INSPECTION PROCEDURE 950X2

SUPPLEMENTAL INSPECTION FOR ONE DEGRADED CORNERSTONE OR ANY THREE WHITE INPUTS IN A STRATEGIC PERFORMANCE AREA FOR FUEL CYCLE FACILITIES

PROGRAM APPLICABILITY: 2600

CORNERSTONES: ALL

INSPECTION BASIS: The U.S. Nuclear Regulatory Commission's (NRC's) fuel cycle facility inspection program includes three parts: baseline inspections; generic safety issues and reactive inspections; and supplemental inspections performed as a result of risk-significant performance deficiencies. The inspection program is designed to apply NRC inspection resources in an increasing manner when risk-significant performance deficiencies are identified through inspection findings. The NRC regional offices will perform a supplemental inspection following the identification of an inspection finding categorized as risk-significant (i.e., white, yellow, or red) in accordance with the fuel cycle significance determination process (FCSDP). The scope and breadth of these inspections will be based on the guidance provided in the NRC's assessment "Action Matrix," as described in Inspection Manual Chapter (IMC)–RFCOP-2604, "Fuel Cycle Facility Assessment Program," and the Supplemental Inspection Table included in IMC-RFCOP-2600, "Fuel Cycle Facility Operational Safety and Safeguards Inspection Program," Appendix B, "Supplemental Inspection Program." The supplemental inspection program is designed to support the NRC's goals of ensuring safety and security.

This procedure provides the supplemental response for one degraded cornerstone or three white inputs in a strategic performance area. The guidance provided in this

procedure was developed with consideration of the following boundary conditions:

- Supplemental inspections will not be done for single or multiple green issues;
- The baseline IP for identification and resolution of problems (i.e., IP 88152, "Fuel Cycle Facility Identification and Resolution of Problems") is independent of the supplemental response;
- The inspection requirements contained in this procedure will be completed when a degraded cornerstone or three white issues in a strategic performance area is identified; and
- New examples of performance deficiencies resulting from supplemental inspections will be evaluated and categorized in a similar manner to that of the baseline inspection program using the FCSDP.

950X2-01 INSPECTION OBJECTIVES

01.01 To provide assurance that the root and contributing causes of individual and collective (multiple white inputs) risk-significant performance deficiencies are understood.

01.02 To independently assess the extent of condition and the extent of cause of individual and collective (multiple white inputs) risk-significant performance deficiencies.

01.03 To independently determine if safety culture components (using appropriate, selected elements from IMC-RFCOP-2604) caused or significantly contributed to the individual and collective (multiple white inputs) risk-significant performance deficiencies.[1]

01.04 To provide assurance that a licensee's corrective actions for risk-significant performance deficiencies are sufficient to address the root and contributing causes and prevent recurrence.

[1] 1Although the safety culture components identified in IMC-RFCOP-2604 were established for power reactors, they may be used as appropriate, in the context of this procedure to evaluate the corrective actions identified to address the case at hand). Specific description details may need to be revised to be more applicable to the fuel cycle environment. These changes will be considered and developed in the future, in conjunction with related agency wide safety culture activities.

950X2-02 INSPECTION REQUIREMENTS

The following inspection requirements relate to the minimum set of information that the NRC will generally need to acquire in order to ensure that the causes of risk-significant performance deficiencies are identified and that appropriate corrective actions are planned or taken to prevent recurrence. While the inspection requirements are generally written to address individual performance deficiencies, this IP may also be used to assess the adequacy of the licensee's evaluations associated with multiple performance deficiencies. (Note: As the safety and safeguards inspection program is applied to facilities under 10 CFR 76, "license" shall read as "certificate," and "licensee" shall read as "certificate holder" for such facilities.) While these inspection requirements do not necessarily represent NRC requirements for the licensee, significant insufficiencies in the licensee's evaluation may require that the NRC conduct additional inspections to acquire the information independently. It is recognized that the depth of the licensee's evaluation may vary depending on the significance and complexity of the issues. In some cases, the answers to specific inspection requirements will be self-evident with little additional review or analysis required by the inspectors. This procedure also requires an independent NRC inspection to inspect the adequacy of the licensee's extent of condition and extent of cause determination. The inspection report associated with a supplemental inspection performed in accordance with this IP should contain the NRC's assessment of the licensee's evaluation for each inspection requirement. The results of a supplemental inspection should be documented in accordance with the guidance contained in IMC-RFCOP-0616, "Fuel Cycle Safety and Safeguards Inspection Reports," Appendix C, "Guidance for Supplemental Inspection Reports."

