



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001  
August 11, 1998

MEMORANDUM TO: Samuel J. Collins, Director  
Office of Nuclear Reactor Regulation

FROM: Carl J. Paperiello, Director  
Office of Nuclear Material Safety  
and Safeguards

SUBJECT: CONCURRENCE ON FINAL RULEMAKING ON CRITICALITY  
ACCIDENT REQUIREMENTS

NMSS concurs in the final rule to:

- (1) Allow licensees to operate light-water nuclear power reactors without criticality monitors in the fresh fuel storage area, under conditions specified in a new 10 CFR 50.58, without first seeking an exemption from the requirements of 10 CFR 70.24(a).
- (2) Delete existing 70.24(d), which invites a request for an exemption from §70.24(a).

We note that the change in the final rule in response to industry comments [Comment 2 in your draft FRN] on the proposed §50.58(b)(3) allows unspecified administrative controls for fuel that may be more reactive than BWR fuel to be a basis for not analyzing k-effective corresponding to optimum moderation. This makes the rule weaker in prevention of accidental criticality than may be necessary to accommodate industry's concern about BWRs. A suggestion for your consideration is to add instead:

This evaluation need not be performed by BWR licensees complying with the recommendations of GE Service Information Letter SIL-152, "Criticality Margins for Storage of New Fuel," dated March 31, 1976.

Actions recommended in SIL 152 reportedly include fire protection nozzles that can only emit a solid stream and not a fog. NMSS would consider such nozzles as engineered or design features, rather than administrative controls.

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