

June 2, 1992

Docket Nos. 50-369
and 50-370

Distribution
See next page

Mr. T. C. McMeekin
Vice President, McGuire Site
Duke Power Company
12700 Hagers Ferry Road
Huntersville, North Carolina 28078-8985

Dear Mr. McMeekin:

SUBJECT: ISSUANCE OF AMENDMENTS - MCGUIRE NUCLEAR STATION, UNITS 1 AND 2
(TACS M82587 AND M82588)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 132 to Facility Operating License NPF-9 and Amendment No. 114 to Facility Operating License NPF-17 for the McGuire Nuclear Station, Units 1 and 2. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated January 8, 1992, as supplemented February 13, 1992.

The amendments revise the Administrative Controls section of the McGuire Nuclear Station, Units 1 and 2, TS to reflect a reorganization of Duke Power Company (DPC) and changes to the DPC Quality Assurance Report. The reorganization decentralizes the DPC corporate management of nuclear activities and relocates these resources to each of the DPC nuclear stations, including the McGuire Nuclear Station.

A copy of the related Safety Evaluation is also enclosed. A Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

¹⁵¹
Timothy A. Reed, Project Manager
Project Directorate II-3
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 132 to NPF-9
2. Amendment No. 114 to NPF-17
3. Safety Evaluation

cc w/enclosures:
See next page

OFC	: PDI	: LA	: PDII-3/PM	: OGC	: PDII-3/D	:
NAME	: LBERRY	: TR	: cw	: [Signature]	: MATTHEWS	:
DATE	: 4/23/92	: 5/11/92	: 5/12/92	: 6/2/92	:	:

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

June 2, 1992

Docket Nos. 50-369
and 50-370

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Vice President, McGuire Site
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12700 Hagers Ferry Road
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Sincerely,

A handwritten signature in black ink, appearing to read "T. Reed", written over the word "Sincerely,".

Timothy A. Reed, Project Manager
Project Directorate II-3
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 132 to NPF-9
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cc w/enclosures:
See next page

Mr. T. C. McMeekin
Duke Power Company

McGuire Nuclear Station

cc:

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Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
101 Marietta Street, NW. Suite 2900
Atlanta, Georgia 30323

DATED: June 2, 1992

AMENDMENT NO. 132 TO FACILITY OPERATING LICENSE NPF-9 - McGuire Nuclear Station, Unit 1

AMENDMENT NO. 114 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. 132
License No. NPF-9

1. The Nuclear Regulatory Commission (the Commission) 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 (licensee) dated January 8, 1992, as supplemented February 13, 1992, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and 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 to 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.

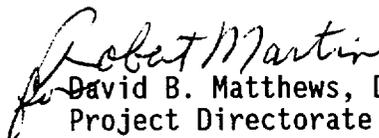
2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Facility Operating License No. NPF-9 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 132, 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



David B. Matthews, Director
Project Directorate II-3
Division of Reactor Projects-I/II
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: June 2, 1992



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. 114
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 1 (the facility), Facility Operating License No. NPF-17 filed by the Duke Power Company (licensee) dated January 8, 1992, as supplemented February 13, 1992, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and 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 to 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.

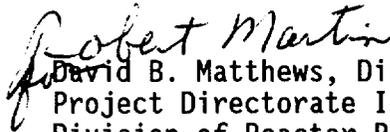
2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Facility Operating License No. NPF-17 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 114, 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


David B. Matthews, Director
Project Directorate II-3
Division of Reactor Projects-I/II
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: June 2, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 132

FACILITY OPERATING LICENSE NO. NPF-9

DOCKET NO. 50-369

AND

TO LICENSE AMENDMENT NO. 114

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 pages are identified by Amendment number and contain vertical lines indicating the areas of change.

Remove Pages

6-1
6-2
6-5
6-6
6-7
6-7a
6-8
6-9
6-10
6-11
6-12
6-13
6-14
6-15
6-23
6-24
6-26

Insert Pages

6-1
6-2
6-5
6-6
6-7
6-7a
6-8
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6-12
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6-14
6-15
6-23
6-24
6-26

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 Vice-President McGuire Nuclear Site, shall be reissued to all McGuire Nuclear Site personnel on an annual basis.

6.2 ORGANIZATION

OFFSITE

6.2.1 OFFSITE AND ONSITE ORGANIZATIONS

Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting the safety of the nuclear power plant.

