

DUKE POWER COMPANY
MCGUIRE NUCLEAR STATION

Attachment 3

Proposed Technical Specification Revision

8402230149 840217
PDR ADOCK 05000369
P PDR

DESIGN FEATURES

5.4 REACTOR COOLANT SYSTEM

DESIGN PRESSURE AND TEMPERATURE

5.4.1 The Reactor Coolant System is designed and shall be maintained:

- a. In accordance with the Code requirements specified in Section 5.2 of the FSAR, with allowance for normal degradation pursuant to the applicable Surveillance Requirements,
- b. For a pressure of 2485 psig, and
- c. For a temperature of 650°F, except for the pressurizer which is 680°F.

VOLUME

5.4.2 The total water and steam volume of the Reactor Coolant System is 12,040 ± 100 cubic feet at a nominal T_{avg} of 525°F.

5.5 METEOROLOGICAL TOWER LOCATION

5.5.1 The meteorological tower shall be located as shown on Figure 5.1-1.

5.6 FUEL STORAGE

CRITICALITY

5.6.1 The new and spent fuel storage racks are designed and shall be maintained with:

- a. A k_{eff} equivalent to less than or equal to 0.95 when flooded with unborated water, which includes a conservative allowance for uncertainties as described in Section 9.1.2.3.1 of the FSAR, and
- b. A nominal 21-inch center-to-center distance between fuel assemblies placed in the new fuel storage vault racks, and
- c. A nominal 10.4-inch and 9.125-inch center-to-center distance between fuel assemblies placed in Region 1 and Region 2 storage racks, respectively, in the spent fuel storage pool.

DRAINAGE

5.6.2 The spent fuel storage pool is designed and shall be maintained to prevent inadvertent draining of the pool below elevation 745 ft. 7 in.

CAPACITY

5.6.3 the spent fuel storage pool is designed and shall be maintained with a storage capacity limited to no more than 1463 fuel assemblies (286 spaces in Region 1 and 1177 spaces in Region 2) having an initial enrichment less than or equal to 4.0 weight percent U-235.

5.7 COMPONENT CYCLIC OR TRANSIENT LIMIT

5.7.1 The components identified in Table 5.7-1 are designed and shall be maintained within the cyclic or transient limits of Table 5.7-1.

3/4.9 REFUELING OPERATIONS

3/4.9.12 FUEL STORAGE - SPENT FUEL STORAGE POOL

LIMITING CONDITION FOR OPERATION

3.9.12 Fuel is to be stored in the spent fuel storage pool with:

- a. Storage in Region 2 restricted to the following:
 - 1) Fuel which has been qualified in accordance with Figure 3.9-2 or unqualified fuel stored in a checkerboard configuration. In the event checkerboard storage is used, one row between normal storage locations and checkerboard storage locations will be vacant; and
 - 2) Irradiated fuel which has decayed at least 16 days; and
- b. The boron concentration in the spent fuel pool maintained at greater than or equal to 2000 ppm.

APPLICABILITY:

During storage of fuel in the spent fuel pool.

ACTION:

- a. Suspend all actions involving the movement of fuel in the spent fuel pool if it is determined a fuel assembly has been placed in the incorrect Region until such time as the correct storage location is determined. Move the assembly to its correct location before resumption of any other fuel movement.
- b. Suspend all actions involving the movement of fuel in the spent fuel pool if it is determined the pool boron concentration is less than 2000 ppm, until such time as the boron concentration is increased to 2000 ppm or greater.
- c. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

- 4.9.12.a. Verify all fuel assemblies to be placed in Region 2 of the spent fuel pool are within the enrichment and burnup limits of Figure 3.9-2 by checking the assemblies' design and burnup documentation.
- b. Verify at least once per 31 days that the spent fuel pool boron concentration is greater than 2000 ppm.

REFUELING OPERATIONS

(LATER)

Figure 3.9-2
Minimum Burnup vs. Initial Enrichment
for Region 2 Storage