

50-338/339

Innsbrook Technical Center  
5000 Dominion Road  
Glen Allen, Virginia 23155



VIRGINIA POWER

**Certified Mail**  
**Return Receipt Requested**

March 31, 2000

Dr. Janardan R. Pandey, P.E.  
Valley Regional Office  
P.O. Box 1129  
Harrisonburg, Va. 22801-1129

**Re: Application for Reissuance  
VPDES Permit No. VA0052451  
North Anna Power Station**

Dear Dr. Pandey:

Enclosed is the original application for reissuance of VPDES Permit No. VA0052451 submitted for your review prior to the regulatory deadline of April 5, 2000. Four additional copies are also being sent with this original. The application fee of \$8000 was previously submitted June 22, 1999 (see enclosure).

As we previously discussed, the waivers granted by the DEQ for the last VPDES permit reissuance continue to apply provided there have been no significant changes at the power station. Attached is our written request for waivers, and the requests previously approved are formally restated in accordance with Forms 2C, 2E and 2F instructions.

We have carefully reviewed the existing permit and request that DEQ consider the following changes:

- **Outfalls 101 & 102, Units 1 & 2, Flash Evaporators.** The flash evaporator systems have been abandoned and we request these outfalls be deleted from the permit. There are no plans to reinstate this equipment or reactivate these discharges.
- **Outfall 107 - Bearing Cooling System Discharge - Lake to Lake Operation.** The proposed increase in flow would be intermittent, comprised of lake water only. This system may require the use of a zinc and/or phosphate corrosion inhibitor. Material safety data sheets are attached to this application.

2001

- **Outfall 114 – New Outfall - Service Water Tie-In Vault Drain.** This new outfall will be used when leakage accumulates in the Pipe Vault adjacent to the Service Water Reservoir. It is not currently in use, and would not discharge unless a seal or valve failed or possibly during maintenance. Outfall 108 (Service Water Overboard) was sampled to represent this outfall.
- **Outfall 115 – New Outfall - Service Water System Blowdown.** This outfall is identical to Outfall 108, the Service Water Overboard and is represented by data from Outfall 108 samples.
- **Outfall 019 - Domestic Water Overflow.** This outfall is entirely composed of groundwater used for the potable water supply. No pollutants are added to this water, and a discharge would occur only if the holding tank overflowed. We request that this outfall be deleted from the permit.
- In the table and discussion that follows below, we have requested reductions and relief from certain monitoring requirements, in most cases justified by our analyses based on the 4/19/96 EPA memorandum titled "Interim Guidance for Performance-Based Reductions of NPDES Permit Monitoring Frequencies" and the 5/4/98 DEQ "Guidance Memorandum #98-2005 – Reduced Monitoring". The results of our analyses are attached to this cover letter for your review and additional justifications are offered in the discussion that follows the table.

<b>NORTH ANNA - VPDES Monitoring Reduction Requests</b>			
<b>Outfall</b>	<b>Permit Requirement</b>	<b>Current Permit</b>	<b>Requested change</b>
Outfall 009, Settling Pond	TSS	2/month	1/quarter
Outfall 020, Reverse Osmosis Reject	TSS	2/month	1/quarter
Outfall 103, Process Waste Clarifier	pH, TSS and O&G	2/month	1/quarter or none
Outfall 104, Oil/Water Separator & Storm Water	pH, TSS and O&G	2/month	1/quarter
Outfall 109, Hot Well Drain Unit 1	pH, TSS and O&G	1/month	1/6 months
Outfall 110, Hot Well Drain Unit 2	pH, TSS and O&G	1/month	1/6 months
Outfall 111, Main Sewage Treatment Plant	BOD <sub>5</sub> , TSS, pH	1/month	1/6 months
Outfall 112, Steam Generator Blowdown Unit 1	pH, TSS and O&G	1/month	1/6 months or none
Outfall 113, Steam Generator Blowdown Unit 2	pH, TSS and O&G	1/month	1/6 months or none

**Outfall 009, Settling Pond** - We request that the TSS monitoring frequency requirement be reduced from 2/month to 1/quarter. We had no permit violations for these parameters during the three-year period from 1997-1999.

**Outfall 020, Reverse Osmosis Reject** - We request that the TSS monitoring frequency requirement be reduced from 2/month to 1/quarter. We had no permit violations for these parameters during the three-year period from 1997-1999.

**Outfall 103, Process Waste Clarifier** - We request that the pH, TSS and O&G monitoring frequency requirement be reduced from 2/month to 1/quarter. We had no permit violations for these parameters during the three-year period from 1997-1999.

**Outfall 104, Oil/Water Separator & Storm Water** - We request that the pH, TSS and O&G monitoring frequency requirement be reduced from 2/month to 1/quarter. We had no permit violations for these parameters during the three-year period from 1997-1999.

**Outfall 109, Hot Well Drain Unit 1** - We request that the pH, TSS and O&G monitoring frequency requirement be reduced from 1/month to 1/6 months. We had no permit violations for these parameters during the three-year period from 1997-1999.

**Outfall 110, Hot Well Drain Unit 2** - We request that the pH, TSS and O&G monitoring frequency requirement be reduced from 1/month to 1/6 months. We had no permit violations for these parameters during the three-year period from 1997-1999.

**Outfall 111, Main Sewage Treatment Plant** - We request that the BOD<sub>5</sub>, TSS and pH monitoring frequency requirement be reduced from 1/month to 1/6 months. We had no permit violations for these parameters during the three-year period from 1997-1999.

**Outfall 112, Steam Generator Blowdown Unit 1** - We request that the pH, TSS and O&G monitoring frequency requirement be reduced from 1/month to 1/6 months. We had no permit violations for these parameters during the three-year period from 1997-1999.

**Outfall 113, Steam Generator Blowdown Unit 2** - We request that the pH, TSS and O&G monitoring frequency requirement be reduced from 1/month to 1/6 months. We had no permit violations for these parameters during the three-year period from 1997-1999.

**Lake Level Contingency Plan** - As we discussed with you and Keith Fowler, a bill that will require the inclusion of a "Lake Level Contingency Plan" in the VPDES permit for North Anna was passed by both the House and Senate during this year's General Assembly session. We have been taking an independent and proactive approach to addressing this matter, and anticipate working with you to ensure that this condition is developed in a manner that will support the timely reissuance of the permit.

Dr. Janardan R. Pandey, P.E.

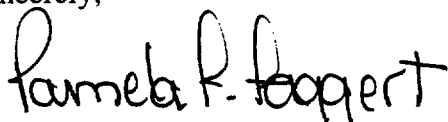
March 31, 2000

Page 4 of 5

**Condition 7, Current VPDES Permit** – As we discussed, we request a DEQ review of the 401 and 21(b) certificates referenced in Special Condition #7 of the current VPDES permit. We believe that portions of this condition may be obsolete but we would like to clarify any requirements that may still be applicable.

If you have any questions concerning this application, please direct your call to Joyce Livingstone at (804) 273-2985.

Sincerely,



Pamela F. Faggert  
Vice President and  
Chief Environmental Officer

**Attachments**

- *DEQ application notification letter – 10/13/99*
- *Basis for Monitoring Reduction Requests – Data Analysis*
- *Submittal of Application Fee – 6/22/99*
  - *Pink copy of Permit Application Fee Form*
  - *Copy of Permit Fee Check, \$8000*
- *Request for Waivers from Sampling and Testing Parameters, 6/21/99*
- *VPDES Outfall Descriptions and Sampling Points*
- *EPA Form 3510-1*
- *Topographic Map – required by EPA Form 3510-1, Section XI*
- *VPDES Outfall Location Map – required by EPA Form 3510-1, Section XI*
- *One Line Diagram – required by EPA Form 3510-2C, Section II.A*
- *EPA Form 3510-2C*
- *Addendum to Form 3510-2C*
- *Virginia Power Detection Levels For EPA Form 3510-2C Data*
- *Routinely Used Chemicals - to support EPA Form 3510-2C, Section V*
- *Material Safety Data Sheets*
- *Outfall 001 Toxicity Data Summary – to support EPA Form 3510-2C, Section VII*
- *EPA Form 3510-2E*
- *Treatment System Component Description (to support EPA Form 3510-2E, Section VI),*
- *VPDES Sewage Sludge Permit Application Form*
- *Topographic Map – required by Sewage Sludge Permit Application, Section A.5*
- *Flow Diagram WWTP - required by Sewage Sludge Permit Application, Section A.6*
- *Sludge Management Plan for North Anna Power Station 10/20/97*
- *EPA Form 3510-2F*
- *Storm Water Drainage Area Description (to support EPA Form 3510-2F, Section IV-B)*

Dr. Janardan R. Pandey, P.E.

March 31, 2000

Page 5 of 5

cc: U.S. Nuclear Regulatory Commission  
Region II  
Atlanta Federal Center  
61 Forsyth Street, SW, Suite 23T85  
Atlanta, Georgia 30303  
RE: North Anna Units 1 & 2  
Docket Nos. 50-338/50-339  
License Nos. NPF-4/NPF-7

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555  
RE: North Anna Units 1 & 2  
Docket Nos. 50-338/50-339  
License Nos. NPF-4/NPF-7

Department of Environmental Quality  
Valley Regional Office (4 copies of complete application)  
P.O. Box 1129  
Harrisonburg, Va. 22801-1129

Mr. M. J. Morgan  
NRC Senior Resident Inspector  
North Anna Power Station

**DEQ Application Notification Letter**  
**10/13/99**



Asplund  
Cory Carter Cooke

# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

### Valley Regional Office

James S. Gilmore, III  
Governor

Street address: 4411 Early Road, Harrisonburg, Virginia 22801  
Mailing address: P.O. Box 1129, Harrisonburg, VA 22801-1129  
Telephone (540) 574-7800 Fax (540) 574-7878  
<http://www.deq.state.va.us>

Dennis H. Treacy  
Director

John Paul Woodley, Jr.  
Secretary of Natural Resources

R. Bradley Chewning, P.E.  
Valley Regional Director

October 13, 1999

Ms. Pamela Faggert  
Virginia Power  
5000 Dominion Boulevard  
Glen Allen, VA 23060

Re: Reissuance of VPDES Permit No. VA0052451  
Virginia Power - North Anna

Dear Ms. Faggert:

This letter is to remind you that your referenced permit will expire on October 02, 2000. If you wish to continue discharging from the wastewater treatment facilities, you must reapply for the permit. The State Water Control Board's VPDES Permit Regulation requires that we receive a complete application at least 180 days before the existing permit expires. The deadline for submitting the application is **April 05, 2000**. Early submissions are encouraged to resolve any application discrepancies prior to the deadline, and to provide you with earlier notice of any expected permit changes. The application forms and instructions are enclosed.