- a. Lines of authority, responsibility, and communication shall be established and defined for the highest management levels through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organization charts, functional descriptions of departmental responsibilities and relationship, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements shall be documented in the FSAR.
- b. The Station Manager shall be responsible for overall unit safe operation and shall have control over those onsite activities necessary for safe operation and maintenance of the plant.
- c. The Vice President of McGuire Nuclear Site shall have responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety.
- d. The Senior Vice President Nuclear Generation Department will be the Senior Nuclear Executive and have corporate responsibility for overall nuclear safety.
- e. The individuals who train the operating staff and those who carry out radiation protection and quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their independence from operating pressures.

ADMINISTRATIVE CONTROLS

UNIT STAFF

- 6.2.2 The unit organization shall be as shown in the FSAR, Chapter 13, 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 Radiation Protection 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; and
 - e. Administrative procedures shall be developed and implemented to limit the working hours of station staff who perform safety-related functions; e.g., licensed Senior Operators, licensed Operators, radiation protection technicians, non-licensed 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.

TABLE 6.2-1

MINIMUM SHIFT CREW COMPOSITION

POSITION	BOTH UNITS IN MODE 1, 2, 3, or 4	BOTH UNITS IN MODE 5 or 6 OR DEFUELED	ONE UNIT IN MODE 1, 2, 3 or 4 AND ONE UNIT IN MODE 5 or 6 or DEFUELED
SS	1	1	1
SRO	1	none ^b	1
RO	3 ^a	2 ^a	3 ^a
AO	3 ^a	3 ^a	3 ^a
SM	1	none	1

- SS - Shift Supervisor with a Senior Operator license
- SRO - Individual with a Senior Operator license
- RO - Individual with an Operator license
- AO - Auxiliary operator
- SM - Shift Manager

- a/ At least one of the required individuals must be assigned to the designated position for each unit.
- b/ At least one licensed Senior Operator or licensed Senior Operator Limited to Fuel Handling must be present during CORE ALTERATIONS on either unit, who has no other concurrent responsibilities.

TABLE 6.2-1 (Continued)

Except for the Shift Supervisor, the Shift Crew Composition may be one less than the minimum requirements of Table 6.2-1 for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the Shift Crew Composition to within the minimum requirements of Table 6.2-1. This provision does not permit any shift crew position to be unmanned upon shift change due to an oncoming shift crewman being late or absent.

During any absence of the Shift Supervisor from the control room while the unit is in MODE 1, 2, 3 or 4, an individual (other than the Shift Manager*) with a valid Senior Operator license shall be designated to assume the control room command function. During any absence of the Shift Supervisor from the control room while the unit is in MODE 5 or 6, an individual with a valid Senior Operator or Operator license shall be designated to assume the control room command function.

* On occasions when there is a need for both the Shift Supervisor and the SRO to be absent from the control room, the Shift Manager shall be allowed to assume the control room command function and serve as the SRO in the control room provided that: (1) the Shift Supervisor is available to return to the control room within 10 minutes, (2) the assumption of SRO duties by the Shift Manager be limited to periods not in excess of 15 minutes duration and a total time not to exceed 1 hour during any 8-hour shift, and (3) the Shift Manager has an SRO license on the unit.

ADMINISTRATIVE CONTROLS

6.2.3 McGUIRE SAFETY REVIEW GROUP

FUNCTION

6.2.3.1 The McGuire Safety Review Group (SRG) shall function to provide the review of plant design and operating experience for potential opportunities to improve plant safety; evaluation of plant operations and maintenance activities; and, to advise management on the overall quality and safety of plant operations. The SRG shall make recommendations for revised procedures, equipment modifications, or other means of improving plant safety to appropriate station/corporate management.

COMPOSITION

6.2.3.2 The SRG shall be composed of at least five individuals and at least three of these shall have a bachelor's degree in engineering or related science and at least 2 years professional level experience in his/her field, at least 1 year of which experience shall be in the nuclear field.

The remaining individuals in the SRG shall have either
(1) at least 5 years of nuclear experience and hold or have held a Senior Reactor Operator license; or
(2) at least 8 years of professional level experience in his/her field, at least 5 years of which experience shall be in the nuclear field.

RESPONSIBILITIES

6.2.3.3 The SRG shall be responsible for:

- a. Review of selected plant operating characteristics and other appropriate sources of plant design and operating experience information for awareness and incorporation into the performance of other duties.
- b. Review of the effectiveness of corrective actions taken as a result of the evaluation of selected plant operating characteristics and other appropriate sources of plant design and operating experience information.
- c. Review of selected programs, procedures, and plant activities, including maintenance, modification, operational problems, and operational analysis.
- d. Surveillance of selected plant operations and maintenance activities to provide independent verification* that they are performed correctly and that human errors are reduced to as low as practicable.
- e. Investigation of selected unusual events and other occurrences as assigned by Station Management or the Manager of Safety Assurance.

