VIRGINIA ELECTRIC AND POWER COMPANY RICHMOND, VIRGINIA 23261

November 29, 1994

U.S. Nuclear Regulatory Commission Attention: Document Control Desk Washington, DC. 20555 Serial No. NL&P/EJW 94-670

Docket Nos.

50-338

License Nos.

50-339 NPF-4 NPF-7

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY
NORTH ANNA POWER STATION UNITS 1 AND 2
PROPOSED ENVIRONMENTAL PROTECTION PLAN CHANGES
ENVIRONMENTAL PROTECTION PLAN UPDATE

Pursuant to 10 CFR 50.90, the Virginia Electric and Power Company requests amendments, in the form of changes to the Environmental Protection Plans (EPPs), to Facility Operating License Nos. NPF-4 and NPF-7 for North Anna Power Station Units 1 and 2, respectively. The proposed changes will update the EPPs to reflect current obligations to the Commonwealth of Virginia, revise portions of the transmission corridor rights-of-way erosion control program for clarification and to be consistent with the state regulations, eliminate inconsistencies, and delete obsolete material. This proposed update to the EPPs meets the NRC's criteria for a cost beneficial licensing action, because these changes would substantially reduce the resources needed to perform erosion control surveillances and repairs and result in a savings of approximately \$25,000 each year.

A discussion of the proposed EPP changes is provided in Attachment 1. The proposed EPP changes are provided in Attachment 2. It has been determined that the proposed EPP changes do not involve an unreviewed safety question as defined in 10 CFR 50.59, a significant hazards consideration as defined in 10 CFR 50.92, or a significant environmental impact as defined in the EPP. The bases for our determination that these changes do not involve a significant hazards consideration or a significant environmental impact are provided in Attachments 3 and 4, respectively. The proposed EPP changes have been reviewed and approved by the Station Nuclear Safety and Operating Committee and the Management Safety Review Committee.

Should you have any questions or require additional information, please contact us.

Very truly yours,

James P. O'Hanlon

Senior Vice President - Nuclear

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Attachments

cc: U.S. Nuclear Regulatory Commission Region II 101 Marietta Street, N.W. Suite 2900 Atlanta, Georgia 30323

> Mr. R. D. McWhorter NRC Senior Resident Inspector North Anna Power Station

Commissioner Department of Health Room 400 109 Governor Street Richmond, Virginia 23219 COMMONWEALTH OF VIRGINIA
COUNTY OF HENRICO

The foregoing document was acknowledged before me, in and for the County and Commonwealth aforesaid, today by J. P. O'Hanlon, who is Senior Vice President - Nuclear, of Virginia Electric and Power Company. He is duly authorized to execute and file the foregoing document in behalf of that Company, and the statements in the document are true to the best of his knowledge and belief.

Acknowledged before me this $29^{7/2}$ day of 107 tember, 1994.

My Commission Expires: May 31, 1998.

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Discussion of Changes

Discussion of Changes

Introduction

Appendix B to the North Anna Unit 1 and Unit 2 Facility Operating Licenses describes the non-radiological Environmental Protection Plan (EPP). The EPP stipulates requirements applicable to monitoring and protecting the environment in the vicinity of the North Anna power Station during construction and operation. The EPP currently provides commitments which are redundant with programs established in compliance with state regulations.

As stated in the NRC's Final Environmental Statement (FES), a routine inspection of transmission corridor rights-of-way is required to identify and curtail erosion resulting from the application of herbicides, construction activities, and/or transmission line maintenance and modification activities. The EPP establishes a program for identifying, addressing, and reporting erosion issues at North Anna Power Station and along its associated transmission corridor rights-of-way. Although the erosion control measures established for the station are appropriate, the EPP's provisions concerning transmission corridor rights-of-way are redundant to current Virginia state law. Title 10.1 of the Code of Virginia (§10.1-563.D) requires that electric utility companies file general erosion and sediment control specifications annually with the Virginia Soil and Water Conservation Board for review and written comments. Those specifications apply to ground disturbing activities associated with construction, installation, or maintenance of electric utility lines. A change to the EPP is required to reflect the Company's obligation to adhere to the Code of Virginia and eliminate the redundant requirement.

The EPP references studies of aquatic and terrestrial biota which were required during the construction phase and during initial operation. These non-radiological studies were completed and communicated to the NRC prior to June 24, 1986. Non-radiological environment status, monitoring program, and reporting requirements associated with Lake Anna and the Waste Heat Treatment Facility (the aquatic community) are administered through the Virginia Pollutant Discharge Elimination System (VPDES, previously the NPDES) permit issued by the Virginia Department of Environmental Quality. An update to the EPP is required to reflect the purpose and new title of the VPDES permit.

Additionally, incorrect references, unclear and outdated dialog/semantics, and format enhancements were identified within the EPP. These are addressed by this change.

Background

The Environmental Protection Plan (EPP) superseded the North Anna Power Station Units 1 and 2 Environmental Technical Specifications on December 30, 1980 (Amendment 23 for Unit 1 and Amendment 3 for Unit 2). The EPP was later condensed (May 5, 1983) to address only non-radiological environmental protection issues by license amendments (Amendment 48 for Unit 1 and Amendment 31 for Unit 2) which incorporated the radiological protection issues into Appendix A to the Facility Operating Licenses and into other NRC-approved documents (Offsite Dose Calculation Manual and Process Control Program). Since that time, no other changes have been made to the EPP. However, several changes concerning non-radiological environmental protection have occurred during the interim. Particularly, the Environmental Protection Agency (EPA) has delegated certain aspects of its authority to individual state regulatory agencies. The EPP's focus on construction phase activities requires revision to environmental protection issues for the operational phase of the nuclear facility. And several references have either changed or become obsolete. The EPP requires revision to reflect these new conditions.

The EPA has delegated the National Pollutant Discharge Elimination System (NPDES) permitting to individual state authorities. For the Commonwealth of Virginia, the Department of Environmental Quality issues a Virginia Pollutant Discharge Elimination System (VPDES) permit. The EPP references the State Water Control Board as the authority for issuing a NPDES permit. However, the agency name has been changed to the Department of Environmental Quality. Also, provisions for identifying, addressing, and reporting terrestrial erosion issues in the transmission line corridor rights-of-way are specified in the EPP. However, these issues are currently governed by a specification in accordance with Title 10.1 of the Code of Virginia. This specification is revised annually and submitted to the Virginia Soil and Water Conservation Board for review, written comments, and approval. The approved specification then applies to all of Virginia Power's transmission line corridor rights-of-way, including those associated with North Anna Power Station.

The focus of the North Anna erosion and sediment control program has shifted since the completion of the facility's construction phase. During construction, movement of heavy equipment along the transmission line corridor rights-of-way and within a radius of 1000 feet of the nuclear facility was common. After start-up, modification activities requiring the use of heavy equipment were mostly isolated to the site, and a program to restore the terrain disturbed during construction was implemented. For the transmission line corridor rights-of-way, this included regrading the terrain, seeding the affected areas, and instituting a periodic monitoring program (discussed in the EPP). There were three concerns with the terrestrial environment discussed in the EPP: the need for controlled use of herbicides on transmission line corridor rights-ofway, the need to control erosion on transmission line corridor rights-of-way, and potential impacts associated with use of the Waste Heat Treatment Facility (WHTF). The impacts of the WHTF were studied and considered negligible for operation of two nuclear units. The need to control herbicide usage and erosion caused by maintenance or modification activities along the transmission line corridor rights-ofway have continued to be issues during the facility's operational phase.