Significant insufficiencies in the licensee's actions to address the performance deficiencies, including insufficiencies relative to the failure to identify the appropriate safety culture components as described in IMC-RFCOP-2604 Appendix A[2] or to perform an adequate evaluation of the performance deficiencies, may be subject to additional agency actions, including: (1) request for the licensee to conduct an independent assessment of safety culture (IMC–RFCOP-2604 Appendix A); (2) additional enforcement actions; or (3) an expansion of this procedure as necessary to independently acquire the information necessary to satisfy the inspection requirements. Expansion of this IP may be necessary if inspectors need to independently evaluate the performance deficiency(ies) or safety culture aspects as a result of the licensee not performing its own analysis. It is not expected that inspectors perform this evaluation as part of this supplemental inspection.

In general, licensees should be given an opportunity to correct any identified deficiencies prior to re-inspection. For significant insufficiencies in the licensee's actions to address a performance deficiency associated with an inspection finding, including a substantial inadequacy in the licensee's evaluation of the root causes of the original performance

2 Although the safety culture components identified in IMC-RFCOP-2604 were established for power reactors, they may be used as appropriate, in the context of this procedure to evaluate the corrective actions identified to address the case at hand). Specific description details may need to be revised to be more applicable to the fuel cycle environment. These changes will be considered and developed in the future, in conjunction with related agency wide safety culture activities.

deficiency, determination of the extent of the performance deficiency, or the actions taken or planned to correct the issue, the original finding will remain open and will not be removed from the Action Matrix until the insufficiencies are addressed and corrected. Programmatic insufficiencies associated with the licensee's evaluation of the performance deficiency will also be documented in the inspection report by briefly describing the insufficiencies in the transmittal letter and the summary of findings section. An amplified discussion of the insufficiencies should be provided in the report details. Additional focus will be given to those areas during the next biennial problem identification and resolution (PI&R) baseline inspection performed in accordance with IP 88152.

If new or additional examples of performance deficiencies (non-programmatic) are identified during this inspection or by the licensee during their evaluation, then the new issues will be evaluated using the FCSDP.

The following inspection requirements are generally applicable for single inspection findings and multiple inspection findings. The scope of this inspection should include all white or yellow findings in the associated degraded cornerstone or strategic performance area. For example, if this procedure is being performed due to a yellow finding in the chemical safety cornerstone, the inspection scope should also include any industry white inspection findings in that cornerstone. If the procedure is being performed due to three white findings in the fuel cycle safety strategic performance area, then the inspection scope should include all white findings in the fuel cycle safety strategic performance area.

If a finding is associated with multiple events or occurrences, or if evaluations of multiple performance deficiencies are performed, then it is expected that the licensee's evaluation should address each of the events or occurrences collectively, as well as individually. In those instances where the licensee's evaluation was previously reviewed as part of a supplemental inspection performed in accordance with IP 950X1, "Fuel Cycle Facility Inspection for One or Two White Inputs in a Strategic Performance Area," a re-review of the evaluation during this procedure is not required; however, a review of the licensee's collective evaluation for multiple performance deficiencies would generally need to be performed.

02.01 <u>Problem Identification</u>

a. Determine whether the evaluation documented who identified the issue (i.e. licensee-identified, self-revealing, or NRC-identified) and under what conditions the issue was identified.

b. Determine whether the evaluation documented how long the issue existed and prior opportunities for identification.

c. Determine whether the evaluation documented the plant-specific risk consequences, as applicable, and compliance concerns associated with the issue(s) both individually and collectively.

