

Reactor Oversight Process Program Area Evaluations

In accordance with Inspection Manual Chapter (IMC) 0307, "Reactor Oversight Process Self-Assessment Program," dated March 23, 2009, the U.S. Nuclear Regulatory Commission (NRC) staff evaluated all four key program areas of the Reactor Oversight Process (ROP). The four areas are (1) the performance indicator (PI) program, (2) the inspection program, (3) the significance determination process (SDP), and (4) the assessment program. The annual ROP performance metric report provides data and a staff analysis for all of the program area metrics (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14056A211). Because there were no stakeholder surveys in calendar year (CY) 2013, those metrics in the program areas that are based on stakeholder perception were not applicable in these evaluations. The staff plans to revise the ROP metrics in CY 2014 so that ROP performance will be measured in a more objective manner that is less reliant on the subjective views and perceptions of a limited number of stakeholders. The results of the staff's review are provided below.

Performance Indicator Program

The PI program continued to provide insights into plant safety and security. The staff and industry made several improvements to the PI program guidance in 2013 during ROP Working Group meetings and using feedback from internal stakeholders. The ROP met all of the applicable PI program metrics for CY 2013.

The NRC staff initiated updates to the public PI Web site to support openness and transparency of the PI program. The current assessment period for each specific PI is defined within its respective display graph such that stakeholders can easily identify the assessment period for each PI. The staff presented a white paper that discusses PI validity during and following extended shutdown to industry representatives at a public ROP Working Group meeting. In support of this effort, the industry performed a sensitivity simulation on Mitigating System Performance Index (MSPI) indicators to assist in determining the validity of MSPI during extended shutdowns and subsequent startups. The staff is soliciting feedback from industry on the PI validity proposal. The staff will revise ROP guidance, as necessary, when an approach and infrastructure for determining PI validity is finalized.

NUREG-1022, "Event Reporting Guidelines: 10 CFR 50.72 and 50.73," Revision 3, was issued in February 2013. The goal of the revision was to clarify current regulatory requirements. Numerous internal and external stakeholders were involved during the revision process. NUREG-1022, Revision 3 reiterated that the inadvertent inoperability of a safety-related structure, system, or component is a reportable event. This has resulted in an increase in event reports in some cases. For example, certain sites have been affected due to the momentary inoperability of the secondary containment. These inoperabilities are primarily due to (1) inner and outer secondary containment doors being inadvertently open at the same time during personnel entry and exit and (2) inadvertent loss of secondary containment vacuum. The safety system functional failure (SSFF) performance indicator (PI) is tied to event reporting. As a result, some staff and industry have expressed a concern regarding clarifications made in NUREG-1022 and its impact on the SSFF PI. In addition, regional staff has expressed a concern with current PI guidance, contained in NEI 99-02, which suggests that all events reportable under NUREG-1022 may not be reportable under the Safety System Functional Failure PI. Specifically, that an engineering analysis may be performed to justify that

a reportable event may not be counted as a SSFF PI provided the system's safety function was maintained. Staff is pursuing several options at this time including internal and external communications, a potential Regulatory Information Summary and Enforcement Guidance Memorandum, and in the longer term, modifications to plant Technical Specifications for the few facilities that do not currently have provisions in their Technical Specifications. The staff will continue to work with stakeholders in CY 2014 to address their concerns through the bi-monthly ROP working group public meetings.

Over the past year, the staff and industry representatives on the ROP Working Group have continued to make significant progress on a white paper regarding probabilistic risk assessment (PRA) technical adequacy to support MSPI indicators. The industry initiated this effort because the guidance in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guideline," needed to be updated to reflect the current American Society of Mechanical Engineers (ASME)/American Nuclear Society (ANS) Standard (ASME/ANS RA-Sa-2009). In addition, this effort will also address the need for guidance on the configuration control program. The staff planned to complete this activity in CY 2013; however, because of its complexity and the need to resolve numerous program issues, the ROP Working Group has not yet finalized the white paper. Upon finalization of this paper, the guidance will be incorporated into NEI 99-02.

