Stakeholder Survey Results

Consistent with the guidelines prescribed by Inspection Manual Chapter (IMC) 0307, "Reactor Oversight Process Self-Assessment Program," the staff conducted both an external and an internal survey during this self-assessment cycle to solicit and analyze stakeholder feedback regarding the effectiveness of the Reactor Oversight Process (ROP). All of the external survey questions and resultant responses, and most of the internal survey questions and responses, contributed directly to the annual ROP performance metrics.

A general analysis of the stakeholder responses is summarized below, while a more detailed analysis is available in the annual ROP performance metric report (reference ADAMS accession number ML070720085) and the applicable performance area discussions in Enclosure 1 to this paper.

External Survey

The staff published a survey in a *Federal Register* notice on October 10, 2006, to seek external stakeholder input regarding the implementation of the ROP. The survey requested responses to 21 specific questions corresponding to specific ROP performance metrics as defined in IMC 0307. This solicitation of public comments has been issued each year since ROP implementation in 2000.

The survey used this year was very similar to that used in previous years. The survey continued to use multiple-choice answers and made only minor changes to a few questions. In addition, as in the past year, the survey asked participants to elaborate on their multiple-choice ratings with specific thoughts or concerns and to offer their opinions on possible improvements. Additional information and comments related to the ROP that were not directly captured by the specific questions were expounded on in Question 22.

In an effort to solicit feedback, the staff (1) mailed approximately 700 surveys directly to stakeholders, (2) placed a direct link to the survey information on both the ROP Web page and the "Documents for Comment" page of the NRC's external Web site, and (3) issued a press release. Compared to the internal survey, the external survey did not get a significant level of response and therefore does not lend itself to the more detailed statistical analysis that was performed for the internal survey. The results of the external survey and the staff's plans to address the insights gained are discussed below.

<u>Survey Response</u> - The NRC received 16 responses to the FRN issued in October 2006 from individuals and/or organizations listed chronologically in the order received below. The ADAMS accession number is given in parentheses after the respondent's name.

Stanley Gamble, Exelon Limerick Generating Station (ML063000055)
Raymond Tierney, Private Citizen (ML063070324)
T. Gurdziel, Private Citizen (ML063130355)
George Vargo, Private Citizen (ML063200031)
James Sniezek, Utility Consultant (ML063240279)
Union of Concerned Scientists (ML063340400)

Pennsylvania Department of Environmental Protection (ML063260281)

South Texas Nuclear Operating Company (ML063340361)

Farouk Baxter, Private Citizen (ML063340365)

Division of Environmental Safety and Health, State of New Jersey (ML063400352)

Nuclear Energy Institute (ML063390650)

Region IV Utility Group (ML063400360)

Florida Power and Light (ML063400368)

Southern California Edison (ML063470342)

Slovenian Nuclear Safety Administration (ML063560068)

Strategic Teaming and Resource Sharing (ML063560024)

<u>Survey Results</u> - The results are similar when comparing respondent satisfaction to the previous surveys. There were no dramatic improvements or declines. However, the level of participation (16 responses) was down from previous years (21 responses in each of the previous two years). Approximately twelve of the respondents answered the survey questions, while four of those that responded provided only comments. Based on a review of the responses, there were three distinct categories of external stakeholders. Half of the 16 responses came from NEI or utilities endorsing the NEI response, three came from State or other agencies, and five came from public interest groups or members of the public. The opinions and experience of the collective stakeholders vastly differ, but at times are parallel or coincide. Several repetitive areas that the staff identified as stakeholder concerns are discussed below.

<u>PI Program Results</u> - Although many of those that answered the survey questions believe that PIs promote plant safety, some public citizens groups are losing confidence in the ability of PIs to promote safety. Their comments complained that the program "caved in to the industry," and provided examples to show that the PI program is "virtually useless." It further stated, as an example, that Alert and Notification System indicators can be, and were, easily manipulated. These same views were shared with at least one State agency. In contrast, the industry primarily believed that the mix of the PI Program in conjunction with the inspection program promotes plant safety.

Inspection Program Results - Nearly all utility respondents agreed that the inspection program adequately covers areas important to safety, and is effective in identifying and ensuring the prompt correction of any performance deficiencies. In contrast, public comments cast doubts. A public interest group noted that numerous inspection procedures were broken, particularly inspection procedure (IP) 71152, "Identification and Resolution of Problems," and the associated portions of individual IPs that assess why licensees failed to identify problems. An effort is currently underway where the NRC ROP Problem Identification and Resolution (PI&R) focus group is performing a "Best Practices" review that includes IP 71152 and the PI&R portions of other IPs. Another comment from the public calls for a stronger enforcement program to ensure correction of problem areas. A comment from the public also pointed out that the reference section of inspection reports is useless to the public because many of the documents on the reference list are not publicly available.

