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

APR 09 1992

Report No: 50-395/92-06

Licensee: South Carolina Electric and Gas Company
Columbia, SC 29218

Docket No.: 50-395 License No.: NFP-12

Facility Name: V. C. Summer Nuclear Station

Inspection Conducted: March 9-13, 1992

Inspector: Elizabeth Pharr 4/6/92
E. B. Pharr Date Signed

Approved by: J. P. Potter 4/8/92
J. P. Potter, Chief Date Signed
Facilities Radiation Protection Section
Emergency Preparedness and Radiological
Protection Branch
Division of Radiation Safety and Safeguards

SUMMARY

Scope: This routine unannounced inspection was conducted in the area of occupational radiation safety and included an examination of audits and appraisals, training and qualifications, external and internal exposure control, control of radioactive materials and contamination, surveys and monitoring, and maintaining occupational exposures ALARA. In addition, Information Notices and licensee response to previously identified inspection findings were reviewed.

Results: Based on interviews with licensee management, supervision, personnel from station departments, and records review, the inspector found the health physics (HP) program to be managed adequately. The licensee's program for external radiation exposure controls was effective and functioning adequately to protect the health and safety of occupational radiation workers. However, a weakness with the licensee's internal exposure control program for making timely assessments of potential internal contamination events was identified as an Unresolved Item (URI). Identified licensee strengths included general housekeeping and postings throughout the Radiation Controlled Area (RCA) as well as the ALARA Awareness program and the dose reduction initiatives and goals.

REPORT DETAILS

Persons Contacted

Licensee Employees

*F. Bacon, Manager, Chemistry and Health Physics (C&HP)
*J. Berley, Nuclear Licensing
*L. Blue, Manager, Corporate Health Physics and Environmental Programs
*M. Browne, Manager, Design Engineering
*B. Christiansen, Manager, Technical Services
*G. Hall, Associate Manager, Health Physics (HP)
*W. Haltiwanger, Senior Reactor Engineer
*W. Higgins, Supervisor, LS&OE
*B. Johnson, Supervisor, Core Engineering
*A. Koon, Manager, Nuclear Licensing and Operating Experience
*C. McKinney, Nuclear Licensing
*J. Proper, Associate Manager, Quality Assurance
*M. Quinton, GMES
*J. Skolds, Vice President, Nuclear Operations
*D. Warner, Manager, Core Engineering and Nuclear Computer Services
*R. White, Nuclear Coordinator, SCPSA

Other licensee employees contacted included engineers, technicians, and office personnel.

Nuclear Regulatory Commission

*P. Burnett, Reactor Engineer
*B. Haag, Senior Resident Inspector

*Attended March 13, 1991 Exit Meeting

2. Audits and Appraisals (83750)

a. Self-Identification Program

The inspector reviewed the licensee's program for self-identification of weaknesses related to the radiation protection program and the appropriateness of corrective action taken. Specifically the inspector reviewed Health Physics Problem Reports (HPPR) which were a means for self-identification and reporting of problems, violations, or deficiences in the area of radiological work practices. The inspector noted that during 1991 73 HPPRs had been initiated.

Additionally, the inspector reviewed the year-end trending report compiled by HP management in which the reports were trended by impacting cause and the effectiveness of corrective actions taken in preventing

recurrence were reviewed. The inspector noted that HP management did not feel that their corrective action program was effective in that similar problems had been identified the previous year. In response to this identified weakness in the program, HP management had recommended that proper radiological work practices be emphasized in radiation worker training and station orientation training (SOT), and that higher priority be assigned to resolving equipment problems which contributed to contamination and exposure control problems. In addition, the inspector noted that discussion of HPPRs was included in the HP specialist's continuing training program.

The inspector noted that the HPPRs appropriately identified work practice weaknesses and that the licensee's efforts to better implement corrective actions so as to prevent recurrence was a program enhancement.

