



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

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Report Nos.: 50-327/92-13 and 50-328/92-13

Licensee: Tennessee Valley Authority
 3B Lookout Place
 1101 Market Street
 Chattanooga, TN 37402-2801

Docket Nos.: 50-327 and 50-328 License Nos.: DPR-77 and DPR-79

Facility Name: Sequoyah 1 and 2

Inspection Conducted: April 20-24, 1992

Inspectors:	<u>Eldon D. Testa</u> E. D. Testa	<u>5/18/92</u> Date Signed
	<u>E. D. Testa for</u> R. B. Shortridge	<u>5/18/92</u> Date Signed
	<u>B. A. Parker</u> B. A. Parker	<u>05/18/92</u> Date Signed
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SUMMARY

Scope:

This routine, unannounced inspection was conducted in the area of occupational radiation safety, and included an examination of changes to the program, planning and preparation, control of radioactive materials and contamination, surveys and monitoring, and maintaining occupational exposure as low as reasonably achievable (ALARA).

Results:

In the areas inspected, one non-cited violation (Paragraph 10) and no deviations were identified. One inspector followup item in the area of out-of-core source term reduction was identified. A concern about containment accountability mentioned in Report No. 91-28 was reviewed and corrections that were implemented appeared adequate to eliminate the problem. A radiographer was observed performing radiation surveys following radiography of the 559 valve. Post-radiography surveys of the radiography equipment were considered marginal and were brought to the licensee's attention for followup. The licensee was encouraged to improve the stepoff pad area postings to eliminate any confusion or mixing of contamination zone material. The radiation doses associated with the shotpeening process for the Unit 2 Cycle 5 refueling outage were greatly improved over the Unit 1 cycle 5 outage reported in Report No. 91-28. The chemistry soft shutdown resulted in a good reactor coolant clean up and thus a significant dose reduction. Significant person-rem savings through the use of lead shielding and the storage of lead in containment helped reduce doses. Worker awareness of the general radiation conditions within the RWP area and post job debriefings were determined to be a positive influence in dose reduction. The licensee was encouraged to improve the pre-job tool packaging. Technicians and professional radiation personnel were found to be knowledgeable and this was noted as a positive force in reducing dose.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *R. Alsup, QA Audit Manager
- *R. Beecken, Plant Manager
- *J. Carter, Corporate Radcon
- *M. Cooper, Site Licensing Manager
- *T. Flipppo, Site Quality Manager
- *J. Gates, Technical Support Superintendent
- *S. Harvey, Corporate Chemistry
- *S. Holdefer, Health Physicist
- *C. Hudson, Corporate Radcon Manager
- *W. Jocher, Manager Site Chemistry
- *J. Johnson, NCO Radcon (Program Manager)
- *T. Johnson, Health Physics Radcon
- *C. Kent, Radcon Manager
- *M. Leamon, Information Systems Specialist
Corporate Radcon
- *P. Lydon, OPS Manager
- *J. Osborne, Radwaste Manager
- *A. Parker, W TVA Projects Director
- *J. Proffitt, Compliance Licensing Engineer
- *J. Stamey, Health Physicist Radcon
- *R. Thompson, Compliance Licensing Manager
- *R. Vanosdoin, Maintenance Program Manager
- *J. Wilson, Site Vice President, Sequoyah

Licensee Employees

Other licensee employees contacted during this inspection included craftsman, engineers, operators, mechanics, and administrative personnel.

Nuclear Regulatory Commission

- *W. Holland, Senior Resident Inspector
- *S. Shaeffer, Resident Inspector

*Attended exit interview

2. Changes (83729)

The inspector reviewed changes since the last inspection in organization, facilities, equipment and personnel and how they relate to the occupational radiation protection program. This inspection noted that no significant changes had occurred in the licensee's program.

No violations or deviations were identified.

3. Facility Tours (83729)

During the onsite inspection, the inspector toured selected areas of the Unit 2 containment (upper and lower). The inspector observed facility operations and selected work activities to evaluate the implementation and effectiveness of the licensee's health physics program. The inspector also toured the outside facilities including warehouses and other storage locations. The inspector noted that overall housekeeping within the plant appeared adequate for the stage of outage and no overly congested areas were observed except at times on the refueling floor (see Paragraph 9c). Tours of the outside area did not uncover any improperly stored or improperly placarded material.