The staff and industry representatives of the ROP Working Group discussed the technical basis and the metric for the Reactor Coolant System (RCS) Leakage PI. The staff received feedback through the ROP feedback process that the RCS Leakage PI neither directly nor indirectly supports the PI objective as described in IMC 0308, Attachment 1, "Technical Basis for Performance Indicators." Specifically, the submitter of the feedback recommends changing the data source of the RCS Leakage PI to measure unidentified RCS leakage and consider counting actual RCS pressure boundary leakage occurrences to accurately support the PI technical basis. Currently, the RCS leakage PI uses identified RCS leakage as its data source. The staff submitted a white paper on the topic and proposed several potential resolutions for the ROP Working Group to consider. In response, industry representatives of the ROP Working Group conveyed that changing the data source to unidentified RCS leakage would be problematic and make the PI more susceptible to spuriously crossing the Green-White threshold. The staff and industry representatives of the ROP Working Group plan to continue to discuss this issue in CY 2014.

In CY 2013, the staff identified the potential need for a revision to the PI in the Security Cornerstone. While the current PI still provides staff with data related to the reporting of Intrusion Detection System availability, the staff recognized that the guidance may need to be revised to accurately reflect the advancement of technologies in this area. In the interim, the staff has confidence in the NRC Baseline Inspection Program to ensure safe and secure operations in the Security Cornerstone. Additionally, the staff is considering additional security PIs in the areas of protective strategy implementation and evaluation. The Office of Nuclear Security and Incident Response (NSIR) will discuss this possibility and explore its feasibility with the industry and other key stakeholders in CY 2014 with a projected pilot period to begin in CY 2016.

The staff continued efforts to improve and clarify the PIs within the Emergency Preparedness cornerstone. The Drill/Exercise Performance PI was revised to clarify the difference between offsite notification PI timeliness criteria and offsite notification regulatory compliance criteria.

Additional guidance includes the clarification that when an emergency action level declaration is announced by the licensee's decision maker, the classification is considered complete for the purpose of evaluating PI accuracy and timeliness. The staff and industry are currently working to revise the plant-specific guidance in Appendix D to NEI 99-02 related to the Alert and Notification System (ANS) Reliability PI. The revised guidance will address documenting siren reliability status for sirens that are within the licensee's Emergency Planning Zones but not part of their ANS design report approved by Federal Emergency Management Agency.

The staff evaluated the appropriateness of existing PIs and the related thresholds for new reactors in SECY-13-0137, "Recommendations for Risk-Informing the Reactor Oversight Process for New Reactors," as directed in the staff requirements memorandum (SRM) for SECY-12-0081, "Risk-Informed Regulatory Framework for New Reactors." The staff concluded that many of the PIs are based on regulations or standards that would also apply to new reactor designs and that many of the thresholds are deterministic. The staff noted that for the unplanned scrams with complications indicator in the Initiating Events cornerstone, a complicated scram for new reactor designs would need to be defined. As previously noted in SECY-12-0081, a risk-informed alternative to the MSPI indicators in the Mitigating Systems cornerstone would need to be developed for new reactor applications. The staff concluded that the remaining PIs and related thresholds could apply to new reactors. Pending Commission approval, the staff plans to further analyze the current PIs and thresholds and will attempt to develop appropriate PIs and thresholds for new reactor licensees, particularly in the Mitigating Systems cornerstone. If the staff determines that appropriate PIs and thresholds are not feasible for new reactor licensees, the staff plans to develop additional inspection guidance to address any shortfalls to ensure that all cornerstone objectives are adequately assessed.

Industry's guidance for reporting PI data, NEI 99-02, Revision 7 was issued in CY 2013. Revision 7, which incorporated all approved frequently asked question (FAQ) resolutions through March 2013, became effective October 2013. Industry recommends continuously updating NEI 99-02 with FAQ resolutions going forward to provide more current guidance for licensees and NRC staff. This proposal will be evaluated and considered in CY 2014.

