

ATTACHMENT I

Proposed Technical Specification Changes
Related to the Inservice Inspection Program

New York Power Authority
James A. Fitzpatrick Nuclear Power Plant

Docket No. 50-333

January 28, 1985

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3.6 (cont'd)

F. Structural Integrity

The structural integrity of the Reactor Coolant System shall be maintained at the level required by the original acceptance standards throughout the life of the Plant.

G. Jet Pumps

Whenever the reactor is in the startup/hot standby or run modes, all jet pumps shall be operable. If it is determined that a jet pump is operable, the reactor shall be placed in a cold condition within 24 hours.

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4.6 (cont'd)

F. Structural Integrity

1. Nondestructive inspections shall be performed on the ASME Boiler and Pressure Vessel Code Class 1, 2 and 3 components and supports in accordance with the requirements of the weld and support inservice inspection program. This inservice inspection program is based on an NRC approved edition of, and addenda to, Section XI of the ASME Boiler and Pressure Vessel Code which is in effect 12 months or less prior to the beginning of the inspection interval.
2. An augmented inservice inspection program is required for those high stressed circumferential piping joints in the main steam and feedwater lines larger than 4 inches in diameter, where no restraint against pipe whip is provided. The augmented inservice inspection program shall consist of 100 percent inspection of these welds per inspection interval.

G. Jet Pumps

Whenever there is recirculation flow with the reactor in the startup/hot standby or run modes, jet pump operability shall be checked daily by verifying that the following conditions do not occur simultaneously:

3.6 and 4.6 BASES (cont'd)

not required to be operable (reactor coolant temperature 212°F and the reactor vessel vented or the reactor vessel head removed). Permitting physics testing and operator training under these conditions would not place the plant in an unsafe condition.

F. Structural Integrity

A pre-service inspection of the ASME Code Class 1 components was performed after site erection to assure the system was free of gross defects. An initial inspection program as detailed in Appendix F of the FSAR was developed and based on an approved edition of the ASME Code.

The program has been expanded to include the requirements of later, approved ASME Code editions and addenda as far as practicable. The importance of these inspections is recognized, and efforts to develop practical new alternative methods of assuring plant inservice integrity will continue. This inspection program should assure the detection of problem areas well before they represent a significant impact on safety.

Several locations on the main steam lines and feedwater lines are not restrained to prevent pipe whip in the event of pipe failure at these locations. The physical layout within the drywell precludes restraints at these points. Unrestrained high stress areas have been identified in these lines where breaks could result in pipe whip such that the pipe could impact the primary containment wall. Augmented inservice inspection of these weld locations shall be performed during each inspection period.

In addition, visual inspection in accordance with the approved ASME code will be made during periodic pressure and hydrostatic tests of critical systems. The inspection program specified encompasses the major areas of the vessel and piping system within the drywell. The inspection period is based on the observed rate of defect growth from fatigue studies sponsored by the AEC.

These studies show that thousands of stress cycles, at stresses beyond any expected to occur in a Reactor Coolant System, were required to propagate a crack. The test

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ATTACHMENT II
Proposed Technical Specification Changes
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New York Power Authority
James A. FitzPatrick Nuclear Power Plant

Docket No. 50-333

January 28, 1985

I. Description of the Proposed Changes

The proposed changes to the FitzPatrick Technical Specifications relate to the Inservice Inspection (ISI) program for pressure retaining components and their supports.

Specifically, the following changes are being proposed:

On page 144, Section 4.6.F.1 is completely rewritten to read,

- "1. Nondestructive inspections shall be performed on the ASME Boiler and Pressure Vessel Code Class 1,2 and 3 components and supports in accordance with the requirements of the weld and support inservice inspection program. This inservice inspection program is based on an NRC approved edition of and addenda to Section XI of the ASME Boiler and Pressure Vessel Code which is in effect 12 months or less prior to the beginning of the inspection interval."

