



Brunswick Nuclear Plant  
P.O. Box 10429  
Southport, NC 28461

JUN 29 2015

Serial: BSEP 15-0051

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Subject: Brunswick Steam Electric Plant, Unit No. 2  
Renewed Facility Operating License No. DPR-62  
Docket No. 50-324  
Inservice Inspection Program Owner's Activity Report for Unit 2 Refueling  
Outage 21

Ladies and Gentlemen:

Duke Energy Progress, Inc., is enclosing an American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, Form OAR-1 Owner's Activity Report, for the Brunswick Steam Electric Plant (BSEP), Unit No. 2. The report covers inspection activities performed during Brunswick Unit 2 Refueling Outage 21 (i.e., designated as B222R1) for the second inspection period of the fourth inservice inspection interval.

No regulatory commitments are contained in this letter. Please refer any questions regarding this submittal to Mr. Lee Grzeck, Manager – Regulatory Affairs, at (910) 457-2487.

Sincerely,

A handwritten signature in black ink, appearing to read 'Annette H. Pope'.

Annette H. Pope  
Director – Organizational Effectiveness  
Brunswick Steam Electric Plant

A047  
NRK

WRM/wrm

Enclosure: Form OAR-1 Owner's Activity Report

cc (with enclosure):

U.S. Nuclear Regulatory Commission, Region II  
ATTN: Mr. Victor M. McCree, Regional Administrator  
245 Peachtree Center Ave, NE, Suite 1200  
Atlanta, GA 30303-1257

U.S. Nuclear Regulatory Commission  
ATTN: Mr. Andrew Hon (Mail Stop OWFN 8G9A) **(Electronic Copy Only)**  
11555 Rockville Pike  
Rockville, MD 20852-2738

U. S. Nuclear Regulatory Commission  
ATTN: Ms. Michelle P. Catts, NRC Senior Resident Inspector  
8470 River Road  
Southport, NC 28461-8869

Chair - North Carolina Utilities Commission  
P.O. Box 29510  
Raleigh, NC 27626-0510

Mr. Cliff Dautrich, Bureau Chief  
North Carolina Department of Labor  
Boiler Safety Bureau  
1101 Mail Service Center  
Raleigh, NC 27699-1101

BSEP 15-0051  
Enclosure

Form OAR-1 Owner's Activity Report  
for B222R1  
(3 Pages)

### Form OAR-1 OWNER'S ACTIVITY REPORT

Report Number: B222R1

Plant: Brunswick Steam Electric Plant

Unit No.: 2 Commercial Service Date: November 1975 Refueling Outage No.: B222R1

Current Inspection Interval: Fourth

Current Inspection Period: Second Period of the Fourth Interval

Edition and Addenda of Section XI applicable to the inspection plans: 2001 edition with 2003 addenda

Date and Revision of Inspection Plans: Fourth Interval Revision 3 05/06/2014

Edition and Addenda of Section XI applicable to Repair/Replacement activities, if different than the Inspection Plans: None

Code Cases used: N-460, N-532-4, N-613-1, N-648-1, and N-695

#### 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 B222R1 conform to the requirements of Section XI. (Refueling Outage Number)

Signed: [Signature] Engineering Manager Date: 6/3/15  
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 North Carolina and employed by HSB Global Standards of Hartford 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 NB#9150 A, N, L, B, NS, C NC#1276  
Inspector's Signature National Board, State, Province, and Endorsements

Date: 6-3-2015

# **FORM OAR-1 OWNER'S ACTIVITY REPORT**

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

<b>Examination Category and Item Number</b>	<b>Item Description</b>	<b>Evaluation Description</b>
Category D-B / Item D2.10	Service Water System Piping at Valve 2-SW-V93	Evaluation 617965-10. This discovery is a result of a extent of condition activities from CR 617441 initiated on 7/17/13 (Unit 1, 1-SW-V94 thru-wall weep). While performing piping preparations for a UT examination at 2-SW-V93, an external corrosion was found. A Code Temporary Repair Mechanical Clamp per IWA-4133 was installed. Repairs were made under Repair Replacement Plan number 2266166-05 during B222R1.
Category D-B / Item D2.10	Service Water System Piping at Valve 2-SW-V94	Evaluation 617963-10. This discovery is a result of a extent of condition activities from CR 617441 initiated on 7/17/13 (Unit 1, 1-SW-V94 thru-wall weep). While performing piping preparations for a UT examination at 2-SW-V94, an external corrosion was found. A Code Temporary Repair Mechanical Clamp per IWA-4133 was installed. Repairs were made under Repair Replacement Plan number 2266162-05 during B222R1.

**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-B21-F010B	MACHINE SEATING SURFACE AND WELD DISK STOP TO DISK	3/28/2015	13494697-01
2	2-C12-125(34-19)	REPLACE HCU ACCUMULATOR 2-C12-125(34-19)	3/20/2015	13499881-01
2	2-C41-F029B	FAILED TESTING REPLACE THE VALVE AND NECESSARY HARDWARE.	3/23/2015	13501297-01
3	2-SW-TI-804	REPLACE FLANGE BOLTING DUE TO EXCESSIVE CORROSION	7/9/2014	13312794-01
3	2-SW-133-6-046	REPLACE SECTION OF THE PIPE	3/5/2015	13338873-01
3	2-SW-100-30-157	WELD REPAIR TO LOCALIZED AREA ON EXTERIOR OF PIPING	3/14/2015	13495005-03
3	2-SW-110-6-157	REPLACE THE FLANGE AND ELBOW ON 2-SW-110-6-157 AT VALVE 2-SW-V110	3/4/2015	1902260-01
3	2-E11-C001C-HX	REPAIR HOLE IN HEADER (COVER) ON THE HEAT EXCHANGE 2-E11-C001C-HX.	5/2/2013	2226830-06
3	2-SW-V94	REPLACE ELBOW, FLANGE, AND FITTING UPSTREAM 2- SW-V94 VALVE	4/1/2015	2266162-05
3	2-SW-V93	REPLACE PIPING, FLANGE, FITTING UPSTREAM OF 2- SW-V93	3/7/2015	2266166-05
3	2-SW-131PG267	REPLACE BROKEN U-BOLT ON 2-SW-131PG267	9/24/2013	2293102-01
3	2-SW-131PG266	REPLACE BROKEN U-BOLT ON 2-SW-131PG266	9/24/2013	2293103-01
3	2-SW-124PG264	REPLACE U-BOLT ON 2-SW-124PG264	9/24/2013	2293210-01