



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

February 11, 2014

Mr. Raymond A. Lieb, Vice President  
Davis-Besse Nuclear Power Station  
FirstEnergy Nuclear Operating Company  
5501 North State Route 2  
Oak Harbor, OH 43449

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE  
DAVIS-BESSE NUCLEAR POWER STATION LICENSE RENEWAL  
APPLICATION (TAC NO. ME4640)

Dear Mr. Lieb:

By letter dated August 27, 2010, FirstEnergy Nuclear Operating Company (FENOC) submitted an application pursuant to Title 10 of the *Code of Federal Regulations* Part 54 for renewal of operating license NPF-3 for the Davis-Besse Nuclear Power Station. The staff of the U.S. Nuclear Regulatory Commission (NRC) is reviewing this application in accordance with the guidance in NUREG-1800, "Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants." During its review, the staff has identified areas where additional information is needed to complete the review. The staff's requests for additional information are included in the enclosure. Further requests for additional information may be issued in the future.

Items in the enclosure were discussed with Cliff Custer, of your staff, and a mutually agreeable date for the response is within 30 days from the date of this letter. If you have any questions, please contact me by telephone at 301-415-3809 or by e-mail at [Juan.Uribe@nrc.gov](mailto:Juan.Uribe@nrc.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Juan F. Uribe".

Juan F. Uribe, Project Manager  
Projects Branch 1  
Division of License Renewal  
Office of Nuclear Reactor Regulation

Docket No. 50-346

Enclosure:  
As stated

cc w/encl: Listserv

ENCLOSURE

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*/RA/*

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Division of License Renewal  
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**ADAMS Accession No.:**ML14029A201

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<b>DATE</b>	1/31/14	2/6/14	2/7/14	2/11/14

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Letter to Raymond A. Lieb from Juan Uribe dated February 11, 2014

**SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE  
DAVIS-BESSE NUCLEAR POWER STATION LICENSE RENEWAL  
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E. Keegan

B. Harris (OGC)

E. Brown

J. Uribe

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**DAVIS-BESSE NUCLEAR POWER STATION**  
**LICENSE RENEWAL APPLICATION**  
**REQUEST FOR ADDITIONAL INFORMATION**

**RAI 2011-03-1**

Background:

The License Renewal Annual Update letter, dated September 20, 2013, amended the acceptance criteria for cathodic protection ground surveys to address the changes in recommendations issued in License Renewal Interim Staff Guidance (LR-ISG)-2011-3, "Changes to the Generic Aging Lessons Learned (GALL) Report Revision 2 Aging Management Program (AMP) XI.M41, 'Buried and Underground Piping and Tanks'." As amended, the cathodic protection acceptance criteria are negative 850 mV relative to a copper/copper sulfate reference electrode instant off or negative 100 mV minimum polarization, and limiting critical potential not more negative than 1200 mV.

LR-ISG-2011-3 Table 6a, "Cathodic Protection Acceptance Criteria," recommends that, [t]he 100 mV polarization criterion is limited to electrically isolated piping sections or areas of grounded piping where the effects of mixed potentials are shown to be minimal. When the 100 mV criterion is utilized in lieu of the -850 mV CSE criterion for steel piping, or where copper or aluminum components are protected, applicants must explain in the application why the effects of mixed potentials are minimal and why the most anodic metal in the system is adequately protected.

Issue:

A basis was not provided for the 100 mV polarization criterion to demonstrate that the effects of mixed potentials are minimal and the most anodic metal in the system is adequately protected.

Request:

State the basis for use of the negative 100 mV minimum polarization criterion, or revise the Buried Piping and Tanks Inspection Program to be consistent with the cathodic protection criteria stated in LR-ISG-2011-03.

**RAI 2011-03-2**

Background:

Commitment No. 44 states that cathodic protection will be provided for the emergency diesel fuel oil storage tanks prior to entering the period of extended operation. In reference to tank inspections, Commitment No. 3, and the associated enhancement, state, "[t]hese inspections are not required if it is demonstrated that the tanks are cathodically protected in accordance with NACE International (NACE) Standard Practice SP0169-2007, "Control of External Corrosion on Underground or Submerged Metallic Piping Systems," or NACE Standard Recommended Practice RP0285-2002, "Corrosion Control of Underground Storage Tank Systems by Cathodic Protection."

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LR-ISG-2011-3, Table 4c, "Inspections of Buried Tanks for all Inspection Periods," recommends that tank inspections are not required if the tank is cathodically protected in accordance with the provisions of footnote 3 of the Table. If the tanks are not cathodically protected or the cathodic protection does not meet the availability and effectiveness goals in footnote 3, they should be inspected in accordance with Table 4c.

Issue:

The staff noted that, in the event that the emergency diesel fuel oil storage tanks are not cathodically protected (due to a future commitment change), the corrective action process will not necessarily lead to the tank inspections in Table 4c. In addition, if the cathodic protection system does not meet availability or effectiveness goals, it is not clear to the staff that tank inspections will be conducted. The staff considers the incorporation of these inspections into Commitment No. 3 and No. 44, as necessary to ensure that aging can be managed throughout the period of extended operation.

Request:

State the basis for not including the recommended fuel oil storage tank inspections into the Buried Piping and Tanks Inspection Program in the event that the tanks are not cathodically protected, or the cathodic protection system does not meet availability or effectiveness goals. Alternatively, revise Commitment No. 3 and No. 44, and the associated enhancements to require that tank inspections meet the recommendations of Table 4c.