

IN RESPONSE, PLEASE  
REFER TO: M911017A

November 7, 1991

MEMORANDUM FOR: James M. Taylor  
Executive Director for Operations

William C. Parler  
General Counsel

David A. Ward, Chairman  
Advisory Committee on Reactor Safeguards

FROM: Samuel J. Chilk, Secretary /S/

SUBJECT: STAFF REQUIREMENTS - BRIEFING ON STAFF  
RECOMMENDED COURSE OF ACTION ON ADHERING TO  
10 CFR PART 52, 2:00 P.M., THURSDAY, OCTOBER  
17, 1991, COMMISSIONERS' CONFERENCE ROOM, ONE  
WHITE FLINT NORTH, ROCKVILLE, MARYLAND (OPEN  
TO PUBLIC ATTENDANCE)

The Commission was briefed by the NRC staff on the status of and possible options for meeting the design detail requirements of 10 CFR Part 52 and on means to enhance standardization.

The staff, in connection with the Office of the General Counsel, was asked to explore further the concept of "design acceptance criteria" (DAC) and to develop for Commission consideration a paper discussing the advantages and disadvantages of relying on DAC in lieu of design detail in a design certification. In this context, the staff should propose criteria for determining when the substitution of DAC for design detail is appropriate, bearing in mind that Part 52 requires final conclusions on all safety issues at the time of design certification and tightly constrains the agency's and the vendor's ability to make changes in a design following the issuance of a design certificate. To the extent necessary to permit the agency to render final conclusions on all safety issues associated with a design at the time of design certification, these criteria should provide that where DAC are employed, compliance with DAC must be capable of objective verification. Further, the criteria should limit the use of DAC such that safety questions involving unforeseen interactions among multiple aspects of a design covered by DAC are not likely to arise. Where DAC are used they should require explicit identification of the possible systems interactions which will be

considered and avoided. Design detail should be provided except

where substantial overriding considerations preventing such design detail from being produced exist. In addition, the staff should discuss if and how (1) some of the traditional safety reviews such as fire and internal flooding; (2) severe accident issues; and (3) PRA insights would be handled within the DAC concept. The staff should also discuss how public review through the hearing process would impact the second and subsequent plants referencing the same design. Finally, the criteria should provide that the use of DAC should not result in any significant dilution of the safety benefits of standardization. The staff should obtain the views of ACRS on the proposed paper before submitting it to the Commission.

(EDO/OGC/ACRS)

(SECY Suspense 1/17/92)

cc: The Chairman  
Commissioner Rogers  
Commissioner Curtiss  
Commissioner Remick  
GPA  
OIG  
PDR - Advance  
DCS - P1-24