

March 8, 2000

NOTE TO: William Huffman, Project Manager
LPD4, DLPM

FROM: Mark Rubin, Section Chief
SPSB, NRR

SUBJECT: DRAFT "SIMPLIFIED THERMAL-HYDRAULIC HEATUP ANALYSIS FOR
SPENT FUEL POOL ZIRCONIUM FIRE VULNERABILITY
ASSESSMENT"

We have reviewed your proposed draft SECY paper on thermal-hydraulic (T/H) analyses for spent fuel pool fuel heatup. We do not believe that a SECY paper is the appropriate venue for achieving the results you wish, which (you told us) are to be able to convince FEMA and Operator Licensing, Human Performance and Plant Support Branch (IOLB) that they should allow reduction/discontinuance of emergency preparedness (EP) and insurance at decommissioning plants. In particular you indicated that FEMA liked EP because it was the best preparedness available anywhere in the country and IOLB did not currently agree with the arguments on risk-informing EP and insurance. As we understand your thoughts, you assume that having a simplified T/H analysis that "demonstrates" small potential for a zirconium fire in conjunction with low frequency estimates from the risk assessment will win over FEMA and IOLB.

We do not believe that bringing a severe accident methodology concern to the Commission for resolution as a separate subject is reasonable, as they do not generally provide guidance at such a specific technical level of detail. Instead if you believe clarification is necessary in this area, we suggest that you propose modifying the draft decommissioning spent fuel pool risk assessment report (i.e., main body and Appendix A1) to clarify the uncertainties in estimating the timing at which no zirconium fire can occur and to clarify what are the expectations of the NRC as to how a licensee should perform a plant-specific T/H calculation for spent fuel pool fuel heat up. If needed, you could provide a Regulatory Guide with the rule-making package you send to the Commission that also addresses NRC's expectations about how a plant-specific T/H analysis should be performed.

We are also willing to work with you and IOLB to discuss and resolve concerns they may have about risk-informed decision-making in their field of expertise. We are interested in keeping abreast of the development of the rule-making package. Please continue to keep us informed.

cc: R. Barrett, SPSB
G. Kelly, SPSB
J. Staudenmeier, SRXB
J. Wermiel, SRXB

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