

Docket No. 50-333

Mr. John C. Brons
Senior Vice President -
Nuclear Generation
Power Authority of the State
of New York
123 Main Street
White Plains, New York 10601

Dear Mr. Brons:

The Commission has issued the enclosed Amendment No. 108 to Facility Operating License No. DPR-59 for the James A. FitzPatrick Nuclear Power Plant. The amendment consists of changes to the Technical Specifications in response to your application dated December 19, 1986, as supplemented by letters dated January 3, 1987 and March 13, 1987.

The amendment changes Table 3.7-1 of the Technical Specifications to reflect installation of new containment isolation valves in the Traveling Incore Probe System, Recirculation Pump Mini-Purge System, and ADS Accumulator System.

A copy of the Safety Evaluation is enclosed. Notice of Issuance will be included in the Commission's Bi-Weekly Federal Register Notice.

Sincerely,

Original signed by

Harvey I. Abelson, Project Manager
BWR Project Directorate #2
Division of BWR Licensing

Enclosures:

1. Amendment No. 108 to License No. DPR-59
2. Safety Evaluation

cc w/enclosures:
See next page

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Mr. John C. Brons
Power Authority of the State of New York

James A. FitzPatrick Nuclear
Power Plant

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

POWER AUTHORITY OF THE STATE OF NEW YORK

DOCKET NO. 50-333

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 108
License No. DPR-59

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Power Authority of the State of New York (the licensee) dated December 19, 1986, as supplemented January 3, 1987, and March 13, 1987, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations 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;
 - 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 amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-59 is hereby amended to read as follows:

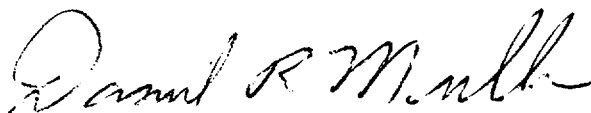
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(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 108, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. The license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script, reading "Daniel R. Muller".

Daniel R. Muller, Director
BWR Project Directorate #2
Division of BWR Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 3, 1987

ATTACHMENT TO LICENSE AMENDMENT NO. 108

FACILITY OPERATING LICENSE NO DPR-59

DOCKET NO. 50-333

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised areas are indicated by marginal lines.

Pages

199
201
202
205

Table 3.7-1 (Cont'd)

PROCESS PIPELINE PENETRATING PRIMARY CONTAINMENT

(Numbers in parentheses are keyed to numbers on following pages: signal codes are listed on following pages)

Line Isolated	Drywell Penetration	Valve Type (6)	Power to Open (5) (6)	Group	Location Ref. to Drywell	Power to Close (5) (6)	Isolation Signal	Closing Time (7)	Normal Status	Remarks and Exceptions
Mini-purge to recirc pump	X-31Ac X-31Bc	SO Valve	Ac	C	Outside	Spring	B,F,RM	Not applicable	Open	
Mini-purge to recirc pump	X-31Ac X-31Bc	Check	Process	C	Inside	Process	Rev. flow	Not applicable	Open	
RHR Reactor Shut-down Cooling supply	X-12	MO Gate	Dc	A	Outside	Dc	A,U,F,RM	38 Sec	Closed	
RHR Reactor Shut-down Cooling supply	X-12	MO Gate	Ac	A	Inside	Ac	A,U,F,RM	38 Sec	Closed	
RHR to Suppression Spray Header	X-211A,B	MO Globe	Ac	B	Outside	Ac	G,S,RM	10 Sec	Closed	Throttling Type Valve Note (2)
RHR - Containment Spray	X-39A,B	MO Gate	Ac	B	Outside	Ac	G,S,RM	10 Sec	Closed	Note (2)
RHR - Containment Spray	X-39A,B	MO Gate	Ac	B	Outside	Ac	G,S,RM	10 Sec	Closed	Note (2)
RHR - Reactor Head Spray	X-17	MO Gate	Ac	A	Inside	Ac	A,U,F,RM	20 Sec	Closed	
RHR - Reactor Head Spray	X-17	MO Gate	Dc	A	Outside	Dc	A,U,F,RM	20 Sec	Closed	
RHR to Suppression Pool	X-210A,B	MO Globe	Ac	B	Outside	Ac	G,RM	70 Sec	Closed	Throttling Type Valve Note (2)
RHR - LPCI to Reactor	X-13A,B	MO Gate	Ac	A	Outside	Ac	RM	120 Sec	Closed	Note (10)
RHR - LPCI to Reactor	X-13A,B	MO Globe	Ac	A	Outside	Ac	RM	90 Sec	Open	Throttling Type Valve Note (10)
RHR - LPCI to Reactor	X-13A,B	AO Check	--	A	Inside	Process	Rev. flow	Not applicable	Closed	Testable check Valve (3,16)
RHR pump suction from suppression pool	X-225A,B	MO Gate	Ac	B	Outside	Ac	RM	Not applicable	Open	

Table 3.7-1 (Cont'd)

PROCESS PIPELINE PENETRATING PRIMARY CONTAINMENT

(Numbers in parentheses are keyed to numbers on following pages: signal codes are listed on following pages)

