



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

June 1, 2017

Mr. William R. Gideon
Site Vice President
Brunswick Steam Electric Plant
8470 River Rd. SE (M/C BNP001)
Southport, NC 28461

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

Dear Mr. Gideon:

During the week of August 14 – 18, 2017, the U.S. Nuclear Regulatory Commission (NRC) will perform a baseline Radiation Safety Inspection at the Brunswick Nuclear Plant (Inspection Procedures 71124.02, 71124.05 and Radiation Safety sections of 71151). In order to minimize the impact to your onsite resources and to ensure a productive inspection, we have enclosed a request for documents needed for this activity. The NRC requests that these documents be provided to the inspectors no later than July 28, 2017.

We have discussed the schedule for these inspection activities with your staff, and understand that our regulatory contact for this inspection will be Julius Bryant. If there are any questions about this inspection or the material requested, please contact the lead inspector, Wade Loo at 404-997-4727, or the Plant Support Branch 1 Chief, Brian Bonser at 404-997-4653.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, "Public inspections, exemptions, requests for withholding" of the NRC's "Agency Rules of Practice and Procedure," 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 component of NRC's Agencywide Documents Access and Management System (ADAMS); accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

This letter does not contain new or amended information collection requirements subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing information collection requirements were approved by the Office of Management and Budget under control numbers 3150-0008, 3150-0011, 3150-0014, 3150-0044, and 3150-0135. The NRC may not conduct or

sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid Office of Management and Budget control number.

Sincerely,

/RA/

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

Docket Nos. 50-324 and 50-325
License Nos. DPR-62 and DPR-71

Enclosure:
Document Request List

cc: Distribution via Listserv

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ADAMS: Yes ACCESSION NUMBER: _____ SUNSI REVIEW COMPLETE FORM 665 ATTACHED

OFFICE	RII, PSB1	RII, PSB1					
SIGNATURE	WTL	BRB1					
NAME	W. Loo	B. Bonser					
DATE	6/1/2017	6/1/2017					
E-MAIL COPY?	YES NO	YES NO					

OFFICIAL RECORD COPY DOCUMENT NAME: G:\DRSII\PSB1\RFI INFORMATION REQUEST
LETTERS\BRUNSWICK\2017\BRUNSWICK RP RFI LTR 2017-003.DOCX

Pre-Inspection Document Request

Inspection Dates: August 14 - 18, 2017

Documents Due to Region II by: July 28, 2017

Licensee: Brunswick Steam Electric Plant

Docket Number: 05000324, 325

Inspection Procedures: IP 71124.02 Occupational As Low As Reasonably Achievable Planning and Controls
IP 71124.05 Radiation Monitoring Instrumentation
IP 71151 Performance Indicator Verification
(Radiation Safety cornerstones only)

Lead Inspector: Wade Loo, Sr. Health Physicist

Note: The current version of these documents is expected unless specified otherwise. Electronic media is preferred if readily available. *[Note that the inspectors cannot accept data provided on USB or "flash" drives due to NRC IT security policies.]* Please organize the information as it is arranged below, to the extent possible. Experience has shown that a poorly organized CD leads to a less efficient inspection and places additional burden on licensee staff. Pay particular attention to the date ranges for the items requested as they may change from item to item. If there are questions, regarding the documents requested, or if the documents cannot be provided by the due date, please do not hesitate to contact the lead inspector, Wade Loo at (404) 997-4727.

Miscellaneous

1. List of primary contacts for each inspection area including names and telephone numbers
2. Plant Management, Radiation Protection, and Chemistry organizational charts w/ contact numbers
3. List of radiation protection procedures, including title and number
4. Corrective action program (CAP) procedures
5. Procedures for gathering and reporting NRC performance indicator (PI) data
6. Independent Spent Fuel Storage Installation (ISFSI) information to include surveys, exposure data, and as low as reasonably achievable (ALARA) planning and reviews conducted for the last two moves, as well as last two routine surveys of the facility and Thermoluminescent Dosimeter (TLD) area monitoring results of the facility

71124.02 - Occupational As Low As Reasonably Achievable Planning and Controls

1. Site and corporate procedures associated with maintaining site dose as low as reasonably achievable (ALARA); including those involving ALARA work activities. These procedures should include:
 - ALARA program implementation, including ALARA committee activities and ALARA planning, briefing, and reviews
 - Radiation work permit preparation and worker compliance
 - Processes used to estimate and track work activity specific exposures
 - Making changes to dose estimates during task performance

