70-3002

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June 21, 1985

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Mr. John G. Davis, Director
Office of Nuclear Material Safety & Safeguards
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Mr. R. G. Page, Chief
Uranium Fuel Licensing Branch

Re: Catawba Nuclear Station, Unit 2
Docket No. 50-414
Special Nuclear Material License Application

Dear Mr. Davis:

In addition to my letter of June 19, 1985, which was in response to the June 7, 1985 letter from Mr. Kishore Kodali, of your staff, we have the following additional comment:

> In the Draft SER and proposed License on pages 11 and 21 (and License Condition 16b) there is a proposed restriction of 12 inches on the minimum edge to edge distance between assemblies in the shipping containers. The actual distance between the assemblies in the containers is approximately 2 inches. The approved Westinghouse shipping containers (Certificate of Compliance No. 5450) employ a poison spacer material which is between the fuel assemblies and will preclude inadvertent criticality. We propose deleting the minimum edge to edge spacing requirement for the shipping container array from the SER and the License.

If there are any questions regarding this information, please contact Mr. Roger W. Ouellette at (704)373-7530.

Very truly yours,

Hal B. Tucker

Hal B. Tucker

RWO:slb

cc: Dr. J. Nelson Grace, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

25427

DOCKET NO. 70-3002
CONTROL NO. 25427
DATE OF DOC. 6/21/85
DATE RCVD. 6/25/85
FCUF ✓
FCAP
MM
MMER
PCTC
PDR
LPDR
ISE REF. ✓
SAFEGUARDS ✓
OTHER
DESCRIPTION:
Restatement dtd
6/7/85 - 6/19/85 and
6/26/85
INITIAL

cc: Robert Guild, Esq.
P. O. Box 12097
Charleston, South Carolina 29412

NRC Resident Inspector
Catawba Nuclear Station

Palmetto Alliance
2135½ Devine Street
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Mr. Jesse L. Riley
Carolina Environmental Study Group
854 Henley Place
Charlotte, North Carolina 28207

g. New Fuel Storage Racks in the New Fuel Storage Vault, and

h. Spent Fuel Storage Racks in the Spent Fuel Storage Facility.

DPC's application specifies that no more than two fuel assemblies shall be out of their shipping containers or storage racks at one time.

Calculations have indicated that two assemblies could be made critical at optimum conditions of water moderation and reflection; however, one assembly, separated from another assembly by ≥12 inches of spacing cannot be made critical under any conditions. Therefore, the staff recommends the following license condition limiting the number of fuel assemblies out of storage and the minimum distance from each other and from all other fuel:

Condition 16a. No more than two fuel assemblies shall be out of approved shipping containers or fuel assembly storage racks at any one time.

b. The minimum edge-to-edge distance between the two fuel assemblies, ~~the shipping container array,~~ and the storage rack arrays shall be 12 inches. between

B. Shipping Containers

The fresh fuel assemblies will be temporarily stored in shipping containers in the fuel receiving area. The shipping containers are authorized for

a. New Assembly Handling Fixture

b. Rod Cluster Control Assembly (RCCA) Handling Fixture

c. New Fuel Elevator

d. Spent Fuel Pool Manipulator Crane

e. Indexing of Spent Fuel Pool Manipulator Crane

f. Whiting 10 Ton Crane

g. New Fuel Storage Racks in the New Fuel Storage Vault, and

h. Spent Fuel Storage Racks in the Spent Fuel Storage Facility.

Condition 16. a. No more than two fuel assemblies shall be out of approved shipping containers or fuel assembly storage racks at any one time.

b. The minimum edge-to-edge distance between the two fuel assemblies ~~and the shipping container array~~ and storage rack arrays shall be 12 inches. between

Condition 17. Fuel assemblies shall be stored in such a manner that water would drain freely from the assemblies in the event of flooding and subsequent draining of the fuel storage area.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License number SNM-1950 49

Docket or Reference number 70-3002

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16. a. No more than two fuel assemblies shall be out of approved shipping containers or fuel assembly storage racks at any one time.

    b. The minimum edge-to-edge distance between the two fuel assemblies, ~~the shipping container array~~ and the storage rack arrays shall be 12 inches.

17. Fuel assemblies shall be stored in such a manner that water would drain freely from the assemblies in the event of flooding and subsequent draining of the fuel storage area.

18. New fuel assemblies may be stored in the Spent Fuel Storage Facility subject to the following conditions:

    a. The maximum U-235 enrichment shall be 3.15 w/o.

    b. The fuel assemblies shall be stored in a checkerboard pattern.

    c. The Reactor Engineer shall verify correct fuel assembly location after insertion of each assembly into the assigned storage rack in accordance with a prepared written procedure approved by the Superintendent of Operations.

    d. An independent loading verification shall be made by a Quality Control Inspector.

    e. The Reactor Engineer and the Quality Control Inspector shall each sign a document assuring proper storage of each fuel assembly.

19. The licensee is hereby exempted from the provisions of 10 CFR 70.24 insofar as this section applies to materials held under this license.

20. The licensee shall comply with provisions of Annex A, "License Condition for Leak Testing Sealed Plutonium Sources."

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