#### U.S. NUCLEAR REGULATORY COMMISSION

#### REGION III

Reports No. 50-254/89026(DRP); 50-265/89026(DRP)

Docket Nos. 50-254, 50-265

Licenses No. DPR-29: DPR-30

Licensee: Commonwealth Edison Company

Post Office Box 767 Chicago, IL 60690

Facility Name: Quad Cities Nuclear Power Station, Units 1 and 2

Inspection At: Quad Cities Site, Cordova, IL

Inspection Conducted: November 5 through December 16, 1989

Inspectors: R. L. Higgins

J. M. Shine R. Bocanegra

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Approved By:

DM. Hinds, Chief

Reactor Projects Section 1B

JAN 0 5 1990 Date

### Inspection Summary:

Inspection on November 5 through December 16, 1989 (Reports No.

50-254/89026(DRP); 50-265/89026(DRP)) Areas Inspected: Routine, unannounced safety inspection by the resident and regional inspectors of licensee actions on previous items, plant operations, radiological controls, allegations, maintenance/surveillance, emergency preparedness, security, engineering/technical support and safety assessment/

quality verification.

Results: During the inspection period, two violations were noted in the area of procedure adequacy (refer to paragraphs 6.b.(2) and 9.b). Other violations involving overdue surveillances were also noted (refer to paragraphs 6.b.(3) and 10.b.(1)) but which satisfied the five criteria of 10 CFR Part 2, Appendix C, and so no Notice of Violation will be issued. Two open items were identified, one dealt with the adequacy of local leak rate testing in paragraph 6.b.(1) and one concerning HPCI room deluge/steam leak isolation is identified in paragraph 9.C.

The violations all involved activities during the Unit 1 outage. Even though the licensee's performance during the inspection period was generally good, additional licensee attention to outage activities is warranted.

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#### DETAILS

#### 1. Personnel Contacted

\*G. Spedl, Production Superintendent

\*R. Robey, Technical Superintendent

\*T. Tamlyn, ENC Site Project Manager

\*J. Wethington, Quality Assurance Superintendent

\*T. Barber, Regulatory Assurance

\*J. Wunderlich, Regulatory Assurance

\*Denotes those present at the exit interview on December 22, 1989.

The inspectors also contacted and interviewed other licensee and contractor personnel during the course of this inspection.

### 2. Action on Previous Items (92701 and 92702)

#### Open Items

(Closed) Open Item 254/85025-01; 265/85028-01: Disposition of contaminated pipe and soil.

The licensee has requested that the Illinois Department of Nuclear Safety (IDNS), in conjunction with the Central Midwest Compact (CMC) establish a position on the approval of the licensee's petition submittals for alternate disposal of very low level contaminated materials, including the subject pipe and soil. This matter is considered closed.

### 3. Plant Operations (71707, 71711)

The inspectors, through direct observation, discussions with licensee personnel, and review of applicable records and logs, examined plant operations. The inspectors verified that all activities were accomplished in a timely manner using approved procedures and drawings and were inspected/reviewed as applicable; and that procedures, procedure revisions and routine reports were in accordance with Technical Specifications, regulatory guides, and industry codes or standards. Additionally, the inspectors verified that approvals were obtained prior to initiating any work; activities were accomplished by qualified personnel; the limiting conditions for operation were met during normal operation and while components or systems were removed from service; functional testing and/or calibrations were performed prior to returning components or systems to service; and independent verification of equipment lineup and review of test results were accomplished. Also verified were quality control records for being properly maintained and reviewed, and parts, materials and equipment for proper certification, calibration, storage, and maintenance as applicable. The inspectors conducted frequent tours of plant facilities to observe any adverse plant conditions such as equipment malfunctions, potential fire hazards, radiological hazards, fluid leaks, excessive vibrations, and personnel errors. The inspectors' review ensured that any such issues were

addressed in a timely manner with sufficient and proper corrective actions and reviewed by appropriate management personnel.