Line Isolated	Drywell Penetration	Valve Type (6)	Power to Open (5) (6)	Group	Location Ref. to Drywell	Power to Close (5) (6)	Isolation Signal	Closing Time (7)	Normal Status	Remarks and Exceptions
Core Spray Minimum Pump Flow	X-210A,B	MO Gate	Ac	B	Outside	Ac	RM	Not applicable	Closed	
Core Spray to Reactor	X-16A,B	MO Gate	Ac	A	Outside	Ac	RM	Not applicable	Open	Note (10)
Core Spray to Reactor	X-16A,B	MO Gate	Ac	A	Outside	Ac	RM	Not applicable	Closed	Note (10)
Core Spray to Reactor	X-16A,B	AO Check	(3)	A	Inside	Note (3)	Rev. flow	Not applicable	Closed	Testable Check Valve Note (3,16)
Core Spray Test to Suppression Pool	X-210A,B	MO Globe	Ac	B	Outside	Ac	G, RM	45 Sec	Closed	
Core Spray Pump Suction	X-227A,B	MO Gate	Ac	B	Outside	Ac	RM	Not Applicable	Open	
Drywell Equipment Drain Sump Discharge	X-19	MO Plug	Ac	B	Inside	Ac	A,F, RM	30 Sec	Open	
Drywell Equipment Drain Sump Discharge	X-19	AO Plug	Air/Ac	B	Outside	Spring	A,F, RM	Not Applicable	Closed (17)	
Drywell Floor Drain Sump Discharge	X-18	MO Plug	Ac	B	Inside	Ac	A,F, RM	30 Sec	Open	
Drywell Floor Drain Sump Discharge	X-18	AO Plug	Air/Ac	B	Outside	Spring	A,F, RM	Not Applicable	Open	
Traveling Incore Probe	X-35A,B,C,D	Explosive Shear	Dc	A	Outside	Dc	RM	Not Applicable	Open	One valve on each line
Traveling Incore Probe	X-35A,B,C,D	SO Ball	Ac	A	Outside	Ac	A,F, RM	Not Applicable	Open	One valve on each line Note (14)
Traveling Incore Probe Purge	X-35B	SO Valve	Ac	A	Outside	Spring	A,F, RM	Not Applicable	Closed	
Traveling Incore Probe Purge	X-35B	Check	Fwd. Flow	A	Inside	Process	Rev. Flow	Not Applicable	Closed	
HPCI - Turbine Steam Supply	X-11	MO Gate	Ac	A	Inside	Ac	L, RM	20 Sec	Open	Signal "G" opens valve. Signal "L" overrides and closes valve.
HPCI - Turbine Steam Supply	X-11	MO Gate	Dc	A	Outside	Dc	L, RM	20 Sec	Closed	

Table 3.7-1 (Cont'd)

PROCESS PIPELINE PENETRATING PRIMARY CONTAINMENT

(Numbers in parentheses are keyed to numbers on following pages: signal codes are listed on following pages)

Line Isolated	Drywell Penetration	Valve Type (6)	Power to Open (5) (6)	Group	Location Ref. to Drywell	Power to Close (5) (6)	Isolation Signal	Closing Time (7)	Normal Status	Remarks and Exceptions
HPCI - Turbine Exhaust	X-214	Check	Fwd flow	B	Outside	Process	Rev. flow	Not applicable	Open	Closes on Rev. flow or low exhaust pressure
HPCI - Turbine Exhaust	X-214	Check	Fwd flow	B	Outside	Process	Rev. flow	Not applicable	Open	
HPCI - Pump Suction	X-226	MO Gate	Dc	B	Outside	Dc	L,RM	Not applicable	Closed	
HPCI - Pump Suction	X-226	MO Gate	Dc	B	Outside	Dc	L,RM	Not applicable	Closed	
HPCI - Pump Discharge	X-9B	MO Gate	Dc	B	Outside	Dc	RM	Not applicable	Closed	
HPCI - Turbine Exhaust Drain	X-222	Stop Check	Fwd flow	B	Outside	Process	Rev. flow	Not applicable	Closed	
HPCI - Minimum Pump Flow	X-210B	Check	Fwd flow	B	Outside	Process	Rev. flow	Not applicable	Closed	
HPCI - Minimum Pump Flow	X-210B	MO Globe	Dc	B	Outside	Dc	L,RM	10 Sec	Closed	
<u>DRYWELL ATMOSPHERIC CONTROL AND SERVICES</u>										
Service Air to Drywell	X-21	Check	Process	C	Inside	Process	Rev. flow	Not applicable	Closed	
Service Air to Drywell	X-21	Hand Gate	Hand	C	Outside	Hand	--	Not applicable	Closed	
Instrument Air to Drywell	X-22	Check	Process	C	Inside	Process	Rev. flow	Not applicable	Open	
Instrument Air to Drywell	X-22	SO Valve	Spring	C	Outside	Ac	RM	Not applicable	Open	Fail in open position to ensure adequate pneumatic supply
Breathing Air to Drywell	X-61	Check	Process	C	Inside	Process	Rev. flow	Not applicable	Closed	
Breathing Air to Drywell	X-61	Hand Gate	Hand	C	Outside	Hand	--	Not applicable	Closed	
Drywell Purge Inlet	X-25, X-71	AO Butterfly	Air/Ac	B	Outside	Spring	F,A,Z,RM	5 sec	Closed	
Drywell Purge Inlet	X-25, X-71	AO Butterfly	Air/Ac	B	Outside	Spring	F,A,Z,RM	5 sec	Closed	
Drywell Main Exhaust	X-26A,B	AO Butterfly	Air/Ac	B	Outside	Spring	F,A,Z,RM	5 sec	Closed	