*Not responsible for sign-off function.

ADMINISTRATIVE CONTROLS

6.2.3 MCGUIRE SAFETY REVIEW GROUP (Continued)

AUTHORITY

6.2.3.4 The SRG shall report to and advise the Manager of Safety Assurance, on those areas of responsibility specified in Section 6.2.3.

RECORDS

6.2.3.5 Records of activities performed by the SRG shall be prepared and maintained for the life of the station. Summary reports of activities performed by the SRG shall be forwarded each calendar month to the Manager of Safety Assurance.

6.2.4 SHIFT MANAGER

6.2.4.1 The Shift Manager, whose functions include those of a Shift Technical Advisor, shall serve in an advisory capacity to the Shift Supervisor.

6.3 UNIT STAFF QUALIFICATIONS

6.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions and the supplemental requirements specified in Sections A and C of Enclosure 1 of the March 28, 1980 NRC letter to all licensees, except for the Radiation Protection Manager who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975.

6.4 TRAINING

6.4.1 A retraining and replacement training program for the unit staff shall be maintained under the direction of the Training Manager and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and Appendix A of 10 CFR Part 55 and the supplemental requirements specified in Sections A and C of Enclosure 1 of the March 28, 1980 NRC letter to all licensees, and shall include familiarization with relevant industry operational experience identified by the SRG.

ADMINISTRATIVE CONTROLS

6.5 REVIEW AND AUDIT

6.5.1 TECHNICAL REVIEW AND CONTROL

ACTIVITIES

6.5.1.1 Each procedure and program required by Specification 6.8 and other procedures which affect nuclear safety, and changes thereto, shall be prepared by a qualified individual/organization. Each such procedure, and changes thereto, shall be reviewed by an individual/group other than the individual/group which prepared the procedure, or changes thereto, but who may be from the same organization as the individual/group which prepared the procedure, or changes thereto.

6.5.1.2 Proposed changes to the Appendix A Technical Specifications shall be prepared by a qualified individual/organization. The preparation of each proposed Technical Specifications change shall be reviewed by an individual/group other than the individual/group which prepared the proposed change, but who may be from the same organization as the individual/group which prepared the proposed change. Proposed changes to the Technical Specifications shall be approved by the Station Manager.

6.5.1.3 Proposed modifications to unit nuclear safety-related structures, systems and components shall be designed by a qualified individual/organization. Each such modification shall be reviewed by an individual/group other than the individual/group which designed the modification, but who may be from the same organization as the individual/group which designed the modification. Proposed modifications to nuclear safety-related structures, systems, and components shall be approved prior to implementation by the Station Manager; or for the Station Manager by the Mechanical Superintendent, the Operations Superintendent, and I and E Superintendent, or the Work Control Superintendent, as previously designated by the Station Manager.

6.5.1.4 Individuals responsible for reviews performed in accordance with Specifications 6.5.1.1, 6.5.1.2, and 6.5.1.3 shall be members of the site supervisory staff, previously designated by the Site Vice President to perform such reviews. Each such review shall include a determination of whether or not additional, cross-disciplinary, review is necessary. If deemed necessary, such review shall be performed by the appropriate designated site review personnel.

6.5.1.5 Proposed tests and experiments which affect station nuclear safety and are not addressed in the FSAR or Technical Specifications shall be reviewed by the Station Manager; or for the Station Manager by the Mechanical Superintendent, the Operations Superintendent, the I and E Superintendent, or the Work Control Superintendent, as previously designated by the Station Manager.

ADMINISTRATIVE CONTROLS

ACTIVITIES (Continued)

6.5.1.6 ALL REPORTABLE EVENTS and all violations of Technical Specifications shall be investigated and a report prepared which evaluates the occurrence and which provides recommendations to prevent recurrence. Such reports shall be approved by the Manager, Safety Assurance and transmitted to the Site Vice President, and to the Director of the Nuclear Safety Review Board.

6.5.1.7 The Manager, Safety Assurance shall assure the performance of special reviews and investigations, and the preparation and submittal of reports thereon, as requested by the Site Vice President.

