## TEXAS ENGINEERING EXPERIMENT STATION



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: Failure of Fuel Temperature Thermocouple During Reactor Operation Reported 9-29-82

Dear Mr. Madsen:

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

Sincerely, Koyer

Dale Rogers, Manager Reactor Operations

DR/ym

Enclosure





Final Report of Violation Due to Failure of Fuel Temperature Thermocouple During Reactor Operations

## Reportable Occurrence

On September 28, 1982 at 2212 while operating at power the reactor operator noted erratic readings on the fuel temperature indicator. The reactor was immediately shutdown, and NSC management was notified. On September 29, 1982 a different instrumented fuel element (IF) was connected to the Fuel Temperature Channel, and thermocouple readings were recorded and compared with pool water temperature. Readings were again checked at 300 watts and at 1 Megawatt. Readings appeared to be normal and were observed throughout the day. However, at 2319 after approximately 12 hours of operation erratic readings were once again observed, and the reactor was shutdown.

## Corrective Action

On Thursday and Friday (9/30/82, 10/1/82) a new IF was prepared and installed in the core. The reactor was not operated until Monday, 4 October 1/82 at which time thermocouple readings were observed to be normal. No further problems have been noted and the new IF thermocouple readings will be kept under close visual observation.