



Department of Energy
Washington, D.C. 20545

Docket No. 50-537
HQ:S:83:244

APR 08 1983

Dr. J. Nelson Grace, Director
CRBR Program Office
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Dr. Grace:

RESPONSE TO SAFETY EVALUATION REPORT (SER) OPEN ITEM NO. 3 - PLANT
PROTECTION SYSTEM (PPS) MONITOR

Enclosed are actions that the Clinch River Breeder Reactor Plant project will take to modify the design of the PPS monitor. These actions are in response to questions raised in discussion with the Nuclear Regulatory Commission staff regarding the independence and testability of the PPS monitor. The enclosed information should enable the staff to view this as a confirmatory item and resolve Open Item No. 3 of SER Section 1.6.

Any questions regarding the enclosed information may be addressed to Mr. R. Rosecky (FTS 626-6355) of the Project Office Oak Ridge staff.

Sincerely,

John R. Longenecker
Acting Director, Office of
Breeder Demonstration Projects
Office of Nuclear Energy

Enclosure

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CRBRP Actions Taken to Resolve the Chapter 7
Open Issue on PPS Monitor

This enclosure transmits actions that the CRBR Project will take as a result of discussions with J. Mauch (NRC) on March 23, 1983, concerning the design of the PPS Monitor.

1. The design of the PPS logic test system will be modified to provide two independent Monitors* such that failures in one Monitor will not propagate to the other Monitor. The Monitors will be used to check the test results of each other.
2. Self-test features will be provided for each Monitor.
3. The automatic test of the PPS logic will be considered a safety related function and will be performed by Class 1E devices. Thus, the PPS Monitors will be Class 1E.
4. Each Monitor will be independent from other Monitors. If isolation devices are required they will be qualified to the criteria in CRBRP SER Section 7.2-2-2.
5. Failure Modes and Effects Analyses will be performed on the PPS logic test system and in particular on the PPS Monitors. The design of the PPS logic test system will be modified to prevent any common mode failures identified in the FMEAs.
6. The PSAR will be updated to reflect the changes identified in this letter.

*Monitor is an automatic test device which tests the PPS logic by monitoring the Primary PPS logic as test pulses are inserted into the Primary PPS. Monitor also triggers the initiation of the test pulses.