

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

August 16, 2012

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

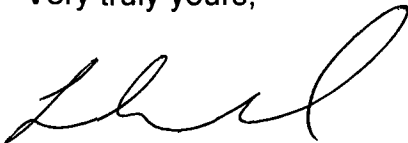
Serial No. 12-513
SPS-LIC/CGL R1
Docket No. 50-280
License No. DPR-32

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION UNIT 1
INSERVICE INSPECTION OWNER'S ACTIVITY REPORT (OAR)

In accordance with the requirements of ASME Code Case N-532-4, Virginia Electric and Power Company (Dominion) hereby submits the Inservice Inspection Owner's Activity Report (Form OAR-1) for Surry Unit 1 refueling outage S1R24. This document contains the reporting requirements for the first refueling outage of the third period in the fourth ten-year inservice inspection interval for Surry Unit 1.

If you have any questions concerning this information, please contact Mrs. Candee G. Lovett at (757) 365-2178.

Very truly yours,



Fred Mladen
Director Station Safety & Licensing
Surry Power Station

Attachment: Owner's Activity Report (Form OAR-1), Surry Unit 1 Refueling
Outage S1R24, Third Period of the Fourth ISI Interval

Commitments made in this letter: None

A 047
NRC

cc: U.S. Nuclear Regulatory Commission
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Surry Power Station

Serial No.: 12-513
Docket No.: 50-280

ATTACHMENT

**Owner's Activity Report (Form OAR-1),
Surry Unit 1 Refueling Outage S1R24,
Third Period of the Fourth ISI Interval**

**VIRGINIA ELECTRIC AND POWER COMPANY
(DOMINION)**

CASES OF ASME BOILER AND PRESSURE VESSEL CODE
FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number 1-4-3-1 (Unit 1, 4th Interval, 3rd Period, 1st Report)
Plant Surry Power Station, 5570 Hog Island Road, Surry, VA 23883
Unit No. 1 Commercial service date 12/22/1972 Refueling outage No. S1R24
(if applicable)
Current inspection interval 4th
(1st, 2nd, 3rd, 4th, other)
Current inspection period 3rd
(1st, 2nd, 3rd)
Edition and Addenda of Section XI applicable to the inspection plans 1998 Edition, 2000 Addenda
Date and revision of inspection plans Surry Unit 1, 4th Interval ISI Plan, Revision 9, August 23, 2011
Edition and Addenda of Section XI applicable to repair/replacement activities, if different than the inspection plans _____
Code Cases used: N-460, N-532-4, N-533-1, N-566-2
(if applicable)

CERTIFICATE OF CONFORMANCE

I certify that (a) the statements made in this report are correct; (b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of S1R24 conform to the requirements of Section XI. (refueling outage number)

Signed [Signature] / ISI Program Owner Date 8/8/12
Owner 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 CT have inspected the items described in this Owner's Activity Report, 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 repair/replacement activities and evaluation 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 a loss of any kind arising from or connected with this inspection.

[Signature] Commissions VA883(R)
Inspector's Signature National Board, State, Province, and Endorsements

Date 8/08/12

CASES OF ASME BOILER AND PRESSURE VESSEL CODE
FORM OAR-1 OWNER'S ACTIVITY REPORT

TABLE 1
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

Examination Category and Item	Item Description	Evaluation Description
B-P, B15.70	1-RC-HCV-1557B / Body to Bonnet	<p>During the performance of an ASME Section XI system pressure test (1-NPT-RC-002), boric acid was discovered on the body to bonnet joint of 1-RC-HCV-1557B. (CR473948)</p> <p>In accordance with IWA-5250(a)(2), a VT-3 examination of the flange fastener was performed. This evaluation determined the fastener to be acceptable with no degradation.</p>
B-P, B15.70	1-RC-PCV-1455A / Body to Bonnet	<p>During the performance of an ASME Section XI system pressure test (1-NPT-RC-002), boric acid was discovered on the body to bonnet joint of 1-RC-PCV-1455A. (CR473993)</p> <p>In accordance with IWA-5250(a)(2), a VT-3 examination of the flange fastener closest to the source of the leakage was performed. This evaluation determined the fastener to be acceptable with no degradation.</p>
B-P, B15.70	1-SI-85 / Body to Bonnet	<p>During the performance of an ASME Section XI system pressure test (1-NPT-RC-002), boric acid was discovered on the body to bonnet joint of 1-SI-85. (CR474000)</p> <p>Code Case N-566-2 was used to perform an evaluation of the bolting and component material. This evaluation determined the bolting and component to be acceptable for continued service.</p>
C-H, C7.10	1-CH-TCV-1143 / Body to Bonnet	<p>During the performance of an ASME Section XI system pressure test (1-NPT-CH-006), boric acid was noted on the flange of 1-CH-TCV-1143. No degradation to the valve was identified during this VT-2 examination. (CR442810)</p> <p>Code Case N-566-2 was used to perform an evaluation of the bolting and component material. This evaluation determined the bolting and component to be acceptable for continued service.</p>