7000  
9/22/99  
In addition, per State Law and our Permit Fee Regulation, we must receive the appropriate permit fee before we can process your application for permit reissuance. The permit fees are listed on the back of the permit fee form. Please follow the instructions on the front of the form concerning the payment of the fee.

If you have any questions concerning the requirements for your permit, please let me know.

Sincerely,

Janardan R. Pandey, P.E.  
Environmental Engineer Senior

Enclosure

# **Basis for Monitoring Reduction Requests Data Analysis**



VALUES BELOW DETECTION ARE TREATED AS ZERO

CANDIDATES FOR MONITORING REDUCTION

DISCHARGE	PARAMETER	TYPE	NUMBER OF MONTHS WITH FLOW	THREE-YEAR MEAN	PERMIT LIMIT	ACTUAL PERFORMANCE/PERMIT LIMIT PERCENT	BASELINE MONITORING	REQUESTED FREQUENCY
9	TSS	AVERAGE CONCENTRATION	35	2.3676	30	7.8922	2/MONTH	1/ QUARTER
		MAXIMUM CONCENTRATION	35	2.8912	100	2.8912	2/MONTH	1/ QUARTER
20	TSS	AVERAGE CONCENTRATION	36	0.4086	30	1.3619	2/MONTH	1/ QUARTER
		MAXIMUM CONCENTRATION	36	0.7200	100	0.7200	2/MONTH	1/ QUARTER
103	OIL & GR	AVERAGE CONCENTRATION	35	0.0000	15	0.0000	2/MONTH	1/ QUARTER
		MAXIMUM CONCENTRATION	35	0.3441	20	1.7206	2/MONTH	1/ QUARTER
103	TSS	AVERAGE CONCENTRATION	35	1.6618	30	5.5392	2/MONTH	1/ QUARTER
		MAXIMUM CONCENTRATION	35	2.4382	100	2.4382	2/MONTH	1/ QUARTER
104	OIL & GR	AVERAGE CONCENTRATION	35	0.9324	15	6.2157	2/MONTH	1/ QUARTER
		MAXIMUM CONCENTRATION	35	2.8559	20	14.2794	2/MONTH	1/ QUARTER
104	TSS	AVERAGE CONCENTRATION	35	4.8515	30	16.1716	2/MONTH	1/ QUARTER
		MAXIMUM CONCENTRATION	35	6.1235	100	6.1235	2/MONTH	1/ QUARTER
109	OIL & GR	AVERAGE CONCENTRATION	25	0.0000	15	0.0000	1/MONTH	1/ 6 MONTHS
		MAXIMUM CONCENTRATION	25	0.0000	20	0.0000	1/MONTH	1/ 6 MONTHS
109	TSS	AVERAGE CONCENTRATION	27	0.1750	30	0.5833	1/MONTH	1/ 6 MONTHS
		MAXIMUM CONCENTRATION	27	0.1750	100	0.1750	1/MONTH	1/ 6 MONTHS
110	OIL & GR	AVERAGE CONCENTRATION	27	0.0000	15	0.0000	1/MONTH	1/ 6 MONTHS
		MAXIMUM CONCENTRATION	27	0.0000	20	0.0000	1/MONTH	1/ 6 MONTHS
110	TSS	AVERAGE CONCENTRATION	28	0.0714	30	0.2381	1/MONTH	1/ 6 MONTHS
		MAXIMUM CONCENTRATION	28	0.0714	100	0.0714	1/MONTH	1/ 6 MONTHS
111	BOD5	AVERAGE CONCENTRATION	35	5.7429	30	19.1429	1/MONTH	1/ 6 MONTHS
		MAXIMUM CONCENTRATION	35	5.7429	45	12.7619	1/MONTH	1/ 6 MONTHS

VALUES BELOW DETECTION ARE TREATED AS ZERO

CANDIDATES FOR MONITORING REDUCTION

DISCHARGE	PARAMETER	TYPE	NUMBER OF MONTHS WITH FLOW	THREE-YEAR MEAN	PERMIT LIMIT	ACTUAL PERFORMANCE/PERMIT LIMIT PERCENT	BASELINE MONITORING	REQUESTED FREQUENCY
111	TSS	AVERAGE CONCENTRATION	35	10.7943	30	35.9810	1/MONTH	1/ QUARTER
		MAXIMUM CONCENTRATION	35	10.7943	45	23.9873	1/MONTH	1/ 6 MONTHS
112	OIL & GR	AVERAGE CONCENTRATION	35	0.0000	15	0.0000	1/MONTH	1/ 6 MONTHS
		MAXIMUM CONCENTRATION	35	0.0000	20	0.0000	1/MONTH	1/ 6 MONTHS
112	TSS	AVERAGE CONCENTRATION	35	0.3286	30	1.0952	1/MONTH	1/ 6 MONTHS
		MAXIMUM CONCENTRATION	35	0.3286	100	0.3286	1/MONTH	1/ 6 MONTHS
113	OIL & GR	AVERAGE CONCENTRATION	35	0.0000	15	0.0000	1/MONTH	1/ 6 MONTHS
		MAXIMUM CONCENTRATION	35	0.0000	20	0.0000	1/MONTH	1/ 6 MONTHS
113	TSS	AVERAGE CONCENTRATION	35	0.9500	30	3.1667	1/MONTH	1/ 6 MONTHS
		MAXIMUM CONCENTRATION	35	1.3800	100	1.3800	1/MONTH	1/ 6 MONTHS

## NORTH ANNA PH MONITORING RESULTS

OUTFALL NUMBER	YEAR	MONTH	LOWER LIMIT + .5	* INDICATES AN EXCEEDENCE	MINIMUM PH	MAXIMUM PH	* INDICATES AN EXCEEDENCE	UPPER LIMIT - 0.5
005	1997	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		6	6.5		NO FLOW	.		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
007	1997	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		6	6.5		NO FLOW	.		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
009	1997	1	6.5		7.76	7.86		8.5
		2	6.5		7.44	7.48		8.5
		3	6.5		6.88	7.45		8.5
		5	6.5	*	6.4	8.85	*	8.5
		6	6.5		6.77	6.85		8.5
		7	6.5		7.07	7.30		8.5
		8	6.5		7	7.24		8.5
		9	6.5		7.11	7.24		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		7.18	7.56		8.5
		12	6.5		7.29	7.29		8.5
009	1998	1	6.5		7.19	7.20		8.5
		2	6.5		7.48	7.62		8.5
		3	6.5		7.24	7.53		8.5
		4	6.5		7.08	7.40		8.5
		5	6.5		6.98	7.09		8.5
		6	6.5		6.85	7.09		8.5
		7	6.5		7.03	7.31		8.5
		8	6.5		6.97	7.48		8.5
		9	6.5		6.94	7.26		8.5
		10	6.5		6.95	7.70		8.5
		11	6.5		7.11	7.44		8.5
		12	6.5		6.7	6.98		8.5
009	1999	1	6.5		6.82	7.01		8.5
		2	6.5		6.8	7.70		8.5
		3	6.5		6.98	7.06		8.5
		4	6.5		6.75	6.90		8.5
		5	6.5		7.33	7.48		8.5
		6	6.5		6.95	7.88		8.5
		7	6.5		6.95	7.02		8.5
		8	6.5		7.21	7.80		8.5
		9	6.5		7.28	7.70		8.5
		10	6.5		7	7.10		8.5
		11	6.5		6.97	7.11		8.5
		12	6.5		7.06	7.46		8.5
013	1997	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		6	6.5		NO FLOW	.		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5

## NORTH ANNA PH MONITORING RESULTS

OUTFALL NUMBER	YEAR	MONTH	LOWER LIMIT + .5	* INDICATES AN EXCEEDENCE	MINIMUM PH	MAXIMUM PH	* INDICATES AN EXCEEDENCE	UPPER LIMIT - 0.5
013	1998	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		4	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		6	6.5		NO FLOW	.		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
013	1999	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		4	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
014	1997	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		6	6.5		NO FLOW	.		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
014	1998	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		4	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		6	6.5		NO FLOW	.		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
014	1999	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		4	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
019	1997	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		6	6.5		NO FLOW	.		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
019	1998	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		4	6.5		NO FLOW	.		8.5

