

December 18, 2007

MEMORANDUM TO: Luis A. Reyes
Executive Director for Operations

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

SUBJECT: STAFF REQUIREMENTS – SECY-07-0185 – MODERATOR
EXCLUSION IN TRANSPORTATION PACKAGES

The Commission has disapproved the staff's recommendation to codify the acceptable uses of moderator exclusion for spent fuel transportation packages by rulemaking at this time. The staff should continue to consider moderator exclusion on a case-by-case basis.

The staff should continue to gain experience through processing of applicants' requests for moderator exclusion. While it gains this experience, the staff should focus its efforts on using burn-up credit as a means to insert more realism into spent fuel transportation cask criticality analyses. The regulated community should be encouraged to develop the technical basis to provide a more realistic description of the fuel composition, including the presence of sufficient poisons in the fuel to allow a greater number of fuel assemblies in a cask without creating a criticality event. The staff should reconsider initiating a moderator exclusion rulemaking only after it has explored the use of burn-up credit to potentially allow a greater number of assemblies to be transported in casks. Before initiating such a rulemaking, the staff should provide the Commission with an information paper describing its efforts to pursue the use of burn-up credit, including a discussion of why it would not be practical to further investigate the systematic use of burn-up credit in certifying spent fuel transportation casks.

cc: Chairman Klein
Commissioner Jaczko
Commissioner Lyons
OGC
CFO
OCA
OPA