6.5.1.8 Deleted

6.5.1.9 Deleted

6.5.1.10 The Manager, Safety Assurance shall assure the performance of a review by a qualified individual/organization of every unplanned onsite release of radioactive material to the environs including the preparation and forwarding of reports covering evaluation, recommendations, and disposition of the corrective ACTION to prevent recurrence to the Site Vice President, and to the Nuclear Safety Review Board.

6.5.1.11 The Manager, Safety Assurance shall assure the performance of a review by a qualified individual/organization of changes to the PROCESS CONTROL PROGRAM, OFFSITE DOSE CALCULATION MANUAL, and Radwaste Treatment Systems.

6.5.1.12 The Manager, Safety Assurance shall ensure the performance of a review by a qualified individual/organization of the Fire Protection Program and implementing procedures and submittal of recommended changes to the Nuclear Safety Review Board and Manager, Human Resources.

6.5.1.13 Reports documenting each of the activities performed under Specifications 6.5.1.1 through 6.5.1.12 shall be maintained. Copies shall be provided to the Site Vice President, and the Nuclear Safety Review Board.

6.5.2 NUCLEAR SAFETY REVIEW BOARD (NSRB)

FUNCTION

6.5.2.1 The NSRB shall function to provide independent review and audit of designated activities in the areas of:

- a. Nuclear power plant operations,
- b. Nuclear engineering,
- c. Chemistry and radiochemistry,

ADMINISTRATIVE CONTROLS

FUNCTION (Continued)

- d. Metallurgy,
- e. Instrumentation and control,
- f. Radiological safety,
- g. Mechanical and electrical engineering, and
- h. Administrative control and quality assurance practices.

ORGANIZATION

6.5.2.2 The Director, members and alternate members of the NSRB shall be appointed in writing by the Executive Vice President, Power Generation and shall have an academic degree in an engineering or physical science field; and in addition, shall have a minimum of 5 years technical experience, of which a minimum of 3 years shall be in one or more areas given in Specification 6.5.2.1. In special cases, candidates for appointment without an academic degree in engineering or physical science may be qualified with a minimum of ten years experience in one of the areas in Specification 6.5.2.1. No more than two alternates shall participate as voting members in NSRB activities at any one time.

6.5.2.3 The NSRB shall be composed of at least five members, including the Director. Members of the NSRB may be from the Nuclear Generation Department, from other departments within the Company, or from external to the Company. A maximum of one member of the NSRB may be from the McGuire Nuclear Site staff.

6.5.2.4 Consultants shall be utilized as determined by the NSRB Director to provide expert advice to the NSRB.

6.5.2.5 Staff assistance may be provided to the NSRB in order to promote the proper, timely, and expeditious performance of its functions.

6.5.2.6 The NSRB shall meet at least once per calendar quarter during the initial year of unit operation following fuel loading and at least once per 6 months thereafter.

6.5.2.7 The quorum of the NSRB necessary for the performance of the NSRB review and audit functions of these Technical Specifications shall consist of the Director, or his designated alternate, and at least four other NSRB members including alternates. No more than a minority of the quorum shall have line responsibility for operation of McGuire Nuclear Station.

ADMINISTRATIVE CONTROLS

REVIEW

6.5.2.8 The NSRB shall review:

- a. The safety evaluations for: (1) changes to procedures, equipment, or systems, and (2) tests or experiments completed under the provision of Section 50.59, 10 CFR to verify that such actions did not constitute an unreviewed safety question;
- b. Proposed changes to procedures, equipment or systems which involve an unreviewed safety question as defined in Section 50.59, 10 CFR;
- c. Proposed tests or experiments which involve an unreviewed safety question as defined in Section 50.59, 10 CFR;
- d. Proposed changes in Technical Specifications or this Operating License;
- e. Violations of Codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance;
- f. Significant operating abnormalities or deviations from normal and expected performance of unit equipment that affect nuclear safety;
- g. All REPORTABLE EVENTS;
- h. All recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems or components that could affect nuclear safety;
- i. Quality Verification Department audits relating to station operations and actions taken in response to these audits; and
- j. Reports of activities performed under the provisions of Specifications 6.5.1.1 through 6.5.1.12.

