

January 13, 1997

FOR: The Commissioners

FROM: Hugh L. Thompson, Jr. /s/ Acting
Executive Director for Operations

SUBJECT: QUARTERLY STATUS UPDATE FOR THE PROBABILISTIC RISK ASSESSMENT (PRA) IMPLEMENTATION PLAN

PURPOSE:

To present a quarterly update on the progress of activities in the PRA Implementation Plan, including the development of risk-informed standards and guidance.

BACKGROUND:

In a memorandum dated January 3, 1996, from the Executive Director for Operations to Chairman Jackson, the staff committed to submit quarterly updates on the status of

developing risk-informed standards and guidance. Previous updates on the status of activities in the PRA Implementation Plan, including the status of developing risk-informed standards and guidance, were sent to the Commission on March 26, June 20, and October 11, 1996.

DISCUSSION:

The staff has updated the status of activities in the agency's PRA Implementation Plan in the Attachment. Significant accomplishments in the past quarter follow:

- The staff has incorporated proposed resolutions of the policy, technical, and process issues in new drafts of the broad-scope general regulatory guide (RG) and standard review plan (SRP) and the application-specific RG and SRP for Inservice Testing (IST), Graded Quality Assurance (GQA) and Technical Specifications (TS) and has discussed the new drafts with senior agency management, the Advisory Committee on Reactor
- Safeguards (ACRS) and the Committee to Review Generic Requirements (CRGR). Additional modifications are being developed to address the issue of whether it is appropriate to allow the industry to propose changes that could lead to systematic increases in risk to public health and safety.
- The staff has completed a total of twelve maintenance rule baseline inspections, which included inspection of licensee methods for applying PRA in maintenance programs.
- Draft NUREG-1560, "Individual Plant Examination [IPE] Program: Perspectives on Reactor Safety and Plant Performance," Vol. 1, Part 1, was issued for public comment in October 1996. Draft NUREG-1560 reports perspectives gained from reviewing 75 IPE submittals covering 108 nuclear power plants. Volume 2, Parts 2 through 5, provided additional perspectives and was published for public comment in November 1996.
- NUREG/BR-0228, "Guidance for Professional Development of NRC Staff in Regulatory Risk Analysis," was issued to all agency managers and contains recommended PRA training programs for NRC staff. NUREG/BR-0228 will help NRC managers prepare training and development programs for their staff in the PRA area.
- The annual report to the Commission on the status of the Accident Sequence Precursor (ASP) Program was issued as SECY-96-241 on November 25, 1996.

In the status report for the last quarter, the staff made recommendations regarding the following four policy issues:

- (1) the role of performance-based regulation in the PRA Implementation Plan
- (2) plant-specific application of safety goals
- (3) risk neutral vs. increases in risk
- (4) implementation of changes to risk-informed IST and ISI (Inservice Inspection) requirements

and listed key technical and process issues identified in the development of the RGs and SRPs and through the risk-informed pilot applications. The staff has incorporated its resolutions of the technical and process issues, and its recommended option for policy issues 2 and 3 (above) in new drafts of the broad-scope general RG and SRP and the application-specific RG and SRP for IST, GQA and TS. The new drafts were discussed with the ACRS and the CRGR, and are currently being revised to address the comments from those committees. Further revisions to these draft documents will be made as necessary following expected Commission guidance from SECY-96-218.

Several key issues in the development of RGs and SRPs remain to be resolved related to risk informed decision criteria. These issues involve the decision criteria relating to allowable changes that increase overall plant risk. The staff expects to incorporate proposed resolutions of open issues into revised RGs and SRPs, send the revised documents to the ACRS and CRGR for their review in January 1997, and, to the Commission, by the end of March 1997,

for approval to issue for public comment. Additionally, due to delayed submittals from industry on ISI, the draft ISI RGs and SRPs will not be issued until May 1997.

The staff is continuing to resolve technical and process issues regarding risk-informed regulation as part of the development of RGs and SRPs. The staff will continue to interact with risk-informed pilot licensees, industry representatives, ACRS, CRGR, and the public about the increased use of risk insights in our regulatory processes.

COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objections.

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[Attachment:](#) As stated

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