

July 11, 1986

Docket No. 50-333

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

Dear Mr. Brons:

SUBJECT: REVIEW OF SECOND TEN YEAR INSERVICE INSPECTION PROGRAM PLAN -  
REQUEST FOR ADDITIONAL INFORMATION

RE: James A. FitzPatrick Nuclear Power Plant

We are currently reviewing your submittal dated September 30, 1985 concerning your Second Ten Year Inservice Inspection Program Plan and have identified certain additional information which we will require in order to complete this task. We therefore request that you respond to the items contained in the enclosure within 45 days of receipt of this letter.

The reporting and/or recordkeeping requirements contained in this letter affect fewer than ten respondents; therefore, OMB clearance is not required under P.L. 96-511.

Sincerely,

Original signed by/

Harvey I. Abelson, Project Manager  
BWR Project Directorate #2  
Division of BWR Licensing

Enclosure:  
As stated

cc: w/enclosure  
See next page

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James A. FitzPatrick Nuclear  
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cc:

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Request for Additional Information - Second Interval Inservice Inspection Program

1. Scope/Status of Review

Throughout the service life of a water-cooled nuclear power facility, 10 CFR 50.55a(g)(4) requires that components (including supports) which are classified as ASME Code Class 1, Class 2, and Class 3 meet the requirements, except the design and access provisions and the preservice examination requirements, set forth in ASME Code Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," to the extent practical within the limitations of design, geometry, and materials of construction of the components. This section of the regulations also requires that inservice examinations of components and system pressure tests conducted during the second 120-month inspection interval shall comply with the requirements in the latest edition and addenda of the Code incorporated by reference in 10 CFR 50.55a(b) on the date 12 months prior to the start of the second 120-month inspection interval, subject to the limitations and modifications listed therein. The components (including supports) may meet requirements set forth in subsequent editions and addenda of this Code which are incorporated by reference in 10 CFR 50.55a(b) subject to the limitations and modifications listed therein. Based on the starting date of July 28, 1985 for the second ten-year interval, the Licensee has prepared the ISI Program in compliance with the requirements of the 1980 Edition, Winter 1981 Addenda (80W81) of ASME Code Section XI except that the extent of examination of pressure-retaining welds in ASME Code Class 1 piping will be in accordance with the requirements of Tables IWB-2500 and IWB-2600, examination Category B-J of ASME Code Section XI in the 1974 Edition, Summer 1975 Addenda (74S75).

The staff has reviewed the available information in the FitzPatrick Second Ten-Year Interval Inservice Inspection Program Plan submitted September 30, 1985.

## 2. Staff Evaluation

The staff has concluded that the following information and/or clarification is required in order to complete the review of the Inservice Inspection Program Plan:

- A. Provide the staff with the color-coded Inservice Diagrams (ISDs) which define the ASME Class 1, Class 2, and Class 3 boundaries for those systems listed in Appendix B of the Fitzpatrick Second Ten-Year Interval ISI Program Plan.
- B. The Scram Discharge Volume (SDV) System is comprised of ASME Boiler and Pressure Vessel Code Section III, Class 2 piping. Therefore, the inservice inspection of the SDV system should be conducted in accordance with the ASME Boiler and Pressure Vessel Code Section XI, Subsection IWC. The 1980 Edition Winter 1981 Addenda of Section XI, Subsection IWC, requires that all pressure-retaining Class 2 pipe welds, except those specified in IWC-1220, must be examined either by surface examination methods or by surface plus volumetric examination methods depending on their wall thickness. Because a significant number of welds in the SDV header are larger than 4 in. in diameter, they should be examined either by surface techniques (for wall thickness 1/2 in. or smaller) or by surface plus volumetric techniques (for wall thickness over 1/2 in.). In addition, the NRC established the position in NUREG-0803, "Generic Safety Evaluation Report Regarding Integrity of BWR Scram System Piping", that licensees for BWR plants should perform periodic inservice inspection of the SDV system to meet the requirements for Class 2 piping in Section XI of the ASME Code.

The staff finds that because the SDV piping is designed and fabricated according to the requirements of ASME Section III Class 2 and because of its importance in achieving the scram function, it should, as a minimum, be subjected to the ISI requirements for Class 2 piping in ASME Code Section XI. Therefore, the Licensee should incorporate the requirements of ASME Code Section XI and the recommendations of NUREG-0803 in the Control Rod Drive (CRD) section of the Fitzpatrick Second Ten-Year Interval ISI Program Plan.

