June 24, 1977

Docket No.: 50-333

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

Gentlemen:

The Commission has issued the enclosed Amendment No. 23 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 submitted by letter dated April 27, 1977, and staff discussions.

This amendment revises operability requirements for the Rod Sequence Control System and the Rod Worth Minimizer and adds safety related snubbers to Table 3.6-1.

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

Sincerely,

Original signed by

Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors

Enclosures:
1. Amendment No. 23
2. Safety Evaluation
3. Notice

cc w/enclosures: See next page

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Power Authority of the
State of New York

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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. 23
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) sworn to April 26, 1977, 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. 23, 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

Robert W. Reid

Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 24, 1977

ATTACHMENT TO LICENSE AMENDMENT NO. 23

FACILITY OPERATING LICENSE NO. DPR-59

DOCKET NO. 50-333

Revise Appendix A Technical Specifications as follows:

Remove Pages	Insert Pages
92 & 93	92 thru 93a
156p & 156q	156p & 156q
-	156r thru 156u

Changes on the revised pages are shown by marginal lines.

when the reactor coolant system is pressurized above atmospheric pressure with fuel in the reactor vessel, unless all control rods are fully inserted and Specification 3.3.A.1 is met.

3. a. Whenever the reactor is below 20 percent rated thermal power, the Rod Sequence Control System shall be operable.

3. Prior to the start of control rod withdrawal at startup, and prior to attaining 20 percent rated power during rod insertion when reducing power, except by scram, the capability of the Rod Sequence Control System and the Rod Worth Minimizer to properly fulfill their functions shall be verified by the following checks:

a. The capability of the RSCS to properly fulfill its function shall be verified by the following tests:

Sequence Portion - Select a sequence and attempt to withdraw a rod in the remaining sequences. Move one rod in a sequence and select the remaining sequences and attempt to move a rod in each. Repeat for all sequences. Prior to reaching 20% power when reducing power, except by scram: Sequence portion - Select a sequence and attempt to select a rod in the remaining sequences.

Group notch portion - For each of the six comparator circuits go through test initiate; comparator inhibit; verify; reset. On seventh attempt test is allowed to continue until completion is indicated by illumination of test complete light.

b. Whenever the reactor is below 20 percent rated thermal power, the Rod Worth Minimizer shall be operable; or a second licensed operator or other qualified member of the technical staff must be present at the reactor console to verify compliance with the prescribed rod pattern.

c. During control rod insertion, no rod movement is permitted, except by scram, until the testing has been performed between 35% and 20% power level and the automatic reinstatement of the RSCS restraints at the preset power level. Alignment of rod groups shall be accomplished prior to performing the tests.

b. The capability of the Rod Worth Minimizer (RWM) shall be verified by the following checks:

(1) The correctness of the control rod withdrawal sequence input to the RWM computer shall be verified.

(2) The RWM computer on line diagnostic test shall be successfully performed.

(3) Prior to startup, proper annunciation of the selection error of at least one out-of-sequence control rod in each fully inserted group shall be verified.

(4) The rod block function of the RWM shall be verified by withdrawing the first rod during startup only as an out-of-sequence control rod no more than to the block point.

c. When required, a second licensed operator or other qualified member of the technical staff must be present at the reactor console to verify compliance with the prescribed rod pattern.

d. Control rod withdrawal sequence shall be established so that the maximum reactivity that could be added by drop of any increment of any one control blade, would not make the core more than 0.0125Δk supercritical.

e. If Specifications 3.3.B.3a through c cannot be met the reactor shall not be started, or if the reactor is in the run or startup modes at less than 20 percent rated thermal power, it **shall be brought to a shutdown condition immediately.**

Table 3.6-1

SAFETY RELATED SHOCK SUPPRESSORS (SNUBBERS)

Snubber No.	Location	Elevation	*Snubber in High Radiation Area During Shutdown	Snubbers Especially Difficult to Remove	Snubbers Inaccessible During Normal Operation	Snubbers Accessible During Normal Operation
H29-137	Inside Cont. 24"-SHP-902-1A	292'-1"			X	
H29-138	Inside Cont. 24"-SHP-902-1B	292'-1"			X	
H29-139	Inside Cont. 24"-SHP-902-1B	292'-1"			X	
H29-140	Inside Cont. 24"-SHP-902-1C	292'-1"			X	
H29-141	Inside Cont. 24"-SHP-902-1C	292'-1"			X	
PFSK-234	Inside Cont. 24"-SHP-902-1D	292'-1"			X	
H29-143	Inside Cont. 24"-SHP-902-1D	292'-1"			X	
H34-117	Inside Cont. 12"-WFP-902A-5C	292'-0"			X	
H34-118	Inside Cont. 12"-WFP-902A-5C	292'-0"			X	
H34-119	Inside Cont. 12"-WFP-902A-4A	291'-10"			X	
H34-120	Inside Cont. 12"-WFP-902A-4A	291'-10"			X	

