

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

Report Nos.: 50-321/95-24 and 50-366/95-24

Licensee: Georgia Power Company

P. O. Box 1295

Birmingham, AL 35201

Docket Nos.: 50-321, 50-366

License Nos.: DPR-57, NPF-5

Facility Name: Hatch 1 and 2

Inspection Conducted: October 16-20, 1995

Inspector: Male 7.

Approved by: A Keaker

T. R. Decker, Acting Chief
Plant Support Branch

Division of Reactor Safety

SUMMARY

Scope:

This routine, announced inspection was conducted in the area of occupational radiation exposure and health physics activities primarily associated with the current Unit 2 Refueling Outage. The specific areas examined included: audits and appraisals, changes to organization and staffing; training and qualifications of personnel; external exposure control; internal exposure control; control of radioactive materials and contamination, surveys and monitoring; and program for maintaining occupational exposures as low as reasonably achievable.

Results:

In the areas inspected, no violations or deviations were identified. Based on various interviews with licensee personnel, records review and observations of work activities in progress, the inspector found that the radiation protection program continued to adequately protect the health and safety of occupational radiation workers. In addition, the inspector noted that the licensee had increased health physics oversight over the control of radioactive material within the radiologically controlled area as compared to previous observations of past outage activities.

The inspector noted that the licensee maintained five levels of radiation dose exposure goals with Level 5 being the best goal to achieve and Level 1 being the worst as discussed in the report details. Based on projected outage and non-outage work activities for the calendar year 1995, the licensee planned to meet their level 4 goal of 475 person-rem, but was unsure as to whether or not they would be able to meet their Level 5 goal of 450 person-rem due to outage and non-outage work activities. In addition, one previous inspection finding was closed based on information gathered during the inspection. During discussions regarding the previous finding, contradictory information was presented to the inspector. The necessity to provide complete and accurate information to NRC inspectors was discussed with the licensee.

a. Audits

10 CFR 20.1101 requires the licensee to periodically (at least annually) review the radiation protection program content and implementation.

At the time of the onsite inspection the SAER Department was in the process of conducting an HP audit, No. 95-SA-6, titled "Outage Activities Health Physics and Radiation Protection Programs." The audit began September 25, 1995, and was schedied to be completed on October 27, 1995. Through discussions between licensee representatives within the SAER Department and the inspector as well as review of audit records, the inspector determined that the HP audit was reviewing those HP activities, procedures and programs associated with the current U2 RFO. The HP audit elements included reviews for ALARA, Personnel Dosimetry, Contamination Control, RWPs, Housekeeping, and Surveys. The inspector noted that the audit elements for the ongoing SAER HP audit were appropriate for evaluating HP program areas. The inspector informed licensee representatives that the completed SAER HP audit, findings and conclusions would be reviewed during future inspections.

b. Corrective Actions

The inspector reviewed DCs initiated since July 1995, and determined that approximately 25 DCs had involved radiological concerns. Based on discussions between the inspector and licensee representatives and a review of those DCs that had been completed, the inspector noted that the licensee was adequately identifying areas of concern and taking corrective actions to prevent recurrence of those items identified by the licensee. Furthermore, no adverse trends were noted by the inspector since the last onsite inspection.

Based on those discussions and review of various records, the inspector noted that the audits were adequately planned and conducted, DCs were identifying areas of concern, and the program area identified and contained items of substance relating to the RP program.

No violations or deviations were identified in this program area.

3. Changes (83729)

Changes in the licensee's program area for organization, personnel, facilities, equipment, programs and procedures, from the previous inspection, were reviewed to assess their impact on the effective implementation of the HP program.

a. Organization and Personnel

The inspector reviewed and discussed with licensee representatives changes made to the HP organization since the last NRC inspection of this area conducted May 1-5, 1995, and documented in IR 50-321, 366/95-10. Since the last onsite inspection of this program area, the Superintendents for HP and Chemistry had changed positions. Based on a review of his experience in the area of HP, the inspector determined that the new HP Superintendent met the qualification requirements specified in the licensee's policies and procedures, including TSs.

