

Official Record

OCT 22 1987

Docket No. 030-20234
License No. 32-23067-01

Associated Technologies, Incorporated
ATTN: Mr. J. E. Day
Executive Vice President
112 S. Tryon Street, Suite 300
Charlotte, NC 28281

Gentlemen:

SUBJECT: FOLLOWUP ACTION--TRANSPORTATION INCIDENT INVOLVING LEAKING CONTAINER

This letter refers to the transportation incident involving the Associated Technologies, Inc. (ATI) Mobile Waste Solidification Unit (MWSU) which occurred on October 15, 1986. The transportation incident is described in detail in the enclosed USNRC Region III inspection report. The inspection report was discussed by telephone between Mr. J. Glenn of your office and Mr. L. Franklin of this office on March 12, 1987, and on April 24, 1987, with Mr. J. Potter of this office.

The NRC Region III inspection findings indicate that slightly radioactive liquid material was observed leaking from the MWSU, which had been shipped by ATI from Palo Verde NPS, Arizona, onto the pavement at the Clinton Nuclear Power Station. This violated 49 CFR 173.425(b)(1) [10 CFR 71.5(a)], which requires that materials must be packaged in strong, tight packages so that there will be no leakage of radioactive material under conditions normally incident to transportation. Information in an ATI letter dated April 18, 1986, and part of NRC License Condition 17B, indicates their carrier trailer was modified into a strong, tight container.

It appears that ATI arranged for and paid for the shipping of the MWSU. However, Palo Verde Power Station signed papers as the shipper of the MWSU and was also responsible for ensuring compliance with regulatory requirements. It is our understanding that Palo Verde was also acting under your direction, as your agent in this matter and they did not wish to be considered the shipper after they received a Notice of Violation from our Region V Office.

However, Palo Verde did not deny that they were the "licensee who transported licensed material" under 10 CFR 71.5(a), so this office did not issue a Notice of Violation to Associated Technologies, Inc. The liquid that leaked was below the concentration defined as radioactive material under USDOT regulations and also below the concentration permitted by USNRC regulations for discharge to unrestricted areas. Therefore, this particular event was of low safety significance; however, based on understandings reached in the telephone discussions referenced above, ATI should review and inspect its MWSUs to ensure that they are "strong tight containers" and remain so during repetitive use.

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In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter will be placed in the NRC Document Room.

Should you have any questions concerning this letter, please contact us.

Sincerely,

J. Philip Stohr, Director
Division of Radiation Safety
and Safeguards

bcc: Document Control Desk
State of North Carolina
G. Sjoblom, IMNS
W. Rankin, DRSS

bcc w/o encl:
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J. Hind, RIII
R. Bangart, RIV
R. Scarano, RV
R. Trojanowski, RII

<i>J</i> RII JPotter	<i>WEC</i> RII WCline	<i>WEC</i> RII JPStohr	<i>WEC</i> RII GJenkins	<i>WEC</i> RII MErnst
7/27/87	7/27/87	8/27/87	10/21/87	10/21/87
10/21/87	10/21/87			

FEB 03 1987

Docket No. 50-461

Illinois Power Company
ATTN: Mr. W. C. Gerstner
Executive Vice President
500 South 27th Street
Decatur, IL 62525

Gentlemen:

This refers to the routine safety inspection conducted by Messrs. R. A. Paul and W. J. Slawinski of this office during the period October 22 through December 5, 1986, of activities at Clinton Power Station, Unit 1, authorized by NRC Operating License No. NPF-55 and to the discussion of our findings with Mr. J. S. Perry and others.

The enclosed copy of our inspection report identifies areas examined during the inspection. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations, and interviews with personnel.

During this inspection, certain of your activities appeared to be in violation of NRC requirements, as specified in the enclosed Notice. A written response is required.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter, the enclosures, and your response to this letter will be placed in the NRC Public Document Room.

The responses directed by this letter and the accompanying Notice are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

~~8702090011~~ 870203
PDR ADOCK 05000461
G PDR

"Original of [unclear] D. Shafer" for
W. D. Shafer, Chief
Emergency Preparedness and
Radiological Protection Branch

Enclosures:

1. Notice of Violation
2. Inspection Report
No. 50-461/86068(DRSS)

See Attached Distribution

RIII

Paul/lms

RIII

Slawinski

RIII

Greger

RIII

Weil

RIII

Knop

RIII

Shafer

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Distribution

cc w/enclosures:

DCS/RSB (RIDS)

Licensing Fee Management Branch

Resident Inspector, RIII

Richard Hubbard

Gary N. Wright, Manager

Nuclear Facility Safety

Mark Jason, Assistant

Attorney General,

Environmental Control Division

H. S. Taylor, Quality Assurance

Division

David Rosenblatt, Governor's

Office of Consumer Services

NOTICE OF VIOLATION

Illinois Power Company

Docket No. 50-461

As a result of the inspection conducted during the period October 22 through December 5, 1986, and in accordance with 10 CFR Part 2, Appendix C - General Statement of Policy and Procedure for NRC Enforcement Actions (1985), the following violations were identified:

1. Technical Specification 6.2.2(f) requires that the licensee establish controls to limit working hours of Health Physics Staff to not more than 72 hours in any seven-day period, excluding shift turnover time, and requires that any deviations from these limitations be authorized by the plant manager, his deputy, or higher level of management.

Contrary to the above, Radiation Protection Department personnel worked as much as 84 hours in a seven-day period during October 1986, without the specified management authorization.

This is a Severity Level IV violation (Supplement IV).

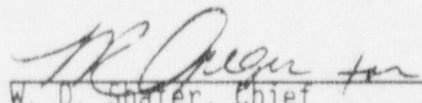
2. 10 CFR 20.408(b) and 20.409(b) require that reports be made to the Commission and to the individual involved, of the radiation exposures of each individual who has terminated employment. Such reports are required to be furnished within 30 days after the exposure of the individual has been determined or 90 days after the date of termination of employment or work assignment, whichever is earlier.

Contrary to the above, final radiation exposure termination reports were not always furnished within 90 days after the date of termination of employment or work assignment. Specifically, during the period from October 1985 through August 1986, at least eleven individuals were not furnished with reports for 94 to 140 days after their dates of employment termination.

This is a Severity Level V violation (Supplement IV).

Pursuant to the provisions of 10 CFR 2.201, you are required to submit to this office within thirty days of the date of this Notice a written statement or explanation in reply, including for each violation: (1) corrective action taken and the results achieved; (2) corrective action to be taken to avoid further violations; and (3) the date when full compliance will be achieved. Consideration may be given to extending your response time for good cause shown.

