

March 19, 1998

MEMORANDUM TO: L. Joseph Callan
Executive Director for Operations

FROM: John C. Hoyle, Secretary /s/

SUBJECT: STAFF REQUIREMENTS - SECY-97-287 - FINAL
REGULATORY GUIDANCE ON RISK-INFORMED
REGULATION: POLICY ISSUES

The Commission has approved the staff's recommendation to allow very small increases in core damage frequency (CDF) and large early release frequency (LERF) independent of the baseline calculated CDF/LERF, provided that licensees track and the NRC staff monitor the cumulative effect of changes. The Commission also approved the definition of "very small" as changes less than 10^{-6} per reactor year for CDF and less than 10^{-7} per reactor year for LERF. The staff should recognize that risk insights continue to be one input to the integrated decision making process and the proposed values should be considered a guideline and not a hard cut-off.

The Commission has approved the staff's recommendation for the treatment of uncertainties in PRA results. As the pilot programs are completed, the salient features of the decision making process should be documented to the Commission to ensure a consistent, scrutable and common understanding as to how risk-informed decisions should be promulgated. In particular, the paper should clarify the treatment of uncertainties and the role of increased NRC management attention in the decision making process in the pilot programs.

The staff should assess for future Commission consideration industry programs for standardizing and certifying nuclear facility PRAs.

(EDO)

(SECY Suspense:

10/30/98)

As part of the FY 1999 budget, the Commission approved "... development of improved human and organizational reliability analysis and data, and to perform additional risk studies associated with reactor low power and shutdown operation." However, the Commission has not approved the staff's recommendation that consideration of possible additional shutdown risk acceptance guidelines be undertaken as part of the research effort. The staff should inform the Commission of the results of these risk studies for future Commission consideration. The Commission has approved the recommendation to maintain the CDF and LERF guidelines for both power and shutdown operations. The staff should appropriately credit compensatory measures taken to mitigate increases in CDF and LERF during shutdown or outage conditions.

The Commission has approved the staff's recommendation to conduct an assessment of risk-informed acceptance guidelines for temporary changes to plant configurations. The Commission noted that this effort will take place in the future. At present, except for the special

case of Technical Specification changes, only time-averaged guidelines will be used. In assessing these acceptance guidelines for temporary plant configurations, staff should weigh the merits of temporary changes that may lead to improved safety, and should ensure that appropriate compensatory measures are taken into account that could mitigate the conditional CDF and LERF. This issue will also arise in the context of the proposed change to the Maintenance Rule under which configuration control during maintenance would become a requirement, but not all temporary changes will come under the Maintenance Rule even after the proposed revision is finalized. The staff should ensure a consistent approach is used for future revisions to Regulatory Guide 1.174 and Regulatory Guide 1.160/NUMARC 93-01.

In addition, a risk-informed approach should not focus exclusively on when risk increases should be allowed. If risk insights reveal significant vulnerabilities, risk reduction may be the appropriate goal for both licensees and the Commission.

cc: Chairman Jackson
Commissioner Dicus
Commissioner Diaz
Commissioner McGaffigan
OGC
CIO
CFO
OCA
OIG
Office Directors, Regions, ACRS, ACNW, ASLBP (via E-Mail)
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