<u>SDP Results</u> - The significance determination process, similar and consistent to previous survey results, had an unfavorable response from the majority of those that answered the survey. Many respondents indicated that the SDP is too complex, is inconsistent, and did not yield equivalent results for issues of similar significance in all ROP cornerstones. Comments

from a State agency raised concerns on probabilistic risk assessments (PRAs) used by the industry, and stated that the PRAs are not adequate, and were never approved by the NRC. The public citizens groups and State agencies indicated that the SDP is too complex and inaccessible for public scrutiny. The industry also expressed concerns about the timeliness and the inconsistency of the SDP.

Assessment Program Results - In the area of addressing performance issues, the majority of the industry respondents agreed that actions taken by the NRC for plants outside of the licensee response column have been appropriate. Many respondents from the public and State and local agencies generally are critical of the NRC for not "taking appropriate actions," and that NRC actions are usually too narrow in scope to ensure larger issues are corrected. The majority of respondents, including the utilities and State and local agencies, agree that the information in the assessment reports is relevant, useful, and written in plain English. Some utility comments expressed concerns about the basis and closure process for substantive cross-cutting issues identified in assessment letters.

Overall ROP Results - The majority of the respondents agreed that the ROP (1) is predictable and objective, (2) is generally risk-informed, (3) is understandable and written in plain English, (4) is effective, efficient, and realistic, (5) ensures openness in the regulatory process, (6) provides sufficient opportunities for the public to participate in the process, (7) has been implemented as defined, (8) minimizes unintended consequences, and (9) provides adequate regulatory assurance when combined with other NRC regulatory processes that plants are being operated and maintained safely. Concerns were noted that the ROP is more reactive than proactive.

Although a vast majority of respondents agree that the NRC has been responsive to public inputs, including several State and local agencies and members of the public, those that disagree feel that the NRC's response has been slow or inadequate. There are additional negative comments indicating a perception that public inputs are not valued.

In addition to the general analysis above, the staff's analysis of the specific responses is included in the applicable portions of the program area evaluations in Enclosure 1 to this paper as well as in the annual ROP performance metrics report (reference ML070720085).

NRC Response to External Feedback - As noted above, the staff reviewed all of the survey responses and evaluated the stakeholder comments as part of this annual self-assessment. The staff also plans to prepare a consolidated response to the CY 2006 external survey as was done for CYs 2004 and 2005. In addition, to ensure continued openness and responsiveness to the public's inputs and comments on the ROP, the staff plans to complete this task in response to future external surveys, and revised IMC 0307 to institutionalize the process.

As noted in SECY-06-0074, the staff proposed a change in the frequency of the external survey to every other year, consistent with the internal survey. This change was suggested in order to gain further efficiencies, and because the comments and staff analysis have tended to repeat the same themes from year to year. The staff solicited feedback regarding the proposed change in survey frequency by adding a specific question to the 2006 external survey. Half of the respondents indicated that they agreed with the change in frequency, while half indicated that they disagreed, including a few who expressed concerns with changing the frequency. As noted above, there was also a notable decline in the level of participation from previous years'

surveys. As a result, the staff plans to conduct the external survey in CY 2007 and revise IMC 0307 to change the frequency to every other year. As such, one year's ROP performance metrics and self-assessment would include survey inputs and analysis from internal stakeholders, and the following year would include external survey inputs and analysis. Regardless, internal and external feedback will be considered each year based on continuous feedback during meetings, the feedback process, and other venues. In addition, the staff will continue to solicit and consider stakeholder feedback for significant ROP changes (e.g., safety culture, MSPI, etc.).

As in previous years, the staff will acknowledge receipt of each FRN response by correspondence indicating that the staff has considered and generally addressed the comments in this paper. In addition, this paper, the annual ROP performance metric report, and the consolidated response will be posted to the ROP Web page and sent along with the acknowledgment letters to each survey respondent.

Internal Survey

An internal survey was completed in November 2006 to solicit and analyze stakeholder feedback regarding the effectiveness of the ROP. The internal surveys are conducted on a biennial basis. Previous surveys were conducted in November 2004, December 2002, in March 2001(in the initial year of ROP implementation), and in November 1999 (during the pilot phase).

