



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

April 17, 2015

Mr. Paul Gunter, Director
Beyond Nuclear
6930 Carroll Avenue, Suite 400
Takoma Park, MD 20912

Dear Mr. Gunter:

The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed your petition dated October 20, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML11293A116), and your supplemental correspondences on November 2, 2011 (ADAMS Accession No. ML11308A027), and December 15, 2011 (ADAMS Accession No. ML12060A197). On March 16, 2012 (ADAMS Accession No. ML12060A090), the NRC staff acknowledged receiving your petition and stated that, under Title 10 of the *Code of Federal Regulations* (10 CFR) 2.206, out of your 16 concerns, twelve concerns were accepted for review and the NRC intends to use the results of the Fukushima review to inform its final decision on whether to implement the requested actions.

Following the August 23, 2011 earthquake, the NRC dispatched an augmented inspection team (AIT) to North Anna 1 and 2, to better understand the event and the licensee's response. The AIT's findings included the following: (1) operators responded to the event in accordance with established procedures and in a manner that protected public health and safety, (2) the ground motion from the earthquake exceeded the plant's licensed design basis, (3) no significant damage to the plant was identified, (4) safety system functions were maintained, and (5) some equipment issues were experienced. Overall, the AIT concluded that the event did not adversely impact the health and safety of the public. Safety limits were not approached and there was no measurable release of radioactivity associated with the event. Following completion of the AIT inspection, the NRC sent another team of inspectors, the restart readiness inspection team (RRIT), to assess the licensee's inspection program and readiness for restarting North Anna, Units 1 and 2 (North Anna 1 and 2). The RRIT concluded that the licensee performed adequate inspections, walkdowns, and testing to ensure that the August 23, 2011, earthquake had not adversely affected safety-related structures, systems, and components (SSCs). The NRC staff completed number of activities before restart of North Anna 1 and 2, to ensure that, before resuming operations, the licensee had demonstrated no functional damage had occurred to those features at North Anna 1 and 2, necessary for continued operation without undue risk to the health and safety of the public, consistent with the requirements of 10 CFR Part 100, Appendix A, Section V(a)(2).

Twelve of your concerns that were accepted for review by the NRC staff are briefly summarized below. The NRC staff issued the partial Director's Decision (DD) to you on October 19, 2012 (ADAMS Accession No. ML12262A156). These twelve concerns are described below:

(1) Prior to the approval of restart for North Anna 1 and 2, after the earthquake of August 23, 2011, Virginia Electric and Power Company (the licensee) should be required to obtain a license

amendment from the NRC that reanalyzes and reevaluates the plant's design basis for earthquakes and for associated necessary retrofits.

(2) Prior to the approval of restart for North Anna 1 and 2, after the earthquake of August 23, 2011, the licensee should be required to ensure that North Anna 1 and 2, are subjected to thorough inspections of the same level and rigor.

(3) The licensee should be required to reanalyze and reevaluate the North Anna Independent Spent Fuel Storage Installation (ISFSI) because of damage caused by the earthquake of August 23, 2011, and ensure that no threat is posed to public health and safety by its operation.

(4) The licensee should ensure the reliability and accuracy of the seismic instrumentation at North Anna 1 and 2.

(5) The NRC staff made hasty decisions about the restart of North Anna 1 and 2, and gave priority to economic considerations. The long-term action plan was not even complete before the NRC staff gave authorization to restart.

(6) Regulatory commitments are an inadequate regulatory tool for ensuring that the critical long-term tasks identified in the NRC staff's confirmatory action letter dated November 11, 2011, are completed.

(7) The licensee needs to address the possibility of both boildown and rapid draindown events at the North Anna 1 and 2, spent fuel pool. (Concern Number 7 listed in Partial DD)

(8) The long-term storage of spent fuel in the spent fuel pool at North Anna 1 and 2, and at the North Anna ISFSI poses challenges to the public health and safety. (Concern Number 8 listed in Partial DD)

(9) "Hardened on-site storage" strategies for spent fuel should be used at North Anna 1 and 2. (Concern Number 9 listed in Partial DD)

(10) Concerns exist about the response of North Anna 1 and 2, to a prolonged station blackout (SBO).

(11) The current emergency evacuation plans for North Anna 1 and 2 needs to be revised to reflect the possible need to evacuate a larger area than that identified in the current emergency planning zone. (Concern Number 11 listed in Partial DD)

(12) Concerns exist about damage to the structural integrity of the spent fuel pool structure at North Anna 1 and 2, as represented on pages 41 and 42 of the NRC staff's technical evaluation for the restart of North Anna 1 and 2, dated November 11, 2011.

As detailed in the partial DD, eight of these concerns were closed. The remaining four concerns (items numbers 7, 8, 9 and 11 listed above) were accepted for review and identified as those that may take longer than the target timeframe for reaching a decision on a petition based on the fact they were undergoing NRC review as part of the agency's response to the Fukushima event in Japan.

After reviewing the NRC's progress in responding to the Fukushima event since acceptance of the petition for review, the NRC staff has determined that these four remaining concerns have been adequately addressed as well. The NRC staff has provided periodic status updates to the petitioners throughout our review process. The resolutions for the four accepted concerns are included in this proposed DD. The NRC staff's proposed DD under 10 CFR 2.206, "Requests for Action under This Subpart," is enclosed (Enclosure 1).

I request that you provide comments to me on any part of the proposed DD that you believe is in error, or any issues in the petition that, in your opinion, have not been adequately addressed. The NRC staff is making a similar request of the licensee. The NRC staff will then review any comments provided by you and the licensee for consideration in the final version of the DD with no further opportunity to comment.

Please provide your comments within 30 days from the date of this letter. The petition manager, Dr. V. Sreenivas, can be reached at (301) 415-2597.

Sincerely,

A handwritten signature in cursive script that reads "Louise Lund".

Louise Lund, Acting Director
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-338 and 50-339

Enclosure:
Proposed Directors Decision

cc w/o enclosure: Listserv

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Sincerely,

/RA/

Louise Lund, Acting Director
 Division of Operating Reactor Licensing
 Office of Nuclear Reactor Regulation

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ADAMS Accession No.: ML 14311A616; ADAMS Package No.: ML15071A339; * Concurrence via email

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DATE	11/07/14	11/09/14	12/05/14	11/19/14
OFFICE	NSIR/ABC*	NMSS/BC	NRR/DPR/PGCB/PM	NRR/DE/D/PRB Chair
NAME	CMurray	CAraguas	MBanic	JGitter
DATE	11/20/14	11/26/14	12/15/14	12/16/14
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NAME	MLemoncelli (DCylkowski for)	RPascarelli	MEvans	WDean (JUhle for)
DATE	01/14/15	01/21/15	03/09/15	04/17/15