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

April 28, 1986

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.56 to Facility Operating License NPF-9 and Amendment No.37 to Facility Operating License NPF-17 - McGuire Nuclear Station, Units 1 and 2

The Nuclear Regulatory Commission has issued the enclosed Amendment No.56 to Facility Operating License NPF-9 and Amendment No.37 to Facility Operating License NPF-17 for the McGuire Nuclear Station, Units 1 and 2. These amendments are in response to your applications for Technical Specifications changes dated January 10, 1986 regarding the minimum number of reactor coolant loops required for hot standby, and September 6, 1985, regarding the Containment Pressure Control System (CPCS).

The amendments change the Technical Specifications to increase by one the allowed number of operable and operating reactor coolant loops for operation in the hot standby mode, correct the CPCS logic, and clarify the CPCS setpoints and allowable values.

With respect to the CPCS changes, these amendments add a new Action Statement 26 to Table 3.3-3. We note that implementation of this new action statement involves use of a temporary jumper. Although the staff normally finds the use of jumpers unacceptable, for this existing system design, we find it justified taking into account the presence of local bistable status indication and your administrative controls over the use of jumpers.

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A copy of the related safety evaluation supporting Amendment No.56 to Facility Operating License NPF-9 and Amendment No.37 to Facility Operating License NPF-17 is enclosed.

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

Sincerely,

Darl Hood

for B. J. Youngblood, Director
PWR Project Directorate #4
Division of PWR Licensing-A

Enclosures:
1. Amendment No.56 to NPF-9
2. Amendment No.37 to NPF-17
3. Safety Evaluation

cc w/enclosures: See next page

A copy of the related safety evaluation supporting Amendment No.56 to Facility Operating License NPF-9 and Amendment No. 37to Facility Operating License NPF-17 is enclosed.

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

Sincerely,

/S/

B. J. Youngblood, Director
PWR Project Directorate #4
Division of PWR Licensing-A

Enclosures:
1. Amendment No.56 to NPF-9
2. Amendment No.37 to NPF-17
3. Safety Evaluation

cc w/enclosures: See next page

PWR#4/DPWR-A	PWR#4/DPWR-A	DSH for PWR#4/DPWR-A
DHood/mac	MDuncan	BJYoungblood
03/30/86	03/13/86	03/ /86 4/18/86

Mr. H. B. Tucker
Duke Power Company

McGuire Nuclear Station

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April 28, 1986

AMENDMENT NO. 56 TO FACILITY OPERATING LICENSE NPF-9 - McGuire Nuclear Station, Unit 1
AMENDMENT NO. 37 TO FACILITY OPERATING LICENSE NPF-17 - McGuire Nuclear Station, Unit 2

Distribution:
Docket File 50-369/370
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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. 56
License No. NPF-9

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The applications 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 10, 1986, and September 6, 1985, comply 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. 56, are hereby incorporated into the license.

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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

Darl Hood

for B. J. Youngblood, Director
PWR Project Directorate #4
Division of PWR Licensing-A

Attachment:
Technical Specification Changes

Date of Issuance: April 28, 1986

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

/S/

B. J. Youngblood, Director
PWR Project Directorate #4
Division of PWR Licensing-A

Attachment:
Technical Specification Changes

Date of Issuance: April 28, 1986

* SEE PREVIOUS CONCURRENCE

PWR#4/DPWR-A	PWR#4/DPWR-A	FOF	OELD	PWR#4/DPWR-A
DHood/mac	*MDuncan	VBenroya	JOHNSON	BJYoungblood
~~03/30~~ 04/ /86	03/13/86	03/19 /86	~~03~~ 04 /86	~~03~~ /86 04/18/86

note addition to FRN: No issuance until expiration of notice period

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. 37
License No. NPF-17

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The applications for amendment to the McGuire Nuclear Station, Unit 2 (the facility) Facility Operating License No. NPF-17 filed by the Duke Power Company (licensee) dated January 10, 1986, and September 6, 1985, comply 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 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. 37, are hereby incorporated into the license.