The staff announced the survey through multiple channels with internal stakeholders to encourage participation. As a result, the staff received a higher number of responses than previous years and a higher level of comments. A total of 266 responses were received from internal NRC stakeholders, including resident and senior resident inspectors, regional-based inspectors and staff, senior reactor analysts, regional and headquarters line management, and headquarters technical and program staff employees. The comments overall reflect frank and honest feedback. Some internal stakeholders voiced concerns over certain aspects of the ROP which would not otherwise be provided.

The respondents selected answers from a computer-based program in the following topic areas: (1) demographics, (2) overall ROP, (3) ROP Web page, (4) assessment process, (5) inspection program, (6) inspection procedures, (7) performance indicators, (8) SDP, (9) SDP results, (10) feedback forms, (11) training issues, and (12) other issues. Each section of the survey allowed for additional comments. All respondent replies were anonymous 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 in the summaries below represent the combined percentage of respondents who endorsed the stated view versus the opposing view. Responses of "unable to answer" were not factored into these percentages.

<u>Demographic Summary</u> - 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 200 of the 266 respondents are regional staff, including resident inspectors, region-based inspectors, senior

reactor analysts, and managers. Regional participation breakdowns are as follows: Region I had 77 respondents, while Region II had 35, Region III had 45, and Region IV had 45. Headquarters personnel account for 23 percent of the respondents (62).

Overall ROP - The majority of respondents indicate that the ROP generally provides appropriate assurance that plants are being operated safely (90 percent), appropriate regulatory attention to licensees with performance problems (87 percent), and a realistic approach to the oversight process (84 percent). Respondents further agree that the ROP provides appropriate objectivity to the oversight process (88 percent). Over two-thirds (68 percent) of the internal stakeholders agree that the ROP provides appropriate identification of declining safety performance before there is a significant reduction in safety 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 in contributing to the identification of declining performance.

Respondents believe that the ROP provides an effective risk-informed approach to oversight (80 percent), provides sufficient attention to licensees whose performance is in the licensee response column (87 percent), and provides appropriate communication through the use of plain language in official correspondence. Additionally, the internal stakeholders agree that the ROP provides appropriate inspector and licensee communication (95 percent) and that the ROP is understandable and the procedures and output products are clear and written in plain English (80 percent).

There were 14 questions included in this area of the survey. The first 10 are the same as in the 2004 survey, the percentage of respondents who agreed increased noticeably for 8 of the 10 questions. The "ROP vs. Previous Process" section in the 2004 survey was consolidated into the "Overall ROP" section of this survey, resulting in the last four questions. Most respondents agree that, overall, the ROP is a predictable (88 percent), consistent (85 percent), and timely (79 percent). Seventy-seven percent agree the ROP provides appropriate efficiency and effectiveness to the oversight process.

<u>ROP Web Page</u> - The vast majority of the respondents agree that the plant performance information on the ROP Web page is accurate (96 percent), timely (93 percent), and understandable (written in plain English) (92 percent). Additionally, the respondents believe that the information is adequate to keep NRC internal stakeholders informed (93 percent) and is organized for easy access (87 percent).

There were 5 questions included in this area of the survey. The percentage of respondents who agreed increased in all 5 questions when compared to the 2004 survey.

<u>Assessment Program</u> - Respondents agree that the assessment process provides an appropriate range of actions for safety issues (89 percent). Most respondents (75 percent) agree that the assessment process provides for timely resolution of issues commensurate with safety significance. Eighty percent of the respondents felt that the assessment process applies appropriate enforcement actions.

Over three-quarters (78 percent) of respondents agree that the assessment process focuses resources on areas of greatest safety significance. Approximately two-thirds (65 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 levels of assessment (88 percent) and the agency takes 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 (67 percent) believe that the assessment process provides effective consideration of safety culture aspects. The safety culture initiative was first implemented in mid 2006 and was a new question added to the 2006 survey. The staff plans to evaluate the effectiveness of the safety culture initiative and compile lessons learned during CY 2007.

There were 10 questions included in this area of the survey verses 8 in the 2004 survey. The percentage of respondents who agreed increased for 7 of the 8 questions and the percentage in agreement decreased for one question when compared to the 2004 survey.

Inspection Program - Most respondents agree that the baseline inspection program inspection reports are communicated in a timely fashion (94 percent). A high percentage of the respondents believe that reports were communicated accurately (96 percent). More than three-quarters of the internal stakeholders believe that the baseline inspection program appropriately inspects for and identifies risk-significant issues (89 percent), and provides appropriate coverage of plant activities and operations important to safety (83 percent). A majority of the respondents believe that the baseline inspection program leads to objective findings whose significance can be clearly documented (81 percent). Nearly two-thirds (64 percent) of respondents agree the inspection program provides adequate guidance on safety culture aspects. The percentage of respondents that perceive the level of effort for conducting each inspection to be consistent with that estimated in the inspection procedure is nearly two-thirds (65 percent). The staff refined and formalized the process to realign inspection resources in CY 2006 and plans to perform the resource realignment effort in CY 2007.