NORTH ANNA PH MONITORING RESULTS

OUTFALL NUMBER	YEAR	MONTH	LOWER LIMIT + .5	* INDICATES AN EXCEEDENCE	MINIMUM PH	MAXIMUM PH	* INDICATES AN EXCEEDENCE	UPPER LIMIT - 0.5
019	1998	5	6.5		NO FLOW	.		8.5
		6	6.5		NO FLOW	.		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
019	1999	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		4	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
020	1997	1	6.5		6.88	7.28		8.5
		2	6.5		7.22	7.56		8.5
		3	6.5		7.32	7.35		8.5
		5	6.5		7.28	7.57		8.5
		6	6.5		7.12	7.14		8.5
		7	6.5		7.1	7.31		8.5
		8	6.5		7.25	7.35		8.5
		9	6.5		7.02	7.39		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		7.41	7.50		8.5
		12	6.5	*	6.47	7.32		8.5
020	1998	1	6.5		7.28	7.58		8.5
		2	6.5		7.14	7.28		8.5
		3	6.5		7.33	7.40		8.5
		4	6.5		7.45	7.61		8.5
		5	6.5		7.25	7.27		8.5
		6	6.5		7.22	7.24		8.5
		7	6.5		7.16	7.20		8.5
		8	6.5		7.19	7.34		8.5
		9	6.5		7.3	7.35		8.5
		10	6.5		7.1	7.22		8.5
		11	6.5		6.73	7.04		8.5
		12	6.5		7	7.06		8.5
020	1999	1	6.5		6.96	7.03		8.5
		2	6.5		6.93	6.99		8.5
		3	6.5		7.09	7.25		8.5
		4	6.5		6.56	7.47		8.5
		5	6.5		6.9	7.00		8.5
		6	6.5		7	7.02		8.5
		7	6.5		6.92	7.20		8.5
		8	6.5		7.47	7.50		8.5
		9	6.5		7.4	7.62		8.5
		10	6.5		7.15	7.33		8.5
		11	6.5		7.08	7.20		8.5
		12	6.5		7.08	7.20		8.5
021	1999	4	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
101	1997	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		6	6.5		NO FLOW	.		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5

## NORTH ANNA PH MONITORING RESULTS

OUTFALL NUMBER	YEAR	MONTH	LOWER LIMIT + .5	* INDICATES AN EXCEEDENCE	MINIMUM PH	MAXIMUM PH	* INDICATES AN EXCEEDENCE	UPPER LIMIT - 0.5
101	1997	12	6.5		NO FLOW	.		8.5
101	1998	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		4	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		6	6.5		NO FLOW	.		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
101	1999	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		4	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
102	1997	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		6	6.5		NO FLOW	.		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
102	1998	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		4	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		6	6.5		NO FLOW	.		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
102	1999	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		4	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
103	1997	1	6.5		7.29	7.36		8.5
		2	6.5		7.16	7.18		8.5
		3	6.5		7.35	7.52		8.5
		5	6.5		7.48	7.55		8.5
		6	6.5		7.15	7.34		8.5
		7	6.5		7.17	7.19		8.5
		8	6.5		7.08	7.24		8.5
		9	6.5		7.31	7.52		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		7.17	7.36		8.5
		12	6.5		7.02	7.29		8.5
103	1998	1	6.5		7.2	7.38		8.5
		2	6.5		7.17	7.60		8.5
		3	6.5		7.24	7.44		8.5
		4	6.5		7.13	7.27		8.5

## NORTH ANNA PH MONITORING RESULTS

OUTFALL NUMBER	YEAR	MONTH	LOWER LIMIT + .5	* INDICATES AN EXCEEDENCE	MINIMUM PH	MAXIMUM PH	* INDICATES AN EXCEEDENCE	UPPER LIMIT - 0.5
103	1998	5	6.5		6.84	6.93		8.5
		6	6.5		6.78	6.81		8.5
		7	6.5		6.82	6.89		8.5
		8	6.5		6.87	6.89		8.5
		9	6.5		6.96	6.98		8.5
		10	6.5		6.8	6.84		8.5
		11	6.5		6.86	6.95		8.5
		12	6.5		6.84	6.87		8.5
103	1999	1	6.5		6.84	6.93		8.5
		2	6.5		6.88	6.92		8.5
		3	6.5		6.84	6.99		8.5
		4	6.5		6.8	6.90		8.5
		5	6.5		6.91	6.92		8.5
		6	6.5		6.81	6.86		8.5
		7	6.5		6.82	7.13		8.5
		8	6.5		7.14	7.33		8.5
		9	6.5		7.12	7.14		8.5
		10	6.5		7	7.12		8.5
		11	6.5		6.89	7.05		8.5
		12	6.5		7.06	7.45		8.5
104	1997	1	6.5		7.29	7.36		8.5
		2	6.5		7.16	7.18		8.5
		3	6.5		7.35	7.52		8.5
		5	6.5		7.48	7.55		8.5
		6	6.5		7.15	7.34		8.5
		7	6.5		7.17	7.19		8.5
		8	6.5		7.08	7.24		8.5
		9	6.5		7.31	7.52		8.5
		10	6.5		NO FLOW			8.5
		11	6.5		7.17	7.36		8.5
		12	6.5		7.02	7.29		8.5
104	1998	1	6.5		7.2	7.38		8.5
		2	6.5		7.17	7.60		8.5
		3	6.5		7.24	7.44		8.5
		4	6.5		7.13	7.27		8.5
		5	6.5		6.84	6.93		8.5
		6	6.5		6.78	6.81		8.5
		7	6.5		6.82	6.89		8.5
		8	6.5		6.87	6.89		8.5
		9	6.5		6.96	6.98		8.5
		10	6.5		6.8	6.84		8.5
		11	6.5		6.86	6.95		8.5
		12	6.5		6.84	6.87		8.5
104	1999	1	6.5		6.84	6.93		8.5
		2	6.5		6.88	6.92		8.5
		3	6.5		6.84	6.99		8.5
		4	6.5		6.8	6.90		8.5
		5	6.5		6.91	6.92		8.5
		6	6.5		6.81	6.86		8.5
		7	6.5		6.82	7.13		8.5
		8	6.5		7.14	7.33		8.5
		9	6.5		7.12	7.14		8.5
		10	6.5		7	7.12		8.5
		11	6.5		6.89	7.05		8.5
		12	6.5		7.06	7.45		8.5
105	1997	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		6	6.5		NO FLOW	.		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5

## NORTH ANNA PH MONITORING RESULTS

OUTFALL NUMBER	YEAR	MONTH	LOWER LIMIT + .5	* INDICATES AN EXCEEDENCE	MINIMUM PH	MAXIMUM PH	* INDICATES AN EXCEEDENCE	UPPER LIMIT - 0.5
105	1998	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		4	6.5		7.13	7.27		8.5
		5	6.5		NO FLOW	.		8.5
		6	6.5		NO FLOW	.		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
105	1999	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		4	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		7	6.5		6.82	7.13		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		7	7.12		8.5
		11	6.5		6.89	7.05		8.5
		12	6.5		7.06	7.45		8.5
106	1997	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		6	6.5		NO FLOW	.		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
107	1998	4	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
107	1999	4	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
108	1997	1	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		6	6.5		NO FLOW	.		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
108	1998	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		4	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		6	6.5		NO FLOW	.		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
108	1999	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		4	6.5		NO FLOW	.		8.5



## NORTH ANNA PH MONITORING RESULTS

OUTFALL NUMBER	YEAR	MONTH	LOWER LIMIT + .5	* INDICATES AN EXCEEDENCE	MINIMUM PH	MAXIMUM PH	* INDICATES AN EXCEEDENCE	UPPER LIMIT - 0.5
108	1999	5	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		7	7.12		8.5
		12	6.5		7.06	7.45		8.5
109	1997	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		5	6.5		7.48	7.55		8.5
		6	6.5		7.15	7.34		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
109	1998	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		4	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		6	6.5		NO FLOW	.		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		6.96	6.98		8.5
		10	6.5		6.8	6.84		8.5
		11	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
109	1999	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		4	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
110	1997	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		6	6.5		NO FLOW	.		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		NO FLOW	.		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
		12	6.5		7.02	7.29		8.5
110	1998	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		3	6.5		NO FLOW	.		8.5
		4	6.5		7.13	7.27		8.5
		5	6.5		6.84	6.93		8.5
		7	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		6.96	6.98		8.5
		10	6.5		NO FLOW	.		8.5
		11	6.5		NO FLOW	.		8.5
		12	6.5		NO FLOW	.		8.5
110	1999	1	6.5		NO FLOW	.		8.5
		2	6.5		NO FLOW	.		8.5
		4	6.5		NO FLOW	.		8.5
		5	6.5		NO FLOW	.		8.5
		8	6.5		NO FLOW	.		8.5
		9	6.5		7.12	7.14		8.5
		10	6.5		7	7.12		8.5
		11	6.5		6.89	7.05		8.5
		12	6.5		NO FLOW	.		8.5

