



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

August 08, 1995

Mr. William J. Cahill, Jr.
Chief Nuclear Officer
Power Authority of the State of
New York
123 Main Street
White Plains, NY 10601

SUBJECT: ISSUANCE OF AMENDMENT FOR JAMES A. FITZPATRICK NUCLEAR POWER PLANT
(TAC NO. M91736)

Dear Mr. Cahill:

The Commission has issued the enclosed Amendment No. 226 to Facility Operating License No. DPR-59 for the James A. FitzPatrick Nuclear Power Plant. The amendment consists of changes to the Technical Specifications (TSs) in response to your application transmitted by letter dated March 2, 1995.

The amendment extends the surveillance test intervals for the snubber systems to support 24-month operating cycles. Surveillance test interval extensions are denoted as being performed "every 24 months" or "at least once per 24 months" consistent with the guidance provided in Generic Letter (GL) 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate 24-Month Fuel Cycle," dated April 2, 1991. The NRC staff has determined that the proposed TS changes are in accordance with GL 91-04, and are therefore acceptable.

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

Sincerely,

C. E. Carpenter, Jr., Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-333

Enclosures: 1. Amendment No. 226 to
DPR-59
2. Safety Evaluation

cc w/encls: See next page

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Power Authority of the State
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James A. FitzPatrick Nuclear
Power Plant

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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. 226
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 March 2, 1995, 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. 226, 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



Ledyard B. Marsh, 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: August 08, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 226

FACILITY OPERATING LICENSE NO. DPR-59

DOCKET NO. 50-333

Revise Appendix A as follows:

Remove Pages

30d

145c

145g

156a

Insert Pages

30d

145c

145g

156a

4.0 BASES

- A. This specification provides that surveillance activities necessary to insure the Limiting Conditions for Operation are met and will be performed during the OPERATIONAL CONDITIONS (modes) for which the Limiting Conditions for Operation are applicable. Provisions for additional surveillance activities to be performed without regard to the applicable OPERATIONAL CONDITIONS (modes) are provided in the individual Surveillance Requirements.
- B. Specification 4.0.B establishes the limit for which the specified time interval for Surveillance Requirements may be extended. It permits an allowable extension of the normal surveillance interval to facilitate surveillance scheduling and consideration of plant operating conditions that may not be suitable for conducting the surveillance (e.g., transient conditions or other ongoing surveillance or maintenance activities). It also provides flexibility to accommodate the length of a fuel cycle for surveillances that are performed at each refueling outage and are specified with a 24 month surveillance interval. It is not intended that this provision be used repeatedly as a convenience to extend surveillance intervals beyond that specified for surveillances that are not performed during refueling outages. The limitation of this specification is based on engineering judgement and the recognition that the most probable result of any particular surveillance being performed is the verification of conformance with the Surveillance Requirements. The limit on extension of the normal surveillance interval ensures that the reliability confirmed by surveillance activities is not significantly reduced below that obtained from the specified surveillance interval.
- C. This specification establishes the failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by the provisions of Specification 4.0.B, as a condition that constitutes a failure to meet the OPERABILITY requirements for a Limiting Condition for Operation. Under the provisions of this specification, systems and components are assumed to be OPERABLE when Surveillance Requirements have been satisfactorily performed within the specified time interval. However, nothing in this provision is to be construed as implying that systems or components are OPERABLE when they are found or known to be inoperable although still meeting the Surveillance Requirements. This specification also clarifies that the ACTION requirements are applicable when Surveillance Requirements have not been completed within the allowed surveillance interval and that the time limits of the ACTION requirements apply from the point in time it is identified that a surveillance has not been performed and not at the time that the allowed surveillance was exceeded. Completion of the Surveillance Requirement within the allowable outage time limits of the ACTION requirements restores compliance with the requirements of Specification 4.0.C. However, this does not negate the fact that the failure to have performed the surveillance within the allowed surveillance interval, defined by the provisions of Specification 4.0.B, was a violation of the OPERABILITY requirements of a Limiting Condition for Operation that is subject to enforcement action. Further, the failure to perform a surveillance within the provisions of Specification 4.0.B is a violation of a Technical Specification requirement and is, therefore, a reportable event under the requirements of 10 CFR 50.73(a)(2)(i)(B) because it is a condition prohibited by the plant Technical Specifications.

