



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W., SUITE 2900
ATLANTA, GEORGIA 30323-0199

Report No.: 50-400/95-14

Licensee: Carolina Power and Light Company
P. O. Box 1551
Raleigh, NC 27602

Docket No.: 50-400

License No.: NPF-63

Facility Name: Shearon Harris

Inspection Conducted: September 18-22, 1995

Inspector:

William J. Rankin
for F. N. Wright

10/19/95
Date Signed

Approved by:

K. P. Barr
K. P. Barr, Chief
Plant Support Branch
Division of Reactor Safety

10/19/95
Date Signed

SUMMARY

Scope:

This routine, announced inspection of the licensee's radiation control program involved a review of health physics activities primarily associated with the current Unit 1 refueling outage number six. The specific areas evaluated included: changes to the radiation protection program; external and internal exposure controls; control of radioactive material and contamination, surveys and monitoring; and As Low As Reasonably Achievable (ALARA) program implementation.

Results:

Based on interviews with licensee personnel, records review, and observation of work activities in progress, the inspector found the Radiation Control program adequately protected the health and safety of plant workers. A Non-Cited Violation (NCV) was identified concerning several radiation workers failure to observe high radiation area postings in their work area.

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REPORT DETAILS

1. Persons Contacted

Licensee Employees

G. Cheetham, Corporate Health Physics
*T. Dobbs, Outage and Planning Manager
*J. Donahue, Plant General Manager
*W. Gautier, Maintenance Manager
*M. Hill, Nuclear Assessment Manager
J. Kiser, Nuclear Assessment Department
K. Neuschaefer, Radiation Control Manager
A. Poland, Environmental and Radiation Control Senior Analysis
*B. Prunty, Licensing/Regulatory Programs Supervisor
K. Rogers, ALARA Specialist
*S. Sewell, Design Control Superintendent
*D. Tibbitts, Plant Operations Assessments Manager
M. Wallace, Senior Regulatory Compliance Specialist
*T. Walt, Regulatory Affairs Manager
*B. White, Environmental and Radiation Control Manager
*A. Williams, Operations Manager
*E. Wills, Environmental and Radiation Control Programs Supervisor

Other licensee employees contacted during the inspection included technicians, maintenance personnel and administrative personnel.

Nuclear Regulatory Commission

*S. Elrod, Senior Resident Inspector
*C. Lui, Office of Research Risk Assessment Engineer
*D. Roberts, Resident Inspector

*Attended September 22, 1995 Exit Meeting

Abbreviations used throughout this report are defined in the last paragraph.

2. Changes (83750)

The inspector reviewed the licensee's HP program to determine if any significant changes had occurred since the last inspection was conducted during the period of April 10-13, 1995, and documented in IR 50-400/95-06. Changes in organization, personnel, facilities, equipment, programs and procedures, from the previous inspection, were reviewed to assess their impact on the effective implementation of the occupational radiation protection program.

The inspector reviewed the licensee's staffing levels in recent years for comparison with the current staffing levels in the ongoing RFO-6. A summary of the changes in recent years is shown below.

Harris Radiation Protection Staffing

<u>Licensee Staff</u>	1992	1993	1994	1995
Senior HPTs	34	33	33	33
Junior HPTs	2	2	1	0
Dosimetry Technicians	4	4	4	3
Other: Management, Specialist & Clerical ^a	12	12	12	14
Shared Resources ^b	5	0	5	33
<u>Vendor HP Support</u>	RFO-4		RFO-5	RFO-6
Senior HPTs	75	0	95	43
Junior HPTs	0	0	0	0
Dosimetry Technicians	4	0	4	3
Decontamination ^c				
Normal Operations	17	17	17	17
Refuel Outages	33	0	33	33

- a. Effective June 28, 1995 E&RC responsible for the SF Shipments
- b. CP&L personnel with HP backgrounds from other departments and other CP&L nuclear sites
- c. Report to Maintenance Department