The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

/S/

B. J. Youngblood, Director
PWR Project Directorate #4
Division of PWR Licensing-A

Attachment:
Appendix A Technical
Specification Changes

Date of Issuance: April 28, 1986

* SEE PREVIOUS CONCURRENCE

				DSH for
PWR#4/DPWR-A	PWR#4/DPWR-A	FOB	OELD	PWR#4/DPWR-A
for DHood/mac	*MDuncan	VBenroya	JOHNSON	BJYoungblood
03/30/85	03/13/85	03/19/85	03/4/85	03/ /86 04/18/86

need addition to FRN; Not issuance until operation of notice period

ATTACHMENT TO LICENSE AMENDMENT NO. 56

FACILITY OPERATING LICENSE NO. NPF-9

DOCKET NO. 50-369

AND

TO LICENSE AMENDMENT NO. 37

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

Amended Page	Overleaf Page
3/4 3-20	
3/4 3-24a	
3/4 3-27	
3/4 3-36	
3/4 4-2	
3/4 6-21	3/4 6-22
3/4 6-41	3/4 6-42
B 3/4 4-1	

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION

FUNCTIONAL UNIT	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	APPLICABLE MODES	ACTION
5. Turbine Trip & Feedwater Isolation					
a. Automatic Actuation Logic and Actuation Relay	2	1	2	1, 2	21
b. Steam Generator Water Level-- High-High	3/stm. gen.	2/stm. gen. in any operating stm gen.	2/stm. gen. in each operating stm. gen.	1, 2	15*
c. Doghouse Water Level (Feedwater Isolation Only)	3/train/ Doghouse	2/train/ Doghouse	2/train/ Doghouse	1, 2	25*
6. Containment Pressure Control System	8(4/train)	4/train	8	1, 2, 3, 4	26

ACTION 25 - With one of the two trains of doghouse water level instrumentation inoperable (less than the minimum required number of channels operable), restore the inoperable train to operable status in 72 hours. After 72 hours with one train inoperable, or within one hour with 2 trains inoperable, monitor doghouse water level in the affected doghouse continuously until both trains are restored to operable status.

ACTION 26 - With any of the eight channels inoperable, place the inoperable channel(s) in the start permissive mode within one hour and apply the applicable action statement (Containment Spray - T.S. 3.6.2, Containment Air Return/Hydrogen Skimmer - T.S. 3.6.5.6).

TABLE 3.3-4 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION TRIP SETPOINTS

FUNCTIONAL UNIT	TRIP SETPOINT	ALLOWABLE VALUES
4. Steam Line Isolation		
a. Manual Initiation	N.A.	N.A.
b. Automatic Actuation Logic and Actuation Relays	N.A.	N.A.
c. Containment Pressure--High-High	$\leq$ 2.9 psig	$\leq$ 3.0 psig
d. Negative Steam Line Pressure Rate - High	$\leq$ -100 psi/sec	$\leq$ -120 psi/sec
e. Steam Line Pressure - Low	$\geq$ 585 psig	$\geq$ 565 psig
5. Turbine Trip and Feedwater Isolation		
a. Automatic Actuation Logic and Actuation Relays	N.A.	N.A.
b. Steam Generator Water level--High-High (P-14)	$\leq$ 82% of narrow range instrument span each steam generator	$\leq$ 83% of narrow range instrument span each steam generator
6. Containment Pressure Control System		
Start Permissive/Termination (SP/T)	0.3 $\leq$ SP/T $\leq$ 0.4 PSIG	0.25 $\leq$ SP/T $\leq$ 0.45 PSIG