JAFNPP

3.6 (cont'd)

2. With one or more snubbers inoperable, within 72 hours during normal operation, or within 7 days during Cold Shutdown or Refueling mode of operation for systems which are required to be operable in these modes, complete one of the following:
 - a. replace or restore the inoperable snubber(s) to operable status or,
 - b. declare the supported system inoperable and follow the appropriate limiting condition for operation statement for that system or,
 - c. perform an engineering evaluation to show the inoperable snubber is unnecessary to assure operability of the system or to meet the design criteria of the system, and remove the snubber from the system.
3. With one or more snubbers found inoperable, within 72 hours perform a visual inspection of the supported component(s) associated with the inoperable snubber(s) and document the results. For all modes of operation except Cold Shutdown and Refueling, within 14 days complete an engineering evaluation as per Specification 4.6.1.6 to ensure that the inoperable snubber(s) has not adversely affected the supported component(s). For Cold Shutdown or Refueling mode, this evaluation shall be completed within 30 days.

4.6 (cont'd)

2. Visual inspection shall verify (1) that there are no visible indications of damage or impaired OPERABILITY, (2) attachments to the foundation or supporting structure are secure, and (3) in those locations where snubber movements can be manually induced without disconnecting the snubber, that the snubber has freedom of movement and is not frozen up. Snubbers which appear inoperable as a result of visual inspections may be determined OPERABLE for the purpose of establishing the next visual inspection interval, providing that (1) the cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers that may be generically susceptible; and (2) the affected snubber is functionally tested in the as found condition and determined OPERABLE per Specifications 4.6.1.7 or 4.6.1.8, as applicable. Hydraulic snubbers which have lost sufficient fluid to potentially cause uncovering of the fluid reservoir-to-snubber valve assembly port or bottoming of the fluid reservoir piston with the snubber in the fully extended position shall be functionally tested to determine operability.
3. Once every 24 months, 10% of each type of snubbers shall be functionally tested for operability, either in place or in a bench test. For each unit and subsequent unit that does not meet the requirements of 4.6.1.7 or 4.6.1.8, an additional 10% of that type of snubber shall be functionally tested until no more failures are found, or all units have been tested.

JAFNPP

3.6 (cont'd)

4.6 (cont'd)

- c. Snubber release rate, where required, is within the specified range in compression or tension. For snubbers specifically required not to displace under continuous load, the ability of the snubber to withstand load without displacement shall be verified.

9. Snubber Service Life Monitoring

A record of the service life of each snubber, whose failure could adversely affect the primary coolant or other safety-related system, the date at which the designated service life commences, and the installation and maintenance records on which the designated service life is based shall be maintained as required by specification 6.10.B.13.

Once every 24 months, the installation and maintenance records for each snubber, whose failure could adversely affect the primary coolant or other safety related system, shall be reviewed to verify that the indicated service life has not been exceeded or will not be exceeded prior to the next scheduled snubber service life review. If the indicated service life will be exceeded prior to the next scheduled snubber service life review, the snubber service life shall be reevaluated or the snubber shall be replaced or reconditioned so as to extend its service life beyond the date of the next schedule service life review. This reevaluation, replacement or reconditioning shall be indicated in the records.

3.6 and 4.6 BASES (cont'd)

in each category from the previous inspection. The intervals may be increased up to 48 months if few unacceptable snubbers are found in the previous inspection. The visual inspection interval will not exceed 48 months. However, as for all surveillance activities, unless otherwise noted, allowable tolerances of 25% are applicable for snubbers. Table 4.6-1 establishes three limits for determining the next visual inspection interval corresponding to the population of each category of snubbers. For a category that differs from the representative sizes provided, the values for the next inspection interval may be found by interpolation from the limits provided in Columns A, B, and C. Where the limit for unacceptable snubbers in Columns A, B, or C is determined by interpolation and includes a fractional value, the limit may be reduced to the next lower integer. The first inspection interval determined using Table 4.6-1 shall be based upon the previous inspection interval as established by the requirements in effect before amendment 180. Any inspection whose results require a shorter inspection interval will override the previous schedule. When the cause of the rejection of a snubber is clearly established and remedied for that snubber and for any other snubbers that may be generically susceptible, and verified by inservice functional testing, that snubber may be exempted from being counted as inoperable. Generically susceptible snubbers are those which are of a specific make or model that have the same design features directly related to rejection of the snubber by visual inspection, and are similarly located or exposed to the same environmental conditions such as temperature, radiation, and vibration. When a snubber is found inoperable, an engineering evaluation is performed, in addition to the determination of the snubber mode of failure, in

