DUKE POWER COMPANY
POWER BUILDING
422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

May 7, 1982

TELEPHONE: AREA 704
373-4083

Mr. James P. O'Reilly, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Re: McGuire Nuclear Station Unit 1
Docket No. 50-369

Dear Mr. O'Reilly:

Please find attached Reportable Occurrence Report RO-369/82-31. This report concerns T.S.6.9.1.13(c), "Observed inadequacies in the implementation of administrative or procedural controls which threaten to cause reduction of degree of redundancy provided in Reactor Protection Systems or Engineered Safety Feature Systems". This incident was considered to be of no significance with respect to the health and safety of the public.

Very truly yours,

William O. Parker, Jr.

PBN/jfw
Attachment

cc: Director
Office of Management and Program Analysis
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Records Center
Institute of Nuclear Power Operations
1820 Water Place
Atlanta, Georgia 30339

Mr. P. R. Bemis
Senior Resident Inspector-NRC
McGuire Nuclear Station

IE, 22
1/1

DUKE POWER COMPANY
MCGUIRE NUCLEAR STATION
REPORTABLE OCCURRENCE REPORT NO. 82-31

REPORT DATE: May 7, 1982

FACILITY: McGuire Unit 1, Cornelius, NC

IDENTIFICATION: The Premature Acceptance of Operational Control of a Boric Acid Transfer Pump Undergoing Maintenance Resulted in Degraded Pump Performance

DISCUSSION: On April 8, with Unit 1 operating at 50% reactor power, Boric Acid Transfer Pump "A" was declared inoperable after the pump failed to perform at its rated capacity. The pump had recently been replaced in accordance with a quarterly preventative maintenance requirement and then had been erroreously declared operable before a retest was accomplished. Timely retest was prevented, when the retest group was not notified of the completed maintenance on the replacement pump. The incident is the result of Personnel Error, with Administrative/Procedural Deficiency contributing.

EVALUATION: After the pump had been replaced and a vibration test performed, all that remained to qualify the newly installed pump for service was the satisfactory completion of the retest by the Performance Group. The Shift Supervisor, however, erroneously declared the pump operable based on the satisfactory results of the pump vibration test. With the item cleared from the Technical Specification Action Item Log, succeeding shifts were unaware that the pump retest was still outstanding. The premature administrative operability (before the retest was completed) was caused by the personnel error of the Shift Supervisor and was not in accordance with the provisions of the Maintenance Management Procedures section of the McGuire Maintenance Manual.

The Performance Group was unaware that the pump was ready to be tested because the work request was returned to the Mechanical Maintenance Group to remain with the replaced pump until the refurbishment was complete. The Mechanical Maintenance Group should have documented the results of a functional verification and notified the Performance Group of the results and the retest requirement.

The installed pump was declared inoperable after observing that it would not develop greater than approximately 70% of its rated discharge head. Investigation determined that the pump motor windings were improperly connected causing reverse rotation. After the wiring error had been corrected, the applicable performance test was conducted with satisfactory results and the pump was returned to service.

The pump motor is a Crane Chempump, canned motor type. Proper rotation can only be verified through Performance testing. Correct connection of the pump motor cannot be verified by inspection; therefore, the technicians involved in the leads reversal were not at fault.

SAFETY ANALYSIS: The required number of boron injection flow paths remained operable throughout this occurrence. Only the flexibility provided by having an operable redundant pump available was hampered. The health and safety of the public were unaffected.

CORRECTIVE ACTION: After the pump was returned to service it was determined that the vibration readings on the pump had been taken when the pump was running backwards. This may have invalidated the test; therefore, the vibration test was performed again with satisfactory results.

The delays encountered in the discrepant preventative maintenance routine have been recognized and the routine is being modified as a result. In the future, the restoration of the system to optimum performance will be the primary objective of maintenance work. Pump refurbishment will be accomplished through the generation of a separate work request. An on-going review of Preventative Maintenance routines is continuous to identify similar inefficiencies which will be modified accordingly. All appropriate operations personnel have been counseled not to place a piece of equipment back into service until all of the retest requirements have been fulfilled.