Overall, the inspector did not note any concerns regarding the HP organization and staffing. The HP organization and staffing levels continued to be appropriate and functioning adequately to support ongoing HP outage and non-outage activities.

b. Policies and Procedures

The inspector reviewed various HP policies and procedures and discussed those records with licensee representatives. Through those discussions and reviews of records, the inspector independently verified that the licensee made several revisions to those policies and procedures reviewed to ensure compliance to NRC regulations.

No violations or deviations were identified in this program area.

4. Planning and Preparation (83729)

Licensee activities and documents for this program area were reviewed to determine the adequacy of management and staff efforts in planning and preparation of outage radiation activities.

At the time of onsite inspection, the licensee was in the fourth week (days 24-28) of a scheduled 43 day RFO that began on September 23, 1995. The inspector reviewed the licensee's organization to support ongoing U2 RFO activities. For the outage, the licensee employed contract personnel to supplement the routine HP staff. The supplemental staff included 34 individuals from Plant Vogtle: five foremen, 13 HPTs, eight Decontamination technicians, and eight Chemistry technicians. Based on discussions with licensee representatives and observation of activities in progress, the inspector noted that the HP staffing levels appeared to be adequate to support ongoing U2 RFO activities. Based on observations made by the inspector and discussions with licensee representatives, the inspector noted that the licensee had increased HP oversight for the U2 RFO as compared to previous outages. This increased oversight included HPTs monitoring all RCA exits to ensure that all tool, equipment and personnel were properly frisked to ensure proper RAM control. In

addition, the licensee had an HPT on both day and night shifts conducting quality assurance checks to ensure that facility personnel were conducting activities in accordance with licensee HP procedures and policies as well as regulatory requirements.

No violations or deviations were identified in this program area.

5. Training and Qualifications of Personnel (83729)

The licensee's program area for training and qualifications of personnel was selectively reviewed to determine whether the licensee's radiation workers were receiving appropriate instructions for their work assignments in accordance with the licensee's standards and procedures.

10 CFR 19.12 requires the licensee to instruct all individuals working in or frequenting any portions of the restricted areas in the health protection aspects associated with exposure to radioactive material or radiation, in precautions or procedures to minimize exposure, and in the purpose and function of protection devices employed, applicable provisions of Commission regulations, individuals' responsibilities and the availability of radiation exposure data.

The inspector discussed and reviewed with licensee representatives GET as provided to contract employees. Through those discussions and reviews of records, the inspector determined that for the U2 RFO the licensee conducted training for approximately 815 individuals. Of those 815 individuals, approximately 76 failed one or more sections of GET. Of those 76 individuals, 32 failed Initial GET and 44 failed Requalification GET. This equated to a 9.3 percent failure rate of contractors. During the previous 1994 Unit 1 RFO only 19 individuals out of 669 failed one or more sections of GET equating to a 3 percent failure rate. Through further discussions with licensee representatives, the inspector was informed by licensee representatives that they were reviewing the utilization of a nationwide training system. This training system maintained updated annual GET records for individuals working at various nuclear facilities across the country. An individual whose annual GET is maintained in the system would not have to repeat GET at various nuclear facilities for that year. The individual would only be required to review site specific information at each facility visited without taking an examination requiring a minimum passing grade. However, when an individual's GET expired for that year the individual would be required to retake GET at the next nuclear facility where work activities would be conducted in order to maintain their GET on the system.

Based on previous inspection findings the licensee had experienced problems with contractors at their facility. Based on discussions with licensee representatives and direct observations made by the inspector, the inspector noted concerns with contractors comprehending basic RP practices. Although the inspector observed instances where it appeared contractors had difficulty understanding basic HP practices, the inspector

noted that HPTs were present to provide adequate job coverage. HPTs would correct the individuals or assist them when they appeared to be confused or did not understand the proper RP practices or procedures. Through further discussions with licensee representatives the inspector was informed that the licensee had observed similar occurrences and was still deliberating on whether they would participate in the nationwide training system. In the event the licensee participated in this training system the inspector informed licensee representatives that the licensee's transition from their current GET processing would be reviewed during future inspections.