No violations or deviations were identified.

b. Audits

The inspector reviewed audit II-22-91-L, conducted October 21, to December 2, 1991 by the Quality Assurance group in the area of the Station Radiation Control Program, and the 1991 annual ALARA review of the Exposure and Contamination Control Program performed by the Corporate Health Physics group during the fourth quarter of 1991. The inspector found both audits to be well planned and documented and most importantly they appeared to adequately assess the radiation protection program. The audits contained items of substance relating to the program and valid nonconformances as well as program strengths were identified. The reports of audit findings to management were also reviewed and were found to contain responsive commitments by management to effect corrective actions for the deficiencies noted. The inspector also noted that findings and improvement items were tracked by the responsible auditing group until final resolution of the item by the HP group.

No violations or deviations were identified.

3. Training and Qualifications (83750)

10 CFR 19.12 requires, in part, that the licensee instruct all individuals working in or frequenting any portions of a restricted area in the health protection aspects associated with exposure to radioactive material or radiation; in

precautions or procedures to minimize exposure; in the purpose and function of protection devices employed; in the applicable provisions of the Commission regulations; in the individual's responsibilities; and in the availability of radiation exposure data.

a. HP Technician Training

The inspector reviewed the licensee's HP Training Manual which established specific requirements for HP specialists. Newly-hired specialists were required to complete basic HP training which was designed to provide necessary knowledge and skills. The formal classroom training included SOT, mathematics, physical sciences, and radiation protection fundamentals, as well as laboratory training and a plant systems overview. The manual also allowed the RPM, after evaluating the past training and experience of the individual, to exempt the newly-hired HP specialist from all portions of basic HP training or to waive training but require successful completion of written examinations (80 percent correct) to verify skills and knowledge. Further study of specific procedural requirements through on-the-job training (OJT) and the qualification process ensured achievement of needed depth of knowledge and skills. Following completion of basic HP training, the manual required HP specialists to complete two sessions (approximately 80 hours) of continuing training annually. The inspector reviewed the 1992 Session I Continuing Training lesson plan and noted that the training included the licensee's emergency plan, industry events, and an overview of the previous outage. As well, the inspector noted that 1991 trendings as related to dosimetry deficiencies and HPPRs were discussed. The inspector was informed that causal factors and corrective actions as expressed by the specialists during such training were discussed by training and HP management and incorporated in future training sessions, as necessary.

The inspector reviewed training records for two HP specialists hired during 1991 and verified that both individuals had completed basic training classes, with the exception of laboratory training, or had successfully completed written examinations based on a training waiver granted by the RPM. The inspector also noted that the individuals had completed OJT and qualification requirements for their specified work activities, as well as, 1991 and 1992 continuing training.

No violations or deviations were identified.

b. Non-licensed Unit Staff Training

Technical Specification (TS) 6.4.1 requires a retraining and replacement training program for the unit staff to be maintained and to meet or exceed the requirements and recommendations of Sections 5.2 and 5.5 of ANSI 3.1-1981 and 10 CFR 55.59, as committed to in Appendix 3A of the Final Safety Analysis Report (FSAR).

The inspector reviewed a draft revision of Station Administrative Procedure (SAP) 105, Statement of Responsibilities, Chemistry and Health Physics (C&HP), which defined the organization and responsibilities for the C&HP department as well as the required training for C&HP staff members. Managers, Associate Managers, and staff were required by SAP-105 to attend initial training, including SOT, respiratory protection, Fitness-For-Duty, 50.59 Evaluation, Radiation Worker, and Emergency Plan training; continuing training, to include discipline continuing training, Nuclear Training for Technical Staff and Managers (NTT) program quarterly required reading, and discipline required reading; and related training, including NTT program, Curriculum A. The draft procedure also required that all completed training, including required readings, be documented and maintained.

The inspector was informed by licensee representatives that the purpose of the NTT program, Curriculum A was to provide a four week instruction to all managers, associate managers, engineers and engineer supervisors in order to develop a broad understanding of overall plant operations. Special emphasis was placed on regulatory and administrative requirements, safety-related systems, and introductory nuclear theory. The NTT program also provided continuing training which consisted of a quarterly required reading that summarized plant modifications, plant and industry operating events, and significant procedure/program changes.

