February 4, 1999

Mr. Garry L. Randolph
Vice President and Chief Nuclear Officer
Union Electric Company
Post Office Box 620
Fulton, Missouri 65251

SUBJECT: CORRECTION TO AMENDMENT NO. 129 (TAC NO. MA1113)

Dear Mr. Randolph:

On January 19, 1999, the Commission issued Amendment No. 129 to Facility Operating License No. NPF-30 for the Callaway Plant, Unit 1. The amendment consisted of changes to the technical specifications to allow an increase in the spent fuel pool storage capacity and to allow storage of an additional 279 fuel assemblies in the cask loading pit in response to your application dated February 24, 1998, as supplemented by letters dated May 27, June 25, August 25, September 3, November 3, and December 4, 1998.

Due to an administrative error, the technical specifications did not indicate the amendment number on each page. Enclosed are the corrected technical specification pages. We apologize for any inconvenience this may have caused.

Sincerely,
Original Signed By
Mel Gray, Project Manager
Project Directorate IV-2
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket No. 50-483

Enclosure: Technical Specification Pages

cc w/encl: See next page

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REFUELING OPERATIONS

3/4.9.12 SPENT FUEL ASSEMBLY STORAGE

LIMITING CONDITION FOR OPERATION

3.9.12 Spent fuel assemblies stored in either the Spent Fuel Pool or cask loading pit shall be subject to one of the following conditions:

a. Spent fuel assemblies regardless of burnup can be placed in Region 1.

b. Spent fuel assemblies within the burnup-enrichment range shown in Figure 3.9-1 for Region 2 fuel shall be placed in Region 2 or 3.

c. Spent fuel assemblies within the burnup-enrichment range shown in Figure 3.9-1 for Region 3 fuel shall be placed in Region 3.

APPLICABILITY: Whenever irradiated fuel assemblies are in the spent fuel pool or cask loading pit.

ACTION:

a. With the requirements of the above specification not satisifed, suspend all other movement of fuel assemblies and crane operations with loads in the fuel storage areas and move non-complying fuel assemblies to Region1. Until the requirements of the above specification are satisifed, boron concentration of the spent fuel pool shall be verified to be greater than or equal to 2000 ppm at least once per 8 hours.

