



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

VIRGINIA ELECTRIC AND POWER COMPANY

OLD DOMINION ELECTRIC COOPERATIVE

DOCKET NO. 50-339

NORTH ANNA POWER STATION, UNIT NO. 2

SUBSEQUENT RENEWED FACILITY OPERATING LICENSE

Subsequent Renewed License No. NPF-7

1. The Nuclear Regulatory Commission (the Commission having previously made the findings set forth in Renewed License NPF-7 issued on March 20, 2003, has now found that:
 - A. The application to subsequently renew License No. NPF-7 filed by Virginia Electric and Power Company (VEPCO or the licensee) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations as set forth in 10 CFR Chapter I and all required notifications to other agencies or bodies have been duly made;
 - B. Actions have been identified and have been or will be taken with respect to (1) managing the effects of aging during the subsequent period of extended operation on the functionality of structures and components that have been identified to require review under 10 CFR 54.21(a)(1), and (2) time-limited aging analyses that have been identified to require review under 10 CFR 54.21(c), such that there is reasonable assurance that the activities authorized by this subsequent renewed license will continue to be conducted in accordance with the current licensing basis, as defined in 10 CFR 54.3, for North Anna Power Station, Unit No. 2, and that any changes made to the plant's current licensing basis in order to comply with 10 CFR 54.29(a) are in accord with the Act and the Commission's regulations;
 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
 - D. There is reasonable assurance: (i) that the activities authorized by this subsequent renewed operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;

- E. VEPCO is technically and financially qualified to engage in the activities authorized by this subsequent renewed operating license in accordance with the rules and regulations of the Commission's regulations set forth in 10 CFR Chapter I;
 - F. VEPCO and the Old Dominion Electric Cooperative (ODEC) have satisfied the applicable provisions of 10 CFR Part 140, of the Commission's regulations;
 - G. The issuance of this subsequent renewed operating license will not be inimical to the common defense and security or to the health and safety of the public;
 - H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Subsequent Renewed Facility Operating License No. NPF-7, subject to the conditions for protection of the environment set forth herein, is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied;
 - I. The receipt, possession, and use of source, byproduct, and special nuclear material as authorized by this subsequent renewed license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40, and 70; and
 - J. ODEC is a partial financial owner of the facility and will not operate the facility.
2. On the basis of the foregoing findings regarding this facility, Renewed Facility Operating License No. NPF-7, issued on March 20, 2003, is superseded by Subsequent Renewed Facility Operating License No. NPF-7, which is hereby issued to VEPCO and ODEC to read as follows:
- A. This subsequent renewed license applies to the North Anna Power Station, Unit No. 2, a pressurized water reactor and associated equipment (the facility), owned by VEPCO and ODEC. The facility is located near Mineral, in Louisa County, Virginia, and is described in VEPCO's Updated Final Safety Analysis Report and the Environmental Report as supplemented and amended.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
 - (1) Pursuant to Section 103 of the Act and 10 CFR Part 50, VEPCO and ODEC to possess and VEPCO to use and operate the facility at the designated location in Louisa County, Virginia, in accordance with the procedures and limitations set forth in this subsequent renewed license;
 - (2) Pursuant to the Act and 10 CFR Part 70, VEPCO to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in VEPCO's Updated Final Safety Analysis Report;

- (3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to receive, possess, and use at any time any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
 - (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material, without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or component; and
 - (5) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This subsequent renewed license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations as set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
- (1) Maximum Power Level
VEPCO is authorized to operate the facility at steady state reactor core power levels not in excess of 2940 megawatts (thermal).
 - (2) Technical Specifications
The Technical Specifications contained in Appendix A, as revised through Amendment No. 280 are hereby incorporated in the subsequent renewed license. The licensee shall operate the facility in accordance with the Technical Specifications.
 - (3) Additional Conditions
The matters specified in the following conditions shall be completed to the satisfaction of the Commission within the stated time periods following the issuance of the condition or within the operational restrictions indicated. The removal of these conditions shall be made by an amendment to the subsequent renewed license, supported by a favorable evaluation by the Commission:
 - a. If VEPCO plans to remove or to make significant changes in the normal operation of equipment that controls the amount of radioactivity in effluents from the North Anna Power Station, the

NRC shall be notified in writing regardless of whether the change affects the amount of radioactivity in the effluents.