In response to URI 91-14-01, licensee representatives informed the inspector that SAP-105 was being revised to ensure that a formalized training and retraining program for the C&HP non-licensed unit staff was established and documented. The URI was issued based on uncertainty at the time of the previous inspection as how the utility met the ANSI standard for retraining and replacement training for non-licensed unit staff. Although the previous revision of SAP-105 required a similar training program for non-licensed staff,

licensee representatives informed the inspector that documentation of completed training was not formalized.

The inspector reviewed training records specifically for the HP Associate Manager, two HP field operations supervisors, and the Radwaste supervisor. The inspector noted that all four managers had completed selected initial training instructions, attended various lectures during 1991 and 1992 HP continuing training, and completed 1992 first quarter NTT required quarterly reading. The inspector reviewed first quarter 1992 NTT program required quarterly readings and noted that summaries of plant and industry events, regulatory activities, plant modifications, and plant procedure changes were included. During discussions with C&HP management, the inspector was informed that the acting Manager, C&HP and the HP Associate Manager had not yet completed NTT, Curriculum A training but were scheduled to do so. Due to concern initiated by the URI, higher priority had been given for C&HP to participate in and to document participation in discipline continuing training and to complete both the initial and continuing NTT programs.

Based on a review of training records and discussions with licensee personnel during the inspection, the inspector noted that the licensee's training program was adequate and conducted in accordance with regulatory and TS requirements.

No violations or deviations were identified.

4. External Exposure Control (83750)

10 CFR 20.101 requires that no licensee possess, use, or transfer licensed material in such a manner as to cause any individual in a restricted area to receive in any period of one calendar quarter a total occupational dose in excess of 1.25 rems to the whole body, head and trunk, active blood forming organs, lens of the eyes, or gonads; 18.75 rems to the hands, forearms, feet and ankles; and 7.5 rems to the skin of the whole body.

10 CFR 20.101(b)(3) requires the licensee to determine an individual's accumulated occupational dose to the whole body on an NRC Form 4 or equivalent record prior to permitting the individual to exceed the limits of 20.101(a).

a. Multibadge/Extremity Exposure Monitoring

The inspector reviewed 1991 third and fourth quarter external exposure records for workers involved with Radiation Work Permit (RWP) 91-207 associated with steam generator nozzle dam installation and removal during refueling outage 6. Following discussions with licensee personnel, the inspector was informed that workers performing these outage activities were provided with multiple dosimetry due to the non-uniform radiation fields in the work area. The inspector noted that for the selected records reviewed the maximum whole body and extremity doses during any one quarter were both 1,268 millirem (mrem). The inspector noted that the individual had exceeded 1.25 rem to the whole body in a calendar quarter. Following further review the inspector verified that the licensee had documentation of the individual's prior exposure on a NRC Form 4 and had granted the individual an exposure extension based on annual and lifetime cumulative exposures.

The inspector concluded that the licensee monitored whole body and extremity doses adequately and that all external exposures were within 10 CFR Part 20 limits.

No violations or deviations were identified.

b. Skin Dose Evaluation

The inspector reviewed the licensee's current guidance and subsequent implementation for determining skin dose from noble gas exposure.

Health Physics Procedure (HPP) 155, Control of Airborne Radiation Exposure (MPC-hrs), Revision (Rev.) 7, dated August 20, 1990 requires that for individuals entering a noble gas atmosphere where the concentration is greater than 10 maximum permissible airborne concentration (MPCa) a skin dose equivalent be calculated by HP personnel. The dose equivalent was calculated by multiplying the noble gas total MPCa hours (MPCa-hrs) by 0.35 mRem/MPCa-hr. Following review by a HP supervisor, skin dose equivalents greater than 1 mRem were entered into the computerized personnel exposure tracking system.

The inspector reviewed 1992 first quarter records for individuals signed on RWP 92-05 associated with a power entry into the reactor building. During review of the RWP, surveys, and dosimetry records associated with the entry, the inspector verified that the licensee was

implementing appropriate radiological surveillances and was calculating and recording individual skin doses due to noble gas exposures in accordance with the requirements of HPP-155. For the records reviewed, the inspector noted that the maximum beta skin dose assigned to those selected individuals reviewed was 28.68 mRem. The inspector subsequently verified that for the selected records reviewed, skin exposures were evaluated appropriately and were within 10 CFR Part 20 limits.

