

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-461/91021(DRSS)

Docket No. 50-461

License No. NPF-62

Licensee: Illinois Power Company
500 South 27th Street
Decatur, IL 62525

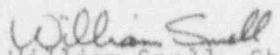
Facility Name: Clinton Power Station

Inspection At: Clinton Site, Clinton, Illinois

Inspection Conducted: November 18-22, 1991

Inspector:  A. W. Markley

12-17-91
Date

Approved By:  William Snell, Chief,
Radiological Controls
Section

12/17/91
Date

Inspection Summary

Inspection on November 18-22, 1991 (Report No. 50-461/91021(DRSS))

Areas Inspected: Routine announced inspection of the radwaste and transportation programs including: organization, management controls and training, audits and appraisals, gaseous radwaste, liquid radwaste, solid waste and transportation, effluent reports, effluent control instrumentation, primary coolant chemistry and air cleaning systems (IP 84750, 86750). Also included in this inspection was a follow-up of concerns regarding the implementation of the radiation safety program (IP 99024).

Results: The licensee's programs for radioactive waste management, effluent monitoring and transportation of radioactive waste and radioactive materials appear to be effective in protecting the public health and safety. An open item was identified that involved charcoal adsorber testing (Section 12).

Areas for which improvement appears to be merited are communications and teamwork between the radiation protection and industrial safety departments (Section 13). Communication problems were also noted in a minor transportation event (Section 10).

Program strengths were identified in the continued excellent fuel performance with associated minimal levels of gaseous radioactive material releases and dose equivalent iodine-131 levels in the reactor coolant. Audits and surveillances were performance based and generally very good, as were planned improvements in radwaste operator training. Housekeeping was also good.

DETAILS

1. Persons Contacted

- F. Armetta, Supervisor, Radwaste
- * J. Bradburne, Supervisor, Radiological Engineering
- L. Clark, Radwaste Trainer
- * J. Cook, Manager, Clinton Power Station
- * M. Dodds, Supervisor Radiological Operations
- * R. Ehle, Director, Industrial Safety
- * C. Elsasser, Director, Planning and Scheduling
- * L. Everman, Assistant Director, Radiation Protection
- * D. Holtzscher, Director, Nuclear Safety
- * J. Langley, Director, Design and Analysis
- * J. Lewis, Principal Assistant to Vice President
- * J. Manskar, Director, Planning and Programming
- R. Maurer, Supervisor, Health Physics and Chemistry Training
- * R. McCampbell, Radiation Protection Shift Supervisor
- * D. Miller, Director, Plant Radiation Protection
- * J. Miller, Manager, NSED
- * K. Moore, Director Plant Technical
- * A. Mueller, Director, Maintenance and Technical Training
- * J. Nyswander, Supervisor, Radiological Environmental
- * J. Perogoy, Staff Engineer
- * R. Phares, Director, Licensing
- * S. Raser, Director, Plant Maintenance
- * J. Sipek, Supervisor, Regional Regulator Interface
- * F. Spangenberg, Manager, Licensing and Safety
- * R. Weedon, Manager, Radiological Assessor
- * R. Wyatt, Manager, Quality Assurance
- * P. Yocum, Director, Plant Operations

- * P. Brockman, Senior Resident Inspector
- * W. Snell, Chief, Radiological Controls Section

The inspectors also interviewed other Licensee and contractor personnel during the course of the inspection.

* Denotes those present at the exit meeting on November 22, 1991.

2. General

This inspection was conducted to review aspects of the licensee's radwaste/radioactive material shipping and transportation programs. The inspection included tours of radiation controlled areas, auxiliary building, spent fuel building, radwaste facilities, observations of licensee activities, review of representative records and discussions with licensee personnel. Also included in this inspection was a follow-up of concerns regarding the implementation of the radiation safety program.