AUDITS

6.5.2.9 Audits of site activities shall be performed under the cognizance of the NSRB. These audits shall encompass:

- a. The conformance of unit operation to provisions contained within the Technical Specifications and applicable license conditions;
- b. The performance, training, and qualifications of the entire station staff;

ADMINISTRATIVE CONTROLS

AUDITS (Continued)

- c. The results of actions taken to correct deficiencies occurring in unit equipment, structures, systems, or method of operation that affect nuclear safety;
- d. The performance of activities required by the Operational Quality Assurance Program to meet the criteria of Appendix B, 10 CFR Part 50;
- e. The Emergency Plan and implementing procedures;
- f. The Security Plan and implementing procedures;
- g. The Facility Fire Protection programmatic controls including the implementing procedures;
- h. The fire protection equipment and program implementation utilizing either a qualified offsite licensee fire protection engineer or an outside independent fire protection consultant. An outside independent fire protection consultant shall be used at least every third year;
- i. The Radiological Environmental Monitoring Program and the results thereof;
- j. The OFFSITE DOSE CALCULATION MANUAL and implementing procedures;
- k. The PROCESS CONTROL PROGRAM and implementing procedures for SOLIDIFICATION of radioactive wastes;
- l. The performance of activities required by the Quality Assurance Program for effluent and environmental monitoring; and
- m. Any other area of site operation considered appropriate by the NSRB or the Executive Vice President, Power Generation.

AUTHORITY

6.5.2.10 The NSRB shall report to and advise the Executive Vice President, Power Generation on those areas of responsibility specified in Specific-ations 6.5.2.8 and 6.5.2.9.

ADMINISTRATIVE CONTROLS

RECORDS

6.5.2.11 Records of NSRB activities shall be prepared, approved, and distributed as indicated below:

- a. Minutes of each NSRB meeting shall be prepared, approved, and forwarded to the Senior Vice President, Nuclear Generation and to the Executive Vice President, Power Generation, within 14 days following each meeting;
- b. Reports of reviews encompassed by Specification 6.5.2.8 above, shall be prepared, approved and forwarded to the Senior Vice President, Nuclear Generation, and to the Executive Vice President, Power Generation within 14 days following completion of the review; and
- c. Audit reports encompassed by Specification 6.5.2.9 above, shall be forwarded to the Senior Vice President, Nuclear Generation and to the Executive Vice President, Power Generation, and to the management positions responsible for the areas audited within 30 days after completion of the audit by the auditing organization.

6.6 REPORTABLE EVENT ACTION

6.6.1 The following actions shall be taken for REPORTABLE EVENTS:

- a. The Commission shall be notified and a report submitted pursuant to the requirements of Section 50.73 to 10 CFR Part 50, and
- b. Each REPORTABLE EVENT shall be reviewed by the Station Manager; or for the Station Manager by: (1) the Operations Superintendent, (2) the I and E Superintendent, (3) the Mechanical Superintendent, or (4) the Work Control Superintendent, as previously designated by the Station Manager, and the results of the review shall be submitted to the NSRB and the Site Vice President.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a Safety Limit is violated:

- a. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within 1 hour. The Site Vice President, and the NSRB shall be notified within 24 hours;
- b. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the Operations Superintendent and the Station Manager. This report shall describe: (1) applicable circumstances preceding the violation, (2) effects of the violation upon facility components, systems, or structures, and (3) corrective action taken to prevent recurrence;

ADMINISTRATIVE CONTROLS

SAFETY LIMIT VIOLATION (Continued)

- c. The Safety Limit Violation Report shall be submitted to the Commission, the NSRB and the Site Vice President, within 14 days of the violation; and
- d. Critical operation of the unit shall not be resumed until authorized by the Commission.

6.8 PROCEDURES AND PROGRAMS

6.8.1 Written procedures shall be established, implemented, and maintained covering the activities referenced below:

- a. The applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978;
- b. The applicable procedures required to implement the requirements of NUREG-0737;
- c. Deleted
- d. Deleted
- e. PROCESS CONTROL PROGRAM implementation;
- f. OFFSITE DOSE CALCULATION MANUAL implementation; and
- g. Quality Assurance Program for effluent and environmental monitoring.
- h. Fire Protection Program implementation.
- i. Commitments contained in FSAR Chapter 16.0

6.8.2 Each procedure of Specification 6.8.1 above, and changes thereto, shall be reviewed and approved by a group manager, superintendent/manager, or one of their designated direct reports prior to implementation and shall be reviewed periodically as set forth in administrative procedures. For procedures which implement offsite environmental, technical, and laboratory activities, the above review and approval may be performed by the General Manager, Environmental Services or designee.

