

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

December 16, 2004

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Serial No.: 04-625
NLOS/ETS: R0
Docket No.: 50-338
License No.: NPF-4

VIRGINIA ELECTRIC AND POWER COMPANY (DOMINION)
NORTH ANNA POWER STATION UNIT 1
OWNER'S ACTIVITY REPORTS

By letter dated October 2, 2000, the NRC granted North Anna Units 1 and 2 approval to use the recording and reporting requirements of American Society of Mechanical Engineers (ASME) Code Case N-532. Therefore, in accordance with the requirements of ASME Code Case N-532, enclosed are the Owner's Activity Reports (Form OAR-1), for refueling outages N1R16 and N1R17. This information completes the reporting requirements for North Anna Unit 1's first two refueling outages in the second period of the third ten-year interval.

Should you have any questions regarding this submittal, please contact Mr. Thomas Shaub at (804) 273-2763.

Very truly yours,



Leslie N. Hartz
Vice President - Nuclear Engineering

Commitments made in this letter: None

Attachment

cc: U.S. Nuclear Regulatory Commission
Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Suite 23 T85
Atlanta, Georgia 30303

Mr. M. T. Widmann
NRC Senior Resident Inspector
North Anna Power Station

Mr. J. E. Reasor, Jr. (letter only)
Old Dominion Electric Cooperative
Innsbrook Corporate Center
4201 Dominion Blvd.
Suite 300
Glen Allen, Virginia 23060

Mr. S. R. Monarque
NRC Project Manager
U. S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Mail Stop 8G9
Rockville, MD 20852

Mr. M. M. Grace
Authorized Nuclear Inspector
North Anna Power Station

Attachment

Letter Serial No. 04-625

**Owner's Activity Reports for North Anna Unit 1 Refueling Outages
Second Period of the Third ISI Interval**

**North Anna Unit 1
Virginia Electric and Power Company**

**NORTH ANNA POWER STATION, N1R16 OUTAGE
FORM OAR-1 OWNER'S ACTIVITY REPORT**

Report Number: N1R16 (Unit 1, 3rd Interval, 2nd Period, 1st Refueling Outage)

Owner Virginia Electric and Power Company, 5000 Dominion Boulevard, Glen Allen, VA 23060
(Name and Address of Owner)

Plant: North Anna Power Station, P.O. Box 402, Mineral VA 23117
(Name and Address of Plant)

Unit No. 1 Commercial service date 6/6/78 Refueling outage no. N1R16 (5/01/02-4/18/03)
(If applicable)

Current inspection interval 3rd (5/1/99 - 4/30/09)
(1st, 2nd, 3rd, 4th, other)

Current inspection period 2nd (5/1/02 - 4/30/06)
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plan 1989 Edition No Addenda

Date and revision of inspection plan ISI Plan Rev 3 Ch. 3 dated 8/04 including the ISI Schedule Revision 8, dated 8/04

Edition and Addenda of Section XI applicable to repairs and replacements, if different than the inspection plan Same
Plant Issues N-2003-3021, 2004-1145, and 2004-2566 were submitted.

CERTIFICATE OF CONFORMANCE

I certify that the statements made in this Owner's Activity Report are correct, and that the examinations, tests, repairs, replacements, evaluations, and corrective measures represented by this report conform to the requirements of Section XI.

Certificate of Authorization No. N/A Expiration Date N/A
(If applicable)

Signed *[Signature]* SUPV TESTING/INSPECTION Date 8/31/04
(Owner's or Owner's Designee, Title)

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Virginia and employed by HSB-CT of Hartford, CT have inspected the items described in this Owner's Activity Report, during the period 10/10/01 to 4/18/03 and state that to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations, tests, repairs, replacements, evaluations and corrective measures described in this report. Furthermore, neither the inspector nor his employer shall be liable, in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Mark M. Grace Commissions VA 424-R
Inspector's Signature National Board, State, Province, and Endorsements

