

Mr. T. C. McMeekin  
 Vice President, McGuire Site  
 Duke Power Company  
 12700 Hagers Ferry Road  
 Huntersville, North Carolina 28078

December 2, 1994

SUBJECT: PROPOSED REVISION TO TECHNICAL SPECIFICATION BASES FOR MCGUIRE  
 NUCLEAR STATION, UNITS 1 AND 2 (TACS M91006 AND M91007)

Dear Mr. McMeekin:

By letter dated September 15, 1994, Duke Power Company (DPC) requested the Nuclear Regulatory Commission's (NRC) review and approval of a proposed change to the Technical Specification (TS) Bases for McGuire Nuclear Station, Units 1 and 2. Specifically, your request provides for the use of Wide Range Neutron Flux Monitors while in Mode 6 to ensure redundant monitoring capability is available to detect changes in the reactivity condition of the core. This information would be added to the Bases Section 3/4.9.2, "Instrumentation." The NRC staff concurs with DPC that the proposed change is administrative. The revised TS Bases page is enclosed.

As you are aware, the TS Bases are not part of the TS as defined by 10 CFR 50.36. As such, changes to the TS Bases may be made in accordance with the provisions of 10 CFR 50.59. Should the proposed change involve an unreviewed safety question pursuant to 10 CFR 50.59(a)(2), or involve a change in the interpretation of implementation of the TS (i.e., constitute a TS change), then the proposed change is to be provided to the staff pursuant to the provisions of 10 CFR 50.59(c) and 10 CFR 50.90 for prior NRC review and approval.

For administrative purposes, the TS Bases change needs to be provided to the staff to enable all copies of the McGuire TS to be updated in a consistent and timely fashion.

Any questions pertaining to this matter can be directed to me at (301) 504-1484.

Sincerely,

/s/  
 Victor Nerses, Project Manager  
 Project Directorate II-3  
 Division of Reactor Projects - I/II  
 Office of Nuclear Reactor Regulation

Docket Nos. 50-369  
 and 50-370

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Enclosure:  
 Revised TS Bases page 06001

**\*SEE PREVIOUS CONCURRENCE**

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

December 2, 1994

Mr. T. C. McMeekin  
Vice President, McGuire Site  
Duke Power Company  
12700 Hagers Ferry Road  
Huntersville, North Carolina 28078

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(301) 504-1484.

Sincerely,

A handwritten signature in cursive script that reads "Victor Nerses".

Victor Nerses, Project Manager  
Project Directorate II-3  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Docket Nos. 50-369  
and 50-370

Enclosure:  
Revised TS Bases page

cc w/enclosure:  
See next page

Mr. T. C. McMeekin  
Duke Power Company

McGuire Nuclear Station

cc:

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### 3/4.9 REFUELING OPERATIONS

#### BASES

#### 3/4.9.1 BORON CONCENTRATION

The limitations on reactivity conditions during REFUELING ensure that: (1) the reactor will remain subcritical during CORE ALTERATIONS, and (2) a uniform boron concentration is maintained for reactivity control in the water volume having direct access to the reactor vessel. These limitations are consistent with the initial conditions assumed for the boron dilution incident in the accident analyses. The value of 0.95 or less for  $K_{eff}$  includes a 1% delta k/k conservative allowance for uncertainties. Similarly, the minimum boron concentration value specified in the Core Operating Limits Report or greater includes a conservative uncertainty allowance of 50 ppm boron.

The Reactor Makeup Water Supply to the Chemical and Volume Control (NV) System is normally isolated during refueling to prevent diluting the Reactor Coolant System boron concentration. Isolation is normally accomplished by closing valve NV-250. However, isolation may be accomplished by closing valves NV-131, NV-140, NV-176, NV-468, NV-808, and either NV-132 or NV-1026, when it is necessary to makeup water to the Refueling Water Storage Tank during refueling operations.

#### 3/4.9.2 INSTRUMENTATION

The OPERABILITY of the Source Range Neutron Flux Monitors ensures that redundant monitoring capability is available to detect changes in the reactivity condition of the core. In MODE 6 the Wide Range Neutron Flux Detectors (ENC) can be used as Source Range Neutron Flux Monitors. All of the LCO, ACTION, and SURVEILLANCE REQUIREMENTS of 3/4.9.2 must be met for the two Source Range Neutron Flux Monitors that are in use at any time.

#### 3/4.9.3 DECAY TIME

The minimum requirement for reactor subcriticality prior to movement of irradiated fuel assemblies in the reactor vessel ensures that sufficient time has elapsed to allow the radioactive decay of the short-lived fission products. This decay time is consistent with the assumptions used in the accident analyses.

#### 3/4.9.4 CONTAINMENT BUILDING PENETRATIONS

The requirements on containment building penetration closure and OPERABILITY of the Reactor Building Containment Purge Exhaust System HEPA filters and charcoal adsorbers ensure that a release of radioactive material within containment will be restricted from leakage to the environment or filtered through the HEPA filters and charcoal adsorbers prior to discharge to the atmosphere. The OPERABILITY and closure restrictions are sufficient to restrict radioactive material release from a fuel element rupture based upon the lack of containment pressurization potential while in the REFUELING MODE. Operation of the Reactor Building Containment Purge Exhaust System HEPA filters and charcoal adsorbers and the resulting iodine removal capacity are consistent with the assumptions of the accident analysis. The methyl iodide penetration test criteria for the carbon samples have been made more restrictive than required for the assumed iodine removal in the accident analysis because the humidity to be seen by the charcoal adsorbers may be greater than 70% under normal operating conditions.