TEXAS ENGINEERING EXPERIMENT STATION

THE TEXAS A&M UNIVERSITY SYSTEM

COLLEGE STATION, TEXAS 77843

50-128

NUCLEAR SCIENCE CENTER
713/845-7551

12 February 1982

Mr. G. L. Madsen
Office of Inspection and Enforcement
Region IV
U.S. Nuclear Regulatory Commission
611 Ryan Plaza, Suite 1000
Arlington, Texas 76012

Subject: Reactor Startup Without Proper Instrumentation Reported 2-5-82

Dear Mr. Madsen:

Enclosed is a final report of a reportable occurrence observed during a reactor startup of the NSCR. This report is submitted in compliance with section 6.4 and 1.8.c of change No. 11 of the Technical Specifications, Facility License No. R-83 for the Nuclear Science Center, Texas A&M University.

Sincerely,

Dale Rogers

Dale Rogers, Manager of
Reactor Operations

DR/ym

Enclosure

IE22
S1/1

Final Report of Violation Due to
Reactor Startup
Without Proper Instrumentation

Reportable Occurrence

On February 5, 1982 during the initial reactor startup of the day, it was noticed that the linear power channel was not responding. Rod withdrawal was terminated at that time with the shim safety control rods at approximately 40% and reactor power less than 1 watt. Upon investigation it was found that the detector high voltage switch was in the off position, and a reactor shutdown was initiated. The reactor supervisor restored power to the detector, and the reactor was then started up to 1 Mw with no further problems.

It should be noted that during the completion of the reactor prestartup checklist the trainee operator observed and recorded proper detector voltage. There was a fifteen minute delay between the completion of the checklist and commencing the reactor startup. Apparently during this time period the detector high voltage switch was inadvertently turned off. However, both the trainee operator and the reactor supervisor failed to notice that the linear recorder and picoammeter were reading zero at the time of startup. Subcritical multiplication was observed to be normal on the log power channel, but it was not until the reactor approached 1 watt that the operator noted no response on the linear channel.

Corrective Action

A critique of the incident by management was conducted, and both the trainee operator and reactor supervisor were counseled on the necessity of monitoring all reactor instrumentation while operating the reactor. A training session was held by the Manager of Reactor Operations for the entire operations staff to review the incident and to emphasize the importance of proper observation of instrumentation and proper documentation. In addition access to the control room prior to steady state operation is being limited in an effort to reduce distractions during startup.