TABLE 4.3-2 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

FUNCTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	ANALOG CHANNEL OPERATIONAL TEST	TRIP ACTUATING DEVICE OPERATIONAL TEST	ACTUATION LOGIC TEST	MASTER RELAY TEST	SLAVE RELAY TEST	MODES FOR WHICH SURVEILLANCE IS REQUIRED
4. Steam Line Isolation								
a. Manual Initiation	N.A.	N.A.	N.A.	R	N.A.	N.A.	N.A.	1, 2, 3
b. Automatic Actuation Logic and Actuation Relays	N.A.	N.A.	N.A.	N.A.	M(1)	M(1)	Q	1, 2, 3
c. Containment Pressure--High-High	S	R	M	N.A.	N.A.	N.A.	N.A.	1, 2, 3
d. Negative Steam Line Pressure Rate-High	S	R	M	N.A.	N.A.	N.A.	N.A.	3
e. Steam Line Pressure--Low	S	R	M	N.A.	N.A.	N.A.	N.A.	1, 2, 3
5. Turbine Trip and Feedwater Isolation								
a. Automatic Actuation Logic and Actuation Relay	N.A.	N.A.	N.A.	N.A.	M(1)	M(1)	Q	1, 2
b. Steam Generator Water Level-High-High (P-14)	S	R	M	N.A.	N.A.	N.A.	N.A.	1, 2
6. Containment Pressure Control System								
Start Permissive/ Termination	S	R	M	N.A.	N.A.	N.A.	N.A.	1, 2, 3, 4

LIMITING CONDITION FOR OPERATION

3.4.1.2 At least three of the reactor coolant loops listed below shall be OPERABLE and at least two of these reactor coolant loops shall be in operation:*

a. Reactor Coolant Loop A and its associated steam generator and reactor coolant pump,

b. Reactor Coolant Loop B and its associated steam generator and reactor coolant pump,

c. Reactor Coolant Loop C and its associated steam generator and reactor coolant pump, and

d. Reactor Coolant Loop D and its associated steam generator and reactor coolant pump.

APPLICABILITY: MODE 3

ACTION:

a. With less than the above required reactor coolant loops OPERABLE, restore the required loops to OPERABLE status within 72 hours or be in HOT SHUTDOWN within the next 12 hours.

b. With only one reactor coolant loop in operation, restore at least two loops to operation within 72 hours or open the Reactor Trip System breakers.

c. With no reactor coolant loop in operation, suspend all operations involving a reduction in boron concentration of the Reactor Coolant System and immediately initiate corrective action to return the required reactor coolant loop to operation.

SURVEILLANCE REQUIREMENTS

4.4.1.2.1 At least the above required reactor coolant pumps, if not in operation, shall be determined OPERABLE once per 7 days by verifying correct breaker alignments and indicated power availability.

4.4.1.2.2 The required steam generators shall be determined OPERABLE by verifying secondary side water level to be greater than or equal to 12% at least once per 12 hours.

4.4.1.2.3 At least one reactor coolant loop shall be verified in operation and circulating reactor coolant at least once per 12 hours.

*All reactor coolant pumps may be de-energized for up to 1 hour provided: (1) no operations are permitted that would cause dilution of the Reactor Coolant System boron concentration, and (2) core outlet temperature is maintained at least 10°F below saturation temperature.

SURVEILLANCE REQUIREMENTS (Continued)

3) Verifying that the Containment Pressure Control System functions within the setpoint limits specified in Table 3.3-4, Item 6.

d. At least once per 5 years by performing an air or smoke flow test through each spray header and verifying each spray nozzle is unobstructed.

3/4.6.3 CONTAINMENT ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.6.3 The containment isolation valves specified in Table 3.6-2 shall be OPERABLE with isolation times as shown in Table 3.6-2.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

With one or more of the isolation valve(s) specified in Table 3.6-2 inoperable, maintain at least one isolation valve OPERABLE in each affected penetration that is open and:

a. Restore the inoperable valve(s) to OPERABLE status within 4 hours, or

b. Isolate each affected penetration within 4 hours by use of at least one deactivated automatic valve secured in the isolation position, or

c. Isolate each affected penetration within 4 hours by use of at least one closed manual valve or blind flange, or

d Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.3.1 The isolation valves specified in Table 3.6-2 shall be demonstrated OPERABLE prior to returning the valve to service after maintenance, repair or replacement work is performed on the valve or its associated actuator, control or power circuit by performance of a cycling test and verification of isolation time.

