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Docket Number 50-346

License Number NPF-3

Serial Number 2756

January 21, 2002

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

Subject: Supplemental Information Regarding License Amendment Application to Revise Technical Specification (TS) 3/4.9.4, "Refueling Operations - Containment Penetrations," and TS 3/4.9.12, "Refueling Operations - Storage Pool Ventilation," Regarding Containment Equipment Hatch Cover Requirements (License Amendment Request No. 00-0005; TAC No. MB1979)

Ladies and Gentlemen:

On May 15, 2001, the FirstEnergy Nuclear Operating Company (FENOC) submitted an application for an amendment to the Davis-Besse Nuclear Power Station (DBNPS), Unit Number 1, Operating License Number NPF-3, Appendix A Technical Specifications, regarding Technical Specification (TS) 3/4.9.4, "Refueling Operations - Containment Penetrations," and TS 3/4.9.12, "Refueling Operations - Storage Pool Ventilation." The proposed amendment (DBNPS Letter Serial Number 2690) would revise the containment equipment hatch cover requirements.

On January 7, 2002, during a conference call with the NRC Staff, FENOC was requested to provide a written response to the issues discussed. Enclosure 1 provides the response to this request for additional information.

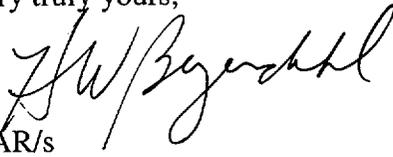
This information does not affect the conclusions stated in the previously submitted license amendment application that there is no adverse impact on nuclear safety and that the proposed amendment involves no significant hazards consideration.

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Should you have any questions or require additional information, please contact Mr. David H. Lockwood, Manager - Regulatory Affairs, at (419) 321-8450.

Very truly yours,

  
MAR/s

Enclosures

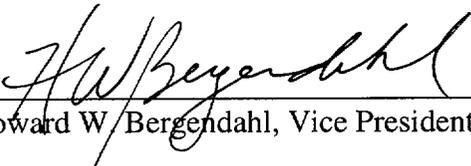
cc: J. E. Dyer, Regional Administrator, NRC Region III  
S. P. Sands, NRC/NRR Project Manager  
D. J. Shipley, Executive Director, Ohio Emergency Management Agency,  
State of Ohio (NRC Liaison)  
D. S. Simpkins, NRC Region III, DB-1 Resident Inspector  
Utility Radiological Safety Board

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Enclosure 1

SUPPLEMENTAL INFORMATION IN SUPPORT OF  
APPLICATION FOR AMENDMENT  
TO  
FACILITY OPERATING LICENSE NPF-3  
DAVIS-BESSE NUCLEAR POWER STATION  
UNIT NUMBER 1

Attached is supplemental information for Davis-Besse Nuclear Power Station (DBNPS), Unit Number 1 Facility Operating License Number NPF-3, License Amendment Request Number 00-0005 (DBNPS Letter Serial Number 2690, dated May 15, 2001).

I, Howard W. Bergendahl, state that (1) I am Vice President - Nuclear of the FirstEnergy Nuclear Operating Company, (2) I am duly authorized to execute and file this certification on behalf of the Toledo Edison Company and The Cleveland Electric Illuminating Company, and (3) the statements set forth herein are true and correct to the best of my knowledge, information and belief.

By:   
Howard W. Bergendahl, Vice President - Nuclear

Affirmed and subscribed before me this 22nd day of January, 2002.

  
Notary Public, State of Ohio - Nora L. Flood  
My commission expires September 4, 2002.

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**Davis-Besse Nuclear Power Station (DBNPS)  
License Amendment Request 00-0005 (TAC No. MB1979)  
Containment Equipment Hatch**

1. NRC Question:

How long does it take to close the equipment hatch cover?

DBNPS Response:

In its response to NRC Generic Letter 88-17 (DBNPS Letter Serial Number 1623, dated January 3, 1989), the DBNPS staff stated that the equipment hatch could be closed in one hour or less, if necessary, during operation with Reactor Coolant System (RCS) inventory reduced to less than 14 inches above the hot leg centerline. An emergency equipment hatch closure drill was performed on September 14, 1991, and demonstrated that emergency closure could be performed within 35 minutes. NRC inspectors observed this drill, as documented in NRC Inspection Report 50-346/91013 (DBNPS Log Letter 1-2549, dated October 4, 1991).

It should be noted that *NO* credit was taken for containment isolation in the existing analyses of the fuel handling accident inside containment, as described in the DBNPS Updated Safety Analysis Report (USAR) in Section 15.4.7.3, "Accident Analysis - Accident Inside Containment," (see discussion on LAR 00-0005, page 5).

2. NRC Question:

With a designated person, how long would it take to close the airlock doors? This is significant for several reasons, one being that an airlock door needs to be closed to establish a pressure boundary.