During the outage, the inspector observed that trash was being relocated from the plant to a warehouse located inside the protected area. Licensee representatives stated that this was necessary since the crew that surveyed the trash for unrestricted release was behind and a storage location was set up in Warehouse 2. The inspector toured Warehouse 2 and noted that the potentially radioactive trash was in a posted radioactive material storage area. The inspector performed radiation surveys of the area and found no radiation above normal background ($<.02$ mrem/hour). Licensee representatives stated that a screening survey had been performed on the trash prior to storage and that a final comprehensive survey would be performed for unrestricted release, when the trash was sorted. The inspector noted that this was standard practice at most utilities.

No violations or deviations were identified.

4. Internal Exposure Control (83729)

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.

The inspector reviewed the licensee's bioassay program during the inspection. Radiological Control Instruction RCI-11, Revision 7, "Bioassay Program," delineated the requirements for routine and non-routine bioassays (whole body counts or WBCs). Approximately 1,300 and 4,600 WBCs were performed by the licensee in 1991 and to date in 1992, respectively. As of the date of the inspection, the licensee had documented approximately 83 "positive" WBCs in 1992. Of those, approximately 58 were less than one percent of the Maximum Permissible Organ Burden (MPOB). Of the remaining 25, 22 were greater than one percent MPOB and three were greater than five percent MPOB, with the maximum being 12.65 percent MPOB. In general, the lower large intestine was analyzed to be the critical organ. The inspector selectively reviewed the positive WBCs, including the three that were greater than five percent MPOB. In addition, a number of routine bioassays were reviewed, including initial and termination WBCs. The inspector determined that the licensee followed procedural requirements and no problems were identified.

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.

10 CFR 20 Appendix A, Footnote (d), requires adequate respirable air of the quality and quantity in accordance with NIOSH/MSHA certification described in 30 CFR Part 11 to be provided for the atmosphere-supplying respirators.

30 CFR 11.121 requires that compressed, gaseous breathing air meets the applicable minimum grade requirements for Type 1 gaseous air set forth in the Compressed Gas Association (CGA) Commodity Specification for Air, G-7.1 (Grade D or higher quality).

On February 11 and 12, 1992, the licensee performed checks on the breathing air produced by eight compressors onsite. All of the air tested met or exceeded the requirements for Grade D breathing air, with two exceptions. The maximum allowable concentration of condensed hydrocarbons (oil) for Grade D air is 5.0 milligrams per cubic meter (mg/m³). The air from two compressors was found to contain levels of oil above the Grade D allowable limit with measurements of 8.1 and 5.9 mg/m³, respectively. The industrial hygienist who

tested the air submitted a report to the licensee dated February 14, 1992, and indicated that the two compressors should not be used for breathing air until filtering systems were changed and the air retested. During the inspection, the licensee indicated that the two compressors were not being used for breathing air.

During a tour of the Unit 2 containment, the inspector noted the use of breathing air manifolds. According to the licensee, eight new manifolds were procured prior to the start of the outage and "calibrated" for use during the outage. The calibration at 28 pounds per square inch pressure at the breather's point of use was performed to alleviate potential airflow-related problems. The inspector reviewed the calibration procedure and results and no problems were noted.

No violations or deviations were identified.

5. Skin Dose Assessment (83729)

10 CFR 20.201(b) 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.

The inspector reviewed the licensee's procedures for assessing the skin dose resulting from a personnel contamination. When a personnel contamination occurred, the licensee evaluated the skin dose relative to an approximate exposure time. These initial evaluations were documented on the personnel contamination reports in counts per minute-hours (cpm-hrs). If certain "trigger" levels were met, further evaluation was initiated and documented. Procedure RMD FO-10 specified that if an initial skin dose assessment exceeded 5000 cpm-hrs (using a standard 15.5 cm² frisker probe for an area contamination) or exceeded 1000 cpm-hrs (using a 1 cm² "hot particle" frisker probe), then a skin dose in millirem must be calculated. Procedures Skindose-1, -2 and -4 provided guidance on assessing suspected skin doses that exceeded the aforementioned trigger levels. Skin doses were calculated for all personnel contaminations. The inspector's review of selected records revealed no significant skin doses and no problems were noted with the licensee's procedures.

No violations or deviations were identified.