### a. Engineered Safety Features System Walkdown (71710)

During plant tours of Units 1 and 2, the inspectors walked down some of the accessible portions of the High Pressure Coolant Injection (HPCI), Reactor Core Isolation Cooling (RCIC), Core Spray (CS), Residual Heat Removal (RHR), RHR Service Water, Standby Liquid Control (SLC) Systems, and Standby Gas Treatment (SGT) Systems. The inspectors also walked down the Emergency Diesel Generators (EDG) and the Station Batteries. No violations or deviations were noted.

### b. Summary of Operations

#### Unit 1

Unit 1 was in a scheduled maintenance and refueling outage until November 23, 1989. Unit 1 shutdown on November 24, 1989, to repair a misaligned coupling on the 1A Reactor Recirculation Pump. Unit 1 restarted on November 25, 1989, and shutdown again on November 26, 1989, to replace the 1B Reactor Recirculation Pump Seal. Unit 1 restarted on November 27, 1989, and operated normally at power until an inadvertent turbine tripped occurred on December 14, 1989. The reactor remained critical, and the Unit 1 main generator was reconnected to the electrical grid on December 15, 1989. Unit 1 operated normally at power for the remainder of the inspection period.

### Unit 2

Unit 2 operated at power throughout the inspection period.

### c. Onsite Followup of Events at Operating Power Reactors (93702)

### (1) Unit 1 Reactor Scram While Shutdown

On November 17, 1989, with Unit 1 in the Refuel mode and all rods inserted, a reactor scram with no rod motion occurred while power to the 24/48 volt distribution panels were being transferred (refer to paragraph 9).

### (2) Unit 1 Reactor Startup

On November 24, 1989, Unit 1 restarted at the completion of a scheduled maintenance and refueling outage.

### (3) Unit 1 Reactor Shutdown and Startup

On November 24, 1989, a high temperature alarm was received for the 1A reactor recirculation pump inboard seal. The pump was tripped and isolated. A leak had occurred due to a misaligned coupling on the 1A reactor recirculation pump seal pressure sensing line. Although the leakage rate was less than the maximum allowed by Technical Specifications, the licensee shutdown and repaired the leak. The leak was not discovered during the Unit 1 hydrostatic test because the source of the leak, the misaligned coupling, was created during the 1A reactor recirculation pump seal replacement. The seal replacement was done after the hydrostatic test was completed.

On November 25, 1989, Unit 1 restarted.

#### (4) Unit 1 Reactor Shutdown and Startup

On November 25, 1989, the Unit 1 reactor operator observed both the inner and outer seal cavity pressures on the 1B reactor recirculation pump to be equal, indicative of a malfunctioning seal. The licensee shut Unit 1 down on November 26, 1989, replaced the 1B reactor recirculation pump seal, and restarted on November 27, 1989.

## (5) Unit 1 HPCI Turbine Oil Reserve Deluge System Actuation

On November 26, 1989, the HPCI Turbine Oil Reserve Deluge System actuated during the HPCI overspeed test as a result of a Fenwal temperature switch setpoint drift. The licensee replaced the switch, verified the other switches worked properly, and ensured the electrical insulation was not damaged.

No ENS phone call was made since the HPCI system was already out of service for the overspeed test and all required surveillances had been performed.

On November 28, 1989, the licensee declared the HPCI system inoperable when it was again sprayed by the inadvertent actuation of the HPCI turbine oil reserve deluge system. The HPCI turbine oil reserve deluge system was being returned to service when it inadvertently activated. The deluge system was taken out of service. In accordance with the Technical Specifications, a twice-shift firewatch and backup fire suppression equipment was established. In declaring the HPCI system inoperable the licensee entered a 7 day limiting condition for operation, performed the required surveillances, and verified the electrical insulation was not damaged prior to declaring HPCI operable.

The licensee is considering modifying the deluge system to include fusible spray heads to replace the open spray heads, so that future spurious deluge actuation will not spray the HPCI room with water, but merely pressurize the spray piping up to the fusible link.