CONTAINMENT AIR RETURN AND HYDROGEN SKIMMER SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.5.6 Two independent Containment Air Return and Hydrogen Skimmer Systems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

With one Containment Air Return and Hydrogen Skimmer System inoperable, restore the inoperable system to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.5.6.1 Each Containment Air Return and Hydrogen Skimmer System shall be demonstrated OPERABLE at least once per 92 days on a STAGGERED TEST BASIS by:

a. Verifying that the air return and hydrogen skimmer fans start automatically on a Containment Phase B Isolation (S_p) test signal after a 9 ± 1 minute delay and operate for at least 15 minutes;

b. Verifying that during air return fan operation with the air return fan damper closed and with the bypass dampers open, the fan motor current is less than or equal to 32 amps when the fan speed is 870 ± 30 rpm;

c. Verifying that with the hydrogen skimmer fan operating and the motor operated valve in its suction line closed, the fan motor current is less than or equal to 21.5 amps when the fan speed is 3599 ± 20 rpm;

d. Verifying that with the air return fan off, the motor operated damper in the air return fan discharge line to the containment's lower compartment opens automatically with a 10 ± 1 second delay after a Containment Phase B Isolation (S_p) test signal;

e. Verifying that with the air return fan operating, the check damper in the air return fan discharge line to the containment's lower compartment is open;

f. Verifying that the motor operated valve in the hydrogen skimmer suction line opens automatically and the hydrogen skimmer fans receive a start permissive signal; and

g. Verifying that with the fan off, the return air fan check damper is closed.

4.6.5.6.2 At least once per 18 months, each Containment Air Return and Hydrogen Skimmer System shall be demonstrated OPERABLE by verifying that the containment pressure control system functions within the setpoint limits specified in Table 3.3-4, Item 6.

FLOOR DRAINS

LIMITING CONDITION FOR OPERATION

3.6.5.7 The ice condenser floor drains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

With the ice condenser floor drain inoperable, restore the floor drain to OPERABLE status prior to increasing the Reactor Coolant System temperature above 200°F.

SURVEILLANCE REQUIREMENTS

4.6.5.7 Each ice condenser floor drain shall be demonstrated OPERABLE at least once per 18 months during shutdown by:

a. Verifying that valve gate opening is not impaired by ice, frost or debris,

b. Verifying that the valve seat is not damaged,

c. Verifying that the valve gate opens when a force of less than or equal to 66 lbs is applied, and

d. Verifying that the drain line from the ice condenser floor to the containment lower compartment is unrestricted.

3/4.4.1 REACTOR COOLANT LOOPS AND COOLANT CIRCULATION

The plant is designed to operate with all reactor coolant loops in operation and maintain DNBR above the design limit during all normal operations and anticipated transients. In MODES 1 and 2 with one reactor coolant loop not in operation this specification requires that the plant be in at least HOT STANDBY within 1 hour.

In MODE 3, two reactor coolant loops provide sufficient heat removal capability for removing decay heat; however, single failure considerations require that three loops be OPERABLE.

In MODE 4, and in MODE 5 with reactor coolant loops filled, a single reactor coolant loop or RHR loop provides sufficient heat removal capability for removing decay heat; but single failure considerations require that at least two loops (either RHR or RCS) be OPERABLE.

In MODE 5 with reactor coolant loops not filled, a single RHR loop provides sufficient heat removal capability for removing decay heat; but single failure considerations, and the unavailability of the steam generators as a heat removing component, require that at least two RHR loops be OPERABLE.