Table 3.7-1 (Cont'd)

PROCESS PIPELINE PENETRATING PRIMARY CONTAINMENT

(Numbers in parentheses are keyed to numbers on following pages: signal codes are listed on following pages)

Line Isolated	Drywell Penetration	Valve Type (6)	Power to Open (5) (6)	Group	Location Ref. to Drywell	Power to Close (5) (6)	Isolation Signal	Closing Time (7)	Normal Status	Remarks and Exceptions
CAD Supply to Instrument Air to Drywell	X-57c	SO Valve	Spring	C	Outside	Ac	RM	Not applicable	Open) Fail in open position to ensure adequate pneumatic supply
CAD Supply to Instrument Air to Drywell	X-57c	Check	Process	C	Inside	Process	Rev. flow	Not applicable	Closed	



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 108 TO FACILITY OPERATING LICENSE NO. DPR-59
POWER AUTHORITY OF THE STATE OF NEW YORK
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
DOCKET NO. 50-333

1.0 INTRODUCTION

By letter dated December 19, 1986, the Power of Authority of the State of New York (the licensee) proposed changes to the Technical Specifications (TS) to support installation of and operation with additional isolation valves in the Traveling Incore Probe (TIP) Purge System, Recirculation Pump Mini-Purge (RPMP) System, Automatic Depressurization System (ADS) Accumulator System, and Reactor Water Cleanup (RWCU) System. Installation of these valves will be completed during the Reload 7/Cycle 8 refueling outage. By letter dated January 3, 1987, the licensee informed the NRC that installation of the new valve for the RWCU System would not be performed during the Reload/Cycle 8 refueling outage and would be deferred. Also, as a result of discussions with the staff, the licensee provided clarification to the proposed TS revisions by letter dated March 13, 1987.

2.0 EVALUATION

In order to implement NUREG-0737 Items II.E.4.2 (Containment Isolation Dependability) and II.K.3.28 (Qualification of ADS Accumulators), the licensee previously committed to install new, automatic, isolation valves with diverse actuation signals in the TIP, RPMP and ADS Systems. These modifications necessitated revising TS Table 3.7-1 which addresses the characteristics of process piping containment penetrations.

a) Traveling Incore Probe Purge System

The licensee will replace the existing check valve located outside containment with a new hand-operated globe valve and a new solenoid-operated valve that will close upon loss of power, low reactor water level, or high drywell pressure. A new check valve will also be installed inside containment. These modifications are necessary to satisfy the criteria of NUREG-0737 Item II.E.4.2 and GDC 54, 55, and 56 of Appendix A to 10 CFR 50.

b) Recirculation Pump Mini-Purge System

The licensee will replace the two existing check valves located outside containment with one new solenoid-operated valve inside containment and one new solenoid-operated valve outside containment. The new valves will close upon loss of power, low-low-low reactor water level or high drywell pressure. These modifications are necessary to satisfy the criteria of NUREG-0737 Item II.E.4.2 and GDC 54, 55, and 56 of Appendix A to 10 CFR 50.

c) ADS Accumulator System

NUREG-0737 Item II.K.3.28 requires the ADS Accumulator System to remain functional for periods up to one-hundred days following a postulated accident. As part of a system upgrade to assure long-term operability, two isolation valves will be added to a new redundant nitrogen supply line to the ADS accumulators. One of these valves, located outside containment, is solenoid-operated and fails open to ensure an adequate supply of nitrogen to the accumulators. The other valve, located inside containment, is a check valve. The two valves in combination satisfy GDC 56. In addition, a hand-operated valve on the existing nitrogen supply line will be replaced by a remote-manual, solenoid-operated valve which fails open to ensure an adequate nitrogen supply to the ADS accumulators.

We have reviewed the modifications and associated TS revisions described by the licensee in the above referenced submittals. We find that the modifications to the TIP, RPMP, and ADS Accumulator Systems will improve the safety functional capability of these systems, will bring these systems into compliance with the applicable criteria of GDC 54, 55, and 56, and will implement the requirements of Items II.E.4.2 and II.K.3.28 of NUREG-0737. We therefore conclude that the associated revisions to TS Table 3.7-1, which are necessary to support operation with these modifications are acceptable.

3.0 ENVIRONMENTAL CONSIDERATIONS

This amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendment involves 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 occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendment meets 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 the amendment.

4.0 CONCLUSION

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 the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: P. Hearn

Dated: April 3, 1987