Since a state-approved program is required to be implemented and revised annually, the EPP requirements associated with transmission line corridor rights-of-way are redundant and unnecessary. Exceptions to this redundancy are the NRC reporting and documentation requirements, and the requirement for inspection of the transmission line corridor rights-of-way. This change to the EPP retains the requirement to report results of inspections of transmission line corridor rights-of-way to the NRC annually and to retain do umentation on erosion damage found, its location, most likely cause, corrective measures, and success of those measures. However, the EPP is currently more restrictive than state regulations concerning routine inspections of the transmission line corridor rights-of-way. The EPP requires an annual inspection of the affected 3528 acres along the transmission line corridor rights-of-way coming from North Anna Power Station and going to Lady Smith, Louisa, Midlothian, and Morrisville. State regulations and sound business/engineering principles require "routine" inspections. Virginia Power currently performs routine inspections annually for transmission lines and towers (maintenance and upkeep) and once every three to five years for erosion/vegetation growth in the corridor rights-ofway (those associated with North Anna Power Station are inspected annually). The frequencies of inspecting Virginia Power's transmission and distribution network corridor rights-of-way are based upon the specific area, the erosion history, and the transmission line size (voltage). Adopting such a performance-based inspection methodology for the North Anna transmission line corridor rights-of-way is considered prudent in that it will provide a uniform standard for all of Virginia Power's transmission line corridors, will continue to ensure proper land management within the transmission line corridor rights-of-way, and will result in a cost benefit.

Many of the same areas with moderate erosion damage are identified and repaired annually under the current EPP program. A cost benefit is derived by introducing longer inspection intervals. The annual inspection interval is changed to once every three to five years to ensure uniformity with Virginia Power's other transmission corridor rights-of-way (lines not associated with North Anna Power Station but which must still comply with Virginia regulations). The longer inspection interval applies only to inspections specifically for erosion and vegetation. Inspections of the transmission lines and towers (to verify that these facilities are in good repair) are performed annually. A benefit is also realized by focusing corrective measures at erosion caused by transmission activities (application of herbicides or from line construction, maintenance, or modification activities) or which have the potential to impact operability of the transmission lines or towers.

The focus for conducting studies of the effects of facility operation on aquatic and terrestrial biota has also shifted. Specifically, the studies referred to in the EPP as "will be performed" (e.g., vegetation studies) were completed on or before June 24, 1986. The aquatic and terrestrial environs around the North Anna Power Station are routinely monitored in accordance with the state-approved Virginia Pollutant Discharge Elimination System (VPDES) permit. Therefore, the EPP needs to be updated to reflect these facts.

Certain references were found to be invalid during the review of the EPP. The EPP refers to Section 316(a) and (b) [of the Clean Water Act] demonstration requirements contained in the effective NPDES permit. Section 316(a) demonstration requirements (need for aquatic monitoring programs to confirm that thermal mixing occurs as predicted) are addressed in the VPDES permit. However, studies completed prior to June 24, 1986 concluded that no variance is needed to address levels of intake entrainment and impingement pursuant to Section 316(b) demonstration requirements. Therefore, the current VPDES permit does not address Section 316(b) demonstration requirements. This change deletes the reference to Section 316(b) demonstration requirements. The term "NPDES permit" is also replaced with "VPDES permit." Under the EPP Section entitled "Consistency Requirements," a reference is made to 10 CFR Part 51.5(b)(2). This is in error, because §51.5(b)(2) does not exist. The reference is corrected to 10 CFR Part 51.60(b)(2) which does address the appropriate issues related to consistency requirements.

Additionally, this change reformats the EPP to enhance readability since the text of the EPP associated with non-radiological environmental protection has not been updated since 1980.

Description Of Specific Changes

The Environmental Protection Plan (EPP) is maintained as Appendix B to each nuclear unit's Facility Operating License. The changes which are detailed below are applicable to the EPP for both North Anna Unit 1 and Unit 2.

The effective date is deleted from the title page since each page of the EPP is dated.

The Table of Contents is revised as follows:

- The title for Section 3.2 is changed to reflect that the NPDES permit is the VPDES permit.
- Subsections, titles, and page numbers are added for EPP Subsections 4.2.1 (Herbicide Application), 4.2.2 (Erosion Control Inspection), 4.2.2.1 (Erosion Control Inspection - Site), 4.2.2.2 (Erosion and Sediment Control Program - Corridor Rights-of-Way), 4.2.3 (Vegetation Studies), 5.4.1 (Routine Reports), and 5.4.2 (Nonroutine Reports)
- The text for chapter titles are capitalized to enhance readability.

Chapter 1, Objectives of the Environmental Protection plan, is revised to reflect that the construction phase has been completed, to define the acronym "FES," and to replace the reference to the NPDES with a reference to the VPDES.

- The first sentence of the first paragraph on Page 1-1, "The Environmental Protection Plan (EPP) is to provide for protection of environmental values during construction and operation of the nuclear facility," is replaced with the sentence "The Environmental Protection Plan (EPP) provides for protection of the environment during the operational phase of the nuclear facility."
- In the first subparagraph (1) under the first paragraph on Page 1-1, the acronym "FES" is replaced with "Final Environmental Statemen' (FES)."
- In the last paragraph on Page 1-1, the acronym "I PDES" is replaced with "Virginia Pollutant Discharge Elimination System (VPCES)."

Chapter 2, Environmental Protection Issues, is revised to delete references to studies documenting the levels of intake entrainment and impingement [Section 316(b) demonstration requirements of the Clean Water Act] and to the aquatic monitoring programs which confirm adequate thermal mixing [Section 316(a) demonstration requirements of the Clean Water Act]. The studies documenting the levels of intake entrainment and impingement were completed during the initial years of operation and resulted in no variances being required. Therefore, this is an obsolete reference which is not addressed in the NPDES permit as stated in the EPP, and additional studies are not required in accordance with the Clean Water Act. The aquatic monitoring programs for thermal mixing and its effect on aquatic biota and water quality are addressed through compliance with the current VPDES permit. As such, only a reference to the VPDES permit is needed. Reference to the State Water Control Board as the issuing authority for VPDES permits is also obsolete. The Department of Environmental Quality currently accomplishes that function. Detailed changes for Chapter 2 are listed below:

- The acronym "FES-OL" in the first sentence of the first paragraph on Page 2-1 is replaced with "Final Environmental Statement - Operating License (FES-OL)."
 A comma is added after 1973 in the same sentence.
- The first paragraph under Section 2.1, Aquatic Issues, and associated subparagraphs 1 and 2 are deleted to reduce redundancy and enhance readability.

- In the first sentence of the last paragraph on Page 2-1, the reference to Section 316(b) demonstration requirements is deleted, since it is no longer applicable. The acronym "NPDES" is replaced with "VPDES," and the "aference to the "State water Control Board" is changed to the "Department of Environmental Quality" in the first sentence. The sentence, "Further aquatic issues are addressed by the June 24, 1986 Section 316(a) submittal and subsequent agreements reached with the Department of Environmental Quality (previously the State water Control Board)," is added to enhance clarity. In the second sentence of the last paragraph on Page 2-1, the verbs "will rely" are replaced with "relies" to reflect that the NRC's reliance upon the Department of Environmental Quality for regulation of matters involving water quality and aquatic biota is a current and continuing condition.
- The phrase "Specific terrestrial issues raised by the staff in the FES-OL were:" is added prior to subparagraph 1 and after the title of Section 2.2 on Page 2-2 to enhance clarity.
- Subparagraph 2 on Page 2-2 is replaced with "The need to control erosion resulting from modification activities, use of herbicides, and/or transmission line maintenance on transmission corridor rights-of-way" to clarify the issues raised in the FES-OL.