2/3/87
Dated


W. D. Shaler, Chief
Emergency Preparedness and
Radiological Protection Branch

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Q PDR

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-461/86068(DRSS)

Docket No. 50-461

License No. NPF-55

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

Facility Name: Clinton Power Station, Unit 1

Inspection At: Clinton Site, Clinton, Illinois

Inspection Conducted: October 22 through December 5, 1986

Inspectors: R. A. Paul *R. A. Paul*

2/2/87
Date

W. J. Slawinski *W. J. Slawinski*

2/2/87
Date

Approved By: *L. R. Greger*
L. R. Greger, Chief
Facilities Radiation
Protection Section

2/2/87
Date

Inspection Summary

Inspection on October 22 through December 5, 1986 (Report No. 50-461/86068(DRSS))

Areas Inspected: Routine, unannounced inspection of startup radiation protection including: organization, staffing, qualifications and training, open items, a reported transportation incident, and allegations concerning the radiological protection and startup testing programs.

Results: Two violations were identified (exceeding working-hour time limitations - Section 8.a; failure to provide timely radiation exposure termination reports - Section 6).

DETAILS

1. Persons Contacted

**J. A. Brownell, Licensing Specialist
*R. E. Campbell, Manager, Quality Assurance
*J. G. Cook, Assistant Manager, Plant Staff
*J. G. Funk, Supervisor, Radiological Operations
*J. H. Greene, Manager, NSED
*R. W. Greer, Director, Outage Maintenance Programs
**D. W. Hillyer, Director, Radiation Protection
*M. A. Kaczor, Supervisor, Radiological Support
*F. R. Lockridge, Supervisor, Radiological Engineering
*K. L. Patterson, Director, Material Management
**J. S. Perry, Manager, Nuclear Program Coordinator
*E. A. Till, Director, Nuclear Training
**J. D. Weaver, Director, Licensing
*F. L. Wolking, Supervisor, Plant Radiation Protection

*P. L. Hiland, NRC Resident Inspector
*R. A. Paul, NRC Region III Radiation Specialist
*W. J. Slawinski, NRC Region III Radiation Specialist

The inspectors also contacted other licensee employees and contractors.

*Denotes those present at the exit meeting on November 14, 1986.

**Denotes those contacted by telephone on December 5, 1986.

2. General

This inspection, which began at approximately 8:00 a.m. on October 22, 1986, was conducted to review the status of the radiation protection program, open items, review of a reported transportation incident, and review of allegations concerning the radiation protection and startup testing programs.

3. Licensee Action on Previous Inspection Findings

(Closed) Open Item (461/86050-04): Evaluation and implementation of recommendations concerning the radwaste liquid processing system. The licensee issued a standing order addressing the recommendations. The order outlines an operating philosophy for radwaste processing which should produce high quality water for return to the condensate storage system and minimize water discharged from the station.

(Closed) Open Item 461/85004-05): Complete installation, calibration, development of procedures, and training on the use of the containment high-range radiation monitors per NUREG-0737, Item II.F.1, Attachment 3 commitments. Calibration of the Containment High Range Monitors was accomplished in accordance with CPS Procedure No. 9910.79. The Drywell High Range Monitors were calibrated in accordance the Procedure No. CPS 9910.82. The inspector reviewed selected results of the calibrations; no problems were noted.

(Open) Open Item (461/86050-01): Review results of the OG System preoperational tests. The tests are in progress and are expected to be 100 percent complete by January 26, 1987. The results of the tests will be forwarded for NRC (RIII) review prior to heat up.

(Open) Open Item (461/85040-03; 461/86024-01): Perform calibrations of TMI AXM-1 noble gas channels and normal range HVAC and SGTS monitoring system prior to exceeding five percent rated reactor power. The calibration program will be completed prior to exceeding five percent power. The licensee will provide Region III with a copy of the calibration procedure, data from performance of the primary calibration, a memo indicating monitor acceptability for use in meeting NUREG-0737, Item II.F.1, Attachment 1 requirements, and a memo which will address range, overlap and accuracy. Within ninety days after five percent power, the licensee will also provide a report addressing primary calibration methodology, primary calibration procedures, data from the performance of the primary calibration, acceptability to NUREG-0737, Item II.F.1, Attachment 1 requirements, and the transfer calibration methodology (gas to solid). In addition, the licensee will provide the transfer calibration procedure and data from the performance of the transfer calibration.

(Open) Open Item (461/86024-02): Review installation of radiation shielding near the radwaste solidification system. Final design of the shielding has been approved; its installation will be complete by five percent power or when radiation levels dictate.

(Closed) Open Item (461/84001-04): Followup of Associated Technologies Incorporated (ATI) portable solidification system for use in radwaste solidification. An ALARA review of the system was performed by ATI and the licensee. An NRC inspector performed a cursory study of the results of ATI's ALARA review and found it acceptable. The review of an audit performed of the licensee's liquid radwaste solidification activities (Q38-86-55) indicates the ALARA recommendations have been addressed.

(Open) Open Item (461/85015-03): Verify implementation of the radwaste process control program (PCP) (SER 11.4.1). The PCP has been approved by NRR and will be implemented when the portable radwaste system is operable and processing radioactive waste streams. This item remains open pending a review of the PCP when the waste solidification system is processing radioactive waste.

(Open) Open Item (461/86037-01): Review the licensee's corrective actions regarding the temporary loss of control of source and special nuclear materials from storage areas. An NRC inspector reviewed proposed corrective actions, which were approved by the Plant Manager on July 18, 1986, necessary to maintain adequate control, identification, and accountability of radioactive materials placed into and removed from storage areas. These corrective actions provide both generic and specific actions to preclude misidentification of stored radioactive materials and their unauthorized removal from their storage location.

4. Radiological Protection Organization, Staffing and Management Controls

The inspectors reviewed the licensee's organization and management controls for the radiation protection program, including changes in the organizational structure, staffing, and effectiveness of procedures and other management techniques used to implement these programs.

Since the previous inspection (Inspection Report No. 50-461/86050), the vacated position of Supervisor of Radiological Environments has been filled. Currently, there are five permanent and one contracted Radiation Protection Shift Supervisors; all meet the criteria for Supervisors Not Requiring NRC Licenses, as specified in Section 4.3.2 of ANSI/ANS 3.1-1978. Since October 1985, nine radiation protection personnel, primarily technicians, have terminated employment; five of the nine terminated since July 1, 1986. Recent hirings have filled the vacated positions. The current radiation protection staff consists of fourteen permanent and ten contractor Radiation Protection Technicians; this appears sufficient to implement the routine radiation protection program. The RPM stated that it is their intent to have twenty-four permanent technicians and six permanent shift supervisors by 1987. Contractor personnel will be used to supplement the staff in the interim.