Based on those discussions, observations and reviews of records, the inspector noted that the training program for general employees adequately addressed the facility's policies and procedures for radiation work.

No violations or deviations were identified in this program area.

External Exposure Control (83729)

This program area was reviewed to determined whether personnel dosimetry, administrative controls, and records and reports of external radiation exposure met regulatory requirements.

a. Personnel Dosimetry

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:

- 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 high radiation area.

The inspector reviewed the licensee's dosimetry program to ensure that the licensee was meeting the monitoring requirements of 10 CFR Part 20. The inspector noted that the licensee continued to provide TLDs to individuals requiring personnel monitoring. The licensee used the TLD for primary monitoring and utilized DADs for secondary monitoring. Personnel TLDs were read quarterly and results served as official dose. DADs were read upon exiting the RCA and served as a means for tracking individual's cumulative exposure on a day-to-day basis.

b. Administrative Controls for External Exposure

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;
 - (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 inspector reviewed external exposure records and discussed those records with licensee representatives for various facility and contract employees for the year 1995 to date. The inspector noted that for those individuals reviewed, the maximum 1995 exposures were: TEDE, 3,984 mrem; SDE-Skin, 4,1%0 mrem; SDE-Extremity, 4,590 mrem; and Eye, 4,036 mrem.

The inspector reviewed various outage RWPs for appropriateness of the RP requirements based on work scope, location and conditions. For those RWPs reviewed, the inspector noted that the radiological concerns were appropriately addressed. Through discussions with licensee representatives and observations by the inspector, the inspector noted that the licensee developed a general pre-job briefing videotape for RWPs discussing pre-job issues and concerns. As a result, the licensee was able to minimize the number of RWPs for the U2 RFO to approximately 49 as compared to the last Unit 1 RFO where the licensee utilized approximately 135. Based on those discussions and review of various RWPs, the inspector determined that the licensee's program for RWP implementation appeared to adequately address radiological protection concerns and provided proper control measures for those activities.

c. Posting and Labeling

10 CFR 20.1902(e), requires that for posting of areas or rooms in which licensed material is used or stored, the licensee shall post each area or room in which there is used or stored an amount of licensed material exceeding 10 times the quantity of such material specified in Appendix C to 20.1001-20.2401 with a conspicuous sign or signs bearing the words "Caution, Radioactive Material(s)" or "Danger, Radioactive Material(s)."

During tours of the facility, the inspector noted that for those areas observed, the licensee's posting and control of radiation areas, HRAs, airborne radioactivity areas, contamination areas, and RAM areas were generally adequate. All signs observed by the inspector were conspicuous and legible and maps and labels were clearly visible and informative. Also, the inspector conducted independent radiation surveys in the Turbine and Reactor Buildings and noted no concerns with the observed radiation levels.

d. High Radiation Areas

During tours of the Reactor and Turbine Buildings, the inspector observed and independently verified that various HRAs were locked and/or posted as required by procedures and regulatory requirements. The inspector noted that the licensee had properly barricaded and enclosed posted Very HRAs observed by the inspector so as to prevent unauthorized or inadvertent entry into those areas. For those HRAs observed, all were found by the inspector to be properly posted and locked to prevent unauthorized access.

Based on those discussions, observations and review of various records, the inspector noted that the licensee was adequately labeling, posting and controlling access to radiation and HRAs and RAM to include appropriate RWPs.

No violations or deviations were identified in this program area.

7. Internal Exposure Control (83729)

This program area was reviewed to determine the adequacy of the licensee's use of process and engineering controls to limit exposures to airborne radioactivity, adequacy of respiratory protection program, licensee's administrative controls for assessing the TEDE in radiation and airborne RAMs areas, assessments of individual intakes of RAM and records of internal exposure measurements and assessments.

10 CFR 20.1204 states that for purposes of assessing dose used to determine compliance with occupational dose equivalent limits, the licensee, when required to monitor internal exposure, shall take suitable and timely measurements of concentrations of radioactive materials in air, quantities of radionuclides in the body, quantities of radionuclides excreted from the body, or combinations of these measurements. When specific information on the behavior of the material in an individual is known, that information may be used to calculate the Committed Effective Dose Equivalent.