Chapter 3, Consistency Requirements, is revised to correct typographical errors and replace the references to "NPDES Permit" with "VPDES Permit." The changes are detailed below:

- The last sentence of the third paragraph under Section 3.1, Plant Design and Operation (Pages 3-1 and 3-2), contains an error, in that it refers to a nonexistent regulation, "10 CFR Part 51.5(b)(2)." The reference is corrected to "10 CFR Part 51.60(b)(2)."
- In the second sentence of the last paragraph under Section 3.1 on Page 3-2, the word "provide" is replaced with the more grammatically correct word "provides."
- In the title of Section 3.2, "Reporting Related to the NPDES Permits and State Certifications" and in each of that section's three paragraphs, the acronym "NPDES" is replaced with "VPDES."

Chapter 4, Environmental Conditions, is revised substantially. Reporting of unusual or important environmental events is updated to reflect current NRC reporting requirements. Subsection 4.2.2.1 is added to clarify the EPP's requirements for erosion control at the site and to eliminate a records retention inconsistency. Subsection 4.2.2.2 is added to clarify that the NRC will rely on the Virginia Soil and Water conservation Board to regulate erosion and sediment control issues along North Anna's transmission corridor rights-of-way. And the discussion of vegetation studies is revised to reflect that these studies were completed in 1981. Detailed changes for Chapter 4 are listed below:

- The first sentence of the first paragraph under Section 4.1, Unusual or Important Environmental Events (Page 4-1), is modified by replacing the phrases "reported to the NRC within 24 hours by telephone, telegraph, or facsimile transmissions followed by a written report per Subsection 5.4.2" with "reported to the NRC in accordance with 10 CFR Part 50.72(b)(2)(vi) followed by a written report as specified in Subsection 5.4.2."
- The second paragraph under Section 4.1, "No routine monitoring programs are required to implement this condition" (Page 4-1), is deleted. The paragraph incorrectly implies that the site environs are not routinely monitored to identify unusual or important environmental events. Monitoring requirements are established in the VPDES Permit, FERC regulations (for main dam and associated project works only), and by the site erosion control program.
- The first sentence ("Routine inspection of transmission line and station site shall include examination for evidence of erosion") in the first paragraph under Subsection 4.7.2, Erosion Control Inspection, (Page 4-2), is clarified to "Routine inspection of the station site and the transmission corridor rights-of-way shall include examination for evidence of erosion" to enhance readability. The remaining two paragraphs under Subsection 4.2.2 are deleted and replaced with Subsections 4.2.2.1, Erosion Control Inspection Site, and 4.2.2.2, Erosion and Sediment Control Program Corridor Rights-of-Way.
- Subsection 1.2.2.1 is added to the EPP text as follows:

4.2.2.1 Erosion Control Inspection - Site

Field inspections of the site for evidence of erosion shall be conducted at approximately 12-month intervals. This requirement shall be applicable during the nuclear facility's operational phase and shall apply to the site as described and evaluated in the FES-OL dated 1973.

A summary of the field inspection program and procedures implemented to control abnormal erosion conditions associated with the nuclear facility site shall be reported in the Annual Environmental Operating Report as described in Subsection 5.4.1. Field logs indicating locations of erosion damage, measures taken to mitigate erosion problems, and estimation of the effectiveness of these mitigative measures shall be kept and made available for a period of five years. Results reported in accordance with Subsection 5.4.1 shall contain information encompassing, but not limited to, inspection date, estimated size of erosion problem area, type of stabilization program, and date of effective stabilization, as appropriate.

It should be noted that the only technical changes from previous requirements concern the record retention duration and the frequency of field inspections.

Records retention changes from two years to five years to be consistent with the existing (and otherwise conflicting) requirements in EPP Section 5.2. The stated frequency of field inspections of the site for erosion damage ("approximately 12-month intervals as a minimum") are revised to "approximately 12-month intervals." Removal of the phrase "as a minimum" clarifies that the frequency of the field inspections may be treated in a similar manner to other Technical Specification surveillance requirements, in that the interval between inspections may be extended by up to 25%. This position has also been approved by the NRC in the Operational Quality Assurance Program.

Subsection 4.2.2.2 is added to the EPP text as follows:

4.2.2.2 Erosion and Sediment Control Program - Corridor Rights-of-Way

Measures to identify and address issues concerning erosion and sediment control within the transmission line corridor rights-of-way shall be in accordance with the Erosion and Sediment Control Specification approved by the Virginia Soil and Water Conservation Board in accordance with Title 10.1, Chapter 5, Article 4, Section 10.1-563(D) of the Code of Virginia and applicable portions of the Erosion and Sediment Control Regulations, VR 625-02-00. The NRC relies on the Virginia Soil and Water Conservation Board for regulation of matters involving arosion and sediment control within the North Anna mission line corridor rights-of-way.

Appropriate records shall be kept indicating the nature and effectiveness of corrective measures. The results of any field inspections and mitigative measures implemented to control abnormal erosion conditions associated with transmission line construction, modification, or maintenance activities or the use of herbicides shall be reported in the Annual Environmental Operating Report as described in Subsection 5.4.1.

With the exception that the NRC reporting requirement is retained, the focus of the transmission line corridor rights-of-way erosion control program is changed from a program unique to North Anna to a requirement to comply with Virginia regulations common for all transmission corridor rights-of-way within the state. The Erosion and Sediment Control Specification is required to be submitted and approved by the Virginia Soil and Water Conservation Board annually. As such, current environmental concerns are addressed through implementation of a detailed evolving specification approved by a regulatory agency with authority and expertise in erosion control issues. The Erosion and Sediment Control Specification applies to the entire Virginia Power transmission and distribution network corridor rights-of-way, not just those associated with North Anna Power Station.

 The paragraphs under Subsection 4.2.3, Vegetation Studies (Pages 4-3 and 4-4) are replaced by the following paragraph:

A vegetation monitoring program completed in 1981, determined that power station operation did not result in any adverse environmental impacts on the vegetation types and vegetation production in two plots adjacent to the Waste Heat Treatment Facility, two plots adjacent to Lake Anna, and one plot downstream near the Lake Anna Dam. Therefore, the non-radiological vegetation monitoring program was terminated after 1981.

The specifics of these vegetation studies which were completed 13 years ago are extraneous details at this time and do not need to be summarized in the current EPP.

Chapter 5, Administrative Procedures, is revised to indicate that audits of the Environmental Protection Plan are conducted in accordance with the approved 10 CFR 50, Appendix B Program and to correct a minor grammatical error. The changes are detailed below:

- The second and third sentence of the first paragraph under Section 5.1, Review and Audit (Page 5-1), are replaced by the sentence "The audits shall be conducted in accordance with the approved Operational Quality Assurance Program."
- In the first sentence of the first paragraph under Subsection 5.4.2, Nonroutine Reports (Page 5-4), the indefinite article "a" is added after "... within 30 days of occurrence of and before "nonroutine event."

Safety Significance

This revision to the EPP provides updates to reflect current requirements and organizations, clarifies the program implemented to control erosion with the North Anna transmission corridor rights-of-way, eliminates obsolete text, corrects certain references and inconsistencies, and changes format and grammar to enhance readability. Therefore, this change has no effect on nuclear plant operation or equipment and little effect on plant procedures (e.g., certain references may need to be updated).