Enclosure

- Work controls
 - Engineering controls
 - Temporary Shielding
 - Source Term Reduction
 - Exposure mitigation requirements
2. List of top 5 dose jobs for the last refueling outage and ALARA planning packages (including dose estimates, work hour estimates, special HP controls, and dose reduction initiatives), if available
 3. Most recent annual ALARA report and most recent refueling outage report
 4. Annual ALARA goals for 2017 and 2018, and the methodology utilized to make the projections
 5. ALARA trending point data for last two outages
 6. ALARA Committee activity summaries (e.g., meeting minutes) discussing activities associated with the last refueling outage
 7. Outline of the source term reduction strategy; information should include:
 - Historic trends and current status of plant source term
 - Factors that affect the source term
 - Activities employed to reduce the source term
 - Specific sources identified for reduction actions
 - Source term reduction evaluation
 - Results achieved since March 1, 2017
 8. List of corrective action reports generated since March 1, 2017, related to the ALARA program, including the following:
 - ALARA planning
 - Post-job review identified problems
 - Radiation worker practices
 - Occurrences where the collective exposure was greater than intended dose determined to be ALARA for the individual work activities
 - Most recent self-assessment or audit of ALARA program
 - List of personnel monitored for radiation exposure that shows the total effective dose equivalent (TEDE) to date for each person. If possible, sort individuals by work group (Please do not provide any records, which contain personally identifiable information such as social security number and name on the CD.)
 - Available for onsite review during the inspection:
 - ALARA planning packages for jobs to be performed during the outage
 - Temporary shielding requests generated for the outage

71124.05 - Radiation Monitoring Instrumentation

1. Procedures/Guidance Documents for:
 - Calibration and functional test/source checks of portable radiation detection instruments
 - Calibration and functional tests of small article monitor, personnel contamination monitor, portal monitor, WBC equipment, and continuous air monitors
 - Collection and analysis of high-range, post-accident effluent samples
 - QA program for count room instruments
2. The last two calibration records for each of the following instruments:
 - Unit 1 Post-accident Drywell High Range Area Monitors
 - Unit 2 Reactor Building Roof Vent Monitor
 - Main Stack Monitor and Associated Sample Line Flow Rate Monitor(s)
 - Unit 1 TIP Room Area Monitor
 - All Portal Monitors at radiological controlled area (RCA) exit point

- All small article monitors (SAMs) at RCA exit point
 - All Whole Body Contamination Monitors (Argos) at RCA exit point
 - High-purity Germanium Detector No. 1
3. Documentation for the radioactive sources used to calibrate the instruments in item 2 above. For the Main Stack Monitor and the U1 Drywell High Range Area Monitors, also include paperwork showing traceability to a National Institute of Standards & Technology (NIST) standard and/or traceability to the primary calibration, as applicable
 4. Design documents and/or calculations showing how the alarm setpoints for the following instruments are determined:
 - Unit 1 TIP Room Area Monitor
 - Portal Monitors (PMs) at RCA exit point
 - CAMs (e.g., AMS-4, mini-edgar, etc.)
 5. Chart or procedure listing emergency action levels (EALs) associated with radiation monitors (if applicable)
 6. The latest test record of the instrument calibrator (Shepherd validation testing/dose rate curves)
 7. Latest system health report for the Radiation Monitoring system
 8. Most recent audit or self-assessment covering HP instruments (portables, RCA exit point, WBC, count room) Include any reviews conducted of vendor facilities, as applicable
 9. LIST of NCRs generated since March 1, 2015, related to portable instruments, effluent and area monitors, CAMs, RCA release point monitors, WBCs, and count room instruments
[This should be a list of corrective action documents containing an AR number and brief description, not full NCRs]

71151 – Performance Indicator Verification (Occupational and Public Cornerstones)

1. Procedure for gathering and reporting PI data
2. List of all CRs related to effluent dose/Offsite Dose calculation Manual (ODCM) issues since April 1, 2016 *[This should be a list of corrective action documents containing an AR number and brief description, not full CRs]*
3. List of all CRs related to locked high radiation area/very high radiation area issues, or significant (>100 mrem) unintended doses since April 1, 2016 *[This should be a list of corrective action documents containing an AR number and brief description, not full CRs]*
4. Most recent gaseous and liquid effluent release permits showing year-to-date doses to the public
5. Annual Radioactive Effluent Report for 2016 and 2017, OR an end-of-year public dose report if the official Effluent Report is not ready yet
6. List of electronic dosimeter alarms (dose and dose rate) since April 1, 2016

Assistance Requested During On-Site Inspection

- Identification of work activities available during the inspection for inspector observations, including notification of pre-job briefings, notification of risk significant work activities, and audio/visual surveillance for remote job coverage

Inspector Contact Information:

Wade Loo
Sr. Health Physicist
US NRC Region II
(404) 997-4727
wade.loo@nrc.gov

Mailing Address:

U.S. Nuclear Regulatory Commission
Region II
ATTN: Mr. Wade Loo
245 Peachtree Center Ave., N.E
Suite 1200
Atlanta, GA 30303