

DUKE POWER COMPANY

POWER BUILDING

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

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

April 20, 1982

TELEPHONE: AREA 704
373-4083

Mr. James P. O'Reilly, Regional Administrator
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 a special report submitted pursuant to T.S.6.9.2 in fulfillment of the special report provision of T.S.3.5.2 (Action b) concerning the safety injection of January 11, 1982. This report is required to be submitted within 90 days in the event the Emergency Core Cooling System is actuated and injects water into the Reactor Coolant System, and is to describe the circumstances of the actuation cycles to date, and provide the current value of the usage factor for each affected safety injection nozzle whenever its value exceeds 0.70.

This event was also the subject of the previously submitted Reportable Occurrence Report RO-369/82-07.

Very truly yours,

William O. Parker, Jr.
William O. Parker, Jr. *PHB*

PBN/jfw
Attachment

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

Records Center
Institute of Nuclear Power Operations
1820 Water Place
Atlanta, Georgia 30339

Mr. P. R. Bemis
Senior Resident Inspector
McGuire Nuclear Station

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DUKE POWER COMPANY
McGUIRE NUCLEAR STATION

Special Report Per T.S.3.5.2 (Action b) or T.S.3.5.3 (Action c)
ECCS Actuation and Injection of Water into the Reactor Coolant System

| Date of SI | Mode | Circumstances of the Actuation Cycle | Affected Safety Injection Nozzle(s) | Nozzle's Usage Factor Due to Event | Nozzle's Cumulative Usage Factor |
|------------|--------------|---|---|--|----------------------------------|
| 9/14/81 | 1(27% power) | During performance of the loss of control room test, operators had trouble controlling the Auxiliary Feedwater System. An excessive amount of feedwater was pumped into the steam generators causing an abnormally fast cooldown rate and a safety injection actuation. (Reference Reportable Occurrence Report RO-369/81-151). SI duration: 3 min. 26 sec. | RCS Cold Leg Loop A RCS Cold Leg Loop B RCS Cold Leg Loop C RCS Cold Leg Loop D* | 0.017 0.017 0.017 0.017 | 0.017 0.017 0.017 0.017 |
| 12/24/81 | 5 | During calibration of the pressurizer pressure controller, technicians inadvertently initiated a low steam line pressure safety injection actuation on both trains. Due to a procedural deficiency, when technicians placed the second channel into the test position, SI blocks in the SSPS logic were cleared and valid indications of low steam line pressure initiated the SI. (Reference Reportable Occurrence Report RO-369/81-193). SI duration: N/A | RCS Cold Leg Loop A RCS Cold Leg Loop B RCS Cold Leg Loop C RCS Cold Leg Loop D | Insignificant Insignificant Insignificant Insignificant | 0.017 0.017 0.017 0.017 |
| 1/11/82 | 1(75% power) | Due to extreme cold weather many instrument lines froze with instruments being declared inoperable, eventually leading to inadvertent actuation of engineered safety features causing safety injection, steamline isolation, and reactor and turbine trips. Two S/G "A" pressure instrumentation channels tripped when pressure was released from their impulse lines through manually cracked open test connections in an effort to prevent freezing by drawing warm steam line condensate through the lines. (Reference Reportable Occurrence Report RO-369/82-07). SI duration: 1 min. 54 sec. | RCS Cold Leg Loop A RCS Cold Leg Loop B RCS Cold Leg Loop C RCS Cold Leg Loop D* | 0.017 0.017 0.017 0.017 | 0.034 0.034 0.034 0.034 |

*Usage factor was calculated for this nozzle which was determined to be the "worst case", and applied to all other nozzles involved in the event.