3. Licensee Action on Previous Inspection Findings (IP 83750)

(Closed) Violation No. 461/90026-01: Failure to control access to high radiation areas (HRAs). The licensee has taken actions to address the causes of these events and to improve personnel accountability. Magnetic signs on all applicable HRA doors stating "RESTRICTED HIGH RADIATION AREA, THIS DOOR MUST REMAIN LOCKED AND SECURED EXCEPT FOR PERSONNEL ENTRY OR EXIT" were installed. These signs are lettered in yellow on a magenta background; procedures have been revised to require door locking for HRAs that exceed 1,000 mrem/hr, while HRAs that are between 100 and 1,000 mrem/hr will be controlled by Radiation Work Permit. Procedure 1905.21, Restricted High Radiation Area Key Control, was revised to authorize issuance of keys, for doors that are required to be locked, to only radiation protection personnel. A memorandum was issued to advise all plant personnel of revised requirements for HRA access control. This violation is closed.

(Closed) Unresolved Item No. 461/90026-02: Evaluate corrective actions regarding HRA access control for the Low pressure core spray room (LPCS). HRA postings were verified, locking mechanisms were repaired, and an article was published in the plant's news letter regarding HRA controls. Also, revisions to radiation worker training to address HRA access controls are planned. Since these occurrences, the licensee revised their procedures to control by radiation work permit access to HRAs that exhibit dose rates between 100 and 1,000 mrem/hr, as allowed by Technical Specifications. The LPCS door no longer requires locking. This item is closed.

(Closed) Violation No. 461/90026-03: Failure to evaluate radiological hazards associated with the maintenance of the "A" residual heat removal pump. The licensee has taken actions to address the causes of these events and to improve guidance for planning radiological work. A work instruction and a flow chart were developed to address controls to be considered for potential airborne producing activities. This work instruction was added to the required reading. Shift turnover sheets were revised to require the logging of ventilation system status changes. This violation is closed.

(Closed) Open Item No. 461/91017-01: Evaluate the implementation of tool contamination control policy in plant procedures. The licensee revised procedure 1907.30, Control of Radioactive Material, to implement the contaminated tool control policy. This item is closed.

4. Management Meeting (30702)

On October 15, 1991, a meeting was held in the Region III office with members of the licensee's nuclear program, engineering and radiation protection management. This meeting was held to discuss progress of actions taken to reduce the source term, improvements made in the ALARA program, and to obtain feedback from the licensee regarding the NRC ALARA team inspection that was conducted during June 1991 at Clinton Power Station.

a. Source Term Reduction

The licensee opened the meeting with a discussion of the nature, the causes, and actions to address the high source term at Clinton Power Station. The licensee presented information that the following actions regarding source term reduction had been completed: restored the reactor water cleanup (RT) suction source to the design configuration; implement RT system operation during fuel moves; changed RT procedures; implemented soft shutdown procedure; and installed controls to prevent future use of cobalt.

The licensee then presented information regarding the following actions in progress: improve RT system availability by replacing the pump seals with the Atomic Energy Canada, Ltd. design seals, replacing the flex coupling on the pump shafts, and by increasing cooling water flow to the pumps; finishing the designs and implementing oxygen injection; improving procedures for system layup by taking advantage of demineralizers to remove corrosion products; continue with the Electric Power Research Institute tailored collaboration efforts to replace the stellite pins and rollers on the control rod blades; continue feasibility reviews/studies of condensate filtration system improvements; and acquire cobalt free valve replacement spare parts for eight valves to be installed during the third refueling outage (RF3).

The licensee indicated that long term source reduction activities included periodic chemical decontamination of the reactor recirculation system and reactor water cleanup system, early retirement of some control rod blades, and further valve replacement and last stage turbine bucket replacement pending a decision on filtration system modifications.

b. ALARA Principles in the Design/Modification Process

The licensee acknowledged the inspection findings regarding the implementation of ALARA in the design/modification process and the lack of formal ALARA training for design engineers. The licensee committed to revise procedures to include ALARA as a Design Input and to conduct ALARA training for engineers. These actions would be completed in the fourth quarter of 1991.

c. Areas that Appear to Merit Attention

The licensee presented information that addressed the remaining items identified in the assessment. The licensee plans to expand advanced radiation worker training to include mechanical, electrical, and instrumentation maintenance disciplines. Mockup training would be expanded to include limiter torque, cabin, reactor recirculation pump, and reactor water cleanup pump maintenance. The licensee also acknowledged the findings regarding area based work planning during outages and accuracy of the daily work schedule.

