



# Duquesne Light

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November 3, 1982

Director of Nuclear Reactor Regulation  
United States Nuclear Regulatory Commission  
Attn: Mr. Steven A. Varga, Chief  
Operating Reactors Branch No. 1  
Division of Licensing  
Washington, DC 20555

Reference: Beaver Valley Power Station, Unit No. 1  
Docket No. 50-334, License No. DPR-66  
NUREG-0737; item II.K.3.10

Gentlemen:

NUREG-0737, item II.K.3.10, Proposed Anticipatory Trip Modification, applies to selected licensees of Westinghouse reactors who have proposed a modification of the anticipatory reactor trip following a turbine trip. We made such a proposed modification in our submittal of October 27, 1978 whereby we requested the deletion of a reactor trip following a turbine trip below 50 percent power. Your letter of November 18, 1981 indicated the Staff review of our request is complete with the exception of the small-break loss-of-coolant accident (SBLOCA) analysis identified in item II.K.3.10 of NUREG-0737. This item states that prior to making the modification, the probability of a SBLOCA resulting from a stuck-open power-operated relief valve (PORV) is substantially unaffected by the modification. On May 27, 1982, we submitted the Westinghouse Electric Corporation Safety Analysis Report supporting the deletion of our reactor trip following a turbine trip below 50 percent power, however, this report was prepared May 4, 1978 and did not contain information relative to concerns identified in item II.K.3.10. Since that time, we have received and reviewed the Westinghouse prepared evaluation on the deletion of a reactor trip following a turbine trip below 70 percent power for the Beaver Valley Power Station, Unit No. 2. This analysis makes the same assumptions as for Unit No. 1, considers a higher set-point for the reactor trip on turbine trip than was considered for Unit No. 1 and as such envelops the analysis and assumptions made for Unit No. 1. Additionally, the Westinghouse Electric Corporation has indicated that the analysis for Unit No. 2 is applicable to Unit No. 1.

This analysis was done principally to show that the pressurizer PORVs would not normally open during the transient. For this analysis, all normal plant control systems were assumed operational during the transient. The results show that the plant design is such that a turbine trip without a direct or immediate reactor trip represents no hazard to the integrity of the reactor coolant system. For normal plant operation, with all normal control systems assumed operational, pressurizer pressure does not reach the point of pressurizer PORV

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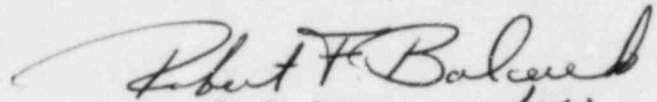
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activation. Therefore, the deletion of reactor trip on turbine trip below 50 percent power, for Unit No. 1, is not expected to significantly increase the probability of a SBLOCA due to a stuck-open PORV.

The analysis for Unit No. 2, with the anticipatory reactor trip at 70 percent power, indicates that following the turbine trip, the maximum primary pressure is 2308 psia, which is well below the PORV actuation setpoint of 2350 psia and results in a margin of 42 psi. Since the Unit No. 1 anticipatory trip modification is enveloped by the Unit No. 2 analysis basis, this analysis may be applied to Beaver Valley, Unit No. 1

If you have any questions, please contact my office.

Very truly yours,

  
J. J. Carey *for*  
Vice President, Nuclear

cc: Mr. W. M. Troskoski, Resident Inspector  
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