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Public Meeting on Revisions to the
Fuel Cycle Oversight Process

October 31, 2012



Objective and Outcomes

▶ Meeting Objective

- ▶ Discuss various tasks from the Revised Fuel Cycle Oversight Process (RFCOP) Project Plan

▶ Meeting Outcomes

- ▶ Agreement or understanding of differences on the acceptance criteria of the draft NUREG on the acceptability of corrective action programs (CAPs) for fuel cycle facilities
- ▶ Agreement or understanding of differences on the terminology and definition to be used for characterizing inspection results
- ▶ Understanding of the improvements to the fuel cycle inspection program



RFCOP Project Plan

- ▶ Tasks being discussed in this meeting:
 - ▶ Task I.C – Develop CAP Guidance

 - ▶ Task I.F – Determine issue characterization terminology and develop definition

 - ▶ Task I.B – Enhance the Core Inspection Program



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Draft NUREG on Acceptability of
CAPs



Background and Context

▶ Background

- ▶ Staff Requirements Memorandum (SRM) for SECY-10-0031
- ▶ SRM for SECY-11-0140

▶ Context

▶ NUREG

- ▶ Licensing document; guidance to NRC staff
- ▶ Acceptance criteria
- ▶ Conclusion in safety evaluation report – CAP acceptable

▶ Inspection Procedure

- ▶ Verify CAP implementing procedures meet the license (program review)
- ▶ Verify licensee's implementation of the CAP (implementation review, after licensee has sufficiently exercised various CAP areas)
- ▶ Conclusion in inspection report – CAP effective



Draft NUREG on Acceptability of CAPs

- ▶ Five areas of review; each with acceptance criteria and review procedures:
 - ▶ Policies, Programs, and Procedures
 - ▶ Identification, Reporting, and Documentation of Safety and Security Issues
 - ▶ Significance Classification and Causal Evaluation of Safety and Security Issues
 - ▶ Development and Implementation of Corrective Actions
 - ▶ Assessment of Corrective Action and Program Effectiveness
- ▶ The CAP should be determined acceptable if it addresses the acceptance criteria.



(1) Policies, Programs and Procedures

▶ Acceptance Criteria

- ▶ The licensee commits to establish procedures and describes the terminology definitions, the CAP expectations, requirements, and implementation processes.
- ▶ The licensee's quality assurance (QA) organization reviews and documents concurrence with the procedures and revisions thereto.



(2) Identification, Reporting, and Documentation of Safety and Security Issues

▶ Acceptance Criteria

- ▶ The CAP includes prompt identification, documentation, assessment, and correction of the safety and security issues (i.e., conditions adverse to quality).
- ▶ The facility's management commits to:
 - ▶ Foster a “no-fault” attitude toward the identification of conditions adverse to quality
 - ▶ Provide adequate training to personnel on their CAP responsibilities
 - ▶ Require all personnel to identify conditions adverse to quality

(3) Significance Classification and Causal Evaluation of Safety and Security Issues



▶ Acceptance Criteria

- ▶ Criteria for classifying the significance of conditions adverse to quality are established.
- ▶ For significance conditions adverse to quality:
 - ▶ the root and contributing causes are determined,
 - ▶ the extent of condition and cause are evaluated, and
 - ▶ preventive actions are taken to preclude recurrence.

(4) Development and Implementation of Corrective Actions



▶ Acceptance Criteria

- ▶ Corrective action is documented and initiated.
- ▶ The licensee's QA organization is involved, where appropriate, in the documented concurrence of the adequacy of the corrective action.
- ▶ Reports of conditions that are adverse to quality are analyzed to identify adverse trends in quality performance.
- ▶ Conditions and trends are reported to appropriate levels of management.

(5) Assessment of Corrective Action and Program Effectiveness



▶ Acceptance Criteria

- ▶ Follow-up action is taken by the licensee's QA organization to verify proper implementation of corrective action and close out the corrective action in a timely manner
- ▶ Licensee maintains the responsibility of the program's effectiveness



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Terminology and Definition to be Used for
Characterizing Inspection Results



NRC Working Group Position Paper

- ▶ Purpose: Address Task I.F of RFCOP Project Plan and the Commission's direction in SRM for SECY-11-0140
- ▶ Background: History of the discussions regarding performance deficiency
- ▶ Discussion: Three options were developed
- ▶ Recommendation
- ▶ References: Public meeting summaries



Recommendation

- ▶ Option 3 – Maintain the use of the current terminology, “noncompliance”

A **violation** (regardless whether it is cited or not), *nonconformance*, or deviation.

Violation – failure to comply with a **requirement**

Requirement – a legally binding requirement, such as statute, regulation, license condition, technical specification, or Order

Nonconformance – A vendor’s or certificate of compliance (CoC) holder’s failure to meet a contract requirement related to NRC activities, where the NRC has not placed the requirement directly on the vendor or CoC holder

Deviation – A licensee’s failure to satisfy a written commitment, such as commitment to conform to the provisions of applicable codes, standards, guides, or accepted industry practices when the code, standard, guide, or practice has not been made a requirement by the Commission.

Option 1

Option 2



Recommendation (continued)

- ▶ Option 3
 - ▶ Broadest definition that only considers regulatory requirements
 - ▶ NRC has the backfit option to address safety issues under its jurisdiction that are not regulatory requirements



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Improvements to the Fuel Cycle
Inspection Program



Inspection Procedures

- ▶ Evaluate and remove redundancies
- ▶ Evaluate whether inspection hours/frequency should be modified
- ▶ Enhance engineering focus, and quality assurance reviews
- ▶ Develop CAP inspection procedure (Task I.D)



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Backup Slides



Conditions Adverse to Quality

- ▶ **Examples:**
 - ▶ Failures,
 - ▶ Malfunctions,
 - ▶ Deficiencies,
 - ▶ Defective Items,
 - ▶ Out-of-control processes, and
 - ▶ Nonconformances 

Criteria for Classifying the Significance of Conditions Adverse to Quality



▶ Examples:

- ▶ impact on health and safety of workers, the public and environment;
- ▶ impact on reliability, availability, or maintainability of the equipment of facility;
- ▶ importance in meeting regulatory requirements;
- ▶ consequence of recurrence; and
- ▶ the extent to which the adverse condition may apply to other items or activities beyond the specific occurrence where it may have greater impact.



Significant Conditions Adverse to Quality

▶ Examples:

- ▶ Trend of multiple conditions adverse to quality;
- ▶ deficiencies in design, manufacturing, construction, testing, or process requiring substantial rework, repair, or replacement;
- ▶ damage to a structure, system, component, or facility requiring substantial repairs;
- ▶ a non-conservative error detected in a computer program after it has been released for use;
- ▶ loss of essential data; and
- ▶ repeated failure to implement a portion of an approved procedure.

RFCOP Issue Characterization Discussion



▶ Option 1 – Use the term “performance deficiency”

An issue that is the result of a licensee not meeting a requirement or standard where the cause was reasonably within the licensee’s ability to foresee and correct, and therefore should have been prevented. A performance deficiency can exist if a licensee fails to meet a self-imposed standard or a standard required by regulation, thus a performance deficiency may exist independently of whether a regulatory requirement was violated.





RFCOP Issue Characterization Discussion (continued)

- ▶ Option 2 – Use the term “performance weakness”

An issue that is the result of a licensee not meeting a requirement or written commitment where the cause was reasonably with the licensee’s ability to foresee and correct, and therefore should have been prevented.