Outage planning and scheduling for drywell activities will utilize area based planning. Efforts are ongoing to ensure that activities that are scheduled will be accomplished.

The licensee also indicated that ALARA reviews of procedures would be factored into the biennial reviews. Seismic lugs for drywell shielding installation would be installed during the fourth refueling outage. Finally, ALARA would be factored into low exposure jobs and an ALARA Awareness/Incentive Program would be initiated.

d. Summary

Overall, the licensee indicated that the ALARA team inspection had been positive. The licensee indicated that many of the items identified in the assessment were excellent comments. Many of which are being addressed and incorporated into the licensee's programs. The licensee also indicated that there were also some items, upon evaluation, which would not be incorporated and provided an appropriate rationale for each. The licensee did take exception to wording in the report regarding suggested weaknesses in management's commitment to reduce the source term at Clinton Power Station. NRC management acknowledged the licensee's concern.

5. Organization, Management Controls and Training (IP 83750, 84750, 86750)

The inspector reviewed the licensee's organization and management controls for the radwaste and shipping and transportation programs, including: organizational structure, staffing, delineation of authority and management techniques used to implement the program and experience concerning self identification and correction of program implementation weaknesses.

a. Organization and Management Controls

The radwaste and chemistry management staffs remain essentially as described in previous inspection reports. The qualifications of radwaste shipping and operations management personnel were reviewed with no problems noted. The radwaste operations group is separate from the plant operations department. The radwaste operations and radwaste shipping groups form the radwaste organization. The radwaste and the chemistry organizations are part of the technical department. The radwaste organization appears to be adequately staffed. The radwaste operations group has had problems in the past maintaining an adequate number of qualified personnel. This has been primarily due to the apparent lock-step nature of the radwaste operator training program. This is discussed in the following section.

The licensee has added an Assistant Director, Radiation Protection position. The Supervisor, Radiological Engineering has submitted

his resignation effective November 27, 1991. A replacement for the Supervisor, Radiological Engineering has not been identified. Two radiation protection shift supervisors (RPSS) have taken positions in other departments, one in training and the other in outage planning. The replacement RPSSs were promoted from within and were found to be well qualified for their positions. The licensee is in the process of filling five radiation protection technician vacancies. Two of these vacancies were due to promotion to RPSS positions, two were due to promotion to specialist positions, and one individual has left the licensee's employment. The licensee has retained six contract technicians to augment their staff.

The ALARA staff has also experienced some transition. One senior ALARA staff member has been assigned to a group that will market the Plant Radiation Exposure Management System (PREMS) software that was developed by the licensee. Another senior ALARA staff member has been temporarily assigned to the 10 CFR 20 Revision Project. The licensee has retained several contractors to augment the ALARA staff until temporary assignments have been completed and positions can be filled. Concern for maintaining continuity in a good performing program was discussed.

b. Training Programs

The curriculum for radwaste operations training was reviewed. The radwaste operator training program appears to be comprehensive and contains the elements necessary to equip trainees with the requisite level of knowledge and skills. It was noted that the radwaste training did not include information on the radiological impact or consequences of radwaste operations. Licensee personnel acknowledged that this was an area in which the radwaste training could be improved.

Part of the radwaste operator curriculum includes selected courses in the non-licensed operator training program. However, these courses are only taught once per year. This has resulted in trainees performing lower tier tasks for an extended period until the non-licensed classes were again offered. The licensee is currently revising the radwaste operator training program to address this situation. The focus of these revisions is intended to utilize self study techniques to facilitate accelerated completion of the training program and to separate radwaste training from the operations training schedule. The trainee would still be required to pass the same competency examinations. This effort to tailor training program resources and maintain competency levels to support operational needs of the plant is indicative of good support for radwaste operations.

Training programs for chemistry and radiation protection technicians were discussed. The licensee utilizes a task based training and qualification approach for both of these programs. The licensee's training and qualification programs for chemistry and radiation

protection do not appear to support the American National Standards Institute (ANSI) qualification level criteria. That is, there were no tasks identified that should remain within the domain of the ANSI qualified technician. Since the licensee had a practice of hiring only ANSI qualified or ex-military personnel, this aspect appears to only affect junior contract personnel or licensee personnel hired from technical schools.