The primary impacts from these changes are administrative in nature. However, the changes associated with the four North Anna transmission corridor rights-of-way affect the frequency of inspections for erosion damage within those areas. The four transmission corridor rights-of-way are North Anna - Lady Smith, North Anna - Louisa, North Anna - Midlothian, and North Anna - Morrisville. The current EPP requires that routine inspection of transmission lines "shall be conducted at approximately 12month intervals as a minimum." This change to the EPP provides an alternative program. Specifically, the change identifies current requirements imposed by another regulatory agency, the Virginia Soil and Water Conservation Board, which is responsible for reviewing and approving utility erosion and sediment control specifications. Although the applicable Virginia regulations do not provide a minimum frequency for inspections, VR 625-02-00, §1.7(A) states "all erosion and sediment control structures and systems shall be maintained, inspected and repaired as needed to insure continued performance of their intended function. Additionally, VR 625-02-00, §1.7(B) states that "periodic inspections are required on all projects by the enforcement authority." Virginia Power's other transmission corridor rights-of-way (i.e., those not associated with North Anna Power Station) are inspected once each three to five years depending upon size of the transmission line (higher voltage lines are inspected more often), history of erosion damage identified, and as required after completion of transmission line activities (maintenance, construction, or modification of lines/poles/towers or application of herbicides).

The probability that an accident will occur will neither be increased nor decreased by this proposed EPP change. This proposed change has no direct impact on the function or method of operation of plant equipment. Thus, there is no increase or decrease in the probability of a previously analyzed accident due to this change. Plant structures, systems, and components are not affected by the proposed change. As such, the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR are not increased by this change.

Neither the administrative changes to the EPP nor the alternative program proposed for erosion and sediment control of transmission corridor rights-of-way contribute to the initiation of accidents or to the mitigation of the consequences thereof. Subsequently, the proposed change to the EPP neither produces a new accident scenario nor produces a previously unanalyzed type of equipment malfunction.

Only the frequency of routine erosion control inspections of transmission corridor rights-of-way are affected, not the design nor the operation of facility structures, systems, or components. This being the case, no margin of safety is applicable to this change request.

Therefore, the proposed EPP change package does not involve an unreviewed safety question as determined by the criteria of 10 CFR 50.59.

Attachment 2
Environmental Protection Plan Changes

APPENDIX B

TO FACILITY OPERATING LICENSE NO. NPF-4
NORTH ANNA POWER STATION, UNIT NO. 1

VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NO. 50-338

ENVIRONMENTAL PROTECTION PLAN

NORTH ANNA POWER STATION ENVIRONMENTAL PROTECTION PLAN (NON-RADIOLOGICAL)

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1.0 Objectives of the Environmental Protection Plan

The Environmental Protection Plan (EPP) provides for protection of the environment during the operational phase of the nuclear facility. The principal objectives of the EPP are as follows:

- (a) Verify that the plant is operated in an environmentally acceptable manner, as established by the Final Environmental Statement (FES) and other NRC environmental impact assessments.
- (b) Coordinate NRC requirements and maintain consistency with other Federal, State and local requirements for environmental protection.
- (c) Keep NRC informed of the environmental effects of facility construction and operation and of actions taken to control those effects.

Environmental concerns identified in the FES which relate to water quality matters are regulated by way of the licensee's Virginia Pollutant Discharge Elimination System (VPDES) permit.

2.0 Environmental Protection Issues

In the Final Environmental Statement – Operating License (FES–OL) dated April 1973 the staff considered the environmental impacts associated with the operation of the North Anna Power Station. Certain environmental issues were identified which required study or license conditions to resolve environmental concerns and to assure adequate protection of the environment.

2.1 Aquatic Issues

The monitoring programs and special studies raised by the FES-OL were completed during the initial years of facility operation. Continued monitoring is addressed by the requirements contained in the effective VPDES permit issued by the Commonwealth of Virginia, Department of Environmental Quality. Further aquatic issues are addressed by the June 24, 1986 Section 316(a) submittal and subsequent agreements reached with the Department of Environmental Quality (previously the State Water Control Board). The NRC relies on this agency for regulation of matters involving water quality and aquatic biota.

2.2 Terrestrial Issues

Specific terrestrial issues raised by the staff in the FES-OL were:

- (a) The need for controlled use of herbicides on transmission rights-of-way.
- (b) The need to control erosion resulting from modification activities, use of herbicides, and/or transmission line maintenance on transmission corridor rights-of-way.
- (c) Potential impacts on the terrestrial environment associated with use of the Waste Heat Treatment Facility.

NRC requirements with regard to the above terrestrial issues are specified in Subsection 4.2 of this EPP.

3.0 Consistency Requirements

3.1 Plant Design and Operation

The licensee may make changes in station design or operation or perform tests or experiments affecting the environment provided such changes, tests or experiments do not involve an unreviewed environmental question, and do not involve a change in the Environmental Protection Plan. Changes in plant design or operation or performance of tests or experiments which do not affect the environment are not subject to the requirements of this EPP. Activities governed by Section 3.3 are not subject to the requirements of this section.

Before engaging in additional construction or operational activities which may affect the environment, the licensee shall prepare and record an environmental evaluation of such activity. When the evaluation indicates that such activity involves an unreviewed environmental question, the licensee shall provide a written evaluation of such activities and obtain prior approval from the Director, Office of Nuclear Reactor Regulation. When such activity involves a change in the Environmental Protection Plan, such activity and change to the Environmental Protection Plan may be implemented only in accordance with an appropriate license amendment as set forth in Section 5.3.

A proposed change, test or experiment shall be deemed to involve an unreviewed environmental question if it concerns (a) a matter which may result in a significant increase in any adverse environmental impact previously evaluated in the final environmental statement (FES) as modified by staff's testimony to the Atomic Safety and Licensing Board, supplements to the FES, environmental impact appraisals, or in any decisions of the Atomic Safety and Licensing Board; or (b) a significant change in effluents or power level [in accordance with 10 CFR Part 51.60(b)(2)] or (c) a matter not previously reviewed and evaluated in the documents specified in (a) of this Subsection, which may have a significant adverse environmental impact.

The licensee shall maintain records of changes in facility design or operation and of tests and experiments carried out pursuant to this Subsection. These records shall include a written evaluation which provides bases for the determination that the change, test, or experiment does not involve an unreviewed environmental question nor constitute a decrease in the effectiveness of this EPP to meet the objectives specified in Section 1.0. The licensee shall include as part of his Annual Environmental Operating Report (per Subsection 5.4.1) brief descriptions, analyses, interpretations, and evaluations of such changes, tests and experiments.

3.2 Reporting Related to the VPDES Permits and State Certifications

Violations of the VPDES Permit or the State certification (pursuant to Section 401 of the Clean Water Act) shall be reported to the NRC by submittal of copies of the reports required by the VPDES Permit or certification.

Changes and additions to the VPDES Permit or the State certification shall be reported to the NRC within 30 days following the date the change is approved. If a permit or certification, in part or in its entirety, is appealed and stayed, the NRC shall be notified within 30 days following the date the stay is granted.

The NRC shall be notified of changes to the effective VPDES Permit proposed by the licensee by providing NRC with a copy of the proposed change at the same time it is submitted to the permitting agency. The notification of a licensee-initiated change shall include a copy of the requested revision submitted to the permitting agency. The licensee shall provide the NRC a copy of the application for renewal of the VPDES permit at the same time the application is submitted to the permitting agency.