The licensee removed the RTD lines during RFO-5 and had significantly increased the number of vendor HPTs in that outage due to the increased workload on the HP staff. RFO-6 and RFO-4 had similar outage work scopes, however, the licensee had reduced the vendor HP support staff for RFO-6 by approximately 40% of the number of vendor HPs utilized in RFO-4. The difference in the number of vendor HP personnel in the RFO-4 and RFO-6 outages was primarily made up with additional CP&L personnel from other site departments, corporate office and other CP&L nuclear facilities. The licensee referred to the CP&L personnel staffing plan as "Shared Resources." The inspector observed the performance of HP shared resource personnel during the inspection and interviewed many of them. All shared resource HP personnel observed and interviewed by the inspector had HP backgrounds, experience and were well qualified for their assigned duties. The employees in general supported the concept and believed the experience would also be beneficial when they returned to their assigned facility and duties. No concerns with the shared resource personnel were identified. The inspector determined that the

staffing levels appeared appropriate for outage scope and E&RC management maintained continuous coverage of HP activities during the outage.

No violations or deviations were identified.

3. External Exposure Control (83750)

This area was reviewed to determine whether individual personnel exposures were controlled, monitored and less than the 10 CFR Part 20 regulatory limits.

a. Radiological Work Controls

10 CFR Part 20.1101(a) requires, in part, that each licensee develop, document, and implement a radiation protection program commensurate with the scope and extent of licensed activities and sufficient to ensure compliance with the provisions of this part.

Licensee TS 6.11.1 states procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained, and adhered to for all operations involving personnel radiation exposure.

Licensee procedures and radiation worker training programs state radiation workers shall be responsible for obeying all radiological postings and following RWP requirements.

The inspector reviewed selected RWPs for their work activity and determined that they appeared to prescribe adequate radiation protection requirements for the assigned task. The inspector observed personnel reviewing RWPs and logging into the RWP and dose tracking system.

The inspector observed plant radiation workers interfacing with HP personnel at the main control points. While the inspector was not aware of all the previous communications between the HPs and radiation workers stopping by the control points on their way into the RCA, the inspector noted the HPs could have been more systematic and thorough in their assessment of the workers job scope, addressing radiological conditions and prescribing protection measures for the radiation workers planned activities. No inadequate briefings were identified and no violations of licensee procedures were observed by the inspector. However, the inspector's observations were discussed with E&RC management personnel. Licensee management reported and provided written communication expectations between HPT and radiation workers that were higher than most of those which had been observed by the inspector.

While reviewing recent radiological protection problems and issues documented in the licensee's corrective action program the inspector learned that several radiation workers had entered an HRA unknowingly and had utilized RWPs specifically excluding their use for work within HRAs. The HRA was located in the mechanical penetration room located on the 236 foot elevation of the RAB.

The mechanical penetration room is a large room surrounding the east side of the RCB within the licensee's RCA. The RHR and containment spray lines passing through the room were the primary sources for the high radiation levels in the room during reactor shutdowns. During routine operations, the room was a radiation area with some small isolated HRAs within. On September 2, 1995 the licensee placed the RHR system in service and dose rates increased in portions of the mechanical penetration room. Radiation surveys were made in the penetration room shortly after RHR was started. The radiation levels within the room increased and the whole room was posted as a HRA that day.

The radiation workers identified in the two CRs had entered the mechanical penetration room in two groups as follows:

On September 6, 1995, three ISI crew members, all CP&L employees, entered the RAB 236 foot mechanical penetration area, a posted and controlled HRA, to perform LLRT on non-contaminated systems. The workers signed on to an RWP (95-0058) which did not permit work in an HRA. HP personnel later determined the radiation workers were on an RWP that did not permit work in an HRA and dispatched an HP to remove the workers from the area. Dose rates where the ISI workers were located were less than 1 mrem/hr. EADs utilized by the ISI radiation workers recorded zero radiation dose during the entries.

