

September 21, 2011

MEMORANDUM TO: R. W. Borchardt
Executive Director for Operations

FROM: Annette L. Vietti-Cook, Secretary **/RA/**

SUBJECT: STAFF REQUIREMENTS – SECY-11-0089 – OPTIONS FOR
PROCEEDING WITH FUTURE LEVEL 3 PROBABILISTIC RISK
ASSESSMENT (PRA) ACTIVITIES

The Commission has approved a modified version of Option 3 to conduct a full-scope comprehensive site level 3 PRA. The staff should plan for and perform a new full-scope comprehensive site Level 3 PRA for an operating plant, as described in Option 3. However, to alleviate some of the near-term resource challenges and to allow adequate time for a careful site selection process, the schedule for the Level 3 PRA described in Option 3 should be extended to 4 years. The staff should engage industry stakeholders to select the most appropriate pilot site.

The staff should explore the benefits of working collaboratively, as appropriate, with the Electric Power Research Institute.

The staff should incorporate both technical and project management insights from the ongoing state-of-the-art reactor consequence analysis (SOARCA) project as well as from other relevant activities as described in the “Other Options” section of SECY-11-0089 to ensure technically sound, disciplined, and timely completion of any planned site Level 3 PRA activities. In particular, the staff should build on the SOARCA work to gain a better understanding of potential radiological effects of postulated accident sequences, particularly in the analysis of accidents at multiple units on a site and from the additional source terms contributed by spent fuel pools and dry casks.

The staff should develop a detailed project plan to complete this work and provide a copy to the Commission for its information within six months of the SRM resulting from this paper.

(EDO) (SECY Suspense: 3/21/12)

The staff should provide briefings to Commission staff on at least an annual basis to assure that the Commission remains fully informed and engaged as this work proceeds.

(EDO) (SECY Suspense: 9/21/12)

The agency’s endeavors towards a Level 3 PRA will need to be developed with rigor and discipline to ensure that the end results of the analysis will meet the vision of maintaining and enhancing the NRC’s technical competence and regulatory decision making. A necessary outgrowth of this effort should be the development, early in the project, of a clear articulation of how the results of the analysis can be applied consistent with the NRC’s Principles of Good

Regulation. A paper updating the Commission regarding the staff's plans to apply the Level 3 PRA results to the NRC's regulatory framework should be provided to the Commission for information 12 months after the issuance of the staff requirements memorandum (SRM) resulting from SECY-11-0089.

(EDO)

(SECY Suspense:

9/21/12)

cc: Chairman Jaczko
Commissioner Svinicki
Commissioner Apostolakis
Commissioner Magwood
Commissioner Ostendorff
OGC
CFO
OCA
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Office Directors, Regions, ACRS, ASLBP (via E-Mail)
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