

DUKE POWER COMPANY

POWER BUILDING

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

MAY 11 8:11

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

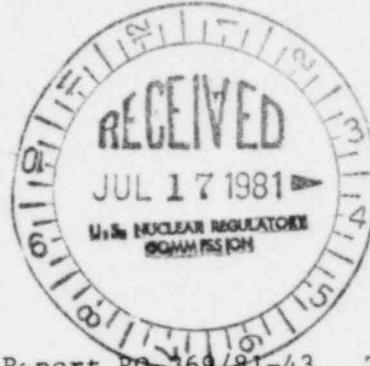
May 6, 1981

TELEPHONE: AREA 704
373-4083

81-050-03K

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-369/81-43. This report concerns Channel II of the Negative Steam Line Pressure Rate for S/G 'A' 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:pw
Attachment

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

Mr. Bill Lavallee
Nuclear Safety Analysis Center
P. O. Box 10412
Palo Alto, CA 94303

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McGUIRE NUCLEAR STATION

INCIDENT REPORT

Report Number: 81-43

Report Date: April 19, 1981

Occurrence Date: April 10, 1981

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

Identification of Occurrence: Channel II of the Negative Steam Line Pressure Rate for Steam Generator (S/G) "A" was declared inoperable.

Conditions Prior to Occurrence: Mode 3, Hot Standby

Description of Occurrence: On April 10, 1981 at 1110 hours, the Shift Supervisor noticed that the pressure gauge for S/G "A" Steam Line Pressure Channel II did not respond with the other two pressure gauges (Channels I and IV) as the steam pressure was increasing. This channel was declared inoperable. This was therefore a reportable incident pursuant to Technical Specification 3.3.2.4d.

Apparent Cause of Occurrence: The lower stem assembly (plunger) of the Dragon Instrument Root and Manifold Valve is spring loaded (compressed) when closed and provided with a disc for seating. The valve stem and the plunger are separated by a seal diaphragm to prevent leakage. When the valve stem is rotated upward, the loaded spring will push the plunger up against the diaphragm allowing the valve to open. The root valve on the S/G "A" Pressure Transmitter was torqued closed such that when it was opened (valve stem cranked up), the plunger did not lift off the seat because the disc was stuck. The spring was not strong enough to push up the stuck plunger even with the aid of system pressure. (Once plunger is out, usually by tapping the valve, it will not close back unless it is done manually because the spring will hold it up.) This caused the pressure gauge in the Control Room to read zero.

Analysis of Occurrence: Upon entering Mode 3 on April 10, 1981, the Reactor Coolant System pressure was being raised when the Shift Supervisor noticed that pressure gauge for S/G "A" Steam Line Pressure Channel II in the Control Room was reading zero. The other two gauges on the same steam line were reading above zero pressure. Channel II loop was immediately declared inoperable and then placed in the tripped position. Personnel had previously received a work request to perform a preventive maintenance periodic test on this channel. When they were notified that the instrument was not working properly, they used the same work request to correct the problem. The transmitter was aligned and the calibration was completed on April 10, 1981.

Safety Analysis: Each of the 4 main steam lines is provided with three (3) independent channel instruments to monitor steam line pressure and provide control of the stop valve. If one channel in any steam line is inoperable, then one out of the three indicators on that steam line is out of agreement with the other two. The stop valves did not close automatically because it would require at least 2/3 channel actuation for main steam line isolation to occur. Therefore, the S/G "A" Steam Line Pressure Channel II being inoperable did not affect the plant's safe operation and the health and safety of the public. If valid signals had occurred on the two operable channels, the stop valves would have closed.

Corrective Action: The Shift Supervisor requested personnel to place the affected channel in the trip position immediately upon declaring it inoperable. (This was done by placing the loop in the TEST position.) The Dragon valve was tapped and the plunger lifted off its seat. The affected channel was calibrated and declared operable on April 10, 1981 at 2025 hours.