



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

July 24, 2013

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

SUBJECT: NORTH ANNA POWER STATION, UNIT NOS. 1 AND 2 (NAPS), AND SURRY  
POWER STATION, UNIT NOS. 1 AND 2 (SURRY) – ENVIRONMENTAL  
ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT (TAC NOS.  
ME9753, ME9754, ME9755, AND ME9756)

Dear Mr. Heacock:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to your applications for license amendment dated September 27, 2012. The proposed license amendment would change Emergency Action Levels (EALs), adding a 15-minute threshold for reactor coolant system leaks based on NEI 99-01, Revision 5, "Methodology for Development of Emergency Action Levels," using the guidance of NRC Regulatory Issue Summary 2003-18, Supplements 1 and 2, "Use of Nuclear Energy Institute (NEI) 99-01, Methodology for Development of Emergency Action Levels."

The assessment is being forwarded to the Office of the *Federal Register* for publication.

Sincerely,

A handwritten signature in black ink, appearing to read "V. Sreenivas", written over a horizontal line.

V. Sreenivas, Project Manager  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-338, 50-339, 50-280, and 50-281

Enclosure:  
Environmental Assessment

cc w/encl: Distribution via Listserv

**NUCLEAR REGULATORY COMMISSION**

**Docket Nos. 50-338, 50-339; 50-280 and 50-281; NRC-20YY-XXXX**

**Virginia Electric and Power Company**

**North Anna Power Station, Unit Nos. 1 and 2**

**Surry Power Station, Unit Nos. 1 and 2**

**Environmental Assessment and Finding of No Significant Impact**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Environmental assessment and finding of no significant impact; issuance.

**ADDRESSES:** Please refer to Docket ID <NRC-20YY-XXXX> when contacting the NRC about the availability of information regarding this document. You may access information related to this document, which the NRC possesses and are publicly available, using any of the following methods:

- **Federal rulemaking Web site:** Go to <http://www.regulations.gov> and search for Docket ID <NRC-20YY-XXXX>. Address questions about NRC dockets to Carol Gallagher; telephone: 301-287-3422; e-mail: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov).

- **NRC's Agencywide Documents Access and Management System (ADAMS):** You may access publicly available documents online in the NRC Library at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "ADAMS Public Documents" and then select "Begin Web-based ADAMS Search." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov). The ADAMS accession number for each document referenced in this notice (if that document is available in ADAMS) is provided the first time that a document is referenced.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

## **SUPPLEMENTARY INFORMATION:**

### **I. Introduction**

The U.S. Nuclear Regulatory Commission (NRC) is considering changes to the Emergency Plan, pursuant to 10 CFR 50.54, "Conditions of licenses," paragraph (q), for North Anna Power Station, Unit Nos. 1 and 2 (NAPS), for Renewed Facility Operating License Nos. NPF-4 and NPF-7, and Surry Power Station, Unit Nos. 1 and 2 (Surry) for Renewed Facility Operating License Nos. DPR-32 and DPR-37, issued to Virginia Electric and Power Company (the licensee), for operation of NAPS and Surry located in Louisa County, Virginia, and Surry County, Virginia, respectively. Therefore, as required by 10 CFR 51.21, the NRC performed an environmental assessment. Based on the results of the environmental assessment, the NRC is issuing a finding of no significant impact.

### **II. Environmental Assessment**

#### *Identification of the Proposed Action:*

The proposed action is a license amendment that would change the Emergency Action Levels (EALs), by adding a 15-minute threshold for isolation of reactor coolant system leaks based on NEI 99-01, Revision 5, "Methodology for Development of Emergency Action Levels," using the guidance of NRC Regulatory Issue Summary 2003-18, Supplement 2, "Use of Nuclear Energy Institute (NEI) 99-01, Methodology for Development of Emergency Action Levels." The proposed action is in accordance with the licensee's application, dated September 27, 2012

(Agencywide Documents **Access** and Management System (ADAMS) Accession No. ML12283A069).

*The Need for the Proposed Action:*

The proposed action is needed because amendments would change an EAL scheme based on NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plan and Preparedness in Support of Nuclear Power Plants," to one based on NEI 99-01, "Methodology for Development of Emergency Action Levels," Revision 4. This change would add 15 minutes to the EAL to preclude classification for brief and readily isolatable RCS leaks. The addition of a 15-minute period would allow plant operators to isolate the RCS leaks using readily accessible means available in the Control Room.

