

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of

DUKE POWER COMPANY

(McGuire Nuclear Station,
Units 1 and 2)

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Docket Nos. 50-369 and 50-370

EXEMPTION

I.

The Duke Power Company (the licensee) is the holder of Facility Operating License Nos. NPF-9 and NPF-17, for the McGuire Nuclear Station, Units 1 and 2. The licenses provide, among other things, that the licensee is subject to all rules, regulations, and orders of the Commission now or hereafter in effect.

These facilities consist of two pressurized water reactors located at the licensee's site in Mecklenburg County, North Carolina.

II.

Title 10 of the Code of Federal Regulations (10 CFR) at subsection (a) of 10 CFR 70.24, "Criticality Accident Requirements," requires that each licensee authorized to possess special nuclear material shall maintain in each area where such material is handled, used, or stored, a criticality accident monitoring system "using gamma- or neutron-sensitive radiation detectors which will energize clearly audible alarm signals if accidental criticality occurs." Subsection (a)(1) and (a)(2) of 10 CFR 70.24 specify the detection, sensitivity, and coverage capabilities of the monitors required by 10 CFR 70.24(a). Subsection (a)(3) of 10 CFR 70.24 requires that the licensee shall

maintain emergency procedures for each area in which this licensed special nuclear material is handled, used, or stored and provides (1) that the procedures ensure that all personnel withdraw to an area of safety upon the sounding of a criticality monitor alarm, (2) that the procedures must include drills to familiarize personnel with the evacuation plan, and (3) that the procedures designate responsible individuals for determining the cause of the alarm and placement of radiation survey instruments in accessible locations for use in such an emergency. Subsection (b)(1) requires licensees to have a means to quickly identify personnel who have received a dose of 10 rads or more. Subsection (b)(2) requires licensees to maintain personnel decontamination facilities, to maintain arrangements for a physician and other medical personnel qualified to handle radiation emergencies, and to maintain arrangements for the transportation of contaminated individuals to treatment facilities outside the site boundary. Subsection (c) exempts Part 50 licensees (such as McGuire) from the requirements of paragraph (b). Subsection (d) states that any licensee who believes that there is good cause why he should be granted an exemption from all or part of 10 CFR 70.24 may apply to the Commission for such an exemption and shall specify the reasons for the relief requested.

By letter dated February 4, 1997, as supplemented March 19, 1997, Duke Power Company requested an exemption for all its nuclear plants from the requirements of 10 CFR 70.24. The staff has reviewed the licensee's submittal, and documented its detailed review in a Safety Evaluation. The staff found that existing procedures and design features make an inadvertent criticality in special nuclear materials handling or storage at McGuire

unlikely. The licensee has thus met the intent of 10 CFR 70.24(d) by the low probability of an inadvertent criticality in areas where fresh fuel could be present, by the licensee's adherence to General Design Criterion 63 regarding radiation monitoring, and by provisions for personnel training and evacuation.

III.

Section 70.14 of 10 CFR, "Specific exemptions," states that

The Commission may, upon application by any interested person or upon its own initiative, grant such exemptions from the requirements of the regulations in this part as it determines are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest.

Section 70.24(d) of 10 CFR states that

Any licensee who believes that good cause exists why he should be granted an exemption in whole or in part from the requirements of this section may apply to the Commission for such exemption.

Accordingly, the Commission has determined that good cause is present as defined in 10 CFR 70.24(d). The Commission has further determined that, pursuant to 10 CFR 70.14, the exemption is authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest. Therefore, the Commission hereby grants Duke Power Company an exemption from the requirement of 10 CFR 70.24(a)(1), (2), and (3) for McGuire, Units 1 and 2, on the bases as stated in Section II above.

Pursuant to 10 CFR 51.32, the Commission has determined that granting of this exemption will have no significant effect on the quality of the human environment (62 FR 41101).

This exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

ORIGINAL SIGNED BY:

Samuel J. Collins, Director
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland,
this 31st day of July 1997.

OFFICE	PDII-2/PM	PDII-2/LA	PDII-2/D	OGC	DRPE/D B ²
NAME	V. NERSES	L. BERRY	H. BERKOW		B. BOGER
DATE	7/11/97	7/8/97	7/29/97	7/15/97	7/24/97
COPY	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICE	ADPR #17122	NRR/D	NRR/SC		
NAME	R. ZIMMERMAN	S. COLLINS	M. [unclear]		
DATE	7/24/97	7/28/97	7/29/97		
COPY	YES NO	YES NO			

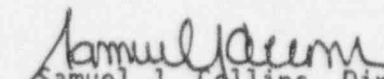
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