#### (6) Unit 1 Turbine Trip

On December 14, 1989, while repairing a leaking Yarway level indicator, the Unit 1 turbine tripped. No reactor scram occurred because reactor power was less than 40% at the time of the turbine trip. The Unit 1 main generator was reconnected to the electrical grid on December 15, 1989. This event is described in detail in inspection report 254/89027.

No violations or deviations were identified in this area.

#### 4. Radiological Controls (71707)

Observations by the inspectors indicated that the licensee's performance in the area of radiological controls was good. Management remains committed to an aggressive ALARA program. Personnel exposure has been higher than budgeted during the inspection period because of unplanned work in areas with high background radiation. Personnel contaminations have been minimal except for December 12, 1989, when 17 personnel contaminations occurred. The licensee determined that the most likely cause of this contamination problem was the removal of contaminated scaffolding from the torus area at the same time that reactor building ventilation problems existed. Contaminated particles from the scaffolding were blown into uncontaminated areas because of the abnormal air flow caused by an unusual ventilation arrangement. To preclude a recurrence of this, the licensee will closely control or postpone plant activities which have a potential of generating contamination if any ventilation problems exist.

### 5. Allegation Followup (99014)

Allegation AMS No. RIII-89-A-0126 (Closed) An NRC Resident Inspector at Quad Cities Station received a telephone call from an individual who expressed concerns about the radiation protection program at Quad Cities Station.

The inspector reviewed licensee procedures and standards, interviewed licensee and contractor personnel, and reviewed selected records to determine the validity and consequences of the concern expressed by the alleger. The allegation is presented and discussed below.

<u>Allegation</u>: A drywell chiller was turned on even though the ductwork had been removed. The chiller itself was highly contaminated. The drywell ventilation system was not tagged out even though some of the duct work had been removed.

Discussion Records indicate that on September 26, 1989, the drywell coolers were turned on by operations personnel at the request of radiation control personnel. Ductwork had been removed, causing contamination to be blown into a portion of the drywell. The drywell cooler was promptly shut off.

Radiation control personnel surveyed the area, detected loose surface contamination, and changed the Radiation Work Permit to require a full face mask. The results of an air sample and a thorough area contamination survey were completed an hour after the event and showed that no abnormal airborne or surface radiological problems were present.

The Radiation Work Permit was again modified to rescind the full face mask requirement.

Finding The event took place as the alleger described, so the allegation is substantiated. Because no internal or external contaminations resulted from the event, the radiological consequence of it were minimal. Control of maintenance activities was subsequently addressed by the licensee in response to NRC concerns unrelated to this allegation.

Allegation AMS No. RIII-89-A-0135 (Closed) An individual met with the NRC Senior Resident Inspector at Quad Cities Station to express concerns about the radiation protection program at Quad Cities Station.

The inspector interviewed licensee and contractor personnel to determine the validity and consequences of the concerns expressed by the alleger. The allegations are presented and discussed below.

Allegation: Union/management relationships between junior supervisory personnel and health physics technicians are poor. The technicians haze and harass the junior supervisory personnel, especially the new hires, making it difficult for the junior supervisory personnel to do their jobs and adversely affecting their morale. This situation is known by middle management, but no effective corrective actions have been taken. This situation, if left uncorrected, may lead to significant personnel turnover and impairment of job performance.

Discussion: Junior supervisory personnel were interviewed to determine the existence and extent of any harassment to which they were subjected by health physics technicians, and the impact it had on their morale and job performance. The junior supervisory personnel acknowledged that some joking and teasing took place, but considered it generally goodnatured and harmless. They felt this teasing, though sometimes thoughtless, did not adversely impact their morale or job performance. The junior supervisory personnel remembered the alleger being teased, but considered the teasing benign and thought that the alleger was overly sensitive.

Middle management personnel were aware of the problem and have discussed the situation with the health physics technicians, but they did not consider it to be a serious problem. They considered the alleger overly sensitive, but they do not want morale or job performance to suffer, so they plan to reemphasize to the health physics technicians their responsibility in helping to foster a good work environment for everyone, especially junior personnel.