The inspectors expressed concern over the negative affect that high staff turnover may have on the effectiveness of the radiation protection program due to stability and experience level degradation. This matter was discussed at the exit meeting and will continue to be reviewed during future inspections (461/86068-01).

No violations or deviations were identified.

5. Radiological Operations Training and Qualification Program

a. Training

The inspectors reviewed portions of the licensee's training program for radiological operations technicians, including contractor personnel. The training requirements are outlined in Clinton Power Station Procedures (CPS) No. 1902.10 "Radiological Controls Training Program" and generally consist of the following broad categories:

- General Employee Training
- Radiation Worker Training
- Radiation Protection Training
- Balance of Plant Training
- Respiratory Protection Training

General Employee Training was previously described in Inspection Report No. 50-461/86050.

Specific training is provided in related areas to supplement the broader categories and includes fire protection, confined space, emergency medical and other miscellaneous topics.

Fire protection training is provided to all radiation protection technicians. The duration of the fire protection training is three days, two days onsite classroom work and one day hands-on experience at the University of Illinois. Fire protection training encompasses nine topics, each normally offered on a quarterly basis. The entire program is repeated every two years; onsite refresher training is offered annually. Personnel interviewed during this inspection generally considered the fire protection training adequate. No problems were identified.

The Radiation Protection Department, the Plant Safety Specialist, or the Supervisor - Industrial Safety Programs are responsible for monitoring confined space atmospheres. Actual monitoring is typically performed by radiation protection technicians under the direction of radiation protection shift supervisors and plant safety specialist(s). Personnel who perform confined space monitoring are trained in the use of the monitoring equipment and entry work by the licensee's Nuclear Training Department. Confined space training currently consists of a four-hour classroom lecture and videotaped/slide presentation. Upon successful completion of the course, the student is required to perform assigned duties in confined spaces in accordance with the station's Site Safety Standard No. 8. This standard specifies the precautions that shall be taken to ensure safe conditions are provided and maintained when personnel work in confined spaces.

Several radiation protection personnel interviewed during this inspection expressed concerns with the adequacy of the confined space training, and indicated that they were hesitant to enter confined spaces especially when chemical hazards are suspected. According to the interviewed personnel, the training focuses on the operational aspects of monitoring devices (Gas Tech Oxygen Monitor and Draeger Multi Gas Detector) but is limited in its coverage of potential chemical atmospheric hazards, possible health effects, use of protective devices, and precautions to be followed when sampling. Radiation Protection management is aware of these concerns and is considering additional confined space training to supplement that currently provided. Current plans are for an additional four to six hours of training in industrial safety, stressing chemical hazards, and in the use of related protective devices. Supplemental confined space training is planned to commence early in 1987 and will be reviewed during a subsequent inspection (50-461/86068-02). The appropriate Occupational Safety and Health Administration Office also will be notified of this worker concern.

Emergency Medical Training is contracted to Radiation Management Corp; the training includes handling and treatment of radioactive contaminated and injured personnel. This training is offered to all radiation protection personnel and consists of a three-hour lecture/discussion and videotaped presentation. No problems were identified with this training.

Informal training on the use of secondary electronic instrumentation needed to calibrate or test various monitoring systems is provided to radiation protection technicians and shift supervisors by the station's radiological engineering group. Thus far, training has included instruction on measuring voltage and resistance with digital multimeters and on practical uses of a specific scaler used for testing AR/PR systems. According to licensee management, additional training will be provided as needed.

b. Radiological Operations Qualification Program

The licensee's radiation protection technician qualification system consists of classroom training and demonstration of practical abilities. Demonstration of practical ability is by actual task performance or by simulation in the event actual performance is not practical. Radiation Protection Shift Supervisors or Health Physics Supervisors are authorized to verify (sign-off) practical ability demonstrations.

Completion of both formal classroom and practical demonstration training is documented on qualification cards maintained for each employee. Documentation consists of the completion date(s) of the training and practical factors demonstration, and the signature of the authorizing nuclear training or radiation protection official. The trainees co-signature is not required. Radiation protection personnel are allowed to perform the functions which have been signed-off (approved) as a practical demonstration; other activities are required to be performed under the direct supervision of a qualified individual or appropriate supervisor.

With limited exceptions, classroom training and practical factors demonstrations are not required for each specific instrument and procedure and instead cover generic systems. For example, training and practical demonstrations are required generically for the AR/PR system, not specifically for each area or process monitor. An individual considered qualified on a generic system is also considered qualified on any similar related instrument. Qualifications for specific instruments/procedures are required only for those which differ significantly from generic systems or possess unique characteristics.

Normal retraining and maintaining of qualification for RP personnel is required to be accomplished on a continuing basis by lectures, self study, and/or practical demonstrations, as directed by the Director of Radiation Protection. Training is also conducted periodically on topics such as procedure revisions, program changes, new equipment and incidents and operating experiences from other nuclear stations. The normal retraining cycle is two years.

The inspectors selectively reviewed records of instrument calibrations, tests, and surveillances performed by RP technicians from late 1985 to date. These records were cross checked with qualification cards to determine if the licensee was in compliance with their

qualification program requirements. These records showed that technicians were qualified prior to performing unsupervised work on a particular instrument or system. No problems were identified.

However, through discussions with personnel and a review of the technician qualification program, the inspectors found that the program, as written, is confusing. Technician misunderstandings concerning the program were common. It was noted that many technicians thought they were required to be specifically trained on each AR/PR instrument and procedure. However, it appeared that the technicians made no real effort to determine the systems on which they were qualified to perform surveillances and calibrations; many technicians never requested to review their qualification cards.

The licensee has been aware of the problems associated with the qualification program and stated improvements were planned. This matter will be reviewed further during a future inspection (50-461/86068-03).

No violations or deviations were identified.

6. External Exposure Control

The inspectors reviewed portions of the licensee's external exposure control and personal dosimetry program, including required records, reports, and notifications.

Personal external exposure monitoring is provided thru the use of thermoluminescent dosimeters (TLDs) and self-reading dosimeters (SRDs). TLDs are provided and processed by a vendor (Eberline) on a monthly basis; SRD doses are recorded daily thru the use of Personnel Time Records (PTRs). The dosimetry vendor is accredited by the National Voluntary Laboratory Accreditation Program for Personnel Dosimetry Processors of the National Bureau of Standards.

