



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

April 6, 2016

Mr. Brian D. Boles  
Site Vice President  
FirstEnergy Nuclear Operating  
Company  
c/o Davis-Besse NPS  
5501 N. State Route 2  
Oak Harbor, OH 43449-9760

SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION, UNIT 1 - RELAXATION OF THE SCHEDULE REQUIREMENTS FOR ORDER EA-12-049, "ISSUANCE OF ORDER TO MODIFY LICENSES WITH REGARD TO REQUIREMENTS FOR MITIGATION STRATEGIES FOR BEYOND-DESIGN-BASIS EXTERNAL EVENTS" (CAC NO. MF0961)

Dear Mr. Boles:

By letter dated March 12, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12054A735), the U.S. Nuclear Regulatory Commission (NRC) ordered FirstEnergy Nuclear Operating Company (FENOC, the licensee), to take certain actions at Davis-Besse Nuclear Power Station (DBNPS), Unit 1, associated with the Fukushima Near-Term Task Force Recommendations. Order EA-12-049 directed that actions be taken by Title 10 of the *Code of Federal Regulations* Part 50 licensees to develop and implement strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities during beyond-design-basis external events (BDBEEs). Condition IV.A.2 of NRC Order EA-12-049 requires full implementation of the order requirements no later than two refueling cycles after submittal of the overall integrated plan, or by December 31, 2016, whichever comes first. The full order compliance date for DBNPS is prior to the startup from the spring 2016 refueling outage.

Section IV of the order states that licensees proposing to deviate from requirements contained in NRC Order EA-12-049 may request that the Director, Office of Nuclear Reactor Regulation, relax or rescind certain conditions, upon demonstration of good cause. By letter dated March 11, 2016 (ADAMS Accession No. ML16071A296), FENOC submitted a request for an extension of the Order EA-12-049 full compliance date to August 1, 2016, which is after startup from the spring 2016 refueling outage. The licensee's request states that FENOC has experienced unanticipated logistical issues that have delayed the completion of plant modifications such that completion prior to startup from the spring 2016 refueling outage is challenged. The requested schedule relaxation will enable FENOC to complete installation of the equipment and modifications needed to implement the mitigation strategies required by order EA-12-049 at DBNPS.

The licensee's request indicates that the method chosen to implement the requirements of Order EA-12-049 includes the use of a new Emergency Feedwater (EFW) system for the DBNPS Phase 1 mitigating strategies that is housed in a newly constructed, robust EFW Facility (EFWF) that is designed to withstand all applicable BDBEES. In addition, selected portable FLEX equipment will also be stored in the EFWF to provide reasonable protection from a postulated BDBEE. The design and construction of the new EFW system and EFWF structure was planned and scheduled to be completed in time to achieve full compliance with order EA-12-049 prior to startup from the DBNPS spring 2016 refueling outage. However, implementation of the EFW system plant modification and construction of the EFWF building has been delayed beyond the anticipated schedule due to three major issues:

1. Component part lead times have delayed equipment deliveries, and constructability issues have impacted completion of the EFWF structure and installation of the EFW system. Problems have included inadequate performance of delivered components and equipment installation alignment and vibration issues. As a result, all pre-planned schedule margin was exhausted, and the cascading effect on work planning and field installation has made adherence to the original order compliance date impossible;
2. Placement of portable FLEX equipment in the EFWF is not possible while plant modification activities are ongoing; and
3. Final verification and validation activities, as well as some training activities, cannot be completed until the EFW system installation is completed.

To allow completion of the EFWF building construction and EFW system installation, moving equipment into the building, and performing final validation, verification and training activities, the licensee requests an extension of the DBNPS, Unit 1, order implementation date from the completion of the spring 2016 refueling outage to no later than August 1, 2016. As detailed in the request dated March 11, 2016, the licensee notes that all other aspects of the DBNPS mitigating strategies will be implemented by the end of the spring 2016 refueling outage. This will provide some limited mitigation capabilities until the full FLEX capability is installed. The licensee also notes that DBNPS will achieve full FLEX mitigating strategy capability before December 2016.

In light of the facts presented in the licensee's letter dated March 11, 2016, the NRC staff has determined that the licensee has demonstrated good cause for relaxation of the order implementation date. Implementation of the EFW system plant modification and construction of the robust EFWF building are complicated activities that must be integrated with safe plant operations at the DBNPS site. The NRC staff also considered the partial FLEX capability that will be in place at DBNPS, Unit 1, during the relaxation period. Further, the NRC staff notes that following the accident at Fukushima Dai-ichi, the NRC concluded that a sequence of events such as the Fukushima Dai-ichi accident is unlikely to occur in the United States based on the current regulatory requirements and existing plant capabilities. Given the plant-specific circumstances at DBNPS and that completion by the proposed date is before December 2016, the ultimate implementation date established by the order, the NRC staff approves the requested relaxation.

B. Boles

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Accordingly, based upon the authority granted to the Director, Office of Nuclear Reactor Regulation, the requirement of the order for full order implementation for DBNPS, Unit 1, is relaxed until August 1, 2016, to allow the licensee sufficient time to complete the EFWF building construction and EFW system installation, moving equipment into the building, and performing the final validation, verification and training activities needed to fully implement the required strategies.

If you have any questions, please contact John Hughey, at 301-415-3204.

Sincerely,

A handwritten signature in black ink, appearing to read 'W. M. Dean', with a long horizontal flourish extending to the right.

William M. Dean, Director  
Office of Nuclear Reactor Regulation

Docket No. 50-346

cc: Listserv

B. Boles

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Accordingly, based upon the authority granted to the Director, Office of Nuclear Reactor Regulation, the requirement of the order for full order implementation for DBNPS, Unit 1, is relaxed until August 1, 2016, to allow the licensee sufficient time to complete the EFWF building construction and EFW system installation, moving equipment into the building, and performing the final validation, verification and training activities needed to fully implement the required strategies.

If you have any questions, please contact John Hughey, at 301-415-3204.

Sincerely,

**/RA/**

William M. Dean, Director  
Office of Nuclear Reactor Regulation

Docket No. 50-346

cc: Listserv

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**ADAMS Accession No.: ML16077A370**

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