

Washington Public Power Supply System

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Nuclear Regulatory Commission
 Region V
 Suite 202 Walnut Creek Plaza
 1990 N. California Boulevard
 Walnut Creek, California 94596

July 28, 1981
 GO-1-81-227

Attention: Mr. R. H. Faulkenberry
 Chief, Reactor Construction
 Projects Branch

Dear Mr. Faulkenberry:

Subject: SUPPLY SYSTEM NUCLEAR PROJECTS NOS. 1 AND 4
 DOCKET NOS. 50-460 AND 50-513
 REPORTABLE CONDITION 10CFR50.55(e)
 INDUCED NEUTRON FLUX ERROR - INTERIM REPORT

Reference: 1) Telecon TJ Houchins, Supply System to
 RF Kirsch, Region V Nuclear Regulatory
 Commission dated November 13, 1980

2) GO-1-80-379, dated December 12, 1980,
 DW Mazur to RH Engelken

In a letter to the NRC (reference 2) dated December 12, 1980, the Supply System reported the existence of a reportable condition (10CFR50.55(e)) to the NRC. The concern was based on problems identified by our reactor vendor, Babcock and Wilcox Company in being able to accurately measure core neutron flux under accident conditions.

B&W's concern was that for accidents which result in decreasing reactor coolant temperature, the measured flux values do not represent actual core conditions and the reactor may not be tripped on a high flux signal possibly resulting in exceeding established safety limits. Also, due to the arrangement of the excore detectors around the vessel and the control logic for obtaining a high flux reactor trip for certain control rod ejection accidents of rods with small worth, a high flux trip may not occur assuming a single failure in the detection or protection system.

Status

In our initial report, the Supply System committed to providing a final report on this subject upon determining the resolution to this problem. To date, this resolution has not been reached and this letter is intended to be an update on the status of resolving this problem.



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Mr. R. H. Engelken
Interim Report
Page 2

GO-1-81-227

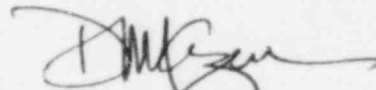
B&W is considering several alternative approaches to this problem. Changes to the Reactor Protective System as a result of the TMI-2 accident as well as an overall upgrade program is underway. Some of these changes will have a direct impact in limiting the potential consequences of this problem. In addition, B&W is considering other alternatives which will either eliminate the problem or reduce the consequences to an acceptable level.

B&W has committed to providing the overall recommended approach to resolving this issue in the fourth quarter of this year. Upon approval of the changes by the Supply System, a final report will be provided to the NRC.

It is expected that this will occur before the end of the year. If this schedule should slip, an interim report will be provided in December.

If you have any questions or desire further information, please advise.

Very truly yours,



D. W. Mazur
Program Director
WNP-1/4

DWM:MER:lm
cc: V Mani, UE&C-Site (897)
RR Steinke, B&W
V Stello, NRC
FDCC 899