## NORTH ANNA PH MONITORING RESULTS

OUTFALL NUMBER	YEAR	MONTH	LOWER LIMIT + .5	* INDICATES AN EXCEEDENCE	MINIMUM PH	MAXIMUM PH	* INDICATES AN EXCEEDENCE	UPPER LIMIT - 0.5
111	1997	1	6.5		7.34	7.34		8.5
		2	6.5		7	7.00		8.5
		3	6.5		7.32	7.32		8.5
		5	6.5		7.17	7.17		8.5
		6	6.5		7.11	7.11		8.5
		7	6.5		7.23	7.23		8.5
		8	6.5		7.51	7.51		8.5
		9	6.5		6.88	6.88		8.5
		10	6.5	*	6.37	6.37		8.5
		11	6.5		6.95	6.95		8.5
		12	6.5		6.81	6.81		8.5
111	1998	1	6.5		7.81	7.81		8.5
		2	6.5		7.12	7.12		8.5
		3	6.5		7.2	7.20		8.5
		4	6.5		7.15	7.15		8.5
		5	6.5		6.9	6.90		8.5
		6	6.5		7.07	7.07		8.5
		7	6.5		7.23	7.23		8.5
		8	6.5		7.14	7.14		8.5
		9	6.5		6.9	6.90		8.5
		10	6.5		7.15	7.15		8.5
		11	6.5		6.8	6.80		8.5
		12	6.5		7.24	7.24		8.5
111	1999	1	6.5		6.61	6.61		8.5
		2	6.5		6.82	6.82		8.5
		3	6.5		6.51	6.51		8.5
		4	6.5		6.77	6.77		8.5
		5	6.5		6.5	6.50		8.5
		6	6.5		7.14	7.14		8.5
		7	6.5		6.97	6.97		8.5
		8	6.5		7.21	7.21		8.5
		9	6.5		7.15	7.15		8.5
		10	6.5		7.14	7.14		8.5
		11	6.5		7.27	7.27		8.5
		12	6.5		7.23	7.23		8.5
112	1997	1	6.5		7.29	7.36		8.5
		2	6.5		7.16	7.18		8.5
		3	6.5		7.35	7.52		8.5
		5	6.5		7.48	7.55		8.5
		6	6.5		7.15	7.34		8.5
		7	6.5		7.17	7.19		8.5
		8	6.5		7.08	7.24		8.5
		9	6.5		7.31	7.52		8.5
		10	6.5		7.22	7.26		8.5
		11	6.5		7.17	7.36		8.5
		12	6.5		7.02	7.29		8.5
112	1998	1	6.5		7.2	7.38		8.5
		2	6.5		7.17	7.60		8.5
		3	6.5		7.24	7.44		8.5
		4	6.5		7.13	7.27		8.5
		5	6.5		6.84	6.93		8.5
		6	6.5		6.78	6.81		8.5
		7	6.5		6.82	6.89		8.5
		8	6.5		6.87	6.89		8.5
		9	6.5		6.96	6.98		8.5
		10	6.5		6.8	6.84		8.5
		11	6.5		6.86	6.95		8.5
		12	6.5		6.84	6.87		8.5
112	1999	1	6.5		6.84	6.93		8.5
		2	6.5		6.88	6.92		8.5
		3	6.5		6.84	6.99		8.5
		4	6.5		6.8	6.90		8.5
		5	6.5		6.91	6.92		8.5
		6	6.5		6.81	6.86		8.5
		7	6.5		6.82	7.13		8.5
		8	6.5		7.14	7.33		8.5
		9	6.5		7.12	7.14		8.5

## NORTH ANNA PH MONITORING RESULTS

OUTFALL NUMBER	YEAR	MONTH	LOWER LIMIT + .5	* INDICATES AN EXCEEDENCE	MINIMUM PH	MAXIMUM PH	* INDICATES AN EXCEEDENCE	UPPER LIMIT - 0.5
112	1999	10	6.5		7	7.12		8.5
		11	6.5		6.89	7.05		8.5
		12	6.5		7.06	7.45		8.5
113	1997	1	6.5		7.29	7.36		8.5
		2	6.5		7.16	7.18		8.5
		3	6.5		7.35	7.52		8.5
		5	6.5		7.48	7.55		8.5
		6	6.5		7.15	7.34		8.5
		7	6.5		7.17	7.19		8.5
		8	6.5		7.08	7.24		8.5
		9	6.5		7.01	7.52		8.5
		10	6.5		7.22	7.26		8.5
		11	6.5		7.17	7.17		8.5
		12	6.5		7.02	7.29		8.5
113	1998	1	6.5		7.2	7.38		8.5
		2	6.5		7.17	7.60		8.5
		3	6.5		7.24	7.44		8.5
		4	6.5		7.13	7.27		8.5
		5	6.5		6.84	6.93		8.5
		6	6.5		6.78	6.81		8.5
		7	6.5		6.82	6.89		8.5
		8	6.5		6.87	6.89		8.5
		9	6.5		6.96	6.98		8.5
		10	6.5		6.8	6.84		8.5
		11	6.5		6.86	6.95		8.5
		12	6.5		6.84	6.87		8.5
113	1999	1	6.5		6.84	6.93		8.5
		2	6.5		6.88	6.92		8.5
		3	6.5		6.84	6.99		8.5
		4	6.5		6.8	6.90		8.5
		5	6.5		6.91	6.92		8.5
		6	6.5		6.81	6.86		8.5
		7	6.5		6.82	7.13		8.5
		8	6.5		7.14	7.33		8.5
		9	6.5		7.12	7.14		8.5
		10	6.5		7	7.12		8.5
		11	6.5		6.89	7.05		8.5
		12	6.5		7.06	7.45		8.5

Submittal of Application Fee  
6/22/99

**Certified Mail**  
**Return Receipt Requested**

June 22, 1999

Department of Environmental Quality  
Receipts Control  
P. O. Box 10150  
Richmond, Virginia 23240

**Re: Submittal of Application Fee - VPDES Permit No. VA0052451**  
**Virginia Power North Anna Power Station**

Dear Sir or Madam:

Please find enclosed a check in the amount of \$8000.00 to be applied to VPDES Permit reissuance application fee for the above-mentioned facility. The white and yellow copies of the DEQ application fee form are also included and the pink copy will be attached to the application in accordance with the instructions.

If you have any questions, please do not hesitate to contact me at (804) 273-2985.

Sincerely,



Joyce Livingstone  
Environmental Specialist

Enclosures: Application fee form, check for \$8000

cc: Dr. Janardan R. Pandey – Valley Regional Office  
P. O. Box 1129  
Harrisonburg, Virginia 22801-1129

ebc:

Robert Asplund  
Carter Cooke  
Kenneth Roller

DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER DIVISION  
PERMIT APPLICATION FEE

2747

INSTRUCTIONS

Applicants for individual Virginia Pollutant Discharge Elimination System (VPDES), Virginia Pollution Abatement (VPA), Virginia Water Protection (VWP), Surface Water Withdrawal (SWW), and Ground Water Withdrawal (GWW) Permits for facilities and activities other than agricultural operations engaged in production for market are required to pay permit application fees. Fees are also required for registration for coverage under General Permits except for the general permits for sewage treatment systems with discharges of 1,000 gallons per day (GPD) or less and for Corrective Action Plans for leaking underground storage tanks. Except for VWP permits, fees must be paid when applications for permit issuance, reissuance or modification are submitted. Applicants for VWP permits will be notified by the DEQ Water Division VWP Permit Office of the fee due. Applications will be considered incomplete if the proper fee is not paid and will not be processed until the fee is received.

The permit fee schedule can be found on the back of this form. Fees for permit issuance/reissuance and for permit modification are included. Once you have determined the fee for the type of application you are submitting, complete this form. The white and yellow copies of the form and your check or money order payable to "Commonwealth of Virginia--DEQ" should be mailed to the Department of Environmental Quality, Receipts Control, P.O. Box 10150, Richmond, VA 23240 in the attached stamped, addressed envelope. The pink copy of the form and a copy of your check or money order should accompany the permit application. The gold copy is for your records. Please direct any questions regarding this form or fee payment to the DEQ Water Division Office to which you are submitting your application.

APPLICANT NAME: Virginia Power SSN/FIN: \_\_\_\_\_

ADDRESS: 5000 Dominion Blvd DAYTIME PHONE: (804) 273-2985  
Glen Allen, Virginia 23060 Area Code

FACILITY/ACTIVITY NAME/LOCATION: North Anna Power Station  
Rt. 700 N, (Louisa) Mineral, Virginia 23117

TYPE OF PERMIT APPLIED FOR (from Fee Schedule): VPDES Industrial Major

TYPE OF ACTION: \_\_\_\_\_ New Issuance ☒ Reissuance \_\_\_\_\_ Modification

AMOUNT OF FEE SUBMITTED (from Fee Schedule): \$ 8000.00

EXISTING PERMIT NUMBER (if applicable): VA0052451

WATER DIVISION OFFICE TO WHICH APPLICATION SUBMITTED (check one)

- |  |   |   |                                       |
|--|---|---|---------------------------------------|
| <input type="checkbox"/> Abingdon/SWRO         | <input checked="" type="checkbox"/> Bridgewater/VRO | <input type="checkbox"/> Prince William/NRO | <input type="checkbox"/> Richmond/PRO |
| <input type="checkbox"/> Richmond/Headquarters | <input type="checkbox"/> Roanoke/WCRO               | <input type="checkbox"/> Virginia Beach/TRO |                                       |

FOR DEQ USE ONLY

Date: \_\_\_\_\_

DC #: \_\_\_\_\_

White and Yellow Copies - DEQ Accounting Office  
Pink Copy - DEQ Regional or Permit Program Office  
Gold Copy - Applicant

Request for Waivers from Sampling and  
Testing Parameters  
6/21/99

June 21, 1999

Dr. Janardan R. Pandey  
Valley Regional Office  
P.O. Box 1129  
Harrisonburg, Virginia 22801-1129

**Re: Request for Waivers from Sampling and Testing Parameters  
Reissuance of VPDES Permit No. VA0052451  
Virginia Power - North Anna Power Station**

Dear Dr. Pandey :

The attached document identifies our sampling and testing obligations for the above-mentioned VPDES permit reissuance application, and details our requests for sampling and testing waivers. While some of the waivers have been previously approved, the requests are formally restated in accordance with Forms 2C, 2E and 2F instructions.

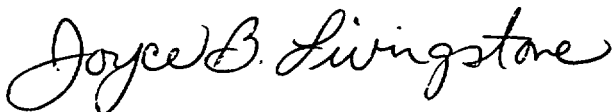
Outfall 019, Domestic Water Overflow is entirely composed of groundwater used for the potable water supply. No pollutants are added to this water, and a discharge would occur only if the holding tank overflowed. We request that this outfall be deleted from the permit.

Outfalls 101 and 102 are not in use. The flash evaporator systems have been dismantled and we would like to delete these outfalls from the permit. There are no plans to reinstall this equipment or reactivate these discharges.

