

DUKE POWER COMPANY

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HAL B. TUCKER

VICE PRESIDENT
NUCLEAR PRODUCTION

TELEPHONE
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December 17, 1985

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

Attention: Mr. B. J. Youngblood, Project Director
PWR Project Directorate No. 4

Subject: Catawba Nuclear Station, Unit 2
Docket No. 50-414

Dear Sir:

By letter dated July 30, 1985, Duke Power Company (DPC) requested, inter alia, that the exemption to 10 CFR 70.24 previously granted in the Special Nuclear Materials License (SNM-1949) be carried over to the Facility Operating License for Catawba Unit 2. The purpose of this letter is to rescind the previous request.

10 CFR 70.24a requires in part:

"Each licensee authorized to possess special nuclear material in a quantity exceeding ... 1,500 grams of contained uranium -235 if no uranium enriched to more than 4 percent by weight of uranium - 235 is present, ... shall maintain in each area in which such licensed special nuclear material is handled, used, or stored, a monitoring system meeting the requirements of either paragraph (a)(1) or (a)(2), as appropriate, and using gamma - or neutron - sensitive radiation detectors which will energize clearly audible alarm signals if accidental criticality occurs. This section is not intended to require underwater monitoring when special nuclear material is handled or stored beneath water shielding..."

The Staff's Safety Evaluation for the Catawba Unit 2 SNM license noted that the new fuel assemblies would be stored dry in a checkerboard pattern in the spent fuel storage facility or in other approved locations. Analyses performed by both Duke and the Staff determined that criticality would be precluded by the above storage arrangement. For this and other reasons, the Staff agreed that criticality monitoring was unnecessary and granted the requested waiver to Part 70.24 for the term of SNM-1949.

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Mr. Harold R. Denton, Director
December 17, 1985
Page Two

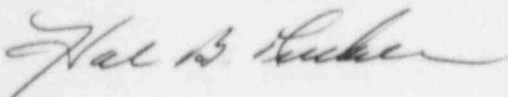
It was later recognized that license SNM-1949 would be automatically terminated at the time of issuance of the Catawba Unit 2 Facility Operating License. As discussed in Section 12.3.4 of the Catawba FSAR, a single radiation monitor is provided on the refueling bridge in order to alert station personnel to unexpected radiation levels during fuel handling operations. This single monitor does not meet the redundancy requirements of Part 70.24. For this reason, Duke Power Company had previously requested that the exemption granted in SNM-1949 be carried over to the Facility Operation License for Catawba Unit 2.

Further review of this situation has determined that a temporary radiation monitor could be provided, along with the refueling bridge radiation monitor, and would satisfy the requirements of Part 70.24.

Between initial fuel loading and the first refueling outage, the spent fuel pool would not be used to store special nuclear material and the requirements of Part 70.24 would not apply. Prior to the first refueling outage, the spent fuel pool would be filled with borated water. Storage of special nuclear material after that time would be under water and criticality monitoring is not required by Part 70.24.

Therefore, it is our conclusion that criticality monitoring need only be provided for the spent fuel pool after receipt of the Facility Operating License until the new fuel is loaded into the reactor vessel. Criticality monitoring will be provided during this time period. This obviates the need for the previously requested extension of the exemption to Part 70.24 and the previous request is herewith rescinded.

Very truly yours,



Hal B. Tucker

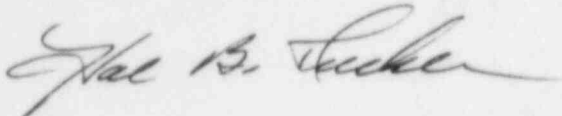
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cc: Dr. J. Nelson Grace, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

NRC Resident Inspector
Catawba Nuclear Station

Mr. Harold R. Denton, Director
December 17, 1985
Page Three

HAL B. TUCKER, 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 application; and that all statements and matters set forth therein are true and correct to the best of his knowledge.



Hal B. Tucker, Vice President

Subscribed and sworn to before me this 17th day of December, 1985.



Notary Public

My Commission Expires:

September 20, 1989