10 CFR 20.1502(b) requires each licensee to monitor the occupational intake of radioactive material by and assess the CEDE to:

- Adults likely to receive, in one year, an intake in excess of 10 percent of the applicable ALI in Table 1, Columns 1 and 2 of Appendix B to 10 CFR 20.1001-20.2401; and
- (2) Minors and DPWs likely to receive, in one year, a committed effective dose equivalent in excess of 0.05 rem.

a. Respiratory Protection

The inspector reviewed the licensee's respiratory protection program. At the time of the onsite inspection, the licensee had used approximately 125 respirators for the U2 RFO. As compared to previous outages the licensee continued to make significant efforts in reducing the use of respirators in areas where respirators had been previously used. Although the licensee observed an increase in PCRs as discussed in Paragraph 8.c, the licensee had anticipated this occurring due to the decrease in respirator usage and previous outage experience in this area. The inspector noted that licensee procedures provided guidance for the selection of respiratory protection devices so as to keep the worker's TEDE ALARA.

b. Engineering Controls

During discussions with licensee representatives, the inspector was informed that during the U2 RFO the licensee made efforts to decrease respirator usage and expand engineering controls to limit airborne radioactivity concentrations including the use of portable High Efficiency Particulate Air filtration units and face shields. Based on those discussions and observations of work activities associated with the U2 RFO, the inspector determined that at the time of the onsite inspection, the licensee's initiatives in reducing radiation exposures through decreased respirator usage and increased engineering controls during potential airborne radioactivity activities were adequate to maintain TEDE exposures ALARA.

In addition, the inspector reviewed various records regarding followup on intakes of RAM and noted that the licensee was appropriately monitoring and controlling internal exposures for facility personnel. The inspector also reviewed and discussed the licensee's program for monitoring internal dose and noted that the licensee's policy regarding internal exposure was adequate.

c. Whole Body Counting and Exposure Tracking

The inspector reviewed various records of whole body counts performed by the licensee for the year 1995 to date. From those reviews of records and discussions with licensee representatives, the inspector

determined that for the year 1995 to date the licensee had conducted numerous WBCs. Although the licensee continued to reduce respirator usage and observed an increase in facial PCEs as discussed in Paragraphs 7.a and 8.c, no significant increase in positive uptakes were observed by the licensee. At the time of the onsite inspection, no concerns were noted by the inspector based on those reviews of various records and discussions with licensee representatives.

Based on those discussions, observations and review of various records, the inspector noted that the licensee's program for monitoring, assessing, and controlling internal exposures was conducted adequately in accordance with regulatory and procedural requirements.

No violations or deviations were identified in this program area.

8. Control of Radioactive Materials and Contamination, Surveys and Monitoring (83729).

This program area was reviewed to determine whether survey and monitoring activities were performed as required and control of RAMs and contamination met licensee and regulatory requirements.

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.

a. Control of Radioactive Material

During facility tours, the inspector noted that for those areas observed, the licensee's posting and control of radiation areas, high radiation areas, airborne radioactivity areas, contamination areas, RAM areas, and the labeling of RAM was adequate. In addition, the inspector reviewed various survey records and verified that the licensee was performing routine surveys of RAMs areas and checks of labels on RAM containers stored at the licensee's facility. Furthermore, 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. As discussed in Paragraphs 4 and 8.d, the inspector observed and noted an increase of HP oversight for the U2 RFO over previous outages.

b. Surveys

The inspector reviewed various records of routine and special radiation and contamination surveys performed for the U2 RFO and discussed the survey results with licensee representatives. Based on those reviews and discussions the inspector noted that the surveys were current and appropriately documented. During tours of the

facility, the inspector independently verified radiation levels in various building locations and other areas of the RCA. In addition, the inspector observed HP technicians performing radiation and contamination surveys. The inspector noted that in all cases, areas were posted in accordance with the radiation hazards present. Furthermore, no concerns with the adequacy or frequency of the radiological survey activities reviewed were identified.

