessment process and is now incorporating the implementation details into ROP guidance documents. Over three-quarters (82 percent) of respondents agree that the assessment process focuses resources on the areas of greatest safety significance. The majority (59 percent) of the respondents agree that the assessment process minimizes duplication/rework in preparation for assessment meetings.

The majority of the respondents agree that the assessment process provides objective assessments of licensee performance (81 percent) and that the agency uses appropriate actions to address performance issues for those licensees outside of the “Licensee Response” column of the Action Matrix (87 percent). Two-thirds of the respondents (68 percent) believe that the assessment process allows effective consideration of safety culture aspects. Sixty-six percent agree that the assessment process integrates and provides insights into substantive cross-cutting issues. Only 59 percent agree that 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. The safety culture initiative was first implemented in mid-2006. Questions were added to the 2006 and 2008 internal surveys to solicit feedback on safety culture.

The 2008 internal survey revealed a generally positive perception of the assessment program although some stakeholders noted that cross-cutting aspects and issues and safety culture guidance were 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. ROP guidance was modified recently to provide additional guidance in the cross-cutting area, and the staff plans to continue to evaluate the effectiveness of the safety culture initiative in CY 2009.

Inspection Program – This area of the survey included 20 questions versus 13 in CY 2006. Inspection program area questions previously separated into program and procedure sections in the CY 2006 survey were combined into one topic area, “Inspection Programs.” The staff added new questions focusing on the baseline inspection program and information contained in inspection reports. Several questions in the “Other Issues” section in the 2006 survey were consolidated into the “Inspection Program” section of this survey. Several questions from the 2006 survey were clarified to improve the 2008 survey. The relatively high percentage of agreement in the responses to all questions generally demonstrated a stable or improving trend.

Most respondents agree that the information contained in inspection reports is communicated in a timely fashion (95 percent) and is communicated accurately (93 percent). More than three-quarters of the internal stakeholders believe that the baseline inspection program appropriately inspects for and identifies risk-significant issues (88 percent) and that it provides appropriate coverage of plant activities and operations important to safety (81 percent). More than three-quarters of the respondents believe that the baseline inspection program leads to objective findings for which significance can be clearly documented (84 percent). The majority of respondents agree that the baseline inspection procedures provide adequate guidance on cross-cutting aspects (59 percent) and provide estimates that reflect the effort required to complete the procedure (58 percent). Inspection guidance was modified recently to provide additional guidance in the cross-cutting area, and the staff plans to continue to evaluate the effectiveness of the safety culture initiative in CY 2009.

A high percentage of the respondents believe that the baseline inspection program procedures are adequate to address intended cornerstone attributes (91 percent), are conducted at an appropriate frequency (86 percent), and adequately sample risk-significant aspects of each inspectable area (90 percent). A high percentage of the respondents believe that the supplemental inspection procedures provide sufficient information to confirm the adequacy of a licensee’s root cause and corrective action effort (87 percent). Many survey respondents also agree that issuing noncited violations and relying on licensees’ corrective action programs constitute an adequate approach to resolving issues of very low safety significance (i.e., “green” findings) (84 percent). Many of the respondents indicate that baseline inspection procedures are clearly written (77 percent). Of those surveyed, seventy-eight percent believe that the baseline inspection procedures place sufficient emphasis on field observation and inspections.

The internal survey resulted in favorable feedback regarding whether information contained in inspection reports was relevant, useful, and written in plain English. However, the inspectors also provided feedback that the documentation of inspection scope in inspection reports could be improved to make these reports easier to read. Additionally, the internal survey provides favorable feedback regarding whether the inspection program adequately covers areas that are important to safety. However, feedback also suggests that increasing the flexibility of the ROP requirements, reducing the number of inspection samples for selected inspection procedures, and increasing maintenance observation activities may be warranted to improve the

effectiveness of the baseline inspection program. The staff will consider these issues during the ROP realignment effort in CY 2009.

Performance Indicators – This area of the survey included seven questions. Several PI questions were rewritten to reinforce the fundamental ROP concept that PIs are considered in conjunction with inspection findings for reactor oversight and performance assessment. The relatively high percentage of agreement in all questions generally demonstrated a stable trend.

The majority of the respondents believe that the PIs are understandable (72 percent). Additionally, many believe that they are clearly defined (79 percent) and provide an appropriate level of overlap with the inspection program (79 percent). More than two-thirds of the respondents believe that the PIs provide useful information on risk-significant areas (74 percent). Seventy-one percent of the respondents agree that PIs provide useful insights and, when combined with the inspection program, help ensure plant safety.

