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FROM: TVA

Chattanooga, Tennessee 37401  
J. E. Gilleland

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## DESCRIPTION

Ltr. Ref. our 1-21-77 ltr...Trans  
The Following:

( 1 page )

NOTE: Distribution per M. Rushbrook on 2-23-77

## ENCLOSURE

Consists of Additional information  
regarding the Bellefonte Nuclear Plant Emer-  
gency core cooling system automatic switchove  
design...( 1 encl rec'd )  
( 2 pages )

PLANT NAME: BELLEFONTE UNITS 1 &amp; 2

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ACKNOWLEDGED

## SAFETY

## FOR ACTION/INFORMATION

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JCM 2-23-77

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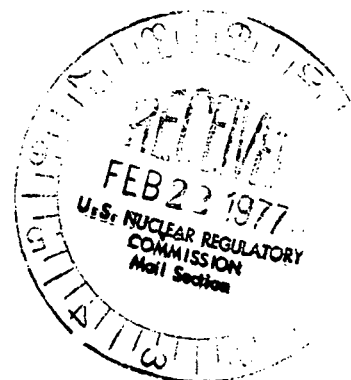
1821 439  
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TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

February 18, 1977

Director of Nuclear Reactor Regulation  
Attention: Mr. Olan Parr, Chief  
Branch No. 3  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555



Dear Mr. Parr:

In the Matter of the Application of ) Docket Nos. 50-438  
Tennessee Valley Authority ) 50-439

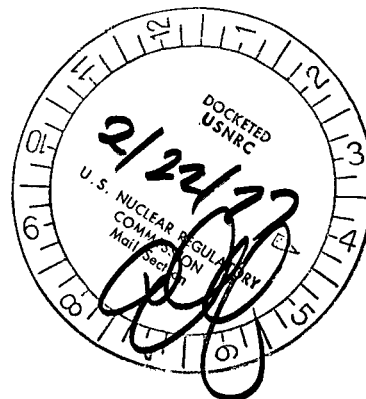
This is in response to your letter to Godwin Williams, Jr., dated January 21, 1977, requesting additional information regarding the Bellefonte Nuclear Plant emergency core cooling system automatic switchover design.

In accordance with your request, enclosed for your review is our response to question 6.101.

Very truly yours,

*J. E. Gilleland*  
J. E. Gilleland  
for Assistant Manager of Power

Enclosure (10)



REQUEST FOR ADDITIONAL INFORMATION

BELLEFONTE NUCLEAR PLANT, UNITS NO. 1 AND 2

Docket Nos. 50-438/439

6.101      Insufficient information is provided in your August 11, 1976, letter concerning the Bellefonte ECCS automatic switchover and regarding the remaining operator manual actions necessary to transfer ECCS flow from BWST to the RB emergency sump. Since the ECCS automatic switchover design incorporates only automatic opening of the emergency sump valves, provide all other necessary operator manual actions, including respective estimated available times to perform each function that will be identified by procedure to complete the changeover operation from injection mode to recirculation mode. Show that the cumulative time to perform all required functions is less than the expected time for the BWST coolant to be exhausted following automatic opening of the emergency sump valves. Provide such analysis for two postulated cases: (1) a LOCA resulting from a double-ended rupture of the RC piping--Design Basis Accident, and (2) a LOCA resulting from a small or intermediate size break in the RC piping where the RC system pressure may be slightly above the LPI system discharge pressure, thereby requiring HPI pump operation during the recirculation mode.

Response: The TVA commitment to provide additional automatic controls over those discussed in the PSAR to accomplish switchover from the BWST to the RB emergency sumps was made by letter to the NRC dated October 7, 1974, and is as follows:

TVA will provide a system that complies with the requirements of IEEE Std. 279-1971 for automatically opening the valves between the Reactor Building emergency sumps and the Low Pressure Injection and Reactor Building spray pumps upon indication of low level in the Borated Water Storage Tanks.

The information submitted by our letter of August 11, 1976, was limited to the design requirements imposed by this commitment.

The information requested by the above question is outside the scope of this commitment and addresses system design features which the staff has already determined to be acceptable as documented in the Safety Evaluation of the Bellefonte Nuclear Plant units 1 and 2 (issued May 24, 1974) and Supplement No. 1 to that document (issued August 30, 1974).

TVA does not believe that providing this information as part of the staff review of the acceptability of the Bellefonte design for meeting this commitment is necessary. This information will be submitted to the NRC as part of the FSAR so a final safety review of the entire system can be performed.