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Docket Number 50-346

License Number NPF-3

Serial Number 2632

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United States Nuclear Regulatory Commission
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Washington, D. C. 20555-0001

Subject: Request for Alternative to 10 CFR 50.55a(f)(4)(ii), Inservice Testing Requirements

Ladies and Gentlemen:

In accordance with the provisions of Title 10 of the Code of Federal Regulations (CFR), Part 50.55a(a)(3)(i), the FirstEnergy Nuclear Operating Company requests authorization from the Nuclear Regulatory Commission (NRC) to use an alternative to the requirements of 10 CFR 50.55a(f)(4)(ii) for the Davis-Besse Nuclear Power Station (DBNPS). This subsection states that licensees must comply with the requirements of the latest edition and addenda of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code incorporated by reference in paragraph (b) of 10 CFR 50.55a on the date 12 months prior to the start of the 120-month interval. FENOC requests an extension to the specified schedule for implementing updates to the Inservice Testing (IST) program for the DBNPS.

The current 120-month IST interval for the DBNPS ends September 12, 2000. FENOC requests approval to submit the 120-month update to the IST Program Plan for the DBNPS after this date. Additional time is needed for development and approval of risk-informed IST (RI-IST) portions of the Program Plan, and for updating the remainder of the IST Program Plan which may not be risk-informed in accordance with 10 CFR 50.55a.

On October 15, 1999, FENOC submitted a letter (Serial Letter Number 2618) requesting an alternative to 10 CFR 50.55a(f)(4)(ii), Inservice Testing Requirements. In this letter, FENOC stated that it intended to update the IST program for the DBNPS to the 1989 Edition of the ASME Code, Section XI, along with requesting an extension to the specified schedule for implementing the update. The ASME Code incorporated by reference in 10 CFR 50.55a on September 12, 1999, was the 1989 Edition of the ASME Code. After discussions with members of the NRC staff, FENOC has elected to update the IST Program Plan for the DBNPS to the 1995 Edition, 1996 Addenda, of the ASME Code, Section XI, which was incorporated by reference into 10 CFR 50.55a effective November 22, 1999.

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With NRC authorization, the DBNPS will continue to comply with the Code requirements as approved for the current 120-month interval beyond September 12, 2000. During this extension period, the IST Program Plan will be incrementally converted to the 1995 Edition, 1996 Addenda, of the ASME Code on a system-by-system or component-by-component approach. Submittals of the RI-IST Program Plan to the NRC will be staggered on approximate six-month intervals. It is the intention of FENOC to make a licensing submittal for the DBNPS during the first quarter of 2000 for RI-IST of Air Operated Valves (AOVs), invoking the ASME OMN-3 Code Case, as the lead plant for the Babcock & Wilcox (B&W) Owners Group project for the RI-IST of AOVs. Subsequently, FENOC would expand the RI-IST Program Plan at the DBNPS to include Motor Operated Valves (MOVs), and possibly Check Valves or other components, on approximate six-month intervals. As RI-IST submittals are approved, they will be incorporated into the RI-IST Program Plan. By January 2002, FENOC would complete the IST program update for the DBNPS to the 1995 Edition, 1996 Addenda, of the ASME Code for any components not included in the RI-IST Program Plan. Therefore, the next interval will begin no later than February 1, 2002. The attached relief request includes the basis and justification for the proposed alternative to the regulatory requirements and an implementation plan. The proposed alternative will provide an acceptable level of quality and safety. The end of the third 120-month interval for the DBNPS IST Program will remain as originally scheduled on September 12, 2010.

NRC approval of this request is requested by April 30, 2000. Should you have any questions or require additional information, please contact Mr. James L. Freels, Manager - Regulatory Affairs, at (419) 321-8466.

Very truly yours,



GMW/s

Attachments

cc: J. E. Dyer, Regional Administrator, Region III
D. V. Pickett, NRC/NRR Project Manager
K. S. Zellers, DB-1 Senior Resident Inspector
Utility Radiological Safety Board

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Attachment 1
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**RELIEF REQUEST
RG-1**

Reference Regulation: Title 10, Code of Federal Regulations, Part 50, Article 55a, "Codes and Standards," 10 CFR 50.55a(f)(4)(ii), "Inservice Testing Requirements."

Components for Which Alternative is Requested:

Name and Identification Number: All components (pumps and valves) listed in the Inservice Test (IST) Program Plan plus components to be added to comply with the 1995 Edition, 1996 Addenda, of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section XI (ASME XI Code).

Function: Inservice Testing Program Plan includes components (pumps and valves) required to perform a specific function in shutting down the reactor to a safe shutdown condition, maintaining the reactor in a safe shutdown condition, or mitigating the consequences of an accident.

Class: ASME Class 1, 2, and 3

Regulatory Requirement from Which Alternative is Requested:

10 CFR 50.55a(f)(4)(ii) states:

"Inservice tests to verify operational readiness of pumps and valves, whose function is required for safety, conducted during successive 120-month intervals must comply with the requirements of the latest edition and addenda of the Code incorporated by reference in paragraph (b) of this section 12 months prior to the start of the 120-month interval, subject to the limitations and modifications listed in paragraph (b) of this section."