3.3 Changes Required for Compliance with Other Environmental Regulations

Changes in plant design or operation and performance of tests or experiments which are required to achieve compliance with other Federal, State, or local environmental regulations are not subject to the requirements of Section 3.1.

4.0 Environmental Conditions

4.1 Unusual or Important Environmental Events

Any occurrence of an unusual or important event that indicates or could result in significant environmental impact causally related to plant operation shall be recorded and promptly reported to the NRC in accordance with 10 CFR 50.72(b)(2)(vi) followed by a written report as specified in Subsection 5.4.2. The following are examples: excessive bird impaction events, onsite plant or animal disease outbreaks, mortality or unusual occurrence of any species protected by the Endangered Species Act of 1973, fish kills, significant increase in nuisance organisms or conditions and unanticipated or emergency discharge of waste water or chemical substances.

4.2 Environmental Monitoring

4.2.1 Herbicide Application

The use of herbicides within the corridor rights-of-way as described and evaluated in the FES-OL dated April 1973 shall conform to the approved use of selected herbicides as registered by the Environmental Protection Agency and approved by State authorities and applied as directed by said authorities.

Records shall be maintained in the appropriate division office concerning herbicide use. Such records shall include the following information: commercial and chemical names of materials used; concentration of active material in formulations diluted for field use; diluting substances other than water; rates of application; method and frequency of application; location; and the date of application. Such records shall be maintained for a period of 5 years and be made readily available to the NRC upon request. There shall be no routine reporting requirement associated with this condition.

4.2.2 Erosion Control Inspection

Routine inspection of the station site and transmission corridor rights-of-way shall include examination for evidence of erosion. Abnormal erosion conditions within the corridor rights-of-way related to transmission activities and within the site boundaries shall be identified and recorded.

4.2.2.1 Erosion Control Inspection - Site

Field inspections of the site for evidence of erosion shall be conducted at approximately 12-month intervals. This requirement shall be applicable during the nuclear facility's operational phase and shall apply to the site as described and evaluated in the FES-OL dated April 1973.

A summary of the filed inspection program and procedures implemented to control abnormal erosion conditions associated with the nuclear facility site shall be reported in the Annual Environmental Operating Report as described in Subsection 5.4.1. Field logs indicating locations of erosion damage, measures taken to mitigate erosion problems, and estimation of the effectiveness of these mitigative measures shall be kept and made available for a period of five years. Results reported in accordance with Subsection 5.4.1 shall contain information encompassing, but not limited to, inspection date, estimated size of erosion problem area, type of stabilization program, and date of effective stabilization, as appropriate.

4.2.2.2 Erosion and Sediment Control Program - Corridor Rights-of-Way

Measures to identify and address issues concerning erosion and sediment control within the transmission line corridor rights-of-way shall be in accordance with the Erosion and Sediment Control Specification approved by the Virginia Soil and Water Conservation Board in accordance with Title 10.1, Chapter 5, Article 4, Section 10.1-563(D) of the Code of Virginia and applicable portions of the Erosion and Sediment Control Regulations, VR 625-02-00. The NRC relies on the Virginia Soil and Water Conservation Board for regulation of matters involving erosion and sediment control within the North Anna transmission line corridor rights-of-way.

Appropriate records shall be kept indicating be nature and effectiveness of corrective measures. The results of any field inspections and mitigative measures implemented to control abnormal erosion conditions associated with transmission line construction, modification, or maintenance activities or the use of herbicides shall be reported in the Annual Environmental Operating Report as described in Subsection 5.4.1.

4.2.3 Vegetation Studies

A vegetation monitoring program completed in 1981, determined that power station operation did not result in any adverse environmental impacts on the vegetation types and vegetation production in two plots adjacent to the Waste Heat Treatment Facility, two plots adjacent to Lake Anna, and one plot downstream near the Lake Anna Dam. Therefore, the non-radiological vegetation monitoring program was terminated after 1981.

5.0 Administrative Procedures

5.1 Review and Audit

The licensee shall provide for review and audit of compliance with the Environmental Protection Plan. The audits shall be conducted in accordance with the approved Operational Quality Assurance Program.

5.2 Records Retention

Records and logs relative to the environmental aspects of plant operation shall be made and retained in a manner convenient for review and inspection. These records and logs shall be made available to NRC on request.

Records of modifications to plant structures, systems and components determined to potentially affect the continued protection of the environment shall be retained for the life of the plant. All other records, data and logs relating to this EPP shall be retained for five years or, where applicable, in accordance with the requirements of other agencies.

5.3 Changes in Environmental Protection Plan

Request for change in the Environmental Protection Plan shall include an assessment of the environmental impact of the proposed change and a supporting justification. Implementation of such changes in the EPP shall not commence prior to NRC approval of the proposed changes in the form of a license amendment incorporating the appropriate revision to the Environmental Protection Plan.

5.4 Plant Reporting Requirements

5.4.1 Routine Reports

An Annual Environmental Operating Report describing implementation of this EPP for the previous year shall be submitted to the NRC prior to May 1 of each year. The initial report shall be submitted prior to May 1 of the year following issuance of the operating license. The period of the first report shall begin with the date of issuance of the operating license.

The report shall include summaries and analyses of the results of the environmental protection activities required by Subsection 4.2 of this Environmental Protection Plan for the report period, including a comparison with preoperational studies, operational controls (as appropriate), and previous nonradiological environmental monitoring reports, and an assessment of the observed impacts of the plant operation on the environment. If harmful effects or evidence of trends towards irreversible damage to the environment are observed, the licensee shall provide a detailed analysis of the data and a proposed course of action to alleviate the problem.

The Annual Environmental Operating Report shall also include:

- (a) A list of EPP noncompliances and the corrective actions taken to remedy them.
- (b) A list of all changes in station design or operation, tests, and experiments made in accordance with Subsection 3.1 which involved a potentially significant unreviewed environmental issue.
- (c) A list of nonroutine reports submitted in accordance with Subsection 5.4.2.

In the event that some results are not available by the report due date, the report shall be submitted noting and explaining the missing results. The missing data shall be submitted as soon as possible in a supplementary report.

5.4.2 Nonroutine Reports

A written report shall be submitted to the NRC within 30 days of occurrence of a nonroutine event. The report shall (a) describe, analyze, and evaluate the event, including extent and magnitude of the impact and plant operating characteristics, (b) describe the probable cause of the event, (c) indicate the action taken to correct the reported event, (d) indicate the corrective active taken to preclude repetition of the event and to prevent similar occurrences involving similar components or systems, and (e) indicate the agencies notified and their preliminary responses.

Events reportable under this subsection which also require reports to other Federal, State or local agencies shall be reported in accordance with those reporting requirements in lieu of the requirements of this subsection. The NRC shall be provided a copy of such report at the same time it is submitted to the other agency.

APPENDIX B

TO FACILITY OPERATING LICENSE NO. NPF-7 NORTH ANNA POWER STATION, UNIT NO. 2

VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NO. 50-339

ENVIRONMENTAL PROTECTION PLAN

NORTH ANNA POWER STATION ENVIRONMENTAL PROTECTION PLAN (NON-RADIOLOGICAL)

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1.0 Objectives of the Environmental Protection Plan

The Environmental Protection Plan (EPP) provides for protection of the environment during the operational phase of the nuclear facility. The principal objectives of the EPP are as follows:

- (a) Verify that the plant is operated in an environmentally acceptable manner, as established by the Final Environmental Statement (FES) and other NRC environmental impact assessments.
- (b) Coordinate NRC requirements and maintain consistency with other Federal, State and local requirements for environmental protection.
- (c) Keep NRC informed of the environmental effects of facility construction and operation and of actions taken to control those effects.