6. Radiological Awareness Reports (RARs) and Personnel Contamination Reports (PCRs)

a. RARs

The requirements for RARs were contained in Procedure SSP-5.5, Revision 1, "Reporting of Radiological Incidents." In 1991, the licensee documented approximately 74 RARs and, as of April 20, 1992, approximately 51 RARs had been documented. Of the 51 RARs in 1992, approximately 35 arose during the Unit 2 Cycle 5 refueling outage. The licensee categorized the RARs to assist in tracking and trending. Those RARs involving non-compliance are followed closely by the Radcon group to closure. One of the more common RARs concerns individuals entering the RCA with no or the wrong personnel dosimetry. It appears that with all of the dosimetry located in racks in the main gatehouse, people occasionally either forget or pick-up another person's dosimetry. Many of these errors were reported by the individuals themselves. Also, since the implementation of Phase 2 of the computer-based Radiation Exposure System (REXS) in February 1992, the licensee has left RAR 92-026 "open" to document all system-related errors (computer glitches, software problems, etc.). At the time of inspection, approximately 23 items for followup were documented in RAR 92-026. Issues involving personnel and REXS (failure to properly sign in/out via REXS, etc.) were handled separately. The inspector reviewed Procedure SSP-5.5 and selected RARs and no problems or significant adverse trends were identified. According to the licensee, the numbers of RARs are trending higher due to increased emphasis and the need to document a wider variety of problems and issues. The licensee sets no goals or limits for RARs.

b. PCRs

The requirements for PCRs were contained in Procedure RMD FO-10, "Personnel Contamination Reports." As of April 22, 1992, the licensee had documented 59 PCRs for the Unit 2 Cycle 5. This was below the outage goal for that point in the outage. The licensee's overall goal for the outage was a maximum of 120 PCRs. As of March 1992, the licensee was averaging 1.4 PCRs/1000 RWP-hours for the fiscal year (October 1 - September 30). The licensee's PCR goal was 1.0 PCR/1000 RWP-hours. The inspector reviewed selected PCRs and no problems were noted. Skin doses resulting from personnel contaminations were evaluated adequately, as discussed in Paragraph 5.

No violations or deviations were identified.

7. Incident Followup (83729)

The inspector reviewed two incidents that occurred during the Unit 2 Cycle 5 outage prior to the inspection.

On April 10, 1992, at approximately 0300 hours, an incident occurred in Steam Generator #1 during which shot was sprayed onto the steam generator platform from the shotpeening equipment while it was withdrawn and being tested. A worker was stationed on the platform for observation/assistance for most of the remote operation. The worker was recalled from the platform due to RWP dose limits, leaving the platform unattended for approximately 45 minutes. The operators were located in a control trailer remotely analyzing a problem with the shotpeening end effector that arose during routine diagnostic testing. Sometime during the period in which the platform was unattended, one of the operators inadvertently placed the unit into the peen mode while manipulating the computer screens in an effort to solve the aforementioned problem. Minutes later, the operators realized that the unit was operating and immediately shut down the system. A replacement worker arrived on the platform and reported that the platform was covered with shot. Upper and lower containment were evacuated due to a potential airborne hazard caused by positive pressure in the channelhead. The licensee launched an immediate investigation into the incident and shotpeening activities were temporarily suspended. The licensee's investigation determined the cause of the incident to be operator error associated with a lack of sufficient controls in the procedure for command and control of the operational console. The licensee was unable to determine exactly how long the unit sprayed shot onto the platform before it was stopped. The vendor immediately initiated Field Change Request Nos. 5, 6 and 7 for Field Procedure STD-FP-1991-5488, "Steam Generator Tubesheet Region Shot Peening." The changes included requiring all translation operations to be performed in the manual mode screen and the addition of a checklist to be used while in the manual mode screen. In addition, closer monitoring of channelhead differential pressure and the shotpeening vacuum system were required to lessen the airborne potential. On the afternoon of April 10, 1992, the licensee reopened containment, cleaned and decontaminated the platform, and allowed shotpeening operations to resume. The incident resulted in two PCRs and three minor uptakes (all ingestion with maximums of 6.38%, 7.05% and 12.65% MPOB of cobalt-58 and cobalt-60, respectively). During the inspection, the inspector reviewed the incident, the investigation documentation, and the followup/corrective actions. No problems were identified. The licensee's response and

followup to the situation was noted as prompt and effective by the inspector.

The second incident occurred on April 15, 1992. Three workers were visually verifying the "bullet nose" and control rod drive shaft alignment when a sparger in the reactor cavity was inadvertently switched on, spraying the work team with water from the reactor water cleanup system. RAR 92-041 was initiated following the incident and required a response from the Operations group by May 2, 1992, that included a statement addressing the probable cause and action to prevent recurrence. From a health physics standpoint, the significance of the incident was minimal since no personnel contaminations occurred although the team's plastic anti-contamination suits were contaminated by the spray. The RAR indicated that the entire work evolution would have to be repeated. This resulted in a wasted team effort and caused an increase in collective dose of approximately 0.791 person rem.