Compliance with this regulatory requirement would result in the Davis-Besse Nuclear Power Station, Unit 1 (DBNPS) using the 1989 edition of the ASME XI Code at the beginning of the next 120-month IST interval. However, FENOC proposes to extend the interval of the existing IST Program Plan for the DBNPS that complies with the 1986 edition (no addenda) of the ASME XI Code. A revised Program Plan incorporating risk-informed (RI) portions and general updates utilizing the 1995 Edition, 1996 Addenda, of the ASME XI Code will be phased in over the duration of the requested extension, and will be fully implemented no later than February 1, 2002. The 1995 Edition, 1996 Addenda, of the ASME Code, Section XI, was incorporated by reference into 10 CFR 50.55a effective November 22, 1999. The next interval will begin no later than February 1, 2002.

Basis for Relief from Regulatory Requirements:

The risk-informed IST (RI-IST) portions of the Program Plan, as well as implementing procedures, must be developed and approved. Implementation of RI-IST requires evaluation of

components for safety significance. This will be done by working groups and reviewed by an expert panel to assess risk effects as a result of RI-IST. Submittals of the RI-IST Program Plan will be staggered on approximate six-month intervals. It is the intention of FENOC to make a licensing submittal for the DBNPS in the first quarter of 2000 for a RI-IST Program Plan for Air Operated Valves (AOVs), invoking the ASME OMN-3 Code Case, as the lead plant for the Babcock & Wilcox (B&W) Owners Group project for the RI-IST for AOVs. Subsequently, FENOC would expand the RI-IST Program Plan for the DBNPS to include Motor Operated Valves (MOVs), and possibly Check Valves or other components, on approximate six-month intervals.

The 1995 Edition, 1996 Addenda, of the ASME XI Code must also be applied for the remainder of the IST Program Plan that may not be risk-informed. Differences between the 1986 Edition of the ASME XI Code currently in use at the DBNPS and the 1995 Edition, 1996 Addenda, of the ASME XI Code will require the majority of pump and valve testing procedures to be changed to reflect the newer code requirements. Alteration or development of pump and valve testing procedures to incorporate these changes will require significant resources.

In addition to the resource requirements for the ASME XI Code update, the Twelfth Refueling outage activities will require preparation and support. This outage, scheduled to begin in April 2000, includes a full core offload for Inservice Inspection of the reactor vessel in addition to steam generator cleaning.

In order to accommodate the activities described above, FENOC requests an extension of the current 120-month interval for the DBNPS IST Program to provide sufficient time to allow development of the RI-IST/IST Program Plan for the next 120-month interval. No extension is being requested with respect to the Inservice Inspection (ISI) Program at the DBNPS.

Proposed Alternative Testing:

Pursuant to 10 CFR 50.55a(a)(3)(i), FENOC proposes an alternative to 10 CFR 50.55a(f)(4)(ii) that would provide an acceptable level of safety for the DBNPS.

As an alternative to the referenced regulation, the DBNPS will continue using the existing IST Program Plan (1986 edition of the ASME XI Code) beyond the end date of the current interval, which is September 12, 2000. The DBNPS will continue to perform IST requirements as specified in the current IST Program Plan, until the requirements of the updated RI-IST/IST Program Plan are invoked. The current IST Program Plan is in compliance with the 1986 Edition of the ASME XI Code (no addenda), which is similar to the 1995 Edition, 1996 Addenda, of the ASME XI Code, and provides an acceptable level of quality and safety.

FENOC will implement a RI-IST/IST Program Plan at the DBNPS. The risk-informed portion of the Program Plan will require the development of implementing procedures/guidelines. Once the implementing procedures/guidelines are developed and approved, RI-IST submittals that have

been approved will be incorporated into the Program Plan. Portions of the Program Plan that may not be risk-informed will be altered to comply with the 1995 Edition, 1996 Addenda, of the ASME XI Code. This conversion to the new code will be incrementally implemented on a system-by-system or component-by-component approach, over the extension period.

Based on new ASME XI Code testing requirements and in conjunction with new testing frequencies and strategies from the risk-informed decisions, the scope of changes to inservice tests will be determined. This evaluation will maximize testing efforts while minimizing impact on the plant. Consequently, many of the components will be in compliance before the extended date requested for full compliance with the regulation for ASME XI Code updates to the IST Program Plan.

Implementation Plan:

Upon approval of this request by the NRC, FENOC will begin the risk-informed program review for the DBNPS. This process will include evaluation of the risk significance of scoped components by working groups, followed by approval of the risk rankings by an expert panel. For the portion of the Program Plan that may not be risk-informed, the DBNPS will also begin the system-by-system or component-by-component conversion to the 1995 Edition, 1996 Addenda, of the ASME XI Code. The estimated completion date for the entire RI-IST/IST Program Plan development is the winter of 2002. The updated IST Program Plan, including RI portions, will be fully implemented no later than February 1, 2002.

COMMITMENT LIST

The following list identifies those actions committed to by the Davis-Besse Nuclear Power Station in this document. Any other actions discussed in the submittal represent intended or planned actions by Davis-Besse. They are described only as information and are not regulatory commitments. Please notify the Manager - Regulatory Affairs (419-321-8466) at Davis-Besse of any questions regarding this document or associated regulatory commitments.

COMMITMENTS

DUE DATE

Continue to comply with the ASME XI Code requirements as approved for the current 120-month interval Inservice Testing Program.

Until associated requirements of the updated RI-IST/IST Program Plan are invoked.

For the portions of the Inservice Testing Program Plan that are not risk-informed, complete the 120-month update to the 1995 Edition, 1996 Addenda, of the ASME XI Code.

January 31, 2002.

Fully implement the updated Inservice Testing Program Plan (including Risk-Informed portions), and start third 120-month interval Inservice Testing Program.

February 1, 2002.

End of the third 120-month interval Inservice Testing Program (as originally scheduled).

September 12, 2010.