On September 8, 1995, four I&C crew members, three CP&L and one vendor, entered the RAB 236 foot mechanical penetration area. The workers had been in the area about 1 and 1/2 hours and were exiting the area when an HPT notified the crew that the RWP (95-0055) they had been working on did not permit work in an HRA. Dose rates where the I&C radiation workers were located were approximately 2 mrem/hr. The highest EAD dose recorded by any of the four radiation workers was 2.0 mrem.

Following each of the events HP personnel specifically asked the workers if they knew the mechanical penetration room was a posted and controlled high radiation area when they had entered the area. All of the ISI and I&C radiation workers reported that they were unaware their work area was in a posted HRA even though they had passed through a door displaying the HRA posting.

The licensee had initiated two Level II CRs requiring a formal root cause investigation. The initial corrective actions included:

 Cancelling access to RCAs for all radiation workers involved in the events;

 The radiation workers and their supervision were required to meet with the RPM to discuss radiation worker responsibilities for compliance with radiological postings and RWP requirements prior to restoring access authorization to the RCA; and

 Radiation Protection management re-emphasized management expectations for HP personnel interfacing with radiation workers to understand the job scope to prescribe proper radiological protection measures and requirements.

The licensee also planned to review radiological posting techniques to optimize and improve posting effectiveness.

The radiation workers had failed to identify radiological postings for their work area and unknowingly entered a posted and controlled HRA (RAB penetration room) and subsequently utilized inappropriate RWPs prohibiting work in HRAs. The inspector discussed the events in detail at the NRC exit meeting held September 22, 1995. The inspector stated that although none of the radiation workers had received any significant radiation exposure and the radiation workers were equipped with alarming dosimeters which could have warned the radiation workers of high radiation dose rates and personnel exposures; awareness of radiological conditions in the work areas was a requirement and a fundamental element in radiation control programs. However, the findings were not identified as violations of licensee TS requirements at that time. Upon further review by NRC Region II personnel a decision was made to identify the findings as a non-cited violation.

NCV 50-400/95-14-01: Failure to adhere to radiological posting and RWP requirements.

This licensee-identified and corrected violation is being treated as a NCV, consistent with Section VII of the NRC Enforcement Policy.

In the radiation protection area, the licensee did a very good job reviewing radiation protection activities, openly identifying problems or potential problems, documenting those issues and

taking corrective actions to prevent recurrence. The inspector observed these processes during the review of the high radiation posting problem described in the above NCV.

One NCV and no deviations were identified.

b. Locked High Radiation Areas

This area was reviewed to verify the licensee's was maintaining control of access to HRAs, LHRAs, and VHRAs. The review was limited to conducting independent radiation surveys identifying radiation and HRAs, verification that the various HRAs were properly posted and that LHRAs and VHRAs were properly secured.

The licensee identified HRAs and VHRAs as described in Paragraph 20.1003 of 10 CFR Part 20. However, NRC approved licensee TSS did not require high radiation areas be locked until radiation dose rates were equal to or greater than 1,000 mrem/hr. Licensee TS required, in part, that each HRA with radiation levels greater than or equal to 100 mrem/hr but less than 1,000 mrem/hr be barricaded and conspicuously posted as a HRA. In addition, any individual or group of individuals permitted to enter such areas were to be provided with or accompanied by a radiation monitoring device which continuously indicated the radiation dose rate in the area or a radiation monitoring device which continuously integrated the dose rate in the area, or an individual qualified in radiation protection procedures with a radiation dose rate monitoring device. The licensee referred to these HRAs as LHRAs.

The inspector determined the locations of all LHRAs and VHRAs and verified that they were all properly posted and secured during the inspection. While making radiation surveys in the licensee's facilities no unposted or uncontrolled high radiation areas were identified.

