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DUKE POWER COMPANY
POWER BUILDING
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WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

TELEPHONE: AREA 704
373-4083

May 27, 1981

Mr. James P. O'Reilly, Director
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-369/81-72. This report concerns the RHR system being inadvertently isolated from the RCS. 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.

RWO:pw
Attachment

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

Ms. M. J. Graham
Resident Inspector - NRC
McGuire Nuclear Station

Mr. Bill Lavallee
Nuclear Safety Analysis Center
P. O. Box 10412
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McGUIRE NUCLEAR STATION
INCIDENT REPORT

Report Number: 81-72

Report Date: May 27, 1981

Occurrence Date: April 27, 1981

Facility: McGuire Unit 1, Cornelius, N. C.

Identification of Occurrence: Residual Heat Removal System (ND) was isolated from the Reactor Coolant System (NC) for about fifteen minutes on April 27, 1981.

Condition Prior to Occurrence: Mode 5, Initial fuel loading

Description of Occurrence: The train A Solid State Protection System (SSPS) logic was being modified to include reactor trip on turbine trip. When the fuses from the SSPS output cabinet were removed, a normally energized output relay went to its de-energized position closing valve 1ND2A (NC Loop 3 Disch. to ND System Containment Iso. Inside).

Apparent Cause: A normally energized relay in the SSPS logic was inadvertently de-energized closing valve 1ND2A and isolating the Reactor Coolant System from the Residual Heat Removal System.

Analysis of Occurrence: It was not realized that work on the A train SSPS cabinets would affect B train operation of ND. A and B trains of ND share a common suction from the Reactor Coolant System with two suction isolation valves in series (one train A powered and the other train B powered). Closing either valve isolates the Reactor Coolant System from the ND system. As soon as 1ND2A (NC Loop 3 Disch. to ND System Containment Iso. Inside) closed, an operator was sent to de-energize the valve and open it manually.

Safety Analysis: At the time of the incident only new fuel was in the core so no decay heat load existed. No boron concentration changes were in progress so no mixing was required. For these reasons and because ND flow was restored so rapidly, the health and the safety of the public were not affected by this incident. If a similar incident were to occur when ND was needed for mixing or cooling, the operators have shown that the flow path could be restored quickly.

Corrective Action: The ND suction from NC flow path was reestablished by manually opening the A train isolation valve. 1ND2A was prevented from reclosing by removing the power. The personnel involved have been cautioned to thoroughly investigate the results of their actions when working in unusual conditions such as special modification projects.