May 24, 1990

Docket No. 50-333

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

Dear Mr. Brons:

SUBJECT: ISSUANCE OF AMENDMENT (TAC NO. 75872)

The Commission has issued the enclosed Amendment No. 161 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 transmitted by letter dated January 12, 1990 and amended by letter dated May 4, 1990.

The amendment reflects removal of two primary containment penetrations and their isolation valves which results from replacing the present four-channel Traversing Incore Probe System with a new three-channel system.

A copy of the related Safety Evaluation is enclosed. A Notice of Issuance will be included in the Commission's next regular bi-weekly Federal Register notice.

Sincerely,

Original signed by

David E. LaBarge, Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No.161 to DPR-59
2. Safety Evaluation

cc: w/enclosures
See next page

PDI-1	PDI-1	OGC	SRXB	PDI-1
CVogan	DLaBarge:rsc	EBrenner	RJones	RACapra
5/11/90 5/24/90	5/11/90	5/15/90	5/11/90	5/24/90

DOCUMENT NAME: ISSUANCE OF AMENDMENT 75872

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Power Authority of the State of New York

James A. tzPatrick 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. 161
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 January 12, 1990, as amended May 4, 1990, 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:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 161, 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 to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert A. Capra

Robert A. Capra, Director
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 24, 1990

ATTACHMENT TO LICENSE AMENDMENT NO.161

FACILITY OPERATING LICENSE NO. DPR-59

DOCKET NO. 50-333

Revise Appendix A as follows:

Remove Pages	Insert Pages
203	203
209	209
211	211
212	212

TABLE 3.7-1
(Sh. 6 of 15)

PRIMARY CONTAINMENT ISOLATION VALVES

CONTAINMENT PENETRATION	PENETRATION FUNCTION	VALVE NUMBER	ISOLATION SIGNAL	CLOSE TIME (SEC) (5)	NORMAL STATUS (7)	REMARKS
31Bd	Drywell atmosphere sample (Suction)	27SOV-135D	A,F,R,Z	N/A	Open	From elev. 296´ to Radiation Monitors Note 12.
		27SOV-135B	A,F,R,Z	N/A	Open	
35B	Traversing In-core Probe "A"	07SOV-104A	A,F,R	N/A	Open	Notes 8, 14.
		07EV-104A	R	N/A	Open	Notes 14, 15.
35C	Traversing In-core Probe "C"	07SOV-104C	A,F,R	N/A	Open	Notes 8, 14.
		07EV-104C	R	N/A	Open	Notes 14, 15.
35D	Traversing In-core Probe "B"	07SOV-104B	A,F,R	N/A	Open	Notes 8, 14.
		07EV-104B	R	N/A	Open	Notes 14, 15.

Amendment No. ~~40~~, ~~48~~, ~~134~~, ~~150~~, 161

Notes For Table 3.7-1
"PRIMARY CONTAINMENT ISOLATION VALVES"
(Sh. 2 of 2)

11. Valve 20AOV-95 opens during pump out of the drywell equipment sump. Automatic isolation signals A and F override an open signal that might be present for sump pump out.

12. Radiation monitors used for sampling iodine, particulate, and gaseous are as follows:

Radiation Monitors	Sample
17-RM-101A 17-RM-101B	Iodine
17-RM-102A 17-RM-102B	Particulate
17-RM-103A 17-RM-103B	Gaseous

13. Isolation signals A, F, and Z may be manually overridden by keylock switch on the Monitoring and Analysis Panel (MAP) located in the relay room.

14. Traversing In-core Probe (TIP) penetrations are isolated by a guide tube and valve assembly which includes a solenoid operated ball valve and an explosive shear valve designed to sever and seal the TIP tubing and TIP detector helix.

15. The explosive shear valves are not normally actuated and require replacement parts and maintenance activity in order to open the valves following actuation.

TABLE 4.7-2

EXCEPTION TO TYPE C TESTS

The following penetrations are excepted from Type C testing requirements:

CONTAINMENT PENETRATION	PENETRATION FUNCTION	VALVE NUMBER	LOCAL LEAK RATE TEST PERFORMED
7A 7B 7C 7D	Main Steam	29AOV-80A 29AOV-80B 29AOV-80C 29AOV-80D 29AOV-86A 29AOV-86B 29AOV-86C 29AOV-86D	The inboard valves will be tested in the reverse direction. 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.)
25	Drywell Purge Inlet (Air and/or Nitrogen)	27AOV-112 27AOV-131A 27AOV-131B	These valves will be tested in the reverse direction.
26A & 26B	Drywell Purge Inlet (Air and/or Nitrogen)	27AOV-113 27MOV-122	These valves will be tested in the reverse direction.
30A	Instrumentation	Various	Will not be tested as lines are sealed by process fluid.
35B	Traversing In-Core Probe "A"	07EV-104A	This valve is an explosive shear valve which cannot be Type C tested.