No violations or deviations were identified.

8. Radiography Observation (83729)

During the inspection, the inspector observed gamma radiographic operations being performed on the 559 check valve. The radiography was performed by a TVA non-destructive testing group which held a NRC license authorizing possession and use of byproduct material for radiography. Sequoyah Procedure RCI-16, "Radiation Protection During Radiographic Operations," delineates the licensee's requirements for conducting radiography onsite. The inspector's observation of the radiographer was made through a video monitor located at the Unit 2 lower control point since containment was evacuated during all radiographic operations per procedure. A question arose from the observation concerning the radiation survey that is required to be performed by 10 CFR Part 34 following each use of the radiography source. 10 CFR 34.43(b) requires a survey after each exposure, including the guide tube and the entire circumference of the exposure device to verify that the source was fully retracted and shielded. The inspector was unable to see the radiographer perform the required survey after the source was retracted and prior to the retrieval of the exposed film. According to the radiographer, who was questioned at the stepoff pad following the exposure, the survey had been conducted. The inspector indicated that if the survey was conducted, it may have been inadequate, although an absolute conclusion could not be drawn due to the limited field of view offered by the video monitor. Only the guide tube was visible through the monitor. The

exposure device was out of the camera's field. The inspector stressed, to the licensee and the radiography group, the importance of performing all required surveys adequately since most incidents involving radiography are related to inadequate surveys. No other problems were noted with the radiography or the licensee's procedure.

No violations or deviations were identified.

9. As Low As Reasonably Achievable (ALARA) (83729)

10 CFR 20.1(c) states that persons engaged in activities under a license issued by the NRC should make every reasonable effort to maintain radiation exposure as low as reasonably achievable. The inspector reviewed the Unit 2 Cycle 5 major ALARA initiatives which included lessons learned from the Unit 1 Cycle 5 outage. Major lessons learned and improvement items included the following:

a. Refueling Operations

- (1) Improved O-ring cleaning
- (2) Correction of Transfer Cart Problems
- (3) Installation of a Reactor Head Shield
- (4) Cavity Decon

b. Steam Generator Maintenance

- (1) Full Secondary Side Steam Generator for Additional Shielding
- (2) Improved Eddy Current Test (ECT) Radioactive Waste Storage
- (3) Improved Planning and Sequencing of Work Activities
- (4) Improved Scaffolding use Coordination

c. Safety Injection System (SIS) Check Valves

- (1) Improved Inspection Methods
- (2) Decontaminating of Valve Internals
- (3) Improved Disc Seat Lapping Techniques
- (4) Improved Work Schedule Planning and Job Sequencing

As a result of these activities, the inspector noted that the total person-rem dose on April 4, 1992, was approximately 328.1 person-rem which was approximately 90 to 100 person-rem below the outage goal estimate for that date.

TABLE 1

U1C5 and U2C5 REFUELING OUTAGE DATA
(Eddy Current, Plugging, and Shotpeening Vendor Performance)

	Person-Rem (Goal)	Person-Rem (Actual)	RWP Hours (Goal)	RWP Hours (Actual)
U1C5	40	154.527	-	7670
U2C5	66.8	35.523	4800	2178

The inspector noted that Unit 2 had undergone a soft shutdown from a chemistry stand point and that approximately 1000 curies had been removed from the Reactor Coolant System. This helped reduce channel head doses from 12 R/hr to 2 R/hr, as well as reduced general area radiation doses. The previous outage removal of the RTD bypass had reduced general loop area radiation doses from approximately 250 to 600 mR/hr to 5 to 50 mR/hr. This resulted in a reduction factor of up to 10 in some areas.

The inspector also noted that a dose performance incentive was included in the major contract awards for this refueling outage. This appears to have provided a positive incentive for contract personnel to keep their doses below outage goals.

Selected design change notices (DCN) were reviewed and the inspector noted improvement in the timeliness of submission. Of the 62 DCN(s) for the Unit 2 Cycle 5 outage, most arrived onsite approximately 3 to 5 months prior to the outage start date. Pre-outage scope and planning meetings were held and unnecessary work was deleted. These deletions helped to control outage growth and therefore, personnel dose.