6.8.3 Temporary changes to procedures of Specification 6.8.1 above may be made provided:

- a. The intent of the original procedure is not altered;
- b. The change is approved by two members of the plant management staff, at least one of whom holds a Senior Operator license on the unit affected; and

ADMINISTRATIVE CONTROLS

PROCEDURES AND PROGRAMS (Continued)

- c. The change is approved by a group manager, superintendent/manager, or one of their designated direct reports within 14 days of implementation.

6.8.4 The following programs shall be established, implemented, and maintained:

- a. Reactor Coolant Sources Outside Containment

A program to reduce leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. The systems include RHR, Boron Recycle, Refueling Water, Liquid Waste, Waste Gas, Safety Injection, Chemical and Volume Control, Containment Spray, and Nuclear Sampling. The program shall include the following:

- 1) Preventive maintenance and periodic visual inspection requirements, and
- 2) Integrated leak test requirements for each system at refueling cycle intervals or less.

- b. In-Plant Radiation Monitoring

A program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

- 1) Training of personnel,
- 2) Procedures for monitoring, and
- 3) Provisions for maintenance of sampling and analysis equipment.

- c. Secondary Water Chemistry

A program for monitoring of secondary water chemistry to inhibit steam generator tube degradation. This program shall include:

- 1) Identification of a sampling schedule for the critical variables and control points for these variables,
- 2) Identification of the procedures used to measure the values of the critical variables,
- 3) Identification of process sampling points, which shall include monitoring the discharge of the condensate pumps for evidence of condenser in-leakage,

ADMINISTRATIVE CONTROLS

RECORD RETENTION (Continued)

- g. Records of training and qualification for current members of the unit staff;
- h. Records of inservice inspections performed pursuant to these Technical Specifications;
- i. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59;
- j. Records of meetings of the NSRB and reports required by Specification 6.5.1.12;
- k. Records of the service lives of all snubbers including the date at which the service life commences and associated installation and maintenance records;
- l. Records of secondary water sampling and water quality; and
- m. Records of analyses required by the Radiological Environmental Monitoring Program that would permit evaluation of the accuracy of the analysis at a later date. This should include procedures effective at specified times and QA records showing that these procedures were followed.
- n. Records of reviews performed for changes made to the ODCM and the PCP.

6.10.3 Records of quality assurance activities required by the QA Manual shall be retained for a period of time required by ANSI N45.2.9-1974.

6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR 20, each high radiation area, as defined in 10 CFR Part 20, in which the intensity of radiation is equal to or less than 1000 mrem/hr at 45 CM (18 in.) from the radiation source or from any surface which the radiation penetrates shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP). Individuals qualified in radiation protection procedures (e.g., Radiation Protection Technician) or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates equal to or less than 1000 mrem/hr provided they are otherwise following plant radiation protection procedures for entry into high radiation areas.

ADMINISTRATIVE CONTROLS

HIGH RADIATION AREA (Continued)

Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area; or
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made knowledgeable of them; or
- c. An individual qualified in radiation protection procedures with a radiation dose rate monitoring device who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the Radiation Protection Manager in the RWP.

6.12.2 In addition to the requirements of Specification 6.12.1, areas accessible to personnel with radiation levels greater than 1000 mrem/hr at 45 CM (18 in.) from the radiation source or from any surface which the radiation penetrates shall be provided with locked doors to prevent unauthorized entry, and the keys shall be maintained under the administrative control of the Shift Foreman on duty and/or health physics supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP which shall specify the dose rate levels in the immediate work area and the maximum allowable stay time for individuals in that area. In lieu of the stay time specification of the RWP, direct or remote (such as closed circuit TV cameras) continuous surveillance may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities being performed within the area.

For individual areas accessible to personnel with radiation levels greater than 1000 mrem/hr* that are located within large areas, such as PWR containment, where no enclosure exists for purposes of locking, and no enclosure can be reasonably constructed around the individual areas, that area shall be barricaded, conspicuously posted, and a flashing light shall be activated as a warning device.

6.13 PROCESS CONTROL PROGRAM (PCP)

6.13.1 The PCP shall be approved by the Commission prior to implementation.

6.13.2 Licensee-initiated changes to the PCP:

- a. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.3n. This documentation shall contain:

* Measurement made at 18 inches from source of radioactivity.