02.02 Root Cause, Extent of Condition, and Extent of Cause Evaluation

a. Determine whether the problem was evaluated using a systematic methodology to identify the root and contributing causes.

b. Determine whether the root cause evaluation was conducted to a level of detail commensurate with the significance of the problem.

c. Determine whether the root cause evaluation included a consideration of prior occurrences of the problem and knowledge of prior operating experience.

d. Determine whether the root cause evaluation addresses the extent of condition and the extent of cause of the problem.

02.03 Corrective Actions

a. Determine whether appropriate corrective actions are specified for each root and contributing cause or that the licensee has an adequate evaluation for why no corrective actions are necessary.

b. Determine whether the corrective actions have been prioritized with consideration of risk significance and regulatory compliance.

c. Determine whether a schedule has been established for implementing and completing the corrective actions.

d. Determine whether quantitative or qualitative measures of success have been developed for determining the effectiveness of the corrective actions to prevent recurrence.

e. Determine whether the corrective actions planned or taken adequately address a Notice of Violation (NOV) that was the basis for the supplemental inspection, if applicable.

02.04 Independent Assessment of Extent of Condition and Extent of Cause.

Perform a focused inspection(s) to independently assess the validity of the licensee's conclusions regarding the extent of condition and extent of cause of the issues. In order to accomplish this objective, the inspection team leader should develop a customized inspection plan using the applicable portions of the IP(s) listed in IMC-RFCOP-2600, Appendix B. The objective should be to independently sample performance, as necessary, to provide assurance that the licensee's evaluation regarding extent of condition and extent of cause is sufficiently comprehensive. The intent is to assess the validity of the licensee's evaluation by independently sampling performance within the key attributes of the cornerstone(s) that are related to the subject performance deficiency(ies); not to re-perform

the licensee's evaluation. The results of this review should be documented in the supplemental inspection report, including the NRC's assessment of the licensee's evaluation in this area.

02.05 Safety Culture Consideration

Perform a focused inspection to independently determine whether the root cause evaluation appropriately considered whether any safety culture component caused or significantly contributed to any risk-significant performance deficiency. Use appropriate, selected components of IMC-RFCOP-2604, Appendix A in evaluating whether safety culture components were appropriately considered by the licensee. If it appears that an insufficiency in any safety culture component did cause or significantly contributed to such an issue, and the licensee's evaluation did not recognize that cause or contribution, the NRC may request that the licensee complete an independent assessment of safety culture.

02-05 Documentation

The results of the inspection will be documented in accordance with IMC-RFCOP-0616.

950X2-03 INSPECTION GUIDANCE

General Guidance

This IP is used to assess the adequacy of the licensee's evaluation of risk-significant findings. As such, a reasonable time (generally within 30-60 days) should be allowed for the licensee staff to complete their evaluation (or self assessment for multiple performance deficiencies); however, all corrective actions may not be fully completed upon commencement of the supplemental inspection. The inspection should not be scheduled until the licensee has completed its problem identification, evaluation, and corrective action plan. The licensee will normally inform the NRC by letter that these actions are completed. In the event that the licensee has not defined their corrective action plan within a reasonable time, regional management should prompt the licensee to provide the basis, including risk insights, for the delay. Implementation of the licensee's corrective actions may be verified during subsequent baseline inspections, such as the biennial PI&R inspection performed in accordance with IP 88152.

The following guidance is provided to help the inspector fulfill the specific inspection requirements contained in Section 950X2-02. It is not intended that the inspector verify that the licensee's evaluation of the performance deficiencies address every attribute contained in the inspection guidance section. The intent is that the inspector uses the guidance sections of the procedure to look for insufficiencies in the licensee's evaluation that might indicate an issue associated with one of the inspection requirements.

Definitions

Root Causes are defined as the basic reasons (i.e., hardware, process, or human performance) for a problem, which if corrected, will prevent recurrence of that problem.

Contributing Causes are defined as causes that by themselves would not create the problem but are important enough to be recognized as needing corrective action. Contributing causes are sometimes referred to as causal factors. Causal factors are those actions, conditions, or events which directly or indirectly influence the outcome of a situation or problem.