No violations or deviations were identified.

6. Audits, Surveillances and Self Assessments (IP 84750, 86750)

The inspector reviewed the results of Quality Assurance audits and surveillances conducted by the licensee since the last inspection. Also reviewed was the thoroughness of the audits and surveillances.

Audits of the chemistry program indicated that the program was performing effectively. Good performance was noted in the areas of material condition and organization of chemistry laboratories, chemical control, upgrade of chemistry procedures and technician performance of sampling and laboratory analyses. In the 1990 chemistry audit, problems were noted with resolution of chemistry action requests for out of specification chemistry for several auxiliary systems and with the development and use of chemistry control charts. In the 1991 chemistry audit, problems were noted with the lack of maintenance of the feedwater sample chiller, trending and analysis of chemistry control charts, and under utilization of the Post Accident Sample System. A Maintenance Work Request had been written on September 9, 1988 to repair the feedwater sample chiller. This audit also noted that the off-gas hydrogen monitors for main condenser off-gas hydrogen were out of service. Concerns were identified in the report regarding long standing out of service equipment altering the configuration of the plant for which evaluations should be made. No findings were identified in either audit; however, several recommendations were identified to address the problems noted.

The January 1991 audit of the radioactive waste activities indicated that the program had improved significantly since the January 1990 audit. The 1990 audit resulted in six findings associated with multiple examples of breakdowns in administrative controls. These included failure to develop or implement procedures for required tasks and responsibilities, failure to ensure proper processing of procedure revisions (including a failure to perform a safety evaluation per 10 CFR 50.59), failure to maintain controlled documents up to date, failure to ensure proper water chemistry in the electrode boiler prior to startup, failure to obtain approval of vendor procedures as required, and failure to maintain adequate logs during electrode boiler startup and during periods of minimum shift manning. This audit noted good performance in the processing of radioactive waste and adherence to tagout controls. The 1991 audit of radwaste activities noted significant improvements in administrative controls and record keeping practices. No recurrences of previously identified issues were identified. Good performance and/or improvements were noted in the areas of Maintenance Work Request tracking, and

radwaste system availability. In the 1991 audit, problems were noted with out of service annunciators associated with solid radwaste processing and disposal system tank levels. Other problems identified in this audit included long standing tagouts of equipment, radwaste operator access to high radiation areas (HRAs), and testing of local annunciator panels. No findings were identified in the 1991 audit; however, several recommendations were identified to address the problems noted.

The inspector reviewed surveillances for in-process transfer of waste sludge and subsequent liner solidification, radwaste operations shift performance, performance of chemistry technical specification surveillances, and shipment of radioactive materials. The surveillances were performance based and appear to adequately assess technical performance, compliance with requirements, and personnel training and qualifications relating to the radwaste management and chemistry programs. Performance of audits and surveillances were generally very good with most findings and recommendations responded to in an adequate and timely manner.

No violations or deviations were identified.

7. Gaseous Radioactive Wastes (IP 84750)

The inspector reviewed the licensee's gaseous radwaste management program, including: changes in equipment and procedures, gaseous radioactive waste effluents for compliance with regulatory requirements, adequacy of required records, reports, and notifications, process and effluent monitors for compliance with operational requirements and experience concerning identification of programmatic weaknesses.

The inspector reviewed selected records of radioactive gaseous effluent releases and Semiannual Radioactive Effluent Release Reports for 1990 and the first half of 1991. The pathways sampled and analyses performed appeared to comply with Technical Specifications and/or Offsite Dose Calculation Manual requirements. In 1990, the plant total gaseous effluents released consisted of approximately 10.9, 1.53E-4, and 1.88 curies of noble gas, radioiodine and tritium, respectively; the corresponding values for the first half of 1991 were 0.0, 0.0, and 1.31 curies, respectively. Gaseous releases remained less than one percent of annual limits.

No violations or deviations were identified.

