



**Progress Energy**

**JUN 26 2006**

**SERIAL: BSEP 06-0066**

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

**Subject: Brunswick Steam Electric Plant, Unit No. 1  
Docket No. 50-325/License No. DPR-71  
Inservice Inspection Program for the Third 10-Year Interval - Refueling  
Outage 15 Owner's Activity Report**

**Ladies and Gentlemen:**

Carolina Power & Light Company, now doing business as Progress Energy Carolinas, Inc., submits the enclosed American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, Form OAR-1 Owner's Activity Reports for the Brunswick Steam Electric Plant (BSEP), Unit No. 1. The enclosed Form OAR-1 Owner's Activity Reports cover inspection activities being credited for the second and third inspection period of the third 10-year inservice inspection interval. The second period of the third 10-year interval began May 11, 2001, and ended May 10, 2005; the third period of the third 10-year interval began May 11, 2005, and ends May 10, 2008.

On October 31, 2005, a revision to 10 CFR 50.55a went into effect which incorporates, by reference, NRC Regulatory Guide 1.147, Revision 14, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1." This revision of Regulatory Guide 1.147 indicates that ASME Code Case N-532-1, "Alternative Requirements to Repair and Replacement Documentation Requirements and Inservice Summary Report Preparation and Submission as Required by IWA-4000 and IWA-6000, Section XI, Division 1," can be used provided the OAR-1 forms are prepared and certified following completion of each refueling outage and submitted to the NRC within 90 days of the completion of the refueling outage.

As specified by the ASME Code Case and Regulatory Guide 1.147, the Form OAR-1 Owner's Activity Report for BSEP, Unit 1 Refueling Outage 15 (i.e., B116R1) is provided in Enclosure 1. Enclosure 2 provides a copy of the Form OAR-1 Owner's Activity Report for the Unit 1 containment inspections performed in accordance with the ASME Code, Section XI, Subsection IWE, during Refueling Outage 15. Refueling Outage 15 for Unit 1 ended on April 6, 2006.

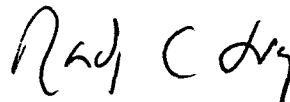
Progress Energy Carolinas, Inc.  
Brunswick Nuclear Plant  
PO Box 10429  
Southport, NC 28461

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No regulatory commitments are contained in this letter. Please refer any questions regarding this submittal to Mr. Leonard R. Beller, Supervisor - Licensing/Regulatory Programs, at (910) 457-2073.

Sincerely,

A handwritten signature in black ink, appearing to read "Randy C. Ivey". The signature is fluid and cursive, with the first name "Randy" being more prominent than the last name "Ivey".

Randy C. Ivey  
Manager - Support Services  
Brunswick Steam Electric Plant

WRM/wrm

Enclosures:

1. Owner's Activity Report - OAR-1 Report for B116R1 Refueling Outage, Revision 0
2. Owner's Activity Report - OAR-1 Report for B116R1 Refueling Outage  
Containment Inspections

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cc (with enclosures):

U. S. Nuclear Regulatory Commission, Region II  
ATTN: Dr. William D. Travers, Regional Administrator  
Sam Nunn Atlanta Federal Center  
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U. S. Nuclear Regulatory Commission  
ATTN: Mr. Eugene M. DiPaolo, NRC Senior Resident Inspector  
8470 River Road  
Southport, NC 28461-8869

U. S. Nuclear Regulatory Commission **(Electronic Copy Only)**  
ATTN: Ms. Brenda L. Mozafari (Mail Stop OWFN 8G9)  
11555 Rockville Pike  
Rockville, MD 20852-2738

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

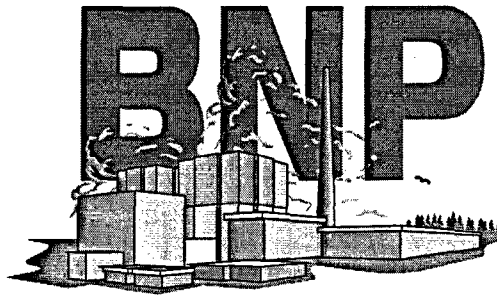
Mr. Jack Given, Bureau Chief  
North Carolina Department of Labor  
Boiler Safety Bureau  
1101 Mail Service Center  
Raleigh, NC 27699-1101