The operation of one reactor coolant pump (RCP) or one RHR pump provides adequate flow to ensure mixing, prevent stratification and produce gradual reactivity changes during boron concentration reductions in the Reactor Coolant System. The reactivity change rate associated with boron reduction will, therefore, be within the capability of operator recognition and control.

The restrictions on starting a reactor coolant pump with one or more RCS cold legs less than or equal to 300°F are provided to prevent RCS pressure transients, caused by energy additions from the Secondary Coolant System, which could exceed the limits of Appendix G to 10 CFR Part 50. The RCS will be protected against overpressure transients and will not exceed the limits of Appendix G by either: (1) restricting the water volume in the pressurizer and thereby providing a volume for the reactor coolant to expand into, or (2) by restricting starting of the RCPs to when the secondary water temperature of each steam generator is less than 50°F above each of the RCS cold leg temperatures.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 56 TO FACILITY OPERATING LICENSE NPF-9

AND AMENDMENT NO. 37 TO FACILITY OPERATING LICENSE NPF-17

DUKE POWER COMPANY

MCGUIRE NUCLEAR STATION, UNITS 1 AND 2

INTRODUCTION

By letter dated January 10, 1986, Duke Power Company (the licensee) proposed amendments to the operating licenses for McGuire Nuclear Station, Units 1 and 2, which would modify the Technical Specification 3.4.1.2, "Reactor Coolant System - Hot Standby," by increasing by one the number of reactor coolant loops required to be operable and in operation for Mode 3 (hot standby). By letter dated September 6, 1985, the licensee proposed amendments which would correct the channel trip logic of the Containment Pressure Control System (CPCS) in Specification Table 3.3-3 "Engineered Safety Features Actuation System (ESFAS) Instrumentation"; clarify CPCS table headings within Tables 3.3-3, 3.3-4 "ESFAS Instrumentation Trip Setpoints" and 4.3-2 "ESFAS Instrumentation Surveillance Requirements" consistent with the corrected logic; revise CPCS setpoints in Table 3.3-4; and rephrase the requirements of Surveillance Specifications 4.6.2c and 4.6.5.6.2 by referencing the revised Table 3.3-4. The NRC staff has evaluated these proposed changes.

EVALUATION

Reactor Coolant Loops for Hot Standby

Prior to these amendments, Specification 3.4.1.2, required as a limiting condition for operation that at least two of the four reactor coolant loops be operable and at least one of these be in operation. (A reactor coolant "loop" includes its primary piping, steam generator and reactor coolant pump). These amendments increase by one the number of reactor coolant loops required to be operable and in operation for Mode 3 (hot standby). Bases 3/4.4.1, "Reactor Coolant Loops and Coolant Circulation" is similarly changed to state that "in MODE 3, two reactor coolant loops provide sufficient heat removal capability for removing decay heat; however, single failure considerations require that three loops be OPERABLE." An addition to the ACTION statement for Specification 3.4.1.2 requires that with only one reactor coolant loop in operation, the operator is to restore at least two loops to operation within 72 hours or open the Reactor Trip System breakers.

Technical Specification 3.4.1.2 previously stated that when operating in Mode 3, at least two reactor coolant loops were to be operable, but only one of these two loops was required to actually be operating. This was inconsistent with the FSAR safety analyses which assume that either two or all four of the reactor coolant pumps are operating. The limiting accidents when in Mode 3

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operation are steamline break, rod ejection, and control rod bank withdrawal from subcritical conditions. The licensee notes that Westinghouse has performed calculations which show that the inconsistency between the safety analysis and Technical Specification 3.4.1.2 does not impact the conclusions presented in the FSAR for the steamline break and rod ejection accidents. However, the licensee also notes that Westinghouse has performed calculations which show that the DNB design basis may not be met with only one of the reactor coolant pumps in operation for the bank withdrawal from subcritical event. The change eliminates the inconsistency between the FSAR and Technical Specification 3.4.1.2 by imposing a more restrictive condition on the allowed number of operable or operating reactor coolant loops. The more restrictive condition ensures that sufficient coolant flow is available when operating in Mode 3 so that the DNB design bases are met for all operating conditions and postulated accidents in Mode 3, including the limiting DNB accident, control rod bank withdrawal from subcritical conditions. The change to the specification, including the additional ACTION statement and the changes to the Bases, result in a McGuire specification which is identical to that previously reviewed and accepted by the NRC for a similar plant, the Catawba Nuclear Station.