Finding: The allegation is only partially substantiated. Some teasing exists but it is not excessive. Should other junior supervisory personnel express similar concerns, management attention in this area may be necessary.

Allegation: Extreme animosity exists between the Commonwealth Edison Health Physics Technicians and the contractor Health Physics Technicians, adversely impacting the job performance of both groups.

<u>Discussion</u>: After interviewing numerous licensee and contractor health physics technicians, and observing them perform their duties, there may have existed some animosity between the two groups at the start of the Unit 1 outage. The contractors did not know the plant, its procedures or personnel, and their capabilities were not known by licensee personnel. As the two groups worked together and the contractors became more familiar with the plant, licensee health physics technicians became more accepting of them.

Finding: This allegation was not substantiated. Though some animosity existed at first, it was quickly dissipated as the licensee and contractor personnel worked with each other. At no time was there any evidence that this animosity adversely affected job performance.

#### 6. Maintenance/Surveillance

### a. Monthly Maintenance Observation (62703)

Station maintenance activities of safety-related and nonsafety-related systems and components listed below were observed/reviewed to ascertain that they were conducted in accordance with approved procedures, regulatory guides and industry codes or standards and in conformance with Technical Specifications.

The following items were considered during this review: the limiting conditions for operation were met while components or systems were removed from service; approvals were obtained prior to initiating the work; activities were accomplished using approved procedures and were inspected as applicable. Additional items reviewed included verification that functional testing and/or calibrations were performed prior to returning components or systems to service; quality control records were maintained; and activities were accomplished by qualified personnel. Also, the inspectors verified that parts and materials used were properly certified; radiological controls were implemented; and fire prevention procedures were followed. Work requests were reviewed to determine the status of outstanding jobs and to assure that priority is assigned to the maintenance of safety-related equipment which may affect system performance.

### (1) Plugged Drywell Pressure Sensing Line

On December 11, 1989, the licensee noted a discrepancy in the Unit 2 drywell pressure instrumentation. It was noted that the drywell pressure reading from one of the drywell penetrations was 1.1 psig instead of the normal value of 1.3 psig which the other instruments were indicating. The licensee suspected that the sensing line was partially plugged. The licensee then placed the protective channels supplied by this sensing line in a tripped condition, thereby giving Unit 2 a partial automatic

blowdown isolation and 1/2 of the required signals for a scram, a Group II isolation and an ECCS isolation.

On December 12, 1989, the licensee used compressed air to clear the sensing line and return it to operability. The licensee subsequently performed functional tests of the instrumentation, and reset the 1/2 scram and the other protective features.

The licensee believes the cause of the blockage to be water accumulation in the sensing line. The probable cause of the water accumulation was condensation of the humid drywell atmosphere in the sensing line. The drywell is abnormally humid because of steam leaks that had been identified earlier by increased drywell floor drain leakage. Because this could not be positively confirmed, the licensee has been consulting with its engineering staff, and has initiated a surveillance program that includes daily monitoring of the sensed pressure through these lines.

### (2) Portions of the following activities were observed/reviewed:

- (a) Repair of computer alarm points.
- (b) Installation of the primary sample sink.
- (c) Installation of the secondary sample sink.
- (d) Repair of the 1B core spray pump.
- (e) Scaffolding inspection.

No violations or deviations were identified in this area.

### b. Monthly Surveillance Observation (61726)

The inspectors observed surveillance testing required by the Technical Specifications and verified that testing was performed in accordance with adequate procedures, that test instrumentation was calibrated, and that limiting conditions for operation were met. Additionally, the inspectors observed/verified the removal and restoration of the affected components, and that test results conformed with Technical Specifications and procedure requirements. Also, the inspectors verified that the results were reviewed by personnel other than the individual directing the test and that any deficiencies identified during the testing were properly reviewed and resolved by appropriate management personnel.