No violations or deviations were identified.

c. Personnel Monitoring

10 CFR 20.1502(a) requires each licensee to monitor occupational exposure to radiation and supply and require the use of individual monitoring devices for:

- (1) Adults likely to receive, in one year from sources external to the body, a dose in excess of 10 percent of the limits in 10 CFR 20.1201(a);
- (2) Minors and declared pregnant women likely to receive, in one year for sources external to the body, a dose in excess of 10 percent of any of the applicable limits of 10 CFR 20.1207 or 10 CFR 20.1208; and
- (3) Individuals entering a high or very HRA.



The inspector observed personnel using EADs and teledosimetry appropriately throughout the inspection. Based on direct observation, discussion and review of records, personnel dosimeters were being effectively utilized.

No violations or deviations were identified.

d. Personnel Exposures

10 CFR 20.1201(a) requires each licensee to control the occupational dose to individual adults, except for planned special exposures under 10 CFR 20.1206, to the following dose limits:

- (1) An annual limit, which is the more limiting of:
 - (i) The total effective dose equivalent being equal to 5 rems; or
 - (ii) The sum of the deep-dose equivalent and the committed dose equivalent to any individual organ or tissue other than the lens of the eye being equal to 50 rems; and
- (2) The annual limits to the lens of the eye, to the skin, and to the extremities, which are:
 - (i) An eye dose equivalent of 15 rems; and
 - (ii) A shallow-dose equivalent of 50 rems to the skin or to any extremity.

The dose tracking system RIMS tracked personnel exposures in order to ensure adherence to procedural administrative allowances as well as 10 CFR Part 20 limits.

The licensee reported that there had not been any personnel administrative limit over exposures since the last inspection. The inspector reviewed personnel exposure reports and noted that there were no personnel doses near administrative occupational radiation dose limits.

The licensee reported the following maximum doses (Rems) for 1994 and 1995:

<u>Year</u>	<u>TEDE</u>	<u>Skin</u>	<u>Extremity</u>	<u>Lens-Eye</u>
1994	1.297	1.492	1.703	1.297
1995 ^a	1.244	1.244	1.067	1.176

Through September 19, 1995

Through review of licensee procedures and reported dose information, the inspector concluded the licensee was adequately monitoring and tracking individual occupational radiation exposures in accordance with the requirements and that all dose reported were within 10 CFR Part 20 limits.

No violations or deviations were identified.

4. Internal Exposure Control (83750)

This area was reviewed to determine the adequacy of licensee's use of process and engineering controls to limit exposures to airborne radioactivity and to verify all internal exposures were less than the regulatory limits.

The use of process and engineering controls to limit airborne radioactivity concentrations in the plant were discussed with licensee representatives and numerous use of such controls were observed during tours of the plant. The inspector observed the use of process and engineering controls such as special containments and HEPA filters while observing maintenance activities.

Through a review of licensee records the inspector determined the highest individual internal exposure/dose was 23 mrem in 1994 and 6 mrem through end of the second quarter of 1995.

The inspector concluded that the licensee's program for controlling internal exposures was conducted in accordance with regulatory and procedural requirements with no exposures in excess of 10 CFR Part 20 limits identified.

No violations or deviations were identified.

5. Contamination Controls (83750)

This program area was reviewed to determine the licensee's control of radioactive and contaminated material.

10 CFR 20.1904(a) requires the licensee to ensure that each container of licensed material bears a durable, clearly visible label bearing the radiation symbol and the words "Caution, Radioactive Material," or "Danger, Radioactive Material." The label must also provide sufficient information (such as radionuclides present, and the estimate of the quantity of radioactivity, the kinds of materials and mass enrichment) to permit individuals handling or using the containers, to take precautions to avoid or minimize exposures. Control and labeling of contaminated and radioactive material was good and labeling met licensee procedure requirements.

Contamination control was good and general housekeeping practices were very good overall. However, portions of the Containment Building were cluttered with material and tools being used in the outage.

Surface contamination appeared to be aggressively controlled at its source. The licensee continuously monitored and tracked the plant area contaminated with a total area included in the monitoring program at about 460,000 ft². That area excluded the RCBT. Trends in the program area are shown below.

