

March 21, 2011

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

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

SUBJECT: STAFF REQUIREMENTS – SECY-10-0140 – OPTIONS FOR
REVISING THE CONSTRUCTION REACTOR OVERSIGHT
PROCESS ASSESSMENT PROGRAM

The Commission has approved the staff's recommended Option 3, to develop a construction assessment program that includes a regulatory framework, the use of a construction significance determination process (SDP) to determine the significance of findings identified during the construction inspection program (CIP), and the use of a construction action matrix (CAM) to determine the appropriate NRC response to findings; subject to the comments below.

Currently, staff estimates that each construction unit will be subject to 35,000 hours of direct inspection (or about 50 FTE) and that about 40 percent of inspections, tests, analyses, and acceptance criteria (ITAAC) will be directly inspected. Staff should assess these estimates in the annual construction reactor oversight process self-assessment and inform the estimates, up or down, on the basis of experience in the field.

The staff should provide the pilot results to the ACRS for review.

The staff should inform the Commission of the pilot results and proposed changes, if any, to the program before implementation of the revised Construction Reactor Oversight Process.

The staff should keep the Commission informed of its progress on the pilot plans and execution via routine (*i.e.*, every 6 months) Commission Assistants briefings.

The staff should further develop the following areas during the pilot of the new cROP.

- a. The staff should ensure that the new reactor cROP is also applicable to construction oversight of plants that are under the 10 CFR Part 50 process, including applicability to potential small modular reactor activities.
- b. The staff should appropriately characterize and publicly communicate the potential risk significance of a construction finding. Specifically, the staff should factor into the SDP whether a licensee's inspections, plant tests, or other means such as the ITAAC process would have revealed and allowed for correction of the deficiency before any actual risk could have been incurred (*i.e.*, during operations with irradiated fuel).

c. For the SDP in the cROP, the staff should assess risk using risk importance measures with selected thresholds that are comparable and technically consistent with risk threshold levels used in the ROP.

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