The staff will continue to review PI effectiveness and evaluate whether the PIs are providing meaningful information as part of its monthly ROP Working Group meetings and through the FAQ process, consistent with the suggestion from the Commission-directed independent review in CY 2013. In addition, the staff will continue to develop messages to enhance stakeholder understanding of how the PIs contribute to the NRC's assessment of plant safety and licensee performance as part of its ongoing efforts to improve communication and openness under the ROP enhancement project.

Inspection Program

NRC inspectors independently verified that plants were operated safely and securely. All applicable inspection program metrics were met in CY 2013, including the completion of the required baseline inspection program. Headquarters and regional staff and management initiated the ROP enhancement project to improve ROP effectiveness, including the effectiveness of the baseline inspection program (BIP). The Office of Nuclear Reactor Regulation (NRR) and regional staff continued their support of Fukushima-related audit and inspection activities. Resident and senior resident inspector demographics and site staffing were evaluated as discussed in Enclosure 5, "Resident Inspector Demographics."

Each NRC Region completed the baseline inspection program in CY 2013 and documented its completion in a memorandum available under ADAMS Accession No. ML14041A037 for Region I, ADAMS Accession No. ML14045A362 for Region II, ADAMS Accession No. ML14045A382 for Region III, and ADAMS Accession No. ML14050A152 for Region IV. In addition, the agency completed all security baseline inspections in CY 2013 as documented in a memorandum from NSIR (ADAMS Accession No. ML14016A237), but this memorandum contains security-related information and is not publicly available. Region IV staff deferred completion of two Component Design Bases Inspections from 4th quarter 2013 to 1st quarter 2014 because of the October 2013 Government shutdown, but the region still satisfied the baseline completion requirement as stipulated in IMC 2515, "Light-Water Reactor Inspection Program – Operations Phase." IMC 2515 allows up to four inspection procedures per Region to not be completed to provide for unanticipated disruptions in inspection scheduling that unavoidably cause a delay in completion. The program is considered complete if at least the minimum inspection requirements will be completed as soon as possible within the quarter immediately following the annual inspection cycle.

The staff initiated the ROP enhancement project in CY 2013 to determine if the ROP is meeting its objectives and to identify areas for improvement. For the inspection portion of the project, headquarters and regional staff and management performed an in-depth review of the baseline inspection program (BIP) and will finalize their report during CY 2014. The goals established for this portion of the project included enhancing the BIP to incorporate the inspection areas for the current environment, eliminate redundant or no longer necessary inspection areas, maximize efficient and effective use of our resources, and incorporate flexibility where appropriate. The baseline inspection procedures were divided into 10 inspection areas. Additionally, special topics were identified as areas that should be included in the enhancement effort (1) based on feedback from stakeholders, (2) because of the potential for these areas to impact the BIP, and (3) as a result of the current regulatory environment. Two public meetings were held to solicit feedback and discuss the BIP portion of the ROP enhancement project.

The BIP portion of the ROP enhancement project has three main phases: (1) analysis of the inspection areas and associated procedures, (2) documentation of recommendations, and (3) actions to address the recommendations including proposing changes to inspection areas and associated procedures. For the analysis phase, the champions and key branch chiefs gathered information from the inspection procedure analysis completed by the inspection procedure owners, inspectors and subject matter experts, special groups and reports, lessons learned, recent events, and inspections to analyze their assigned inspection areas. The analysis included insights from applicable sections of the Commission-directed independent review of the ROP draft report and recent reports from the Office of the Inspector General (OIG) on topics that involved the BIP. The final report will be issued and made publicly available in CY 2014 and it will capture the recommendations from the BIP enhancement team.