c. Personnel and Area Contamination

The inspector reviewed PCRs documented by the licensee for the year 1995 to the date of the onsite inspection. For the calendar year 1995 to the date of the onsite inspection, the licensee had a total of 99 occurrences. Of the 99 PCRs documented by the licensee, 63 involved skin contaminations and 44 involved clothing contaminations. Of the 63 skin contaminations 35 involved the head and face area. For the current U2 RFO the licensee had documented from the beginning to the date of the onsite inspection 53 PCEs; 45 involved skin contaminations and 15 involved clothing contaminations. Of the 45 skin contaminations, 29 involved the head and face area. Through discussions between licensee representatives and the inspector, the inspector was informed that the increase in the number of PCRs as compared to previous outages and years appeared to be a result of the reduction in respirator usage and new craft personnel who had very little nuclear power plant experience. The licensee observed this increase in PCRs and had been tracking this occurrence from the beginning of the outage and continued to track them through the rest of the outage to determine if any trends could be identified. Review of selected contamination events noted that licensee documentation and follow-up on the individual events were appropriate, and skin dose assessments were performed, when required. At the time of the onsite inspection, the licensee had conducted only two skin dose assessments. For those reports reviewed by the inspector, resultant exposures were minor, not significant, and within regulatory limits and guidelines.

Through discussions with licensee representatives, the inspector noted that the licensee had approximately 750,000 square feet as RCA. Of the 750,000 $\rm ft^2$ designated as radiologically controlled, approximately 63,650 $\rm ft^2$ was designated as contaminated at the time of the onsite inspection. This equated to about 8.5 percent of the RCA. Based on the stage of the outage and material movement, the inspector did not note any concerns in this area.

d. Radiation Detection and Survey Instrumentation

During tours of the facility, the inspector noted that since the last onsite inspection the licensee had acquired new radiation detection survey instruments. The licensee had acquired new tool monitors and radiation detection survey instruments that were more sensitive than

the ones that they previously had used. As a result, the licensee observed an increase in sensitivity for RAM detection capabilities. In addition, at the time of the onsite inspection, the licensee appeared to possess an adequate number of operable radiation survey instruments and related equipment for outage activities. Furthermore, background radiation levels at various survey locations were noted by the inspector to be within an acceptable range.

Based on those discussions, observations and review of various records, the inspector noted that the licensee was adequately conducting area radiation and contamination surveys at the licensee's facility with appropriate radiation survey instruments.

No violations or deviations were identified in this program area.

 Maintaining Occupational Exposures As Low As Reasonably Achievable (83729).

This program area was reviewed to determine the adequacy of the ALARA program. Areas reviewed included organization support, training, goals and objectives, radiation source reduction, worker awareness and involvement, ALARA plans and reviews, and ALARA results in the implementation of the licensee's ALARA program.

10 CFR 20.1101(b) states that each licensee shall 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 as low as reasonably achievable.

The inspector reviewed the licensee's program for maintaining exposures ALARA. At the time of the onsite inspection, the licensee's 1995 total collective dose was approximately 400.314 person-rem based on DAD dose. Through discussions with licensee representatives and a review of records, the inspector determined that the licensee maintained five levels of radiation dose exposure goals with Level 5 being the best goal to achieve and Level 1 being the worst. The licensee established a radiation dose exposure goal based on projected job activities for the upcoming year and designated that numerical value as the Level 3 goal. The Level 4 goal was 5 percent less than the Level 3 goal, the Level 5 goal was 10 percent less than the Level 3 goal, the Level 2 goal was 10 percent greater than the Level 3, and the Level 1 goal was any number greater than the Level 2 goal. Based on projected doses to be received, the licensee planned to meet their Level 4 collective dose goal of 475 person-rem. At the time of the onsite inspection, the licensee's total collective dose for the U2 RFO was approximately 240.668 person-rem based on DAD dose. The licensee's Level 5 outage exposure goal was set at 275 person-rem. Based on projected outage work activities, the licensee planned to meet their Level 3 goal of 305 person-rem. Through discussions with licensee

representatives, the inspector was informed that the observed increase in dose received was apparently attributed to an increase in the work hours from outage activities associated with Drywell Minor Maintenance, Control Rod Drives, and In-Service Inspections.