VEPCO shall report any violations of this requirement within 24 hours by telephone and confirmed by telegram, mailgram, or facsimile transmission to the Director of the Regional Office, or his designate, no later than the first working day following the violation, with a written follow-up report within 14 days.

- b. The licensee shall implement a procedure that will prohibit entry into an extended Emergency Diesel Generator Outage Time (14 days), for scheduled maintenance purposes, if severe weather conditions are expected, as described in the licensee's application dated June 25, 1998, and evaluated in the staff's Safety Evaluation dated August 26, 1998.
- c. The licensee is authorized to relocate certain Technical Specification requirements previously included in Appendix A to licensee-controlled documents, as described in Table R, Relocated Specifications and Removed Details, attached to the NRC staff's Safety Evaluation enclosed with Amendment No. 212. These requirements shall be relocated to the appropriate documents no later than September 2, 2002.
- d. The schedule for performing surveillance requirements (SRs) that are new or revised in Amendment No. 212 shall be as follows:

For SRs that are new in this amendment, the first performance is due at the end of the first surveillance interval that begins on the date of implementation of this amendment.

For SRs that existed prior to this amendment whose intervals of performance are being reduced, the first reduced surveillance interval begins upon completion of the first surveillance performed after implementation of this amendment.

For SRs that existed prior to this amendment that have modified acceptance criteria, the first performance subject to the modified acceptance criteria is due at the end of the first surveillance interval that began on the date the surveillance was last performed prior to the implementation of this amendment.

For SRs that existed prior to this amendment whose intervals of performance are being extended, the first extended surveillance

interval begins upon completion of the last surveillance performed prior to implementation of this amendment.

This license condition is effective as of its date of issuance.

- e. VEPCO may operate one lead test assembly containing advanced zirconium-based alloys for one cycle, to a lead rod burn-up not exceeding 75,000 MWD/MTU, as described in the licensee's submittal dated February 11, 2002.
- f. Upon implementation of Amendment No. 232, adopting TSTF-448, Revision 3, the determination of Main Control Room/Emergency Switchgear Room (MCR/ESGR) envelope unfiltered air inleakage as required by TS SR 3.7.10.4 in accordance with TS 5.5.16.c(i), the assessment of MCR/ESGR envelope habitability as required by Specification 5.5.16.c(ii), and the measurement of MCR/ESGR envelope pressure as required by Specification 5.5.16.d, shall be considered met. Following implementation:
 - (i) The first performance of SR 3.7.10.4 in accordance with Specification 5.5.16.c(i), shall be within the specified frequency of 6 years plus the 18-month allowance of SR 3.0.2, as measured from September 21, 2003, the date of the most recent successful tracer gas test, as stated in the March 30, 2004 letter response to Generic Letter 2003-01, or within the next 18 months if the time period since the most recent successful tracer gas test is greater than 6 years.
 - (ii) The first performance of the periodic assessment of MCR/ESGR envelope habitability, Specification 5.5.16.c(ii), shall be within 3 years, plus the 9-month allowance of SR 3.0.2, as measured from September 21, 2003, the date of the most recent successful tracer gas test, as stated in the March 31, 2004 letter response to Generic Letter 2003-01, or within the next 9 months if the time period since the most recent successful tracer gas test is greater than 3 years.
 - (iii) The first performance of the periodic measurement of MCR/ESGR envelope pressure, Specification 5.5.16.d, shall be within 18 months, plus the 138 days allowed by SR 3.0.2, as measured from February 27, 2007, the date of the most recent successful pressure measurement test, or within 138 days if not performed previously.

- (4) The licensee is authorized to receive from the Surry Nuclear Power Station, Unit Nos. 1 and 2, possess, and store irradiated Surry Power Station fuel assemblies containing special nuclear material, enriched to not more than 4.1 percent by weight U-235, subject to the following conditions:
- a. Surry Power Station fuel assemblies may not be placed in North Anna Power Station, Unit Nos. 1 and 2, reactors.
 - b. Irradiated fuel shipped to North Anna Power Station shall have been removed from the Surry Power Station reactors no less than 730 days prior to shipment.
 - c. No more than 500 Surry Power Station irradiated fuel assemblies shall be received for storage at the North Anna Power Station, Unit Nos. 1 and 2, spent fuel pool.