Repeat Occurrences are defined as two or more independent conditions which are the result of the same basic cause(s).

Common Cause is defined as multiple failures (i.e., two or more) of plant equipment or processes attributable to a shared cause.

Extent of Condition is defined as the extent to which the actual condition exists with other plant processes, equipment, or human performance.

Extent of Cause is defined as the extent to which the root causes of an identified problem have impacted other plant processes, equipment, or human performance.

Consequences are defined as the actual or potential outcome of an identified problem or condition.

Specific Guidance

Sections 03.01 through 03.03 apply to the licensee's evaluation of both individual and collective issues.

03.01 Problem Identification

a. The evaluation should state how and by whom the issue was identified. When appropriate, the licensee's failure to identify the problem at a precursor level should be evaluated. Specifically, the licensee's failure to identify a problem before it becomes risk-significant may indicate a more substantial problem. Examples include the licensee's failure to: (1) enter a recognized non-compliance into the corrective action program; (2) raise safety concerns to management; or (3) complete corrective actions for a previously identified problem that resulted in further degradation. If the NRC identified the performance deficiency, the evaluation should address why the licensee's processes, such as peer review, supervisory oversight, inspection, testing, self-assessments, or quality activities, did not identify the problem.

b. The evaluation should state when the problem was identified, how long the condition(s) existed, and whether there were prior opportunities for correction. For

example, if a maintenance activity resulted in an inoperable item relied on for safety (IROFS) that was not detected by post-maintenance testing or quality assurance oversight, the reasons that the testing and quality oversight did not detect the error should be included in the problem identification statement and addressed in the root cause evaluation.

c. The evaluation should address the plant-specific risk consequences of the issue. Conditions need not be assessed quantitatively, but the licensee should as a minimum use the risk processes used in the integrated safety analysis (ISA). The evaluation should also include an assessment of compliance. As applicable, some events may be more appropriately assessed as hazards to plant personnel or the public. The inspector's review of the risk assessment should be coordinated with a senior risk analyst.

The inspector's review of the risk assessment should be coordinated with a risk analyst. The risk analyst should perform an assessment of the individual risk associated with the team's findings. The risk analyst may perform a collective risk assessment by summing or qualitatively assessing the risk impacts of multiple separate or independent findings that overlap in time to gain an understanding of the aggregated or collective risk profile. When performing the collective risk assessment, it is important to clearly ascertain the time history (appropriate identification of start and end dates) of each overlapping inspection finding to reach a proper result. Assessing the collective risk from the "roll-up" of multiple related, non-overlapping independent findings or of combining all of the findings identified during the inspection would produce an artificially high risk estimate leading to incorrect conclusions.

03.02 Root Cause, Extent of Condition, and Extent of Cause Evaluation

a. The licensee's evaluation should generally make use of systematic methods to identify root and contributing causes. The root cause evaluation methods that are commonly used in nuclear facilities include:

1. Events and causal factors analysis – to identify the events and conditions that led up to an event;

2. Fault tree analysis – to identify relationships among events and the probability of event occurrence;

3. Barrier analysis – to identify the barriers that if present or strengthened would have prevented the event from occurring;

4. Change analysis – to identify changes in the work environment since the activity was last performed successfully that may have caused or contributed to the event;

5. Management Oversight and Risk Tree (MORT) analysis – to systematically check that all possible causes of problems have been considered;

6. Critical incident techniques – to identify critical actions that if performed correctly would have prevented the event from occurring or would have significantly reduced its consequences;

7. Why Staircase – to produce a linear set of causal relationships and use the experience of the problem owner to determine the root cause and corresponding solutions; and

8. Pareto Analysis – a statistical approach to problem solving to determine where to start an analysis.

The licensee may use other methods to perform root cause evaluations. A systematic evaluation of a problem using one of the above methods should normally include:

1. A clear identification of the problem and the assumptions made as a part of the root cause evaluation.

   For example, the evaluation should describe the initial operating conditions of the system or component identified, staffing levels, and training requirements, as applicable.