No violations or deviations were identified.

5. Internal Exposure Control (83750)

10 CFR 20.103(a)(1) states that no licensee shall possess, use, or transfer licensed material in such a manner as to permit any individual in a restricted area to inhale a quantity of radioactive material in any period of one calendar quarter greater than the quantity which would result from inhalation for 40 hours per week for 13 weeks at uniform concentrations of radioactive material in air specified in Appendix B, Table 1, Column 1.

10 CFR 20.103(a)(3) requires, in part, that the licensee, as appropriate, use measurements of radioactivity in the body, measurements of radioactivity excreted from the body, or any combination of such measurements as may be necessary for timely detection and assessment of individual intakes of radioactivity by exposed individuals.

a. Program Guidance

The inspector reviewed the licensee's guidance for the internal exposure program. Specifically the inspector reviewed the following procedures:

- HPP-155, Control of Airborne Radiation Exposure (MPC-hrs), Rev. 7, dated August 20, 1990 requires that if subsequent bioassay results indicate an internal exposure different from that calculated by MPCa-hr accountability, then internal exposure based on bioassay measurements will be recorded in personnel exposure records.

- HPP-515, Interpretation of Bioassay Analyses, Rev. 6, dated August 9, 1990 states that following detection of activity exceeding 1 percent of the Maximum Permissible Organ Burden (MPOB) the licensee is required to determine MPC-hrs and percent MPOB, record the information, and initiate a HPPR.

The inspector noted that the licensee's guidance appeared appropriate to comply with 10 CFR Part 20 requirements.

No violations or deviations were identified.

b. Program Implementation

The inspector reviewed HPPRs and termination records of individuals involved in 1991 internal contamination events. The inspector reviewed three HPPRs and associated records for three such events. The inspector noted that for an incident which occurred on October 16, 1991 the licensee appropriately calculated and recorded 11.0 MPCa-hrs for the individual based on a deposition of cobalt-58 (Co-58) in the lower torso and Co-58 and Co-60 in the lung. However, for another individual involved in the October 16, 1991 incident, the inspector noted that the licensee did not calculate the individual's internal exposure until February 1992. The inspector also noted that at the time of the onsite inspection, the calculated exposure of 6.3 MPC-hrs, based on a deposition of Co-58 and Co-60 in the lower torso and Co-58 in the lung, had not been assigned to the individual by way of the licensee's computerized tracking system. In the case of a positive whole body count which occurred on December 20, 1991 the licensee had not fully evaluated the incident as required by HPP-155 until March 12, 1992 at which time the licensee calculated 12.8 MPC-hrs for the individual and completed a HPPR. The licensee informed the inspector that in this case they did not believe the count results were indicative of a true internal contamination but could not verify their opinion since the results were based solely on the standup fast-scan counter.

The inspector discussed with licensee representatives the importance of timely detection and assessments of internal uptakes. The inspector informed the licensee that an assessment of an uptake and assignment of exposure during the quarter following an event was not timely in that regulatory limits are based on quarterly values. Licensee representatives also informed the inspector that based on whole body count results, the chair whole body counter listed a MPOB percentage and MPC-hrs for individuals. Therefore, the licensee believed that for the two October 16, 1991 internal exposure events initial assessments of the individuals' exposures were made and regulatory limits would not be exceeded. The inspector informed licensee representatives that the lack of timeliness in

assessing internal exposures was a program weakness. Licensee representatives acknowledged the inspectors concerns and stated that they would consider procedural revisions for improving guidance in making timely assessments.

