



NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50-338 and 50-339; NRC-2012-0051]

License Nos. NPF-4 and NPF-7

Virginia Electric and Power Company; Receipt of Request for Action

Notice is hereby given that by petition dated September 8, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML11256A019), as supplemented by letters dated September 8, 2011 (ADAMS Accession No. ML11334A152), and October 21, 2011 (ADAMS Accession No. ML11308A016), Thomas Saporito (the petitioner) requests that the U.S. Nuclear Regulatory Commission (NRC or the Commission) take action with regard to Virginia Electric and Power Company's (the licensee's) North Anna Power Station, Units 1 and 2 (North Anna 1 and 2). The petitioner requests that the NRC:

- (1) take escalated enforcement action against the licensee and suspend, or revoke, the operating licenses for North Anna 1 and 2;
- (2) issue a notice of violation against the licensee with a proposed civil penalty in the amount of 1 million dollars; and
- (3) issue an order to the licensee requiring the licensee to keep North Anna 1 and 2, in a "cold shutdown" mode of operation until such time as a series of actions described in the petition are completed.

As the basis for this request, the petitioner states that:

- (1) On August 23, 2011, North Anna 1 and 2, automatically tripped offline as a direct result of ground motion caused by an earthquake centered in Mineral, Virginia, approximately 10 miles from North Anna 1 and 2. The licensee has not determined

- the root cause of this event, nor has it explained why the reactor tripped on “negative flux rate” rather than on loss of offsite power.
- (2) Subsequent to the earthquake, the licensee initiated various inspection activities and tests to discover the extent of damage to the nuclear facility, but these inspection and testing activities continue and remain incomplete and non-validated.
 - (3) The licensee had set an overly aggressive schedule for restarting North Anna 1 and 2 that was based on economic considerations rather than safety.
 - (4) The licensee needs to amend its licensing documents, including its licenses and the updated facility analysis report. As a result of ground motion experienced at, and damage sustained to, North Anna 1 and 2, due to the earthquake of August 23, 2011, which is greater than the licensee’s design and safety bases, North Anna 1 and 2, are in an unanalyzed condition and current licensing documents are erroneous and incomplete. As a result, the licensee cannot rely on them to provide reasonable assurance to the NRC that these nuclear reactors can be operated in a safe and reliable manner to protect public health and safety.
 - (5) The licensee needs to conduct new seismic and geological evaluations of the North Anna 1 and 2, site that are independent. These evaluations should ascertain the degree and magnitude of future earthquake events and address a “worst case” earthquake.
 - (6) There are numerous issues with the seismic instrumentation at North Anna 1 and 2, including lack of free field instrumentation, issues associated with conversion of analog data to digital data, issues with lack of on-site personnel with sufficient training in seismic measurements, and potential skewing of ground motion data due to the location of the “scratch plates.”

- (7) Retrofitting of North Anna 1 and 2, is required due to damage to North Anna 1 and 2, from the earthquake of August 23, 2011.
- (8) There are concerns with the impact of the August 23, 2011, earthquake on the North Anna 1 and 2, Independent Spent Fuel Storage Installation (ISFSI) including the fact that 25 casks weighing over 115 tons were not supposed to shift as much as 4.5 inches during a predicted earthquake, validation of the integrity of the seals inside the spent fuel casks, assessing whether spent nuclear fuel storage facilities could topple or otherwise sustain significant damage resulting in a release, and assessing whether the licensee's emergency plans adequately addressed damage to the ISFSI as a result of a severe earthquake.
- (9) The petitioner is concerned that the licensee cannot be trusted to communicate reliable information to the public or the regulator based on the fact that the licensee in the 1970s failed to promptly disclose the discovery of geological information and was subjected to a monetary fine for the violation.

The request is being treated pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 2.206, "Requests for action under this subpart," of the Commission's regulations. The request has been referred to the Director of the Office of Nuclear Reactor Regulation. As provided by § 2.206, appropriate action will be taken on this petition within a reasonable time. The petitioner met with the NRR petition review board on September 29, 2011 (transcript at ADAMS Accession No. ML11332A046), and November 7, 2011 (transcript at ADAMS Accession No. ML113530035), to discuss the petition. The results of these discussions were considered in the PRB's final recommendation to accept the petition for review and in establishing the schedule for the review of the petition.

A copy of the petition is available for inspection at the Commission's Public Document Room, located at One White Flint North, Public File Area O1-F21, 11555 Rockville Pike (first floor), Rockville, Maryland 20852. Publicly available documents created or received at the NRC are accessible electronically through the NRC's Agencywide Documents Access and Management System (ADAMS) in the NRC Library at <http://www.nrc.gov/reading-rm/adams.html>. Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the NRC PDR Reference staff by telephone at 1-800-397-4209 or 301-415-4737, or by e-mail to PDR.Resource@nrc.gov

Dated at Rockville, Maryland, this 22nd day of February, 2012.

For the Nuclear Regulatory Commission.

/RA/

Eric J. Leeds, Director
Office of Nuclear Reactor Regulation