



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

July 7, 2015

Mr. David A. Heacock  
President and Chief Nuclear Officer  
Virginia Electric and Power Company  
Innsbrook Technical Center  
5000 Dominion Blvd.  
Glen Allen, VA 23060-6711

SUBJECT: NORTH ANNA POWER STATION, UNITS 1 AND 2 – STAFF REVIEW OF  
INTERIM EVALUATION ASSOCIATED WITH REEVALUATED SEISMIC  
HAZARD IMPLEMENTATING NEAR-TERM TASK FORCE  
RECOMMENDATION 2.1 (TAC NOS. MF5252 AND MF5253)

Dear Mr. Heacock:

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 17, 2014<sup>1</sup>, Virginia Electric and Power Company (the licensee), provided its ESEP report in a response to Enclosure 1, Item (6) of the 50.54(f) letter, for the North Anna Power Station, Units 1 and 2 (North Anna). The NRC staff assessed the licensee’s implementation of the ESEP guidance through the completion of a reviewer checklist<sup>2</sup>. Based on the NRC staff review of the ESEP report, the NRC staff concludes that the licensee’s implementation of the interim evaluation meets the intent of the guidance.

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 up to two times the safe shutdown earthquake.

---

<sup>1</sup> The December 17, 2014, letter can be found under ADAMS Accession No. ML14357A059.

<sup>2</sup> The North Anna ESEP NRC review checklist can be found under ADAMS Accession No. ML15179A008.

D. Heacock

- 2 -

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) 415-1115 or via e-mail at [Nicholas.DiFrancesco@nrc.gov](mailto:Nicholas.DiFrancesco@nrc.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Nicholas DiFrancesco", with a long horizontal flourish extending to the right.

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

Docket Nos. 50-338 and 50-339

cc: Distribution via Listserv

D. Heacock

- 2 -

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) 415-1115 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 Nos. 50-338 and 50-339

cc: Distribution via Listserv

**DISTRIBUTION:**

PUBLIC  
LPL1-1 R/F  
JLD R/F  
RidsOeMaiiCenter  
RidsNrrPMPilgrim  
RidsNrrDorlpl3-1  
RidsNrrLASLent  
RidsRgn3MaiiCenter  
RidsNrrOd  
DJackson, NRO  
MShams, NRR  
NDiFrancesco, NRR

**ADAMS Accession No.: ML15182A392**

**\* via concurrence e-mail**

<b>OFFICE</b>	NRR/JLD/JHMB/PM	NRR/JLD/LA	DSEA/RGS2*
<b>NAME</b>	SWyman	SLent	DJackson
<b>DATE</b>	07/02/15	07/02/15	07/01/15
<b>OFFICE</b>	NRR/JLD/JHMB/BC	NRR/JLD/JHMB/PM	
<b>NAME</b>	MShams	NDiFrancesco	
<b>DATE</b>	07/03/15	07/07/15	

**OFFICIAL RECORD COPY**