2. A timely collection of data, verification of data, and preservation of evidence to ensure that the information and circumstances surrounding the problem are fully understood. The analysis should be documented such that the progression of the problem is clearly understood, any missing information or inconsistencies are identified, and the problem can be easily explained or understood by others.

3. A determination of cause and effect relationships resulting in an identification of root and contributing causes which consider potential hardware, process, and human performance issues. For example:

   (a) Hardware issues could include design, materials, systems aging, and environmental conditions;

   (b) Process issues could include procedures, work practices, operational policies, supervision and oversight, preventive and corrective maintenance programs, and quality control methods; and

   (c) Human performance issues could include training, communications, human-system interface, and fitness for duty.

b. The root cause evaluation should be conducted to a level of detail that is adequate for the significance of the problem. Different root cause evaluation methods

provide different perspectives of the problem. In some instances, using a combination of methods helps ensure the analysis is thorough. Therefore, the root cause evaluation should consider evaluating complex problems, which could result in significant consequences, using multi-disciplinary teams and/or different and complimentary methods appropriate to the circumstances. For example, problems that involve hardware issues may be evaluated using barrier analysis, change analysis, or fault trees.

The depth of a root cause evaluation is normally achieved by completely and systematically applying the methods of analysis described in Section 03.02.a and by repeatedly asking the question "Why?" about the occurrences and circumstances that caused or contributed to the problem. Once the analysis has developed all of the causes for the problem (i.e., root, contributing, and programmatic), the evaluation should also look for any relationships among the different causes. The depth of the root cause evaluation may be assessed by:

1. Determining that the questioning process appeared to have been conducted until the causes were beyond the licensee's control.

   For example, problems that were initiated by an act of nature, such as a lightning strike or tornado, could have the act of nature as one of the causes of the problem. The act of nature would not be a candidate root cause, in part, because the licensee could not prevent it from happening again. However, a licensee's failure to plan for or respond properly to acts of nature would be under management control and could be root causes for the problem.

2. Determining that the problem was evaluated to ensure that other root and contributing causes were not inappropriately ruled out due to assumptions made as a part of the analysis.

   For example, a root cause evaluation may not consider the adequacy of the design or process controls for a system if the problem appears to be primarily human performance focused. Consideration of the technical adequacy of the assumptions used in the root cause evaluation and their impact on the root causes would also be appropriate.

3. Determining that the evaluation collectively reviewed all root and contributing causes for indications of more fundamental problems with a process or system. This is particularly important when the licensee has multiple risk-significant performance deficiencies.

   For example, a problem that involved a number of procedural inadequacies or errors may indicate a more fundamental or higher level problem in the processes for procedural development, control, review, and approval. Issues associated with personnel failing to follow procedures may also indicate a problem with supervisory oversight and communication of standards.

4. Determining that the root cause evaluation properly ensures that correcting the causes would prevent recurrence of the same and similar problems. Complex problems may have more than one root cause as well as several contributing causes. The evaluation should include a process to verify that corrective actions for the identified root causes do not rely on unstated assumptions or conditions that are not controlled or ensured.

   For example, root cause evaluations that are based on normal modes of operation may not be valid for accident modes or other "off normal" modes of operation.

5. Determining that the evaluation appropriately considered other possible root causes. Providing a rationale for ruling out alternative possible root causes helps to ensure the validity of the specific root causes that are identified.

c. The root cause evaluation should include a proper consideration of prior occurrences of the same or similar problems at the facility and knowledge of prior operating experience. This review is necessary to help develop the specific root and contributing causes and to provide indication as to whether the issue is due to a more fundamental concern involving insufficiencies in the licensee's corrective action program.

   The licensee's root cause evaluation should:

1. Broadly question the applicability of other similar events or issues with related root or contributing causes.

   For example, root cause evaluations associated with outage activities and safety-related systems could include a review of prior operating experience involving off-normal operation of systems, unusual system alignments, and infrequently performed evolutions.

2. Determine if previous root cause evaluations and/or corrective actions missed or inappropriately characterized the issues. Determine those aspects of prior corrective actions that did not prevent recurrence of the problem.