ADMINISTRATIVE-CONTROLS

6.15 MAJOR CHANGES TO RADIOACTIVE LIQUID, GASEOUS, AND SOLID WASTE TREATMENT SYSTEMS*

6.15.1 Licensee initiated major changes to the Radioactive Waste Systems (liquid, gaseous and solid)

- a. Shall be reported to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the evaluation was reviewed by the Station Manager. The discussion of each change shall contain:
 - 1) A summary of the evaluation that led to the determination that the change could be made in accordance with 10 CFR Part 50.59;
 - 2) Sufficient detailed information to totally support the reason for the change without benefit of additional or supplemental information;
 - 3) A detailed description of the equipment, components, and processes involved and the interfaces with other plant systems;
 - 4) An evaluation of the change, which shows the predicted releases of radioactive materials in liquid and gaseous effluents and/or quantity of solid waste that differ from those previously predicted in the License application and amendments thereto;
 - 5) An evaluation of the change, which shows expected maximum exposures to individual in the UNRESTRICTED AREA and to the general population that differ from those previously estimated in the License application and amendments thereto;
 - 6) A comparison of the predicted releases of radioactive materials, in liquid and gaseous effluents and in solid waste, to the actual releases for the period prior to when the changes are to be made;
 - 7) An estimate of the exposure to plant operating personnel as a result of the change; and
 - 8) Documentation of the fact that the change was reviewed and found acceptable by the Station Manager or the Chemistry Manager.
- b. Shall become effective upon review and acceptance by a qualified individual/organization.

*Licensees may choose to submit the information called for in this specification as part of the annual FSAR update.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 132 TO FACILITY OPERATING LICENSE NPF-9
AND AMENDMENT NO. 114 TO FACILITY OPERATING LICENSE NPF-17
DUKE POWER COMPANY
MCGUIRE NUCLEAR STATION, UNITS 1 AND 2
DOCKET NOS. 50-369 AND 50-370

1.0 INTRODUCTION

By letter dated January 8, 1992, as supplemented February 13, 1992, the Duke Power Company (the licensee) submitted a request for changes to the McGuire Nuclear Station, Units 1 and 2, Technical Specifications (TS). The requested changes would reflect a reorganization of the Duke Power Company (DPC) and changes to the DPC Quality Assurance Report. The reorganization decentralizes the DPC corporate management of nuclear activities and relocates these resources to each of the DPC nuclear stations, including the McGuire Nuclear Station. The following is the NRC staff's evaluation of the requested changes.

2.0 EVALUATION

2.1 Administrative Controls

- a. Section 6.1.2 - Responsibility - The title of Vice President, Nuclear has been replaced by the title Vice President, McGuire Nuclear Site, and the organizational unit Nuclear Production Department has been replaced by McGuire Nuclear Site.

We find these changes acceptable as they reflect the revised organization and reassignment of responsibilities.

- b. Section 6.2.1 - Organization - Offsite - The licensee has deleted the description of the offsite organization by reference to FSAR Chapter 13. The new description is consistent with that described in Generic Letter 88-06, Removal of Organization Charts From Technical Specification Administrative Control Requirements. Within that description, the Station Manager shall be responsible for overall unit safety, the Vice President of McGuire Site shall have responsibility for overall plant nuclear safety, and the Senior Vice President Nuclear Generation Department shall have corporate responsibility for overall nuclear safety.

We find this change acceptable as it reflects the revised organization and reassignment of responsibilities, and conforms to Generic Letter 88-06.

- c. Section 6.2.2 - Organization - Unit Staff - The title Health Physics Technical has been replaced by the title Radiation Protection Technician. In addition, in Table 6.2.1 the title Shift Manager has replaced the title Shift Technical Advisor (STA).

We find these changes acceptable as they reflect the revised organization and the function of the STA has been retained in the new position of Shift Manager.

- d. Section 6.2.3 - McGuire Safety Review Group - The acronym for the McGuire Safety Review Group has been changed to SRG. In addition, the composition of the SRG has been revised to provide more flexibility of backgrounds of members while maintaining the minimum qualification requirements, and the title of Manager, Nuclear Safety Assurance has been changed to Manager of Safety Assurance.

We find these changes acceptable as they reflect the revised organization and reassignment of responsibilities, and the changed qualification requirements meet the appropriate acceptance criteria of Section 13.4 of NUREG-0800, the Standard Review Plan.

- e. Section 6.2.4 - Shift Technical Advisor - As stated in c. above, the new position of Shift Manager has been created that subsumes the functions of the STA. Therefore, in this section, the title of STA has been replaced by the Shift Manager.

We find this change acceptable as the function of the STA is retained.

- f. Section 6.4 - Training - The responsibility for the training program has been reassigned from the Station Manager to the Training Manger.