The independent review of the ROP was conducted in CY 2013 as directed by the Commission in the SRM for SECY-12-0081. The report identified eight recommendations and ten suggestions for improving the ROP, many of which had already been identified by the staff and put into the scope of the ROP enhancement project. For example, one recommendation was to include a risk-informed periodic review of licensee programs or actions to address generic issues. This recommendation is being addressed in the BIP portion of the ROP enhancement project in the special topic of operating experience. Another recommendation is to clarify ROP

program expectations for instances when performance issues are common to multiple facilities. This recommendation was addressed during the recent revision to Office Instruction COM-106, "Control of Task Interface Agreements." The staff will continue to discuss and assess the NRC's handling of performance issues that are common to multiple facilities as needed through the public ROP Working Group meetings. The suggestion to use periodic inspector counterpart seminars, training, and mentoring as opportunities to ensure that inspectors and managers have a common understanding of the inherent flexibilities in the ROP inspection program is addressed under the BIP portion of the ROP enhancement project. The topic of flexibility was also discussed during a counterpart meeting as part of the internal outreach and information collection for the BIP project. The staff will continue to consider the topic for future counterpart meetings.

As further discussed below in the assessment program evaluation, IMC 2515 was revised to state that additional inspection may be used to evaluate emerging technical issues not related to licensee performance issues, and that this additional inspection is not considered an Action Matrix deviation. One example is the extensive staff resources dedicated to inspection to resolve the Seabrook alkali-silica reaction issue. IMC 2515 was also revised to state that licensees will no longer be subjected to the ROP and will transition to the decommissioning inspection program after a licensee submits a written certification to cease operation in accordance with 10 CFR 50.82(a)(1)(ii).

Additionally, in CY 2014, NRC staff will evaluate the inspection program to address recommendations from several independent evaluations, including: (1) The Government Accounting Office audit report 13-743, "Analysis of Regional Differences and Improved Access to Information Could Strengthen NRC Oversight," dated September 27, 2013 (ADAMS Accession No. ML13290A611); (2) OIG report 13-A-14, "Audit of NRC's Safety Training and Development for Technical Staff," dated March 14, 2013 (ADAMS Accession No. ML13073A183); and (3) the OIG audit report on the effectiveness of NRC support provided to resident inspectors at nuclear power plants, fuel-cycle facilities, and construction sites, which will be issued in early CY 2014.

The inspection staff developed and issued Temporary Instruction (TI) 2515/189, "Inspection To Determine Compliance of Dynamic Restraint (Snubber) Program with 10 CFR 50.55a Regulatory Requirements for Inservice Examination and Testing of Snubbers," and TI 2515/190, "Inspection of the Licensee's Proposed Interim Actions as a Result of the Near-Term Task Force Recommendation 2.1 Flooding Evaluation." The NRC staff conducted seven flooding and six seismic regulatory audits at selected operating reactors to gain a better understanding of the flooding and seismic walkdown methods and associated procedures used by licensees to prepare the flooding and seismic walkdown report and to assist the staff in preparing its safety assessment. These actions follow the March 12, 2012, NRC request for information letter per Title 10 to the *Code of Federal Regulations* (10 CFR), Subpart 50.54(f). The request addressed, in part, that licensees perform flooding and seismic walkdowns to identify and address degraded, non-conforming, or unanalyzed conditions through the corrective action program, and to verify the adequacy of the monitoring and maintenance procedures.

On March 12, 2012, the NRC issued Order EA-12-049, "Mitigation Strategies for Beyond-Design-Basis External Events" (ADAMS Accession No. ML12054A736), requiring holders of operating licenses and construction permits issued under 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," to submit Overall Integrated Plans, including

descriptions of how compliance with the requirements of Attachment 2 of the order will be achieved. NRC staff are conducting onsite audits during CY 2014 to confirm or evaluate mitigating strategies as described in licensee submittals, and to receive and review with site staff, information relative to open items from the interim safety evaluations related to licensee's compliance with NRC Order EA-12-049.