The inspector discussed RWP job knowledge and general ALARA awareness with selected workers during facility tours. The workers questioned were knowledgeable about the ALARA program and RWPs under which they were working.

The inspector observed that some RWP job tool lists were incomplete. It was noted that a more complete packaging of tools for jobs would reduce the amount of time necessary to complete the job and thus reduce personnel doses.

The inspector noted after reviewing test results and the lessons learned from the Unit 1 Cycle 5 outage that the introduction of vaporized oil carry over from the air compressors in the shotpeen system appeared to be the

culprit in causing shot clumping. This resulted in higher than anticipated maintenance activities. The fact that this was not discovered during the 100 hour test conducted prior to the Unit 1 cycle 5 outage was brought to the attention of the licensee as a weakness in the ALARA program. It was also pointed out that this test weakness was a major contributor to the Unit 1 Cycle 5 outage higher than expected person-rem doses.

The inspector reviewed the licensee's stellite reduction program and noted that a valve list had been generated for valves containing stellite and an action plan was being developed to acquire non-stellite valves so that valves could be replaced with material containing lower or no cobalt material as valve replacement was required. Valves had been divided into three priorities. Non-stellite material was going to be specified in certain replacement valves. The licensee plans to have these valves available in the warehouse for replacement of required valves prior to the end of calendar year 1992. The inspector reviewed recent gamma spectral measurements of pipe wall surface activity in the Unit 1 cold leg. The measurements showed a cobalt surface activity of about 46.4 uCi/cm² (average). This is about twice the industry average of 27.2 uCi/cm² for similar plants. This confirmed the need to reduce the amount of stellite in the primary system. The inspector informed the licensee that replacement of valves containing stellite with valves containing little or no stellite would be tracked as an inspector followup item.

Inspector Followup Item (IFI): 50-327, 328/92-13-01:
Replacement of valves containing stellite with valves containing little or no stellite.

The inspector attended a post-job debriefing for all steam generator maintenance operations. Technical problems were discussed that pertained to shotpeening operations, however, a good portion of the debrief discussed work coordination problems. The most significant of these was the failure to adequately plan for removal of equipment from containment. The inspector noted that this same item was listed in the previous outage report as item 6. The prescribed fix, or corrective action was to schedule dedicated rigger support for refueling floor work activities during peak periods. The inspector observed periods of log jams on the refueling floor, partly due to plant design, and noted the need for better coordination. The chairman of the critique noted the problems as discussed and stated that they would again be listed as a corrective action to be fixed prior to U1C6.

The licensee has obtained a video disc system of photographs of Unit 1 and 2 containments. These are successfully used in pre-job briefings for work crews and provide a significant dollar savings. The licensee has purchased a sufficient number of satellite stations that have the capability to virtually simulate a tour through the containments as if actually walking there.

d. ALARA Planning and Briefings

To reduce collective dose, the licensee has taken significant steps to minimize the impact that modifications/design change notices (DCNs) have on outage work scope. For the Unit 1 Cycle 5 (U1C5) outage 84, DCNs were to be issued to the station eight months prior to the outage start date. Only 25% were issued by the outage start date. Of the original 84 DCNs, 33 were deleted and 31 were added. Seven DCNs were added in the last two months prior to outage. Late issue of DCNs was a factor in the increased number of field changes. Each DCN averaged 10 filed changes after issue. Late issue to the station also resulted in: (a) inadequate time for pre-design walkdowns, (b) inadequate quality because of inadequate time for development, (c) late identification of awarding material contracts, and (d) reduced time for preparing, writing, and reviewing appropriate approvals for work plans.

To preclude a repeat of U1C5, the engineering department included radiological controls in ALARA reviews at 10%-80% development of the DCN. Also, a concerted effort to reach the eight month prior to outage start issue date resulted in the 62 DCNs for U2C5 issued five months prior to the outage start. Radcon stated that only six DCNs were received after the outage start date and they were all due to emergent work and therefore, unanticipated.