order to determine if any safety-related component or system has been adversely affected by the inoperability of the snubber. The engineering evaluation shall determine whether or not the snubber mode of failure has imparted a significant effect or degradation on the supported component or system.

To provide assurance of snubber functional reliability, a representative sample of the installed snubbers will be functionally tested every 24 months. Selection of a representative sample of 10% of each type of safety related snubbers provides a confidence level within acceptable limits that these supports will be in an operable condition. Observed failures of these sample snubbers shall require functional testing of additional units.

Hydraulic snubbers and mechanical snubbers may each be treated as a different entity for the above surveillance programs.

The service life of a snubber is evaluated using manufacturer input and information and also through consideration of the installation and maintenance records (newly installed snubber, seal replaced, spring replaced, in high radiation area, in high temperature area, etc...). The requirement to monitor the snubber service life is included to ensure that the snubbers periodically undergo a performance evaluation in view of their age and operating conditions. These records will provide statistical bases for future consideration of snubber service life. The requirements for the maintenance of records and the snubber service life review are not intended to affect plant operation.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 226 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 March 2, 1995, the Power Authority of the State of New York (the licensee) submitted a request to change the James A. FitzPatrick Nuclear Power Plant (FitzPatrick) Technical Specifications (TSs). The proposed changes to the FitzPatrick TSs would modify surveillance requirements for the snubber systems. Starting with Cycle 11 (which began in January 1993), FitzPatrick began implementation of 24-month operating cycles. The proposed changes to the FitzPatrick TSs would be to extend the snubber surveillance test intervals to accommodate operation with the 24-month cycle. The proposed change in test frequency is every 24 months. These changes are necessary to avoid an extended mid-cycle outage.

2.0 BACKGROUND

Licensees are planning to use improved reactor fuels because of the significant economic benefits associated with a longer fuel cycle. A longer fuel cycle increases the time interval between refueling outages and the performance of the associated TS surveillance requirements. Improved reactor fuels allow licensees to consider an increase in the duration of the fuel cycle for their facilities. The staff has reviewed requests for individual plants to modify surveillance intervals to be compatible with a 24-month fuel cycle. Therefore, in a letter dated April 2, 1991, the NRC staff issued Generic Letter (GL) 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate 24-Month Fuel Cycle," to provide licensees with generic guidance on preparing such license amendments.

Snubbers are designed to permit flexibility of a piping system or component when subjected to slow movement such as thermal expansion and contraction during normal operation. When subjected to a dynamic load such as might be expected during a seismic event or transient, the snubber locks to limit motion of the system or component to which it is attached.

3.0 PROPOSED TS CHANGES

The licensee proposed the following changes to the FitzPatrick TSs:

1. Page 30d, Bases 4.0.B, change "an 18 month surveillance interval" to "a 24-month surveillance interval." The revised specification reads:

"It also provides flexibility to accommodate the length of a fuel cycle for surveillances that are performed at each refueling outage and are specified with a 24-month surveillance interval."

2. Page 145c, Specification 4.6.I.3, change "Once each operating cycle" on the first sentence to "Once every 24 months." The revised specification reads:

"Once every 24 months, 10% of each type of snubbers shall be functionally tested for operability, either in place or in a bench test."

3. Page 145g, Specification 4.6.I.9 (first sentence of the second paragraph), change "At least once per operating cycle" to "At least once every 24 months." The revised specification reads:

"At least once every 24 months, the installation and maintenance records for each snubber, whose failure could adversely affect the primary coolant or other safety related system, shall be reviewed to verify that the indicated service life has not been exceeded or will not be exceeded prior to the next scheduled snubber service life review."

