

AUGUST 28 1981

Docket No. 50-369

Mr. William O. Parker, Jr.  
Vice President Steam Production  
Duke Power Company  
P. O. Box 2178  
422 South Church Street  
Charlotte, North Carolina 28242

Dear Mr. Parker:

Subject: Issuance of Amendment No. 3 to Facility Operating License NPF-9  
McGuire Nuclear Station, Unit 1

The Nuclear Regulatory Commission has issued Amendment No. 3 to Facility Operating License NPF-9 for the McGuire Nuclear Station, Unit 1, located in Mecklenburg County, North Carolina.

This amendment is in response to a portion of item 1 in your letter dated August 12, 1981. The remaining items will be addressed in a subsequent amendment. This amendment modifies surveillance requirements of the Engineered Safety Features Actuation System, specifically the Auxillary Feedwater Suction Pressure-Low Pressure Instrumentation.

A copy of the related safety evaluation report supporting Amendment No. 3 to Facility Operating License NPF-9 is enclosed. Also enclosed is a copy of a related notice which has been forwarded to the Office of the Federal Register for publication.

Sincerely,

Original signed by:

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

B109160141 810828  
PDR ADOCK 05000369  
P PDR

Enclosures:

1. Amendment No. 3
2. Safety Evaluation
3. Federal Register Notice

*CPA*

cc w/encl:  
See Next Page

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SURNAME	MDuncan:eb	RBirkel	EAdensam				
DATE	8/27/81	8/27/81	8/28/81				

August 20, 1981

Mr. William O. Parker, Jr.  
Vice President - Steam Production  
Duke Power Company  
P.O. Box 2178  
422 South Church Street  
Charlotte, North Carolina 28242

cc: Mr. W. L. Porter  
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Mr. R. S. Howard  
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EDS Nuclear Incorporated  
220 Montgomery Street  
San Francisco, California 94104

Mr. J. E. Houghtaling  
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2536 Countryside Boulevard  
Clearwater, Florida 33515

Mr. Jesse L. Riley, President  
The Carolina Environmental Study Group  
854 Henley Place  
Charlotte, North Carolina 28207

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DeBevoise & Liberman  
1200 Seventeenth Street, N.W.  
Washington, D. C. 20036

Ms. M. J. Graham  
Resident Inspector McGuire NPS  
c/o U.S. Nuclear Regulatory Commission  
P.O. Box 216  
Cornelius, North Carolina 28031

Mr. Willaim O. Parker, Jr.

- 2 -

August 28, 1987

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Department of Justice  
Justice Building  
Raleigh, North Carolina 27602

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116 West Jones Street  
Raleigh, North Carolina 27603

County Manager of Mecklenburg County  
720 East Fourth Street  
Charlotte, North Carolina 28202

Mr. Bruce Blanchard  
Environmental Projects Review  
Department of the Interior  
Room 4256  
18th and C Street, N.W.  
Washington, D. C. 20240

U.S. Environmental Protection Agency  
ATTN: Ms. Elizabeth V. Jankus  
Office of Environmental Review  
Room 2119 M, A-104  
401 M Street, S.W.  
Washington, D. C. 20460

Director, Criteria and Standards Div.  
Office of Radiation Programs  
(AKR-450)  
U.S. Environmental Protection Agency  
Washington, D. C. 20460

EIS Coordinator  
U.S. Environmental Protection Agency  
Region IV Office  
345 Courtland Street, N.E.  
Atlanta, Georgia 30308

Chairman, North Carolina  
Utilities Commission  
430 North Salisbury Street  
Dobbs Building  
Raleigh, North Carolina 27602

Dr. John M. Barry  
Department of Environmental Health  
Mechlenburg County  
1200 Blythe Boulevard  
Charlotte, North Carolina 28203

Mr. David E. Smith  
City of Charlotte  
Legal Department  
600 E. Trade Street  
City Hall  
Charlotte, North Carolina 28211

DUKE POWER COMPANY

DOCKET-NO. 50-369

MCGUIRE NUCLEAR STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Facility Operating License No. NPF-9  
Amendment No. 3

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 August 12, 1981, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations as 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-9 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 3, are hereby incorporated into this license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

OFFICE							
SURNAME	8109160142	810828					
DATE	PDR	ADDCK	05000369				
	P		PDR				

AUGUST 28 1981

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

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by:

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

Attachment:  
Technical Specification  
changes

Date of Issuance: AUGUST 28 1981

*Concur in amendment &  
F.R. notice  
8/27/81; 1:19 P.M. DOL received  
after 4 PM, 8/27/81 pas*