There were 7 questions included in this area of the survey. The percentage of respondents who agreed increased for 5 questions, while the percentage in agreement decreased for 1 question. The safety culture question was new for 2006 and therefore cannot be trended.

Inspection Procedures - A high percentage of the respondents believe that the baseline inspection program procedures are adequate to address intended cornerstone attributes (93 percent), are conducted at an appropriate frequency (86 percent), and adequately sample risk significant aspects of each inspectible area (87 percent). Many of the respondents indicated that inspection procedures are clearly written (85 percent). Eighty-three percent of those surveyed believed that the inspection procedures place sufficient emphasis on planning.

There were 6 questions included in this area of the survey. The percentage of respondents who agreed increased in all questions when compared to the 2004 survey.

<u>Performance Indicators</u> - The majority of the respondents believe that the performance indicators were understandable (82 percent). Additionally, many believe that they were clearly defined (82 percent) and provide an appropriate level of overlap with the inspection program

(78 percent). More than two-thirds of the respondents believe that the performance indicators provide useful information on risk-significant areas (71 percent) and help to maintain safety (74 percent).

Slightly over half of the respondents agree that the performance indicators increase public confidence (56 percent). Only 58 percent of the respondents believe that the performance indicators provide an adequate indication of declining safety performance. When asked if the inclusion of MSPI can effectively identify performance outliers, only 60 percent agree (this was a new question in the 2006 survey).

There were 8 questions included in this area of the survey. The percentage of respondents who agreed increased for 6 of the 7 questions and the percentage in agreement decreased for one question when compared to the 2004 survey.

<u>Significance Determination Process (SDP)</u> - Many of the respondents agree that the SDPs provide a basis for effective communication of inspection findings to the licensee (84 percent) and focus NRC attention on safety-significant issues (83 percent). Three quarters of the respondents agree that the SDP provides consistent results (74 percent) and a basis for effective communication of inspection findings to the public (73 percent).

Sixty-three percent of the respondents agree that program guidance documents are clear and 60 percent agree that resource expenditures are appropriate. Only 57 percent of respondents believe non-reactor safety SDPs are easy to use. To a lesser extent, approximately only half of the respondents believe that the reactor safety SDPs are easy to use (54 percent) and SDP training is effective (56 percent). Several significant SDP improvements were implemented in CY 2006, including implementing the pre-solved tables, issuing the IMC 0609 Appendix M, "Significance Determination Process Using Qualitative Attributes," and addressing the need for risk informing findings which do not fit a previously developed SDP. The staff believes that once training is completed on these process improvements, internal stakeholder perception of the SDP will significantly improve.

There were 9 questions included in this area of the survey. The percentage of respondents who agreed increased in all 9 questions when compared to the 2004 survey.

<u>SDP Results</u> - Eighty-five percent of the respondents believe that the SDP results were verifiable. A majority of the respondents believe that the SDP results correctly characterize the risk-significance of inspection findings (76 percent), are accurate (76 percent), are timely (68 percent), are based on clear standards (69 percent), and are realistic (78 percent).

There were 6 questions included in this area of the survey. The percentage of respondents who agreed increased in all 6 questions when compared to the 2004 survey.

<u>Feedback Forms</u> - Many respondents believe that the feedback forms were understandable and written in plain English (78 percent) and were accurate (79 percent). Only half agree that the responses to feedback forms sent to headquarters are timely (50 percent). Nearly two-thirds of the respondents believe that the feedback forms are responsive and address the issues raised (68 percent). Approximately 40 percent of the respondents were unable to answer these questions because they did not have experience using the feedback process. The staff

believes that the recent improvements in CY 2006 for tracking feedback forms will significantly increase timeliness and stakeholder satisfaction with the internal feedback process.

There were 4 questions included in this area of the survey. The percentage of respondents who agreed increased for all 4 of the questions when compared to the 2004 survey.

<u>Training Issues</u> - Most of the respondents agree that inspectors are encouraged to maintain a questioning attitude (94 percent). Three quarters of the respondents agree that adequate training is provided to effectively implement the ROP. Only 59 percent agree that adequate training is available for the safety culture aspects of the ROP inspection procedures and manual chapters. The staff plans to evaluate the effectiveness of the safety culture initiative, including inspector training, and compile lessons learned during CY 2007.