8. Liquid Radioactive Waste (IP 84750)

The inspector reviewed the licensee's liquid radioactive waste management program, including: liquid radioactive waste effluents for compliance with regulatory requirements, adequacy of required records, reports, and notifications, process and effluent monitors for compliance with operational requirements and experience concerning identification and correction of programmatic weaknesses.

The inspector reviewed selected records of radioactive liquid effluent releases and Semiannual Radioactive Effluent Release Reports for 1990 and the first half of 1991. The pathways sampled and analyses performed appeared to comply with Technical Specifications and/or Offsite Dose Calculation Manual requirements. In 1990, the plant total liquid effluent release consisted of approximately $2.44\text{E-}2$ curies total activity (excluding tritium, alpha and dissolved noble gases) and 2.6 curies of tritium; the corresponding values for the first half of 1991 were approximately $7.78\text{E-}3$ and 1.3 curies, respectively. Liquid releases remained less than one percent of annual limits. The inspector also selectively reviewed the liquid batch release permit program and associated documentation for past releases; no problems were noted.

In the 1991 audit, problems were noted with out of service annunciators associated with solid radwaste processing and disposal system tank levels. This problem affects 42 annunciators in the radwaste operations center. Surveillance Q-15092, conducted June 24 through July 2, 1991, noted that resin transfers from the radwaste holding tank to two liners for dewatering required five and nine fill and decant evolutions, respectively, to fill each liner. In the surveillance report, radwaste contract personnel indicated that this evolution normally requires two fill and decant evolutions. The cause for the high number of evolutions to fill the radwaste liner was attributed to lack of operable radwaste tank level indication instrumentation. The licensee indicated in their response to a Notice of Violation, dated May 14, 1990, that due to difficulties experienced with tank level indications that a design change to upgrade or replace the existing ultrasonic level instrumentation was under review. The modification to provide radwaste tank level indication and associated annunciation in the radwaste operations center was initiated in June 1990. This modification is currently scheduled for implementation during the period of May through June 1992.

Operation without this modification appears to have a radiological safety impact. Fill and decant evolutions require personnel to manipulate hoses and cover plates on top of the liner. Decant evolutions beyond a normal of two increases potential personnel exposure to radiation and radioactive materials. Additionally, the potential for radioactive waste tank overflows may also be increased.

Further reviews of outstanding modifications for radioactive waste systems and interviews with licensee personnel were conducted. Modification RT-F039 was initiated in September 1991 to cap off the backwash receiving tank funnel, to remove the existing check valve, and to install a weighted swing check valve in the pre-coat tank drain line. This modification was initiated to prevent an inadvertent spill of expended ion exchange, filtration media, and reactor water from a sample funnel at an unused sample station. Reportedly, this modification was submitted as "Priority 2" but was down graded to a "Priority 4" and scheduled for action during the period "beyond 1993". The type of event for which this modification addresses has occurred at other facilities.

On July 23, 1991, a similar event occurred at Commonwealth Edison's Dresden Station. This was discussed in Inspection Report 50-237/91022(DRP); 50-249/91022(JRP).

The licensee has significantly improved the availability of its radioactive liquid waste systems. However, the licensee appears to process an extraordinary amount of water. While the licensee did not present actual figures, interviews with personnel indicated that the amount was of the order of 2.6 to 5 million gallons per month. Sources of this water included a significant amount of seal leakage from the feedwater pumps and from condensation of moisture from ventilation chillers used in the facility. The licensee plans to implement a modification on the feedwater pump during the third refueling outage to address feedwater pump seal leakage. Licensee personnel indicated that this modification should eliminate approximately one third or more of the water processing requirements. Concern for potentially excessive wear of radioactive waste water systems was discussed with the licensee.

No violations or deviations were identified.

9. Solid Radioactive Waste (IP 86750)

The inspector reviewed the licensee's solid radioactive waste management program, including: changes to equipment and procedures, processing and control of solid wastes, adequacy of required records, reports and notifications, performance of process control and quality assurance programs and experience in identification and correction of programmatic weaknesses.