Outfall 114 is a new proposed outfall, Service Water Pipe Vault Drain. This new outfall will be used when leakage accumulates in the Pipe Vault adjacent to the Service Water Reservoir. Outfall 108 will be sampled to represent this outfall.

If you have any questions, please contact me at (804) 273-2985.

Sincerely,



Joyce B. Livingstone  
Senior Environmental Specialist  
Environmental Policy and Compliance

Attachment



### Outfall 001      Discharge of Condenser Cooling Water from WHTF at Dike 3

This outfall continuously discharges condenser cooling water from the Waste Heat Treatment Facility (WHTF) to Lake Anna at Dike 3. The retention time in the WHTF is greater than 24 hours.

#### BOD<sub>5</sub>, COD and TOC, Total Suspended Solids, Ammonia, Temperature (summer):

We will submit data from a grab sample in accordance with Form 2C instructions (retention period of greater than 24 hours). A waiver for the off-season winter temperature is requested because it is regularly submitted in quarterly reports to DEQ.

**Flow:** Existing flow data for 1998 will be submitted consistent with reporting required by the current permit (1/month, calculated).

**pH** Existing data for 1998 will be submitted consistent with sampling required by the current permit (1/year, grab, at Dike 3 before subsurface discharge to the Lake).

**Part B and C parameters:** All Part B parameters and Part C metals will be sampled with the following exceptions. Pesticides, PCBs, Dioxin, Fecal coliforms, sulfite, surfactants, color, volatiles and acid/base/neutral organics are believed absent based on previous data and will not be sampled.

### Outfall 009      Settling Pond

This intermittent discharge is from ground water, backwash cleaning from sand filters and reverse osmosis units with the majority of the discharge consisting of storm water runoff.  
The retention time > 24 hours.

BOD<sub>5</sub>, COD, TOC, Ammonia, Temperature (summer): We will submit data from a single grab sample in accordance with Form 2C instructions. A waiver for the off-season winter temperature is requested.

**Total Suspended Solids:** Existing TSS data for 1998 will be submitted consistent with reporting required by the current permit (~~1/month~~, grab).  
2/month

**Flow:** Existing flow data for 1998 will be submitted consistent with reporting required by the current permit (~~2/month~~, estimated).  
1/month

**pH:** Existing data for 1998 will be submitted consistent with sampling required by the current permit (~~1/month~~, grab). Form 2C specifies that grab samples be used for pH and oil and grease.  
2/month

**Part B and C parameters:** All Part B parameters and Part C metals will be sampled with the following exceptions. Pesticides, PCBs, dioxin, fecal coliforms and sulfite are believed absent based on previous data and will not be sampled.

**REQUEST FOR WAIVERS FROM SAMPLING AND TESTING PARAMETERS**  
**VPDES PERMIT NO. VA0052451 – NORTH ANNA POWER STATION**  
**LIST OF VPDES OUTFALLS**

**EXTERNAL OUTFALLS**

Outfall 001	Discharge of Condenser Cooling Water from WHTF at Dike 3
Outfall 009	Settling Pond
Outfall 013	Turbine Bldg Sump #1 and Common Sump & Storm Water only
Outfall 014	Turbine Bldg Sump #2 & Storm Water only
Outfall 016	Intake Screen Wash Water
Outfall 019	Domestic Water Overflow
Outfall 020	Reverse Osmosis Reject
Outfall 021	Reverse Osmosis Drain Line
Outfall 022	Drainage Area #2A (storm water only)
Outfall 023	Drainage Area #2B (storm water only)
Outfall 024	Drainage Area #3 (storm water only)
Outfall 025	Drainage Area #18 (storm water only)
Outfall 026	Drainage Area #25 (storm water only)

**INTERNAL OUTFALLS**

Outfall 101	Flash Evaporator - Unit 1
Outfall 102	Flash Evaporator - Unit 2
Outfall 103	Process Waste Clarifier
Outfall 104	Oil/Water Separator & Storm Water
Outfall 105	Bearing Cooling Tower Blowdown
Outfall 107	Bearing Cooling System Discharge - Lake to Lake Operation
Outfall 108	Service Water Overflow
Outfall 109	Hot Well Drain Unit 1
Outfall 110	Hot Well Drain Unit 2
Outfall 111	Main Sewage Treatment Plant
Outfall 112	Steam Generator Blowdown Unit 1
Outfall 113	Steam Generator Blowdown Unit 2
Outfall 114	Service Water Pipe Vault Drain (NEW OUTFALL)

**Outfall 013      Turbine Bldg Sump #1 & Common Sump & Storm Water only**

This intermittent outfall is an alternate discharge route for the effluent making up the majority of the flow at Outfall 104. Outfall 104 will be sampled to represent this outfall.

**Outfall 014      Turbine Bldg Sump #2 & Storm Water only**

This intermittent outfall is an alternate discharge route for the effluent making up the majority of the flow at Outfall 104. Outfall 104 will be sampled to represent this outfall.

**Outfall 016      Intake Screen Wash Water**

This outfall is a low volume, non-process discharge that consists entirely of lake water. This outfall is represented by intake data.

**Outfall 019      Domestic Water Overflow**

We request that this outfall be deleted from the permit. This infrequent intermittent discharge is composed entirely of groundwater that is used for the potable water supply. No pollutants are added and no treatment occurs. A discharge would occur only if the holding tank overflowed. The retention time of the holding tank is < 24 hours. To support our request that this outfall be deleted, the following data will be submitted from a sample collected from a tap inside the Domestic Water Pump House building.

**BOD<sub>5</sub>, COD, TOC, Total Suspended Solids, Ammonia, Temperature (summer):** We request a waiver from the 4 hourly grab sampling requirement to be substituted with results from a single grab sample, and a waiver for the off-season winter temperature is requested.

**pH:** A single grab sample will be collected and analyzed in accordance with Form 2C instructions.

**Part B and C parameters:** We request a waiver from the 4 hourly grab sampling requirement to be substituted with results from a single grab sample. All Part B parameters and Part C metals will be sampled with the following exceptions. Pesticides, PCBs, dioxin, fecal coliforms, sulfite and surfactants are believed absent based on previous data and will not be sampled.

### **Outfall 020      Reverse Osmosis Reject**

This outfall is designed to discharge continuously, but there are times, which are rare, normally during outages when no make-up water is needed and all tanks are full, when it does not discharge. It consists of reverse osmosis reject water that contains only a 3.3x concentration of constituents of lake water, and a potential residual of 0-1 ppm free chlorine from sodium hypochlorite used in the Ionics system. No process waste waters or pollutants from other sources are added. Also, this outfall discharges into the incoming cooling water flow just outside the intakes. The retention time < 24 hours.

**BOD<sub>5</sub>, COD, TOC, Ammonia, Temperature (summer):** We request a waiver from the 24-hour composite sample requirement to be substituted with results from a single grab sample, and a waiver for the off-season winter temperature is requested.

**Total Suspended Solids:** Existing TSS data for 1998 will be submitted consistent with sampling required by the current permit (2/month, grab).

**Flow:** Existing flow data for 1998 will be submitted consistent with reporting required by the current permit (2/month, estimated).

**pH, Total Residual Chlorine:** Existing data for 1998 will be submitted consistent with sampling required by the current permit (2/month, grab).

**Part B and C parameters:** We request a waiver from the 24-hour composite sample requirement to be substituted with results from a single grab sample. All Part B parameters and Part C metals will be sampled with the following exceptions. Pesticides, PCBs, dioxin, fecal coliforms and sulfite are believed absent and will not be sampled.

### **Outfall 021      Reverse Osmosis Drain Line**

This outfall intermittently and infrequently discharges pure lake water from the reverse osmosis system. Intake water will be used to characterize this outfall.

This outfall has never been used and is in the permit for emergency use only in the case where the whole ionic system is down and the line needs to be drained.

**Outfall 022      Drainage Area #2A (storm water only)**

This is an area of approximately 52 acres, with approximately 7.1 acres of impervious area. Storm water collected in the higher portion to the south, contractor shops, parking lots and the switch yard, flows into a drop grating to a culvert near the northeast corner of the switch yard and discharges into Lake Anna at Outfall 022. The lower, more level portion includes a vehicle maintenance shop, a paint shop and part of an outdoor equipment lay down area. Storm water runoff from the grassed portions of this area adjacent to the lakeshore is generally sheet flow. Form 2F will be submitted.

**Oil and Grease, pH, Total Residual Chlorine, Fecal Coliforms:**      Grab samples will be collected and analyzed.

**BOD<sub>5</sub>, COD, TSS, TKN, Nitrate plus Nitrite, Total Phosphorus:**      Grab and flow-weighted composite samples will be collected. Samples will not be analyzed for sulfite or radioactivity.

**Bromide, Color, Fluoride, Sulfate, Sulfide, Surfactants, Aluminum, Barium, Boron, Cobalt, Iron, Magnesium, Molybdenum, Manganese, Tin, Titanium:**      Grab and flow-weighted composite samples will be collected and analyzed.

**Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium and Zinc:**      Grab and flow-weighted composite samples will be collected and analyzed. Samples will not be analyzed for cyanide, phenols, volatiles, acids, base/neutrals and pesticides. Based on previous analytical results these pollutants are not believed to be present.

**Outfall 023      Drainage Area #2B (storm water only)**

This is a small area of approximately 6 acres. The only impervious area is the 0.09 acre storage building which is used for hazardous waste accumulation, with other miscellaneous storage. This storage building is constructed with a curbed foundation to contain any spillage and prevent any discharge outside the structure. Storm water collected in the higher portion to the south flows into a culvert under this storage building then discharged into Lake Anna at Outfall 023. Storm water runoff from the grassed portions of this area adjacent to the lake shore is generally sheet flow.