Environmental concerns identified in the FES which relate to water quality matters are regulated by way of the licensee's Virginia Pollutant Discharge Elimination System (VPDES) permit.

2.0 Environmental Protection Issues

In the Final Environmental Statement – Operating License (FES–OL) dated April 1973 the staff considered the environmental impacts associated with the operation of the North Anna Power Station. Certain environmental issues were identified which required study or license conditions to resolve environmental concerns and to assure adequate protection of the environment.

2.1 Aquatic Issues

The monitoring programs and special studies raised by the FES-OL were completed during the initial years of facility operation. Continued monitoring is addressed by the requirements contained in the effective VPDES permit issued by the Commonwealth of Virginia, Department of Environmental Quality. Further aquatic issues are addressed by the June 24, 1986 Section 316(a) submittal and subsequent agreements reached with the Department of Environmental Quality (previously the State Water Control Board). The NRC relies on this agency for regulation of matters involving water quality and aquatic biota.

2.2 Terrestrial Issues

Specific terrestrial issues raised by the staff in the FES-OL were:

- (a) The need for controlled use of herbicides on transmission rights-of-way.
- (b) The need to control erosion resulting from modification activities, use of herbicides, and/or transmission line maintenance on transmission corridor rights-of-way.
- (c) Potential impacts on the terrestrial environment associated with use of the Waste Heat Treatment Facility.

NRC requirements with regard to the above terrestrial issues are specified in Subsection 4.2 of this EPP.

3.0 Consistency Requirements

3.1 Plant Design and Operation

The licensee may make changes in station design or operation or perform tests or experiments affecting the environment provided such changes, tests or experiments do not involve an unreviewed environmental question, and do not involve a change in the Environmental Protection Plan. Changes in plant design or operation or performance of tests or experiments which do not affect the environment are not subject to the requirements of this EPP. Activities governed by Section 3.3 are not subject to the requirements of this section.

Before engaging in additional construction or operational activities which may affect the environment, the licensee shall prepare and record an environmental evaluation of such activity. When the evaluation indicates that such activity involves an unreviewed environmental question, the licensee shall provide a written evaluation of such activities and obtain prior approval from the Director, Office of Nuclear Reactor Regulation. When such activity involves a change in the Environmental Protection Plan, such activity and change to the Environmental Protection Plan may be implemented only in accordance with an appropriate license amendment as set forth in Section 5.3.

A proposed change, test or experiment shall be deemed to involve an unreviewed environmental question if it concerns (a) a matter which may result in a significant increase in any adverse environmental impact previously evaluated in the final environmental statement (FES) as modified by staff's testimony to the Atomic Safety and Licensing Board, supplements to the FES, environmental impact appraisals, or in any decisions of the Atomic Safety and Licensing Board; or (b) a significant change in effluents or power level [in accordance with 10 CFR Part 51.60(b)(2)] or (c) a matter not previously reviewed and evaluated in the documents specified in (a) of this Subsection, which may have a significant adverse environmental impact.

The licensee shall maintain records of changes in facility design or operation and of tests and experiments carried out pursuant to this Subsection. These records shall include a written evaluation which provides bases for the determination that the change, test, or experiment does not involve an unreviewed environmental question nor constitute a decrease in the effectiveness of this EPP to meet the objectives specified in Section 1.0. The licensee shall include as part of his Annual Environmental Operating Report (per Subsection 5.4.1) brief descriptions, analyses, interpretations, and evaluations of such changes, tests and experiments.

3.2 Reporting Related to the VPDES Permits and State Certifications

Violations of the VPDES Permit or the State certification (pursuant to Section 401 of the Clean Water Act) shall be reported to the NRC by submittal of copies of the reports required by the VPDES Permit or certification.

Changes and additions to the VPDES Permit or the State certification shall be reported to the NRC within 30 days following the date the change is approved. If a permit or certification, in part or in its entirety, is appealed and stayed, the NRC shall be notified within 30 days following the date the stay is granted.

The NRC shall be notified of changes to the effective VPDES Permit proposed by the licensee by providing NRC with a copy of the proposed change at the same time it is submitted to the permitting agency. The notification of a licensee-initiated change shall include a copy of the requested revision submitted to the permitting agency. The licensee shall provide the NRC a copy of the application for renewal of the VPDES permit at the same time the application is submitted to the permitting agency.

3.3 Changes Required for Compliance with Other Environmental Regulations

Changes in plant design or operation and performance of tests or experiments which are required to achieve compliance with other Federal, State, or local environmental regulations are not subject to the requirements of Section 3.1.

4.0 Environmental Conditions

4.1 Unusual or Important Environmental Events

Any occurrence of an unusual or important event that indicates or could result in significant environmental impact causally related to plant operation shall be recorded and promptly reported to the NRC in accordance with 10 CFR 50.72(b)(2)(vi) followed by a written report as specified in Subsection 5.4.2. The following are examples: excessive bird impaction events, onsite plant or animal disease outbreaks, mortality or unusual occurrence of any species protected by the Endangered Species Act of 1973, fish kills, significant increase in nuisance organisms or conditions and unanticipated or emergency discharge of waste water or chemical substances.

4.2 Environmental Monitoring

4.2.1 Herbicide Application

The use of herbicides within the corridor rights-of-way as described and evaluated in the FES-OL dated April 1973 shall conform to the approved use of selected herbicides as registered by the Environmental Protection Agency and approved by State authorities and applied as directed by said authorities.

Records shall be maintained in the appropriate division office concerning herbicide use. Such records shall include the following information: commercial and chemical names of materials used; concentration of active material in formulations diluted for field use; diluting substances other than water; rates of application; method and frequency of application; location; and the date of application. Such records shall be maintained for a period of 5 years and be made readily available to the NRC upon request. There shall be no routine reporting requirement associated with this condition.

4.2.2 Erosion Control Inspection

Routine inspection of the station site and transmission corridor rights of way shall include examination for evidence of erosion. Abnormal erosion conditions within the corridor rights-of-way related to transmission activities and within the site boundaries shall be identified and recorded.

4.2.2.1 Erosion Control Inspection - Site

Field inspections of the site for evidence of erosion shall be conducted at approximately 12-month intervals. This requirement shall be applicable during the nuclear facility's operational phase and shall apply to the site as described and evaluated in the FES-OL dated April 1973.

A summary of the filed inspection program and procedures implemented to control abnormal erosion conditions associated with the nuclear facility site shall be reported in the Annual Environmental Operating Report as described in Subsection 5.4.1. Field logs indicating locations of erosion damage, measures taken to mitigate erosion problems, and estimation of the effectiveness of these mitigative measures shall be kept and made available for a period of five years. Results reported in accordance with Subsection 5.4.1 shall contain information encompassing, but not limited to, inspection date, estimated size of erosion problem area, type of stabilization program, and date of effective stabilization, as appropriate.

4.2.2.2 Erosion and Sediment Control Program - Corridor Rights-of-Way

Measures to identify and address issues concerning erosion and sediment control within the transmission line corridor rights-of-way shall be in accordance with the Erosion and Sediment Control Specification approved by the Virginia Soil and Water Conservation Board in accordance with Title 10.1, Chapter 5, Article 4, Section 10.1-563(D) of the Code of Virginia and applicable portions of the Erosion and Sediment Control Regulations, VR 625-02-00. The NRC relies on the Virginia Soil and Water Conservation Board for regulation of matters involving erosion and sediment control within the North Anna transmission line corridor rights-of-way.

