

October 26, 2006

Dr. Graham B. Wallis, Chairman  
Advisory Committee on Reactor Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

SUBJECT: PROPOSED DIRECT FINAL RULE TO AMEND 10 CFR 50.68, "CRITICALITY ACCIDENT REQUIREMENTS"

Dear Dr. Wallis:

I am responding to your letter, dated September 21, 2006, concerning the proposed direct final rule to amend 10 CFR 50.68, "Criticality accident requirements." In that letter, you presented feedback and recommendations from the Advisory Committee on Reactor Safeguards (ACRS or the Committee), based on the Committee's review of the rule package and consideration of the related formal presentation by the Nuclear Regulatory Commission (NRC) staff on September 7, 2006. We appreciate the interest ACRS has shown in this direct final rule.

In your letter, you made two recommendations. The first recommendation was to issue the proposed direct final rule for public comment. We are proceeding with the rule package and plan to publish the rule in the *Federal Register* in October 2006. The second recommendation was to complete the research to quantify fission product reactivity effects, in order to provide burn-up credit for Part 71 or 72 licensed packages or casks, as is currently available for spent fuel pools. The staff has been working with industry for several years on this issue, and currently plans to meet with the Nuclear Energy Institute (NEI) in October 2006 to discuss this issue. As was discussed during our presentation, burn-up credit can only be made available when the data has been compiled, analyzed and found to be acceptable.

In the background and discussion section of your letter, you state that the arguments made in the qualitative analysis (referring to the rulemaking technical basis) "are persuasive but the presentation is confusing" and recommended adding simple event trees to the final rule package. The draft rule text and technical basis have been available for information for some time on the NRC's RuleForum website. The staff has received comments on the draft rule from industry and there is no indication to date that industry or the public find the material presented confusing. Based on the experience to date we do not believe that modifying the draft technical basis to add event trees to the relatively short qualitative analysis is necessary to provide additional clarity to the rule.

G. Wallis

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If you have any questions, please feel free to contact Mr. George M. Tartal at (301) 415-0016 or [GMT1@nrc.gov](mailto:GMT1@nrc.gov).

Sincerely,

/RA William F. Kane Acting for/

Luis A. Reyes  
Executive Director  
for Operations

cc: Chairman Klein  
Commissioner McGaffigan  
Commissioner Merrifield  
Commissioner Jaczko  
Commissioner Lyons  
SECY

G. Wallis

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