The inspector reviewed selected portions of the licensee's solid radwaste processing, storage and shipping records for 1990 and January through June 1991. Licensee records indicated that approximately 9,578 and 6,074 cubic feet of radioactive waste, respectively, were shipped offsite for further processing or burial. These radioactive wastes included approximately 12,366 cubic feet of spent resins, filter sludges and evaporator bottoms and approximately 3,326 cubic feet of dry compactable waste. Solid waste processing and shipping facilities appeared to be well organized and in good material condition.

No violations or deviations were identified.

10. Transportation of Radioactive Materials and Radwaste (IP 86750)

The inspector reviewed the licensee's transportation of radioactive materials program, including: adequacy and implementation of written procedures, radioactive materials and radwaste shipments for compliance with NRC and DOT regulations and the licensee's quality assurance program, review of transportation incidents involving licensee shipments (if any), adequacy of required records, reports, shipment documents and notifications and experience concerning identification and correction of programmatic weaknesses.

The inspector selectively reviewed radwaste and radioactive material shipment records for January 1991 to date. Shipping records for solidified resin, vendor equipment, 10 CFR 61 samples, dry active waste, laundry, and reactor water cleanup system septa were reviewed. Shipping documentation, radiological surveys and procedure implementation appears to satisfy NRC, DOT and burial site requirements.

One incident regarding transportation should be noted. This incident involved the shipment of a snubber testing trailer to Wyle Laboratories in Huntsville, Alabama. On January 7, 1991, the licensee was notified by Wyle Laboratories that the trailer had arrived without shipping papers. Efforts to completely decontaminate this trailer had been unsuccessful; however, radioactive material content of this trailer was below the DOT definition of radioactive material for transportation purposes. The trailer had been packaged and released from the protected area. The radiological engineering group thought the nuclear station engineering department understood that radiological engineering was to be notified on the day of the shipment for completion of the procedurally required shipping documentation. However, the shipment left without notification of radiological engineering and the procedurally required paperwork. A breakdown in communications between the two organizations was the cause of this incident. Regarding corrective actions, the licensee sent appropriate shipping papers to Wyle Laboratories and revised procedure CPS 7013.12, Shipment of Radioactive Material, to prevent staging of shipments outside the protected area unless the shipments are locked or under personnel control. This incident did not involve a significant regulatory concern.

No violations or deviations were identified.

11. Primary Coolant Radiochemistry (IP 84750)

Technical Specification 3.4.5 requires that the specific activity of the primary coolant not exceed 0.2 microcurie of I-131 dose equivalent (DEI-131) per gram except under certain limiting conditions of operation. The inspector selectively reviewed the licensee's primary coolant radiochemistry results for 1990 and 1991 to date, to determine compliance with the Technical Specification requirements for DEI-131 concentration. The selective review and discussion with licensee personnel indicated that the DEI-131 concentration for the primary system remained less than the applicable Technical Specification limit throughout the review period. The DEI-131 did not exceed $8.0E-5$ uCi/g in 1990 and did not exceed $6.0E-5$ uCi/g in 1991 to date. This appears to be indicative of excellent fuel performance. There have been no indications of fuel element leaks to date for Clinton Power Station. This is very notable since some of the fuel is on its third burn cycle.

No violations or deviations were identified.

12. Air Cleaning Systems

The inspector reviewed recent testing result records of air cleaning system filters, including laboratory analyses for methyl iodide removal

efficiencies of charcoal adsorber samples, and in-place penetration (bypass leakage) testing of HEPA and charcoal adsorber filters. The tests appeared to have been conducted in accordance with Technical Specification requirements and yielded results which met acceptance criteria for leakage and removal efficiencies.

However, a significant amount of data scatter was noted. This data scatter, identified on trending charts, indicated that the charcoal adsorber had improved over time in its effectiveness in removing radioiodine. Charcoal adsorbers normally experience continued loading of contaminants over time and lose effectiveness in removing radioiodine. These apparent anomalies reduced confidence in charcoal adsorber testing results.

