



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

January 20, 2016

Mr. William R. Gideon  
Site Vice President  
Brunswick Steam Electric Plant  
P.O. Box 10429  
Southport, NC 28461

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

Dear Mr. Gideon:

During the week of March 7–11, 2016, the U.S. Nuclear Regulatory Commission (NRC) will perform a baseline Radiation Safety Inspection at the Brunswick Nuclear Plant (Inspection Procedures 71124.01, 71124.08, and Technical Instruction 2800/041). 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 February 21, 2016.

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>.

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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 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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Docket Nos. 50-324 and 50-325  
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Document Request List

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ADAMS:  Yes    ACCESSION NUMBER: ML16020A263     SUNSI REVIEW COMPLETE     FORM 665 ATTACHED

OFFICE	RII:DRS/PBS1	RII:DRS/PSB1					
SIGNATURE	WTL	BRB1					
NAME	W. Loo	B. Bonser					
DATE	1/ 20 /2016	1/ 20 /2016					
E-MAIL COPY	YES    NO	YES    NO					

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## Document Request List

Inspection Dates: March 7–11, 2016

Documents Due to Region II by: February 22, 2016

Inspection Procedures (IPs):

IP 71124.01	Radiological Hazard Assessment and Exposure Controls
IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation
TI 2800/041	10 CFR Part 37 Materials Security Review – at Facilities with a 10 CFR Part 73 Physical Protection Program (Radiation Protection Portions only)

Lead Inspector: Wade Loo  
Sr. Health Physicist  
US NRC Region II  
404-997-4727  
Wade.Loo@nrc.gov

**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.

### Miscellaneous

1. List of primary contacts for each inspection area w/phone numbers.
2. Corrective action program procedures.

### 71124.01 - Radiological Hazard Assessment and Exposure Controls

1. List of active Radiation Work Permits (RWPs), including planned and contingency outage RWPs, with their administrative limits, electronic dosimeter dose rate limit, and dose limit.
2. Timeline of major outage activities (e.g., Gantt chart or similar list).
3. Procedures related to health physics (HP) controls (e.g., Posting, labeling, surveys, RWPs, contamination control, high radiation area (HRA)/locked high radiation area (LHRA)/very high radiation area (VHRA) control, key control, control of divers, special controls during fuel offload, hot spots).
4. Procedures related to release of personnel and materials (e.g., release surveys, decontamination, guidance for alarm followup).
5. List of National Source Tracking System (NSTS) sources and any change-of-ownership transactions since March 1, 2015.
6. Documentation of annual NSTS sources inventory reconciliation for 2015.

Enclosure

7. Most recent survey of all LHRAs and VHRAs, as applicable.
8. Most recent sealed source inventory record.
9. List of all non-fuel items stored in spent fuel pool (SFP).
10. Most recent self-assessment or audit covering HP controls.
11. List of Condition Reports (CRs) related to HP controls where the cause was listed as human performance (e.g., radworker error, HP technician error, posting issues, HRA/LHRA/VHRA issues, survey problems) issued since March 1, 2015. *[This should be a list of corrective action documents containing an Action Request (AR) number and brief description, not full Nonconformance Reports (NCRs).]*
12. All self-assessments and audits covering HP controls since March 1, 2015.
13. All CRs related to NSTS sources since March 1, 2015.