The dosimetry section is responsible for collecting TLDs for shipment to the vendor, processing Forms NRC-4 and 5, providing exposure termination reports, and updating daily dose reports. This section is currently staffed by a supervisor, three clerks and one word processor. Short-term plans call for increasing this staff with two temporary clerk positions.

The inspectors selectively reviewed Forms NRC-4 and NRC-5 for personnel issued dosimetry in 1986 to date. As of November 6, 1986, all applicable NRC Form 5s "Current Occupational External Radiation Exposure" were found only to include radiation exposure information through the second calendar quarter of 1986 (ending June 31, 1986). However, current quarterly exposure information, equivalent to NRC Form-5, is available to the licensee through the vendor's monthly reports. Dosimetry personnel indicated that staffing limitations and other priorities were the cause for not updating NRC Form 5s. Exposure termination reports and daily dose report updating are considered by the dosimetry staff to be higher priority.

During this inspection, dosimetry and termination records were reviewed to determine compliance with termination reporting requirements. Records of seventeen individuals who were issued personal dosimetry and terminated employment between October 1985 and August 1986 were chosen. With one exception, interim termination reports containing exposure estimates from self reading dosimeters were provided within ten days after termination. Of the final termination reports submitted to the NRC and the terminated employees, three were provided 132-140 days after employment termination, and eight reports were provided 94-117 days after termination. Also, the termination reports were sent to the improper commission office (i.e., Director of Inspection and Enforcement rather than Director, Office of Nuclear Regulatory Research). This is a violation of 10 CFR 20.408(b) and 20.409(b) which require that radiation exposure of each individual who has terminated employment be furnished within 30 days after the exposure of the individual has been determined or 90 days after the date of termination of employment, whichever is earlier (50-461/86068-04).

A Personnel Time Record (PTR) system is currently used to document daily exposures; PTRs are initiated for each shift when RWP work is performed. SRD exposures are recorded for each ingress and egress from RWP areas. Exposure data from the PTRs are accumulated in daily dose reports compiled by the dosimetry staff. The daily dose reports specify weekly and quarterly dose margins which workers use to track doses and maintain their exposures within limits. The dosimetry staff normally works weekdays; weekends and off-shifts are worked on occasion. Daily dose reports are typically updated Monday through Friday mornings; updated reports are completed and issued in late morning. Dose reports are not routinely updated from Friday morning to late Monday morning. Therefore, exposures received over a weekend period are typically not reflected in daily dose reports until Monday. An individual could unknowingly exceed his dose margin over a weekend and be allowed to continue working. Radiation Protection Shift Supervisors have provisions to update this information over the weekend, but are not required to do so. Currently, personal exposures are minimal and daily dose updating is not critical; however, as the plant becomes fully operational, problems could exist without weekend dose updating. This concern was expressed at the exit meeting and will be reviewed during a future inspection (461/86068-05).

One violation was identified.

7. Transportation Activities

On October 15, 1986, a truck mounted mobile solidification unit arrived at Clinton Power Station. The unit is owned by Associated Technologies Inc. of Charlotte, North Carolina, who operate it under NRC Materials License No. 32-23067-01. This license is under jurisdiction of NRC Region II. While the truck was parked outside the controlled area, liquid was observed leaking from two sections of the unit. Clinton Station rad protection personnel sampled the liquid and smeared the areas where the leaks were occurring. Smear results ranged from 1300 to 2500 dpm/100 cm². Liquid sample analysis indicated cesium-137 activity of 2E-6 uCi/cc; the licensee estimated about one pint of liquid leaked from the truck.

The truck was moved into the controlled area and smears were taken from the solidification equipment inside the unit. Smear results indicated removable contamination up to 16,000 dpm/100 cm². The source of the liquid could not be determined; it may have come from residual process liquids that were trapped within the unit or from rain water that had leaked through the unit. In either case, the solidification unit does not appear to meet the strong tight package requirement of 10 CFR 173.425(b)(1). This matter will be referred to NRC Region V for enforcement action.

8. Allegation Followup

Discussed below are allegations regarding the radiation protection program at the Clinton Station which were evaluated during this inspection. The evaluation consisted of record and procedure review, and interviews with approximately 40% of the licensee radiation protection technical staff.

- a. An individual visited the Clinton Resident Inspector's office and expressed concern about a corporate nuclear procedure which he stated violated another procedure and good health physics practices. The alleege met with RIII Radiation Specialists later and presented written concerns pertaining to the corporate nuclear procedure conflict, general intimidation by licensee management, and inadequate reporting of terminated employee radiation exposures. The allegations and inspectors' findings are presented below (Allegation No. RIII-86-A-0194 (Closed)).

Allegation: The working environment at Clinton is not free from intimidation.

To support his concern, the alleege provided several examples which he claimed to have occurred in the Radiation Protection Department. These examples, which involve radiological procedure issues, worker morale, working hours, management directives, and authority of radiation protection personnel to control radiological safety, are discussed below.

Discussion: The following discussions are based on reviews of the examples provided by the alleege. The examples are categorized into various topics or issues and the findings are summarized.

• Radiological Procedure Issues

The alleege indicated that in early 1986, the licensee initiated radiation monitor (AR/PR) calibrations using approved calibration procedures. During these calibrations, radiation protection technicians found problems with the procedures. In order to expedite the calibrations, some technicians were allegedly instructed to "interpret" (ie. use common sense) portions of these procedures which were not clear.

The procedures were subsequently revised. When asked by the inspectors for specific examples, none of the persons interviewed, including the alleged, could supply one. While some technicians were ill at ease with the quality of the original calibration procedures, none acknowledged that any calibrations were improperly performed. Without specific examples of procedure violations, enforcement action can not be supported; however, as noted, appropriate corrective actions have been taken by the licensee to revise the procedures.

The alleged also cited an example of the deviation of a visitor dosimetry procedure by a radiation protection management individual. An NRC official allegedly entered the station's RCA prior to properly completing the documentation required by Clinton Power Station (CPS) Procedure No. 1903.25, "Visitor Dosimetry." This procedure requires that visitors be trained/escorted and "Visitor Radiological Training Record," Procedure No. 1902.10 F001, be completed prior to entry into the RCA. The Director of Plant Radiation Protection (DPRP) personally instructed and escorted the NRC official in accordance with procedural requirements; however, training documentation was recorded in a memorandum from the DPRP to the Dosimetry Department and not on the required CPS No. 1902.10 F001 form. Also, the official was allowed to enter the RCA prior to signing the memorandum which acknowledged his understanding of the instructions provided. The alleged identified this deviation to the DPRP while the visitor was in the RCA; immediate correction actions were taken. These licensee corrective actions appear appropriate.