The inspector further reviewed exposure records for individuals who terminated employment with the licensee following completion of refueling outage 6. The inspector noted three additional cases of positive termination whole body counts for analyses conducted on December 20, 1991. During discussions with licensee representatives the inspector was informed that these three individuals as well as the other individual with the December 20, 1991 positive whole body count were contractors involved with decontamination activities in the fuel loading building. The inspector noted that the licensee had not initiated an investigation nor assessments of a possible internal exposure in response to the positive whole body count results. Followup discussions with licensee representatives revealed that in each of the four instances the positive whole body counts were detected by the licensee's standup fast-scan whole body counter. Licensee representatives also informed the inspector that normal procedure when detecting activity greater than action limits was to recount the individual in the chair whole body counter in order to quantitatively verify the standup results. Since the chair counter was not in service during much of December and January and because the individuals involved were terminated contractors leaving site, the licensee was unable to verify the count results and quantitatively analyze any detected results. Because of the nature of the contractors work activities while onsite and based on respiratory protection controls, the licensee made the assumption that the positive count results were a measure of external, rather than internal, contamination. Also the licensee informed the inspector that the HPPR and assessment of the positive count results reviewed by the inspector during the onsite inspection was for one individual of the four involved. This individual was conservatively assumed to have the highest exposure based on the fact that the detected activity was the greatest, as well, the individual's time onsite was the maximum. The licensee estimated the individual's internal exposure of 12.8 MPC-hrs conservatively based on a measured lung burden assuming the intake occurred the first day the individual was onsite.

During discussions with licensee representatives the inspector expressed concern in the licensee's decision to assume the four individuals were externally contaminated based on an assessment of internal exposure for only one individual. Due to time constraints the inspector was unable to review survey data associated with the RWP under which the involved individuals were working. The inspector informed the licensee that the issue would be considered an unresolved item (URI) pending further review of radiation, contamination, and air sample data for the decon activities in which the individuals were involved, and any followup investigations and assessments conducted by the licensee.

The inspector reviewed selected records of internal exposure results for both licensee and contract employees involved in the noted incidents as well as routine activities. The inspector verified that no exposures in excess of the 40 MPCa-hr control measure had occurred since January 1, 1991.

During a March 16, 1992 teleconference between the inspector and the licensee's Radiation Protection Manager, the inspector was informed that HPPRs had been initiated for the remaining three individuals with the December 20, 1991 positive whole body count results. As well the licensee had assessed the individuals' exposures based on the same conservative assumptions used previously and estimated a range of 1.9 to 5.5 MPC-hrs.

One URI pending further review of the licensee's evaluation of internal exposures and inspector followup review of fuel loading decon area survey data for the period during which the individuals were involved in decon activities was identified.

c. Termination Activities

10 CFR 20.408(b) and 10 CFR 20.409(b) require that the licensee make a report to the Commission, and notify the individual involved, of the radiation exposure of each individual who has terminated employment. The report is to be furnished within 30 days after the individual's exposure was determined by the licensee or 90 days after the date of termination of employment or work assignment, whichever is earlier.

Following discussions with licensee representatives, the inspector was informed that the licensee requested initial and termination whole body counts for all

radiation workers and all facial contaminations required followup whole body counts. The inspector verified that for selected outage contract workers who were hired and terminated during refueling outage 6, initial and termination whole body counts were performed. In addition, the inspector verified termination exposure reports were issued to those individuals generally within thirty days following their termination date. The inspector also reviewed HPPRs for January 1, to December 31, 1991 and verified that selected personnel with facial contaminations received followup whole body counts. For those selected individuals reviewed, the inspector noted all whole body count results were less than the minimum detectable limit (MDL).

No violations or deviations were identified.

d. Respiratory Protection Program

10 CFR 20.103(c)(2) permits the licensee to maintain and to implement a respiratory protection program that includes, at a minimum: air sampling to identify the hazard; surveys and bioassays to evaluate the actual exposures; written procedures to select, fit and maintain respirators; written procedures regarding the supervision and training of personnel and issuance of records; and determination by a physician prior to the use of respirators, that the individual is physically able to use respiratory protective equipment.

The inspector reviewed records for selected employees signed in on RWP 92-207 for work associated with steam generator nozzle dam installation and removal. The inspector verified that for records reviewed each worker was trained to use respiratory protective equipment, fit-tested, and medically qualified in accordance with appropriate requirements.

No violations or deviations were identified.