CASES OF ASME BOILER AND PRESSURE VESSEL CODE
FORM OAR-1 OWNER'S ACTIVITY REPORT**TABLE 1**
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

Examination Category and Item	Item Description	Evaluation Description
C-H, C7.10	1-RH-20 / Body to bonnet	During the performance of an ASME Section XI system pressure test (1-NPT-RH-001), boric acid was discovered on the body to bonnet joint of 1-RH-20. (CR473931) Code Case N-566-2 was used to perform an evaluation of the bolting and component material. This evaluation determined the bolting and component to be acceptable for continued service.
C-H, C7.10	1-CS-8 / Body to bonnet	During the performance of an ASME Section XI system pressure test (1-NPT-CS-002), boric acid was discovered on the body to bonnet joint of 1-CS-8. (CR465035) In accordance with IWA-5250(a)(2), a VT-3 examination of the flange fastener closest to the source of the leakage was performed. This evaluation determined the fastener to be acceptable with no degradation.
C-H, C7.10	1-RH-HCV-1142 / Packing gland area	During the performance of an ASME Section XI system pressure test (1-NPT-RH-001), boric acid was noted from the packing gland area of 1-RH-HCV-1142 and ran across the body to bonnet connection but did not contact body to bonnet fasteners. (CR473933) Code Case N-566-2 was used to perform an evaluation of the bolting and component material. This evaluation determined the bolting and component to be acceptable for continued service.
D-A, D1.20	1-CC-H019-2 / Missing weld	VT-1 examination performed on integral attachment 01-CC-H019-2 on 8"-CC-66-151 identified a missing weld. (CR474220) Engineering evaluation concluded the support is functional with the missing weld.

CASES OF ASME BOILER AND PRESSURE VESSEL CODE
FORM OAR-1 OWNER'S ACTIVITY REPORT

TABLE 1
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

Examination Category and Item	Item Description	Evaluation Description
F-A, F1.10	1-RC-H017B / Loose nut, bottom-out on down rod	<p>VT-3 examination of spring hanger 1-RC-H017B on line 4"-RC-15-1502 identified a loose nut on the end of the load stud where it is free to rotate. Additionally, the down rod in clevis is threaded tight against the load stud and held in place by lock nut. (CR475293)</p> <p>Engineering evaluation concluded the support is functional.</p> <p>The loose nut was tightened with work order 38103227960 as permitted by IWF 3112.3(b)</p>
F-A, F1.10	1-RC-H031 / Loose attachment	<p>VT-3 examination of rigid pipe hanger 1-RC-H031 on line 4"-RC-14-1502 identified a loose locking nut allowing rotation of the support to pipe attachment. (CR474453)</p> <p>Engineering evaluation concluded the support is functional.</p> <p>The loose nut was tightened with work order 38103219622 as permitted by IWF 3112.3(b)</p>
F-A, F1.10	1-RC-H029 / Loose attachment	<p>VT-3 examination of vertical constraint pipe hanger 1-RC-H029 on line 4"-RC-14-1502 identified a loose locking nut which could allow sway strut to rotate. (CR474451)</p> <p>Engineering evaluation concluded the support is functional.</p> <p>The loose nut was tightened with work order 38103219620 as permitted by IWF 3112.3(b)</p>
F-A, F1.10	1-CH-H002 / Corrosion and material wastage	<p>VT-3 examination performed on support 01-CH-H002 on line 2"-CH-5-1502 identified significant corrosion/material wastage of structural member. (CR474284)</p> <p>Engineering evaluation concluded the support is functional.</p> <p>This condition was repaired during the Unit 1 RFO under WO38103218396 as permitted in IWF-3112.3(b) and is included in Table 2 of this report.</p>

CASES OF ASME BOILER AND PRESSURE VESSEL CODE
FORM OAR-1 OWNER'S ACTIVITY REPORT**TABLE 1**
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