   For example, the evaluation should review the implementation of the previously specified corrective actions and a reassessment of the identified root causes to determine process or performance errors that may have contributed to the repeat occurrence.

3. Determine if the root cause evaluation for the current problem specifically addresses those aspects of the prior root cause evaluation or corrective actions that were not successfully addressed.

For example, if during the review of a tagging error that resulted in a mis-positioned valve the licensee determines that a previous similar problem occurred, and the corrective actions only focused on individual training, then the root cause evaluation for the repeat occurrence should document why the previous corrective actions were inadequate.

4. Include a review of prior documentation of problems and their associated corrective actions to determine if similar incidents have occurred in the past.

   For example, the licensee staff should consider the following in their review of prior operating experience: internal self-assessments; maintenance history; adverse problem reports; and external data bases developed to identify and track operating experience issues. Examples of external data bases may include Information Notices, Generic Letters, and vendor/industry generic communications.

   The inspectors should discuss the problem and associated root causes with other resident, regional, or headquarters personnel to assess whether previous similar problems or root causes should have been considered.

d. The root cause evaluation should include a proper consideration of the extent of condition and the extent of cause of the problem and whether other systems, equipment, programs, or conditions could be affected.

   1. The extent of condition review should assess the degree that the actual condition (e.g., failed valve, inadequate procedure, improper human action, etc.) may exist in other plant equipment, processes, or human performance.

   2. The extent of cause review should assess the applicability of the root causes across disciplines or departments to different programmatic activities, human performance, or different types of equipment.

   For example, the licensee's staff considered that the root causes identified for the inadequate calibration of a radiation detector, that was part of an IROFS, could potentially impact material control and accounting (MC&A) results since MC&A instruments were calibrated in a similar manner.

   The extent of condition review differs from the extent of cause review in that the extent of condition review focuses on the actual condition and its existence in other places. The extent of cause review should focus more on the actual root causes of the condition and on the degree that these root causes have resulted in additional insufficiencies.

03.03 <u>Corrective Actions</u>

The licensee's proposed corrective actions to the root and contributing causes should:

a. Address each of the root and contributing causes and any insufficiencies associated with the extent of condition and extent of cause of the performance deficiencies. The corrective actions should be clearly defined. Examples of corrective actions may include but are not limited to modifications, inspections, testing, process or procedure changes, and training. The proposed corrective actions should not create new or different problems as a result of the corrective actions. If the licensee determines that no corrective actions are necessary, then the basis for this decision should be documented in the evaluation.

b. Include consideration of the licensee's risk assessment results of the issue in prioritizing the type of corrective actions chosen. Attention should be given to solutions that involve only changing procedures or providing training because they are sometimes overused. In such cases, consideration should be given to more comprehensive corrective actions such as design modifications. The corrective action plan should also include a review of the regulatory requirements and the ISA to ensure that it achieves compliance if compliance issues exist and to determine if changes to the license or ISA were required.

c. Be assigned to the appropriate individuals or organizations to ensure that the actions are planned or taken in a timely manner. The licensee should also establish a formal tracking mechanism for each of the specific corrective actions.

d. Establish a method to validate the effectiveness of the overall corrective action plan. Specifically, a method should be established to quantitatively or qualitatively measure the effectiveness of the corrective actions. Effective methods would include but are not limited to assessments, audits, inspections, tests, trending of plant data, or follow-up discussions with plant staff.

The licensee's response to an NOV that directly corresponds with the finding that was the basis for the supplemental inspection should address the reason for the violation, corrective actions that have been taken and the achieved results, corrective actions that will be taken, and the date when full compliance was or will be achieved. The adequacy of the corrective actions should be reviewed in accordance with the guidance above to determine if they address the violation.

03.04 Independent Assessment of Extent of Condition and Extent of Cause

The objective of the independent extent of condition review is to ensure that the licensee's evaluation was of sufficient breadth to identify additional issues similar to those for which the supplemental inspection was performed. For example, if the issue was an inoperable conductivity monitor due to inadequate set point determination and calibration, the inspectors should sample other conductivity monitors to ensure that their set point determination and calibration is adequate. If the issue was due to an inadequate procedure, the inspectors should sample other procedures to determine their adequacy.