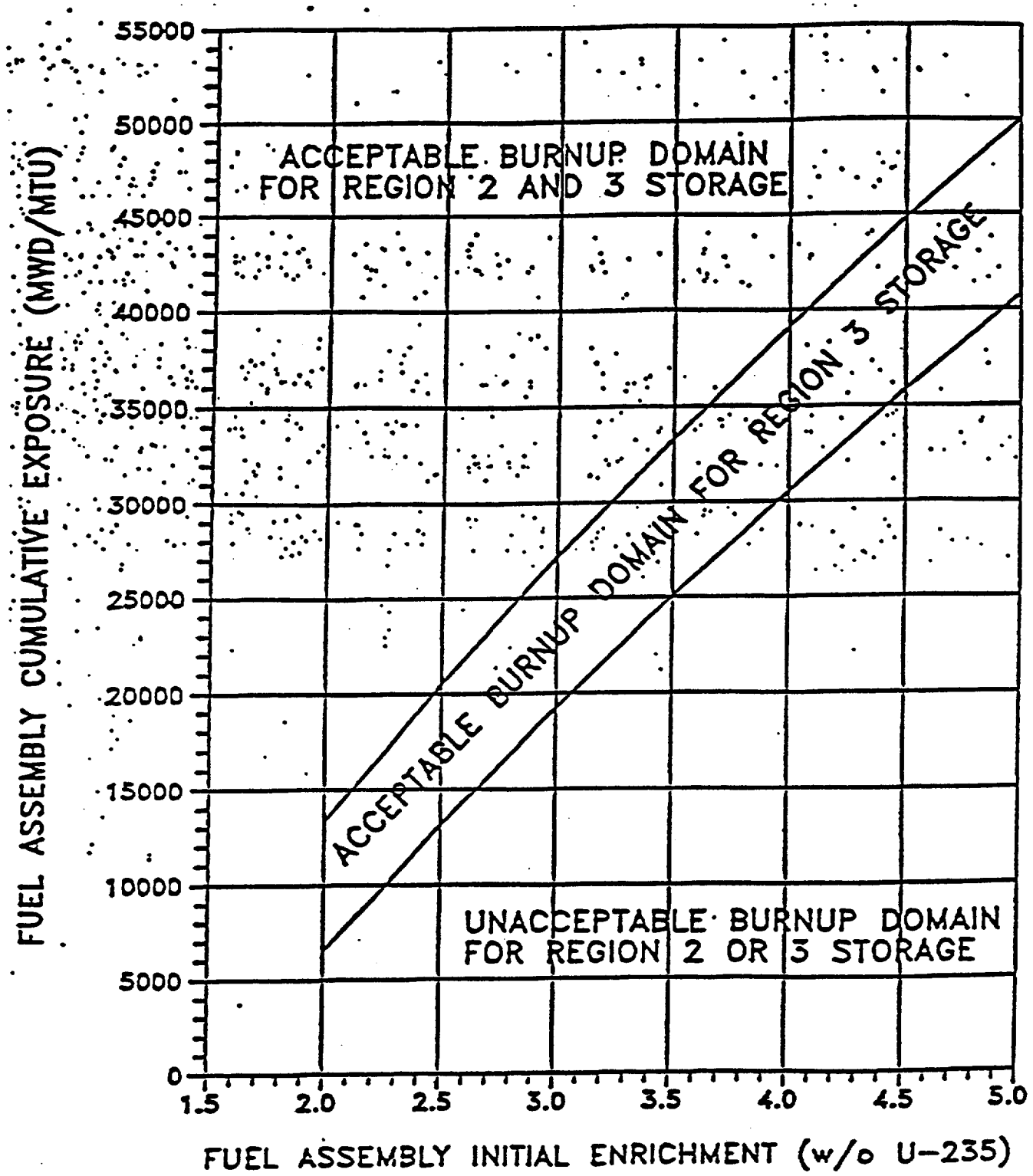
b. The provisions of Specification 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.12 The burnup of each spent fuel assembly stored in Regions 2 and 3 shall be ascertained by analysis of its burnup history and independently verified prior to storage in Regions 2 or 3. A complete record of such analysis shall be kept for the time period that the spent fuel assembly remains in Regions 2 or 3 of the spent fuel pool or cask loading pit.

FIGURE 3.9-1

MINIMUM REQUIRED FUEL ASSEMBLY BURNUP AS A FUNCTION OF INITIAL ENRICHMENT TO PERMIT STORAGE IN REGIONS 2 AND 3



removal capability. With the reactor vessel heat removed and at least 23 feet of water above the reactor vessel flange, a large heat sink is available for core cooling. Thus, in the event of a failure of the operating RHR loop, adequate time is provided to initiate emergency procedures to cool the core.

3/4.9.9 CONTAINMENT VENTILATION SYSTEM

The OPERABILITY of this system ensures that the containment purge penetrations will be automatically isolated upon detection of high radiation levels within the containment. The OPERABILITY of this system is required to restrict the release of radioactive material from the containment atmosphere to the environment.

3/4.9.10 and 3/4.9.11 WATER LEVEL - REACTOR VESSEL AND STORAGE POOL

The restrictions on minimum water level ensure that sufficient water depth is available to remove 99% of the assumed 10% iodine gap activity released from the rupture of an irradiated fuel assembly. The minimum water depth is consistent with the assumptions of the safety analysis.