*J. R 8/24/81  
F. ROSA  
CR 8/24/81  
C.E. ROSSI*

OFFICE	DL:LB#4	DL:LB#4	OELD	DL:LB#4	AD/DL	DSI:ICSB	DSI:ASB
SURNAME	MDuncan:eb	RBirke1	Ketchen	EAdensam	RTedesco	RKendall	O PARR
DATE	8/25/81	8/26/81	8/27/81	8/28/81	8/28/81	8/26/81	8/26/81

ATTACHMENT TO LICENSE AMENDMENT NO. 3

FACILITY OPERATING LICENSE NO. NPF-1

DOCKET NO. 50-369

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 area of change. The corresponding overleaf pages are also provided to maintain document completeness.

Overleaf  
Page

3/4 3-17  
3/4 3-22

Amended  
Page

3/4 3-18  
3/4 3-21

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
5. TURBINE TRIP AND FEEDWATER ISOLATION					
a. Steam Generator Water Level-- High-High	3/loop	2/loop in any operating loop	2/loop in each operating loop	1, 2, 3	14*
6. CONTAINMENT PRESSURE CONTROL SYSTEM					
a. Train A	4	2	3	1, 2, 3, 4	19*
b. Train B	4	2	3	1, 2, 3, 4	19*
7. AUXILIARY FEEDWATER					
a. Manual Initiation	2	1	2	1, 2, 3	22
b. Automatic Actuation Logic	2	1	2	1, 2, 3	21
c. Stm. Gen. Water Level-Low-Low					
i. Start Motor-Driven Pumps	4/stm. gen.	2/stm. gen. any stm. gen.	3/stm. gen.	1, 2, 3#	19
ii. Start Turbine-Driven Pumps	4/stm. gen.	2/stm. gen. any 2 stm. gen.	3/stm. gen.	1, 2, 3	19
d. S.I. Start Motor-Driven Pumps	See I above (all S.I. initiating functions and requirements)				

FIGURE - UNIT 1

3/4 3-18

AMENDMENT NO. 3

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
e. Station Blackout Start Turbine-Driven Pump and Motor-Driven Pumps	6-3/Bus	2/Bus Either Bus	2/Bus	1, 2, 3	19
f. Auxiliary Feedwater Suction Pressure-Low	2/pump	2/pump	2/pump	1, 2, 3	23a
g. Trip of Main Feedwater Pumps Start Motor-Driven Pumps	2	1/pump	1/pump	1, 2#	13
8. LOSS OF POWER					
a. Grid Degraded Voltage	3/Bus	2/Bus	2/Bus	1, 2, 3, 4	14*
9. ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INTERLOCKS					
a. Pressurizer Pressure - P-11	3	2	2	1, 2, 3	20a
b. T <sub>avg</sub> - P-12	4	2	3	3	20b
c. Steam Generator Level-P-14	3/loop	2/loop in any operating loop	2/loop in each operating loop	1, 2	20c
10. CONTAINMENT SUMP RECIRCULATION					
a. RWST Level-Low	3	2	2	1, 2, 3	14*



TABLE 3.3-3 (Continued)

- ACTION 23 With the number of OPERABLE channels one less than the Total Number of Channels, restore the inoperable channel to OPERABLE status within 48 hours or declare the associated valve inoperable and take the ACTION required by Specification 3.7.1.4.
- ACTION 23a With the number of OPERABLE channels less than the total number of channels, restore the inoperable channels to OPERABLE status within 48 hours or declare the associated auxiliary feedwater pump inoperable and take the ACTION required by Specification 3.7.1.2. With channels associated with more than one pump inoperable, immediately declare the associated auxiliary feedwater pumps inoperable and take the ACTION required by Specification 3.7.1.2.