The alleged also cited a related event involving an individual from CPS Licensing who made derogatory comments concerning implementation of the visitor dosimetry procedure and threatened to go over the plant manager's head to have the visitor dosimetry procedure changed. However, the visitor was properly processed without circumvention of the visitor dosimetry procedure and no repercussions or procedural changes resulted from this incident. No further action appears warranted concerning this matter.

- Working Hour Issue

The alleged indicated that he was not allowed to document all of his working hours on the time sheets. In addition to not being paid for all his working hours, this practice circumvented the limitations on maximum working hours. Technical Specification 6.2.2.f and Section 8 of CPS Procedure No. 1001.10 specify working hour limitations. The limitations state that an individual should not be permitted to work more than 72 hours in any seven-day period without specific management approval. The RPSS shift rotation schedule for September and October 1986

indicated that three RPSSs worked eight consecutive twelve-hour days (96 hours), without the approval of upper management; these work hours were confirmed with the Radiological Operations Shift Supervisor, who stated that he expected his supervisory personnel to put in some unpaid "professional" time and was unaware of the technical specification limitation on working hours. Failure to comply with the working hour limitations is considered a violation of Technical Specification 6.2.2.f requirements (461/86068-06). When this matter was discussed at the exit meeting, the inspectors were informed that licensee management was aware of the effect that long working hours had on all employees, particularly during fuel load. As a result, station management has issued a directive stating that no employee shall work more than 60 hours in any seven-day period without specific management approval.

- Worker Morale

The allegor indicated that the Vice President Nuclear had responded to a radiation protection technician's expressed concern of morale problems during a meeting by indicating that there was no morale problem and further suggesting that the individual look elsewhere for work. The Vice President also allegedly informed the radiation protection staff that procedural compliance was all that was needed to meet program goals. The general concern pertaining to worker morale is discussed in the summary section below. The specific comments attributed to the Vice President Nuclear were not pursued due to the lack of potential for violation of regulatory requirements.

- Management Directives

The allegor indicated that radiation protection management had told him and others that they had better not hold up fuel load. According to management personnel, the intent of the instruction was to ensure the radiation protection staff was prepared and worked expeditiously and was not meant to imply that regulatory requirements be violated. The allegor did not provide any specific examples of regulatory violations. No further action appears warranted concerning this matter due to the lack of potential violation of regulatory requirements.

The allegor also indicated that he had been directed to change a Radiation Incident Report (RIR) because his management did not want to deal with the issue of stop-job authority with the plant manager. The RIR in question was written in early to mid 1986 and pertained to workers who had to be instructed not to wear yellow shoe covers in non-radiological controlled areas because yellow shoe covers were intended to be used only in radiological controlled areas. The Director Plant Radiation Protection (DPRP) directed that the RIR be changed because the RCA controls had not been officially established at the time the RIR was written. The RCA was officially established in September 1986, and

radiological controls and procedural adherence was initiated at that time. This action appears acceptable based on the timeframe for establishing RCA radiological controls. Licensee personnel interviewed did not indicate that they had been pressured not to write RIR's or bring up radiological safety issues to management's attention.

- Radiation Protection Authority

The allegor indicated that a radiation protection technician entered an area during an emergency drill that was simulated to have a dose rate of 10,000 R/hr because he was not sure if he had the authority to override the Radwaste Supervisor who had directed that the entry be made. Section 12.51 of the FSAR clearly delineates the authority of radiation protection personnel. Specifically, RP technicians have the authority to stop any work in a RCA, or order its evacuation, when, in their judgement, the radiological conditions warrant such an action and such actions are consistent with plant safety. This matter was discussed with the licensee who stated the training program would be reviewed to ensure that it adequately covers technician authority during radiological work coverage, including stop-job authority. Interviews with licensee radiation protection technicians did not reveal any general unawareness on the part of technicians concerning their stop-job authority. This matter will be reviewed further during a future inspection (50-461/86068-07).

Summary

One violation of regulatory requirements was identified based on the allegor's examples. The inspectors did not identify any significant indication that the radiation protection technicians were prevented from performing their regulatory required duties because of management intimidation, nor in many cases could the allegor's examples be correlated to intimidation. It did appear; however, that the morale of the radiation protection technicians was adversely affected by existing labor-management relations within the group. The majority of the fourteen permanent radiation protection technical staff interviewed were concerned that morale problems exist in the radiation protection group. They indicated, however, that the morale problems had not precluded their adequate performance of their job responsibilities to date, nor prevented the addressing of significant radiological safety issues. While no significant detrimental effect on the licensee's radiation protection program to date could be specifically identified by the inspectors, the allegor, or other interviewed personnel, it is possible that if the morale problems continue to exist the conditions could worsen. The radiation protection staff turnover rate at Clinton appears to be higher than at other Region III nuclear plants. It is not known if this higher turnover rate can be attributed to the morale issue;

however, the turnover rate has affected the radiation protection staff. Nine employment terminations occurred during the May 1985 through November 1986 period; four were voluntary resignations and five were involuntary terminations. In addition, three promotions occurred to positions outside the radiation protection department and there were four promotions within the radiation protection department. The loss from the radiation protection staff over this time frame represents approximately 35% turnover. Recent hirings of experienced radiation protection personnel have strengthened the staff. While high staff turnover generally is detrimental to the conduct of radiation protection programs, no significant effects were identified to date.

The matter of morale within the radiation protection department was discussed at the exit meeting and will be reviewed further during future inspections.

As noted above portions of the allegation were substantiated while other portions either could not be substantiated or were not related to regulatory requirements.

Allegation: The dosimetry section of the Radiation Protection Department were unable to deliver dose records to terminated employees within the required time.

Discussion: Failure to provide timely exposure termination reports is discussed in Section 6 of this report. (One violation is identified in Section 6.)

The allegation was substantiated.

Allegation: Corporate Nuclear Procedure No. 1.10, which establishes policy for a standard priority system pertaining to all site work, lists critical path work and certain operating constraints as Priority I "Emergency." This definition could allow critical path work to proceed without RWP controls.

Discussion: Apparent confusion exists between the use and meaning of Corporate Nuclear Procedure No. 1.10, Radiation Protection RWP Procedure No. 1905.10, and a Night Order concerning the use of the RWP Procedure under Priority I - Emergencies. Corporate Nuclear Procedure No. 1.10 defines Priority I - "Emergency" as activities which are required to be performed immediately to avert or correct situations that "could lead to endangering the health or safety of employees or the public;" this includes critical path work. CPS Procedure No. 1905.10, "Radiological Work Permit," Revision 3, dated April 12, 1986, provides instructions in the initiation, utilization, and termination of RWP's. This procedure states that RWP requirements "do not apply during emergencies which threaten personnel or plant safety."