Plant Contaminated Areas (FT²)

Year	Total RCA Area In Program	Areas Contaminated Minimum	Maximum	Annual Average Goal
1992	460,000	1,170	2,585	<3,500
1993	460,000	1,235	2,199	<3,500
1994	460,000	700	2,400	<1,900
1995	460,000	5,100	10,000	<6,000

The licensee had recently added approximately 11,000 ft² of plant space which had previously been considered non-recoverable into the area of plant space contaminated. The licensee believed these areas could be recovered and was having some success in decontaminating the areas. This decision was reflected in the 1995 numbers. The addition of the non-recoverable areas into the decontamination plan reflected good initiative as the licensee was continuing to establish a higher standards for the decontamination program.

During the assessment, the inspector observed radiation workers in anti-contamination PCs and noted personnel were wearing the PCs as required by RWPs. The inspector observed radiation worker techniques in removing the PCs when exiting contaminated areas and in general determined the workers were removing the PCs appropriately and as trained.

The inspector also observed radiation workers performing personal hand and foot surveys when exiting the RCB, a contaminated area. The inspector noted various level of skills when radiation workers were performing hand and foot surveys at the containment building SOP with most workers doing a very good hand and foot survey. However, the licensee had personnel whole body friskers near the containment building SOP. All workers were required to use them before leaving the area.

The inspector observed the following personnel decontamination activities: detection and decontamination of personnel with low levels of radioactive contamination on the skin; detection and removal of a discrete radioactive particle on a radiation worker; interviews with the radiation workers for determining contamination causes; and documentation of applicable information concerning the PCEs. The inspector observed excellent techniques in each of these areas.

The inspector reviewed the licensee's PCE records. The licensee documented all personnel contaminations including skin, modesty garments and personal clothing greater than 100 cpm above background measured

with a thin window GM pancake detector. Approximately forty-one PCEs had been documented in 1995 prior to the on-going RFO-6 and are shown in table below. Another seventy two PCEs had been documented during the first twenty days in RFO-6 which are not included in the following table. The inspector discussed PCEs in general with licensee representatives and determined the licensee was trending the events, initiating a CR for each occurrence and attempting to determine root causes. A large number of the PCEs in non-outage periods appeared to be occurring in "clean areas" while most of the PCEs documented during the outage were occurring in the licensee's containment building. Many appeared to occur when the coveralls became wet with perspiration. Half of the seventy-two PCEs occurring in the first twenty days of RFO-6 occurred in the first seven days of the outage when the containment temperatures were high. Most of the events during RFO-6 were still under investigation, however, the licensee suspected some personnel contaminations were due to leaching contamination from PCs and planned to re-evaluate cleaning process for PCs following RFO-6.

Personnel Contamination Events

<u>Year</u>	<u>Annual</u>		<u>Skin Clothing</u>	
	<u>Actual^a</u>	<u>Goal</u>		
1992	134	135	38	96
1993	45	60	8	37
1994	225	185	100	125
1995 ^b	41	135	12	29

- a. In some cases one PCE included a skin and a clothing contamination.
- b. 1995 data through August 31, 1995 does not include additional 72 PCEs through September 22.

Skin dose assessments were performed when required and all resultant exposures were minor.

No violations or deviations were identified.

6. Facility Tours (83750)

Tours of the licensee's facilities including the RCB, RAB, fuel handling and radioactive waste process buildings were made by the inspector during the review. The inspector took independent radiation and contamination surveys; observed control of radioactive material and contamination; housekeeping; postings, security of LHRAs and VHRAs; examine conditions of radiological monitoring equipment; and observe HP presence in the RCA.

10 CFR 20.1501(a) requires each licensee to make or cause to be made such surveys as (1) may be necessary for the licensee to comply with the regulations and (2) are reasonable under the circumstances to evaluate the extent of radioactive hazards that may be present.

