

Georgia Institute of Technology

SCHOOL OF NUCLEAR ENGINE ERING AND HEALTH PHYSICS

ATLANTA, GEC 7GIA 30332

NEELY NUCLEAR RESEARCH CENTER 83 MAR 15 A10 : 13 (404) 894-3600

March 10, 1983

U.S.Nuclear Regulatory Commission, Region II 101 Marietta Street, N.W. Atlanta, Georgia 30303

Reference: Inspection Report No. 50-160/82-01, Item 82-01-01

Gentlemen:

In mid-June, 1982, we became aware that, on occasion, a step in our procedure No. 2000, Reactor Operation, was not always being followed. Specifically, during a normal startup, step III.A.12 of Procedure 2000 states that a "stamp reading" will be recorded in the log book whenever the desired power level is reached. A "stamp reading" for the Georgia Tech Reactor consisted, at that time, of twenty-two (22) entries to record various parameters of the reactor.

For some reactor experiments, it may be a requirement to operate the reactor at a desired power level for periods of time that may be as short as two minutes. This is not, of course, sufficient time to record much, if any, data. In the Spring of 1982, there was a very extensive series of such experiments. The log-book entries for this period were examined and it was found that on 114 occasions, a stamp reading was not taken immediately following arrival at the specified power. Seventy-eight of these cases (68%) occurred when the desired power level was to be maintained for ten (10) minutes or less.

During the referenced I&E Reactor inspection, the members of the inspection group were made aware of the problem although the tabulated numbers were not then available. A commitment was made to review the problem and take the necessary action to resolve the difficulty. At a meeting of the Nuclear Safeguards Committee in August 1982, a proposed solution was presented for their consideration. This solution was to log-in, immediately upon reaching desired power, those data that were considered essential information. This included control blade position, linear and high power neutron levels and amplifier gain settings This reduced the number of items to be logged to eleven. An

8304110491 830317 PDR ADOCK 05000160 PDR

additional step was added to Procedure 2000 requiring a more complete set of data to be recorded after the reactor has reached thermal equilibrium. The Nuclear Safeguards Committee reviewed and approved the recommended changes. Procedure 2000 (copy enclosed) was revised to incorporate the changes and is being implemented.

I believe we are now operating within the guidelines of our procedure 2000. If you have any questions on this matter, or need additional information, please contact me.

Sincerely yours,

Robert S. Kirkland, Associate Director Nuclear Research Center

encl: Procedure 2000, Rev.8/2/82

cc: Members, Nuclear Safeguards Committee