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

50-369

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WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

April 8, 1981

TELEPHONE: AREA 704
373-4083

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-369/81-29. This report concerns the flowmeter for the Conventional Waste Water discharge line being 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:scs

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

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

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DUKE POWER COMPANY
MCGUIRE NUCLEAR STATION
INCIDENT REPORT

Report Number: RO-369/81-29

Report Date: March 26, 1981

Occurrence Date: March 10, 1981

Facility: McGuire Unit 1, Cornelius, North Carolina

Identification of Occurrence:

The flow meter for the Conventional Waste (WC) Water Treatment discharge line was declared inoperable.

Condition Prior to Occurrence: Mode 5, Cold Shutdown

Description of Occurrence:

At some time between 0800 and 0900 hours on March 10, 1981, Chemistry personnel were conducting a daily routine checkout of the WC discharge when they noticed the water level of the Parshall flume measuring device did not seem to correspond with the flow meter indication. They measured flow using the Head vs Flow table (ISCO Open Channel Flow Measurement Handbook) and found out that the flow meter was reading approximately 200 GPM higher. At 0830 hours, they shut off the WC pump and used gravity flow discharge (180 to 200 GPM). This was reported to their supervisor and he went back to check the instrument. He verified the flow meter was not functioning properly and reported immediately to the Shift Supervisor on duty who in turn declared the system inoperable at 1040 hours. Chemistry personnel terminated WC discharge at 1045 hours. This incident was reportable pursuant to MNS Technical Specification 3.3.3.8.

Apparent Cause of Occurrence:

The WC discharge flow meter (Model 1870) is designed to measure and record flow rate or level in conjunction with the type of open channel primary measuring device used (e.g., weir, flume, etc.). The meter is capable of monitoring 1 to 4 different channels by selecting the proper MODE position. Level-to-flow rate conversion is accomplished by a plug-in Primary Device Characterization Module which is set (programmed) at the factory with its respective primary device. The WC discharge flow meter was factory set to use only Level/Flow Rate device number 4. However, somebody changed the position of the mode select switch to device number 3 causing the flow water to function improperly.

Analysis of Occurrence:

The WC system was discharging approximately 480 GPM the last time it was monitored on March 9, 1981, at 0850 hours. It is unknown at this time who moved the MODE select switch or when it was moved from position number 4 to 3.

Safety Evaluation:

At the time the incident occurred, Chemistry personnel were able to isolate the WC discharge, thus, Chemistry personnel were not required to estimate flow every 4 hours. However, if the WC discharge could not have been terminated, flow could have been measured by taking the water elevation of this flume and obtaining flow rate using Head vs. Flow Table (ISCO Open Channel Flow Measurement Handbook). This type of measurement is used whether discharging through the pump or due to gravity.

Since there is only new fuel on site at this time, the loss of WC system flow indication had no significance with respect to radiation, and the health and safety of the public were not affected.

Corrective Action:

The WC discharge was terminated within five (5) minutes upon discovering that the flow meter was not functioning properly. A work request was initiated and I&E personnel repositioned the flow meter's MODE select switch to device number 4. The equipment was calibrated and tested for proper operation. A padlock was installed on the flow meter cabinet and no one has access to the key except Chemistry personnel. The WC system was declared operable on March 10, 1981, at 1558 hours.