Date 9/1/2004

**North Anna Power Station
N1R16 OUTAGE
Form OAR-1 Owner's Activity Report
Table 1
Abstract Of Examinations And Tests**

<i>Examination Category</i>	<i>Total Examinations Required For The Interval</i>	<i>Total Examinations Credited For This Period</i>	<i>Total Examinations Credited (%) For The Period</i>	<i>Total Examinations Credited (%) To Date For The Interval</i>	<i>Remarks</i>
B-A	8.67	.00	.00	32.69	
B-B	7.00	.00	.00	23.81	
B-D	28.00	2.00	28.57	42.86	
B-E	11.00	1.00	33.33	27.27	
B-G-1	650.00	196.00	100.00	64.77	Note 1
B-G-2	49.00	9.00	56.25	59.18	Note 1
B-K	18.00	2.00	37.50	40.74	Note 2
B-L-1	1.00	.00	.00	.00	Note 3
B-M-2	4.00	.00	.00	100.00	Note 4
B-N-1	3.00	.00	.00	33.33	
B-N-2	1.00	.00	.00	.00	
B-N-3	1.00	.00	.00	.00	
B-O	3.00	.00	.00	.00	Note 5
B-P	7.00	1.00	50.00	42.86	Note 6
B-Q	5.00	.00	.00	40.00	
C-A	9.00	2.67	72.73	37.04	Note 7
C-B	16.00	1.00	20.00	31.25	
C-C	29.00	9.00	100.00	68.97	Note 2
C-D	16.00	5.00	100.00	62.50	
C-F-1	106.00	20.00	52.63	59.43	

<i>Examination Category</i>	<i>Total Examinations Required For The Interval</i>	<i>Total Examinations Credited For This Period</i>	<i>Total Examinations Credited (%) For The Period</i>	<i>Total Examinations Credited (%) To Date For The Interval</i>	<i>Remarks</i>
C-F-2	30.00	3.00	33.33	43.33	
C-G	2.00	1.00	50.00	50.00	
C-H	3.00	.00	.00	33.33	Note 8
D-A	37.00	8.00	66.67	48.65	Note 8
F-A	366.00	100.00	77.52	51.37	
R-A	59.00	6.00	30.00	42.37	Note 9

North Anna Power Station
N1R16 OUTAGE
Form OAR-1 Owner's Activity Report
Table 1 Notes
Abstract Of Examinations And Tests

- Note 1** Examinations are limited to components selected for examination
- Note 2** See Partial Examination attachment
- Note 3** Internal examination is required only when a pump is disassembled for maintenance, repair, or examination. B-L-1 has one scheduled examination of the external surface of the weld of one pump casing in accordance with Code Case N-481.
- Note 4** Examination is required only when a valve is disassembled for maintenance, repair, or examination.
- Note 5** Category B-O is scheduled to be examined as part of the reactor vessel examination in the third period.
- Note 6** The Class 1 leakage test is required to be performed every refueling outage. The number and percentages listed represent the total number of refueling outages anticipated over the inspection interval. All required system pressure tests have been completed.
- Note 7** Relief will be requested for the regenerator heat exchanger welds.
- Note 8** The number and percentages listed represent the total number of periods over the inspection interval. All required system pressure tests have been completed.
- Note 9** Risk informed program currently addresses categories B-F and B-J.

Partial Examinations N1R16

<i>CATEGORY</i>	<i>ITEM</i>	<i>DRAWING</i>	<i>LINE</i>	<i>NUMBER</i>	<i>EXAM REMARKS</i>
B-K					
	<i>B10.2</i>				
	11715-WMKS-0103Y		6"-SI-133-1502-Q1	18H	87% PT partial coverage due to pipe clamp. A request for relief will be submitted to the NRC.
C-C					
	<i>C3.20</i>				
	11715-WMKS-0103AF		6"-SI-19-1502-Q1	26H	85% PT partial coverage due to pipe clamp. A request for relief will be submitted to the NRC.
	11715-WMKS-0107C		8"-QS-4-153A-Q3	34H	85% PT partial coverage due to pipe clamp. A request for relief will be submitted to the NRC.

**NORTH ANNA POWER STATION
N1R16 OUTAGE
FORM OAR-1 OWNER'S ACTIVITY REPORT
TABLE 2
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRE
EVALUATION FOR CONTINUED SERVICE**

Exam Category	Item Number	Item Description	Flaw Characterization (IWA-3300)	Flaw or Relevant Condition Found During Scheduled Section XI Exam or Test (Yes or No)
F-A	F1.20	Support R-214 on drawing 11715-WMKS-0101A-1	Indications were removed by grinding. The reduced weld size was evaluated and found to be adequate.	No
F-A	F1.20	Support R-216 on drawing 11715-WMKS-0101A-2	Loose bolts were evaluated and found to be acceptable	No
F-A	F1.10	Support R-39 on drawing 11715-WMKS-0103BH	One of the anchor bolts installed at a very slight angularity resulting in the nut having a small gap at the base plate contact. Review of design load and overall support configuration considered the support acceptable.	Yes
F-A	F1.20	Support SH-28 on drawing 11715-WMKS-0104A-2	The actual spring setting was verified by evaluation	Yes
F-A	F1.20	Support RH-5 on drawing 11715-WMKS-0104B	Anchor bolts are not installed flush with the base plate. Bolts were adequate to withstand design load.	Yes
F-A	F1.20	Support A-1 on drawing 11715-WMKS-0111XE	Sliding surface of support is painted restricting motion of support but found operable.	Yes
F-A	F1.10	Support R-15 on drawing 11715-WMKS-0113A-4	Sway struts were installed where the design drawing showed threaded rods. Evaluation determined this was desirable.	Yes