3/4.9.12 SPENT FUEL ASSEMBLY STORAGE

The racks for the spent fuel pool and cask loading pit are designed for storage of both new fuel and irradiated fuel. Prior to storage of fuel assemblies in either the spent fuel pool or cask loading pit, overall pool storage Regions shall be prepared in accordance with administrative controls. The restrictions placed on fuel assemblies stored in the spent fuel pool and cask loading pit ensure inadvertent criticality will not occur. Region 1 is designed to accommodate new fuel with a maximum nominal initial enrichment of 5.0 weight percent U-235, or spent fuel regardless of the discharge fuel burnup. Region 2 and Region 3 are designed to accommodate fuel of various initial enrichments which have accumulated minimum burnups within the acceptable domain according to Figure 3.9-1, in the accompanying LCO.

3/4.9.13 EMERGENCY EXHAUST SYSTEM

The limitations on the Emergency Exhaust System ensure that all radioactive materials released from an irradiated fuel assembly will be filtered through the HEPA filters and charcoal adsorber prior to discharge to the atmosphere. Operation of the system with the heaters operating to maintain low humidity using automatic control for at least 10 continuous hours in a 31-day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters. The OPERABILITY of this system and the resulting iodine removal capacity are consistent with the assumptions of the safety analyses. ANSI N510-1975 will be used as a procedural guide for surveillance testing. ASTM D-3803-1989 will be used as a procedural guide for the laboratory testing of charcoal samples.

5.3 REACTOR CORE

FUEL ASSEMBLIES

5.3.1 The core shall contain 193 fuel assemblies with each fuel assembly normally containing 264 fuel rods clad with Zircaloy-4 or Zirlo, except that limited substitution of fuel rods by filler rods consisting of Zircaloy-4, stainless steel, or Zirlo may be made if justified by a cycle-specific reload analysis. Each fuel rod shall have a nominal active fuel length of 144 inches and contain a maximum total weight of 1766 grams uranium. Reload fuel shall be similar in physical design to the initial core loading and shall have a maximum nominal enrichment of 5.00 weight percent U-235.

CONTROL ROD ASSEMBLIES

5.3.2 The core shall contain 53 full-length and no part-length control rod assemblies. The full-length control rod assemblies shall contain a nominal 142 inches of absorber material. All control rods shall be hafnium, silver-indium-cadmium, or a mixture of both types. All control rods shall be clad with stainless steel tubing.

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 volume of the Reactor Coolant System, including pressurizer and surge line, is 12,135 ± 100 cubic feet at a nominal T_{avg} of 557°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

5.6.1.1 The spent fuel storage racks are designed and shall be maintained:

a. With a k_{eff} equivalent to less than or equal to 0.95 when flooded with unborated water, which includes an allowance for uncertainties as described in Section 9.1 of the FSAR. This is based on fresh fuel with the maximum initial enrichment of U-235 in Region 1 and on spent fuel with an acceptable combination of initial enrichment and discharge exposures, shown in Figure 3.9-1 for Region 2 and Region 3, and

b. With a nominal 8.99 inch center-to-center distance between fuel assemblies placed in the storage racks, and

c. For fuel with nominal enrichments greater than 4.60 weight percent U-235, the combination of enrichment and integral fuel burnable absorbers shall be sufficient so that the requirements of Specification 5.6.1.1.a are met. Integral fuel burnable absorbers are not required for Region 1 rack locations on the periphery of the pool adjacent to a concrete wall.

5.6.1.2 The k_{eff} for new fuel for the first core loading stored dry in the spent fuel storage racks shall not exceed 0.98 when aqueous foam moderation is assumed.

DRAINAGE

5.6.2 The fuel storage pool is designed and shall be maintained to prevent inadvertent draining of the pool below elevation 2040 feet.

CAPACITY

5.6.3 The spent fuel storage pool is designed and shall be maintained with a storage capacity limited to no more than 2363 fuel assemblies. The cask loading pit is designed and shall be maintained with a storage capacity limited to no more than 279 fuel assemblies.

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.