Appropriate records shall be kept indicating he nature and effectiveness of corrective measures. The results of any field inspections and mitigative measures implemented to control abnormal erosion conditions associated with transmission line construction, modification, or maintenance activities or the use of herbicides shall be reported in the Annual Environmental Operating Report as described in Subsection 5.4.1.

4.2.3 Vegetation Studies

A vegetation monitoring program completed in 1981, determined that power station operation did not result in any adverse environmental impacts on the vegetation types and vegetation production in two plots adjacent to the Waste Heat Treatment Facility, two plots adjacent to Lake Anna, and one plot downstream near the Lake Anna Dam. Therefore, the non-radiological vegetation monitoring program was terminated after 1981.

5.0 Administrative Procedures

5.1 Review and Audit

The licensee shall provide for review and audit of compliance with the Environmental Protection Plan. The audits shall be conducted in accordance with the approved Operational Quality Assurance Program.

5.2 Records Retention

Records and logs relative to the environmental aspects of plant operation shall be made and retained in a manner convenient for review and inspection. These records and logs shall be made available to NRC on request.

Records of modifications to plant structures, systems and components determined to potentially affect the continued protection of the environment shall be retained for the life of the plant. All other records, data and logs relating to this EPP shall be retained for five years or, where applicable, in accordance with the requirements of other agencies.

5.3 Changes in Environmental Protection Plan

Request for change in the Environmental Protection Plan shall include an assessment of the environmental impact of the proposed change and a supporting justification. Implementation of such changes in the EPP shall not commence prior to NRC approval of the proposed changes in the form of a license amendment incorporating the appropriate revision to the Environmental Protection Plan.

5.4 Plant Reporting Requirements

5.4.1 Routine Reports

An Annual Environmental Operating Report describing implementation of this EPP for the previous year shall be submitted to the NRC prior to May 1 of each year. The initial report shall be submitted prior to May 1 of the year following issuance of the operating license. The period of the first report shall begin with the date of issuance of the operating license.

The report shall include summaries and analyses of the results of the environmental protection activities required by Subsection 4.2 of this Environmental Protection Plan for the report period, including a comparison with preoperational studies, operational controls (as appropriate), and previous nonradiological environmental monitoring reports, and an assessment of the observed impacts of the plant operation on the environment. If harmful effects or evidence of trends towards irreversible damage to the environment are observed, the licensee shall provide a detailed analysis of the data and a proposed course of action to alleviate the problem.

The Annual Environmental Operating Report shall also include:

- (a) A list of EPP noncompliances and the corrective actions taken to remedy them.
- (b) A list of all changes in station design or operation, tests, and experiments made in accordance with Subsection 3.1 which involved a potentially significant unreviewed environmental issue.
- (c) A list of nonroutine reports submitted in accordance with Subsection 5.4.2.

In the event that some results are not available by the report due date, the report shall be submitted noting and explaining the missing results. The missing data shall be submitted as soon as resible in a supplementary report.

5.4.2 Nonroutine Reports

A written report shall be submitted to the NRC within 30 days of occurrence of a nonroutine event. The report shall (a) describe, analyze, and evaluate the event, including extent and magnitude of the impact and plant operating characteristics, (b) describe the probable cause of the event, (c) indicate the action taken to correct the reported event, (d) indicate the corrective active taken to preclude repetition of the event and to prevent similar occurrences involving similar components or systems, and (e) indicate the agencies notified and their preliminary responses.

Events reportable under this subsection which also require reports to other Federal. State or local agencies shall be reported in accordance with those reporting requirements in lieu of the requirements of this subsection. The NRC shall be provided a copy of such report at the same time it is submitted to the other agency.

Attachment 3
Significant Hazards Consideration

SIGNIFICANT HAZARDS CONSIDERATION

The North Anna Unit 1 and Unit 2 Environmental Protection Plan (EPP) provides requirements relative to the protection of the environment during the construction and operation of the nuclear facility. This is accomplished by verifying that the plant is operated in an environmentally acceptable manner, coordinating NRC requirements and maintaining consistency with other regulatory requirements, and keeping the NRC informed of environmental matters and corrective measures. The proposed changes to the EPP continue to accomplish these objectives by updating the EPP to reflect current requirements, eliminating inconsistencies, and identifying proper regulatory agencies for certain environmental issues.

Specifically, references to National Pollutant Discharge Elimination System (NPDES) Permits are changed to reflect the correct permit title, Virginia Pollutant Discharge Elimination System (VPDES). Vegetation and aquatic biota studies referred to in the EPP were satisfactorily completed on or before June 24, 1986. The discussion of the detailed subject matter in these studies is removed because it is extraneous information. A reference to 10 CFR 51.5(b)(2) (which does not exist) is corrected to 10 CFR 51.60(b)(2). The explicit reporting requirements for unusual or important environmental events are replaced with the reporting requirement which the NRC has required pursuant to 10 CFR 50.72 (b)(2)(vi). Therefore, the reporting inconsistency (EPP requires report to NRC within 24 hours, whereas the 10 CFR 50.72 requires a four hour report to the NRC) is resolved. The description of the audit program to be utilized for auditing the EPP is replaced by referring to the Audit Program established in accordance with 10 CFR 50, Appendix B. Another inconsistency is eliminated by revising the two year records retention requirement for erosion control inspection field logs to five years. This makes the requirement consistent with EPP Section 5.2, Records Retention. References to the State Water Control Board are updated to that agency's successor, the Department of Environmental Quality. Additionally, Virginia Power's obligation to comply with Virginia regulations concerning erosion and sediment control within the transmission corridor rights-of-way are recognized to eliminate redundancy with previous EPP commitments. The Virginia Soil and Water Conservation Board is recognized as the regulatory authority concerning erosion within the transmission corridor rights-of-way. The Virginia Soil and Water Conservation Board reviews and approves erosion and sediment control specifications submitted by utilities on an annual basis.

The proposed change does not directly affect the operation, maintenance, reliability, or testing of plant structures, systems, and components. Safety-related structures, systems, and components are not affected, because the environmental controls associated with aquatic, terrestrial, and consistency issues (design and configuration management) at the North Anna Power Station site are not decreased in any way. As such, the changes to the EPP have no significant impact upon the safe and reliable operation of the nuclear facility.

Virginia Electric and Power Company has reviewed the EPP changes against the criteria of 10 CFR 50.92 and has concluded that the changes as proposed do not pose a significant hazards consideration. Specifically, operation of the North Anna Power Station in accordance with the EPP changes will not:

Involve a significant increase in the probability or consequences of an accident (1) previously evaluated. The likelihood that an accident will occur is neither increased or decreased by the proposed changes to the EPP. Sufficient controls are established to ensure that environmental controls impacting safetyrelated structures, systems, and components are maintained current and accurate. The only potentially credible accident which might be affected is the Loss of Offsite Power (if erosion were severe enough to undermine the bases of a transmission tower). Each of the three 500 KV transmission lines connected to North Anna Power Station can supply sufficient power to the site. This limits the effect that one transmission tower has on safe operation of the nuclear facility. However, the erosion noted to date has not been severe enough to make such an accident credible. Additionally, each of the 500 KV transmission lines are inspected for material condition annually. Although the intent of this inspection is not soil erosion (the annual erosion inspections are currently conducted by another group who specializes in land management), evidence of severe erosion would be noted and addressed as appropriate. Therefore, this EPP change will not impact the function or method of operation of plant equipment. Thus, a significant increase in the probability of a previously analyzed accident does not result due to this change. Nuclear station systems, equipment, or components are not affected by the proposed changes. Thus, the consequences of a malfunction of equipment important to safety previously evaluated in the UFSAR are not increased by this change.

