

# DUKE POWER COMPANY

POWER BUILDING

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

WILLIAM O. PARKER, JR.  
VICE PRESIDENT  
STEAM PRODUCTION

June 17, 1981

TELEPHONE: AREA 704  
373-4083

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Attention: Ms. E. G. Adensam, Chief  
Licensing Branch No. 4

Re: McGuire Nuclear Station, Unit 1  
Docket No. 50-369



Dear Mr. Denton:

Attached are proposed changes to the McGuire Nuclear Station, Unit 1, Technical Specifications. These changes include the following items:

1. Exemption request from certain diesel generator testing requirements.
2. Correction to listing of fire detection instrumentation.

Each of these items has been reviewed and it has been determined that there are no adverse safety or environmental impacts associated with the proposed changes.

Very truly yours,

A handwritten signature in dark ink, appearing to read "William O. Parker, Jr.", written over a horizontal line.

William O. Parker, Jr.

CAC:pw  
Attachment

cc: Ms. M. J. Graham  
Resident Inspector  
McGuire Nuclear Station

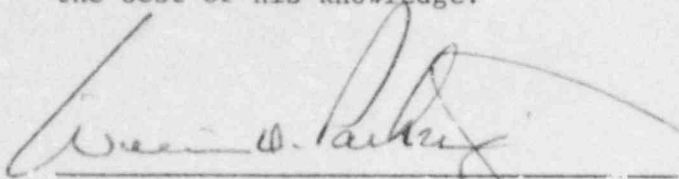
Mr. James P. O'Reilly, Director  
U.S. Nuclear Regulatory Commission  
Region II

P

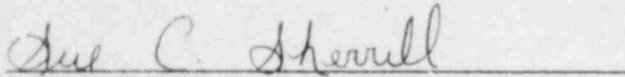
8106220 180

Mr. Harold R. Denton, Director  
June 17, 1981  
Page Two

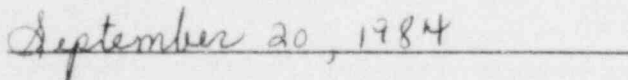
WILLIAM O. PARKER, JR., being duly sworn, states that he is Vice President of Duke Power Company; that he is authorized on the part of said Company to sign and file with the Nuclear Regulatory Commission this revision to the McGuire Nuclear Station Technical Specifications, Appendix A to License No. NPF-9; and that all statements and matters set forth therein are true and correct to the best of his knowledge.

  
\_\_\_\_\_  
William O. Parker, Jr., Vice President

Subscribed and sworn to before me this 17th day of June, 1981

  
\_\_\_\_\_  
Notary Public

My Commission Expires:

  
\_\_\_\_\_

## McGUIRE NUCLEAR STATION

### Technical Specification 3/4.8.1 A.C. Sources

#### Requested Action

Duke Power Company hereby requests an exemption from one of the requirements in Specification 4.8.1.1.2.d.8. Specifically, an exemption is requested from the requirement to perform Specification 4.8.1.1.2.d.7.b within 5 minutes after completing the 24 hour test run of the diesel generator. This is a one time exemption since compliance with this specification is intended for future tests.

#### Justification and Safety Analysis

The requirement to perform a test loading of the diesel generator with accident loads within 5 minutes after completion of a 24 hour test run is a new requirement added to the Technical Specifications which were issued on June 12, 1981 with the 5% power license. The Technical Specification in effect before June 12, 1981 required the diesel generators to be loaded with blackout loads within 5 minutes after completion of a 24 hour test run. To comply with the new specification at this time would result in a 4 to 8 week delay in the plant startup since another integrated ESF test would be required.