Based on those discussions and review of various records, the inspector noted that the ALARA staff was adequately addressing ALARA initiatives for licensee outage and non-outage activities.

No violations or deviations were identified in this program area.

10. Follow-up of Previously Identified Inspection Findings (93001)

(Closed) IFI 50-321, 366/94-26-04: Review licensee's corrective actions associated with the industrial safety hazards and concerns identified during the inspection.

The inspector reviewed the licensee's actions regarding industrial safety for the current U2 RFO. The inspector conducted tours of the drywell on two different occasions and noted an improvement in the housekeeping of the drywell as compared to the conditions observed during the previous Unit 1 outage. The inspector did not observe any significant tripping hazards from cables, hoses and welding leads. All ladders observed in the drywell were properly tied off and adequate flooring was observed throughout the drywell, where feasible, to prevent an individual from falling down through openings in the grating floors. In addition, the inspector observed individuals wearing hardhats and safety glasses.

During the previous NRC onsite outage inspection of this program area, licensee representatives stated they planned to conduct safety tours of the drywell three times a week. The inspector discussed with numerous licensee representatives the efforts made by the licensee to improve the housekeeping and working conditions within the U2 drywell. The inspector was informed by cognizant licensee representatives, including licensee management, that the safety tours had not been conducted at the expected frequency of three times a week. The inspector independently verified, based on RWP and dosimetry records, that safety tours had been conducted only two times during the two week period that the drywell was accessible for inspection since the outage began. In additional discussions, the inspector was informed by one of the licensee's safety advisors that he had conducted several routine safety tours of the U2 drywell. The information provided by the advisor was contradictory to the information the inspector received from licensee management and the information independently evaluated by the inspector. Although statements by the safety advisor did not appear to accurately characterize the number of inspections performed, no violation or deviation of regulatory requirements was identified because: (1) the inspector was satisfied with the progress made in resolving industrial safety issues in the drywell and (2) accurate information was provided by licensee management. The inspector informed licensee representatives that this inspector follow item would be considered closed based on actions take to resolve drywell problems and verified by the inspector during this inspection.

11. Exit Meeting

At the conclusion of the inspection on October 20, 1995, an exit meeting was held with those licensee representatives indicated in Paragraph 1 of this report. The inspector summarized the scope and findings of the onsite inspection and indicated that no violations or deviations were identified. In addition, the inspector informed licensee representatives that, based on discussions between the inspector and a licensee representative, the NRC was concerned that information provided to NRC inspectors was not always accurate and complete. Licensee management acknowledged NRC's concern and agreed that information provided was to be accurate. The licensee did not indicate any of the information provided to the inspector during the inspection as proprietary in nature and no dissenting comments were received from the licensee.

Type	Item Number	Status	Description and Reference
IFI	50-321, 366/94-26-04	Closed	Review licensee's corrective actions associated with the industrial safety hazards and concerns identified during the inspection (Paragraph 10).

12. Index of Abbreviations Used in this Report

ALARA	As Low As Reasonably Achievable
ALT	Annual Limit on Intake
DAD	Digital Alarming Dosimeter
DC	Deficiency Card
DPW	Declared Pregnant Women
ft ²	Square Feet
GET	General Employee Training
HP	Health Physics
HPT	Health Physics Technician
HRA	High Radiation Area
IFI	Inspector Follow-up Item
IR	Inspection Report
mrem	Milli-Roentgen Equivalent Man
NRC	Nuclear Regulatory Commission
NSC	Nuclear Safety and Compliance
PCE	Personnel Contamination Event
PCR	Personal Contamination Report
RAM	Radioactive Material
RCA	Radiologically Controlled Area

RFO	Refueling Outage
RP	Radiation Protection
RWP	Radiation Work Permit
SAER	Safety Audit and Engineering Review
SDE	Shallow Dose Equivalent
SNOPCO	Southern Nuclear Operating Company
TEDE	Total Effective Dose Equivalent
TEP	Training and Emergency Preparedness
TLD	Thermoluminescent Dosimeter
U2	Unit 2
WBC	Whole Body Count