On page 144, modify Section 4.6.F.2 to read,

"An augmented inservice inspection program is required for those high stressed circumferential piping joints in the main steam and feedwater lines larger than 4 inches in diameter, where no restraint against pipe whip is provided. The augmented inservice inspection program shall consist of 100 percent inspection of these welds per inspection interval."

On page 153 modify Section F to read,

"A pre-service inspection of the ASME Code Class I components was performed after site erection to assure the system was free of gross defects. An initial inspection program as detailed in Appendix F of the FSAR was developed and based on an approved edition of Section XI of the ASME Code.

The program has been expanded to include the requirements of later, approved ASME Code editions and addenda as far as practicable. The importance of these inspections is recognized, and efforts to develop practical new alternative methods of assuring plant inservice integrity will continue. This inspection program should assure the detection of problem areas well before they represent a significant impact on safety.

Several locations on the main steam lines and feedwater lines are not restrained to prevent pipe whip in the event of pipe failure at these locations. The physical layout within the drywell precludes restraints at these points. Unrestrained high stress areas have been identified in these lines where breaks could result in pipe whip such that the pipe could impact the primary containment wall. Augmented inservice inspection of these weld locations shall be performed during each inspection period.

In addition, visual inspection in accordance with the approved ASME Code will be made during pressure and hydrostatic tests of critical systems. The inspection program specified encompasses the major areas of the vessel and piping systems within the drywell. The inspection period is based on observed rate of defect growth from fatigue studies sponsored by the AEC.

These studies show that thousands of stress cycles, at stresses beyond any expected to occur in a Reactor Coolant System, were required to propagate a crack. The test"...

Delete Table 4.6-1 on pages 157 through 162.

II. Purpose of the Proposed Changes

The proposed changes are necessary to allow the revision of the FitzPatrick weld and support ISI program to comply with the requirements of the later editions of the ASME Boiler and Pressure Vessel Code, Section XI.

The revision of the ISI Program and this amendment are required by 10 CFR 50.55 a (g) (4) (ii) and (5)(i). This revision of the inspection program is to allow the incorporation of improved examination techniques and sampling plans that may have been developed during the previous 120 month interval.

III. Impact of the Proposed Changes

The ISI program provides continued assurance of structural integrity of the pressure-retaining components of critical systems that contain radioactive and/or high pressure fluids, or that provide for safe shutdown of the plant in either normal or accident conditions. The proposed changes will allow the program to reflect industry experience and increased understanding of service induced failure mechanisms, and detection. This experience and knowledge is reflected in the requirements of newer editions of Section XI of the ASME Code approved for use by the NRC. The revised inspection program represents an expanded and more clearly defined sampling plan of examination of pressure retaining components and their supports. For these reasons, operation of the FitzPatrick Plant in accordance with the proposed amendments would not:

- (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or
- (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or
- (3) involve a significant reduction in a margin of safety.

IV. Implementation of the Changes

Implementation of the changes, as proposed, will not impact the fire protection program at FitzPatrick, nor will the changes impact the environment.

V. Conclusion

The incorporation of these changes:

- a) will not increase the probability or the consequences of an accident or malfunction of equipment important to safety as evaluated previously in the Safety Analysis Report (SAR);
- b) will not increase the possibility of an accident or malfunction of a type other than that evaluated previously in the SAR;
- c) will not reduce the margin of safety as defined in the basis for any Technical Specification;
- d) does not constitute an unreviewed safety question; and
- e) involves no significant hazards considerations, as defined in 10 CFR 50.92.

VI. References

- 1. James A. FitzPatrick Nuclear Power Plant Safety Evaluation Report (SER).
- 2. James A. FitzPatrick Nuclear Power Plant Final Safety Analysis Report (FSAR), Rev. 1, July 1983.
- 3. ASME Boiler and Pressure Vessel Code Section XI.
- 4. 10CFR50.55.