There were 7 questions included in this area of the survey. This is a new area added to the 2006 survey. Two similar training questions were included in the 2004 survey. The percentage increased in both questions during this survey.

Other Issues - Three quarters of respondents agree that the resources needed to oversee licensees using the ROP are appropriate. Sixty-eight percent agree the ROP fosters a long-term self-improvement by the licensees. 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 (90 percent). Many survey respondents also agree that the information provided by the NRC appropriately keeps the public informed of the agency oversight activities related to the plants (89 percent) and that issuing non-cited violations and relying on licensees' corrective action programs provide an adequate approach to resolve issues of very low safety significance (i.e., Green findings) (80 percent).

Regarding new questions, 70 percent agree that the ROP appropriately integrates and provides insights to cross-cutting issues. Only 62 percent agree that the ROP safety culture enhancements help in identifying licensee safety culture weaknesses. The staff plans to evaluate the effectiveness of the safety culture initiative and compile lessons learned during CY 2007.

There were 7 questions included in this area of the survey. This area represented various aspects of the ROP (i.e., resources, oversight, safety culture).

Common Themes from Specific Internal Comments - In contrast to the highly favorable percentages in the question responses, some respondents provided critical comments on the ROP in the free-form comment sections of the survey. Several commenters noted that although the ROP has shortcomings, it is more objective and predictable than the previous assessments conducted under the subjective Systematic Assessment of Licensee Performance (SALP). In general, many respondents agree that the ROP provides appropriate identification of declining safety performance before there is a significant reduction in safety margins.

Several respondents noted that the SDP was too complex, inconsistent, and/or did not provide timely results. Several respondents believed that too much time and effort were spent obtaining and analyzing data to determine the color of a finding. The need for SDP training was also a recurring concern.

The inspection program comments were broad and far reaching across the baseline inspection program. Many respondents expressed concerns with the quality of licensee PRAs and with the sampling required in inspection procedures. Another area of the inspection program that received numerous comments was that additional focus should be dedicated to maintenance activities.

Performance indicator comments, while not overwhelmingly critical, were consistent. Some respondents believed that the credibility of the thresholds was compromised because the thresholds were set too high and failed to provide viable plant performance information. Since the green threshold is rarely exceeded (such as many of the barrier integrity PIs), it gives a false impression of licensee performance. Additionally, some respondents believe that the PIs are managed since they are not clearly defined, resulting in interpretations by the licensee that potentially mask actual performance.

Other themes from the comments were that the handling of cross-cutting issues is unclear and inconsistent, that inspector feedback is not adequately addressed and resolved, and that NRC enforcement actions are not adequately incorporated into the ROP.

Comparison of November 2004 and November 2006 Surveys - The staff last conducted an internal survey in November 2004. Responses to the 2004 survey were generally favorable. The majority of respondents indicated that the ROP provided appropriate assurance that plants were operated safely and that appropriate regulatory attention was provided to licensees with performance problems, resulting in a realistic approach to oversight.

The 2006 survey experienced a significant increase of 27 percent in participation from the 2004 survey. The results represent a good cross-section of ROP users. The average percentage of agreement for the questions in the 2006 survey is more than 76 percent; a noted increase from the 2004 survey. Overall, there were improvements in level of agreement (on average 5 percent to 6 percent) across all areas of the ROP as compared to the 2004 survey results. The vast majority of the responses showed an increase in stakeholder satisfaction when compared to previous results. Several areas of the ROP experienced a significant increase up to 15 percent. Each of the major topic areas demonstrated overall improvement and an increase in stakeholder satisfaction when compared to the previous survey. The topic area that showed the greatest improvement was feedback forms. Every question regarding the feedback forms showed a noticeable improvement over the previous survey (4 out of 4), with an average increase of more than 7 percent. Two other sections that significantly improved were the SDP and performance indicators. The SDP sections showed improvement in all 9 questions with an average increase of nearly 5 percent. Performance indicators had an improvement in 6 out of 7 questions.

Stakeholder Survey Conclusions

The responses from the surveys of both internal and external stakeholders were generally in line with responses from previous years, as were the number and distribution of the responses. The responses were generally positive, with some concerns being raised in each of the ROP program areas. The feedback from these surveys has been or will be considered in modifying the appropriate areas of the ROP. Further discussion and analysis of the survey results are included in the applicable portions of the program evaluations in Enclosure 1 to this paper as

well as in the ROP performance metric report (reference ML070720085). 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 recently developed ROP Web page entitled "ROP Program Evaluations and Stakeholder Feedback."