The proposed changes do not affect equipment or its operation, and, thus, do not affect the probabilities or consequences of an accident.

Therefore, we conclude that this change does not significantly increase the probabilities or consequences of an accident.

Create the possibility of a new or different kind of accident from any accident previously evaluated. The proposed changes do not involve changes to the physical plant or operations. Since the proposed EPP changes do not contribute to accident initiation and therefore do not produce a new accident scenario or produce a new type of equipment malfunction. Also, this EPP change does not alter any existing accident scenarios. The proposed changes do not affect nuclear plant equipment or its operation, and thus do not create the possibility of a new or different kind of accident. Therefore, the proposed changes do not create the possibility of a new or different kind of accident.

(3) Involve a significant reduction in a margin of safety. The EPP does not have a formal basis description other than the discussion in the FES-OL. The FES-OL discusses the non-radiological impacts of facility construction and operation on the environment. The discussion indicates that the environment will be managed to a stabilized condition during the operations phase, and a program will be implemented to maintain the environment in a stabilized condition. This intent is not altered by the proposed changes to the EPP. The proposed changes do not affect nuclear plant equipment or its operation, and thus do not involve any reduction in the margin of safety.

Therefore, use of the proposed EPP would not involve any reduction in the margin of safety.

Virginia Electric and Power Company concludes that the activities associated with these proposed EPP changes satisfy the no significant hazards consideration criteria of 10 CFR 50.92 and, accordingly, a no significant hazards consideration finding is justified.

Attachment 4
Assessment of Environmental Impact

ASSESSMENT OF ENVIRONMENTAL IMPACT

The North Anna Unit 1 and Unit 2 Environmental Protection Plan (EPP) provides requirements relative to the protection of the environment during the construction and operation of the nuclear facility. The issues raised by the Final Environmental Statement - Operating License (aquatic, terrestrial, and consistency issues) are addressed through compliance with the EPP. This is accomplished through verification that the plant is operated in an environmentally acceptable manner, coordination with NRC and other regulatory requirements, and adherence to reporting requirements for routine and unusual environmental conditions. The proposed changes to the EPP continue to accomplish these objectives by updating the EPP to reflect current requirements, eliminating inconsistencies, and identifying proper regulatory agencies for certain environmental issues. As such, the changes to the EPP have no significant impact upon the North Anna Power Station or associated environs.

Specifically, the EPP change includes the following. References to National Pollutant Discharge Elimination System (NPDES) Permits are changed to reflect the correct permit title, Virginia Pollutant Discharge Elimination System (VPDES). Vegetation and aquatic biota studies referred to in the EPP were satisfactorily completed on or before June 24, 1986. The discussion of the detailed subject matter in these studies is removed because it is extraneous information. A reference to 10 CFR 51.5(b)(2) (which does not exist) is corrected to 10 CFR 51.60(b)(2). The explicit reporting requirements for unusual or important environmental events are replaced with the reporting requirement which the NRC has required pursuant to 10 CFR 50.72 (b)(2)(vi). Therefore, the reporting inconsistency (EPP requires report to NRC within 24 hours, whereas the 10 CFR 50.72 requires a four hour report to the NRC) is resolved. The description of the audit program to be utilized for auditing the EPP is replaced by referring to the Audit Program established in accordance with 10 CFR 50, Appendix B. Another inconsistency is eliminated by revising the two year records retention requirement for erosion control inspection field logs to five years. This makes the requirement consistent with EPP Section 5.2, Records Retention. References to the State Water Control Board are updated to that agency's successor, the Department of Environmental Quality. Additionally, Virginia Power's obligation to comply with Virginia regulations concerning erosion and sediment control within the transmission corridor rights-of-way are recognized to eliminate redundancy with previous EPP commitments. The Virginia Soil and Water Conservation Board is recognized as the regulatory authority concerning erosion within the transmission corridor rights-of-way. The Virginia Soil and Water Conservation Board reviews and approves erosion and sediment control specifications submitted by utilities on an annual basis. These changes impact the administrative controls more so than the environment.

Virginia Electric and Power Company has reviewed the EPP changes against the criteria of 10 CFR 51.60(b)(2) and the EPP Consistency Requirements for plant design and operation and has concluded that the changes as proposed do not involve an unreviewed environmental question. Specifically, compliance with the EPP changes will not:

- Involve a significant increase in any adverse environmental impact previously (1) evaluated in the Final Environmental Statement (FES) as modified by the NRC's testimony to the Atomic Safety and Licensing Board, supplements to the FES, environmental impact appraisals, or in any decisions of the Atomic Safety and Licensing Board. The likelihood that the environment will be significantly affected is neither increased nor decreased by the proposed changes to the EPP. Sufficient controls are established to ensure that environmental controls are maintained current and accurate. The only conceivably affected environmental issue is erosion control in the transmission corridor rights-of-way (if erosion were severe enough to undermine the bases of a transmission tower). However, the erosion noted to date has not been severe. The changes to the EPP do not reduce the requirement to control erosion in these transmission corridor rights-of-way. Rather, the appropriate regulatory authority with expertise in erosion and sediment control issues for Virginia is recognized, and the necessity of complying with dual regulations is eliminated. Therefore, we conclude that this change does not significantly increase the probabilities or consequences of any adverse environmental impact.
- (2) Involve a significant change in effluents or power level in accordance with 10 CFR Part 51.60(b)(2). The proposed changes do not involve a significant expansion of either the North Anna Power Station site or associated transmission corridor rights-of-way. Neither the types of effluents nor the quantities of those effluents form North Anna Power Station are changed by this update to the EPP. The EPP concerns only non-radiological environmental protection issues. Therefore, changes to the EPP will not result in a significant increase in individual or cumulative occupational radiation exposure, a significant increase in the potential for or consequences from radiological accidents, or a significant increase in spent fuel storage capacity (or permission for such an increase). Therefore, the proposed changes to the EPP do not involve changes to any effluents or power levels which could adversely affect the environment.

(3) Involve a matter not previously reviewed and evaluated in the documents specified in the FES as modified by the NRC's testimony to the Atomic Safety and Licensing Board, supplements to the FES, environmental impact appraisals, or in any decisions of the Atomic Safety and Licensing Board. The only EPP change with the potential to impact the environment in any way concerns erosion control of the transmission corridor rights-of-way. The practical impact of this will result in less frequent inspections (approximately once every three years rather than the annual requirement which currently exists) of the North Anna transmission corridor rights-of-way. Additionally, Virginia Power's responsibilities are clarified relative to correcting erosion problems (responsible for correcting erosion caused by transmission line activities and severe cases of naturally occurring erosion to preclude operational concerns from arising. The issue of erosion control along the transmission corridor rights-of-way has been fully explored in the FES and supplements thereto. The other changes to the EPP are administrative in nature and merely update the EPP. Additional issues are not raised. Therefore, use of the proposed EPP would not involve any previously unreviewed or unevaluated environmental protection matters.

Virginia Electric and Power Company concludes that the activities associated with these proposed EPP changes do not involve an unreviewed environmental question.