



William J. Cahill, Jr.
Chief Nuclear Officer

May 30, 1996
JPN-96-030

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-137
Washington, D.C. 20555

SUBJECT: James A. FitzPatrick Nuclear Power Plant
Docket No. 50-333
**Supplemental Letter Regarding the FitzPatrick Core Shroud Repair
Inservice Inspection and XM-19 Material Testing Programs**

- Reference:
1. JPN-95-043, "FitzPatrick Core Shroud Repair Inservice Inspection and XM-19 Material Testing Programs," dated September 12, 1995
 2. NRC Letter to Mr. William J. Cahill, Jr., "Evaluation of James A. FitzPatrick Nuclear Power Plant Testing Program for Hot Rolled XM-19 Materials (TAC NO. M93617)," dated May 1, 1996
 3. NRC Letter, N. F. Conicella to W. J. Cahill, Jr., NYPA "Request for Additional Information - Review of Proposed Repair of FitzPatrick Core Shroud (TAC M90964)," dated December 5, 1994
 4. EPRI TR-105747, "Guidelines for Reinspection of BWR Core shrouds (BWRVIP-07)," dated February 1996

Dear Sir:

The Authority submitted the FitzPatrick core shroud repair Inservice Inspection (ISI) and XM-19 material testing programs in JPN-95-043 (Reference 1). This letter supplements JPN-95-043 by changing core shroud repair ISI and XM-19 material testing program requirements.

The NRC staff reviewed the FitzPatrick test program for hot rolled XM-19 (Reference 2), and determined that the test program was adequate for ensuring that the XM-19 materials have adequate resistance to Intergranular Stress Corrosion Cracking (IGSCC), provided that five conditions are incorporated into the program. One of the conditions (Condition 4 of Reference 2) relates to a test requirement described in Attachment 2 of JPN-95-043. The test requirement in JPN-95-043 states that one specimen of sensitized 304SS will be tested in the test environment as a control to assure the adequacy of the test environment to produce IGSCC.

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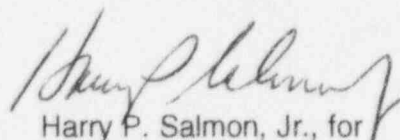
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Condition 4 of Reference 2 requires XM-19 to be sensitized and states that if the sensitized condition of the XM-19 material cannot be produced in time to support the test program, then one of the test specimens from each heat of XM-19 (three specimens) should be tested at a slower strain rate (about $5 \times 10^{-8} \text{ sec}^{-1}$) to demonstrate the effect of strain rate on IGSCC. During a discussion between the Authority and NRC staff on May 9, 1996, it was agreed that testing one specimen of unsensitized XM-19 from one of the heats at the slower strain rate would be adequate due to the difficulty in sensitizing XM-19 and the limited amount of XM-19 available for the test. Therefore, the Authority plans to test one specimen of unsensitized XM-19 from one of the heats at a slower strain rate of about $5 \times 10^{-8} \text{ sec}^{-1}$ to demonstrate the effect of strain rate on IGSCC. In addition, one specimen of sensitized 304SS will be tested in the test environment as a control and two specimens from each heat of hot rolled XM-19 materials will be tested in the simulated BWR environment. These controls meet the intent of Condition 4 of Reference 2. The remaining Reference 2 conditions will be incorporated into the XM-19 test program at FitzPatrick and other testing requirements stated in Attachment 2 of JPN-95-043 remain unchanged.

By letter dated December 5, 1994 (Reference 3), the NRC requested that the Authority submit an inspection program for the 10 core shroud tie rod assemblies placed in service during the Refuel 11/Cycle 12 (R11/C12) Refueling Outage (RFO). In JPN-95-043, the Authority submitted plans for an augmented ISI to the NRC for review. Subsequent to this, the BWR Vessels and Internals Project (BWRVIP) finalized guidelines (EPRI TR-105747, Reference 4) for augmented ISI of BWR core shrouds. The Authority has reviewed EPRI TR-105747 and concludes that implementing these guidelines will maintain the structural and functional integrity of the core shroud. Therefore, the inspection plan for the 10 core shroud tie rod assemblies and core shroud welds will conform to the EPRI TR-105747 guidelines. Based on this, the augmented ISI plan for the core shroud and tie rod assemblies described in Attachment 1 of JPN-95-043 is superseded by the EPRI TR-105747 guidelines. The initial core shroud repair ISI will be performed during the R12/C13 RFO which is currently scheduled for the Fall 1996. Starting with the R13/C14 RFO, core shroud repair ISI will be conducted in accordance with EPRI TR-105747 guidelines and any changes which may result from NRC review and approval of these guidelines.

Attachment 1 lists the commitments made by the Authority in this letter. If you have any questions, please contact Mr. A. Zaremba.

Very truly yours,



Harry P. Salmon, Jr., for
William J. Cahill, Jr.
Chief Nuclear Officer

Attachment: As stated
cc: Next page

cc: Regional Administrator
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Attachment 1 to JPN-96-030

Summary of Commitments

Number	Commitment	Due Date
JPN-96-030-01	Implement augmented ISI plan for the core shroud tie rod assemblies and core shroud welds per EPRI TR-105747.	R12/C13 RFO
JPN-96-030-02	Incorporate Conditions 1, 2, 3, and 5 stated in NRC letter dated May 1, 1996 into the hot rolled XM-19 test program.	Prior to testing hot rolled XM-19 materials
JPN-96-030-03	Incorporate testing of one specimen of unsensitized XM-19 from one of the heats at a slower strain rate of about $5 \times 10^{-8} \text{ sec}^{-1}$ to demonstrate the effect of strain rate on IGSCC into the XM-19 test program. In addition, incorporate testing of one specimen of sensitized 304SS in the test environment as a control and testing two specimens from each heat of hot rolled XM-19 materials in the simulated BWR environment into the XM-19 test program. These actions meet the intent of Condition 4 stated in NRC letter dated May 1, 1996.	Prior to testing hot rolled XM-19 materials
JPN-96-030-04	Conduct core shroud repair ISI in accordance with EPRI TR-105747 guidelines and any changes which may result from NRC review and approval of these guidelines.	R13/C14 RFO