



FirstEnergy Nuclear Operating Company

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September 25, 2013
L-13-295

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

SUBJECT:

Davis-Besse Nuclear Power Station
Docket No. 50-346, License No. NPF-3
Response to Request for Additional Information Regarding 10 CFR 50.55a
Request RP-3 (TAC No. MF0757); and Code Case Number Corrections in 10 CFR
50.55a Request RR-A1 (TAC No. MF0753)

By correspondence dated February 27, 2013 (Accession No. ML13059A321), FirstEnergy Nuclear Operating Company (FENOC) submitted 10 CFR 50.55a Request RP-3 for the Davis-Besse Nuclear Power Station (DBNPS). By correspondence dated August 28, 2013 (Accession No. ML13227A367), the Nuclear Regulatory Commission (NRC) requested additional information to complete its review of Request RP-3. FENOC's response to this request is attached.

By correspondence dated February 27, 2013 (Accession No. ML13059A315), FENOC submitted 10 CFR 50.55a Request RR-A1 for the DBNPS. On August 29, 2013, NRC and FENOC staff discussed typographical errors (incorrect code case numbers) in Request RR-A1. FENOC hereby amends Request RR-A1, page 3 of 4, section 5, last paragraph, to correct the errors by citing Code Case N-532-4 and Code Case N-532-5 in lieu of Code Case N-352-4 and Code Case N-352-5, respectively.

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

Sincerely,


Raymond A. Lieb

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Attachment: Response to August 28, 2013 Request for Additional Information
Regarding 10 CFR 50.55a Request RP-3

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

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The Nuclear Regulatory Commission Staff questions are provided below in bold text and are followed by the FirstEnergy Nuclear Operating Company Response.

1. Subsection ISTB-5100 of the American Society of Mechanical Engineers Operations and Maintenance of Nuclear Power Plants Code (ASME OM Code), "Centrifugal Pumps (Except Vertical Line Shaft Centrifugal Pumps)," (a), "Duration of Tests," (1), states that:

For the Group A test and the comprehensive test, after pump conditions are stable as the system permits, each pump shall be run at least 2 min. At the end of this time at least one measurement or determination of each of the quantities required by Table ISTB-3000-1 shall be made and recorded.

For the proposed testing for the fuel oil transfer pumps, discuss whether each pump will be run for at least two minutes after the stabilization of pump conditions prior to measuring pump flow rate.

Response:

Fuel oil transfer pump flow rate is calculated by measuring the change in emergency diesel generator (EDG) day tank level over time. For the proposed testing, EDG day tank level is measured prior to starting and after stopping the fuel oil transfer pump. Measurement of EDG day tank level after starting the fuel oil transfer pump may not reflect static tank level, due to movement of fuel entering the tank. Since measuring the EDG day tank level is not practical while the pump is running, the volume of fuel oil transferred to the day tank after stabilization of pump conditions and the fuel oil transfer pump flow rate cannot be reliably calculated by this method. Therefore, each fuel oil transfer pump will not be run for at least two minutes after the stabilization of pump conditions as stated in subparagraph ISTB-5100(a)(1).

FENOC hereby amends Request RP-3 (in the February 27, 2013 submittal, Accession No. ML13059A321), to include the following provisions.

- The following code requirement is to be added to page 1 of 4, under section 3, "Applicable Code Requirement."

Subparagraph ISTB-5100(a)(1) of the ASME OM Code, states that for the Group A test and the comprehensive test, after pump conditions are as stable as the system permits, each pump shall be run at least 2 minutes. At the end of this time at least one measurement or determination of each of the quantities required by Table ISTB-3000-1 shall be made and recorded.

- The following words are to be added to page 2 of 4, Section 6, "Proposed Alternative and Basis for Use," first paragraph, second sentence.

The following testing will be performed in lieu of the inservice test requirements (subparagraphs ISTB-5100(a)(1), ISTB-5121 and ISTB-5123), test acceptance criteria (Table ISTB-5121-1), and test frequency requirements (Table ISTB-3400-1) described above in the applicable code requirements section. [Underlined characters to be added.]

2. Page 3 of Attachment C to the submittal dated February 27, 2013, states that:

The EDG fuel oil transfer pumps are rated at 10 gallons per minute (gpm). A conservative minimum flow value, with respect to design basis, will be used in lieu of ASME OM Code Table ISTB-5121-1.

Provide the conservative minimum flow value, in gpm. State whether the conservative minimum flow value is greater than or equal to 90 percent of the rated flow for the pumps (10 gpm). If the conservative minimum flow value is less than 90 percent of the rated flow for the pumps, provide justification as to why this is acceptable.

Response:

The minimum flow rate used for test acceptance criteria is 6 gpm. This minimum flow rate is less than 90 percent of the rated flow for the pumps. The calculated consumption rate for the EDG at maximum power output is 3.6 gpm. Therefore, the minimum flow rate (6 gpm) is conservative relative to the maximum required pump flow rate (3.6 gpm) and justified for use as test acceptance criteria in lieu of the criteria in ASME OM Code Table ISTB-5121-1.

3. Page [3] of Attachment C to the submittal also states that:

Periodically, the EDG fuel oil storage tanks are drained, cleaned, and filled with fresh oil. The EDG day tanks are also drained, cleaned and inspected. At these times, a long term pump duration test is possible.

Define the term "periodically" in months and/or years. Address whether the fuel oil storage tank and associated day tank [are] cleaned at the same time.

Response:

The EDG day tanks are drained, cleaned, and inspected on a 10-year frequency. The EDG fuel oil storage tanks are drained, cleaned, and refilled with fresh oil on a 48-month frequency. There have been no instances in the past 10 years where these tasks have been performed concurrently. However, there are no requirements that would preclude cleaning the tanks at the same time.

4. Address whether any of the fuel oil transfer pumps had failed starts or corrective maintenance performed on them for the past 10 years. If yes, provide the details.

Response:

EDG fuel oil transfer pump number 1 was replaced as a single unit with the motor in September 2005 due to low electrical resistance in the motor. This replacement was not due to degraded pump performance. The EDG fuel oil transfer pumps are canned motor/pump assemblies. As such, when replacement of either the motor or pump is required, the entire EDG fuel oil transfer pump assembly is replaced. There was no other record of corrective maintenance for this pump during the past 10 years. For EDG fuel oil transfer pump number 2, there is no record of corrective maintenance during the past 10 years. For both pumps, there is no record of failed starts during the past 10 years.

5. Provide the inservice test results for each fuel oil transfer pump for the past 10 years.

Response:

The following tables provide a summary of inservice test results for each EDG fuel oil transfer pump test performed over the past 10 years.

| EDG Fuel Oil Transfer Pump No. 1 | |
|-------------------------------------|--------------------|
| Test Date | Flow Rate (gpm) |
| 10/21/2003 | 11.9 |
| 8/31/2005 | 12.5 |
| 1/24/2007 | 12.6 |
| 11/21/2008 | 14.4 |
| 11/18/2010 | 14.1 |
| 3/5/2013 | 14.38 |

| EDG Fuel Oil Transfer Pump No. 2 | |
|-------------------------------------|--------------------|
| Test Date | Flow Rate (gpm) |
| 10/21/2004 | 12.5 |
| 2/28/2007 | 15 |
| 10/15/2008 | 14.18 |
| 12/11/2009 | 16.2 |
| 10/14/2010 | 16.2 |
| 5/22/2012 | 14.7 |