- C. 10 CFR 50.55a(g)(5) requires that if the licensee determines that certain code examination requirements are impractical and relief is requested, the licensee shall submit information to the staff to support that determination. The requests for relief for the Fitzpatrick Second Ten-Year Interval ISI Program Plan are extremely difficult to review since they are in the form of "notes" and remarks in several different appendices and sections

of the plan. This causes the reviewer to search throughout the entire document to find all of the justifying pieces of information for each relief request. Because the relief requests and their respective justifications are not consolidated into one section of the plan, the requests may be unidentified and overlooked or they may not receive a complete review and/or supporting information may be missed by the reviewer which could result in the relief request being denied. In order to ensure that the relief requests receive a complete review, the Licensee should provide a formal submittal of requests for relief from ASME Code Section XI requirements which the Licensee has determined to be impractical to perform at Fitzpatrick. When preparing requests for relief, the staff suggests that the Licensee follow the attached Appendix A, "Guidance for Preparing Requests for Relief from Certain Code Requirements Pursuant to 10 CFR 50.55a(a)(3)".

The Licensee should provide the above requested information and/or clarifications as soon as possible so that the review of the Inservice Inspection Program Plan can be completed.



## APPENDIX A

### GUIDANCE FOR PREPARING REQUESTS FOR RELIEF FROM

### CERTAIN CODE REQUIREMENTS PURSUANT TO 10 CFR 50.55a(a)(3)

#### A. Description of Requests for Relief

The guidance in this enclosure is intended to illustrate the type and extent of information that is necessary for "request for relief" of items that cannot be fully inspected to the requirements of Section XI of the ASME Code. The preservice/in-service inspection program should identify the inspection and pressure testing requirements of the applicable portion of Section XI that are deemed impractical because of the limitation of design, geometry, radiation considerations or materials of construction of the components. The request for relief should provide the information requested in the following section of this appendix for the inspections and pressure tests identified above.

#### B. Request for Relief From Certain Inspection and Testing Requirements

Many requests for relief from testing requirements submitted by licensees have not been supported by adequate descriptive and detailed technical information. This detailed information is necessary to: (1) document the impracticality of the ASME Code requirements within the limitations of design, geometry and materials of construction of components; and (2) determine whether the use of alternatives will provide an acceptable level of quality and safety.

Relief request submitted with a justification such as "impractical", "inaccessible", or any other categorical basis, require additional information to permit an evaluation of that relief request. The objective of the guidance provided in this section is to illustrate the extent of the information that is required to make a proper evaluation and to adequately document the basis for granting the relief in the Safety Evaluation Report. Subsequent requests for additional information and delays in completing the review can be considerably reduced if this information is provided initially in the licensee's submittal.

For each relief request submitted, the following information should be included:

1. An identification of the component(s) and the examination requirement for which relief is requested.
2. The number of items associated with the requested relief.
3. The ASME Code class.

4. An identification of the specific ASME Code requirement that has been determined to be impractical.
5. The information to support the determination that the requirement is impractical; i.e., state and explain the basis for requesting relief. If the Code required examination cannot be performed because of a limitation or obstruction, describe or provide drawings showing the specific limitation or obstruction, and provide an estimate of the percentage of the Code required examination that can be completed on the individual components requiring relief.
6. An identification of the alternative examinations that are proposed: (1) in lieu of the requirements of Section XI; or (b) to supplement examinations performed partially in compliance with the requirements of Section XI.
7. A description of the ASME Code Section III fabrication examinations that were completed and documented during construction for the specific components listed in the relief requests.
8. A description and justification of any changes expected in the overall level of plant safety by performing the proposed alternative examination in lieu of the examination required by Section XI. If it is not possible to perform alternate examinations, discuss the impact on the overall level of plant quality and safety.

For inservice inspection, provide the following additional information regarding the inspection frequency:

1. State when the request for relief would apply during the inspection period or interval (i.e., whether the request is to defer an examination.)
2. State when the proposed alternative examinations will be implemented and performed.
3. State the time period for which the requested relief is needed.

Technical justification or data must be submitted to support the relief request. Opinions without substantiation that a change will not affect the quality level are unsatisfactory. If the relief is requested for inaccessibility, a detailed description or drawing which depicts the inaccessibility must accompany the request. A relief request is not required for tests prescribed in Section XI that do not apply to your facility. A statement of "N/ A" (not applicable) or "none" will suffice.

C. Request for Relief for Radiation Considerations

Exposures of test personnel to radiation to accomplish the examinations prescribed in Section XI of the ASME Code can be an important factor in determining whether, or under what conditions, an examination must be performed. A request for relief must be submitted by the licensee in the manner described above for inaccessibility and must be subsequently approved by the NRC staff.

Some of the radiation considerations will only be known at the time of the test. However, from experience at operating facilities, the licensee generally is aware of those areas where relief will be necessary and should submit as a minimum, the following information with the request for relief:

1. The total estimated man-rem exposure involved in the examination.
2. The radiation levels at the test area.
3. Flushing or shielding capabilities which might reduce radiation levels.
4. A proposal for alternate inspection techniques.
5. A discussion of the considerations involved in remote inspections.
6. Similar welds in redundant systems or similar welds in the same systems which can be inspected.
7. The results of preservice inspection and any inservice results for the welds for which the relief is being requested.
8. A discussion of the failure consequences of the weld which would not receive the Code required examination.