Only 61 percent of the respondents believe that the PIs provide an objective indication of declining safety performance. Sixty-five percent of the respondents agree that PIs effectively contribute to the identification of performance outliers based on risk informed, objective, and predictable indicators.

The internal survey indicates that the PI program meets the ROP goals of providing useful information on risk-significant areas. Most survey respondents believe that the PIs are clearly defined, understandable, and provide an appropriate overlap with the inspection program. They also state that the PIs provide an objective indication of declining safety performance and can be effectively used to identify outliers. However, of the stakeholders who provided written comments, many indicate that the PI program has not worked in accordance with the ROP goals of being understandable, well defined, or useful. Several indicate that with so few PIs crossing the green to white threshold, the PI program does not provide meaningful insights. Others feel that the PI program is not predictive of identifying plants with declining plant performance. The staff will continue to reinforce the message that a green PI represents performance that does not require additional NRC oversight and that PIs are only one contributor to the identification of performance outliers. In addition, the staff will continue to refine existing PIs and explore options for introducing new PIs to ensure that the PI program provides useful insights and contributes to the identification of declining performance.

Significance Determination Process (SDP) – This area of the survey includes 17 questions versus 15 in CY 2006. Most questions were the same as in the 2006 survey and the responses revealed a stable or improving trend.

Many of the respondents agree that the SDPs provide a basis for effective communication of inspection findings to the licensee (83 percent) and focus NRC attention on safety-significant issues (85 percent). Three quarters of the respondents agree that the SDP provides consistent and repeatable results (74 percent) and a basis for effective communication of inspection findings to the public (68 percent).

Sixty-six percent of the respondents agree that program guidance documents are clear, and over two-thirds agree that resource expenditures are appropriate (68 percent). The majority (57 percent) of respondents believe that non-reactor safety SDPs are easy to use, while a greater percentage of the respondents believe that the reactor safety SDPs are easy to use

(63 percent). A little over half of the respondents believe SDP training is effective (55 percent). The staff implemented several SDP improvements in CY 2008 including revised guidance for the initial screening and characterization of findings in the Phase 1 process, maintaining SDP timeliness, and for conducting Significance and Enforcement Review Panels. The internal survey results show a positive reception of these improvements, and this trend should be reflected in future surveys.

Eighty-five percent of the respondents believe that the SDP results are verifiable. A majority of the respondents believe that the SDP results correctly characterize the risk-significance of inspection findings (74 percent), are accurate (71 percent), are timely (75 percent), are based on clear standards (62 percent), and are realistic (76 percent).

The responses to the internal survey are generally favorable for the SDP. The respondents appear confident that the SDP (1) provides consistent results that are an appropriate regulatory response to performance issues; (2) meets important program objectives such as being scrutable, accurate, repeatable, timely, and based on clear standards; and (3) is effective in communicating results to the licensees and the public. 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 and guidance could be improved and additional refresher training would be helpful. The staff is working to improve initial and refresher SDP training in CY 2009 to address the indicated need for more effective training, and the staff continues to make improvements to the guidance to improve the understandability and effectiveness of the various SDPs.

ROP Web Page and Reactor Program System – This area of the survey included eight questions. The staff added new questions regarding the effectiveness of the Reactor Program System in 2008. The other questions were the same as in the 2006 survey, and the responses revealed a stable or improving trend.

The vast of the respondents agree that information on plant performance is accurate (95 percent), timely (91 percent), and understandable (written in plain English) (88 percent). Additionally, the respondents believe that the information is adequate to keep NRC internal stakeholders informed (89 percent) and is organized for easy retrieval (81 percent).

About two-thirds of the respondents agree that the Reactor Program System is effective in managing issues and findings (69 percent), is effective in scheduling and managing inspections (66 percent), and is an effective tool for determining completion of the baseline inspection program (71 percent).

Feedback Forms – This area of the survey included four questions. The percentage of respondents who agree with the stated view increased for all questions when compared to the 2006 survey.

Many respondents believe that the responses to feedback forms are accurate (84 percent) and are understandable and written in plain English (86 percent). More than half agree that the responses to feedback forms are timely (58 percent) and almost three quarters of the respondents believe that the responses from feedback forms are responsive and address the issues raised (73 percent).

Close to 40 percent of those surveyed were unable to answer these questions because they did not have experience using the feedback process. Some respondents state that the feedback process could be improved to make it more effective and responsive. The staff believes that the improvements made in CY 2006 for tracking feedback forms increased timeliness and stakeholder satisfaction with the internal feedback process. However, the staff recognizes the potential for additional process improvements to increase overall efficiency and reliability and plans to further improve the feedback process in CY 2009.