We find this change acceptable as it reflects the revised organization and the reassignment of responsibilities.

- g. Section 6.5.1 - Technical Review and Control - The approval authority for proposed modifications to unit nuclear safety-related structures, systems, and components, and proposed tests or experiments which affect nuclear safety have been revised to conform to the revised organization. The titles Station Manager, Corporate System Health Physicist, and Vice President, Nuclear Production have been replaced to reflect the revised organization and the reassignment of responsibilities.

We find these changes acceptable as they reflect the revised organization and the reassignment of responsibilities. The change in approval authority meets the appropriate acceptance criteria of Section 13.5.1 of NUREG-0800, the Standard Review Plan.

- h. Section 6.5.2 - Nuclear Safety Review Board (NSRB) - The titles Vice President, Nuclear Production, Nuclear Production Department, Quality Assurance Department, Executive Vice President, Engineering, Construction, and Production have been replaced to reflect the revised organization. In Subsection 6.5.2.2 the qualification requirements for NSRB members has been revised to allow, in special cases, an individual with ten years experience in a specific technical area. In Subsection 6.5.2.9, Audits, the licensee has relocated the audit frequency from the audits required by this subsection. Audit frequency requirements are now addressed in the Duke Quality Assurance Topical and are performance-based on the safety significance and extent of the activities except those for the Emergency and Security Plans as discussed below.

We find these changes acceptable as they reflect the revised organization and reassignment of responsibilities, the appropriate acceptance criteria of Section 13.4 of NUREG-0800, the Standard Review Plan, and the commitment to performance-based audits in their revised Quality Assurance Topical Report, a document controlled in accordance with 50.54(a).

- i. Section 6.6 - Reportable Event Action - The titles in this section have been revised to reflect the new titles in the revised organization.

We find these changes acceptable as they reflect the revised organization.

- j. Section 6.7 - Safety Limit Violation - The titles in this section have been revised to reflect the new titles in the revised organization.

We find these changes acceptable as they reflect the revised organization.

- k. Section 6.8 - Procedures and Programs - The approval authority for procedures and temporary changes to procedures has been revised by deleting specific titles and specifying a predesignated level of management.

We find this change acceptable as it meets the appropriate acceptance criteria of Section 13.5.1 of NUREG-0800, the Standard Review Plan.

2.2 Security and Emergency Plan

The requirements in TS 6.5.1.8 for review of the security program and implementing procedures and in TS 6.5.1.9 for review of the station emergency plan and implementing procedures are removed from the TS and are relocated to the respective security and emergency plans. Once they are included in the respective plans, further changes in these review requirements must be made in accordance with 10 CFR 50.54(p) for the security plan and with 10 CFR 50.54(q) for the emergency plan. The NRC staff concludes that, in conjunction with this change to the plans, the extensive requirements for emergency planning in 10 CFR 50.47 and 50.54 and for security in 10 CFR 50.54 and 73.55 for drills, exercises, testing and the maintenance of the programs provides adequate assurance that the objective of the previous TS 6.5.1.8 and TS 6.5.1.9 for a periodic review of the programs and changes to the programs will be met. Therefore, this change is acceptable.

The requirements of TS 6.5.2.9.e and .f for an audit on a twelve month frequency by the corporate Nuclear Safety Review Board (NSRB) of the emergency and security plans and implementing procedures is modified by deleting the specification of the twelve month frequency. This results in no change in this regulatory requirement since the frequency of such independently conducted reviews is also specified in 10 CFR 50.54(t) for the emergency plan, in 10 CFR 50.54(p)(3) for the safeguards contingency plan and in 10 CFR 73.55(g)(4) for the security program. Therefore, this change is acceptable.

The requirements of TS 6.8.1.c and .d for procedures for security and emergency plan implementation are removed from the TS and are relocated to those plans. The requirement of TS 6.8.1.c for the security plan is in effect also contained in 10 CFR 50.54(p)(1) for the safeguards contingency plan, and in 10 CFR 73.55(b)(3) for the security plan. The requirement of TS 6.8.1.d for the emergency plan is in effect also contained in 10 CFR 50.47(b)(5) and in 10 CFR 50.54(q), Appendix E, parts IV.G and V for the emergency plan. This change is acceptable.

We find the above changes to the Administrative Controls Section of the Technical Specifications, as described in the DPC letter dated January 8, 1992, and as revised by letter dated February 13, 1992, acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the North Carolina State official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments relate to changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

5.0 CONCLUSION

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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Date: June 2, 1992