The objective of the independent extent of cause review is to ensure that the licensee's evaluation was of sufficient breadth and depth to identify other plant equipment, processes,

or human performance issues that may have been impacted by the root causes of the performance deficiency. For example, if in the above example the inadequate set point determination was due to inadequate engineering calculations in establishing the set point, the inspectors should review other engineering calculations to establish set points to assess their adequacy. The depth of the extent of cause review should be commensurate with the nature and complexity of the original performance deficiency. For those instances where multiple issues have been documented, the inspectors should consider performing a broad-based inspection(s) to assess performance across the associated strategic performance area. If this IP is being performed due to a single yellow issue, a more focused inspection would likely be appropriate.

Consideration should also be given to the comprehensiveness of the licensee's evaluations. In those cases where significant insufficiencies are identified in the licensee's evaluations during implementation of Sections 95002-02.01 through 02.03 of this procedure, consideration should be given to performing a more in-depth programmatic review of the licensee's corrective action program.

03.05 Safety Culture Consideration

For the individual and collective risk-significant performance deficiencies, determine that the root cause evaluation appropriately considered whether an insufficiency in any safety culture component was a root cause or a significant contributing cause of any risk-significant performance deficiency, as follows:

a. Independently determine whether any safety culture component could reasonably have been a root cause or significant contributing cause of the deficiency using the appropriate, selected elements in IMC-RFCOP-2604, Appendix A.

b. Review the licensee's evaluation to determine and/or discuss with appropriate personnel whether the root cause methodology considered whether a possible insufficiency in a safety culture component could have been a root cause or a significant contributing cause of the deficiency. If so, also determine whether the consideration included at least those components that the inspectors determined could reasonably have been the root cause or a significant contributing cause of the deficiency.

c. If the licensee did not consider whether a possible insufficiency in a particular safety culture component could have been a root cause or a significant contributing cause of the deficiency, and if the inspectors determined that a insufficiency in the same component could have reasonable been a root cause or a significant contributing cause of the deficiency, then independently perform an evaluation. The evaluation should be extensive enough to (1) determine whether an insufficiency in that component actually was a root cause or a significant contributing cause of the deficiency and (2) establish the relationship between the insufficiency and the deficiency. If the inspector's evaluation shows that an insufficiency in a safety culture component actually was the root cause or a significant contributing cause of the deficiency, and the licensee's evaluation did

not recognize that cause or contribution, the NRC may request that the licensee complete an independent assessment of safety culture.

A safety culture assessment is a comprehensive evaluation of the assembly of characteristics and attitudes related to all of the safety culture components described in IMC-RFCOP-2406, Appendix A. A licensee independent safety culture assessment is performed by qualified individuals that have no direct authority and not been responsible for any areas being evaluated (for example, staff from another of the license's facilities, or corporate staff who have no direct authority or direct responsibility for the areas being evaluated). Individuals performing the evaluation can be qualified through experience and/or formal training.

The staff will use IP 88152, "Identification and Resolution of Problems at Fuel Cycle Facilities," to perform followup when the NRC requests the licensee to perform an independent safety culture assessment. The focus of the followup effort will be to confirm that the licensee is appropriately dealing with the insufficiencies identified by their safety culture assessment. Region II staff should contact the FCSS director for assistance and guidance.

95002-04 RESOURCE ESTIMATE

The resources required to complete this procedure will vary greatly depending on the specific procedure(s) chosen to independently assess the validity of the licensee's evaluation of extent of condition and extent of cause and on the expansion of this procedure, as necessary, to independently acquire the information necessary to satisfy the inspection requirements. In general, it would be expected that the procedure could be completed within 40-240 hours.

END

ATTACHMENT 1

Revision History for IP 950X2

Commitment Tracking Number	Issue Date	Description of Change	Training Needed	Training Completion Date	Comment Resolution Number
NA	xx/xx/10	Issued for use under the revised fuel cycle oversight process			ML