The staff developed and implemented training in CY 2013 to ensure that the inspectors remain efficient and effective in their inspection activities. The staff conducted training on safety culture common language for nuclear power reactors to ensure clearer and more consistent communication between the NRC and industry. The staff developed refresher training on the operability determination process that will be conducted in CY 2014. In response to an OIG audit, a training needs assessment will be conducted in CY 2014 to evaluate the effectiveness of training programs used to certify different types of inspectors. This assessment will be used to improve training and to inform a learning transformation initiative that seeks to identify delivery methods that improve access to learning materials, reduce travel, and shorten time to qualification. The staff plans to conduct training on the use of Standardized Plant Analysis Risk (SPAR) model tools in CY 2014. In addition, NSIR staff conducted training before implementing the newly revised baseline inspection procedures. Training on systems and target sets was also provided to the cyber technical contractors to enhance their support of cyber security inspection activities.

Significance Determination Process

The SDP continues to be an effective tool for determining the safety and security significance of inspection findings. In CY 2013, the staff implemented several improvements to the SDP guidance and made significant progress in other initiatives. The staff met the SDP timeliness metric for an eighth consecutive year and all other applicable SDP performance metrics were met for CY 2013.

NRR staff made significant improvements to IMC 0609, Appendix F, "Fire Protection Significance Determination Process," and issued a revision to both IMC 0609, Appendix F, and IMC 0609, Appendix F, Attachment 1, "Fire Protection Significance Determination Process Worksheet," in September 2013. These revisions expanded the qualitative screening approach to better enable the staff to screen very low safety significant (Green) findings. NRR staff also made progress in revising IMC 0609, Appendix G, "Shutdown Operations Significance Determination Process," and IMC 0609, Appendix G, Attachment 1, "Phase 1 Operational Checklists for Both PWRs and BWRs," and plans to finalize these revisions in CY 2014. These revisions will improve usability and effectiveness of the screening tool for findings involving shutdown operations.

The SDP Business Process Improvement (BPI) project team continued work throughout CY 2013 and completed the Define, Measure, and Analyze phases. The project team has developed recommendations and will brief management in early CY 2014. The recommendations are categorized into four different improvement areas: communications, management, coordination, and policy. After the recommendations are approved by management, the BPI project team will establish an implementation plan and begin incorporating improvements by the end of CY 2014. The suggestion by the independent assessment team that Significance and Enforcement Review Panel (SERP) members should be provided with periodic training or briefings regarding the uncertainties inherent in the agency's

PRA tool outputs and the use of PRA quantitative results in SERP decisionmaking also was identified by the SDP BPI team and is a recommendation in the BPI final report.

The staff continued to address comments and solicit technical support from internal stakeholders regarding a draft SDP for spent fuel pool (SFP) findings. In recent years, many hours of engineering and risk analysis support from both regional and headquarters staff were expended to characterize the safety significance of several SFP findings. The purpose of the draft SDP is to provide an efficient, structured, and predictable process for characterizing the safety significance of SFP findings. In order to proceed, the staff determined that a dedicated working group consisting of expertise from a variety of technical disciplines would be needed to develop an SFP SDP that effectively and efficiently dispositions safety significance. This initiative will likely be deferred pending availability of resources. Alternatively, IMC 0609, Appendix M, "Significance Determination Process Using Qualitative Criteria," may continue to be the preferred tool for characterizing the safety significance of SFP inspection findings.

The staff continued to evaluate the best approach to estimate the safety significance of findings associated with licensed operator performance. The staff proposed adding a new table to IMC 0609, Appendix M, that focuses on qualitative attributes of licensed operator performance issues. After incorporating feedback from internal stakeholders, the staff reconsidered this approach and is now revising the wording in the current table in IMC 0609, Appendix M, to make it more applicable to all types of findings. Additional guidance will be added as well to elaborate on the different types of findings and how each of them can be implemented using a single table in Appendix M. The proposed draft to IMC 0609, Appendix M, will go out for comment in CY 2014.

