



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

October 31, 2014

Mr. Eric A. Larson, Site Vice President
FirstEnergy Nuclear Operating Company
Beaver Valley Power Station
Mail Stop A-BV-SEB1
P. O. Box 4, Route 168
Shippingport, PA 15077

SUBJECT: BEAVER VALLEY POWER STATION, UNITS 1 AND 2 - REQUEST FOR
ADDITIONAL INFORMATION ASSOCIATED WITH NEAR-TERM TASK
FORCE RECOMMENDATION 2.1, SEISMIC HAZARD AND SCREENING
REPORT (TAC NOS. MF3726 AND MF3727)

Dear Mr. Larson:

By letter dated March 31, 2014¹, to the U. S. Nuclear Regulatory Commission (NRC), FirstEnergy Nuclear Operating Company (FENOC) the licensee for Beaver Valley Power Station (Beaver Valley), Units 1 and 2, submitted for NRC review the Seismic Hazard and Screening Report, Pursuant to Title 10 of the *Code of Federal Regulations* Part 50, Section 50.54(f), Response for Information Regarding Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident.

The NRC staff has reviewed the information provided for Beaver Valley's seismic hazard reevaluation and has determined that additional information is required to complete its review. Enclosed is a request for additional information (RAI) related to the geophysical properties used in the site response analysis for the Beaver Valley Power Station. As discussed with your staff on October 31, 2014, it was agreed that a response would be provided no later than December 1, 2014.

¹ Beaver Valley Seismic Hazard Evaluation Report dated March 31, 2014, can be found under Agencywide Documents Access and Management System (ADAMS) Accession No. ML14092A203.

E. Larson

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If you have any questions related to the enclosed RAIs or response date, please contact me at 301-415-1115 or via e-mail at Nicholas.DiFrancesco@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Nicholas J. DiFrancesco". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Nicholas J. DiFrancesco, Senior Project Manager
Hazards Management Branch
Japan Lessons-Learned Division
Office of Nuclear Reactor Regulation

Docket Nos. 50-334 and 50-412

Enclosure:
Request for Additional Information

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION
NEAR-TERM TASK FORCE RECOMMENDATION 2.1
SEISMIC HAZARD AND SCREENING REPORT
BEAVER VALLEY POWER STATION, UNITS 1 AND 2
DOCKET NOS. 50-334 AND 50-412

By letter dated March 31, 2014¹, to the U. S. Nuclear Regulatory Commission (NRC), FirstEnergy Nuclear Operating Company (FENOC) the licensee for Beaver Valley Power Station (Beaver Valley), Units 1 and 2, submitted for NRC review the Seismic Hazard and Screening Report, 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), Response for Information Regarding Recommendation 2.1 of the Near-Term Task Force (NTTF) Review of Insights from the Fukushima Dai-ichi Accident.

Review of geophysical properties used in the site response analysis

Section 2.3.2.3 of the NTTF Recommendation 2.1 Seismic Hazard and Screening Report for Beaver Valley states that the total kappa values for each of the three profiles was determined using the Central Eastern United States (CEUS) rock site equation for which the shear wave velocity (V_s) over the upper 100 feet of the profile (V_{s100}) is the input variable. Assuming V_{s100} to be 5000 ft/sec for Profile P1, 4348 ft/second (sec) for Profile P2, and 5750 ft/sec for Profile P3, results in total kappa values of 15 millisecond (msec) for P1, 18 msec for P2, and 13 msec for P3 were obtained, respectively. The CEUS rock site equation for kappa includes the assumed kappa value of 6 msec from the underlying reference rock.

The NRC Staff has reviewed the information submitted and has determined that the following additional information is needed to complete its review.

Consistent with the 50.54(f) letter and the SPID guidance², please provide the basis for total kappa values of 21.3 msec for P1, 23.7 msec for P2, and 19.3 msec for P3 calculated for the Beaver Valley Power Station.

¹ Beaver Valley Seismic Hazard Evaluation Report dated March 31, 2014, can be found under Agencywide Documents Access and Management System (ADAMS) Accession No. ML14092A203.

² The screening, prioritization, and implementation details (SPID) can be found under ADAMS Accession No. ML12333A170

Enclosure

E. Larson

- 2 -

If you have any questions related to the enclosed RAIs or response date, please contact me at 301-415-1115 or via e-mail at Nicholas.DiFrancesco@nrc.gov.

Sincerely,

/RA/

Nicholas J. DiFrancesco, Senior Project Manager
Hazards Management Branch
Japan Lessons-Learned Division
Office of Nuclear Reactor Regulation

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Request for Additional Information

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