



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

June 30, 2015

Mr. Bryan C. Hanson  
Senior Vice President  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3 – STAFF REVIEW  
OF INTERIM EVALUATION ASSOCIATED WITH REEVALUATED SEISMIC  
HAZARD IMPLEMENTATION NEAR-TERM TASK FORCE  
RECOMMENDATION 2.1 (TAC NOS. MF5239 AND MF5240)

Dear Mr. Hanson:

By letter dated March 12, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12053A340), the U.S. Nuclear Regulatory Commission (NRC) issued a request for information pursuant to Title 10 of the *Code of Federal Regulations* Part 50, Section 50.54(f) (hereafter referred to as the 50.54(f) letter). The request was issued as part of implementing lessons-learned from the accident at the Fukushima Dai-ichi nuclear power plant. Enclosure 1 to the 50.54(f) letter requested that licensees reevaluate seismic hazards at their sites using present-day methodologies and guidance. Enclosure 1, Item 6, of the 50.54(f) letter requested that licensees identify “interim evaluation and actions taken or planned to address the higher seismic hazard relative to the design basis as appropriate, prior to completion of the [seismic] risk evaluation.” In addition to the interim evaluation provided in the March 2014 Seismic Hazard and Screening report, the licensees for the Central and Eastern United States committed to providing the Expedited Seismic Evaluation Process (ESEP) report, an interim evaluation, by December 31, 2014.

By letter dated December 26, 2014<sup>1</sup>, Exelon Generation Company, LLC (Exelon, the licensee), provided its ESEP report in a response to Enclosure 1, Item (6) of the 50.54(f) letter, for Dresden Nuclear Power Station, Units 2 and 3 (Dresden). The NRC staff assessed Exelon’s implementation of the ESEP guidance through the completion of a reviewer checklist<sup>2</sup>. In support of NRC staff questions, Exelon provided a response dated March 18, 2015<sup>3</sup>, documenting submittal information. Based on the NRC staff review of the ESEP report and responses to the staff’s questions, the NRC staff concludes that the licensee’s implementation of the interim evaluation meets the intent of the guidance.

The staff concludes that, through the implementation of the ESEP guidance, the licensee identified and evaluated the seismic capacity of certain key installed mitigating strategies equipment that is used for core cooling and containment functions to cope with scenarios that

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<sup>1</sup> The December 26, 2014, letter can be found under ADAMS Accession No. ML14360A123.

<sup>2</sup> The Dresden ESEP NRC review checklist can be found under ADAMS Accession No. ML15173A213.

<sup>3</sup> The Exelon response to NRC staff questions can be found under ADAMS Accession No. ML15089A005.

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involve a loss of all alternating current power and loss of access to the ultimate heat sink to withstand a seismic event equal to the reevaluated hazard of 1.78 times the safe shutdown earthquake. The licensee's ESEP assessment provides additional assurance which supports continued plant safety while the longer-term seismic evaluation is completed to support regulatory decision making. The NRC staff concludes that the licensee responded appropriately to Enclosure 1, Item (6) of the 50.54(f) letter. Application of this review is limited to the interim evaluation as part of Recommendation 2.1 Seismic review.

If you have any questions, please contact me at (301) 415-1617 or via e-mail at [Frankie.Vega@nrc.gov](mailto:Frankie.Vega@nrc.gov).

Sincerely,

A handwritten signature in black ink, appearing to read 'F. Vega', written in a cursive style.

Frankie G. Vega, Project Manager  
Hazards Management Branch  
Japan Lessons-Learned Division  
Office of Nuclear Reactor Regulation

Docket Nos. 50-237 and 50-249

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involve a loss of all alternating current power and loss of access to the ultimate heat sink to withstand a seismic event equal to the reevaluated hazard of 1.78 times the safe shutdown earthquake. The licensee's ESEP assessment provides additional assurance which supports continued plant safety while the longer-term seismic evaluation is completed to support regulatory decision making. The NRC staff concludes that the licensee responded appropriately to Enclosure 1, Item (6) of the 50.54(f) letter. Application of this review is limited to the interim evaluation as part of Recommendation 2.1 Seismic review.

If you have any questions, please contact me at (301) 415-1617 or via e-mail at Frankie.Vega@nrc.gov.

Sincerely,

*/RA/*

Frankie G. Vega, Project Manager  
Hazards Management Branch  
Japan Lessons-Learned Division  
Office of Nuclear Reactor Regulation

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