



UNITED STATES  
ATOMIC ENERGY COMMISSION  
WASHINGTON, D.C. 20545

October 10, 1973

Docket No. 50-390 & 50-391

Tennessee Valley Authority  
ATTN: Mr. James E. Watson  
Manager of Power  
818 Power Building  
Chattanooga, Tennessee 37401

Gentlemen:

The Regulatory staff has had the subject of anticipated transients without scram (ATWS) in water-cooled reactor power plants under study for some time. This matter was cited in the Advisory Committee on Reactor Safeguards (ACRS) report and/or in the staff safety evaluation report on your application for a construction permit.

The staff has completed its review of ATWS and has concluded that measures should be taken to improve nuclear plant designs in this regard. Details of the staff review and conclusions and of the steps that should be taken to deal with ATWS are given in the staff "Technical Report on Anticipated Transients Without Scram for Water-Cooled Power Reactors," September 1973, a copy of which is enclosed for your information. The improvement measures acceptable to the staff are outlined in the staff position on ATWS, Appendix A, of the enclosed report in descending order of preference; that is, the "A" sections of the staff position describe the ultimate objective. For those facilities for which the imposition of the requirements of the "A" sections is not practical, the staff will accept the alternate approaches of the "B" or "C" sections subject to the limitations specified in the staff position. The rationale and bases for this approach are given in the enclosed report.

Acceptable measures that should be taken for the subject facility(s) are either those in the "A" or the "B" sections of the staff position. If there is reasonable assurance that the provisions of the "A" sections can be met satisfactorily on a schedule consistent with that of the subject facility(s), you need not analyze the consequences of ATWS. You must, however, provide sufficient analyses and discussion to justify

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your position and a commitment that you will meet the provisions of the "A" sections or revert to the provisions of the "B" sections if required by the staff. You should advise the staff by no later than January 1, 1974, of the approach you intend to take and submit a detailed report addressing fully, either the "A" or "B" sections of the staff position by October 1, 1974, as an amendment to the Safety Analysis Report or with your application for an operating license, whichever is later.

The staff is prepared to discuss this matter with you at a mutually agreeable time.

Sincerely,



A. Giambusso, Deputy Director  
for Reactor Projects  
Directorate of Licensing

Enclosure:

Technical Report on ATWS  
for Water-Cooled Power  
Reactors, September 1973

cc:

Mr. Robert H. Marquis  
629 New Sprankle Building  
Knoxville, Tennessee 37919

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