During tours of the plant, the inspector observed HPTs in the plant monitor worker activities in their assigned locations, make radiation and contamination surveys and advise workers on appropriate radiological protection procedures. The inspector independently verified radiation and contamination levels in selected areas of the RCB, RAB, waste processing, and fuel handling buildings. The inspectors survey results within these areas agreed with the licensee's control and postings for those areas.

The inspector noted that portable radiation detectors, air samplers, and friskers and contamination monitors in the plant had up-to-date calibration stickers and had been source-checked as required. In addition, the licensee appeared to possess an adequate number of survey instruments and related equipment.

The inspector reviewed selected records of routine and special radiation and contamination surveys performed during the current refueling outage and discussed the survey results with licensee representatives. No concerns with the adequacy or frequency of the radiological survey activities were identified.

The licensee's control of radioactive materials was closely examined throughout this inspection during tours of the facilities. In general, the inspector determined that the licensee's control and labeling of contaminated and radioactive material was adequate. No examples of failure to tag or label contaminated or radioactive material were identified by the inspector.

The inspector noted that the licensee's posting and control of radiation areas, contamination areas and radioactive material areas was generally adequate. Overall the radiological controls observed on tours of the RCA were good. No violations or deviations were identified.

7. Program for Maintaining Exposures As Low As Reasonably Achievable (83750)

This program area was reviewed to determine the status of ALARA program initiatives and its effect in reducing collective dose for the RFO-6. Areas reviewed included goals and objectives, radiation source reduction, ALARA plans and reviews, and the collective dose results.

10 CFR 20.1101(b) requires that the licensee use, to the extent practicable, procedures and engineering controls based upon sound radiation protection principles to achieve occupational doses and doses to members of the public that are ALARA.

At the time of the inspection, the licensee was in the third week (days 16-20) of a 35 day refueling outage that began September 2, 1995. The licensee was slightly behind schedule when the inspection was made.

The inspector reviewed RFO-6 ALARA Work Plan 003, Refueling Maintenance. The plan included fourteen Sub-Plans prepared for significant refueling task. The plans adequately addressed job scope, dose estimates, work controls, source controls; airborne contamination controls, training, process controls, and radiation shielding.

The inspector reviewed the licensee's collective dose and goals for the ongoing RFO-6, the licensee's 1995 annual collective dose and goals, and the recent site collective dose trends. A summary of recent collective dose for the site is shown below.

Collective Personnel Exposures (Person-Rem)

Year	Annual Dose <u>Actual</u>	<u>Goal</u>	Outage <u>Title</u>	Outage Dose <u>Actual</u>	<u>Goal</u>	Outage <u>Dates</u>
1992	213	215	RFO-4	174	165	09/12/92 to 12/07/92
1993	31	45				
1994	222	223	RFO-5	195	198	03/19/94 to 05/12/94
1995	116 ^a	218	RFO-6	91	159	09/03/95 to 10/09/95 ^b

- a. Through September 20, 1995
- b. As Scheduled

The licensee's outage collective dose was below the estimated outage dose for outage day 20 by approximately 20 person-rem.

The inspector reviewed the Harris Nuclear Plant Five Year Dose Reduction Plan for 1995 - 1999 with ALARA personnel. The plan included aggressive collective dose goals for the next five years; dose reduction actions and historical dose expenditures. The site's long term goal was to reduce the three year average to 100 person-rem in 1999. The licensee divided the dose reduction actions into several categories including: activities requiring significant resources to complete; new initiatives; on-going actions; actions requiring further evaluations and dose reduction items that have been completed. The licensee's list of dose reduction initiatives was substantial and the licensee was making progress in implementing many of them.

