



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

January 11, 2010

Mr. Benjamin C. Waldrep
Vice President
Carolina Power and Light Company
Brunswick Steam Electric Plant
P.O. Box 10429
Southport, NC 28461

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

Dear Mr. Waldrep:

During the period of February 8 – 12, 2010, the NRC will conduct baseline radiation safety inspection activities at your Brunswick Steam Electric Plant site. The inspection will evaluate activities in the Public Radiation Safety Inspection cornerstone using NRC Inspection Procedures (IP) 71124.06, and IP 71124.07, and will focus on radiation protection activities associated with effluent and environmental monitoring. The inspection also will focus on dosimetry program activities using IP 71124.04, and on in-plant and effluent radiation instrumentation and monitoring activities associated with both the Occupational and Public Radiation Safety Inspection Cornerstone using IP 71124.05. Finally, the site's implementation of the Industry Ground Water Protection Voluntary Initiative will be reviewed using Temporary Instruction (TI) 2515/173.

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, 2010, 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, George B. Kuzo at (404) 562-4658.

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, 324,
License Nos.: DPR-71, 62

Enclosure: Radiation Safety Inspection Document Request

cc w/encl: (See page 3)

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Enclosure: Radiation Safety Inspection Document Request

cc w/encl: (See page 3)

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 ADAMS: Yes ACCESSION NUMBER: _____ X SUNSI REVIEW COMPLETE

OFFICE	RII:DRS	RII:DRS											
SIGNATURE	GBK /RA/	BRB /RA/											
NAME	GKuzo	BBonser											
DATE	1/11/2010	1/11/2010											
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: G:\DRSI\PSB1\INFORMATION REQUEST
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cc w/encl continued next page

CP&L

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cc w/encl continued

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CP&L

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Letter to Benjamin C. Waldrep from Brian Bonser dated January 11, 2009

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

Distribution w/encl:

C. Evans, RII

L. Slack, RII

OE Mail

RIDSNRRDIRS

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RADIATION SAFETY INSPECTION INFORMATION REQUEST

SITE: Brunswick Steam Electric Plant Units 1 & 2 Report 05000325, 324/2010002

PRE-INSPECTION VISIT: Not Applicable

INSPECTION DATES: February 8-12, 2010

NRC INSPECTORS: George B. Kuzo, George.Kuzo@NRC.GOV Lead Inspector
Ruben Hamilton, Ruben.Hamilton@NRC.GOV
Adam Nielsen, Adam.Nielsen@NRC.GOV

ACCOMPANYING PERSONNEL: Richard Conatser, NRR

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

IP 71124.04 Dosimetry
IP 71124.05 Radiation Monitoring Instrumentation
IP 71124.06 Radioactive Gaseous and Liquid Effluent Treatment
IP 71124.07 Radiological Environmental Monitoring Program
TI 2515/173 Review of the Implementation of the Industry Ground Water Protection Voluntary Initiative (Revision 1)

IDENTIFIED LICENSEE CONTACTS: Radiation Protection and Chemistry Manager: Jerry Johnson, (910-457-2264); Radiation Protection Manager: John Vincelli, (-2608); Chemistry Manager: John Piepmeyer, (2776); Portable Instruments: Ed Rochelle (- 2716); Effluent/ Process Monitor Engineer: Leo Kuffel; (-3136); Counting Room: Alicia Baker (2143), REMP, Marty McGowan, (-2538); Groundwater Protection Initiative: Mike Millinor (-2667); Licensing/Compliance: Lee Grzeck (-2487)

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 a 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
 - Operations
 - Maintenance and I&C

Enclosure

- Procedure for issuing Condition Reports 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) 07 and CY 08
- Annual Radiological Effluent Release Report (ARERR) documents for CY 2007 and CY 2008
- Current Part 61 Analysis Results for Dry Active Waste (DAW)

DOSIMETRY [71124.04]

- Provide Procedures/Guidance Documents for:
 - external dose monitoring, i.e., dosimetry issuance and use. The documents should include:
 - guidance for multi-badging; monitoring in steep/highly variable dose rate gradients;
 - personnel contamination events; storage/care of personal dosimeters; use of electronic
 - dosimeters including evaluation of any biases identified relative to TLD monitoring
 - internal dose assessment, i.e., both *in vivo* and *in vitro* bioassay and air sampling capabilities. The documents should include guidance for calibration/QC and use of whole body counter (WBC); release of contaminated individuals, use of passive monitoring as screening method for evaluations, and special *in vitro* sample collection and analysis, and actions for declared pregnant workers.
- NVLAP accreditation documentation for current dosimetry used by site
- List of all positive whole body count (WBC), *in vitro*, or air sampling analyses which resulted in an assigned CEDE equal to or exceeding 10 millirem since January 1, 2008. *[Note: only a listing should be provided for use by the inspectors to select a sample of issues for in-depth review during the on site inspection]*
- List of all personnel contamination events, dispersed contamination/discrete particles, identified since January 1, 2008. *[Note: only a listing should be provided for use by the inspectors to select a sample of issues for in- depth review during the on site inspection]*
- List of declare pregnant workers *[Note: do not provide this data – the documents will be reviewed on-site, only have the data readily available during the onsite inspection]*
- Copies of all audits, self-assessments, and/or reviews related to internal or external dosimetry issues generated since January 1, 2008. The documents provided should to include any reviews/evaluations conducted of vendor facilities, e.g., corporate or outside vendor/ or corporate calibration facilities.
- Provide a list of Condition Report (CR) documents generated since January 1, 2008, for Internal or external dosimetry issues/events. *[Note: only titles/summary statement should be provide for use by the inspectors to select a sample of issues for in-depth review]*

RADIATION MONITORING INSTRUMENTATION) [71124.05]

- Copies of the CY 2007 and CY 2008 ARERR documents *[Note: provided as part of the General Information Request and duplication is not required]*
- Provide Procedures/Guidance Documents for:
 - use of portable instrument calibrators
 - calibration and functional test/source checks of portable radiation detection instrumentation
 - calibration and functional tests of small article monitor (SAM), personnel contamination monitor (PCM), portal monitor (PM), and whole body counting (WBC) equipment; for area radiation monitor (ARM) and continuous air monitor (CAM) equipment.
 - determination of set-points for ARM, CAM, PCM, PM and SAM equipment used for area and personnel monitoring equipment, as applicable
 - collection and analysis of high-range, post accident iodine and effluent samples
- Provide a list of in-service SAM, PCM, PM, and WBC equipment *[Note: the list will be used to select 3 to 5 monitors for evaluation of their calibration/functional check surveillances during the onsite inspection. In addition, portable radiation detection instrumentation will be selected at random to evaluate adequacy of calibrations.]*
- Provide the previous two sets of calibration data for the following effluent monitors: main stack radiation monitor, liquid process radiation monitor, and Unit 1 reactor building ventilation monitor
- Provide the previous two sets of calibration data for the following monitors: control room operating area (1-1); U1 spent fuel pool cooling system, (1-30); U1 feedwater heater by access corridor, (1-10); U1 core spray pump room ESS II, (1-16); U2 reactor building across from TIP Room Elevation-29', (2-19) and 2B RHR system heat exchanger + pump room ESSII, (2-18); and U2 Drywell high radiation monitor (RM 4195 and RM 4196).
- Copies of all audits, self-assessments, and/or reviews of area and personnel monitoring equipment and portable radiation survey instruments generated since January 1, 2007. The records should include any reviews conducted of vendor facilities, e.g., outside calibration laboratories
- Provide a list of Condition Report (CR) documents generated since January 1, 2007, for gaseous and liquid effluent monitoring activities, for ARM and/or CAM operability issues, effluent monitoring equipment or monitoring activities; and for the release of licensed material outside of the radiologically controlled area (RCA) *[Note: only titles/summary statement should be provide for use by the inspectors to select a sample of issues for in-depth review]*

RADIOACTIVE GASEOUS AND LIQUID EFFLUENT TREATMENT [71124.06]

- Copies of the CY 2007 and CY 2008 ARERR documents *[Note: provided as part of the General Information Request and duplication is not required]*
- 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, 2007

Enclosure

- Provide a list of significant changes to the radioactive effluent processing systems since January 1, 2007
- Provide a list of any non-radioactive systems that have become contaminated since October 1, 2007
- Provide a list of any abnormal gaseous or liquid releases identified since January 1, 2007
- Provide a list of 10 CFR 50.75(g) entries made since January 1, 2007
- Provide system health reports for radiological effluent/process monitoring systems since January 1, 2007
- Provide a list of the main liquid and gaseous effluent pathway process monitors listed as out-of-service (OOS) since January 1, 2007. *[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, 2007, as documented within the ODCM
- Provide groundwater monitoring results since January 1, 2007
- Records since January 1, 2007, for:
 - detailed inter-laboratory comparison program results
 - results of Technical Specification HEPA and Charcoal filtration system surveillances
 - list of abnormal liquid and gaseous releases
- Copies of all audits, self-assessments, and/or reviews of liquid and gaseous effluent monitoring program activities since January 1, 2007. The data should include any reviews conducted of vendor activities and their facilities
- List of Condition Report documents generated since January 1, 2007, as a result of gaseous and liquid effluent processing and/or release activities. *[Note: only titles/summary statement should be provide for use by the inspectors to select a sample of issues for in-depth review]*

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM (REMP) [71124.07]

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, 2007 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
- 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, 2007

Enclosure

- List of Condition Reports generated as a result of REMP activities since January 1, 2007. *[Note: only titles/summary statement should be provide for use by the inspectors to select a sample of issues for in-depth review]*
- Copies of the CY 2007 and CY 2008 AREORs [Note: provided as part of the General Information Request and do not need to be duplicated]

REVIEW OF THE IMPLEMENTATION OF THE INDUSTRY GROUNDWATER PROTECTION VOLUNTARY INITIATIVE [TI 2515/173 Rev.1]

- Provide procedures/guidance documents for groundwater monitoring program including:
 - Sample collection and frequency
 - NEI Groundwater Protection Initiative (GPI) compliance including communication protocols
 - Processes for remediation (as applicable)
 - Record keeping
 - Quality Assurance
- All 30-day reports, special reports, or voluntary/informal communication reports since August 1, 2008
- ODCM [Note: provided as part of the General Information Request and do not need to be duplicated]
- Current maps showing locations of all groundwater monitoring/remediation wells
- Most current site hydrology/geology report
- Any revisions to FSAR or ODCM made as a result of the groundwater monitoring program
- List of Structures, Systems, and Components (SSCs) ranked according to risk for release of contaminated liquid
- Current 50.75(g) decommissioning files