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81-062-036

DUKE POWER COMPANY

POWER BUILDING

422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

WILLIAM O. PARKER, JR.  
VICE PRESIDENT  
STEAM PRODUCTION

May 15, 1981

TELEPHONE AREA 704  
373-4083

Mr. J. 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-369/81-57. This report concerns the Upper Head Injection System being declared inoperable. 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.*  
William O. Parker, Jr.

RWO/djs  
Attachment

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

Mr. Bill Lavalee  
Nuclear Safety Analysis Center  
Post Office Box 10412  
Palo Alto, California 94303

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

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McGUIRE NUCLEAR STATION

INCIDENT REPORT

REPORT NUMBER: 81-57

REPORT DATE: May 7, 1981

OCCURRENCE DATE: April 17, 1981

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

IDENTIFICATION OF OCCURRENCE: Upper Head Injection (UHI) System declared inoperable.

CONDITIONS PRIOR TO OCCURRENCE: Mode 3, Hot Standby

DESCRIPTION OF OCCURRENCE: Several times beginning on April 17, 1981, the UHI System was declared inoperable. The UHI surge tank low pressure alarm was received in the Control Room. The pressure was approximately 1200 psig. This was reportable pursuant to Technical Specification 3.5.1.2.

APPARENT CAUSE OF OCCURRENCE: Various Safety Injection (SI) System valves have been found to be leaking which apparently allowed the UHI surge tank to drain down and thus reduce tank pressure.

ANALYSIS OF OCCURRENCE: At 1456 hours on April 17, 1981, a low UHI surge tank pressure alarm was received in the Control Room. Water was added to the surge tank and the alarm cleared. At 2146 hours, the low pressure alarm was again received. Since the surge tank water was within normal limits, nitrogen was added and the alarm was cleared at 2220 hours. On April 18, at 0610, 1028, and 1519 hours, the surge tank low pressure alarm was received in the Control Room. Water was added to the surge tank each time and the alarm was cleared at 0628, 1120, and 1559 hours respectively. The UHI surge tank pressure was monitored and water was added as needed to insure the pressure stayed within normal operating limits. Several SI valves have been found to be leaking and work requests were written to repair them.

SAFETY ANALYSIS: The UHI system is passive and only used during a loss-of-coolant accident. Since there was only new fuel in the core, safe plant operation and the health and safety of the public were not affected. If the reactor had been at power and a SI system break had occurred, the UHI System would have functioned as designed because the UHI surge tank level and pressure were close to its normal operating limits.

CORRECTIVE ACTION: The UHI surge tank was filled with water after the low pressure alarm was received in order to increase level and pressure to within normal limits. Work Requests have been written to repair the leaking SI valves.