



JOHN G. CESARE, JR.
Director
Nuclear Licensing

May 13, 1988

U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Document Control Desk

Gentlemen:

SUBJECT: Grand Gulf Nuclear Station
Unit 1
Docket No. 50-416
License No. NPF-29
Special Report 88-003/0
Loose Parts Monitor Channel
Inoperable For More Than 30
Days
AECM-88/0108

On April 5, 1988 a design modification to the alarm circuitry for the Loose Parts Monitor (LPM) was begun with the vendor Babcock and Wilcox (B&W) assisting in the work. The modification required obtaining baseline noise data on each of the sixteen channels. When the LPM was removed from service to perform the design modification, a Limiting Condition for Operation (LCO) for Technical Specification 3.3.7.10 was entered.

The operability of the loose-part detection system ensures that sufficient capability is available to detect loose metallic parts in the primary system and avoid or mitigate damage to primary system components. The system consists of 16 sensors, of which only 8 are selected and need to be operable at a time, to provide the inputs to the 8 monitoring channels. The remaining 8 sensors may be used as replacement sensor inputs for failed sensors or to provide a change in location of the area being monitored.

During evaluation of the baseline data obtained, a potential metallic loose part was identified on the recirculation loop "B" discharge sensor. Further investigations were performed and are continuing. The existence of the potential loose part and the status of the ongoing investigations were discussed with representatives of the NRC NRR and Region II staff in a telephone conversation on April 21, 1988.

The ongoing investigations made it necessary to leave the recirculation loop "B" discharge channel connected to the LPM monitoring equipment. This required a normally active channel to be disconnected. The design modification work was subsequently completed except for final setpoint determination. The LPM would have been returned to its normal status prior to exceeding the LCO time limit except for the ongoing monitoring of the recirculation loop "B" discharge line.

J16AECM88051202 - 1

P. O. BOX 23070 | JACKSON, MISSISSIPPI 39225-3070 | (601) 984-9210

8805270087 880513
PDR ADOCK 05000416
S DCD

IE22
1/1

On May 5, 1988 the inoperability of the LPM exceeded 30 days requiring a Special Report to be submitted within 10 days in accordance with Technical Specification 3.3.7.10. B&W completed their on-site analysis on May 9. After their equipment was removed, a temporary loose parts detector was installed to monitor recirculation loop "B" discharge sensor making it possible to restore the LPM system to operation. While the LPM was inoperable, each active channel was periodically connected to an LPM monitoring circuit to ensure adequate monitoring of all active channels.

Yours truly,

M. L. Crawford
for J. G. Cesare

ODK:bms

cc: Mr. T. H. Cloninger
Mr. R. B. McGehee
Mr. N. S. Reynolds
Mr. H. L. Thomas
Mr. R. C. Butcher

Dr. J. Nelson Grace, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta St., N. W., Suite 2900
Atlanta, Georgia 30323

Mr. L. L. Kintner, Project Manager
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Mail Stop 14B20
Washington, D.C. 20555