

June 30, 2006

MEMORANDUM TO: Luis A. Reyes  
Executive Director for Operations

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

SUBJECT: STAFF REQUIREMENTS - SECY-06-0124 - RULEMAKING  
PLAN TO AMEND FRACTURE TOUGHNESS REQUIREMENTS  
FOR PROTECTION AGAINST PRESSURIZED THERMAL  
SHOCK EVENTS (10 CFR 50.61)

The Commission has approved Option 2 to amend the existing regulation to allow licensees to voluntarily implement the less restrictive screening limits based on the updated technical basis in NUREG-1806, "Technical Basis for Revision of the Pressurized Thermal Shock (PTS) Screening Limit in the PTS Rule (10 CFR 50.61): Summary Report." The requirements of the current version of the Pressurized Thermal Shock (PTS) Rule would continue to apply to licensees that choose not to implement the less restrictive screening limits.

The staff should use guidance promulgated in the recent SRM (COMNJD-06-0004/COMEXM-06-0006 Streamlining the NRR Rulemaking Process), to seek early interaction with stakeholders on a possible requirement for all licensees to use the updated embrittlement correlation.

The proposed rule should seek specific feedback from stakeholders regarding the potential impacts (e.g., cost/benefit) of requiring all licensees to update their embrittlement correlation as described in the staff recommended Option 3.

The staff should provide a more detailed assessment of the impacts of the updated correlation at the proposed rule stage. This assessment should identify the reactors, if any, for which the use of the updated correlation would predict higher embrittlement and should provide appropriate recommendations regarding whether additional regulatory action is needed in those cases. Although advances in reactor vessel fabrication methods should nearly eliminate PTS as a concern for future new plants, the staff should consider requiring new plants to use the best available embrittlement correlation.

In completing the technical basis to implement a less restrictive screening limit, the staff should ensure that the probabilistic assumptions (e.g. frequency of PTS initiating events) are consistent, where appropriate, with those used in other risk-informed initiatives and have reasonably considered plant aging effects over extended plant lifetimes.

The staff should specifically seek ACRS comment on the most important aspects of the probabilistic basis.

cc: Chairman Diaz  
Commissioner McGaffigan  
Commissioner Merrifield  
Commissioner Jaczko  
Commissioner Lyons  
OGC  
CFO  
OCA  
OPA  
Office Directors, Regions, ACRS, ACNW, ASLBP (via E-Mail)  
PDR