**Same Monitoring as Outfall 022**

**Outfall 024      Drainage Area #3 (storm water only)**

A small drainage area of 9 acres with primarily sheet flow runoff of stormwater to Lake Anna. About 0.08 acre is paved impervious areas. A portion of the laydown area, shared with Area 2A has runoff through a drop culvert under the roadway and into Lake Anna at Outfall 024.

**Same Monitoring as Outfall 022**

**Outfall 025      Drainage Area #18 (storm water only)**

This 56 acre drainage area, with 4 acres of impervious area, includes a portion of the warehouse facilities, an outdoor laydown area and some small utility buildings. Storm water from the northern portion of this drainage area is conveyed under the paved roadway via two culverts. The culvert to the west carries the smaller amount of storm water flow which drains from open, grassed fields with no industrial activity. The culvert to the east was chosen as the sample point from Area 18 because it carries the collected drainage from the larger portion of the area, from the warehouse and laydown facilities, and would be more likely to contain any contaminants. Outfall 025 discharges storm water from this drainage into the Waste Heat Treatment Facility.

**Same Monitoring as Outfall 022**

**Outfall 026      Drainage Area #25 (storm water only)**

A 61 acre drainage area with no impervious surface area. In the northern portion of Area 25, there is a site used for temporary exposed storage of discarded miscellaneous material such as large concrete "dead weight" blocks for crane weight testing, small movable buildings, etc. This portion of the drainage area has runoff through a culvert under the roadway and into Lake Anna at Outfall 026. This culvert was selected as the sample point for Area 25; no industrial activities occur downstream. As with other lakeside areas, sections adjacent to the shoreline, north of the graveled roadway have sheet flow runoff of storm water.

**Same Monitoring as Outfall 022**

**Outfall 101      Flash Evaporator - Unit 1**

We request that this outfall be deleted from the permit.

**Outfall 102      Flash Evaporator - Unit 2**

We request that this outfall be deleted from the permit.

### **Outfall 103      Process Waste Clarifier**

This intermittent discharge now includes intermittent lower volumes of steam generator blowdown, also package boiler blowdown (not currently in use) and mat sump system discharge and ion exchanger waste. We would like to initiate continuous blowdown of the Service Water Reservoir through this outfall with this new permit. Engineering data will be submitted to characterize this additional flow which will be substantially identical to Outfall 108. There is a holding tank at the end of this system with a retention time > 24 hours.

**BOD<sub>5</sub>, COD, TOC, Total Suspended Solids, Ammonia, Temperature (summer):** We will submit data from 1 individual grab sample in accordance with Form 2C instructions, and a waiver for the off-season winter temperature is requested.

**Flow:** Existing flow data for 1998 will be submitted consistent with reporting required by the current permit (2/month, estimated).

**pH, Oil & Grease:** We request a waiver from the single grab sample to be substituted with existing data for 1998 submitted consistent with sampling required by the current permit (2/month, grab).

**Part B and C parameters:** All Part B parameters and Part C metals will be sampled with the following exceptions. Pesticides, PCBs, dioxin, fecal coliforms, bromide, fluoride, sulfate, sulfide and sulfite are believed absent and will not be sampled.

### **Outfall 104      Oil/Water Separator & Storm Water**

This discharge was previously approved to represent Outfalls 013 and 014 (Turbine Building Sump #1, Common Sump and Turbine Building Sumps #2). The flow is intermittent, and the retention time is < 24 hours.

**BOD<sub>5</sub>, COD, TOC, Ammonia, Temperature (summer):** We request a waiver from the 4 hourly grab sample requirement to be substituted with results from a single grab sample, and a waiver for the off-season winter temperature is requested.

**Flow:** Existing flow data for 1998 will be submitted consistent with reporting required by the current permit (2/month, estimated).

**Total Suspended Solids, pH, Oil and Grease:** Existing data for 1998 will be submitted consistent with sampling required by the current permit (2/month, grab). Form 2C specifies that grab samples be used for pH and oil and grease.

**Part B and C parameters:** All Part B parameters and Part C metals will be sampled with the following exceptions. We request a waiver from the 4 hourly grab sampling requirement to be substituted with results from a single grab sample. Pesticides, PCBs, dioxin, fecal coliforms, sulfite, volatiles and acid/base/neutral organics are believed absent and will not be sampled.

**Outfall 105      Bearing Cooling Tower Blowdown**

This outfall was previously intermittent but used very infrequently. To control the water chemistry in the system, it will become a continuous discharge when either of the units is operating. The retention time will be < 24 hours. Engineering data has been previously submitted to characterize the treatment chemicals that will be used in this system and will be included with this application. A grab sample will also be collected from the Bearing Cooling Tower reservoir.

**BOD5, COD, TOC, Total Suspended Solids, Ammonia, Temperature (summer), pH, Oil and Grease:** We request a waiver from the 24-hour composite sampling requirement and request approval to submit data from 1 individual grab sample, and a waiver for the off-season winter temperature is requested.

**Flow:** Flow data will be estimated based on projected operations. .

**Part B and C parameters:** We request a waiver from the 24-hour composite sampling requirement and request approval to submit data from 1 individual grab sample. All Part B parameters and Part C metals will be sampled with the following exceptions. Pesticides, PCBs, dioxin, fecal coliforms and sulfite are believed absent and will not be sampled.

**Outfall 107      Bearing Cooling System Discharge - Lake to Lake Operation**

This outfall is not currently in use. If a discharge were to occur, it would be temporary when the bearing cooling tower is valved off for maintenance work, and this is likely to occur within the next five years. Lake water would pass through the bearing cooling system, bypass the cooling tower and go straight to the WHTF. No treatment chemicals are used. There is no retention time. Intake data will be submitted to represent this outfall. October Free Cl<sub>2</sub> and flow data are available.



### **Outfall 108      Service Water Overflow**

This outfall is manually operated with a valve, and is intermittently used to control the level of the Service Water Reservoir as necessary. The retention time of the service water reservoir is > 24 hours. A sample can be collected from the bank of the Service Water Reservoir near the intake structure. Outfall 108 is substantially identical to the proposed new Outfall 114, the Service Water Pipe Vault Drain and we request approval to sample Outfall 108 as the representative outfall. Outfall 108 will also characterize the additional new flows from the Service Water Reservoir to the Process Waste Clarifier.

**BOD<sub>5</sub>, COD, TOC, Total Suspended Solids, Ammonia, Temperature (summer), Flow:** We will submit data from a grab sample in accordance with Form 2C instructions, and a waiver for the off-season winter temperature is requested.

**pH, Oil and Grease:** A single grab sample will be collected and analyzed for pH and oil and grease in accordance with Form 2C instructions.

**Part B and C parameters:** All Part B parameters and Part C metals will be sampled with the following exceptions. Pesticides, PCBs, dioxin, fecal coliforms and sulfite are believed absent and will not be sampled.

### **Outfall 109      Hot Well Drain #1**

This intermittent outfall was previously approved to represent Outfall 110 (Hot Well Drain #2), relatively high-purity condensate water, with small concentrations of corrosion chemicals. The drains are normally used once per 18 months, on alternating schedules, during maintenance shutdowns of the respective units. To obtain a representative sample, this must be sampled during outages (Unit 2 - Hot Well #2, September 1999; Unit 1- Hot Well #1, March 2000). The retention time > 24 hours.

**BOD<sub>5</sub>, COD, TOC, Ammonia, Temperature (summer):** We will submit data from a single grab sample in accordance with Form 2C instructions, and a waiver for the off-season winter temperature is requested.

**Total Suspended Solids:** Existing TSS data for 1998 will be submitted consistent with reporting required by the current permit (1/month, grab).

**Flow:** Existing flow data for 1998 will be submitted consistent with reporting required by the current permit (1/month, estimated).

**pH, Oil & Grease:** Existing data for 1998 will be submitted consistent with sampling required by the current permit (1/month, grab). Form 2C specifies that grab samples be used for pH and oil and grease.

**Part B and C parameters:** All Part B parameters and Part C metals will be sampled with the following exceptions. Pesticides, PCBs, dioxin, fecal coliforms, bromide, fluoride, sulfite, sulfate, surfactants, volatiles and acid/base/neutral organics are believed absent and will not be sampled.

**Outfall 110      Hot Well Drain #2**

Outfall 109 will be sampled to represent this outfall.

**Outfall 111      Main Sewage Treatment Plant**

All domestic sewage is routed to the main sewage treatment plant. The plant is equipped with two equalization basins, each with a capacity of 18,700 gallons. During normal operation only one side is used but during periods of high demand (outages) both sides are used.

**BOD, TSS, pH, Total Residual Chlorine, Flow:** We request a waiver from the 24-hour composite sample as required by Form 2E and request approval to submit existing data for 1998 consistent with reporting required by the current permit for these parameters.

**Ammonia:** We request a waiver from the 24-hour composite sample as required by Form 2E and request approval to submit data from a single grab sample to be taken for ammonia.

**Temperature (summer), Oil & Grease, Fecal Coliform:** Existing data from 1998 grab samples collected in accordance with the current permit will be submitted for these parameters, and a waiver for the off-season winter temperature is requested.

**COD, TOC:** Not required, per instructions on form (non-contact cooling water is not discharged).

**Outfall 112      Steam Generator Blowdown Unit 1**

This outfall was previously approved to represent Outfall 113 (Steam Generator Blowdown Unit 2), and discharges relatively high-purity condensate water from a closed system with small concentrations of corrosion chemicals continuously while Unit 1 is operating. It is only shut off during outages (every 18 months) for maintenance. The retention time < 24 hours.

**BOD<sub>5</sub>, COD, TOC, Ammonia, Temperature (summer):** We request a waiver from the 24-hour composite sampling requirement and request approval to submit data from a single grab sample. A waiver for the off-season winter temperature is requested.

**Total Suspended Solids:** Existing TSS data for 1998 will be submitted consistent with reporting required by the current permit (1/month, grab).