The requested exemption is justified from both a technical and a safety standpoint for the following reasons:

- 1) The emergency start signal to the diesel generators is identical for blackout and accidents.
- 2) The loading sequence is similar for both blackout and accident loads.
- 3) A successful "hot" restart and load test with blackout loads of both diesel generators was performed during preoperational testing. This testing was performed with an accelerated sequence (2 seconds between load groups vs a committed 5 seconds between load groups).
- 4) A successful test loading of both diesel generators with accident loads was performed during preoperational testing.
- 5) The "ambient" conditions for the diesel generators include jacket cooling water temperature at 150°F (full load jacket cooling water temperature is 165-175°F) and lube oil temperature at 150°F (full load fuel oil temperature is between 166-173°F). Thus in a "normal" start the diesel generator must cope with elevated temperatures which approach those temperatures that exist 5 minutes after shutdown.
- 6) The response of the diesel generators to the sequencing of accident loads is similar to the response to blackout loads as shown in the following table.

# ESF (ACCIDENT) LOADING

Minimum

Load Group

Voltage (% Nominal) Frequency (Hz)

| Sequence No.* | ESF (Accident) Loading |       |            |   | Blackout Loading |       |            |      |
|---------------|------------------------|-------|------------|---|------------------|-------|------------|------|
|               | Min. Voltage           |       | Freq. (Hz) |   | Min. Voltage     |       | Freq. (Hz) |      |
|               | (% Nominal)            |       |            |   | (% Nominal)      |       |            |      |
|               | A                      | B     | A          | B | A                | B     | A          | B    |
| 1             | 82.7                   | 79.9  | 60.1       |   | 88.7             | 89.0  | 58.4       | 59.3 |
| 2             | 101.4                  | 107.8 | 59.7       |   | 102.1            | 107.3 | 59.7       | 60.2 |
| 3 (5)         | 98.4                   | 97.3  | 59.4       |   | 98.9             | 98.8  | 59.7       | 60.1 |
| 4 (6)         | 96.4                   | 90.7  | 59.8       |   | 86.4             | 85.9  | 59.3       | 60.0 |
| 5 (7)         | 97.9                   | 96.1  | 60.1       |   | 93.1             | 94.9  | 59.7       | 60.1 |

\*Blackout sequencing logic bypasses Sequences Nos. 3 and 4 (RHR and Containment Spray Pumps) since these loads are not required for blackout. Instead the sequencer goes to Sequence No. 5 and continues from there.

The above discussion demonstrates that the intent of the Technical Specifications has been met with the testing that has been performed. Duke Power Company concludes that repeating the integrated ESF test to verify the diesel loading capability after a 24 hour test run is not necessary. There are no health and safety consequences arising from the requested waiver.

## McGUIRE NUCLEAR STATION

### Technical Specification 3/4.3.3.7 Fire Detection Instrumentation

#### Proposed Change

Revise Table 3.3-11, Fire Detection Instruments, as shown on attached table to reflect the actual number of fire detection instruments installed in the Station.

#### Justification

Fire Zone 106 - The minimum number of detectors required in this fire zone by National Fire Protection Association (NFPA) Code 72E-1974 is two ionization (smoke) detectors and two heat/rate of rise detectors. The current number of detectors listed in the Technical Specifications is in error since it lists the number of detectors located in the corresponding Unit 2 fire zone which is larger and requires additional detectors.

Fire Zones 147 through 150 - Each of these fire zones contain one heat/fixed temperature detector to monitor the temperatures around the Reactor Coolant Pump (RCP) motors. This detector is a long cable type detector which wraps around the RCP motor several times. This installation complies with NFPA 72E-1974.

The number of smoke detectors in each fire zone is dependent on the amount of cable located in each zone. Thus, for Fire Zone 148 only one smoke detector is required, whereas three detectors are required in Fire Zone 149 and four detectors are required in Fire Zones 147 and 150. The number and location of these smoke detectors is in compliance with NFPA 72E-1974.

All of the above detection devices have been installed in accordance with the criteria in NFPA 72E-1974 and in the McGuire Fire Protection Hazards Analysis. There is no effect on public health and safety associated with the proposed change.