On the basis of the Westinghouse analyses, our prior review on Catawba, and because the effect of the change is to increase the margin of safety (i.e., DNB ratio), we find the licensee's requested changes acceptable.

Containment Pressure Control System

A. Logic

Prior to these amendments, Item 6 of Table 3.3-3 listed the CPCS as having four channels per train with 2-out-of-four trip logic and at least three channels were required to be operable. This was inconsistent with the actual system logic as described in FSAR Section 7.6.16 and accepted by SER 7.6.2 because each of the four channels has a different function in the operation of the CPCS. Each of the pressure switches provides a start permissive/termination signal to one or two of the following components: Containment Spray Pump, Containment Air Return Fan, Hydrogen Skimmer Fan, Containment Air Return Damper, Hydrogen Skimmer Inlet Valve, and Containment Spray Isolation Valves. Therefore, in order to assure proper operation of the CPCS, all four channels must be operable. Accordingly, Table 3.3-3 is revised by these amendments to reflect that there are two trains of four channels each, and that all eight channels are required to be operable, or action in accordance with a new "Action 26" statement referenced by the table is required. The new Action 26 requires that with any of the eight channels inoperable, the operator is to place the inoperable channel(s) in the start permissive mode within one hour and apply the action statement applicable to the affected component(s) (i.e., for Containment Spray components, apply the action statement of Specification 3.6.2; for the Containment Air Return components or the Hydrogen Skimmer components, apply the action of Specification 3.6.5.6). New Action 26 replaces Action 19 which was inappropriate for the actual CPCS system logic. Action 19 stated that:

"With the number of OPERABLE channels one less than the Total

Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the following conditions are satisfied:

a. The inoperable channel is placed in the tripped condition within one hour, and

b. The Minimum Channels OPERABLE requirement is met; however, the inoperable channel may be bypassed for up to 2 hours for surveillance testing of other channels per Specification 4.3.11 and Specification 4.3.2.1"

Also, a previous footnote referenced in Table 3.3-4 in conjunction with Action 19, which granted relief from the provisions of Specification 3.0.4, is not referenced in conjunction with new Action 26.

Prior to these amendments, Item 6 of Tables 3.3-3, 3.3-4 and 4.3-2 designated the heading (i.e., functional unit) "Containment Pressure Control System," and included as subheadings, "a. Start Permissive" and "b. Termination." These amendments combine the two subheadings and main heading into a single heading, "Containment Pressure Control System Start Permissive/Termination (SP/T)," or (for Table 3.3-3) just "Containment Pressure Control System." The previous subheadings were misleading because they implied that separate instrument channels (and bi-stables) were provided for the start permissive and for the termination functions. In reality, each CPCS instrument channel provides both the start and termination functions. No change in system intent or operation is associated with this change. Rather, the revised heading represents a clarification consistent with the actual installed system as described in FSAR Section 7.6.16 and as accepted by the NRC staff in SER Section 7.6.2.

B. Setpoints

The function of the CPCS is to preclude underpressurization of the containment. As described in FSAR Section 7.6.16 and accepted in SER Section 7.6.2, the CPCS interlocks with the containment spray and containment air return/hydrogen skimmer systems to prevent operation when containment pressure is below approximately 0.25 psig. As containment pressure increases, the CPCS provides a start permissive signal to allow operation of the Engineered Safety Features (containment spray and air return systems). The setpoint (containment high-high pressure, Item 4c of Table 3.3-4) for these ESF systems is less than or equal to 2.9 psig; the CPCS start permissive may occur at any containment pressure below 2.9 psig (but at or above about 0.25 psig) and will not affect system operation.