**Flow, pH, Oil & Grease:** Existing flow data for 1998 will be submitted consistent with reporting required by the current permit (Flow - 1/month, estimated; pH, Oil & Grease 1/month, grab). Form 2C specifies that grab samples be used for pH and oil and grease.

**Part B and C parameters:** All Part B parameters and Part C metals will be sampled with the following exceptions. Pesticides, PCBs, dioxin, fecal coliforms and sulfite are believed absent and will not be sampled.

**Outfall 113      Steam Generator Blowdown Unit 2**

Outfall 112 will be sampled to represent this outfall.

**Outfall 114      Service Water Pipe Vault Drain (NEW OUTFALL)**

This new outfall will be used when leakage accumulates in the Pipe Vault adjacent to the Service Water Reservoir. We request approval to represent this discharge with data from Outfall 108, the Service Water Overflow.

cc: (w/attach.)  
U. S. Nuclear Regulatory Commission  
Region II  
Atlanta Federal Center  
61 Forsyth St., SW, Suite 23T85  
Atlanta, GA 30303  
RE: North Anna Units 1 and 2  
Docket Nos. 50-338/50-339  
License Nos. NPF-4/NPF-7

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555  
RE: North Anna Units 1 and 2  
Docket Nos. 50-338/50-339  
License Nos. NPF-4/NPF-7

Mr. M.J. Morgan  
NRC Senior Resident Inspector  
North Anna Power Station

## **VPDES Outfall Descriptions and Sampling Points**

## VPDES OUTFALL DESCRIPTIONS AND SAMPLING POINTS

### NORTH ANNA POWER STATION


##	External Outfalls	Sample Point	Discharge To:
001 (formerly 010)	Discharge of Condenser Cooling Water from WHTF at Dike 3	Dike 3	Lake Anna
009	Settling Pond	End of pipe	Lake Anna
013	Turbine Bldg Sump #1 & Storm Water only	At overflow weir	Lake Anna
014	Turbine Bldg Sump #2 & Storm Water only	At overflow weir	Lake Anna
016	Intake Screen Wash Water	Discharge into basket	Lake Anna
019	<del>Domestic Water Overflow</del>	<b>DELETE</b>	Lake Anna
020	Reverse Osmosis Reject	End of small pipe, where it empties into larger pipe	Lake Anna
021	Reverse Osmosis Drain Line	Middle of pipe at valve	Lake Anna
022	Drainage Area #2A (storm water only)	End of pipe, deep gully	Lake Anna
023	Drainage Area #2B (storm water only)	End of culvert	Lake Anna
024	Drainage Area #3 (storm water only)	End of culvert, in rip rap	Lake Anna
025	Drainage Area #18 (storm water only)	End of culvert, down the hill	WHTF
026	Drainage Area #25 (storm water only)	End of culvert, weedy area	Lake Anna
##	Internal Outfalls		
401 (formerly 001)	<del>Flash Evaporator - Unit 4</del>	<b>DELETE</b>	Discharge Canal
402 (formerly 002)	<del>Flash Evaporator - Unit 2</del>	<b>DELETE</b>	Discharge Canal
103 (formerly 003)	Process Waste Clarifier	Clarifier building sink	Discharge Canal
104 (formerly 004)	Oil/Water Separator & Storm Water	At overflow weir	Discharge Canal
105 (formerly 015)	Bearing Cooling Tower Blowdown	Sample tap in Turbine Building Basement	Discharge Canal
107 (formerly 017)	Bearing Cooling System Discharge	Sample tap in Turbine Building Basement	Discharge Canal
108 (formerly 018)	Service Water Overboard	Sample tap in Turbine Building Basement	Discharge Canal
109 (formerly 222)	Hot Well Drain - Unit 1	Hotwell drain pipe valve; Turbine Building Basement.	Discharge Canal
110 (formerly 223)	Hot Well Drain - Unit 2	Hotwell drain pipe valve; Turbine Building Basement	Discharge Canal
111 (formerly 011)	Main Sewage Treatment Plant	At the weir	Discharge Canal
112 (formerly 224)	Steam Generator Blowdown - Unit 1	Unit 1 sample sink; Turbine Building Basement	Discharge Canal
113 (formerly 225)	Steam Generator Blowdown - Unit 2	Unit 2 sample sink; Turbine Building Basement	Discharge Canal
114 NEW	Service Water Tie-In Vault Drain	End of pipe on walkway	Discharge Canal
115 NEW	Service Water System Blowdown	End of concrete drainage ditch adjacent to the Warehouse 5 fire pump house, midway down the discharge canal.	Discharge Canal

# EPA Form 3510-1

<b>FORM</b> <b>1</b> <b>GENERAL</b>	<b>EPA</b>	<b>U.S. ENVIRONMENTAL PROTECTION AGENCY</b> <b>GENERAL INFORMATION</b> <i>Consolidated Permits Program</i> <i>(Read the "General Instructions" before starting)</i>	<b>1. EPA I.D. NUMBER</b> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:5%;">S</td> <td style="width:15%;"></td> <td style="width:5%;">T/A</td> <td style="width:5%;">C</td> </tr> <tr> <td>F</td> <td><b>VA0052451</b></td> <td></td> <td>D</td> </tr> <tr> <td>1</td> <td>2</td> <td>13</td> <td>14 15</td> </tr> </table>	S		T/A	C	F	<b>VA0052451</b>		D	1	2	13	14 15		
S		T/A	C														
F	<b>VA0052451</b>		D														
1	2	13	14 15														
<b>LABEL ITEMS</b> I. EPA I.D. NUMBER III. FACILITY NAME V. FACILITY MAILING ADDRESS VI. FACILITY LOCATION		<b>PLEASE PLACE LABEL IN THIS SPACE</b>															
<b>II. POLLUTANT CHARACTERISTICS</b> INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of <b>bold-faced terms</b> .																	
<b>SPECIFIC QUESTIONS</b>		<b>SPECIFIC QUESTIONS</b>															
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="3">MARK "X"</th> </tr> <tr> <th>YES</th> <th>NO</th> <th>FORM ATTACHED</th> </tr> </table>		MARK "X"			YES	NO	FORM ATTACHED	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="3">MARK "X"</th> </tr> <tr> <th>YES</th> <th>NO</th> <th>FORM ATTACHED</th> </tr> </table>		MARK "X"			YES	NO	FORM ATTACHED		
MARK "X"																	
YES	NO	FORM ATTACHED															
MARK "X"																	
YES	NO	FORM ATTACHED															
<b>A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)</b>		<b>B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)</b>															
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%;"></td> <td style="width:33%; text-align: center;"><b>X</b></td> <td style="width:33%;"></td> </tr> <tr> <td>16</td> <td>17</td> <td>18</td> </tr> </table>			<b>X</b>		16	17	18	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%;"></td> <td style="width:33%; text-align: center;"><b>X</b></td> <td style="width:33%;"></td> </tr> <tr> <td>19</td> <td>20</td> <td>21</td> </tr> </table>			<b>X</b>		19	20	21		
	<b>X</b>																
16	17	18															
	<b>X</b>																
19	20	21															
<b>C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)</b>		<b>D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)</b>															
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%; text-align: center;"><b>X</b></td> <td style="width:33%;"></td> <td style="width:33%; text-align: center;"><b>X</b></td> </tr> <tr> <td>22</td> <td>23</td> <td>24</td> </tr> </table>		<b>X</b>		<b>X</b>	22	23	24	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%;"></td> <td style="width:33%; text-align: center;"><b>X</b></td> <td style="width:33%;"></td> </tr> <tr> <td>25</td> <td>26</td> <td>27</td> </tr> </table>			<b>X</b>		25	26	27		
<b>X</b>		<b>X</b>															
22	23	24															
	<b>X</b>																
25	26	27															
<b>E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)</b>		<b>F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)</b>															
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%;"></td> <td style="width:33%; text-align: center;"><b>X</b></td> <td style="width:33%;"></td> </tr> <tr> <td>28</td> <td>29</td> <td>30</td> </tr> </table>			<b>X</b>		28	29	30	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%;"></td> <td style="width:33%; text-align: center;"><b>X</b></td> <td style="width:33%;"></td> </tr> <tr> <td>31</td> <td>32</td> <td>33</td> </tr> </table>			<b>X</b>		31	32	33		
	<b>X</b>																
28	29	30															
	<b>X</b>																
31	32	33															
<b>G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)</b>		<b>H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)</b>															
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%;"></td> <td style="width:33%; text-align: center;"><b>X</b></td> <td style="width:33%;"></td> </tr> <tr> <td>34</td> <td>35</td> <td>36</td> </tr> </table>			<b>X</b>		34	35	36	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%;"></td> <td style="width:33%; text-align: center;"><b>X</b></td> <td style="width:33%;"></td> </tr> <tr> <td>37</td> <td>38</td> <td>39</td> </tr> </table>			<b>X</b>		37	38	39		
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34	35	36															
	<b>X</b>																
37	38	39															
<b>I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)</b>		<b>J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)</b>															
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%;"></td> <td style="width:33%; text-align: center;"><b>X</b></td> <td style="width:33%;"></td> </tr> <tr> <td>40</td> <td>41</td> <td>42</td> </tr> </table>			<b>X</b>		40	41	42	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%;"></td> <td style="width:33%; text-align: center;"><b>X</b></td> <td style="width:33%;"></td> </tr> <tr> <td>43</td> <td>44</td> <td>45</td> </tr> </table>			<b>X</b>		43	44	45		
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43	44	45															
<b>III. NAME OF FACILITY</b>																	
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:5%;">C</td> <td style="width:5%;">1</td> <td style="width:10%;">SKIP</td> <td style="width:80%;"><b>VIRGINIA POWER - NORTH ANNA NUCLEAR POWER STATION</b></td> </tr> <tr> <td>15</td> <td>16 - 29</td> <td>30</td> <td>69</td> </tr> </table>				C	1	SKIP	<b>VIRGINIA POWER - NORTH ANNA NUCLEAR POWER STATION</b>	15	16 - 29	30	69						
C	1	SKIP	<b>VIRGINIA POWER - NORTH ANNA NUCLEAR POWER STATION</b>														
15	16 - 29	30	69														
<b>IV. FACILITY CONTACT</b>																	
<b>A. NAME &amp; TITLE (last, first, &amp; title)</b>		<b>B. PHONE (area code &amp; no.)</b>															
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;"><b>FAGGERT, PAMELA - VICE PRESIDENT &amp; CHIEF ENVIRONMENTAL OFFICER</b></td> <td style="width:20%; text-align: center;"><b>804</b></td> <td style="width:10%; text-align: center;"><b>273</b></td> <td style="width:10%; text-align: center;"><b>3467</b></td> </tr> <tr> <td>15</td> <td>16</td> <td>45</td> <td>46 - 48 49 - 51 52 - 55</td> </tr> </table>		<b>FAGGERT, PAMELA - VICE PRESIDENT &amp; CHIEF ENVIRONMENTAL OFFICER</b>	<b>804</b>	<b>273</b>	<b>3467</b>	15	16	45	46 - 48 49 - 51 52 - 55	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%;"></td> <td style="width:33%; text-align: center;"><b>X</b></td> <td style="width:33%;"></td> </tr> <tr> <td>40</td> <td>41</td> <td>42</td> </tr> </table>			<b>X</b>		40	41	42
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15	16	45	46 - 48 49 - 51 52 - 55														
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<b>V. FACILITY MAILING ADDRESS</b>																	
<b>A. STREET OR P.O. BOX</b>																	
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:5%;">C</td> <td style="width:5%;">3</td> <td style="width:90%;"><b>5000 DOMINION BLVD</b></td> </tr> <tr> <td>15</td> <td>16</td> <td>45</td> </tr> </table>				C	3	<b>5000 DOMINION BLVD</b>	15	16	45								
C	3	<b>5000 DOMINION BLVD</b>															
15	16	45															
<b>B. CITY OR TOWN</b>		<b>C. STATE</b>	<b>D. ZIP CODE</b>														
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:40%;"><b>GLEN ALLEN</b></td> <td style="width:10%; text-align: center;"><b>VA</b></td> <td style="width:50%; text-align: center;"><b>23060</b></td> </tr> <tr> <td>15</td> <td>16</td> <td>40 41 42 47 - 51</td> </tr> </table>		<b>GLEN ALLEN</b>	<b>VA</b>	<b>23060</b>	15	16	40 41 42 47 - 51	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%;"></td> <td style="width:33%; text-align: center;"><b>X</b></td> <td style="width:33%;"></td> </tr> <tr> <td>40</td> <td>41</td> <td>42</td> </tr> </table>			<b>X</b>		40	41	42		
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	<b>X</b>																
40	41	42															
<b>VI. FACILITY LOCATION</b>																	
<b>A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER</b>																	
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:5%;">C</td> <td style="width:5%;">5</td> <td style="width:90%;"><b>1022 HALEY DRIVE</b></td> </tr> <tr> <td>15</td> <td>16</td> <td>45</td> </tr> </table>				C	5	<b>1022 HALEY DRIVE</b>	15	16	45								
C	5	<b>1022 HALEY DRIVE</b>															
15	16	45															
<b>B. COUNTY NAME</b>																	
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:5%;">C</td> <td style="width:5%;">6</td> <td style="width:90%;"><b>LOUISA</b></td> </tr> <tr> <td>15</td> <td>16</td> <td>70</td> </tr> </table>				C	6	<b>LOUISA</b>	15	16	70								
C	6	<b>LOUISA</b>															
15	16	70															
<b>C. CITY OR TOWN</b>		<b>D. STATE</b>	<b>E. ZIP CODE</b>														
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:40%;"><b>MINERAL</b></td> <td style="width:10%; text-align: center;"><b>VA</b></td> <td style="width:50%; text-align: center;"><b>23117</b></td> </tr> <tr> <td>15</td> <td>16</td> <td>40 41 42 47 - 51 52 - 54</td> </tr> </table>		<b>MINERAL</b>	<b>VA</b>	<b>23117</b>	15	16	40 41 42 47 - 51 52 - 54	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:33%;"></td> <td style="width:33%; text-align: center;"><b>X</b></td> <td style="width:33%;"></td> </tr> <tr> <td>40</td> <td>41</td> <td>42</td> </tr> </table>			<b>X</b>		40	41	42		
<b>MINERAL</b>	<b>VA</b>	<b>23117</b>															
15	16	40 41 42 47 - 51 52 - 54															
	<b>X</b>																
40	41	42															