*Environmental Impacts of the Proposed Action:*

The NRC has completed its environmental assessment of the proposed EAL changes to NAPS and Surry. The staff has concluded that the changes would not affect plant safety and would not have an adverse effect on the probability of an accident occurring. The proposed change has no effect on the consequences of any analyzed accident since the change does not affect any equipment related to accident mitigation. The addition of a 15-minute criteria to the emergency action level only serves to ensure the emergency action level declaration is based upon plant conditions that are more indicative of a (Notice of) Unusual Event (UE) emergency classification level. The brief delay in declaring the proposed action would not result in radiological hazard beyond those previously analyzed in the Updated Final Safety Analysis Report, as this emergency classification level is based upon plant events that have no radiological consequences. There will be no change to radioactive effluents that affect radiation exposures to plant workers and members of the public. No changes will be made to plant buildings or the site property. Therefore, no changes or different types of radiological impacts are expected as a result of the proposed changes.

The proposed action does not result in changes to land use or water use, or result in changes to the quality or quantity of non-radiological effluents. No changes to the National Pollution Discharge Elimination System permit are needed. No effects on the aquatic or terrestrial habitat in the vicinity of the plant, or to threatened, endangered, or protected species under the Endangered Species Act, or impacts to essential fish habitat covered by the Magnuson-Stevens Act are expected. There are no impacts to the air or ambient air quality.

There are no impacts to historic and cultural resources. There would be no noticeable effect on socioeconomic conditions in the region.

Accordingly, the NRC concludes that there are no significant environmental impacts associated with the proposed action.

*Environmental Impacts of the Alternatives to the Proposed Action:*

As an alternative to the proposed action, the NRC staff considered denial of the proposed action (i.e., the "no-action" alternative). Denial of the application would result in no change in current environmental impacts. The environmental impacts of the proposed action and the alternative action are similar.

*Alternative Use of Resources:*

The action does not involve the use of any different resources than those previously considered in the "Final Environmental Statement Related to the Continuation of Construction and the Operation," for NAPS dated April 1973, and Surry dated May 1972 and June 1972, respectively, as supplemented through the "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Supplements 6 and 7 Regarding Surry and NAPS - Final Report (NUREG-1437, Supplements 6 and 7)," dated November 2002.

*Agencies and Persons Consulted:*

In accordance with its stated policy, on July 3, 2013, the staff consulted with the Virginia State official, Steven A. Harrison, Director of the Division of Radiological Health, regarding the proposed EAL revision. The State official had no comments.

**III. Finding of No Significant Impact**

On the basis of the environmental assessment, the NRC concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the NRC has determined not to prepare an environmental impact statement for the proposed action.

Dated at Rockville, Maryland, this 24<sup>th</sup> day of July 2013.

For the Nuclear Regulatory Commission.

A handwritten signature in black ink, appearing to read "V. Sreenivas". The signature is fluid and cursive, with a long horizontal stroke at the end.

Dr. V. Sreenivas, Project Manager,  
Plant Licensing Branch 2-1,  
Division of Operating Reactor Licensing,  
Office of Nuclear Reactor Regulation.

July 24, 2013

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

SUBJECT: NORTH ANNA POWER STATION, UNIT NOS. 1 AND 2 (NAPS), AND SURRY POWER STATION, UNIT NOS. 1 AND 2 (SURRY) – ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT (TAC NOS. ME9753, ME9754, ME9755, AND ME9756)

Dear Mr. Heacock:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to your applications for license amendment dated September 27, 2012. The proposed license amendment would change Emergency Action Levels (EALs), adding a 15-minute threshold for reactor coolant system leaks based on NEI 99-01, Revision 5, "Methodology for Development of Emergency Action Levels," using the guidance of NRC Regulatory Issue Summary 2003-18, Supplements 1 and 2, "Use of Nuclear Energy Institute (NEI) 99-01, Methodology for Development of Emergency Action Levels."

The assessment is being forwarded to the Office of the *Federal Register* for publication.

Sincerely,

*/RA/*

V. Sreenivas, Project Manager  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-338, 50-339, 50-280, and 50-281

Enclosure:  
Environmental Assessment

cc w/encl: Distribution via Listserv

DISTRIBUTION:

PUBLIC  
LPL2-1 R/F  
RidsAcrsAcnw\_MailCTR Resource  
RidsNrrDirRerb Resource  
RidsNrrDorlLpl2-1 Resource

RidsNrrLAMO'Brien Resource  
RidsNrrPMSurry Resource  
RidsNrrPMNorthAnna Resource  
RidsRgn2MailCenter Resource

**ADAMS Accession Nos.: LTR ML13205A219      FRN ML13205A223      \*via e-mail**

OFFICE	DORL/LPL2-I/PM	DORL/LPL2-I/PM	DORL/LPL2-I/LA	NRR/DLR/RERB/BC
NAME	VSreenivas	VSreenivas for KCotton	SFiguroa	MWong*
DATE	07/23/13	07/24/13	07/24/13	07/24/13
OFFICE	OGC - NLO	DORL/LPL2-1/BC	DORL/LPL2-1/PM	
NAME	MYoung	RPascarelli	VSreenivas	
DATE	07/23/13	07/24/13	07/24/13	

**OFFICIAL RECORD COPY**