4. Page 156a, Bases 4.6, change "during each operating cycle" to "every 24 months" in the first sentence of third to last paragraph. The revised specification reads:

"To provide assurance of snubber functional reliability, a representative sample of the installed snubbers will be functionally tested every 24 months."

In addition, a previously omitted reference to amendment number 180 has been corrected in the first paragraph of page 156a.

4.0 EVALUATION

Starting with Cycle 11 (which began in January 1993), the James A. FitzPatrick Nuclear Power Plant began implementation of 24-month operating cycles. Currently, TS 4.6.I.3 requires functional testing of a representative sample of 10 percent of each snubber type once each operating cycle (i.e., 18 months). Performing the functional test requires a plant shutdown due to snubbers that are inaccessible; therefore, the interval between functional tests requires extension to at least once per 24 months to accommodate the

longer operating cycle. In addition, functional testing of snubbers requires snubber removal from the system and, therefore, affects system operability. The TS criteria and the corrective actions required for a snubber failing a functional test remain the same.

The licensee reviewed surveillance test data from the period of 1987 to 1994 for all safety-related snubbers. Sixteen snubber functional test failures occurred at FitzPatrick in this period of time (16 failures out of a safety-related snubber population of 233). The licensee's review indicated that the failures were not age related or time dependent. In addition to the regular sample, snubbers that failed the previous functional test are retested during the next functional test interval. The licensee states that the functional test criteria ensures a 95 percent confidence level that at least 90 percent of all snubbers are operable. The TSs also require engineering evaluations and more stringent future functional testing of the failed unit to determine if a generic problem exists.

Technical Specification 4.6.I.9 requires a once per operating cycle review of the installation and maintenance records for each snubber as part of the snubber service life monitoring program. This review ensures that the designated service life of the snubber has not been, or will not be, exceeded prior to the next scheduled service life review. The review of the installation and maintenance records will be scheduled to be consistent with the length of the 24-month operating cycle. This review will continue to ensure that snubber service life will not be exceeded prior to the next scheduled review. The frequency of removal and replacement of snubbers will remain the same. Snubber service life will not decrease as a result of the operating cycle extension.

The Bases sections 4.0 and 4.6 have been revised to clarify that the interval for functional testing is once every 24 months.

The assumptions in the FitzPatrick licensing basis are not invalidated by performing the snubber surveillances at the bounding interval limits (30 months) to accommodate the 24-month operating cycle.

The licensee had previously submitted a request for TS changes in a letter dated November 15, 1991, to extend snubber visual inspection intervals. The changes were made following the guidance provided in GL 90-09, "Alternative Requirements for Snubber Visual Inspection Intervals and Corrective Actions," dated December 11, 1990, which allowed extending the frequency of snubber visual inspections based on an operating cycle up to 24 months, not to exceed 48 months. By letter dated April 13, 1992, the NRC issued Amendment No. 180 to the FitzPatrick TSs, which approved these changes.

The presently requested changes to the FitzPatrick TSs are not substantively different from the changes granted by Amendment No. 180. They were inadvertently omitted from the previous request for amendment and thus conform the TS to the prior amendment. The NRC staff has determined that the proposed TS changes are in accordance with both GL 90-09 and GL 91-04 and are therefore acceptable.

5.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New York State official was notified of the proposed issuance of the amendment. The State official had no comments.

6.0 ENVIRONMENTAL CONSIDERATION

The 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 and changes surveillance requirements. The NRC 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 (60 FR 24916). 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.

7.0 CONCLUSION

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) 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: C. E. Carpenter

Date: August 08, 1995

August 08, 1995

Mr. William J. Cahill, Jr.
Chief Nuclear Officer
Power Authority of the State of
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123 Main Street
White Plains, NY 10601

SUBJECT: ISSUANCE OF AMENDMENT FOR JAMES A. FITZPATRICK NUCLEAR POWER PLANT
(TAC NO. M91736)

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

Sincerely,

Original signed by:
C. E. Carpenter, Jr., Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-333

- Enclosures: 1. Amendment No. 226 to DPR-59
- 2. Safety Evaluation

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DATED: August 08, 1995

AMENDMENT NO. 226 TO FACILITY OPERATING LICENSE NO. DPR-59-FITZPATRICK

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