The inspector reviewed the performance of jobs regarding projected dose versus actual dose. In general, the licensee's performance in this area was good. However, in one case, a work group had expended its dose allowance during work on Unit 2 Residual Heat Removal (RHR) check valves. A hold was placed on the job by Radcon which meant the work group would have to justify additional dose and obtain authorizations from the ALARA committee before proceeding. Several days later, the same work group attempted to restart the work on another RWP without obtaining authorization from the ALARA committee. The work group was stopped by Radcon. The inspector interviewed several plant

personnel involved in the issue and found that the apparent root cause of the work crew attempting to perform work on a new RWP without obtaining additional dose authorization was poor communications. Outage management and Radcon did not feel the potential existed for future problems in this area, and the error was caught, therefore no corrective action was proposed or taken.

e. ALARA Training

The inspector reviewed the licensee's program to provide ALARA training or training to reduce occupational radiation dose. The licensee abandoned classroom training in favor of on-the-job training (OJT) in dose reduction. Currently ALARA training is provided as a teamwork exercise on a system mockup. The system mockup contains valves, pumps, and other components frequently found in the plant. Plant personnel received training in the form of pre-job briefings, radiation work permit briefings and performing exercises (under simulated conditions). Training personnel are required to evaluate performance and conduct post-job debriefings to strengthen performance. The inspector discussed the difficulty of measuring the performance/success of OJT but licensee representatives stated that based on radiological awareness reports, there have been fewer direct personnel errors since OJT was implemented. The licensee had just completed ALARA training for contract engineers when the vendors were recently changed. The new engineering vendor will also need this training.

The Plant Manager provided the inspector with several video training tapes. The inspector viewed the training and noted that the video tapes covered the entire job performance from pre-job briefings through the performance of the job task and to the post-job debriefing. The licensee plans to video tape frequently performed operations and enhance the surrogate tour with this information.

f. Station ALARA Committee

The inspector reviewed minutes of the Station ALARA Committee (SAC) to determine their role and effectiveness in the program to maintain collective dose as low as reasonably achievable (ALARA). The minutes for 1991 and early 1992 reflected the following: Overall the SAC was active in establishing and managing collective dose goals. An integral part of managing dose has been proceduralized and requires

work groups about to exceed a pre-established goal to stop work and seek approval from the SAC for additional job dose. Inherent in this process is the justification for dose spent and the new initiatives to be taken to control/reduce future dose for the subject job. Indicative of management's support for the program was the approval by upper management to use 15,000 dollars as the figure in cost benefit analysis to save one person-rem. The inspector noted that numerous meetings were held to obtain approval for additional dose in which case the SAC generally transferred one amount to pay another. In one case where a major vendor had failed to check out equipment properly before use in containment, and incurred a significant dose overrun for the project, the SAC was instrumental in putting the vendor on notice. Later, when this same operation was performed the vendor was contracted by penalty or bonuses for performance with an established exposure limit for that known scope of work. The inspector noted that the status of ALARA open items was not up to date and discussed this with the Secretary of the SAC. While the SAC was improving and appeared to be working as a team, the chairperson was frequently absent. The inspector discussed with the plant manager that performance declined when this happened and plant management noted this observation. Overall the SAC involvement in the ALARA program was improving.

10. Termination Letters

10 CFR 20.408(b) requires that termination letters be provided to individuals and the Nuclear Regulatory Commission within a certain specified time.

Based on the inspection of selected records, at least one individual and possibly other individuals were not provided with termination letters within the specified time. The licensee took immediate corrective action to review the termination letter program and corrective action was underway prior to completion of the inspections. As a result of the impending corrective actions and low safety significance, this was identified as an NRC identified non-cited violation.

NRC identified NCV: 50-327, 328/92-13-01: Failure to provide timely terminations letters to individuals as required.

11. Exit Interview (83729)

The inspection scope and results were summarized on April 24, 1992, with those persons indicated in Paragraph 1 above. Program areas were reviewed and the non-critical violation (NCV) and Inspector Followup Item identified during this inspection and listed below were discussed in detail. The inspector noted the significant reduction in this outage (U2C5) person rem totals versus the most recent outage (U1C5) totals. The soft chemistry shutdown, good RCS cleanup, better performance of shotpeening equipment (no shot clumping caused by oil/moisture) and ALARA performance contract bonus/penalty clauses contributed to the dose reductions.

The inspector informed licensee representatives that although proprietary information was reviewed during this inspection, such material would not be included in the report.

<u>Item Number</u>	<u>Description and Reference</u>
50-327, 328/92-13-01	Inspector Followup Item (IFI): Replacement of identified valves containing stellite with valves containing low or no concentration of cobalt (Paragraph 9).
50-327, 328/92-13-02	NRC-identified Violations (VIO): Failure to provide termination letters to individuals and NRC within specified time as required by 10 CFR 20.408(b). (Paragraph 10). NCV with licensee corrective actions underway prior to the end of the onsite inspections.