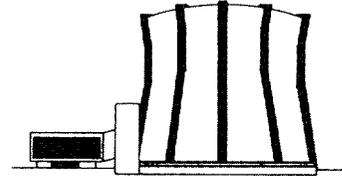


TEXAS ENGINEERING EXPERIMENT STATION

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NUCLEAR SCIENCE CENTER
409/845-7551

March 31, 2000

2000-0117

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Reference: 1. NRC Facility License R-83, Docket 50-128
2. TAMU Nuclear Science Letter "1999 Annual Report"

Subject: Error Correction in 1999 Annual Report

Dear Sir/Madam ,

This letter is to inform you that the 1999 Annual Report of the Texas A&M University Nuclear Science Center includes an error on page 11, paragraph 3, line 2 which reads "...with 10CFR 50.59 and did violate any of the..." The line should read "...with 10CFR 50.59 and did not violate any of the..." Attached please find the corrected page of the annual report. We apologize for any inconvenience this may have caused.

Sincerely,


Chan-Hyeong Kim
Assistant Director

CK/rmw

Attachments: Corrected page

xc: 211/Central File
NRC License File
NRC Correspondence File

system shutdown signals to the central exhaust controller. The proposed system would include all of the same functions yet allow more flexibility and easier system maintenance.

The NSC staff reviewed the proposed system and identified two credible failure scenarios. The first involved power failure to the computer. The system was designed such that a loss of power would result in a shutdown of the air handling systems. This was similar to the old system. The second scenario consisted of a computer "lock-up". If a "lock-up" were to occur, the FAM readings would not be updated and the air handling system shutdowns would be disabled. This was exactly the same response as the old system. The computer program was designed such that the operator would be able to easily identify a computer "lock-up" by watching a system clock on the computer and verifying that the FAM readings were continuously updating. The computer "lock-up" could then be corrected by resetting the computer.

After a thorough review, the NSC staff concluded that the proposed change was in accordance with 10 CFR 50.59 and did not violate any of the NSC Technical Specifications. They approved the proposed change as MA #52 and, upon approval of the RSB, implemented the new system. The system was thoroughly tested and documented to be fully functional before the reactor was operated.

8. Repair and modification of the single element fuel handling tool (November 12, 1999)

The flexible tool used to handle single fuel elements was broken during preparations for fuel-handling operations in early November 1999. The NSC staff proposed repairing the tool with a stainless steel central wire that would replace the existing damaged control wire. This change did not introduce any unreviewed safety questions and did not increase the risk or probability of an accident. In accordance with 10 CFR 50.59 the staff approved the repair of the tool so that fuel-handling activities could proceed as planned.

9. Modification of the computer program for FAM channel #5 (December 2-3, 1999)

During the calibration of FAM channel #3 with Ar-41 gas, NSC staff noticed that the count rate on FAM channel #5 also drastically increased. FAM channel #3 and FAM channel #5 share the same detector but use different SCA's with different energy ranges. The increase in the channel #5 counts was due to the increased Compton continuum of the Ar-41 gamma rays. This increase often caused the alarm set point for FAM #5 to be exceeded and thus the air handling systems were shutdown.

In an effort to prevent this type of shutdown, the NSC staff proposed changing the computer program for FAM channel #5 so that the count rate would be obtained from the following equation:

$$(\text{New \#5 reading}) = (\text{actual \#5 reading}) - (0.81) * (\text{\#3 reading})$$

The correction factor of 0.81 was derived from comparisons between channel #3 and channel #5 under varying conditions. After a thorough review, this modification was made to the program and tested under varying conditions. The tests revealed that the channel #5 indication became