

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

January 4, 2016

Mr. Adam C. Heflin President, Chief Executive Officer, and Chief Nuclear Officer Wolf Creek Nuclear Operating Corporation P.O. Box 411 Burlington, KS 66839

SUBJECT: WOLF CREEK GENERATING STATION – STAFF REVIEW OF INTERIM EVALUATION ASSOCIATED WITH REEVALUATED SEISMIC HAZARD IMPLEMENTATING NEAR-TERM TASK FORCE RECOMMENDATION 2.1 (CAC NO. MF5634)

Dear Mr. Heflin:

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 Screening and Hazard 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 23, 2014¹, Wolf Creek Nuclear Operating Corporation (WCNOC, the licensee), provided its ESEP report in a response to Enclosure 1, Item (6) of the 50.54(f) letter, for Wolf Creek Generating Station (Wolf Creek). The NRC staff assessed the licensee's implementation of the ESEP guidance through the completion of a reviewer checklist². In support of NRC staff questions, WCNOC provided responses dated June 24, 2015³, and November 11, 2015⁴, clarifying 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.

² The Wolf Creek ESEP NRC review checklist can be found under ADAMS Accession No. ML15349A274.

⁴ The WCNOC response to NRC staff questions can be found ADAMS Accession No. ML15323A317.

¹ The December 23, 2014, letter can be found under ADAMS Accession No. ML14365A262.

³ The WCNOC response to NRC staff questions can be found ADAMS Accession No. ML15182A116.

A.Heflin

The NRC 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 involve a loss of all alternating current power and loss of access to the ultimate heat sink to withstand a seismic event 1.47 times the safe shutdown earthquake for Wolf Creeek. 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 the Recommendation 2.1 Seismic review.

The NRC staff notes that regulatory commitments are listed in Section 8.4 of the ESEP report, as updated in Attachments 1 and 2 of the November 11, 2015, letter, including a walkdown of inaccessible items, perform High Confidence Low Probability of Failure table updates, report any required modifications with proposed completion dates and provide a letter with this supplemental information no later than 60 days following completion of Refueling Outage 21, fall 2016.

If you have any questions, please contact me at (301) 415-1115 or via e-mail at Nicholas.DiFrancesco@nrc.gov.

Sincerely,

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

Docket No. 50-482

cc: Distribution via Listserv

The NRC 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 involve a loss of all alternating current power and loss of access to the ultimate heat sink to withstand a seismic event 1.47 times the safe shutdown earthquake for Wolf Creeek. 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 the Recommendation 2.1 Seismic review.

The NRC staff notes that regulatory commitments are listed in Section 8.4 of the ESEP report, as updated in Attachments 1 and 2 of the November 11, 2015, letter, including a walkdown of inaccessible items, perform High Confidence Low Probability of Failure table updates, report any required modifications with proposed completion dates and provide a letter with this supplemental information no later than 60 days following completion of Refueling Outage 21, fall 2016.

If you have any questions, please contact me at (301) 415-1115 or via e-mail at Nicholas.DiFrancesco@nrc.gov.

Sincerely,

/RA/

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

Docket No. 50-482

cc: Distribution via Listserv

DISTRIBUTION:

PUBLIC LPL4-1 R/F JLD R/F RidsNrrPMWolfCreek RidsNrrDorllpl4-1 RidsRgn4MailCenter DJackson, NRO

RidsNrrOd RidsNrrLASLent NDiFrancesco, NRR MShams, NRR

ADAMS Accession No.: ML15350A220

* via e-mail NRR/JLD/LA DSEA/RGS2 OFFICE NRR/JLD/JHMB/PM NAME SLent DJackson* SWyman 12/11/2015 DATE 1/4/2016 12/29/2015 NRR/JLD/JHMB/PM OFFICE NRR/JLD/JHMB/BC NDiFrancesco NAME MShams (MMarshall for) DATE 1/4/2016 1/4/2016

OFFICIAL RECORD COPY