



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
MARQUIS ONE TOWER
245 PEACHTREE CENTER AVENUE, NE
SUITE 1200
ATLANTA, GEORGIA 30303-1257

January 10, 2012

Mr. Michael J. Annacone
Vice President
Brunswick Steam Electric Plant
P.O. Box 10429
Southport, NC 28461-0429

**SUBJECT: BRUNSWICK STEAM ELECTRIC PLANT UNIT 1 AND UNIT 2 - NOTIFICATION
OF INSPECTION AND REQUEST FOR INFORMATION**

Dear Mr. Annacone:

During the periods of February 13 - 17, 2012, and March 5 - 9, 2012, the NRC will conduct baseline radiation safety inspection activities at your Brunswick Steam Electric Plant site.

The inspection will focus on the Occupational Radiation Safety Inspection cornerstone using NRC Inspection Procedure (IP) 71124.01. In addition, the inspection will evaluate activities in the Public Radiation Safety Inspection cornerstone using NRC IPs 71124.06, 71124.07 and 71124.08, with focus on radiation protection activities associated with effluents, environmental monitoring and waste processing and transportation. Finally, the inspection will review Performance Indicator data for both Occupational and Public Radiation Safety cornerstones using the applicable sections of IP 71551.

Experience has shown that this inspection is resource intensive both for the NRC inspectors and your staff. In order to minimize the impact to your on-site resources and to conduct a productive inspection, we have enclosed a request for documents needed for this inspection. It is important that all of these documents are up to date and complete, in order to minimize the number of additional documents requested during the preparation and/or the onsite portions of the inspection. The lead inspector has requested that the subject informational material be made available to the NRC staff by February 1, 2012, to allow preparation for the upcoming inspection.

We have discussed the schedule for these inspection activities with your staff and understand that our regulatory contact for this inspection will be Mr. Lee Grzeck of your organization. If there are any questions about this inspection or the material requested, please contact the lead inspector, Wade Loo at (404) 997-4727.

In accordance with 10 CFR 2.390 of the NRC's Rules of Practice, a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Brian Bonser, Chief
Plant Support Branch 1
Division of Reactor Safety

Dockets Nos.: 50-325, 50-324
License Nos.: DPR-71, DPR-62

Enclosure:
Radiation Safety Inspection
Document Request

cc w/encl: (See page 3)

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 Radiation Safety Inspection
 Document Request

cc w/encl: (See page 3)

Distribution w/encl:

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 ADAMS: X Yes ACCESSION NUMBER: ML# 120120386 X SUNSI REVIEW COMPLETE X FORM 665 ATTACHED

OFFICE	RII: DRS	RII: DRS			
SIGNATURE	RA	RA			
NAME	WLOO	BBONSER			
DATE	01/10/2012	01/10/2012			
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: G:\DRS\PSB1\INFORMATION REQUEST
 LETTERS\BRUNSWICK\BRUNSWICK 2012 002 PSB1 RP DOCUMENT REQUEST LTR (REV 1).DOCX

cc w/encl:
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cc w/encl: (continued on page 4)

cc w/encl: (continued)

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Section Chief
Radiation Protection Section
N.C. Department of Environmental
Commerce & Natural Resources
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Emergency Management Director
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RADIATION SAFETY INSPECTION INFORMATION REQUEST

SITE: Brunswick Steam Electric Plant Units 1 & 2 Report 05000325, 324/2012002

PRE-INSPECTION VISIT: Not Applicable

INSPECTION DATES: February 13-17, and March 5-9, 2012

NRC INSPECTORS: Wade T. Loo, Wade.Loo@NRC.GOV
George B. Kuzo, George.Kuzo@NRC.GOV
Adam Nielsen, Adam.Nielsen@NRC.GOV
William Pursley, William.Pursley@NRC.GOV

Inspection Procedure (IP) and Temporary Instruction (TI) Documents to be used for inspection:

IP 71124.01 Radiological Hazard Assessment and Exposure Controls
IP 71124.06 Radioactive Gaseous and Liquid Effluent Treatment
IP 71124.07 Radiological Environmental Monitoring Program
IP 71124.08 Radioactive Solid Waste Processing and Radioactive Material Handling, Storage,
and Transportation
IP 71151 Performance Indicator Verification

Note: This is a broad list of the documents the NRC inspectors will be interested in obtaining and reviewing prior to the on-site inspection visit. The current version of these documents is expected unless specified otherwise. Electronic media is preferred, if readily available. (The preferred file format is Word or searchable "pdf" files on CDROM. Please provide three copies of each electronic media device submitted.) Information in the "document lists" should contain enough information to be easily understood by someone who has knowledge of the subject. The lead inspector can answer questions regarding questions on specific information needs with licensee staff and may request additional documents.

GENERAL INFORMATION NEEDED

- Organization Charts and Contact Phone Numbers for:
 - Radiation Protection
 - Chemistry
- Procedure for issuing Nuclear Condition Reports (NCRs) and assessing issues for risk significance and follow-up actions.
- Updated Final Safety Analysis Report Chapters 11, Effluents/Radwaste; and Chapter 12 Radiation Protection
- Current version/revision of the Offsite Dose Calculation Manual (ODCM)
- Annual Radiological Environmental Operating Report (AREOR) for Calendar Year (CY) 09 and CY 10.
- Annual Radiological Effluent Release Report (ARERR) documents for CY 2009, and CY 2010.
- Current Part 61 Analysis Results for Dry Active Waste (DAW)

