



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

June 30, 2010

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 NO. 1 – ENVIRONMENTAL
ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT (TAC NO.
ME3820)

Dear Mr. Heacock:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to your application for exemption dated April 23, 2010, and supplement dated May 13, 2010. The proposed exemption from the specific requirements of Title 10 of the *Code of Federal Regulations*, Part 50, Appendix R, Section III.O, for North Anna Power Station, Unit No. 1, would permit minor uncollected oil misting from the designed reactor coolant pump motor oil collection system installed to collect potential oil leakage and to not allow oil pooling to occur outside the oil collection system.

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", with a stylized flourish at the end.

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

Docket No. 50-338

Enclosure:
Environmental Assessment

cc w/encl: Distribution via Listserv

NUCLEAR REGULATORY COMMISSION
VIRGINIA ELECTRIC AND POWER COMPANY
DOCKET NO. 50-338
NORTH ANNA POWER STATION, UNIT NO. 1
ENVIRONMENTAL ASSESSMENT AND
FINDING OF NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an Exemption from Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Appendix R, Section III.O, "Oil collection system for reactor coolant pump," for Facility Operating License No. NPF-4, issued to Virginia Electric and Power Company (the licensee), for operation of the North Anna Power Station, Unit 1 (NAPS Unit 1), located in Louisa County, Virginia. Therefore, as required by 10 CFR 51.21, the NRC prepared an environmental assessment. Based on the results of the environmental assessment, the NRC is issuing a finding of no significant impact.

ENVIRONMENTAL ASSESSMENT

Identification of the Proposed Action:

The proposed action would exempt NAPS Unit 1 from the requirement that the reactor coolant pumps (RCPs) be equipped with an oil collection system (OCS) if the containment is not inerted during normal operation and such collection systems shall be capable of collecting lube oil from all potential pressurized and unpressurized leakage sites in the RCP lube oil systems. Specifically, NAPS Unit 1 would be granted an exemption from the collection of minor oil misting by the OCS.

The proposed action is in accordance with the licensee's application dated April 23, 2010, as supplemented by letter dated May 13, 2010.

The Need for the Proposed Action:

The proposed action is needed to address expected minor uncollected oil misting from RCP motors and not allow oil pooling to occur outside the OCS.

Environmental Impacts of the Proposed Action:

The NRC has completed its evaluation of the proposed action and concluded that the proposed action (i.e. to exempt NAPS Unit 1 from expected minor uncollected oil misting from RCP motors and to not allow oil pooling to occur outside the OCS) would not significantly affect plant safety and would not have a significant adverse effect on the probability of an accident occurring.

The proposed action will not significantly increase the probability or consequence of accidents. No changes are being made in the types of effluents that may be released offsite. There is no significant increase in the amount of any effluent released offsite. There is no significant increase in occupational or public radiation exposure. Therefore, there are no significant radiological environmental impacts associated with this proposed action.

Based on the nature of the exemption, 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.

Therefore, no changes or different types of non-radiological environmental impacts are expected as a result of the proposed action.

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 "no action" alternative 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 of NAPS Units 1 and 2, and the Construction of Units 3 and 4," issued in 1973, as supplemented through the "Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Supplement 7 Regarding NAPS Units 1 and 2 - Final Report (NUREG-1437, Supplement 7)," dated November 2002.

Agencies and Persons Consulted:

In accordance with its stated policy, on June 7, 2010, the NRC staff consulted with the Virginia State official, Mr. Les Foldesi, Director, Division of Radiological Health of the Virginia Department of Health, regarding the environmental impact of the proposed action. The State official had no comments.

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,

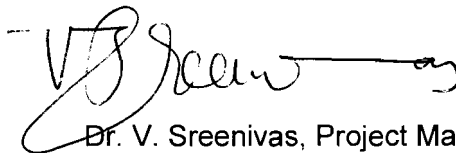
the NRC has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the licensee's letter dated April 23, 2010, as supplemented by letter dated May 13, 2010. Documents may be examined, and/or copied for a fee, at the NRC's Public Document Room (PDR), located at One White Flint North, Public File Area O-1F21, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records will be accessible electronically from the Agencywide Document Access and Management System (ADAMS) Public Electronic Reading Room on the Internet at the NRC Website: <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 send an e-mail to pdr@nrc.gov.

Dated at Rockville, Maryland, this 30th day of June 2010.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read "V. Sreenivas", with a long horizontal line extending to the right.

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

Mr. David A. Heacock
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Sincerely,

/RA/

Dr. V. Sreenivas, Project Manager
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 Environmental Assessment

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