Review of licensee technical specifications indicated that the licensee was committed to the 1979 standard, ASTM D3803-79, for testing charcoal adsorbers. A review was then conducted of the licensee's response to NRC Information Notice 87-32. The licensee's response to this notice only acknowledged that the charcoal testing laboratory utilized was one of the two with acceptable quality and test control to produce consistent results. The licensee did not evaluate the technical information, the inadequacies of testing methods utilized in the 1979 testing standard, nor the recommendations that were identified in Information Notice 87-32. The licensee committed to reevaluate the Information Notice and contacted its vendor for charcoal testing for additional technical input. The results of this evaluation indicated that charcoal adsorber testing utilized methods that analyzed unequilibrated samples. Results were not reproducible and could vary significantly for similar charcoal samples. Reportedly, the licensee's charcoal testing vendor recommended a change in the testing methodology to conform with the 1989 revision of the testing standard, ASTM D3803-89.

Licensee personnel indicated that it appeared that a revision of testing protocol was in order and that a recommendation to revise technical specifications would be made to management. This will be reviewed in a future inspection. (Open Item No. 461/91021-01)

No violations or deviations were identified. One open item was identified.

13. Concern Follow-up (IP 99024)

Discussed below is a specific concern relating to potential inadequate implementation of the radiation protection program which was evaluated during this inspection. The evaluation consisted of record and procedure reviews and interviews with licensee personnel.

(Closed) Concern (AMS No. RIII-91-A-0069)

Concern: Performing industrial safety monitoring diverts attention from radiation protection monitoring tasks and radiation protection safety issues.

Discussion: Interviews were conducted with a random sampling of radiation protection (RP) technicians, RP management and industrial safety management. Personnel interviewed identified concerns regarding the adequacy of industrial safety training, communication problems between radiation protection and the industrial safety groups, and a genuine concern on the part of some RP personnel for taking responsibility for industrial safety approvals. Most RP personnel interviewed did not object to the performance of industrial safety functions; however, they did not feel comfortable with their level of knowledge in evaluating potentially hazardous or toxic atmospheres. However, personnel interviewed could not identify any situation in which the performance of industrial safety functions had had an actual impact upon radiological safety. Some individuals indicated that there was a potential impact during the performance of multiple job coverage.

Reviews of applicable procedures and corrective action documents were conducted to identify situations in which the performance of industrial safety functions or other activities may have diverted the attention of an RP technician or was a contributing factor in an incident that had radiological safety implications. No incidents or problems were identified in which radiological safety was impacted by the performance of industrial safety or other functions.

Finding: This concern was not substantiated. No evidence was found to indicate that performance of industrial safety functions had diverted attention and impacted radiological safety.

No violations or deviations were identified.

14. Personnel Tours (IP 83750, 84750, 86750)

The inspector performed several tours of radiologically controlled areas. These included walkdowns of containment building, auxiliary building, radwaste facilities and turbine building. The inspector observed the following:

- ° Radiation workers access and egress from the RCA; personnel use of frisking stations, portal monitors and radiation work permit access system were acceptable.
- ° Contamination monitoring, portable survey, area radiation monitoring instrumentation in use throughout the plant; instrumentation observed had been recently source checked and had current calibrations, as appropriate.
- ° Posting and labeling for radiation, high radiation, contaminated and radioactive material storage areas; posting and labeling, were generally, with the exceptions listed below, in accordance with regulatory requirements and approved station procedures.

- ° Housekeeping and material conditions were generally very good. Some improvements were noted in the radioactive waste areas since the last inspection.

No violations or deviations were identified.

15. Exit Interview (IP 30713)

The inspector met with licensee representatives (denoted in Section 1) at the conclusion of the inspection on November 22, 1991, to discuss the scope and findings of the inspection.

During the exit interview, the inspectors discussed the likely informational content of the inspection report with regard to documents or processes reviewed by the inspectors during the inspection. Licensee representatives did not identify any such documents or processes as proprietary. The following was specifically discussed at the exit meeting:

- a. Inspector concerns regarding charcoal adsorber testing (Section 12).
- b. Status of modifications and long standing tagouts that impact radwaste operations and plant configurations (Sections 6 and 8).
- c. Maintenance of continuity in the operational ALARA program (Section 5).
- d. Communications and teamwork between some work groups (Sections 10 and 13).