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

1. Provide procedures/guidance documents describing licensee compliance with 10 CFR Parts 20, 61, and 71, and 49 CFR Parts 170-189. Procedures/manuals should include:
  - Solid and liquid radwaste processing procedures.
  - Procedure(s) for transferring radioactive waste resin and sludge discharges into shipping/disposal containers.
  - Waste stream mixing and/or sampling procedures, including: (1) waste concentration averaging; (2) use of scaling factors and calculations used to account for difficult-to-measure radionuclides; and (3) ensuring waste stream composition data accounts for changing operational parameters.
  - Shipping/transportation procedures.
  - Cask loading and closure procedures (licensee and vendor) applicable to last three cask transports.
  - List of radioactive material (RAM) storage areas, including satellite radiological controlled areas (RCAs).
  - Monitoring impact of long-term storage (e.g., buildup of gases produced by waste decomposition, chemical reactions, container deformation).
  - Process Control Program (PCP).
3. Liquid and solid radwaste system diagrams and detailed system descriptions (e.g., information that might be contained in curricula for training new system engineers).
4. List of all shipments made since March 1, 2014 (i.e., shipping logs of LSA I, II, III; SCO I, II, Type A, or Type B). The inspectors will select three to five packages to review in detail.
5. Copies of applicable transport cask Certificate of Compliance for the last three transport cask shipments.
6. List and documentation of any changes made to the radioactive waste processing systems (liquid and solid) and/or the PCP since March 1, 2015, and associated 10 CFR 50.59 documentation, as appropriate.
7. List of all abandoned solid and liquid radwaste processing equipment.
8. Last two radio-chemical sample analysis results (i.e., 10 CFR Part 61 analysis) for each of the identified radioactive waste streams (e.g., dry active waste, ion exchange resins, mechanical filters, and sludges and activated materials).
9. Most recent self-assessment or audit of Shipping/radwaste processing and RAM storage programs.
10. List of NCRs involving RAM shipping/transportation, radwaste processing, or RAM storage since March 1, 2014. *[This should be a list of corrective action documents containing an AR number and brief description, not full NCRs.]*

11. Training and qualification records for personnel responsible for radioactive waste processing and RAM shipment preparation activities demonstrating that the requirements of 49 CFR Part 172, Subpart H, HAZMAT training, have been met. *[This information can be reviewed onsite rather than included with the submittal because it may contain Personally Identifiable Information.]*

Available for onsite review during the inspection:

- Site drawing(s) showing the location of all stored RAMs and all stored radioactive waste.
- Plant drawings sufficient to permit the inspector to walkdown the liquid and solid radioactive waste processing systems, to verify current system configuration/operation agree with the descriptions contained in the Updated Final Safety Analysis Report, and in the PCP.
- Documentation describing the status of any radioactive waste process equipment that is not operational, and/or is abandoned in place.
- Information concerning the site's waste disposal volume and waste reduction program.
- Training curriculum and primary lesson plans for qualifying persons, including vendors, for radwaste processing, packaging, and making shipments of RAMs and radioactive waste as specified by 49 CFR Part 172. Liquid and solid radwaste system diagrams and detailed system descriptions (e.g., information that might be contained in curricula for training new system engineers).

Temporary Instruction 2800/041 - Title 10 of the Code of Federal Regulations Part 37 Materials Security Review – At Facilities with a Title 10 of the Code of Federal Regulations Part 73 Physical Protection Program (Radiation Protection portions only)

1. All procedures related to 10 CFR Part 37 compliance (storage of RAM, 10 CFR Part 37 Security Plan, etc.).\*
2. List of all known locations of Category 1 and 2 material.
3. All supporting calculations for determination of whether an aggregation of RAM meets the definition of Category 1 or Category 2 (e.g., warehouse calculation).
4. Other documents needed have been requested in the previous procedures that are related to the inspection of the Technical Instruction.
5. List of RAM storage areas, including satellite RCAs.
6. Log of radioactive material shipments (LSA I, II, III; SCO I, II, Type A, or Type B) since January 1, 2013.

\*Please do not include Safeguards or Official Use Only information in the submittal. That information can be reviewed onsite.

Assistance Requested During Onsite Inspection

- Identification of work activities available during the inspection for inspector observations, including notification of pre-job briefings, notification of diving activities, audio/visual surveillance for remote job coverage.
- HP assistance in plant walkdowns of areas identified for storage of Category 1 and 2 materials.
- An inspector will need to observe any shipments or receipts of RAM.
- HP assistance in plant walkdowns of radwaste processing systems.

- HP assistance in plant walkdowns assessing access controls (e.g., verifying the posting and locking of entrances to HRAs and VHRAs, and SFP controls).
- HP assistance in plant walkdowns/job coverage of ongoing activities to assess access controls
- Discussions with appropriate individuals regarding access controls

### **LIST OF ACRONYMS**

AR	Action Request
CRs	Condition Reports
HP	Health Physics
HRA	High Radiation Area
LHRA	Locked High Radiation Area
NCRs	Nonconformance Reports
NSTS	National Source Tracking System
PCP	Process Control Program
RAM	Radioactive Material
RCAs	Radiological Controlled Area
RWPs	Radiation Work Permits
SFP	Spent Fuel Pool
TI	Technical Instruction
VHRA	Very High Radiation Area