Enclosure

71124.01: RADIOLOGICAL HAZARD ASSESSMENT AND EXPOSURE CONTROLS

- List of active RWPs.
- List of all Locked HRAs and VHRA (as applicable).
- Latest survey of ISFSI areas.
- Procedures related to HP controls (e.g. Posting, labeling, surveys, RWPs, contamination control, HRA/LHRA/VHRA control, key control, control of divers, special controls during fuel offload, hot spots, etc.).
- Procedures related to release of personnel and materials (e.g. release surveys, decontamination, guidance for alarm follow up, etc.).
- List of Nationally Tracked Sources and any change-of-ownership transactions.
- List of all non-fuel items stored in spent fuel pool.
- All self-assessments and audits covering HP controls since January 2011.
- LIST of NCRs related to HP controls where the cause was listed as human performance (radworker error) or human performance (HP technician error) issued since January 2011. This should be a list of corrective action documents containing an NCR number and brief description, not full NCRs.
- All NCRs related to Nationally Tracked Sources since January 1, 2011.

71124.06: RADIOACTIVE GASEOUS AND LIQUID EFFLUENT TREATMENT

- Provide Procedures/Guidance Documents for:
 - collection, analysis, release and dose evaluations for gaseous and/or liquid effluents. Include guidance for both batch and continuous modes
 - determination of set-points for main plant gaseous and liquid effluent discharge pathways
- Provide a list of any significant changes to the ODCM since January 1, 2010.
- Provide a list of significant changes to the radioactive effluent processing systems since January 1, 2010.
- Provide a list of any non-radioactive systems that have become contaminated since January 1, 2010.
- Provide a list of any abnormal gaseous or liquid releases identified since January 1, 2010.
- Provide last two gaseous effluent permits and last two liquid effluent permits.
- Provide a list of 10 CFR 50.75(g) entries made since January 1, 2010.
- Provide system health reports for radiological effluent/process monitoring systems since January 1, 2010.
- Provide a list of the main liquid and gaseous effluent pathway process monitors listed as out-of-service (OOS) since January 1, 2010. *[Note do not include monitors listed as OOS for less than 24 hours].*
- List of significant changes to the effluent monitoring program since January 1, 2010, as documented within the ODCM.
- Provide groundwater monitoring results since January 1, 2010.
- Inter-laboratory comparison program results (onsite count room) since January 1, 2010.
- Last 2 surveillance test results for Standby Gaseous Treatment system, "B" train.
- Copies of all audits, self-assessments, and/or reviews of liquid and gaseous effluent monitoring program activities since January 1, 2010. The data should include any reviews conducted of vendor activities and their facilities.

- List of NCR documents generated since January 1, 2010, as a result of gaseous and liquid effluent processing and/or release activities including Engineered Safety Feature ventilation systems. *[Note: only titles/summary statement should be provide for use by the inspectors to select a sample of issues for in-depth review]*

71124.07: RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM (REMP)

Prior to the Onsite Inspection

- Provide Procedures/Guidance Documents for:
 - collection and analysis of environmental samples
 - calibration and maintenance of REMP air and/or water samplers
 - calibration of meteorological monitoring instrument loop (wind speed & direction, air temperature sensors currently in use)
 - monthly/quarterly meteorological instrumentation surveillance requirements (control room and local tower activities)
- Records since January 1, 2010, for:
 - calibrations of REMP air and water sampling equipment (as applicable)
 - meteorological monitoring instrument calibrations (wind speed & direction, air temperature)
 - detailed inter-laboratory comparison program results (environmental lab)
- Copies of all audits, self-assessments, and/or reviews of REMP activities. The data should include any reviews conducted of vendor activities and their facilities.
- List of systems, structures, or components (SSCs), identified as credible mechanism(s) having the potential for release of licensed material to the groundwater environs.
- List of significant REMP changes documented within the ODCM since January 1, 2010.
- List of NCRs generated as a result of REMP activities since January 1, 2010. *[Note: only titles/summary statement should be provide for use by the inspectors to select a sample of issues for in-depth review]*

71124.08: Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation

1. Site and corporate procedures associated with radioactive waste processing and handling, storage, and transportation of radioactive material (RAM), including:
 - a. Storage and handling of RAM including non-RCA and satellite RCA locations.
 - b. Waste stream mixing, sampling, concentration averaging, and use of scaling factors.
 - c. Monitoring impact of long-term storage (e.g. buildup of gases produced by waste decomposition, chemical reactions, container deformation, loss of container integrity, re-release of free-flowing water).
 - d. Transferring of resin and/or sludge into shipping/disposal containers; dewatering and waste stabilization.
 - e. Preparing packages and documentation for shipping radioactive materials.

2. List of RAM storage areas, including satellite RCAs.
3. Process Control Program.
4. List of changes to the radioactive waste processing systems since January 2011, and copies of the associated 50.59 screening documentation.
5. Log of radioactive material shipments (LSA I, II, III; SCO I, II, Type A, or Type B) since January 2011, (The inspectors will select 3-5 packages to review in detail).
6. List of NCRs generated since January 2011, related to radioactive solid waste processing and packaging, handling, storage, and shipping of radioactive materials.

71151: Performance Indicator (PI) Verification

1. Monthly PI reports since January 2011, for occupational and public cornerstones.
2. Liquid and gaseous effluent release assessments which specify the monthly, quarterly, and annual public dose since October 2010.
3. List of all corrective action documents since January 2011, using keywords such as: HRA, LHRA, VHRA, unintended dose, unlocked door, etc. (for occupational cornerstone).
4. List of all electronic dosimeter (ED) dose rate alarms > 1 R/hr and all ED dose alarms since January 2011.
5. Procedure for collection and review of PI data.