(5) Environmental Protection Plan

The Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 178, is hereby incorporated in the subsequent renewed license. The licensee shall operate the facility in accordance with the Environmental Protection Plan.

D. Fire Protection

VEPCO shall implement and maintain in effect all provisions of the approved fire protection program as described in the licensee's Updated Final Safety Analysis Report for the facility and as approved in the SER dated February 1979 subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

E. Physical Protection

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: "Millstone, North Anna and Surry Power Stations' Security Plan, Training, and Qualification Plan, Safeguards Contingency Plan, and Independent Spent Fuel Storage Installation Security Program" with revisions submitted through May 15, 2006.

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved Kewaunee, Millstone, North Anna, and Surry Power Stations Cyber Security Plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The CSP was approved by

License Amendment No. 245, as supplemented by a change approved by License Amendment No. 258.

F. Updated Final Safety Analysis Report

- (1) The licensee's Updated Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on July 25, October 1, November 4, and December 2, 2002, describes certain future inspection activities to be completed before the period of extended operation. The licensee shall complete these activities no later than August 21, 2020, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.
- (2) The UFSAR supplement as revised on July 25, October 1, November 4, and December 2, 2002, shall be included in the next scheduled update to the UFSAR required by 10 CFR 50.71(e)(4), following the issuance of the renewed license. Until that update is complete, the licensee may make changes to the programs described in such supplement without prior Commission approval, provided that the licensee evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

G. Mitigation Strategy

Develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

- (1) Fire fighting response strategy with the following elements:
 - a. Pre-defined coordinated fire response strategy and guidance
 - b. Assessment of mutual aid fire fighting assets
 - c. Designated staging areas for equipment and materials
 - d. Command and control
 - e. Training of response personnel
- (2) Operations to mitigate fuel damage considering the following:
 - a. Protection and use of personnel assets
 - b. Communications
 - c. Minimizing fire spread
 - d. Procedures for implementing integrated fire response strategy
 - e. Identification of readily-available pre-staged equipment
 - f. Training on integrated fire response strategy
 - g. Spent fuel pool mitigation measures

(3) Actions to minimize release to include consideration of:

- a. Water spray scrubbing
- b. Dose to onsite responders

H.

COMMITMENT	SCHEDULED COMPLETION DATE
1. Dominion will perform the final acceptance of the North Anna 2 uncertainty analysis to ensure the results are bounded by the statements contained in this LAR (Attachment 5 Section I.1.D.4.1).	Prior to operating above 2893 MWt (98.4% RTP).
2. Technical Requirements Manual (TRM) will be revised to include UFM administrative controls (Attachment 1 Section 3.0).	Prior to operating above 2893 MWt (98.4% RTP).
3. Procedures and documents for the new UFM (Attachment 5 Section I.1.D.1.1, I.1.H, and VII.2.A).	Prior to operating above 2893 MWt (98.4% RTP).
4. Appropriate personnel will receive training on the UFM and affected procedures (Attachment 5 Sections I.1.D.1.1, VII.2.A, and VII.2.D).	Prior to operating above 2893 MWt (98.4% RTP).
5. Simulator changes and validation will be completed (Attachment 5 Section VII.2.C).	Prior to operating above 2893 MWt (98.4% RTP).
6. Revise existing plant operating procedures related to temporary operation above full steady-state licensed power levels (Attachment 5 Section VII.4).	Prior to operating above 2893 MWt (98.4% RTP).
7. Replace Steam Generator secondary manway bolts or change cumulative fatigue usage analysis to support using existing bolts for the licensed period for each unit (Attachment 5 Section IV.1.A.vi.2 and IV.1.B.ii).	Prior to exceeding 45 years of in-service use for each secondary manway bolt.

H. (continued)

COMMITMENT	SCHEDULED COMPLETION DATE
8. The impact of radiation effects on the EQ Program qualification requirements will be determined (Attachment 5 Section V.1.C).	Prior to operating above 2893 MWt (98.4% RTP).
9. The FAC Checkworks SFA models will be updated to reflect the MUR power uprate conditions (Attachment 5 Section IV.1.E.iii).	Prior to operating above 2893 MWt (98.4% RTP).
10. Dominion will determine the EQ-service life of the excore detectors. (Attachment 5 Section II.2).	Prior to operating above 2893 MWt (98.4% RTP).
11. Verify bounding calibration test data and confirm that actual field performance meets the uncertainty bounds established for the instruments	Prior to operating above 2893 MWt (98.4% RTP).
12. Confirm that the variation in the flow normalization factors over a 48-hour period is negligible and that the normalized venturi flows are an acceptable surrogate for the Ultrasonic Flow Meter flows during the 48-hour completion time	Prior to any such use above 2893 MWt (98.4% RTP).

