



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

November 12, 1985

Docket Nos: 50-369
and 50-370

Mr. H. B. Tucker, Vice President
Nuclear Production Department
Duke Power Company
422 South Church Street
Charlotte, North Carolina 28242

Dear Mr. Tucker:

Subject: Issuance of Amendment No. 48 to Facility Operating License
NPF-9 and Amendment No. 29 to Facility Operating License
NPF-17 - McGuire Nuclear Station, Units 1 and 2

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 48 to Facility Operating License NPF-9 and Amendment No. 29 to Facility Operating License NPF-17 for the McGuire Nuclear Station, Units 1 and 2. These amendments are issued in response to your application dated December 10, 1984.

The amendments modify Technical Specification 6.2.2.f. related to working hours of plant staff. The amendments are effective as of their dates of issuance.

A copy of the related safety evaluation supporting Amendment No. 48 to Facility Operating License No. NPF-9 and Amendment No. 29 to Facility Operating License NPF-17 is enclosed.

Notice of issuance will be included in the Commission's next bi-monthly Federal Register notice.

Sincerely,

for *L L Kuitner*
Elinor G. Adensam, Chief
Licensing Branch No. 4
Division of Licensing

Enclosures:

1. Amendment No.48 to NPF-9
2. Amendment No.29 to NPF-17
3. Safety Evaluation

cc w/enclosures:
See next page

DESIGNATED ORIGINATOR
Certified By *Helen M. Clem*

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November 12, 1985

AMENDMENT NO. 48 TO FACILITY OPERATING LICENSE NPF-9 - McGUIRE NUCLEAR STATION, UNIT 1
AMENDMENT NO. 29 TO FACILITY OPERATING LICENSE NPF-17 - McGUIRE NUCLEAR STATION, UNIT 2

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

DUKE POWER COMPANY

DOCKET NO. 50-369

McGUIRE NUCLEAR STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 48
License No. NPF-9

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
 - A. The application for amendment to the McGuire Nuclear Station, Unit 1 (the facility) Facility Operating License No. NPF-9 filed by the Duke Power Company (the licensee) dated December 10, 1984, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application as amended, the provisions of the Act, and the regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this amendment will not be inimical to the common defense and security or the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. NPF-9 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 48, are hereby incorporated into this license. The

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licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

for *L. K. Kintner*
Elinor G. Adensam, Chief
Licensing Branch No. 4
Division of Licensing

Attachment:
Technical Specification Changes

Date of Issuance: November 12, 1985



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

DUKE POWER COMPANY

DOCKET NO. 50-370

McGUIRE NUCLEAR STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 29
License No. NPF-17

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the McGuire Nuclear Station, Unit 2 (the facility) Facility Operating License No. NPF-17 filed by the Duke Power Company (the licensee) dated December 10, 1984, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public;
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachments to this license amendment and paragraph 2.C.(2) of Facility Operating License No. NPF-17 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 29, are hereby incorporated into this license.

The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

for 
Elinor G. Adensam, Chief
Licensing Branch No. 4
Division of Licensing

Attachment:
Technical Specification Changes

Date of Issuance: November 12, 1985

ATTACHMENT TO LICENSE AMENDMENT NO. 48

FACILITY OPERATING LICENSE NO. NPF-9

DOCKET NO. 50-369

AND

TO LICENSE AMENDMENT NO. 29

FACILITY OPERATING LICENSE NO. NPF-17

DOCKET NO. 50-370

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised page is identified by Amendment number and contains a vertical line indicating the area of change. The corresponding overleaf page is also provided to maintain document completeness.

Amended
Page

6-2

Overleaf
Page

6-1

6.0 ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

6.1.1 The Station Manager shall be responsible for overall unit operation and shall delegate in writing the succession to this responsibility during his absence.

6.1.2 The Shift Supervisor (or during his absence from the control room, a designated individual) shall be responsible for the control room command function. A management directive to this effect, signed by the Manager of Nuclear Production shall be reissued to all station personnel on an annual basis.

6.2 ORGANIZATION

OFFSITE

6.2.1 The offsite organization for unit management and technical support shall be as shown in Figure 6.2-1.

UNIT STAFF

6.2.2 The unit organization shall be as shown in Figure 6.2-2 and:

- a. Each on-duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1;
- b. At least one licensed Operator for each unit shall be in the control room when fuel is in either reactor. In addition, while either unit is in MODE 1, 2, 3, or 4, at least one licensed Senior Operator shall be in the control room;
- c. A Health Physics Technician[#] shall be on site when fuel is in either reactor;
- d. All CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Operator or licensed Senior Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation;
- e. A site Fire Brigade of at least five members shall be maintained onsite at all times. The Fire Brigade shall not include three members of the minimum shift crew necessary for safe shutdown of the unit and any personnel required for other essential functions during a fire emergency; and

[#]The Health Physics Technician and Fire Brigade composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence, provided immediate action is taken to fill the required positions.