In January 2013, the staff issued revision 2.0 to the Risk Assessment Standardization Project (RASP) Handbook, Volume 1, "Internal Events." This revision was undertaken as part of ongoing NRC initiatives to provide guidance on PRA methods and best practices for consistency in risk significance assessment of inspection findings and reactor incidents. The staff added several new modules in the areas of common cause failure, initiating event assessment, human reliability analysis, treatment of loss of offsite power initiating events, and support system initiating events assessments. In May 2013, the staff held a public meeting to discuss these new modules with external stakeholders and industry. Industry representatives expressed concerns with the guidance on initiating events analyses and the minimum threshold value on joint human error probabilities. Regarding the guidance on initiating events analyses, there were questions regarding the use of an event assessment conditional core damage probability (CCDP) metric to assess the safety significance of inspection findings that result in initiating events. The specific concern was that the January 2013 revision to the RASP Handbook, Volume 1, described an evaluation method that uses the CCDP metric for assessing risk significance. The explicit use of the CCDP metric in SDP evaluations of inspection findings that result in initiating events is not described in the SDP program guidance in IMC 0308, Attachment 3, "Significance Determination Process Basis Document." The staff discussed the issue at several ROP Working Group public meetings in 2013 and held a separate public meeting to discuss the specific concerns on November 4, 2013. In CY 2014, the staff plans to hold additional public meetings to discuss alternative, viable approaches to the use of event assessment CCDP in the SDP and will propose revisions to applicable guidance based on the outcomes of these discussions. Should proposed revisions involve potential changes in Commission policy, the staff will seek Commission direction before pursuing any changes to ROP program documents.

The staff enhanced IMC 0609, Appendix E, Part II, “Force-on-Force Significance Determination Process,” based on lessons learned and to incorporate both internal and external stakeholder input. Staff also revised IMC 0609, Appendix E, Part I, “Baseline Security Significance Determination Process for Power Reactors,” to account for revisions to the inspection program such as reducing redundancies and additional programmatic changes to increase efficiencies.

The staff issued a new appendix to IMC 0612, Appendix G, “Emergency Planning Cornerstone-Specific Supplemental Guidance for Appendix B Screening Figures 1 and 2,” that provides specific inspection guidance originally located in IMC 0609, Appendix B, “Emergency Preparedness Significance Determination Process.” Staff plans to revise IMC 0609, Appendix B, to remove the relocated guidance and to make other enhancements to the document based on stakeholder feedback.

The staff reached out to internal stakeholders to identify any specific training deficiencies in the use and understanding of the SDP guidance. After discussions with regional stakeholders, the inspection staff noted that additional training on the use of SPAR model tools, specifically the SDP workspace and Plant Risk Information eBook, would be beneficial. The staff will develop these additional training materials and work with regional staff to determine the most effective implementation plan.

Assessment Program

The staff’s implementation of the assessment program ensured that the staff and licensees took appropriate actions to address performance issues in CY 2013, commensurate with their safety significance. All applicable assessment metrics met their established criteria in CY 2013. The staff opened one new Action Matrix deviation in CY 2013 at the Perry Nuclear Power Plant. The deviation was requested to maintain the plant in the Degraded Cornerstone column of the ROP Action Matrix when licensee performance met the criteria for entry into the Multiple/Repetitive Degraded Cornerstone column. The staff pursued this deviation because the licensee had not exhibited indications of significant performance problems in areas other than the Occupational Radiation Safety Cornerstone. Therefore, the regulatory actions specified for the Degraded Cornerstone column of the Action Matrix were deemed more commensurate with the licensee’s safety performance. The staff subsequently completed the supplemental inspection, and the deviation was closed. The staff evaluated the deviation to determine if any program changes were needed. As a result of that review, the staff generated a feedback form to consider revising the definition of “repetitive degraded cornerstone.” The staff is evaluating the appropriateness of the criteria for Action Matrix columns under the scope of the ROP enhancement project as discussed below, and will consider this feedback in that effort.