The previous CPCS trip setpoint in Table 3.3-4 was impractical in that the start permissive and termination both occurred at the same value of differential containment pressure (0.25 psid), which provided no adjustment band about the setpoint. The previous CPCS allowable setpoint in Table 3.3-4 was the same value as for the CPCS trip setpoint, which was impractical because it did not provide for normal variations such as

instrument drift. Also, the previous CPCS setpoint allowed termination of CPCS at any value less than or equal to 0.25 psid and was, thus, inconsistent with the FSAR which requires that termination occur at a value greater than - 1.5 psig (e.g., a termination setpoint of -2.0 would have satisfied the previous technical specification, but not the FSAR).

Accordingly, these amendments change the CPCS trip setpoint in Table 3.3-4 from "less than or equal to 0.25 psid" to a range that is "greater than or equal to 0.3, but not in excess of 0.4 psig". Similarly, the CPCS allowable value is changed from "less than or equal to 0.25 psid" to a range that is "greater than or equal to 0.25, but not in excess of 0.45 psig".

The CPCS setpoint changes for Table 3.3-4 and some editorial rephrasing are also reflected in the surveillance specifications for the two ESF systems associated with the CPCS logic. Surveillance Specification 4.6.2c previously required that each Containment Spray System periodically be demonstrated operable, in part, by:

"3) Verifying that each spray pump is prevented from starting by the Containment Pressure Control System when the containment atmosphere pressure is less than or equal to 0.25 psid,

4) Verifying that each spray pump discharge valve is prevented from opening by the Containment Pressure Control System when the containment atmosphere pressure is less than or equal to 0.25 psid, and

5) Verifying that each spray pump is automatically de-energized by the Containment Pressure Control System when the containment atmosphere pressure is reduced to less than or equal to 0.25 psid."

These amendments delete paragraphs 4) and 5) and rephrase 3) to read: "Verifying that the Containment Pressure Control System functions within the setpoint limits specified in Table 3.3-4, Item 6."

Similarly, Surveillance Specification 4.6.5.6.2 previously required each Containment Air Return and Hydrogen Skimmer System to periodically be demonstrated operable "by verifying that each air return fan and hydrogen skimmer fan is prevented from starting by the Containment Pressure Control System when the containment internal pressure is less than or equal to 0.25 psid relative to the outside atmosphere." The quoted portion of this specification is changed by these amendments to read: "by verifying that the Containment Pressure Control System functions within the setpoint limits specified in Table 3.3-4, Item 6."

On the basis of our review, we find that the licensee's proposed changes to the headings for Item 6 in Tables 3.3-3, 3.3-4 and 4.3-2, and the rephrasing of Surveillance Specifications 4.6.2c and 4.6.5.6.2 by substitution of functionally equivalent statements, are of an administrative nature and have no adverse impact on safety. Therefore, they are acceptable. We find that the other proposed changes are of a corrective nature and more accurately reflect the design and function of the CPCS as previously reviewed and accepted by the NRC.

Such corrective changes are necessary for assurance of proper system operation. The licensee's changes to clarify the required setpoints and allowable values, and the substitution of appropriate action statements, do not significantly change the intent or operation of the CPCS. Therefore, operation of the facility in accordance with these amendments does not adversely impact safety, and is, therefore, acceptable.

ENVIRONMENTAL CONSIDERATION

These amendments involve changes to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes in surveillance requirements. We have determined that the amendments involve no significant increase in the amounts and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative radiation exposure. The NRC staff has made a proposed determination that the amendments involve no significant hazards consideration, and there has been no public comment on such finding. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

CONCLUSION

The Commission made proposed determinations that the amendments involve no significant hazards considerations which were published in the Federal Register (51 FR 6822) on February 26, 1986, and (51 FR10457) on March 26, 1986, 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.

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Dated: April 28, 1986