BSEP 06-0066  
Enclosure 1

Owner's Activity Report - OAR-1 Report  
for B116R1 Refueling Outage, Revision 0

# PROGRESS ENERGY BRUNSWICK STEAM ELECTRIC PLANT

## UNIT 1



## OWNER'S ACTIVITY REPORT

### OAR-1 REPORT FOR B116R1 REFUELING OUTAGE

REVISION 0

Prepared By: L D D Healey Date 6-7-06  
NDE Program Manager

Reviewed By: James W. Cook Date 6/8/06  
E/R Program Manager

Reviewed By: Scott Larson Date 6/7/06  
Independent Review

Reviewed By: Raymond V. Kent Date 6/8/06  
Authorized Nuclear Inservice Inspector

## **Revision Summary**

- Initial issue

## **INTRODUCTION**

This report represents a summary of the Inservice Inspection (ISI) activities performed at the Carolina Power and Light Company's Brunswick Steam Electric Plant (BSEP) Unit 1 during the Spring 2006 refueling outage.

The examinations and testing performed during this timeframe were for credit during the second and third inspection period of the Third Inspection Interval.

Examinations and testing were performed to satisfy the requirements of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Inspection Program B, 1989 Edition with no addenda.

In accordance with requirements of Code Case N-532, which has been approved for use at the Brunswick Station, enclosed is the Owners Activity Report (OAR-1 Report).

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

Report number 1-06-B116R1

Owner Carolina Power & Light Company d/b/a Progress Energy Carolinas Inc., PO Box 1551, Raleigh North Carolina  
(Name and Address of Owner)

Plant Brunswick Steam Electric Plant, PO Box 10429, Southport, North Carolina  
(Name and Address of Plant)

Unit No. 1 Commercial Service Date 3/17/77 Refueling outage no. B116R1  
(if applicable)

Current inspection interval 3rd  
(1st, 2nd, 3rd, 4th, other)

Current inspection period 3rd  
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plan 1989 Edition with no addenda

Date and revision of inspection plan October 27, 2005 ISI Program Plan revision 13

Edition and Addenda of Section XI applicable to repairs and replacements, if different than the inspection plan NA

#### 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. NA Expiration Date NA  
(if applicable)

Signed [Signature] NDE Program Manager Date 6-8-06  
Owner or Owner's Designee, Title

#### CERTIFICATE OF INSERVICE INSPECTION

I, the under signed, 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 Hartford Steam Boiler of Connecticut have inspected the items described in the Owner's Activity Report during the period 6/10/04 to 4/07/06, and state that to the best of my knowledge and belief, the Owner has performed all of the 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 warrantee, expressed or implied, concerning the tests, repairs, replacements, evaluations and corrective measures described this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for an personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NC-1433, A.N.I.B.C.  
Inspector's Signature National Board, State, Province and Endorsements

Date 6/9/06



**TABLE 1****ABSTRACT OF EXAMINATIONS AND TESTS**

| Examination Category | Total Examinations Required for The Interval | Total Examinations Credited for This Period | Total Examinations Credited (%) for The Period | Total Examinations Credited (%) to Date for Interval | Remarks       |
|----------------------|--|---|--|--|---------------|
| B-A                  | 26   | 3   | 12   | 46   | See note 2    |
| B-D                  | 70   | 4   | 3  | 71   | See note 2    |
| B-E                  | 46   | 0   | 0  | 0  | See note 2    |
| B-G-1                | 336  | 320   | 95   | 95   | See note 2    |
| B-G-2                | NA   | 3   | NA   | NA   | See note 4, 5 |
| B-K                  | 14   | 0   | 0  | 57   | See note 7    |
| B-L-2                | NA   | NA  | NA   | NA   | See note 4    |
| B-M-2                | NA   | 3   | NA   | NA   | See note 4    |
| B-N-1                | 3  | 0   | 0  | 67   |               |
| B-N-2                | 32   | 0   | 0  | 0  | See note 2    |
| B-O                  | 8  | 8   | 100  | 100  | See note 2    |
| C-A                  | 3  | 0   | 0  | 67   |               |
| C-B                  | 2  | 0   | 100  | 100  | See note 6    |
| C-C                  | 11   | 0   | 0  | 55   | See note 7    |
| C-F-2                | 30   | 0   | 0  | 63   |               |
| D-A                  | 6  | 0   | 0  | 67   | See note 7    |
| F-A                  | 67   | 0   | 0  | 61   |               |
| R-A                  | 49   | 17  | 35   | 82   | See note 3    |

## **TABLE 1 NOTES**

The following notes correspond to the numbers referenced in Table 1 of the OAR-1 Report:

1. Examination categories B-B, B-H, B-K-1, B-N-3, B-L-1, B-M-1, C-F-1, C-G, D-B, and D-C do not apply to the Brunswick Station or are not required for the Third Inspection Interval.
2. Some or all examinations in this category may be deferred until the end of the inspection interval.
3. Examination category B-F and B-J have been subsumed by Category R-A to reflect approval of a Class 1 Risk Informed ISI Program. This was implemented after commencement of the Inspection Interval and the total number of examinations for the interval reflect relief request RR-27.
4. The examinations under this examination category are event related. They are only required if a subject pump or valve is disassembled during a maintenance activity.
5. Item number B7.80 of this category includes a requirement to examine CRD bolting if a CRD is disassembled. In accordance with relief request RR-04 which implemented Code Case N-547, there is no longer a requirement to examine this bolting
6. This category has only 2 items and is covered by Relief Request RR-21.
7. This examination category is performed per the requirements of Code Case N-509.