Because of Action Matrix deviations issued in CY 2012, IMC 0305, “Operating Reactor Assessment Program,” was revised in CY 2013 to specify that the application of additional resources to evaluate issues not related to licensee performance is not considered a deviation from the Action Matrix. This revision ensured the Action Matrix deviation process is focused on regulatory action that is inconsistent with the range of actions described in the pertinent column of the Action Matrix. Similarly, IMC 2515 was revised to state that additional inspection may be used to evaluate emerging technical issues not related to licensee performance issues, and that this additional inspection is not considered an Action Matrix deviation. These revisions address

the suggestion by the independent assessment team to expand IMC 0305 guidance to allow more efficient management decisions on resources needed to address oversight at plants with unique, ongoing, technical challenges.

The staff initiated the ROP enhancement project in CY 2013 to take a fresh look at the ROP to determine if the ROP is meeting its objectives and to identify areas for improvement. For the assessment portion of the project, the staff is considering issues such as the timeliness of supplemental inspections, long-standing substantive cross-cutting issues (SCCIs), and the criteria for entry into the Regulatory Response and Degraded Cornerstone columns of the Action Matrix. The staff held a public meeting on November 21, 2013, to discuss the scope of the assessment portion of the enhancement project with industry and members of the public. Industry recommended eliminating SCCIs from the ROP in favor of another process to assess safety culture. The staff initiated an effectiveness review of the SCCI process to determine if it has accomplished what it was intended to.

The staff held a public meeting with industry representatives on February 5, 2014, to discuss the basis and the history of the SCCI process, and to listen to industry concerns with the process. According to industry, the SCCI process results in large expenditures of resources without any appreciable safety benefit. During the meeting, industry representatives proposed and discussed an alternative approach to oversight of safety culture. Staff is evaluating the proposed alternative, as well as other options for modifying or replacing the current SCCI process under the scope of the ROP enhancement project, and plans to hold additional public meetings on the subject. The current SCCI process was implemented in response to Commission direction in SRM-SECY-04-0111, "Recommended Staff Actions Regarding Agency Guidance in the Areas of Safety Conscious Work Environment and Safety Culture," to enhance the ROP treatment of cross-cutting issues to more fully address safety culture. Should internal and external stakeholders identify preferred options that involve potential changes in Commission policy, the staff will seek Commission direction before proceeding with program adjustments.

On February 18, 2014, an independent review of the ROP was completed, as directed by the Commission in the SRM for SECY-12-0081. The report identified eight recommendations for improving the ROP. Several of the recommendations had already been identified by the staff and put into the scope of the assessment portion of the ROP enhancement project. For instance, the report made a recommendation to clarify expectations for the timing of supplemental inspections for the Multiple/Repetitive Degraded Cornerstone column (Column 4) of the Action Matrix. Staff has identified several options to address supplemental inspection timeliness as part of the enhancement project. The report also recommended the staff review the criteria for transition to the Degraded Cornerstone column (Column 3) of the Action Matrix. This issue also was identified by staff as the scope of the enhancement project evolved in CY 2013. In addition, the report recommended that the staff perform a comprehensive analysis to determine whether the use of cross-cutting issues and safety culture provides regulatory value in terms of licensee safety performance for the resources expended. Staff is currently finalizing the SCCI effectiveness review and changes or alternatives to the SCCI process as part of the enhancement project. The staff has completed the effectiveness review of the SCCI process, and is completing documentation of the conclusions from that effort. The staff intends to disposition these recommendations and several suggestions from the independent ROP review through the ROP enhancement project. Enclosure 2 summarizes the staff actions to disposition the recommendations and suggestions from the report.

