

DECEMBER 21 1978

Docket No. 50-333

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Mr. George T. Berry
 General Manager & Chief Engineer
 Power Authority of the State of
 New York
 10 Columbus Circle
 New York, New York 10019

Dear Mr. Berry:

The Commission has issued the enclosed Amendment No. 44 to Facility Operating License No. DPR-59 for the James A. FitzPatrick Nuclear Power Plant. The amendment consists of interim changes to the Technical Specifications in response to your application submitted by letter dated December 12, 1978.

The amendment revises the Technical Specifications on an interim basis to allow plant operation with higher than allowable leakage of one outboard Main Steam Isolation Valve (MSIV) located in the A main steam line. The leakage from this valve shall not exceed a 10 CFR 50 Appendix J type C leakage limit of 300 SCFD and the combined leakage of the four outboard MSIV's shall not exceed the present 1104 SCFD Technical Specification limit.

Plant operation with the subject MSIV at 300 SCFD is allowed until the next scheduled refueling outage. During the plant outage for snubber inspection in April 1979, this valve shall be retested, and the staff shall be formally informed of the test results.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

Original signed by

Thomas A. Ippolito, Chief
 Operating Reactors Branch #3
 Division of Operating Reactors

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Enclosures:

1. Amendment No. 44 to License No. DPR-59
2. Safety Evaluation
3. Notice

OFFICE	Notice	ORB#3 SSheppard	ORB#3 PPolk:acr	OELD R.J. GODDARD	OSRM Gnighton	ORB#3 T. Ippolito
SURNAME	w/enclosures:					
DATE	see next page	12/20/78	12/ /78	12/ /78	12/20/78	12/20/78

Mr. George C. Berry

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December 20, 1978

cc: Lewis R. Bennett, Assistant General
Manager/General Counsel
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New York, New York 10019

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(AW-459)
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Crystal Mall #2
Arlington, Virginia 20460

U. S. Environmental Protection
Agency
Region II Office
ATTN: EIS COORDINATOR
26 Federal Plaza
New York, New York 10007



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. 44
License No. DPR-59

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Power Authority of the State of New York (the licensee) dated December 12, 1978, 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.

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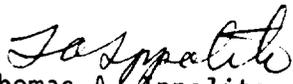
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-59 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 44, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION


Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 20, 1978

ATTACHMENT TO LICENSE AMENDMENT NO. 44

FACILITY OPERATING LICENSE NO. DPR-59

DOCKET NO. 50-333

Replace the following page of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by Amendment number and contains vertical lines indicating the area of change.

Remove

211

Insert

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TABLE 3.7-2

EXCEPTION TO TYPE C TESTS

Certain Type C tests will be performed or omitted as follows:

<u>Penetration</u>	<u>System</u>	<u>Valve</u>	<u>Local Leak Rate Test Performed</u>
X-7A, B, C, and D	Main Steam	29-AOV-80A, B, C, and D 29-AOV-86A, B, C, and D	These valves are air-operated globe valves - pressurized in reverse direction and measurement of leakage will be equivalent to results from pressure applied in the same direction as when the valves would be required to perform its safety function. Therefore, pressure will be applied between the isolation valves and leakage measured. A water seal of 25 psig will be used on the inboard valve to determine the outboard valve's leak rate. (limit 11.5 scfh at 25 psig) (a)
X-10	RCIC	13-MOV-15	See X-25 (27-AOV-131A, B)
X-11	HPCI	23-MOV-15	See X-25 (27-AOV-131A, B)
X-25	Dry Well Inerting CAD and Purge	27-AOV-112	This valve is a butterfly valve - pressurization in reverse direction and measurement of leakage will be equivalent to results from pressure applied in the same direction as that when the valve would be required to perform its safety function.
X-25	Dry Well Inerting CAD and Purge	27-AOV-131A 27-AOV-131B	These valves will be tested in the reverse direction, since the system was not designed for pressure to be applied in the same direction as that when the valve would be required to perform its safety function. Basis - The pressurization direction was not a requirement at the time of plant design; to redesign the system to permit this is not feasible as it would delay plant operation.
X-26 A/B	Dry Well Inerting CAD and Purge	27-AOV-113 27-MOV-113	See X-25 (27-AOV-112) This globe valve will be tested in the reverse direction. See X-25 (27-AOV-131A, B)

(a) During cycle 3 the plant may operate with valve 29-AOV-86A type C leakage not to exceed 300 SCFD and valves 29-AOV-86A, B, C and D total leakage not to exceed 1104 SCFD.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 44 TO FACILITY LICENSE NO. DPR-59

POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

DOCKET NO. 50-333

Introduction

By letter dated December 12, 1978, the Power Authority of the State of New York (licensee) proposed changes to the Technical Specifications appended to Facility Operating License No. DPR-59 for the James A. FitzPatrick Nuclear Power Plant. The proposed change revises the type C test main steam isolation valve allowable leakage from 276 to 296 SCFD. The requested change is to be effective on an interim basis to allow plant operation until the next refueling outage at which time the subject valve will be retested and repaired, if appropriate.

Evaluation

The staff has evaluated the impact of the proposed interim change to the main steam isolation valve (MSIV) leakage Technical Specification to 296 SCFD as it affects the postulated loss-of-coolant accident (LOCA) doses. The FitzPatrick plant was originally licensed assuming a Technical Specification leakage limit of 276 SCFD per valve. Since the initial licensing, the licensee has installed and made operational a main steam line Leakage Collection System (LCS) which functions to route any MSIV post LOCA leakage to the charcoal filters of the Standby Gas Treatment System (SGTS).