CONTINUED FROM THE FRONT

VII. SIC CODES (4 digit in order of priority)												
A. FIRST					B. SECOND							
C	7	4911	(specify)			C	7	(specify)				
15	16	19	<b>ELECTRIC POWER</b>			15	16	19				
C. THIRD					D. FOURTH							
C	7	(specify)			C	7	(specify)					
15	16	19			15	16	19					
VIII. OPERATOR INFORMATION												
A. NAME								B. Is the name listed in Item VIII-A also the owner?				
C	8	<b>VIRGINIA ELECTRIC AND POWER CO</b>										
15	16	55 66 <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO										
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other," specify.)						D. PHONE (area code & no.)						
F = FEDERAL    M = PUBLIC (other than federal or state) S = STATE      O = OTHER (specify)						P (specify)						
P						C	A	804	273	3467		
56						15	16	18	19	21	22	25
E. STREET OR P.O. BOX												
<b>5000 DOMINION BLVD</b>												
26	F. CITY OR TOWN					55	G. STATE		H. ZIP CODE		IX. INDIAN LAND	
C	B	<b>GLEN ALLEN</b>					40	41	42	47	51	52
15	16	40					41	42	47	51	Is the facility located on Indian lands? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
X. EXISTING ENVIRONMENTAL PERMITS												
A. NPDES (Discharges to Surface Water)					D. PSD (Air Emissions from Proposed Sources)							
C	T	I	9 N			C	T	I	9 P			
15	16	17	18	30			15	16	17	18	30	
B. UIC (Underground Injection of Fluids)					E. OTHER (specify)							
C	T	I	9 U			C	T	I	(specify)			
15	16	17	18	30			15	16	17	18	30	
C. RCRA (Hazardous Wastes)					E. OTHER (specify)							
C	T	I	9 R			C	T	I	(specify)			
15	16	17	18	30			15	16	17	18	30	
XI. MAP												
<p>Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.</p>												
XII. NATURE OF BUSINESS (provide a brief description)												
<p><b>GENERATION OF ELECTRICITY WITH STEAM PRODUCED BY THE FISSION OF NUCLEAR MATERIALS.</b></p>												
XIII. CERTIFICATION (see instructions)												
<p>I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.</p>												
A. NAME & OFFICIAL TITLE (type or print)					B. SIGNATURE			C. DATE SIGNED				
<b>W.R. MATTHEWS</b>								<b>3/30/00</b>				
<b>VICE PRESIDENT - STATION MANAGER</b>												
COMMENTS FOR OFFICIAL USE ONLY												
C												
C												
15	16	55										

Topographic Map  
(required by EPA Form 3510-1, Section XI)

**THIS PAGE IS AN  
OVERSIZED DRAWING  
OR FIGURE,**

**THAT CAN BE VIEWED AT  
THE RECORD TITLED:**

**LAKE ANNA WEST & EAST  
QUADRANGLE, VIRGINIA 7.5  
MINUTE SERIES (TOPOGRAPHIC)**

**WITHIN THIS PACKAGE...OR,  
BY SEARCHING USING THE  
DOCUMENT/REPORT  
NUMBER: NONE**

**NOTE: Because of this page's large file size, it may be more convenient to copy the file to a local drive and use the Imaging (Wang) viewer, which can be accessed from the Programs/Accessories menu.**



ML003702210

**VPDES Outfall Location Map**  
**(required by EPA Form 3510-1, Section XI)**

**THIS PAGE IS AN  
OVERSIZED DRAWING  
OR FIGURE,**

**THAT CAN BE VIEWED AT  
THE RECORD TITLED:  
N-2646-3-C-001, Rev. 1: VPDES  
OUTFALL LOCATION MAP/SITE  
DRAINAGE ENVIRONMENTAL  
COMPLIANCE NORTH ANNA  
POWER STATION**

**WITHIN THIS PACKAGE...OR,  
BY SEARCHING USING THE  
DOCUMENT/REPORT  
NUMBER: N-2646-3-C-001, Rev. 1**

**NOTE: Because of this page's large file size, it may be more convenient to copy the file to a local drive and use the Imaging (Wang) viewer, which can be accessed from the Programs/Accessories menu.**

*ML003702241*



One Line Diagram  
(required by EPA Form 3510-2C, Section II.A)

**THIS PAGE IS AN  
OVERSIZED DRAWING  
OR FIGURE,**

**THAT CAN BE VIEWED AT  
THE RECORD TITLED:  
NA-VPDES-083199-001, REV. 1,  
ONE LINE DIAGRAM STATION  
WATER FLOW  
NORTH ANNA POWER STATION  
  
WITHIN THIS PACKAGE...OR,  
BY SEARCHING USING THE  
DOCUMENT/REPORT  
NUMBER: NA-VPDES-083199-001,  
Rev. 1**

**NOTE: Because of this page's large file size, it may be more convenient to copy the file to a local drive and use the Imaging (Wang) viewer, which can be accessed from the Programs/Accessories menu.**

*ML003702260*

*D-3*