DBNPS Response:

Existing Technical Specification (TS) 3.9.4.b requires the use of a dedicated individual to close a containment personnel airlock door, if both doors of the airlock are open. The key factor in predicting the time in which the airlock could be closed is the time to complete containment evacuation of personnel. The

DBNPS staff estimates that the time required to evacuate containment would not exceed 5-10 minutes. Closure of a personnel airlock door would occur promptly following evacuation of containment. DBNPS procedure NG-DB-00116, "Outage Nuclear Safety Control," requires any hoses and cables running through the air lock employ a means to allow safe, quick disconnect or severance, and be tagged at the air lock with specific instructions to expedite removal. These requirements ensure that the air lock doors would be capable of being closed prior to evacuation of containment being complete. The use of quick disconnects or severance, and tagging of hoses and cables running through the containment personnel airlock door is discussed in the existing TS 3/4.9.4 Bases.

As noted in the response to question 1, *NO* credit was taken for containment isolation following a fuel handling accident inside containment in the existing USAR Section 15.4.7.3 analyses.

3. NRC Question:

What, if any, controls will be placed on cables, hoses, etc., fouling the airlock doors?

DBNPS Response:

TS Bases Section 3/4.9.4 discusses that any hoses and cables running through the open containment personnel airlock employ a means to allow safe, quick disconnect or severance, and be tagged at the air lock with specific instructions to expedite removal during core alterations and movement of irradiated fuel in containment. The DBNPS applies these means at all times during shutdown as a risk reducing measure. These same requirements would be utilized for the airlock doors during crane operation with loads over the spent fuel pool, cask pit, or transfer pit or operations involving movement of fuel in the spent fuel pool, cask pit, or transfer pit, with the equipment hatch and personnel airlock open.

4. NRC Question:

What is the impact of this Tech Spec change on the control room?

DBNPS Response:

There is no impact on the control room operator dose assessments. No assumptions used in the analyses are altered by the proposed changes. As noted in the response to question 1, *NO* credit was taken for containment isolation

following a fuel handling accident inside containment in the existing USAR Section 15.4.7.3 analyses.

5. NRC Question:

What controls are placed on the openings in the fuel handling area?

DBNPS Response:

DBNPS procedure DB-OP-00018, "Inoperable Equipment Tracking Log," provides for the tracking of openings in the fuel handling area negative pressure boundary. If the total area of all openings exceeds the acceptance criteria provided, operators are instructed to enter TS 3/4.9.12, which would require suspension of fuel movement. Compliance with TS 3/4.9.12 is verified prior to moving fuel in the fuel handling area (see LAR 00-0005, page 8).

6. NRC Question:

What is meant by "well within the limits of 10 CFR 100"?

DBNPS Response:

The estimated offsite dose consequences from the fuel handling accident inside containment, without crediting containment isolation or filtration are contained in existing USAR Table 15.4.7-4a, "Resultant Doses From Fuel Handling Accident Inside Containment - Extended Fuel Burnup (60,000 MWD/MTU)," and are summarized as follows:

	Exclusion Area Boundary 0 to 2 hours		Low Population Zone Boundary 0 to 30 days	
	Table 15.4.7-4a	10 CFR 100	Table 15.4.7-4a	10 CFR 100
Thyroid Dose (rem)	62.6	300	3.26	300
Whole Body Dose (rem)	0.55	25	3.0×10 <sup>-2</sup>	25

USAR Section 15.4.7.3.4.2 states that these results are "well within the dose guidelines set forth in 10 CFR 100," as is shown in the above table.

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7. NRC Question:

Is there a period of time after shutdown that the licensee will not move fuel due to radiological concerns?

DBNPS Response:

DBNPS TS 3/4.9.3 requires the reactor be subcritical for at least 72 hours prior to movement of irradiated fuel. This is consistent with the time after shutdown assumed in the fuel handling accident analyses as stated in Note (1) to USAR Table 15.4.7-6, "Fuel Assembly Fission Product Activities (Curies) for Extended Fuel Burnup (60,000 MWD/MTU)."

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Enclosure 2

### COMMITMENT LIST

THE FOLLOWING LIST IDENTIFIES THOSE ACTIONS COMMITTED TO BY THE DAVIS-BESSE NUCLEAR POWER STATION (DBNPS) IN THIS DOCUMENT. ANY OTHER ACTIONS DISCUSSED IN THE SUBMITTAL REPRESENT INTENDED OR PLANNED ACTIONS BY THE DBNPS. THEY ARE DESCRIBED ONLY FOR INFORMATION AND ARE NOT REGULATORY COMMITMENTS. PLEASE NOTIFY THE MANAGER – REGULATORY AFFAIRS (419-321-8450) AT THE DBNPS OF ANY QUESTIONS REGARDING THIS DOCUMENT OR ANY ASSOCIATED REGULATORY COMMITMENTS.

#### COMMITMENTS

Hoses or cables running through the containment personnel air lock will employ a means to allow safe, quick disconnect or severance, and be tagged at the air lock with specific instructions to expedite removal during crane operation with loads over the spent fuel pool, cask pit, or transfer pit or operations involving movement of fuel in the spent fuel pool, cask pit, or transfer pit, with the equipment hatch and personnel airlock open.

#### DUE DATE

Prior to utilizing the NRC-approved License Amendment allowing the containment equipment hatch and personnel air lock to remain open during fuel handling operations in the fuel handling area.