I. Subsequent License Renewal License Conditions

- (1) The information in the Updated Final Safety Analysis Report supplement submitted as required by 10 CFR 54.21(d), and revised during the application review process, and the licensee's commitments listed in Appendix A of the "Safety Evaluation Report Related to the Subsequent License Renewal of North Anna Power Station, Units 1 and 2," dated January 2022, are collectively the "Subsequent License Renewal Updated Final Safety Analysis Report Supplement." This Supplement is henceforth part of the UFSAR which will be updated in accordance with 10 CFR 50.71(e).

As such, the licensee may make changes to the programs, activities, and commitments described in the Subsequent License Renewal Updated Final Safety Analysis Report Supplement, provided the licensee evaluates such changes pursuant to 10 CFR 50.59, "Changes, Tests and Experiments," and otherwise complies with the requirements in that section.

- (2) This Subsequent License Renewal Updated Final Safety Analysis

Report Supplement, as defined in subsequent renewed license condition [1] above, describes programs to be implemented and activities to be completed before the subsequent period of extended operation, which is the period following the August 21, 2040, expiration of the initial renewed license.

- a. The licensee shall implement those new programs and enhancements to existing programs no later than the date 6 months before the subsequent period of extended operation.
 - b. The licensee shall complete those activities by the date 6 months prior to the subsequent period of extended operation or by the end of the last refueling outage before the subsequent period of extended operation, whichever occurs later.
 - c. The licensee shall notify the NRC in writing within 30 days after having accomplished item (a) above and include the status of those activities that have been or remain to be completed in item 2(b) above.
 - d. The programs and commitments described in the Subsequent License Renewal Updated Final Safety Analysis Report Supplement shall continue in effect during the subsequent period of extended operation, to the extent set forth therein, unless modified in accordance with the process set forth in 10 CFR 50.59.
- J. This subsequent renewed license is effective as of the date of issuance and shall expire at midnight on August 21, 2060.

FOR THE NUCLEAR REGULATORY COMMISSION

R/A

Andrea D. Veil, Director
Office of Nuclear Reactor Regulation

Attachments:

1. Appendix A, Technical Specifications
2. Appendix B, Environmental Protection Plan

Date of Issuance: August 28, 2024

Appendix A: Technical Specifications

North Anna 2 uses the same Appendix A as North Anna 1. Please refer to North Anna 1 for Appendix A (ML052990145).

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)
TABLE OF CONTENTS**

Section		Page
1.0	Objectives of the Environmental Protection Plan	1-1
2.0	Environmental Protection Issues	2-1
2.1	Aquatic Issues	2-1
2.2	Terrestrial Issues	2-1
3.0	Consistency Requirements	3-1
3.1	Plant Design and Operation.....	3-1
3.2	Reporting Related to the VPDES Permits and State Certification.....	3-2
3.3	Changes Required for Compliance with Other Environmental Regulations	3-2
4.0	Environmental Conditions	4-1
4.1	Unusual or Important Environmental Events.....	4-1
4.2	Environmental Monitoring.....	4-1
4.2.1	Herbicide Application	4-1
4.2.2	Erosion Control Inspection.....	4-2
4.2.2.1	Erosion Control Inspection – Site	4-2
4.2.2.2	Erosion and Sediment Control Program – Corridor Rights-of-Way.....	4-3
4.2.3	Vegetation Studies.....	4-3
5.0	Administrative Procedures	5-1
5.1	Review and Audit.....	5-1
5.2	Records Retention	5-1
5.3	Changes in Environmental Protection Plan.....	5-1
5.4	Plant Reporting Requirements	5-2
5.4.1	Routine Reports.....	5-2
5.4.2	Nonroutine Reports	5-3

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)(xi) 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.

4.22 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.

4.22.1 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 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.

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.