**NORTH ANNA POWER STATION
N1R16 OUTAGE
FORM OAR-1 OWNER'S ACTIVITY REPORT
TABLE 3**

**ABSTRACT OF REPAIRS, REPLACEMENTS, OR CORRECTIVE MEASURES
REQUIRED FOR CONTINUED SERVICE**

Code Class	Repair, Replacement, or Corrective Measure	Item Description	Description of Work	Flaw or Relet Condition Found During Scheduled Section XI Examination or Test (Yes or No)	Date Completed	Repair/ Replacement Plan Number
2	Repair	Support	Removed indications by grinding	No	12/15/03	2003-052

**NORTH ANNA POWER STATION, N1R17 OUTAGE
FORM OAR-1 OWNER'S ACTIVITY REPORT**

Report Number: N1R17 (Unit 1, 3rd Interval, 2nd Period, 2nd Refueling Outage)

Owner Virginia Electric and Power Company, 5000 Dominion Boulevard, Glen Allen, VA 23060
(Name and Address of Owner)

Plant: North Anna Power Station, P.O. Box 402, Mineral VA 23117
(Name and Address of Plant)

Unit No. 1 Commercial service date 6/6/78 Refueling outage no. N1R17 (4/19/03-10/06/04)
(If applicable)

Current inspection interval 3rd (5/1/99 - 4/30/09)
(1st, 2nd, 3rd, 4th, other)

Current inspection period 2nd (5/1/02 - 4/30/06)
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plan 1989 Edition No Addenda

Date and revision of inspection plan ISI Plan Rev 3 Ch. 3 dated 8/04 including the ISI Schedule Revision 9, dated 11/04 and the SPT Implementation Schedule Revision 2, dated 12/04

Edition and Addenda of Section XI applicable to repairs and replacements, if different than the inspection plan Same
Plant Issues N-2001-1678, 2003-2838, 2003-3021, 2004-1241, 2004-2283, 2004-2566, and 2004-4230R1 were submitted.

CERTIFICATE OF CONFORMANCE

I certify that the statements made in this Owner's Activity Report are correct, and that the examinations, tests, repairs, replacements, evaluations, and corrective measures represented by this report conform to the requirements of Section XI.

Certificate of Authorization No. N/A Expiration Date N/A
(If applicable)

Signed *A.P. Hail* ISI Engineer Date 12-23-04
(Owner's or Owner's Designee, Title)

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Virginia and employed by HSB-CT of Hartford, CT have inspected the items described in this Owner's Activity Report, during the period 4/19/03 to 10/6/04 and state that to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations, tests, repairs, replacements, evaluations and corrective measures described in this report. Furthermore, neither the inspector nor his employer shall be liable, in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

M.M. Grace Commissions VA 424-R
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/27/04

**North Anna Power Station
N1R17 OUTAGE
Form OAR-1 Owner's Activity Report
Table 1
Abstract Of Examinations And Tests**

<i>Examination Category</i>	<i>Total Examinations Required For The Interval</i>	<i>Total Examinations Credited For This Period</i>	<i>Total Examinations Credited (%) For The Period</i>	<i>Total Examinations Credited (%) To Date For The Interval</i>	<i>Remarks</i>
B-A	8.67	.00	.00	32.69	
B-B	7.00	1.33	80.00	42.86	
B-D	28.00	7.00	100.00	60.71	Note 1
B-E	11.00	2.00	66.67	36.36	
B-G-1	650.00	196.00	100.00	64.77	Note 2
B-G-2	49.00	16.00	100.00	73.47	Note 2
B-K	18.00	5.33	100.00	59.26	
B-L-1	1.00	.00	.00	.00	Note 3
B-M-2	4.00	.00	.00	100.00	Note 4
B-N-1	3.00	.00	.00	33.33	
B-N-2	1.00	.00	.00	.00	
B-N-3	1.00	.00	.00	.00	
B-O	3.00	.00	.00	.00	Note 5
B-P	7.00	2.00	100.00	57.14	Note 6
B-Q	5.00	1.00	50.00	60.00	
C-A	9.00	2.67	72.73	37.04	Note 7
C-B	16.00	4.00	80.00	50.00	
C-C	29.00	9.00	100.00	68.97	
C-D	16.00	5.00	100.00	62.50	
C-F-1	106.00	36.00	94.74	74.53	