Radiation Protection Night Order No. 86-0022, initiated by the Radiological Operations Supervisor, states that an RWP for Priority I work shall be immediately processed without jeopardizing radiological controls. The order further states that direct radiation protection coverage can be used in lieu of an RWP. The Radiological Operations Supervisor confirmed that an RWP must be used for all Priority I work; however, direct radiation protection coverage could be used to expedite the work while the RWP was being completed.

The inspectors noted that lack of procedural interface between the Corporate Nuclear Procedure and the RWP Procedure involving Priority I emergencies could result in confusion concerning establishment of radiological controls and RWP issuances. As a result, the licensee indicated they would revise the RWP procedure to clarify RWP emergencies and provide an interface with Corporate Nuclear Procedure Priority I emergencies. Specifically, the interface will allow Priority I emergency work to be expedited by providing direct radiological controls with radiation protection personnel, while an RWP is processed. Under no circumstances will Priority I work circumvent or alleviate radiological controls or the requirement for an RWP. This matter was discussed at the exit meeting and will be reviewed during future inspections (461/86068-08). The alleged indicated that he was not aware of any Priority I work which had circumvented radiological controls to date.

While the allegation was substantiated, no regulatory violations were identified and the licensee proposed corrective action to clarify the use of the Corporate Nuclear Procedure.

- b. The Region III NRC office received information from an individual regarding concerns with the radiation protection program at Clinton. These concerns and the inspectors' findings are discussed below. (Allegation No. RIII-86-A-0164 (Open))

Allegation: A contractor technician was told by a Radiation Protection Shift Supervisor (RPSS) that if he did not perform the daily PCM-1A source check in accordance with the RPSS's instructions, which were contrary to the procedure, he would be sent home.

Discussion: On September 11, 1986, a contractor radiation protection technician no longer employed by the licensee was instructed to perform a source check on a PCM-1A. CPS Procedure No. 7410.33, Revision 0, dated March 31, 1986, required the use of a nominal 1000 dpm technetium-99 (Tc-99) source to perform the check. The RPSS instructed the technician to use a strontium-90 source. The technician refused and was directed by the RPSS to either perform the check as instructed, or go home. The technician did not perform the check and brought his concern to the attention of the Plant Radiation Protection Supervisor.

The licensee had attempted to perform the required source checks on the PCM-1A on September 9, 1986; the check failed because the source was too weak for an adequate monitor response. The licensee's radiological engineering group recommended a Sr-90 source be used in lieu of the Tc-99 source. The Radiological Operations Supervisor wrote a memo to all RPSSs, advising them to use a Sr-90 source to perform the PCM-1A source check; this was the basis for the RPSSs instructions to the technician.

The Radiological Operations Supervisor was reprimanded for directing the RPSS to deviate from a procedure, by issuing a memo, instead of using the station's formal temporary procedure deviation process. The PCM-1A source check procedure was modified shortly thereafter to require use of a Tc-99 source with sufficient activity to yield radiation levels of 4 to 5 times the monitor's area background levels, and the source check of the PCM-1A was then performed in accordance with the revised procedure.

Although the allegation was substantiated, the source check was not performed until after the procedure was properly revised. Licensee management instituted appropriate corrective action.

Allegation: Technicians are given safety assignments in fire protection. These assignments spread the staff too thin and they are not trained well enough to perform the jobs. The alleged informed the inspectors that in addition to fire protection, confined space and housekeeping assignments are also required.

Discussion: According to licensee management personnel, fire protection and confined space assignments are part of a radiation protection technicians' regular duties at the Clinton station. Housekeeping duties (mopping, sweeping, etc.) are not regularly assigned but are performed on an as-needed basis. Housekeeping chores are normally assigned for areas within the RP department and do not include other areas.

Confined space and fire protection training were previously described in Section 5(a). Confined space work was identified as an area where additional training is considered necessary. The consensus of those interviewed considered the fire protection training to be adequate.

No problems were identified which could be directly attributed to technicians being spread too thin because of additional (non-radiation protection) assignments. The quality of the radiation protection program does not appear to be adversely affected by additional assignments and only a small portion of those interviewed were concerned that the additional assignments diminished the effectiveness of the radiation protection program.

The allegation that fire protection and other assignments are materially detracting from the effectiveness of the radiation protection program was not substantiated. The allegation concerning training inadequacies was partially substantiated. The licensee has proposed corrective actions for these inadequacies as noted in Section 5. Training related to confined space entries falls under the jurisdiction of the Occupational Safety and Health Administration (OSHA), and the concern over the adequacy of this training will be forwarded to OSHA for their review.

Allegation: People are being intimidated. When an individual told his supervisor about his concerns, he was told to go home; the employee wrote a Quality Concern.

Discussion: This allegation stems from an incident which occurred in July 1986, involving a radiation protection technician who had been assigned to monitor a confined space. The details of this discussion were gathered from conversations with the allexer, the technician, and the radiation protection shift supervisor involved.

In early July 1986, an RPSS instructed a technician to don an acid suit and SCBA and obtain an air sample in the sediment pond sump area (confined space), where an acid spill had occurred. The technician indicated he refused to do so because he had no training or experience with acid suits, was skeptical regarding its protective aspects, and had little training/knowledge concerning potential health effects of such atmospheres. The technician stated that the plant safety specialist was never contacted even though required by Site Safety Standard No. 8, nor was the matter properly evaluated prior to directing him into the area. The RPSS informed the technician that failure to follow his directive was grounds for possible disciplinary action. The technician was not directed to go home and later agreed to perform the task; however, the confined space was monitored by another individual.

The involved RPSS stated that an unsuccessful attempt to contact the Plant Safety Specialist was made, even though not required in this instance. Site Safety Standard No. 8 requires the Plant Safety Specialist or Supervisor - Industrial Safety Programs be contacted if there are any questions, concerns, or if the confined space atmosphere is unknown. The RPSS also stated that the safety aspects of the atmosphere were evaluated by himself, an assistant shift supervisor, a chemist and a radwaste utility supervisor, prior to directing the technician into the area. An acid suit and SCBA were not necessary but were chosen as a conservative protective measure.

The technician's Quality Concern was partially investigated by the licensee; however, no formal response was made. The licensee did not pursue the concern further because it was not considered an issue affecting quality.