The staff has not yet issued Technical Specifications related to the operation, testing, and surveillance of the LCS. However, we have considered its operation following a postulated LOCA in our evaluation of the impact of the increased MSIV leakage in one valve. Even without the LCS operating, the measured leakage from the other outboard valves is low enough that we can conclude that operation with the higher leak rate at one valve will not result in consequences any greater than those calculated under the current Technical Specifications. By restricting the total leakage of all four outboard valves to the current Technical Specification limit for all four valves of 1104 SCFD, the estimated consequences due to operation of the LCS will not change. We will require the licensee to test the A line outboard valve at the next scheduled shutdown for snubber inspection in April 1979, and to assure that valve 29-AOV-68A type C leakage is less than 300 SCFD.

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at 25 psig. The licensee will be required to conform to the current Technical Specifications before returning to power following the next scheduled refueling outage. We believe that operation in this manner for a short time period will not significantly increase the risk to the public.

For purposes of evaluating this Technical Specification change only, we have estimated the dose consequences of a LOCA with the LCS functioning using the assumptions in Table 1 and the containment leakage dose contribution from our 1972 SER. We have assumed the leakage across the valves is not collected and filtered by the LCS until after its actuation ten minutes into the accident. For main steam lines which have both valves closed, the pressure between the valves is expected to preclude any out-leakage across those outboard MSIVs prior to actuation of the LCS. Leakage across the one outboard MSIV leaking at 300 SCFD was assumed to start at the time of the accident due to a postulated single active failure of the inboard MSIV to close. Once the LCS is actuated, however, this leakage is also assumed treated by the charcoal filters and vented through the plant stack. These assumptions do not give credit for any delay of the first ten minutes of leakage down the main steam piping. The difference between this valve leaking at 300 SCFD for ten minutes and leaking at 276 SCFD for ten minutes is estimated to be two rem to the thyroid at the exclusion area boundary (EAB) and less than one rem to the thyroid at the low population zone (LPZ) boundary. The whole body dose will be increased by less than 0.1 rem at both the EAB and at the LPZ. The total valve leakage following actuation of the LCS will contribute the same dose as at current Technical Specification limits. We have estimated the total dose consequences of the LOCA, including containment leakage, to be 108 rem to the thyroid and 5 rem to the whole body at the EAB and 170 rem to the thyroid and 5 rem to the whole body at the LPZ. These are within the guidelines of 10 CFR Part 100.

We, therefore, conclude that modifying the Technical Specifications to permit one valve to exceed the current 276 SCFD limit by 24 SCFD and maintaining the total leakage at 1104 SCFD will not significantly change the estimated consequences of a postulated loss-of-coolant accident at FitzPatrick. Assumptions used in this evaluation are presented in Table 1.

We have determined that the amendment does not authorize a change in effluent types or 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 §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.

Dated: December 20, 1978

TABLE 1
ASSUMPTIONS USED IN ESTIMATING DOSE CONSEQUENCES
FROM MSIV LEAKAGE, POST-LOCA AT FITZPATRICK

Power Level		2560 MWT
Operating Time		3 years
Fraction of Core Inventory Released to Containment:		
Iodines		25%
Noble Gases		100%
Iodine Distribution:		
Elemental		91%
Particulate		4%
Organic		5%
Drywell Free Volume		150,000 ft ³
x/Q Values*, sec/m ³ :		
<u>Stack Release</u>	<u>EAB</u>	<u>LPZ</u>
0 - 2 Hours	5.1 x 10 ⁻⁵	2.6 x 10 ⁻⁵
2 - 4 Hours	"	2.6 x 10 ⁻⁵
4 - 8 Hours	"	6.2 x 10 ⁻⁶
8 - 24 Hours	"	4.4 x 10 ⁻⁶
24 - 96 Hours	"	1.7 x 10 ⁻⁶
96 - 720 Hours	"	5.5 x 10 ⁻⁷
<u>Ground Level Release</u>		
0 - 10 minutes	1.3 x 10 ⁻⁴	1.5 x 10 ⁻⁵
Standby Gas Treatment System		
Charcoal Filter Efficiencies for Iodine**:		
Elemental		90%
Particulate		90%
Organic		70%
Time to Actuate the LCS		10 minutes

*From "Safety Evaluation of the James A. FitzPatrick Nuclear Power Plant," USAEC, November 20, 1972, pp. 2 - 13 through 2 - 17.

**Ibid., p. 10 - 3.

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-333POWER AUTHORITY OF THE STATE OF NEW YORKNOTICE OF ISSUANCE OF AMENDMENT TO FACILITY
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 44 to Facility Operating License No. DPR-59, issued to Power Authority of the State of New York, which revised Technical Specifications for operation of the James A. FitzPatrick Nuclear Power Plant (the facility) located in Oswego County, New York. The amendment is effective as of its date of issuance.

The amendment revises the Technical Specifications on an interim basis to allow plant operation with higher than allowable leakage of the outboard Main Steam Isolation Valve for a main steam line.

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 rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and 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 Section 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.

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For further details with respect to this action, see (1) the application for amendment dated December 12, 1978, (2) Amendment No. 44 to License No. DPR-59, 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 at the Oswego County Office Building 46 E. Bridge Street, Oswego, New York 13126. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland, this 20th day of December 1978.

FOR THE NUCLEAR REGULATORY COMMISSION


Thomas A. Zappalito, Chief
Operating Reactors Branch #3
Division of Operating Reactors