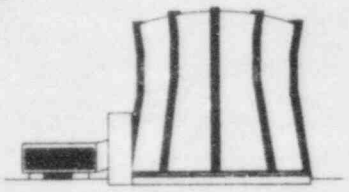
TEXAS ENGINEERING EXPERIMENT STATION

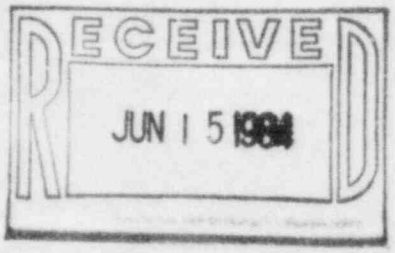
THE TEXAS A&M UNIVERSITY SYSTEM

COLLEGE STATION, TEXAS 77843-3575



NUCLEAR SCIENCE CENTER
409/845-7551

11 June 1984



Mr. E. Johnson
Office of Inspection and Enforcement
Region IV
U.S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76012

Dear Mr. Johnson:

I am forwarding the final report of the reportable occurrence of 28 May 1984. This report is being submitted in accordance with NSC Technical Specification requirements Section 6.6.2 of the Nuclear Science Center Reactor, License R-83, Texas A&M University.

Respectfully,

Barry Willits

Barry Willits, Manager
Reactor Operations

BW/ym

Enclosure

50-128

IE-28
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Reportable Occurrence #84-2
Operation of the NSCR in
Violation of the Technical Specification
Limiting Conditions for Operation

Reportable Occurrence

On 28 May 1984 at approximately 2202, it was not noted while completing log readings, that the reactor servo control was performing erratically. The operator noted that reactor power had increased slightly by observing the Safety Channel. The Linear Power Level Channel indication was noted to be low at this time, and the operator selected a lower scale setting observing that the signal to this instrument had apparently failed. The Senior Reactor Operator commenced a reactor shutdown in accordance with Standard Operating Procedure SOP III-C, while monitoring reactor power on the Log Power and Safety Channels of indication.

The Manager of Reactor Operations was informed of the situation and directed an investigation into the cause of the failure. The operators noted in the subsequent investigation that the high voltage power supply for the Linear Power Channel was switched off. The power supply was re-energized and the Linear Channel indication was observed to be normal. It is apparent that the high voltage power supply was inadvertantly de-energized by the Senior Reactor Operator as his hand brushed across the power switch while taking the pool and instrumented fuel element temperature readings. The thermocouple selector switch for these temperatures is located just above the high voltage power supply switch in question.

Since the experiments under irradiation were essentially completed at the time of shutdown, the operators were directed to secure the reactor. On 29 May 1984, the Linear Power Channel was satisfactorily checked for proper operation during a pre-startup check, and the reactor was returned to normal operation.

Corrective Action

This incident is being reported as a reportable occurrence since section 3.2.1 of the NSC Technical Specifications states that the reactor will not be operated without the Linear Power Channel being operable. The operator acted properly in shutting the reactor down and informing NSC Management. Though he stated that he does not recall de-energizing the high voltage power supply, and since only he and the reactor operator were in the facility and noting the proximity of the power supply switch to the temperature selector, any other explanation of how the power supply was de-energized is highly improbable. The operator was cautioned in being more observant while taking log readings. Since this is the first incidence of this or any similar occurrence it is the determination of NSC management that no further action is necessary concerning this incident.