Table 3.6-1

SAFETY RELATED SHOCK SUPPRESSORS (SNUBBERS)

Snubber No.	Location	Elevation	* Snubber in High Radiation Area During Shutdown	Snubbers Especially Difficult to Remove	Snubbers Inaccessible During Normal Operation	Snubbers Accessible During Normal Operation
H34-121	Inside Cont. 12"-WFP-902A-5D	292'-0"			X	
H34-122	Inside Cont. 12"-WFP-902A-5D	292'-4"			X	
H34-123	Inside Cont. 18"-WFP-902A-4B	291'-10"			X	
H34-124	Inside Cont. 18"-WFP-902A-4B	291'-10"			X	
BFSK-511	Reactor Bldg. 24"-N-151A	335'-0"				X
BFSK-512	Reactor Bldg. 24"-N-151A	335'-0"				X
BFSK-514	Reactor Bldg. 24"-N-151A	335'-0"				X

Table 3.6-1

SAFETY RELATED
SHOCK SUPPRESSORS (SNUBBERS)

Snubber No.	Location	Elevation	* Snubber in High Radiation Area During Shutdown	Snubbers Especially Difficult to Remove	Snubbers Inaccessible During Normal Operation	Snubbers Accessible During Normal Operation
H29-148	Inside Cont. 24"-SHP-902-1B	292'-1"			X	
H29-149	Inside Cont. 24"-SHP-902-1A	292'-1"			X	
H29-150	Inside Cont. 24"-SHP-902-1D	292'-1"			X	
H29-151	Inside Cont. 24"-SHP-902-1C	292'-1"			X	
H29-247	Inside Cont. 24"-SHP-902-1A	276'-10"			X	
H29-248	Inside Cont. 24"-SHP-902-1B	276'-10"			X	
H29-249	Inside Cont. 24"-SHP-902-1C	276'-10"			X	
H29-250	Inside Cont. 24"-SHP-902-1D	276'-10"			X	
PFSK-1236	Inside Cont. 10"-SSV-302-1B	294'-4"			X	

Table 3.6-1
SAFETY RELATED
SHOCK SUPPRESSORS (SNUBBERS)

Snubber No.	Location	Elevation	* Snubber in High Radiation Area During Shutdown	Snubbers Especially Difficult to Remove	Snubbers Inaccessible During Normal Operation	Snubbers Accessible During Normal Operation
PFSK-1237	Inside Cont. 10"-SSV-302-1B	266'-11"			X	
PFSK-1238	Inside Cont. 10"-SSV-302-1F	266'-11"			X	
PFSK-1251	Inside Cont. 10"-SSV-302-1F	266'-11"			X	
PFSK-1254	Inside Cont. 10"-SSV-302-1B	266'-11"			X	
PFSK-1255	Inside Cont. 10"-SSV-302-1D	272'9"			X	
PFSK-1256A	Inside Cont. 10"-SSV-302-1D	266'-11"			X	
PFSK-1256B	Inside Cont. 10"-SSV-302-1B	266'-11"			X	
PFSK-1256C	Inside Cont. 10"-SSV-302-1B	266'-11"			X	
PFSk-1257	Inside Cont. 10"-SSV-302-1F	266'-11"			X	

Table 3.6-1
SAFETY RELATED
SHOCK SUPPRESSORS (SNUBBERS)

Snubber No.	Location	Elevation	* Snubber in High Radiation Area During Shutdown	Snubbers Especially Difficult to Remove	Snubbers Inaccessible During Normal Operation	Snubbers Accessible During Norma Operation
PFSK-1258	Inside Cont. 10"-SSV-302-1J	266'-11"			X	
PFSK-1259	Inside Cont. 10"-SSV-302-1J	262'			X	
PFSK-1260	Inside Cont. 10"-SSV-302-1G	159-6"			X	
PFSK-1263A	Inside Cont. 10"-SSV-302-1D	266'-11"			X	
PFSK-1263B	Inside Cont. 10"-SSV-302-1B	266'-11"			X	
PFSK-1267A	Inside Cont. 10"-SSV-302-1J	266'-11"			X	
PFSK-1267B	Inside Cont. 10"-SSV-302-1J	266'-11"			X	
PFSK-1268	Inside Cont. 10"-SSV-302-1J	266'-11"			X	
PFSK-1270	Inside Cont. 10"-SSV-302-1J	286'-2"			X	
PFSK-1275	Inside Cont. 10"-SSV-302-1J	294'-11"			X	