TABLE 3.3-4

## ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION TRIP SETPOINTS

<u>FUNCTIONAL UNIT</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUES</u>
1. SAFETY INJECTION, TURBINE TRIP AND FEEDWATER ISOLATION		
a. Manual Initiation	Not Applicable	Not Applicable
b. Automatic Actuation Logic	Not Applicable	Not Applicable
c. Containment Pressure--High	$\leq 1.1$ psig	$\leq 1.2$ psig
d. Pressurizer Pressure--low	$\geq 1845$ psig	$\geq 1835$ psig
e. Steam Line Pressure--low	$\geq 585$ psig	$\geq 565$ psig
2. CONTAINMENT SPRAY		
a. Manual Initiation	Not Applicable	Not Applicable
b. Automatic Actuation Logic	Not Applicable	Not Applicable
c. Containment Pressure--High-High	$\leq 2.9$ psig	$\leq 3.0$ psig
3. CONTAINMENT ISOLATION		
a. Phase "A" Isolation		
1. Manual	Not Applicable	Not Applicable
2. From Safety Injection Automatic Actuation Logic	Not Applicable	Not Applicable

MCQUIRE - UNIT 1

3/4 3-22

SAFETY EVALUATION BY THE  
OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 3  
TO LICENSE NPF-9  
DUKE POWER COMPANY

INTRODUCTION

By letter dated August 12, 1981 the licensee (Duke Power Company) proposed modifications to the Technical Specifications for the McGuire Nuclear Station, Unit 1 regarding the auxiliary feedwater low suction pressure instrument channels. The McGuire auxiliary feedwater (AFW) system consists of two motor driven pumps and one turbine driven pump normally aligned to take suction from the non-seismic condensate storage tank (CST). When low suction pressure is sensed at any AFW pump, its suction path is transferred from the CST to the seismically qualified nuclear service water system by opening two valves in series in that pump's suction path. There are two pressure switches in the suction line to each motor driven AFW pump. Low pressure must be sensed by both of these channels (one pressure switch per valve) to effect a transfer. There are four pressure switches in the suction line to the turbine driven AFW pump (two switches for each service water train) which operate in a similar fashion.

EVALUATION:

Under the existing Technical Specifications action statement for these pressure channels, one each for the two valves in series, if one channel fails, the licensee has 48 hours to restore that channel to operable status before taking action to shutdown and cooldown the plant. However, another action statement is applied with more than one pressure channel inoperable which requires the plant be placed in hot standby within 7 hours, although the pressure channels are for valves in series.

The proposed modification would allow the licensee 48 hours to restore the inoperable pressure channel(s) for the valves in series for any one AFW pump to OPERABLE status before declaring the pump inoperable. Thus the same action statement would apply regardless of whether one or both pressure channels associated with any one AFW pump are inoperable. We conclude that this is acceptable since the failure of one or both channels results in the same effect on the AFW system (i.e., loss of capability to transfer AFW pump suction for one auxiliary feedwater pump). If inoperable channels are associated with more than one pump, then the associated pumps must be declared inoperable immediately.

We agree with the licensee's conclusion that this proposed change does not alter requirements for redundant AFW pumps and does not result in any adverse safety implications. This change also is consistent with the requirements of IEEE Std. 279, and therefore, is acceptable.

### Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types of total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR Section 51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

### Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

DATE: AUGUST 28 1961

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-369DUKE POWER COMPANYNOTICE OF ISSUANCE OF AMENDMENTFACILITY OPERATING LICENSE NO. NPF 9

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 3 to Facility Operating License No. NPF-9, issued to Duke Power Company (licensee) for the McGuire Nuclear Station, Unit 1 (the facility) located in Mecklenburg County, North Carolina. This amendment modifies surveillance requirements of the Engineered Safety Features Actuation System, specifically the Auxiliary Feedwater Suction Pressure-Low Pressure Instrumentation. The amendment is effective as of its date of issuance.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations. The Commission has made appropriate findings as required by the Act and the Commission's regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5 (d)(4) an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

OFFICE							
SURNAME							
8109160145	810828						
PDR	ADDCK	05000369					
P	PDR						

OFFICIAL RECORD COPY

For further details with respect to this action, see (1) Duke Power Company letter dated August 12, 1981, (2) Amendment No. 3 to Facility Operating License No. NPF-9 with Appendix A Technical Specification page changes, and (3) the Commission's related Safety Evaluation.

All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D. C., and the Atkins Library, University of North Carolina, Charlotte (UNCC Station), North Carolina 28223. A copy of Amendment No. 3 may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 28 day of August 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by:

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

*E.K. 7/27/81 @ 1:19 p.m.  
concur in F.R. notice  
NOTE comments on  
SER. DoL received after  
4 PM 8/27/81*

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DATE ▶	8/25/81	8/26/81	8/27/81	8/28/81		

AMENDMENT NO. 3 TO  
FACILITY OPERATING LICENSE NPF-9 - MCGUIRE NUCLEAR STATION, UNIT NO. 1

DISTRIBUTION:  
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✓ Docket No. 50-369  
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