6. Operational Radiation Controls (83750)

a. Facility Tours

During tours of the facility, the inspector observed the licensee's posting and control of radiation areas, high radiation areas, contamination areas, radioactive materials areas, and labeling of radioactive material and noted no apparent problems. During these tours the inspector observed a generally clean and tidy facility. Following discussions with licensee representatives,

the inspector was informed that the RCA contaminated area averaged approximately 859.9 square feet (ft^2) in 1991, excluding two outage months, 0.64 percent of the total area in the RCA. The inspector noted that during 1992 the licensee had averaged 891.5 contaminated ft^2, 0.67 percent of the RCA total area. In addition, the inspector noted that survey and monitoring equipment was operable and calibrated on a semiannual frequency.

No violations or deviations were identified.

b. Radiation Work Permits (RWP)

The inspector reviewed selected refueling outage 6 RWPs for appropriateness of the radiation protection requirements based on work scope, location, and conditions. The inspector reviewed RWP 91-207, Installation/Removal of Nozzle Dams in A,B,C Steam Generators and RWP 91-212, Installation of Isokinetic Weld Sleeves in A,B,C Steam Generators.

Each RWP, as well as its associated pre-job briefing, appropriately addressed radiological concerns and provided for appropriate HP monitoring and surveying throughout the job. Pre-job ALARA reviews contained appropriate ALARA recommendations. The inspector verified that workers signed on the RWP attended the pre-job briefing. The RWPs also required proper protective clothing, respiratory protection, and dosimetry as needed. The inspector also noted that the ALARA committee performed post-job reviews that included critiques of both jobs, which exceeded dose goals, and recommendations for improvements to prevent recurrence. The inspector found the licensee's program for RWP implementation to adequately address radiological protection concerns, and to provide for proper control measures.

No violations or deviations were identified.

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

10 CFR 20.1(c) states that persons engaged in activities under licenses issued by the NRC should make every reasonable effort to maintain radiation exposures as low as reasonably achievable.

The inspector reviewed the licensee's program to maintain occupational exposure ALARA. During discussions with licensee representatives the inspector was informed that the total collective radiation exposure for 1991, based on

total collective radiation exposure for 1991, based on thermoluminesent dosimeters (TLD), was 291 person-rem. Collective radiation exposure received during refueling outage 6, as recorded by pocket chambers, was 299.368 person-rem, approximately 59 person-rem greater than the 240 person-rem goal established by the ALARA committee prior to outage start. Factors contributing to the licensee exceeding their outage exposure goal included the addition of 98 RWPs to increase original work scope, added scope of work to existing RWPs, and extended work scope associated with steam generator maintenance. During discussions with licensee representatives the inspector was informed that the licensee also contributed overall increased exposures to higher than expected dose rates in the reactor building during the outage. Licensee representatives stated that problems with the RHR letdown valve not opening fully prevented thorough cleanup of crud after the hydrogen peroxide injection. The crud plated out on piping thereby significantly increasing the dose rates on associated RHR piping within both the reactor and auxillary buildings. The inspector was informed that the valve operability will be tracked as an action item for the following outage as well as the issue of running the three Reactor Coolant Pumps (RCPs) longer prior to shutdown in order to aid in full system decontamination.

From review of the fourth quarter ALARA Committee Meeting minutes from December 19, 1991, the inspector noted that attendance was documented for each work group for which radiation exposure was tracked. The inspector noted that the ALARA committee had reviewed those outage RWPs which had exceeded their projected exposure estimates and had discussed reasons for the increased exposures as well as exposure reduction suggestions. The inspector also noted that the ALARA Committee was tracking the status of action items which were prioritized by person-rem savings. Those given top priority and scheduled for implementation during the first half of 1992 included a fine mesh (0.45 micron) filter program, two surrogate video tour units, and elimination of monthly venting of the RHR. By way of cobalt elimination due to sub-micron filter use and elimination of routine operations, surveillances, and walkdowns due to implementation of the two other items, the licensee expected cumulative short term exposure savings of 2.5 to 16.2 rem/yr and an overall long range source term reduction. In addition, the inspector noted that during the meeting each work group, for the first time, proposed their own annual exposure goal for a total 1992 goal of 20 person-rem.