Table 3.6-1

SAFETY RELATED
SHOCK SUPPRESSORS (SNUBBERS)

Snubber No.	Location	Elevation	* Snubber in High Radiation Area During Shutdown	Snubbers Especially Difficult to Remove	Snubbers Inaccessible During Normal Operation	Snubbers Accessible During Norma Operation
PFSK-1286	Inside Cont. 10"-SSV-302-1A	294'-6"			X	
PFSK-1287	Inside Cont. 10"-SSV-302-1H	294'-4"			X	
H12-88	Reactor Bldg. 6"-WR-902A-1	314'-6"				X
H12-93	Inside Cont. 6"-WR-902A-1	313'-7"			X	
H12-94	Inside Cont. 6"-WR-902A-1	292'-8"			X	
H12-95	Inside Cont. 6"-WR-902A-1	291'-9"			X	
H12-96	Inside Cont. 6"-WR-902A-1	291'-9"			X	
PFSK-887	Reactor Bldg. 6"-WR-902A-1	314'-6"				X

NOTE: The above snubbers are listed in the order in which they appear on the pipe going away from the reactor.

* Modifications to this table due to changes in high radiation areas should be submitted to the NRC as part of the next license amendment.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 23 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 an application for amendment signed and notorized April 26, 1977, the Power Authority of the State of New York (the 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 changes provide for a revision to the Rod Sequence Control System and Rod Worth Minimizer operability requirements and the addition of safety related snubbers.

Discussion and Evaluation

The proposed changes to the Technical Specifications are discussed separately below under (A) Rod Worth Minimizer and Rod Sequence Control System, and (B) Safety Related Snubbers.

A. Rod Worth Minimizer and Rod Sequence Control System

The Technical Specifications are presently written such that operability tests for the Rod Sequence Control System and the Rod Worth Minimizer are required whenever the reactor is in the start up or run modes below 20 percent rated power.

The proposed changes would clarify the intent of Specification 4.3.3, Surveillance Requirement, such that operability tests for the Rod Sequence Control System and Rod Worth Minimizer are required not only during startups but also when reducing power. In addition, minor changes have been proposed to the Limiting Conditions for Operation, Specification 3.3.B.3, to clarify intent.

During our reviews of the proposed Technical Specification change, we have suggested minor changes to the proposed amendment, which were agreed to by the licensee and incorporated in the amendment.

The change in wording of the Technical Specification makes it clear that operability tests for the Rod Sequence Control System and the Rod Worth Minimizer are required when reducing power below 20 percent of rated thermal power. This was the original intent of the Specification. We conclude that this proposed Technical Specification change, as resolved through discussions with the licensee, increases the assurance that control rod operation is properly restricted at low power conditions, increases reactor safety, and is therefore, acceptable.

B. Safety Related Snubbers

The licensee proposed to add a total of 36 safety related snubbers to Table 3.6-1. These had been omitted from Amendment No. 20, which initially added snubbers to the Limiting Conditions of Operation. Six of the 36 snubbers are additions to the system and 30 are of a group of snubbers that were inadvertently omitted from the original list in Amendment No. 20. The licensee also requested a correction to Page 156p. The snubbers previously identified as H29-142 should have been identified as PFSK-234.

We conclude that the addition of the snubbers and the correction of errors to Table 3.6-1 are an improvement to the surveillance program and are acceptable.

Environmental Consideration

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: June 24, 1977

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-333

POWER AUTHORITY OF THE STATE OF NEW YORK

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 23 to Facility Operating License No. DPR-59, issued to Power Authority of the State of New York (the licensee), 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.

This amendment revises operability requirements for the Rod Sequence Control System and the Rod Worth Minimizer and adds safety related snubbers to Table 3.6-1.

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 §51.5(d)(4) an environmental impact statement, negative declaration or environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment submitted by letter dated April 27, 1977, (2) Amendment No. 23 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 East Bridge Street, Oswego, New York.

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 24th day of June 1977.

FOR THE NUCLEAR REGULATORY COMMISSION

Robert W. Reid

Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors