



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

July 28, 2008

Carolina Power and Light Company
ATTN: Mr. Thomas D. Walt
Vice President - Robinson Plant
H. B. Robinson Steam Electric Plant
3851 West Entrance Road
Hartsville, SC 29550

**SUBJECT: H.B. ROBINSON STEAM ELECTRIC PLANT- NOTIFICATION OF INSPECTION
AND REQUEST FOR INFORMATION**

Dear Mr. Walt:

On October 13-17 and October 20-24, 2008, the NRC will perform the baseline Occupational Radiation Safety Inspection at the H.B. Robinson Steam Electric Plant (NRC Inspection Procedures 71121.01, 71121.02, and 71122.02 and the radiation safety sections of 71151 and 60855). 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 ensure 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. In lieu of a pre-inspection visit, we request that the requested information be provided to our staff by September 10, 2008. An address to which the information, preferably on CD, can be sent is provided on the enclosed document request.

We have discussed the schedule for these inspection activities with your staff and understand that our regulatory contact for this inspection will be Garrett Sanders of your organization. If there are any questions about this inspection or the material requested, please contact the lead inspector, Heather Gepford, at (404) 562-4659, or the Plant Support Branch 1 Chief, Brian Bonser, at (404) 562-4653.

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).

Should you have any questions concerning this letter, please contact us.

Sincerely,

/RA/

Brian R. Bonser, Chief
Plant Support Branch 2
Division of Reactor Safety

Docket No. 50-261
License No. DPR-23

Enclosure: Pre-Inspection Document Request

(cc: w/encl See Page 3)

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☒ PUBLICLY AVAILABLE

☐ NON-PUBLICLY AVAILABLE

☐ SENSITIVE

☒ NON-SENSITIVE

ADAMS: ☒ Yes

ACCESSION NUMBER: ML082110144

☒ SUNSI REVIEW COMPLETE

OFFICE	RII:DRS	RII:DRS					
SIGNATURE	/RA/	/RA/					
NAME	BBonser	HGepford					
DATE	07/28/2008	07/25/2008	7/ /2008	7/ /2008	7/ /2008	7/ /2008	7/ /2008
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

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DOCUMENT NAME: C:\MYFILES\CHECKOUT\ROBINSON INFORMATION REQUEST LETTER (IR

cc w/encl:
Eric McCartney
Director Site Operations
Carolina Power & Light Company
Electronic Mail Distribution

Ernest J. Kapopoulos, Jr.
Plant General Manager
Carolina Power & Light Company
Electronic Mail Distribution

Paul Fulford
Manager
Performance Evaluation and Regulatory
Affairs PEB5
Carolina Power & Light Company
Electronic Mail Distribution

Curt A. Castell
Supervisor
Licensing/Regulatory Programs
Carolina Power & Light Company
H. B. Robinson Steam Electric Plant
3581 West Entrance Road
Hartsville, SC 29550

C. T. Baucom
Manager
Support Services - Nuclear
Carolina Power & Light Company
Electronic Mail Distribution

Susan E. Jenkins
Director, Division of Waste Management
Bureau of Land and Waste Management
S.C. Department of Health and
Environmental Control
Electronic Mail Distribution

R. Mike Gandy
Division of Radioactive Waste Mgmt.
S.C. Department of Health and
Environmental Control
Electronic Mail Distribution

Beverly O. Hall
Chief, Radiation Protection Section
Department of Environmental Health
N.C. Department of Environmental
Commerce & Natural Resources
Electronic Mail Distribution

David T. Conley
Associate General Counsel
Legal Dept.
Progress Energy Service Company, LLC
Electronic Mail Distribution

John H. O'Neill, Jr.
Shaw, Pittman, Potts & Trowbridge
2300 N. Street, NW
Washington, DC 20037-1128

Chairman
North Carolina Utilities Commission
Electronic Mail Distribution

Robert P. Gruber
Executive Director
Public Staff - NCUC
4326 Mail Service Center
Raleigh, NC 27699-4326

Public Service Commission
State of South Carolina
P.O. Box 11649
Columbia, SC 29211

S. D. West
Superintendent Security
H. B. Robinson Steam Electric Plant
Progress Energy
Electronic Mail Distribution

Senior Resident Inspector
Carolina Power and Light Company
H. B. Robinson Steam Electric Plant
U.S. NRC
2112 Old Camden Rd
Hartsville, SC 29550

Pre-Inspection Document Request

Occupational Radiation Safety Cornerstone

Licensee: H.B. Robinson Steam Electric Plant
Docket Number: 50-261
Inspection Dates: October 13-17 and October 20-24, 2008

Inspection Procedures to be performed:

71121.01	Access Controls to Radiologically Significant Areas
71121.02	ALARA Planning and Controls
71122.01	Radioactive Gases and Liquid Effluent Treatment & Monitoring Systems [limited scope, focusing on the groundwater monitoring program]
71122.02	Radioactive Material Processing and Transportation
71151	Performance Indicator Verification
60855	Operation of an ISFSI (RP aspects)

The most recent inspection completed for inspection procedures 71121.01, 71121.02, and 60855 was performed on April 16-20, 2007; inspection procedure 71122.02 was performed June 26-30, 2006, and inspection procedures 71122.01 and 71151 were performed on January 8-12, 2007. Unless otherwise specified, documentation is requested from the date of the previous inspection to the present.

We would prefer as much of the information as possible in electronic form. An index to the CD contents is also helpful. For those items requesting a list of documents/areas, the inspectors will select documents/areas from the list for on-site review. If any of the requested information is too burdensome to provide electronically or as hard copies, simply indicate that the requested material is available for onsite review by the inspectors.

If you have any questions, please call Heather Gepford at 404-562-4659. Thank you in advance for all your effort in putting together this material.

Assistance Requested During On-Site Inspection

- Identification of work activities during the inspection for inspector observations, including notification of pre-job briefings, notification of diving activities, audio/visual surveillance for remote job coverage.
- Walk-down of the ISFSI
- Discussion of groundwater monitoring program with cognizant personnel
- Discussions with appropriate individuals regarding access controls and ALARA planning.
- Schedule of transportation shipments during the inspection and notification of opportunities for observations of shipment preparation/receipt; discussions with appropriate individuals regarding the transportation program.

Enclosure

General Information Request

- Telephone numbers of contacts
- Plant and Radiation Protection organizational charts, including personnel involved in solid radwaste processing and transportation of radwaste/radioactive materials.
- Electronic copy of applicable chapters of UFSAR (e.g. radiation protection program, liquid and solid radioactive waste program, etc.)
- Outage schedule, including work activities to be conducted during the week(s) of the inspection
- List of active radiation work permits, including those specific to outage activities, with their administrative limits, electronic dosimeter dose rate limit, and dose limit.
- List of radiation protection procedures
- Corrective Action Program procedures
- Audits and self-assessments performed since the last inspection that encompass the areas of (1) access controls, (2) the ALARA program and implementation, (3) liquid and solid radwaste processing, (4) transportation of radioactive material/radwaste, and (5) the ISFSI.

71122.01 Radioactive Gases and Liquid Effluent Treatment & Monitoring Systems

- Procedures for onsite/offsite surface/groundwater monitoring activities and leak detection
- Summary of spill, leak, or unexpected liquid discharge data documented in the site's 10 CFR 50.75(g) files. *Note: Only provide summary, 50.75(g) file details may be reviewed during onsite inspection.*
- List of ARs issued since August 2007 for tritium or other radioisotopes in ground water wells, or identification of spills or leaks from contaminated systems, structures, and components.
- Audits and self assessments conducted since January 2007 for groundwater monitoring.
- Annual Effluent/REMP Reports for CY 2007

71121.01 Access Controls to Radiologically Significant Areas

- Site and corporate procedures associated with the access control program. Procedures should include:
 - Radiological surveys, postings, and radiation control barricades
 - Security and control of high radiation sources/objects stored in pools
 - Radiation Work Permits
 - Radiological Job-Coverage
 - Controlling access to High Radiation Areas (HRAs), High Dose Rate High Radiation Areas (HDR-HRAs), and Very High Radiation Areas (VHRAs)
 - Key controls for all high radiation areas
 - Radioactive material control, including contamination and hot particles
 - Dosimetry monitoring (electronic dosimeters, multi-badging, etc.)
 - Calculations of internal exposures
- List of the 10 most exposure significant work areas within radiation areas, high radiation areas (<1R/hr), or airborne radioactivity areas in the plant. This may include areas with low dose rates but high collective dose. Identify any high radiation areas with significant dose gradients (factor of five or more), including underwater diving activities.
- RWP for the top five dose rate areas or tasks.
- Plant/elevation maps of all HRAs, LHRAs, HDR-HRAs (>25 rem in one hour @ 30 cm), and VHRAs. Include areas with the potential to become a HRA during routine operations or outages.
- Internal dose assessments, including calculations, for any internal exposures greater than 50 mrem CEDE since the last inspection.
- List of all PCEs, including skin dose assessment if applicable, since the last inspection.
- List of ARs generated since the last inspection (April 2007) related to access controls, including the following:
 - Access controls, including high radiation area radiological incidents
 - Radiological events caused by radiation worker errors
 - Radiological events caused by radiation protection technician errors

71121.02: ALARA Planning and Controls

- Site and corporate procedures associated with maintaining site dose 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
 - Work controls
 - Engineering controls

Enclosure

- ▶ Exposure mitigation requirements
- ALARA documents related to current outage:
 - ▶ List approximately 10-15 work activities planned during the inspection likely to result in the highest personnel collective exposures and those which present the greatest radiological risk to workers (e.g. work in HRAs, diving, potentially changing radiological conditions). Include the dose projection and ALARA package number.
 - ▶ ALARA planning packages for the 5 highest dose jobs being performed
 - ▶ Temporary shielding requests generated for the outage.
- ALARA documents related to previous outage:
 - ▶ Completed ALARA packages (including post-job reviews) for the 5 work activities that were completed during the last outage which had the greatest collective dose and/or presented significant radiological risk.
 - ▶ List of 5 activities (including ALARA package number) from the previous outage in which the work scope changed or was extended and alternative ALARA measures were taken to respond to the emergent conditions.
 - ▶ List of 5 activities from the previous outage in which the estimated work hours were significantly different than the actual hours expended.
 - ▶ List of 5 activities in which the estimated and actual hours expended were accurate.
- Documents related to the ALARA planning process:
 - ▶ Annual ALARA goals for 2006-2008, previous/current outage ALARA goals, and the methodology utilized to make the projections.
 - ▶ Most recent annual ALARA report and most recent refueling outage report.
 - ▶ ALARA Committee activity summaries (e.g. meeting minutes) for three months or 3 meetings after the last refueling outage and the three months or 3 meetings prior to the upcoming refueling outage.
- 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 last inspection of the ALARA program
- Records for declared pregnant workers since April 2007, listing their monthly radiation exposure during the term or year-to-date.
- List of ARs generated since April 2007 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

71122.02 Radioactive Material Processing and Transportation

- Site and corporate procedures/manuals 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
- Process Control Program (PCP).
- Most recent Annual Radioactive Effluents Release Report.
- Most recent radio-chemical sample analysis results (i.e., "10 CFR Part 61" analysis) for each of the radioactive waste streams (e.g., dry active waste (DAW), ion exchange resins, mechanical filters, and sludges and activated materials, etc.).
- List and documentation of any changes made to the radioactive waste processing systems (liquid and solid) and/or the PCP since June 2006 and associated 10 CFR 50.59 documentation, as appropriate.
- Copies of applicable transport cask Certificate of Compliance for the last three transport cask shipments.
- Training and qualification records for personnel responsible for radioactive waste processing and radioactive material shipment preparation activities.
- Copy of the Radioactive Shipping Log for the last 18 months. (The inspector will select transportation shipping packages for review during the inspection.)
- List of ARs generated since June 2006 involving radioactive waste and radioactive material/waste transportation.
- *Available for onsite review during the inspection:*
 - ▶ Site drawing(s) showing the location of all stored radioactive materials and all stored radioactive waste.
 - ▶ Plant drawings sufficient to permit the inspector to walk-down the liquid and solid radioactive waste processing systems to verify current system configuration/operation agree with the descriptions contained in the UFSAR 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 radioactive materials and radioactive waste as specified by 49 CFR 172.

71151 Performance Indicator Verification

- Procedure(s) for identifying, notification, tracking, and correcting PI occurrences.
- List of all ARs since January 2007 using keywords: HRA, LHRA, VHRA, unintended dose, unlocked door, offsite dose, ODCM, etc.
- Monthly PI reports since January 2007 and copies of associated corrective action reports for Occupational Exposure Control Effectiveness and RETS/ODCM Radiological Effluent Occurrences.
- List of all dose rate alarms > 500 mR/hr and all dose alarms since January 2007.
- All final release point effluent monitor out-of-service dates since January 2007.
- Most recent gaseous and liquid effluent release permits.

60855 Operation of an ISFSI

- Procedures associated with the ISFSI facility. Procedures should include:
 - ▶ Radiological surveys, postings, and radiation control barricades
 - ▶ Environmental monitoring (including TLDs)
 - ▶ Loading of casks
 - ▶ Routine activities
- Radiation surveys of the ISFSI since April 2007.
- ALARA reviews and planning and associated RWP for cask loading activities
- Environmental monitoring results (e.g. TLDs)
- Radiological records for the loading of casks since April 2007.
- Records of contamination incidents since April 2007.
- List of ARs related to the ISFSI with respect to radiation protection (i.e. access controls, ALARA, contamination, radiation levels, etc.) since April 2007.

Inspector Contact Information:

Heather Gepford, Ph.D., CHP
 (404) 562-4659, (770) 833-6512
 Heather.Gepford@nrc.gov

Mailing Address

US NRC Region II
 ATTN: Brian Bonser
 61 Forsyth Street, SW
 Suite 23T85
 Atlanta, GA 30303-3415

Enclosure