Although the allegation was partially substantiated in that the individual wrote a quality concern over the incident, no regulatory violations were identified. Corrective actions have been proposed by the licensee to improve confined space training (Section 5). As noted in Section 8.a, labor-management relations appear strained within the Radiation Protection Department; however, the performance of the Department does not appear to have suffered significantly to date.

Allegation: The radiation protection work force at Clinton is not experienced enough to do the job. More training is needed to do the job for the safety of the plant.

Discussion: Technical Specification 6.3.1 requires each member of the unit staff to meet or exceed the minimum qualifications of ANSI/ANS 3.1-1978, except for the Director-Plant Radiation Protection and the Radiation Protection Supervisor who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975. Inspector review of experience/qualification records for plant radiation protection personnel shows that the requirements of ANSI/ANS 3.1-1978 and Regulatory Guide 1.8 are met. Specifically, the Radiation Protection Manager (i.e. Director-Plant Radiation Protection) meets the requirements of Section (c) of Regulatory Guide 1.8. Supervisors of Radiological Operations, Radiological Engineering, Radiological Support, and Radiation Protection Shift Supervisors meet the criteria of Section 4.3.2 of ANSI/ANS 3.1-1978. As of October 22, 1986, all plant technicians met the criteria of Section 4.5.2 of ANSI/ANS 3.1-1978.

It appears that one of the Radiation Protection Shift Supervisors and many of the radiation protection technicians do not have significant operational commercial nuclear plant experience; however, such experience levels are common for new plants and do not violate regulatory requirements. Currently the radiation protection staff is composed of fourteen permanent and ten contractor technicians, and five permanent and one contractor shift supervisor. The licensee intends to have twenty-four permanent technicians and six permanent shift supervisors for normal operations. Outages will be supplemented with contractor personnel as needed. Training provided to the radiation protection staff was previously described in Reports No. 50-461/82006 and No. 50-461/85052, and has been found to meet regulatory requirements.

The allegation was not substantiated. Performance of the licensee's radiation protection staff has been acceptable to date. This area will be reviewed during future inspections, however, to ensure that licensee performance remains acceptable.

Allegation: There is a morale problem in the radiation protection department and the general attitude is poor.

Discussion: Morale and attitude problems within radiation protection are discussed in Section 8.a.

Allegation: A plant communications problem exists. An individual was hurt and the information could not be communicated because the two lines to the Control Room were busy, no one answered the shift engineer's phone, and the Gaitronics system didn't work. In addition, the allegor indicated that a Gaitronics phone is not accessible in some plant areas, the radiation protection and shift supervisor offices have only one phone line, and the nurses office is physically located outside the confines of the plant.

Discussion: The nurses' station has recently been relocated within the plant and is currently located adjacent to the radiation protection office. The station's normal and emergency communication systems are described in NRC Inspection Report No. 461/86039. Problems associated with the Gaitronics system are currently tracked as an NRC Open Item (461/86039-23) and addressed in Report No. (461/86060). On November 7, 1986, the inspectors were informed by a plant staff engineer that all Gaitronics system problems have been resolved. This matter will be reviewed by the NRC Resident Inspection Staff.

This allegation remains open.

Allegation: The radiation protection first line shift supervisors are the problem, higher level managers seem okay.

Discussion: The supervisors referred to in this allegation are the radiation protection shift supervisors. Specifically, the allegor questioned the qualification and experience level of some RPSSs, emphasizing one in particular.

Inspector review of qualification/experience records disclosed that all individuals considered radiation protection shift supervisors, as of October 22, 1986, meet or exceed the requirements of Section 4.3.2 of ANSI/ANS 3.1-1978, as required by Technical Specification 6.3.1.

As noted in Section 8.a, labor-management relations appear strained within the Radiation Protection Department; however, the performance of the Department does not appear to have suffered significantly to date. This concern was discussed with licensee management and will continue to be monitored during future inspections. No allegations of regulatory violations was made by the allegor in this area.

Allegation: The union is beginning to run the plant.

Discussion: The allegor did not provide specific examples to support his concern but indicated this general concern has been brought to the attention of radiation protection management. The inspectors did not identify any instances that would indicate that union workers were acting autonomously and without supervisory direction, or that regulatory requirements are circumvented because of union influences.

This concern was discussed with licensee management and will continue to be monitored during future inspections. No allegations of regulatory violations was made by the allegor in this area.

Allegation: Records are not properly kept in the dosimetry department and information is not being recorded quickly.

Discussion: This matter is discussed in Section 6. Problems were identified with updating daily dose reports and maintaining NRC Form-5's current. One violation was cited for failure to provide exposure termination reports in accordance with 10 CFR 20.408/20.409 requirements.

The allegation was substantiated. One violation of NRC requirements was identified.

- c. An NRC resident inspector at Clinton received information pertaining to the licensee's radwaste and radiation protection programs. The individual expressed that a large turnover of personnel in the Radiation Protection Department has occurred in the last year due in part to management's attitude toward the department technical staff. The specific examples cited by the allegor to support his concern and the inspectors' findings are discussed below.
(Allegation No. RIII-86-A-0164 (Open))

Allegation: Radiation Protection (RP) has assumed the responsibility for taking air samples when it is suspected that hazardous chemicals or insufficient air quality exists (e.g. confined space). Training was provided on the use of air sampling tools; however, no training was provided concerning the necessary decision process as to which chemicals should be sampled during an event. A recent example was an acid spill in the Radwaste Building.

Discussion: Confined space training is described in Section 5(a). The majority of those interviewed indicated the confined space training program was insufficient. Management plans to supplement the confined space training with additional related training in industrial hygiene and safety.

Regulatory jurisdiction over the subject matter of this allegation appears to belong to the Occupational Safety and Health Administration (OSHA); the allegation will be forwarded to OSHA for its consideration. However, as noted in Section 5, the licensee has proposed to improve training in these areas.

Allegation: The RP technicians have been trained to calibrate the Area Radiation Monitors (ARMs) and Process Radiation Monitors (PRMs). However, the training provided on the use of necessary calibration tools (pulse counter, digital volt meter, etc.) was inadequate or not provided. This results in a technician following a procedure without understanding the instruments he is using.

Discussion: Training for RP technicians was previously discussed in Section 5(a). Informal training briefings, given by the radiological engineering group, was provided to RP technicians on the use of secondary electronic instrumentation for use in the calibration of certain radiation monitoring systems. To date, two sessions have been conducted on the use of digital volt meters and one session on the practical uses of the HP 5315A scaler. The alleged attended the initial volt meter training session but did not attend the training on pulse counters (scalers).

The majority of those interviewed did not share the alleged's concern; however, some individuals stated the aforementioned sessions could have been presented in more detail. The licensee indicated that additional related training will be provided as the need arises.

