

# **POLICY ISSUE (Information)**

October 15, 2002

SECY-02-0186

FOR: The Commissioners

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SUBJECT: STATUS REPORT ON PERFORMANCE-BASED APPROACHES TO  
REGULATION

## PURPOSE:

To inform the Commission of the status of performance-based activities.

## BACKGROUND:

The staff last provided the Commission with its plans regarding performance-based regulatory activities in SECY-01-0205, "Status Report on Performance-Based Approaches to Regulation," dated November 16, 2001. The staff's stated plans and the status of each item follows:

1. Continue to apply performance-based concepts, including the high-level guidelines, in ongoing or future rulemakings, as appropriate.

Each rulemaking in which the guidelines were applied is shown in the next section.

2. Complete a guidance document in the form of a NUREG/BR by the end of FY 2002. The guidance would enable the NRC staff to implement the high-level guidelines in the context of specific regulatory issues and to include the recommendations of the Advisory Committee on Reactor Safeguards (ACRS) in the staff's work. The supporting guidance would incorporate the lessons learned from any pilot projects and other experience.

The guidance document is complete and is being reviewed by ACRS, as discussed in the next section.

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3. Complete a communications plan incorporating the experience with performance-based activities by mid FY 2002. The response to the ACRS recommendations would be incorporated into the plan.

The communications plan was issued on April 18, 2002, as discussed in the next section.

4. Provide a status report to the Commission on the above activities at the end of FY 2002. The status report would include the staff's recommendation regarding implementation of the final high-level guidelines as well as the supporting guidance. The recommendation would be based on consistency with the White Paper on "Risk-Informed and Performance-Based Regulation."

This is addressed under "Follow-On Activities."

#### DISCUSSION:

During the past year, the staff has continued to make progress toward a more formal approach to applying performance-based concepts in its regulatory activities. Some of the activities, such as those related to irradiator operation (10 CFR Part 36), have been affected by concerns arising from the terrorist attacks of September 11, 2001.

#### Ongoing or Future Rulemakings

The status of the selected rulemakings in the pilot-type program described in SECY-01-0205:

- 10 CFR Part 34 – Options for Use of Associated Equipment for Gamma Radiography (PRM-34-05)

A paper is being prepared to inform the Commission of the staff's decision on the petition for rulemaking.

- 10 CFR Part 36 – Requirements on Attendance During Irradiator Operation (PRM-36-01)

NMSS has placed this rulemaking on hold pending a vulnerability assessment.

- 10 CFR Part 72 – Geological and Seismological Characteristics for Siting and Design of Dry Cask Independent Spent Fuel Storage Installations

A proposed amendment to 10 CFR Part 72 has been published applicable to independent spent fuel storage installations or to monitored retrievable storage installations. The concepts provided in the high-level guidelines for performance-based activities published in SECY-00-0191 have been used in the regulatory analysis as a way to optimize the cost effectiveness of the rulemaking option that the staff chooses to implement. This is based on an approach whereby flexibility is provided for demonstrating the suitability of a site when substantial and robust safety margins (as shown by a risk assessment or other means) exist. The regulatory analysis document describes how a performance-based approach may be used in a cost-benefit evaluation.

- SECY-01-0113, "Fatigue of Workers at Nuclear Power Plants," June 22, 2001

The Commission issued an Staff Requirements Memorandum (SRM) on January 10, 2002, approving development of a rule that would amend 10 CFR Part 26 to establish thresholds for work hour controls. The staff is proceeding with implementation of the Commission's direction in the SRM.

- Application of the guidelines to the Option 3 Rulemaking for 10 CFR 50.44

The staff has issued a proposed rule that would eliminate the requirements for hydrogen recombiners and hydrogen purge systems and relax the requirements for hydrogen and oxygen monitoring equipment to make them commensurate with their risk significance. Draft Regulatory Guide DG-1117, included with this rulemaking package, has a performance-based provision such that functionality of hydrogen monitors is reasonably assured during accident conditions. The maintenance rule program implemented at each plant could include hydrogen monitoring as a means to handle servicing, testing and calibration of the monitors appropriately.

- Application of the guidelines to the Option 3 Rulemaking for 10 CFR 50.46

As reported in SECY-02-0057, "Update to SECY-01-0133, Fourth Status Report on Study of Risk-Informed Changes to the Technical Requirements of 10 CFR Part 50 (Option 3) and Recommendations on Risk-Informed Changes to 10 CFR 50.46 (ECCS Acceptance Criteria)" the staff is continuing to work on including performance-based provisions in any possible rulemaking. The staff is now seeking stakeholder input on such rulemakings.

#### Guidance NUREG/BR

The staff has completed a NUREG/BR guidance document that will become a companion document to the Regulatory Analysis Guidelines, NUREG/BR-0058. The staff has requested the ACRS to review and comment on the guidance document. The document has been prepared to implement the high-level guidelines for performance-based activities (SECY-00-0191) that were reviewed by ACRS (documented in ACRS letter of September 8, 2000). The guidance includes a high-level treatment for consideration of the ACRS recommendations. An additional supporting document that provides more detail for specific implementation of the ACRS recommendations is currently under development. The document containing the details will be published in FY-03 in the form of a NUREG.

#### Communications Plan

The staff issued a Communications Plan for performance-based regulation on April 18, 2002 (ADAMS Accession No. ML021120533). The plan is being used by the staff as one of the means to achieve a common understanding of expectations and accomplishments relative to the use of performance-based approaches to regulation. The plan will be updated as needed to incorporate feedback from users and stakeholders, including specifically, the ACRS.

FOLLOW-ON ACTIVITIES:

Consistent with the Commission's guidance in the White Paper on risk-informed and performance-based regulation, and with the staff's efforts to address regulatory coherence among risk-informed activities (in response to the SRM of February 8, 2002), the staff is developing a plan for improving such coherence that will include performance-based activities. The goals of this plan are to develop a common understanding of risk-informed regulatory objectives and to obtain staff and stakeholder buy-in on the objectives. In the interest of effectiveness and efficiency, the staff believes that a separate paper on the subject of performance-based approaches to regulation is not needed annually because the staff's efforts to develop regulatory coherence will subsume this activity. The initial plan has been provided in the most recent update of Risk-Informed Regulation Implementation Plan (SECY-02-0131, July 12, 2002). The status of performance-based activities in the future will be included with reports on the coherence effort. The first paper to report to the Commission on these activities will be issued in Fall 2002.

RESOURCES:

Resources for the detailed NUREG guidance document are included in the RES budget for FY 2003. The required resources for the activities under the regulatory coherence effort are included in the RES and NRR budgets for FY-2003 and the FY 2004 proposed budget.

COORDINATION:

The Office of the General Counsel has no legal objection to this paper. The Office of the Chief Financial Officer has reviewed this Commission Paper for resource implications and has no objection.

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