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

[illegible]

**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 Relevant Condition Found During Scheduled Section XI Examination or Test (Yes or No) | Date Complete | Repair/ Replacement Plan Number |
|------------|--|-----------------------------------|--|--|---------------|---------------------------------|
| 3          | Replacement                                | Service Water line 1-SW-307-1-046 | Replacement of piping containing through-wall leak | No   | 3/26/06       | 806242-01                       |
| 3          | Replacement                                | Service Water line 1-SW-71-4-157  | Replacement of pipe containing through wall leak   | No   | 4/26/06       | 688920-03                       |

**BSEP 06-0066**  
**Enclosure 2**

**Owner's Activity Report - OAR-1 Report**  
**for B116R1 Refueling Outage Containment Inspections**

ATTACHMENT 1  
Page 1 of 2  
Code Case N-532 Form OAR-1, Owner's Activity Report

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

Report Number CIP-B116R1

Owner Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc., PO Box 1551, Raleigh, North Carolina  
(Name and Address of Owner)

Plant Brunswick Steam Electric Plant, PO Box 10429, Southport, North Carolina  
(Name and Address of Plant)

Unit No. 1 Commercial service date March 1977 Refueling outage no. B116R1  
(if applicable)

Current inspection interval First Containment Inspection Interval (Subsection IWE & IWL Only)  
(1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, other)

Current inspection period 3<sup>rd</sup> Inspection Period  
(1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>)

Edition and Addenda of Section XI applicable to the inspection plan 1992 Edition w/ 1992 Addenda

Date and revision of inspection plan 0BNP-TR-002, Revision 09, 02/02/2006

Edition and Addenda of Section XI applicable to repairs and replacements, if different than the inspection plan N/A

**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 Jerry W. Crider Jerry W. Crider ISI Program Manager Date 5/30/2006  
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 Hartford Steam Boiler Inspection and Insurance Company of Connecticut of Hartford, Connecticut have inspected the items described in this Owner's Activity Report, during the period 4/11/04 to 5/30/06, and state that to the best of my knowledge and belief, the Owner has performed all of the 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 a loss of any kind arising from or connected with this inspection.

Reginald N. A. Omb Commissions NB-9557-ANIBC; NC-1433  
Inspector's Signature National Board, State, Province, and Endorsements  
Date 5/30/06

ATTACHMENT 2  
Page 2 of 2  
Code Case N-532 Tables 1, 2, and 3

Note: This Owner's Activity Report is only applicable to the Containment Inspection Program (Subsection IWE & IWL) and does not address Class 1, 2, and 3 components.

TABLE 1  
ABSTRACT OF EXAMINATIONS AND TESTS

| Examination Category | Total Examinations Required For The Interval | Total Examinations Credited For This Period | Total Examinations Credited (%) For This Period | Total Examinations Credited (%) To Date For The Interval | Remarks   |
|----------------------|--|---|---|--|---|
| N1                   | N1   | N1  | N1  | N1   | N1 – Examination percentages are not applicable to the components examined. During the B116R1 outage, only ISI Class MC components associated with the Drywell containment were examined. No ISI Class CC components were examined. |

TABLE 2  
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRE EVALUATION FOR CONTINUED SERVICE

| Examination Category | Item Number | Item Description | Flaw Characterization (IWA-3000) | Flaw or Relevant Condition Found During Scheduled Section XI Examination or Test (Yes or No)        |
|----------------------|-------------|------------------|----------------------------------|---|
| N/A                  | N/A         | N/A              | N/A                              | No flaws or relevant conditions were identified that exceeded the criteria of IWE-3000 or IWL-3000. |

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 Relevant Condition Found During Scheduled Section XI Examination or Test (Yes or No) | Date Completed | Repair/ Replacement Plan Number |
|------------|--|------------------|---------------------|--|----------------|---------------------------------|
| N/A        | None                                       | N/A              | N/A                 | N/A  | N/A            | N/A                             |