The allegation was not supported by the majority of the technicians interviewed. The licensee did, however, agree to conduct additional training on an "as needed" basis. This matter will be followed during future inspections (461/86068-09).

Allegation: Process Radiation Monitor (PRM) Channel-6 (background gamma) and PRM Channel-2 (alpha) for the station HVAC exhaust SPINGS have no alert/alarm setpoints.

Discussion: CPS Procedures No. 9910.73 and No. 9910.73D001 "Calibration of Station HVAC Exhaust PRM Calibration Check Sheet" do not require alert/alarm setpoints for channels 2 and 6. These channels are used for background subtraction only. It is good practice, however, to have alarms on the background subtract channels to alert personnel of unusually high background levels which can degrade the sensitivity of the monitors.

Although the allegations were substantiated, no regulatory requirements were violated. The desirability of such alarms were discussed with licensee personnel. This matter will be reviewed further during future inspections (461/86068-10).

Allegation: Liquid release monitoring instrumentation is currently reading a negative value due to applied correction values. Because the instrument reads a negative value, the alleged questioned the operability of the instruments.

Discussion: The referenced liquid monitors which are equipped with background subtract functions, do not currently have radioactive material flowing through them. Therefore they should currently read "zero" radioactivity units. However, due to counting statistics, their output vacillates between small negative and small positive readings. When actual radioactive liquids are introduced into the monitor chambers, the monitor readings should become consistently positive since the background subtract values will be low compared to the monitor chamber values. (The statistical uncertainties

therefore should not be large enough to produce negative monitor readings. Correct performance of the liquid monitors was documented when radioactive liquids were introduced into the monitor chambers during initial calibrations and is also observed during daily source checks of the monitors. The allegation is partially substantiated in that these liquid monitors can display slightly negative values, however, this condition does not affect the operability of the instruments.

Allegation: Contrary to procedure requirements, a group of station supervisors created their own Personnel Time Record (PTR), instead of signing the posted PTR at the radiation protection office before entering a radiologically controlled area.

Discussion: On September 24, 1986, six plant workers initiated their own PTR after entering into the RCA in lieu of signing the posted PTR at the radiation protection office; this was a violation of Procedure No. 1905.10 requirements even though the required time information was recorded. A Condition Report (CPS-8610-058) was initiated and an investigation was made to determine the root causes for violating the procedural requirements. Corrective actions to prevent recurrence were taken by the plant manager, including counseling of the workers who violated the procedure and recommendations to improve the procedure.

Although this allegation was substantiated, licensee management appears to have taken adequate and timely corrective action to prevent recurrence.

- d. An allegation was made concerning the process monitor acceptance test program by Control and Instrumentation (C&I) technicians. The technicians' concerns and the inspectors' findings are discussed below. (Allegation No. RIII-85-A-177 (Open))

Allegation: A System Engineer had instructed C&I technicians to use uncalibrated test instrumentation in the area and process monitor acceptance test program and to falsify documentation to show that calibrated instrumentation had been used.

Discussion: The licensee was previously aware of this allegation and advised the System Engineer who denied the allegation. The licensee indicated that of approximately twelve C&I technicians who had been involved in the area and process monitor acceptance test program, six remained onsite, and all six denied that they had ever been instructed to use uncalibrated test instrumentation. Review of the matter during this inspection focused on the effect of the allegation on area and process monitor operability.

Licensee review of the acceptance test records showed that the System Engineer named by the allegers was involved in the acceptance tests of 98 of the 137 area and process monitors. The engineer's degree of involvement varied and consisted of either actual calibration or record verification and/or review. In most cases his involvement was limited only to test record verification and approval.

The acceptance tests of the area and process monitors are designed to demonstrate that the monitors are operating in accordance with design specifications. Upon completion of the acceptance tests, the monitors are turned over to the plant staff who then perform continuing calibrations of the monitors; these calibrations repeat many of the tests performed during the acceptance test program and verify acceptable operation of the monitors. Any significant errors introduced during the acceptance test program would be expected to be found during these calibrations. Thus far, licensee personnel calibrated approximately 35% of the 98 monitors and did not discover any discrepancies which would suggest that the acceptance tests were performed improperly. This matter will be reviewed further during a future inspection.

Additionally, the inspectors selectively reviewed portions of the test results for the monitors (SPING, Liquid PRM, and area monitors) in which the System Engineer was involved. These results were compared with more recent plant staff calibration results. No anomalies attributable to incorrect acceptance testing was identified by the inspectors.

Review of area and process monitor tests during this inspection did not uncover any evidence to substantiate that process or area monitors were not properly acceptance tested. However, the operability of these monitors does not preclude the validity of the allegations. Uncalibrated, but acceptably operating, test equipment could have been utilized during the acceptance testing without adversely affecting the operability of the monitors.

9. Exit Meeting

The inspectors met with licensee representatives (denoted in Section 1) at the conclusion of the site inspection on November 14, 1986, and discussed the apparent violations in a telephone conversation with Mr. Perry on December 5, 1986. Additional information was gathered in telephone discussions through December 5, 1986.

The inspectors also discussed the likely informational content of the inspection report with regard to documents or processes reviewed by the inspectors during the inspection. The licensee did not identify any such documents/processes as proprietary. In response to certain matters discussed by the inspector, the licensee:

- a. Acknowledged the inspectors' concern regarding possible misinterpretation of Corporate Nuclear Procedure No. 1.10 and confirmed their plans to revise the RWP Procedure to clarify emergency work (Section 8.a.).
- b. Acknowledged the inspectors' statements concerning radiation protection staff stability (Section 4).
- c. Acknowledged the apparent violations (Section 6 and 8.a.).

- d. Acknowledged the inspectors' comments concerning the apparent confusion associated with the Radiological Controls Training and Qualification Program requirements (Section 5(b)).
- e. Acknowledged the inspectors' concern regarding updating daily dose reports over weekends/offshifts (Section 6).
- f. In response to an issue concerning interpretation of procedures, the Manager of Nuclear Program Coordination stated that procedural compliance was very important but not the sole function of radiation protection personnel. The manager stressed the importance of radiation protection workers being cognizant of surrounding conditions, identifying and evaluating potential problems, and taking remedial actions when required.

The inspectors stated that as a result of their interviews of numerous radiation protection staff members in connection with the allegations reviewed during this inspection, it was apparent that worker-management relations were unusually strained, and that the licensee should address this issue before it adversely affects the quality of the radiation protection programs. It was also apparent that both radiation protection technician and supervisory personnel had as goals the implementation of a good radiation protection program.