One of the licensee's initiatives in the plan requiring significant resources was the installation of a Permanent Cavity Seal Ring. The licensee had expected to install the seal during the RFO-6 for approximately 12.5 person-rem with a payoff of approximately 1.6 person-rem per RFO being realized in all future RFOs. However, the licensee was unable to position the last portion of the seal. The licensee attempted to move the seal in place and even attempted a field



modification to seat the seal but was unable to accomplish the task after considerable effort and time. As the seal installation had slowed and delayed critical path work the decision was made to install the temporary cavity seal and to defer the installation of the permanent cavity seal. The inspector noted both staff and management support for the seals installation. The staff expected the problem could be solved for eventual installation.

Partial list of on-going radioactive source reduction activities included: continued flushing of hot spots; utilization of a new surrogate tour system for ALARA applications; ALARA incentives in nuclear contracts; continuing optimum shutdown chemistry; continued improvements in outage planning and use of remote monitoring equipment for high dose task. The licensee reported an effective crud burst had occurred following shutdown for RFO-6. The licensee had previously seen about a 20 percent increase in the SG bowl radiation levels in each of the first five RFOs. However, the licensee had lower radiation levels for the on-going outage primarily due to good crud burst procedures utilized during reactor shutdown.

The inspector observed the use of remote monitoring equipment including remote controlled closed circuit video cameras and monitors, telemetric dosimetry, and communication equipment for cavity and SG work activities. The equipment provided HP personnel the ability to closely monitor live time dose and dose rates in low dose areas and provide continuous radiological controls for those work activities.

The inspector concluded that the activities of the ALARA staff with the apparent support of site management appear to be advancing the effectiveness of the Harris ALARA program.

No violations or deviations were identified.

8. Exit Meeting (83750)

The inspection scope and findings were summarized on September 22, 1995, with those persons indicated in Paragraph 1. In the meeting the inspector discussed licensee identified problems with radiation workers failing to maintain awareness of the radiological postings in their work area. These problems were not identified as violations of TS requirements in the exit meeting. Following Region II review of events the decision was made to identify the licensee identified issues as a NCV. During a telephone conversation on October 13, 1995, between F. N. Wright of the NRC and B. White of CP&L, the licensee was notified that failure of the radiation workers to maintain awareness of radiological postings in their work area was a violation of licensee procedures and would be treated as a NCV. Dissenting comments were not received from the licensee. Proprietary information is not contained in this report.



<u>Type</u>	<u>Item Number</u>	<u>Status</u>	<u>Description and Reference</u>
NCV	50-400/95-14-01	Closed	Failure to comply with Radiological Posting and RWP Procedure Requirements (Paragraph 3.a).

9. Index of Abbreviations Used in this Report

AC	Adverse Condition
ALARA	As Low As Reasonably Achievable
CFR	Code of Federal Regulations
cm ²	Centimeters Squared
CP&L	Carolina Power & Light
CR	Condition Report
cpm	Counts Per Minute
dpm	Disintegration Per Minute
EAD	Electronic Alarming Dosimeter
E&RC	Environmental and Radiation Control
ft ²	Square Feet
GM	Geiger-Muller
HEPA	High Efficiency Particulate Air-filter
HNP	Harris Nuclear Plant
HPP	Health Physics Procedures
HPT	Health Physics Technician
HRA	High Radiation Area
IR	Inspection Report
ISI	In-Service Inspection
LHRA	Locked High Radiation Area
LLRT	Local Leak Rate Test
mrem	Milli-Roentgen Equivalent Man
NAD	Nuclear Assessment Department
ncpm	Net Counts Per Minute
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
PC	Protective Clothing
PCE	Personal Contamination Events
RAB	Reactor Auxiliary Building
RC	Radiation Control
RCA	Radiological Control Area
RCB	Reactor Containment Building
RC&PM	Radiation Control Protection Manual
RFO	Re-Fueling Outage
RHR	Residual Heat Removal
RTD	Resistance Temperature Detector
RWP	Radiation Work Permit
SF	Spent Fuel
SG	Steam Generator
SOP	Step Off Pad
TEDE	Total Effective Dose Equivalent
TS	Technical Specifications
VHRA	Very High Radiation Area