TABLE 4.7-2

EXCEPTION TO TYPE C TESTS

CONTAINMENT PENETRATION	PENETRATION FUNCTION	VALVE NUMBER	LOCAL LEAK RATE TEST PERFORMED
35C	Traversing In-Core Probe "C"	07EV-104C	This valve is an explosive shear valve which cannot be Type C tested.
35D	Traversing In-Core Probe "B"	07EV-104B	This valve is an explosive shear valve which cannot be Type C tested.
37A 37B 37C 37D	Control Rod Drive (Inlet)	SOV-120 SOV-123 AOV-126 CRD-138	Will not be tested as lines are sealed by process fluid.
38A 38B 38C 38D	Control Rod Drive (Outlet)	SOV-121 SOV-122 AOV-127	Will not be tested as lines are sealed by process fluid.
39A	RHR Cont. Spray	10MOV-31A	This valve will be tested in the reverse direction.
39B	RHR Cont. Spray	10MOV-31B	This valve will be tested in the reverse direction.
45	Drywell Pressure Sensing	16-1AOV-101A	This valve will be tested in the reverse direction.
50C	Instrumentation - Sensing DW Pressure	Various	These instrument root valves are tested during a Type A test.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 161 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

INTRODUCTION

By letter dated January 12, 1990 and amended by letter dated May 4, 1990, the Power Authority of the State of New York (PASNY or the licensee) submitted an amendment for changes to the Technical Specifications (TS) for the James A. FitzPatrick Nuclear Power Plant. The changes would remove two Traversing Incore Probe (TIP) penetrations, X-35A and X-35E, from the list of penetrations shown in Table 3.7-1, "Primary Containment Isolation Valves" and Table 4.7-2 "Exception to Type C Tests." The only changes made to the original proposal in the May 4, 1990 letter reflected a change to the penetration numbers and a change to the format of Table 4.7-2 to incorporate changes approved previously in Amendment No. 150. These changes do not affect the Notice and proposed finding of no significant hazards consideration which was published in the Federal Register on March 7, 1990 (55 FR 8234) and which was based on the original submittal.

EVALUATION

Each of the four TIP channels consist of a detector attached to a flexible drive cable so that the detector can be inserted and withdrawn from the reactor core and its axial position accurately determined. An indexing mechanism allows positioning of each detector at any one of ten core locations. The signal from a detector is used to periodically calibrate its associated Local Power Range Monitor (LPRM) channel by correlating the TIP signal to the LPRM signal as the appropriate TIP detector, once inserted, is withdrawn from the core. The LPRM system, in turn, monitors reactor core power level and supplies signals to other nuclear instrumentation.

Since the drive mechanism for each of the four TIP channels is located outside of the primary containment, there are four primary containment penetrations for routing of the drive cable. Another penetration is used for the TIP purge piping.

During the 1990 refueling outage, the four-channel TIP system is being replaced with a new three-channel TIP system which is expected to increase reliability, availability, and accuracy. Because of its design, the new TIP system will not require use of purge piping. As a result, one of the TIP penetrations (X-35A) and the purge penetration (X-35E) are being capped and the TIP valves associated with them removed.

The remaining TIP penetrations are or will be labeled X-35B (TIP Machine A, Penetration Isolation Valves 07SOV-104A and 07EV-104A), X-35C (TIP Machine C, Penetration Isolation Valves 07SOV-104C and 06EV-104C), and X-35D (TIP Machine B, Penetration Isolation Valves 07SOV-104B and 07EV-104B). The proposal also changes the valve labels from NM (e.g., 07NM-104B) to SOV for "Solenoid Operated Valve" and EV for "Explosive Valve" to better identify the operation of the valves.

Following the modification, and as a scheduled outage test, the licensee will perform a Type A Primary Containment Leak Rate Test in accordance with Appendix J to 10 CFR Part 50 (with a visual inspection of the penetrations associated with this modification) prior to reactor startup to ensure that the penetration is intact.

SUMMARY

The modifications being made to the TIP system reduce the total number of primary containment isolation valves by four (two per penetration), which results in substitution of active components (valves) with passive barriers (seal-welded caps). Thus, the penetration will be more reliable. Also, the testing following modification, and routinely thereafter, will ensure continued reliability. Thus, the basis for the conclusions reached in the Final Safety Analysis Report and the Plant Safety Evaluation are not changed. Therefore, the staff concludes that the proposed changes are acceptable.

ENVIRONMENTAL CONSIDERATION

This amendment involves a change to a requirement with respect to the 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Sec 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 this amendment.

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

Dated: May 24, 1990

PRINCIPAL CONTRIBUTOR:

D. LaBarge