<i>Examination Category</i>	<i>Total Examinations Required For The Interval</i>	<i>Total Examinations Credited For This Period</i>	<i>Total Examinations Credited (%) For The Period</i>	<i>Total Examinations Credited (%) To Date For The Interval</i>	<i>Remarks</i>
C-F-2	30.00	4.00	44.44	46.67	
C-G	2.00	1.00	50.00	50.00	
C-H	3.00	.00	.00	33.33	Note 8
D-A	37.00	10.00	83.33	54.05	Note 8
F-A	366.00	123.00	95.35	57.65	
R-A	59.00	17.00	85.00	61.02	Note 9

North Anna Power Station
N1R17 OUTAGE
Form OAR-1 Owner's Activity Report
Table 1 Notes
Abstract Of Examinations And Tests

- Note 1** See Partial Examination attachment.
- Note 2** Examinations are limited to components selected.
- Note 3** Internal examination is required only when a pump is disassembled for maintenance, repair, or examination. B-L-1 has one scheduled examination of the external surface of the weld of one pump casing in accordance with Code Case N-481.
- Note 4** Examination is required only when a valve is disassembled for maintenance, repair, or examination.
- Note 5** Category B-O is scheduled to be examined as part of the reactor vessel examination in the third period.
- Note 6** The Class 1 leakage test is required to be performed every refueling outage. The number and percentages listed represent the total number of refueling outages anticipated over the inspection interval. All required system pressure tests have been completed.
- Note 7** Relief will be requested for the regenerator heat exchanger welds.
- Note 8** The number and percentages listed represent the total number of periods over the inspection interval. All required system pressure tests have been completed.
- Note 9** Risk informed program currently addresses categories B-F and B-J.

Partial Examinations N1R17

<i>CATEGORY</i>	<i>ITEM</i>	<i>DRAWING</i>	<i>LINE</i>	<i>NUMBER</i>	<i>EXAM REMARKS</i>
B-D					
	<i>B3.11</i>				
	11715-WMKS-RC-E-2		1-RC-E-2	10	78.36% UT coverage due to pressurizer to nozzle weld configuration. A request for relief will be submitted to the NRC.
	11715-WMKS-RC-E-2		1-RC-E-2	11	78.36% UT coverage due to pressurizer to nozzle weld configuration. A request for relief will be submitted to the NRC.
	11715-WMKS-RC-E-2		1-RC-E-2	12	78.36% UT coverage due to pressurizer to nozzle weld configuration. A request for relief will be submitted to the NRC.

**NORTH ANNA POWER STATION
N1R17 OUTAGE
FORM OAR-1 OWNER'S ACTIVITY REPORT
TABLE 2
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRE
EVALUATION FOR CONTINUED SERVICE**

Exam Category	Item Number	Item Description	Flaw Characterization (IWA-3300)	Flaw or Relevant Condition Found During Scheduled Section XI Exam or Test (Yes or No)
F-A	F1.30	Support SH-100 on drawing 11715-WMKS-0117A	Load scale not installed on hanger was evaluated and found not to effect operability	Yes
F-A	F1.30	Support A-29 on drawing 11715-WMKS-0105C	Minor gap between baseplate and concrete wall evaluated and found not to effect operability	Yes

**NORTH ANNA POWER STATION
N1R17 OUTAGE
FORM OAR-1 OWNER'S ACTIVITY REPORT
TABLE 3**

**ABSTRACT OF REPAIRS, REPLACEMENTS, OR CORRECTIVE MEASURES
REQUIRED FOR CONTINUED SERVICE**

Code Class	Repair, Replacement, or Corrective Measure	Item Description	Description of Work	Flaw or Releant Condition Found During Scheduled Section XI Examination or Test (Yes or No)	Date Completed	Repair/ Replacement Plan Number
1	Replacement	Charging Snubber	Replaced snubber due to visual and functional test failure	No	10/5/04	2004-182
1	Replacement	Reactor Coolant Snubber	Replaced snubber due to visual and functional test failure.	No	10/5/04	2004-183
2	Replacement	Safety Injection Pipe	Replaced 12" LHSI suction pipe due to through wall leak.	No	10/9/04	2004-103
2	Replacement	Feedwater Support	Replaced monoball support with strut due to indications in support.	No	10/26/04	2004-154
3	Replacement	1 1/2" Refueling Purification Flange	Replaced flange at inlet to strainer due to weld leak	No	12/12/03	2003-081