Examination Category and Item	Item Description	Evaluation Description
F-A, F1.20	1-SI-H024 / Insufficient thread engagement	VT-3 examination of pipe support 1-SI-H024 on line 2"-SI-80-1502 identified two nuts with insufficient thread engagement. (CR475755) Engineering evaluation concluded the support is functional.
F-A, F1.20	1-CS-H004 / Insufficient thread engagement	VT-3 examination performed on support 1-CS-H004 on line 8"-CS-33-153 identified insufficient thread engagement on pipe clamp. (CR474791) Engineering evaluation concluded that all fasteners are tight and, with the noted condition, support is functional.
F-A, F1.20	1-SI-H002 / Clearance and welds not per drawing	VT-3 examination of vertical/lateral constraint 1-SI-H002 on line 3"-SI-147-1503 identified the following rejectable conditions: (CR474808) 1) Significant corrosion was noted on the weld connection of the vertical and lateral structural members. 2) Loss of cross sectional area of weld. 3) 0" gap in location "B" of pipe strap. This gap should be 1/16". Engineering evaluation concluded the support is functional.
F-A, F1.20	1-WAPD-H002 / Clearance and welds not per drawing	VT-3 examination of vertical/lateral constraint 1-WAPD-H002 on line 6"-WAPD-2-601 identified pipe to support structure clearance on one side does not match that shown on the support drawing. Additionally, several field welds shown on the drawing are either missing or incomplete. (CR474875) Engineering evaluation concluded the support is functional.

CASES OF ASME BOILER AND PRESSURE VESSEL CODE
FORM OAR-1 OWNER'S ACTIVITY REPORT

TABLE 1
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

Examination Category and Item	Item Description	Evaluation Description
F-A, F1.20	1-SI-H004 / Improper clearances	VT-3 examination of lateral constraint 1-SI-H004 on line 6"-SI-49-1502 identified that three sides of the pipe have improper clearances. These sides show on the PSSK drawing as having clearances ranging from 1/16" to 1/8" (top, bottom and right side when viewing the drawing) but there were no verifiable clearances on any of these sides. (CR475119) Engineering evaluation concluded the support is functional.
F-A, F1.20	1-CS-H007 / Insufficient thread engagement	VT-3 examination performed on support 1-CS-H007 on line 8"-CS-33-153 identified improper thread engagement on anchor. (CR474792) Engineering evaluation concluded that, with the noted condition, support is functional.
F-A, F1.30	1-CC-H012 / Additional material not on drawing	VT-3 examination performed on support 1-CC-H012 on line 18-CC-230-121 identified additional structure not identified on support detail drawing. (CR474792) Engineering evaluation concluded that, with the noted condition, support is functional. MSDUR 12-600613 has been submitted to update 11448-PSSK-112A1.12 to show the conduit support.
F-A, F1.30	1-CC-H002 / Missing load scale	VT-3 examination performed on spring support 01-CC-H002 on line 6"-CC-80-151 identified a missing load indicator scale. (CR474279) Engineering evaluation concluded the support is functional. WO 38103218395 was initiated to replace the missing load scale during the next U1 RFO.

CASES OF ASME BOILER AND PRESSURE VESSEL CODE
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TABLE 1
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR CONTINUED SERVICE

Examination Category and Item	Item Description	Evaluation Description
F-A, F1.30	1-CC-H015 / Loose bolts and corrosion	VT-3 examination performed on support 1-CC-H015 on line 18"-CC-237-121 identified loose bolts and washers, and significant corrosion/wastage of the baseplate. (CR473478) Engineering evaluation concluded, with the currently installed temporary supports and shims installed per DCP 07-010 and the degradation noted during the examination, the support is functional under all design basis loading conditions. WO 38103216145 was initiated to repair this support during the DCP 07-010 project.

CASES OF ASME BOILER AND PRESSURE VESSEL CODE
FORM OAR-1 OWNER'S ACTIVITY REPORT

TABLE 2
ABSTRACT OF REPAIR/REPLACEMENT ACTIVITIES REQUIRED FOR CONTINUED SERVICE

Code Class	Item Description	Description of Work	Date Completed	Repair/Replacement Plan Number
1	2" CH-5-1502	Perform piping support repairs on 01-CH-PP-2.00-CH-PIPE-5-1502.	05/29/2012	2012-089
2	12" SI-2-153	Remove indications / perform weld repairs on 01-SI-PP-12.00-SI-2-153.	06/01/2012	2012-091
3	01-CC-E-1A	01-CC-E-1A Outlet End Bell Drain Plug Failed. Install and weld plug in boss of outlet channel head.	02/07/2012	2012-045
3	48" WC-1-10	Perform weld repairs on 01-SW-PP-48.00-WC-PIPE-1-10.	05/20/2012	2012-088
3	96" WC-1-10	Perform weld repairs on 01-SW-PP-96.00-WC-PIPE-1-10.	05/20/2012	2012-087
3	30" WS-464-151	Repair through-wall leak on 01-SW-PP-30.00-WS-PIPE-464-151.	04/01/2011	2011-086
3	01-VS-YS-1D	Replace Strainer 01-VS-YS-1D.	02/07/2012	2012-020
3	01-SW-TI-109E	Replace thermowell on 01-SW-TI-109E	02/25/2011	2011-068