The staff continues to monitor the reintegration of the Security Cornerstone into the assessment program to ensure regulatory response outcomes remain reliable and appropriate. The staff continues to monitor communication with internal and external stakeholders to ensure that security-related information is not publicly released. The staff had reintegrated the Security Cornerstone into the assessment program in July 2012 as described in SECY-11-0073, "Staff Proposal to Reintegrate Security into the Action Matrix of the Reactor Oversight Process Assessment Program," and in accordance with the resultant SRM. The staff believes the reintegration continues to be an effective and appropriate program adjustment, and no additional concerns have been identified. The staff will continue to perform integrated assessments of licensee's performance while ensuring that security-related information is not publicly released.

During CY 2013, Browns Ferry Unit 1 remained in the Multiple/Repetitive Degraded Cornerstone (Column 4), and Fort Calhoun remained under the oversight process of IMC 0350, "Oversight of Reactor Facilities in a Shutdown Condition Due to Significant Performance and/or Operational Concerns." In December 2013, the NRC authorized restart of Fort Calhoun; however, the licensee will remain under oversight of the IMC 0350 oversight panel until the plant transitions back to the ROP. The staff will discuss the status of Browns Ferry's and Ft. Calhoun's performance during the Agency Action Review Meeting (AARM) in April 2014 and the subsequent Commission meeting on the results of the AARM.

The staff engaged with the Institute for Nuclear Power Operations (INPO), NEI, and other external stakeholders to develop a common safety culture language for nuclear power reactors. This language, which better aligns the industry's language with the NRC's language to improve clarity and facilitate a mutual understanding of licensee performance, was documented in INPO 12-012, "Traits of a Healthy Nuclear Safety Culture," and the meeting summary from the January 2013 workshop (ADAMS Accession No. ML13038A054). The staff also developed a NUREG to formally document the common language for all NRC programs in CY 2013. NUREG-2165, "Safety Culture Common Language," was published in March 2014.

The staff formed a multi-disciplined working group with representatives from both headquarters and each region to evaluate and incorporate the safety culture common language into the ROP. The resultant changes were reflected in a draft revision to IMC 0310, "Components Within the Cross-Cutting Areas." This draft revision was sent to internal stakeholders for review and comment and was made publicly available. The changes to IMC 0310 simply incorporated the common-language terminology into the ROP and do not affect the process for applying cross-cutting aspects (CCAs) to inspection findings or evaluating cross-cutting themes. The staff discussed the changes and implementation plans and gathered feedback during a focused public meeting in November 2013, and the status of the project was discussed during several ROP working group public meetings and Regional Utility Group meetings.

The staff issued the revised IMC 0310, "Aspects within the Cross-Cutting Areas," on December 19, 2013. The new terminology and CCA codes became effective on January 1, 2014, and will be applied to NRC inspection findings for inspections in 2014 and beyond. Other affected ROP documents have been identified for conforming changes, and the NRC inspection program software has been revised to accommodate the changes. NRC inspectors and management were trained on the revised guidance in December 2013, and the staff described the changes in an article in the January 2014 inspector newsletter. The staff

also posted an NRC blog in January 2014 to communicate with external stakeholders on the safety culture common language changes to the ROP.

The staff noted in the December 2013 training sessions and in other venues that the impact of these changes on the ROP assessment program would include: (1) the CY 2013 End-of-Cycle Meetings will be conducted in accordance with existing guidance using the CCAs that are in effect as of December 2013; (2) the annual assessment letters will reflect the CY 2013 CCAs and mention the planned implementation of common language CCAs for CY 2014 and beyond; (3) annual assessment letters that discuss SCCIs or cross-cutting themes will include a cross reference to the new CCAs for continuity and clarity going forward; (4) the CY 2014 mid-cycle meetings will be conducted in accordance with the revised CCA guidance; and (5) CCA terminology for inspection findings from the 2nd half of CY 2013 will be converted to the new terminology such that only the common language CCAs will be considered during the CY 2014 mid-cycle assessments. Although these terminology changes do not affect the process for applying CCAs to findings or evaluating cross-cutting themes, more substantive process changes are being considered as part of the ROP enhancement effort as previously discussed.