

August 8, 1977

Docket No.: 50-333

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. 26 to Facility Operating License No. DPR-59 for the FitzPatrick Nuclear Power Plant. The amendment consists of changes to the Technical Specifications in response to your application for amendment submitted by letter dated September 2, 1976.

The amendment changes the Technical Specifications to require periodic surveillance of the recirculation pump discharge valves and the associated bypass valves.

Copies of the Safety Evaluation and the Federal Register Notice are also enclosed.

Sincerely,

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

Enclosures:

1. Amendment No. 26
2. Safety Evaluation
3. Federal Register 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. 26  
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 September 1, 1976, 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.

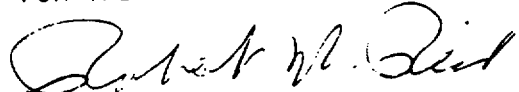
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-59 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 26, 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, Chief  
Operating Reactors Branch #4  
Division of Operating Reactors

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: August 8, 1977

ATTACHMENT TO LICENSE AMENDMENT NO. 26

FACILITY OPERATING LICENSE NO. DPR-59

DOCKET NO. 50-333

Replace page 115a of the Appendix A Technical Specifications with the attached revised page 115a. Changes in the revised page are shown by marginal lines.

### 3.5 (cont'd)

JAFNPP

### 4.5 (cont'd)

5. All recirculation pump discharge valves and bypass valves shall be operable prior to reactor startup (or closed if permitted elsewhere in these specifications).

6. If the requirements of 3.5.A cannot be met, the reactor shall be placed in the cold condition within 24 hr.

#### B. Containment Cooling Subsystem Mode (of the RHR System)

1. Both subsystems of the containment cooling mode, each including two RHR, one ESW pump and two RHRSW pumps shall be operable whenever there is irradiated fuel in the reactor

5. All recirculation pump discharge and bypass valves shall be tested for operability any time the reactor is in the cold condition exceeding 48 hours, if operability tests have not been performed during the preceding 31 days.

#### B. Containment Cooling Subsystem Mode (of the RHR System)

1. Subsystems of the containment cooling mode are tested in conjunction with the test performed on the LPCI System and given in 4.5.A.1.a, b, c, and d. Residual heat removal



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 26 TO FACILITY OPERATING LICENSE NO. DPR-59  
POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Introduction

By letter dated September 2, 1976, Power Authority of the State of New York (PASNY) requested an amendment to Facility Operating License No. DPR-59 for the FitzPatrick Plant. The amendment would modify the Technical Specifications to require periodic surveillance on the recirculation pump discharge valves (RPDV) and the associated bypass valves (BV).

Evaluation

The James A. FitzPatrick Plant is one of several boiling water reactors on which the low pressure coolant injection system (LPCIS) modification has been completed. This modification was made to allow the ECCS model to take credit, in the loss of coolant accident (LOCA) analysis, for one half of the LPCIS flow provided in the event of a single failure. The modification included the removal of the loop selection logic feature of the original design and instituted instead the simultaneous opening of both LPCIS injection valves. This was done to insure at least one half of the LPCIS injection capacity could be available after a postulated loss of coolant accident (i.e. suction line break). Another essential element of this modification involves the closure of the RPDV and BV upon LPCIS initiation following a LOCA.

The closure of the RPDV and BV is necessary to isolate a pipe rupture occurring in the recirculation loop suction line and thereby ensure that the LPCIS will not discharge makeup water back through the recirculation pump or bypass line and out of the break. The failure of a RPDV or BV to close upon LPCIS initiation has an adverse affect on core cooling similar to the failure of a LPCIS injection valve to open. The failure of a LPCIS injection valve to open is the limiting single failure in the FitzPatrick Emergency Core Cooling System (ECCS) analysis.

Currently, because they were not considered safety related before the LPCIS modification, the RPDV's and BV's are tested only during refueling outages which occur every 12 - 18 months. The standard interval for surveillance testing of motor operated ECCS valves is 31 days. We consider it desirable for surveillance to be performed on the RPDV and BV in a manner, and with a surveillance frequency similar to that which is performed on the LPCIS injection valves. However, unlike the LPCIS injection valves, the RPDV's and BV's cannot be tested during power operation. We have considered the known safety effects on the plant associated with a plant shutdown and cooldown, solely for the purpose of testing these valves and have determined that the increase in reliability that might be gained does not justify an interruption in normal plant operations. Therefore, we have required that the RPDV and BV be tested during periods of reactor cold shutdown in excess of 48 hours if they have not been tested in the previous 31 days. For most operating BWR's today this cold shutdown period would occur, because of the necessity for maintenance and other planned operations, every 3 - 4 months. This expected outage frequency and thus the surveillance testing frequency is consistent with the 3 month surveillance interval specified in Section XI of the ASME Boiler and Pressure Vessel Code. (The ASME Boiler and Pressure Code is implemented under 10 CFR 50.55a).

On the basis of the foregoing, we consider the proposed changes to be improvements to overall plant safety and reliability; therefore, the changes are acceptable.

#### Environmental Considerations

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: August 8, 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. 26 to Facility Operating License No. DPR-59, issued to the 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.

The amendment changes the Technical Specifications to require periodic surveillance of the recirculation pump discharge valves and the associated bypass valves.

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, or negative declaration and 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 September 2, 1976, (2) Amendment No. 26 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.

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 8th day of August 1977.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script, appearing to read "Robert W. Reid".

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