ADMINISTRATIVE CONTROLS

- f. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety-related functions; e.g., licensed Senior Operators, licensed Operators, health physicists, auxiliary operators, and key maintenance personnel.

Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a normal 12 hour day with alternating 48 hour and 36 hour work week while the unit is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance or major plant modifications, on a temporary basis, the following guidelines shall be followed:

- 1) An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time;
- 2) An individual should not be permitted to work more than 16 hours in any 24-hour period, nor more than 28 hours in any 48-hour period, nor more than 72 hours in any 7-day period, all excluding shift turnover time;
- 3) A break of at least 8 hours should be allowed between work periods, including shift turnover time; and
- 4) Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

Any deviation from the above guidelines shall be authorized by the Station Manager or his deputy, or higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation. Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the Station Manager or his designee to assure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.



UNITED STATES
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SAFETY EVALUATION REPORT

RELATED TO AMENDMENT NO. 48 TO FACILITY OPERATING LICENSE NPF-9

AND TO AMENDMENT NO. 29 TO FACILITY OPERATING LICENSE NPF-17

DUKE POWER COMPANY

MCGUIRE NUCLEAR STATION, UNITS 1 AND 2

I. INTRODUCTION

By letter dated December 10, 1984, the licensee proposed amendments to License Nos. NPF-9 and NPF-17 which would change Technical Specification 6.2.2.f with respect to working hours of plant staff. The NRC staff has evaluated these proposed amendments.

II. EVALUATION

The proposed amendments modify Technical Specification 6.2.2.f with respect to the specified objectives on normal working hours of unit staff who perform safety-related functions. The modifications substitute a 12-hour day with alternating 48-hour and 36-hour work week in place of the 8-hour day, 40-hour week. For those occasions which require substantial amounts of overtime or during extended periods of shutdown for refueling, major maintenance or major plant modifications, the specified guidelines on the maximum number of working hours recommended on a temporary basis for any 48-hour period are increased 4 hours (i.e., from no more than 24 hours to no more than 28 hours). The corresponding guidelines of not more than 16 hours any 24-hour period and not more than 72 hours for any 7-day period are not changed by the proposed amendments.

In support of this request, the licensee stated that the change from an 8 to a 12-hour shift has been found to be more efficient, to reduce shift turnovers from 3 to 2 per day, and to have the advantage of worker transfer continuity (i.e., an individual worker transfers the duties to the person from whom he or she had taken over the duties 12 hours earlier). The licensee also found this continuity to enhance familiarity with the ongoing operations for the shift workers, to result in enhanced safety and improved work quality, and to enhance the effective management of shift turnovers. The Commission finds these observations by the licensee to be consistent with the experience of other operating nuclear power plants utilizing a 12-hour shift. The change to allow an individual to work 28 hours in a 48-hour period provides flexibility for those occasions when an individual works 16 hours, takes a 12-hour break, and returns for a normal 12-hour shift (i.e., the change allows this individual to complete that normal shift).

The Commission finds that the proposed change in working hour guidelines in the Technical Specifications does not create a significant adverse impact on safety as the effect of longer working hours is offset by less frequent shift turnovers and improved employee morale; nor does the Commission's experience to date with other similar shift schedules indicate an increase in operator errors. Therefore, the change is acceptable.

III. ENVIRONMENTAL CONSIDERATION

These amendments involve a change in administrative procedures or requirements. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR Section 51.22(c)(10). Pursuant to 10 CFR 51.22(b) no environmental assessment need be prepared in connection with the issuance of these amendments.

IV. CONCLUSION

The Commission made a proposed determination that the amendments involve no significant hazards consideration which was published in the Federal Register on August 28, 1985 (50 FR 34939) and consulted with the state of North Carolina. No public comments were received, and the state of North Carolina did not have any comments.

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: D. S. Hood, Licensing Branch No. 4, DL
M. Schoppman, Licensee Qualifications Branch, DHFS
F. Allenspach, Licensee Qualifications Branch, DHFS

Dated: November 12, 1985