During discussions with licensee representatives the inspector was informed of several recent ALARA initiatives. The licensee was scheduled to have approximately 150

program implemented during 1993. Permanent reactor head shielding was constructed during the outage. Additionally, the utility had participated in a project during the outage in which two twice-burned fuel bundles and two new fuel bundles were deconned using two different chemical processes. The four bundles were then put back into the reactor for the duration of cycle 7. During the refueling outage 7 the four bundles would be studied for the effects of chemical induced corrosion damage following such a decontamination and reirradiation process.

The inspector also reviewed the licensee's program for increasing worker's ALARA awareness. The inspector was informed by licensee representatives that the ALARA supervisor had initiated quarterly ALARA shop briefings to address specific work groups. The inspector reviewed the 1992 first quarter briefing outline and noted that the supervisor discussed outage exposure and the major dose contributing jobs, as well as personnel contaminations, and HPPRs incurred during the outage. The inspector also noted that changes in standing RWPs (SRWPs) were discussed and the cobalt reduction program and changes to 10 CFR 20 were introduced. The inspector was also informed that 115 ALARA suggestions were made during 1991.

The inspector informed licensee representatives that their program to maintain worker exposures ALARA was effective and that their dose reduction initiatives and goals, and ALARA awareness program were considered a HP program strength.

No violations or deviations were identified.

8. Information Notices (92701)

The inspector determined that the following Information Notices (IN) had been received by the licensee, reviewed for applicability, distributed to appropriate personnel, and that action, as appropriate was taken or scheduled:

91-36: Nuclear Plant Staff Working Hours

91-37: Compressed Gas Cylinder Missile Hazards

91-39: Compliance with 10 CFR Part 21, "Reporting of Defects and Noncompliance"

91-40: Contamination of Non-Radioactive System and Resulting Possibility for Unmonitored Uncontrolled Release to the Environment

88-63, Supp. 2: High Radiation Hazards from Irradiated Incore Detectors and Cables

91-60: False Alarms of Alarm Ratemeters Because of Radiofrequency Interference

9. Licensee Actions on Previously Identified Inspector Findings (92701)

(Closed) 50-395/91-14-01 The licensee's program for retraining and replacement training for the non-licensed unit staff did not appear to be in accordance with TS 6.4.1.

Results of the inspector's review and resolution of the issue is documented in paragraph 3 of this report. The inspector informed licensee representatives that this item would be considered closed based on the appropriateness of their current training program.

10. Onsite Followup of Written Reports of Nonroutine Events (92700)

(Closed) LER 91-004: Incorrect Sample Volume Data Results in Computer Error for Tritium Concentration

The inspector reviewed LER 91-004, dated August 30, 1991. The inspector verified that the reporting requirements were met, a root cause analysis was performed, and that corrective actions were implemented. The LER documented an event identified May 3, 1991 by HP personnel in which they determined that an incorrect sample volume was being used by count room personnel during the calculation of airborne tritium (H-3) concentrations. Input of incorrect data resulted in calculated values of airborne H-3 activity 100 times less than actual values. Information concerning this problem and evaluations of the licensee's investigation and corrective actions taken to prevent recurrence were detailed in Paragraph 2.f. of IR 50-395/91-14 and Paragraph 3 of IR 50-395/91-18. One NCV, 50-395/91-18-01, was issued for failure to make an adequate survey resulting in the underestimation of amounts of tritium released.

Based on the licensee's review of airborne tritium analyses records which confirmed that effluent releases and personnel exposures remained within TS and 10 CFR 20 limits, and previous inspection efforts, the inspector informed licensee representatives that the item was considered closed.

11. Exit Meeting

The inspector met with licensee representatives, denoted in Paragraph 1, at the conclusion of the inspection on March 13, 1992. The inspector summarized the scope and findings of the inspection, including the URI. The inspector also discussed the likely informational content of

the inspection report with regard to documents or processes reviewed by the inspector during the inspection. The licensee did not identify any such documents or processes as proprietary.

Item Number	Description and Reference
50-395/92-06-01	URI-Potential failure to provide appropriate assessments of internal exposures in a timely manner (Paragraph 5.b.)