Training Issues - This area of the survey included six questions. The percentage of agreement in the responses to all questions generally demonstrated a stable or improving trend.

Regarding training issues and professional development, 70 percent of the respondents agree that adequate training is provided to effectively implement the ROP. Most of the respondents agree that inspectors are encouraged to maintain a questioning attitude (91 percent). Only 54 percent agree that adequate training is available for the safety culture enhancements to the ROP inspection procedures and manual chapters. The staff plans to continue to evaluate the effectiveness of the safety culture initiative including inspector training during CY 2009.

The internal survey shows that inspectors are generally satisfied with training to implement the ROP but slightly less satisfied than 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 (the Reactor Program System). Another message from the survey is that inspectors seek more opportunities for continuing training after completion of qualification requirements. The staff plans to address these training needs in CY 2009.

Security - This new area of the survey included 14 questions. In general, most participating respondents agree that the security aspects of the ROP have been executed effectively within the Security cornerstone. This new survey topic area was added to obtain feedback on cornerstone inspection procedures, the security assessment process, and security inspection reports. The survey also asked questions concerning the Reactor Program System as it relates to the Security cornerstone.

About 73 percent of the internal survey population did not address the "Security" section of the internal survey. An assessment of those respondents who did address this section follows. The majority of participating respondents agree that baseline inspection procedures cover all areas important to plant security (89 percent) and are conducted at the appropriate frequency (90 percent). Over three-quarters of the participating respondents agree that the baseline inspection program provides appropriate coverage of plant activities and operations important to security (89 percent).

Additionally, participating respondents agree that the Reactor Program System is effective in managing security issues and findings (78 percent), scheduling and managing security inspections (80 percent), and determining completion of the security baseline inspection program (78 percent). Only 47 percent of the participating respondents agreed that security inspection reports and their cover letters provide sufficient information to the public. The staff continues to evaluate the appropriate level of security-related inspection and licensee performance information that could be made available to the general public without jeopardizing security or revealing actual or potential vulnerabilities.

Overall ROP – This area of the survey included 16 questions. Most questions remain the same as in the 2006 survey, and the responses revealed a stable or improving trend. Several questions in the “Other Issues” section in the 2006 survey were consolidated into the “Overall ROP” section of this survey resulting in additional questions. Most respondents agree that overall the ROP is predictable (91 percent), consistent (85 percent), and timely (90 percent). Seventy-eight percent agree that the ROP provides appropriate efficiency and effectiveness.

The majority of respondents indicate that the ROP generally provides appropriate assurance that plants are being operated safely (89 percent), appropriate regulatory attention to licensees with performance problems (88 percent), and a realistic approach to the oversight process (86 percent). Respondents further agree that the ROP provides appropriate objectivity (87 percent). Almost three quarters (73 percent) of the internal stakeholders agree that the ROP appropriately identifies declining safety and security performance before there is a significant reduction in safety and security margins. The staff is in the process of improving several PIs and continues to work with the industry to revise and/or introduce other PIs to improve the program’s effectiveness as an input to the ROP assessment process.

Respondents believe that the ROP generally provides an effective, risk-informed approach to oversight (83 percent) and provides appropriate regulatory attention to licensees with performance problems (88 percent). Additionally, the internal stakeholders agree that the ROP provides appropriate inspector and licensee communication (93 percent) and provides appropriate communication effectiveness through the use of plain language in official correspondence (86 percent).

About three quarters of respondents agree that the resources needed to oversee licensees using the ROP are appropriate. Eighty-two percent agree that the ROP encourages self-improvement of licensees. Many survey respondents also agree that the ROP provides sufficient information to keep the public informed of the agency oversight activities related to the plants (85 percent).

### **Stakeholder Survey Conclusions**

The responses from the survey of internal stakeholders are generally in line with responses from previous years as are the distribution of the responses. The responses are generally positive with some concerns being raised in each of the ROP program areas. The staff has or will consider the feedback from these surveys in modifying the associated areas of the ROP. The applicable portions of the program evaluations in Enclosure 1 to this paper as well as in the ROP performance metric report (reference ADAMS Accession No. ML090690616) offer further discussion and analysis of the survey results. The staff further plans to prepare a consolidated response to the internal survey to more specifically address some of the comments and the main themes derived from the comments and will make this response available to internal stakeholders through the ROP Digital City Web site. In addition, a consolidated table including all internal and external survey results since inception of the ROP, along with the staff’s evaluation and response, can be accessed through the ROP Web page entitled, “ROP Program Evaluations and Stakeholder Feedback.”