# (1) Untested Local Leak Rate Test (LLRT) Volumes

During the inspection period, licensee personnel did an indepth comparison of the LLRTs performed at each facility. This comparison revealed that there are six LLRT volumes which are tested at other licensee facilities but which are not tested at

Quad Cities. The licensee has added these six volumes to the LLRTs which will be performed each outage. This issue is an open item (254/89026-02).

#### (2) Unit 1 ESF Actuation

On November 5, 1989, Unit 1 was shutdown in a refueling outage with all rods inserted. Instrument technicians were performing the Excess Flow Check Valve Surveillance, QIS 47-1. The instruments associated with each excess flow check valve were isolated by shutting the isolation valve to prevent spurious trip signals from being initiated.

Channel "A" Group II and Group III isolation signals were received, as well as the low-low reactor vessel level reactor recirculation pump trip signal, because of a leaky isolation valve on the 1-263-58A level transmitter. While valving the 1-263-58B level transmitter back into service, a Group II and Group III isolation occurred, the running reactor recirculation pump tripped, the control room and reactor building ventilation systems tripped, and the standby gas treatment system started. The plant systems were promptly returned to normal.

The cause of the "A" channel trip signal was a leaky isolation valve. The cause of the "B" channel trip signal was procedure inadequacy, specifically the failure of the Excess Flow Check Valve Surveillance, QIS 47-1, to specify the valving sequence for returning the level transmitter to service. The root cause is unknown at this time. Failure to provide adequate procedures is contrary to 10 CFR Part 50 Appendix B, Criterion V, and is considered to be a violation (254/89026-01a).

# (3) Missed Fire Surveillance

On November 24, 1989, a review of surveillances performed by the licensee revealed that the Unit One HPCI Deluge System Functional Test had exceeded the 25% grace period. The surveillance tests only one heat detector, while Technical Specification 4.12.A.1 requires all seven heat detectors to be tested semiannually. An hourly firewatch was initiated in both Unit 1 and Unit 2 HPCI rooms and a temporary procedure was written to functionally test all seven heat detectors for both units. The test was completed on November 25, 1989. This is a violation of Technical Specification 4.12.A.1 and is considered a Severity Level IV violation (254/89026-03). Because this violation satisfied the criteria of 10 CFR 2 Appendix C Section V.G (it was licensee-identified, was promptly reported and corrected, was Severity Level IV or V. and could not have been prevented by the licensee's corrective action for a previous violation) no Notice of Violation will be issued. This item is considered closed.

### (4) Out of Sequence Control Rod Movement

On December 10, 1989, with Unit 1 above 90% power, the Nuclear Station Operator (NSC) was performing the Weekly Control Rod Exercise, QOS 300-1, on control rod F-14, which was at position 42. The NSO inserted this control rod to position 40 as required by the procedure, and should have returned it to position 42. Instead, the NSO, believing that a coupling check had to also be performed, began withdrawing the control rod to position 48 to perform this procedure. He was alerted by another NSO of his mistake when the control rod was at position 46, at which time control rod movement was halted. The NSOs consulted the Mispositioned Control Rod procedure, QOA 300-4, and in accordance with that procedure returned the control rod to its proper position. The Nuclear Engineers were contacted and determined that no adverse effects occurred because of this unplanned control rod movement.

### (5) Portions of the following activities were observed/reviewed:

- (a) Unit 1 diesel generator monthly surveillance.
- (b) Unit 1 250 volt DC battery discharge test.
- (c) Secondary containment leak rate test.
- (d) Unit 1 integrated leak rate test.
- (e) Unit 1 24/48 volt DC battery capacity test.
- (f) Unit 1 Group I isolation logic test.
- (g) Unit 1 shutdown margin subcritical demonstration.
- (h) Unit 1 mode selector switch functional test.
- (i) Unit 1 HPCI quarterly surveillance.
- (j) Unit 1 hot scram timing.
- (k) Shared diesel generator monthly surveillance.

Two violations were identified in this area, one for which no Notice of Violation will be issued.

