



FirstEnergy Nuclear Operating Company

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July 3, 2013  
L-13-224

10 CFR 50.54(f)

ATTN: Document Control Desk  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

SUBJECT:

Davis-Besse Nuclear Power Station, Unit No. 1  
Docket No. 50-346, License Number NPF-3  
Notification of Closure of a Commitment Related to the Generic Safety Issue 191  
Resolution Plan for the Davis-Besse Nuclear Power Station, Unit No. 1 (DBNPS)  
(TAC No. MC4681)

By letter dated May 15, 2013 [Agencywide Documents Access and Management System (ADAMS) Accession No. ML13135A456] (Reference 1), FirstEnergy Nuclear Operating Company (FENOC) provided the Davis-Besse Generic Safety Issue 191 Resolution Plan consistent with the Nuclear Energy Institute closure option template dated November 9, 2012, "Closure Option Templates for Generic Safety Issue 191 (GSI-191), Assessment of Debris Accumulation on Pressurized Water Reactor Sump Performance". In Reference 1 FENOC committed to report on the progress toward confirming the strainer bypass percentage results is less than or equal to 15 grams of fiber per fuel assembly for DBNPS by July 15, 2013. FENOC hereby submits the progress toward confirming the strainer bypass percentage results.

FENOC has obtained and reviewed strainer bypass test data from two other plants for applicability to the DBNPS strainer design. The relevant parameters from each test — debris bed thickness, approach velocity, and perforated plate hole size — were compared to DBNPS parameters. Lower approach velocity and smaller strainer hole size associated with the test data could not be reconciled to DBNPS parameters given the available correlations. Based on this information, FENOC is reassessing the options to confirm the strainer bypass fraction. This item is documented and tracked in the FENOC activity tracking program.

By letter dated February 28, 2008 (ML080650368), FENOC submitted a supplemental response to Generic Letter (GL) 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors" for DBNPS (Reference 2). By letter dated

July 10, 2008 (ML081780330), the Nuclear Regulatory Commission (NRC) staff requested FENOC to report how DBNPS has addressed the in-vessel downstream effects issue within 90-days of issuance of the final NRC Safety Evaluation (SE) on WCAP-16793. Reference 3 states:

FENOC may demonstrate that in-vessel downstream effects issues are resolved for DBNPS by showing that the licensee's plant conditions are bounded by the final WCAP-16793-NP and the corresponding final NRC staff SE, and by addressing the conditions and limitations in the final SE. Alternately, FENOC may resolve this item by demonstrating, without reference to WCAP-16793 or the NRC staff SE, that in-vessel downstream effects have been addressed at DBNPS.

As indicated in Reference 1, FENOC intends to follow the resolution strategy proposed by the Pressurized Water Reactor Owners Group to establish in-vessel debris limits for the DBNPS type plant design and demonstrate that downstream effects have been addressed.

There are no regulatory commitments contained in this letter. If there are any questions or if additional information is required, please contact Mr. Thomas A. Lentz, Manager, Fleet Licensing at (330) 315-6810.

Sincerely,

A handwritten signature in dark ink, appearing to read "Raymond A. Lieb", is written over a horizontal line.

Raymond A. Lieb

Attachment:

cc: NRC Region III Administrator  
NRC Resident Inspector  
NRC Project Manager  
Utility Radiological Safety Board

### **References**

1. FENOC letter to NRC, "Generic Safety Issue 191 Resolution Plan" (TAC No. MC4681), May 15, 2013 (Accession No. ML13135A456).
2. FENOC letter to NRC, "Supplemental Response to Generic Letter 2004-02, 'Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized Water Reactors'" (TAC No. MC4681), February 28, 2008 (Accession No. ML080650368).
3. NRC letter to FENOC, "Davis-Besse Nuclear Power Station, Unit No. 1 – Request for Additional Information Related to Response to Generic Letter 2004-02, Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors (TAC No. MC4681)," July 10, 2008 (Accession No. ML081780330).