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DUKE POWER COMPANY

POWER BUILDING

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

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

May 7, 1981

TELEPHONE: AREA 704
373-4083

81-051-03L

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-369/81-44. This report concerns the operability of Train A of the Control Area Ventilation System. 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. by JS
William O. Parker, Jr.

RWO:djs

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
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M. J. Graham
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McGUIRE NUCLEAR STATION

INCIDENT REPORT

REPORT NUMBER: 81- 44

REPORT DATE: April 28, 1981

OCCURRENCE DATE: April 10, 1981

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

IDENTIFICATION OF OCCURRENCE: Train A of the Control Area Vencilation (VC) System was declared inoperable. Reportable pursuant to Technical Specification 3.7.6.

CONDITIONS PRIOR TO OCCURRENCE: Mode 3, Hot Standby

DISCRIPTION OF OCCURRENCE: Train A of the Control Area Ventilation System was declared inoperable because the A chiller would not start. The A chiller provides cooling water to the A train Control Room and control area air handling units.

APPARENT CAUSE: The chilled water thermostat on the A chiller was set too low causing the chiller to trip.

ANALYSIS OF OCCURRENCE: The Control Area Ventilation System is sized to cool the Control Room and areas below the Control Room under the most strenuous conditions. Heat loads from the two operating units and high outside temperatures would contribute to this design capacity. There are two chillers in the system, each designed to carry 75% of the load. With Unit #2 still under construction, unit #1 in hot standby (no power output), and mild outside temperatures, the heat load on "A" chiller was a small percentage of its design capacity. The chilled water temperature control thermostat was set too low for the low chiller load and the refrigerant low temperature thermostat opened in the control circuit. This prevented the chiller from re-starting. By the time the mechanical maintenance technician got to the chiller, the refrigerant temperature had increased enough to reset the thermostat. He reset the alarm (LOW REGRIG TEMP) and started the chiller. Using the chilled water outlet thermometer as a guide, he adjusted the chilled water control to maintain 45°F.

CORRECTIVE ACTION: The corrective action was to restart the chiller and then readjust the chilled water temperature controller.

SAFETY ANALYSIS: VC Train A was backed up by and replaced with VC Train B so that no equipment was overheated and damaged. If the train A chiller was needed, it could have been restarted after the refrigerant warmed up. As the heat load increases, the chilled water temperature controller set-point will become less sensitive. Since no overheating occurred in Control Room area equipment, the health and safety of the public were not affected.