### 7. Emergency Preparedness (71707)

During the inspection period the Resident Inspectors inspected the Quad Cities Technical Support Center (TSC) and the Emergency Operations Facility for adequacy. The inspectors also monitored a monthly test of the Emergency Notification System (ENS) phone.

No violations or deviations were noted.

### 8. Security (71707)

During the inspection period the inspectors toured the plant to assure that security programs were being properly implemented. The inspectors verified that security barriers were in place, security doors were operable, the security force was alert, personnel correctly displayed their identification badges and visitor access was being properly controlled.

The Senior Resident Inspector monitored the fitness for duty training given to contractor personnel.

No violations or deviations were noted.

### Engineering/Technical Support

### a. Installation and Testing of Modifications (37828)

The feedwater hydrogen addition modification for both units is continuing. The feedwater hydrogen addition modification for Unit 2 is projected to be completed prior to the Unit 2 outage. A portion of the feedwater hydrogen addition piping was inadvertently damaged (subsequently repaired) by contractor personnel who were repairing the turbine building roof.

### b. Unit 1 Reactor Scram While Shutdown

On November 17, 1989, after completing the 1B 24/48 volt DC battery discharge test and while preparing for the 1A 24/48 volt DC battery discharge test. Unit 1 reactor scrammed. Since Unit 1 was in the Refuel mode with all control rods inserted, no control rod motion occurred. The licensee's investigation revealed that the cause of the scram was an inadeouate out-of-service instruction which allowed both the A and B neutron monitoring panels to deenergize at the same time. Failure to provide adequate instructions is contrary to 10 CFR Part 50 Appendix B, Criterion V, and is considered to be a violation (254/89026-01B). Determination of the root cause is pending further review.

### c. HPCI Deluge and HPCI Steam Isolation Setpoints

The inspectors responded to a request for information from Region III regarding a problem identified at Duane Arnold where the High Pressure Coolant Injection (HPCI) and Reactor Core Isolation Cooling (RCIC) fire protection deludge systems' temperature detector setpoints were lower than the steam leak isolation temperature detector setpoints. With this configuration, the isolation system would likely not function because the deluge would suppress the steam. When the licensee was questioned about this they responded that the setpoints for the fire protection deluge system temperature detectors were higher than the temperature detectors for the isolation function.

The inspector's followup to this issue revealed that the RCIC room does not have a fire protection deluge system. Therefore this concern was not applicable to the RCIC system. In addition, the licensee review of this concern was apparently limited to the nominal setpoints and did not consider the tolerances associated with them. The inspector found that the temperature detectors for the HPCI room deluge were factory pre-set (nonadjustable) at 190° F with a tolerance of +7 and -8. The steam leak isolation temperature detectors were calibrated by the licensee in accordance with QIS 27-1, HPCI Turbine Area High Temperature Isolation Calibration.

QIS 27-1 allows a tolerance band of +5 to -10 F. Therefore, depending on the actual setpoint of the deluge system temperature detectors and the steam leak isolation temperature detector the isolation system function might be defeated by the deluge system.

This concern was brought to the attention of the licensee on December 11, 1989. The licensee evaluated this concern and found no evidence to indicate that the setpoint did not overlap. Based upon this the licensee declared the deluge system inoperable at 8:00 PM (CST) on December 11 and placed the system in a condition where it would not actuate. The licensee is currently reviewing options to resolve this problem. This will be tracked as an open item (265/89026-04).

### 10. Safety Assessment/Quality Verification

a. Evaluation of Licensee Quality Assurance Program Implementation (35502)

During the inspection period the inspectors met frequently with members of the licensee's Quality Assurance staff to discuss the licensee's Quality Assurance program. Among the items discussed/inspected were Quality Assurance staffing and qualification levels, and the results of Quality Assurance audits and surveillances.

b. In-Office Review of Written Reports of Nonroutine Events at Power Reactor Facilities (90712) and Onsite Followup of Written Reports of Nonroutine Events at Power Reactor Facilities) (52700)

During the inspection period the resident inspectors reviewed incidents such as scrams, ESF actuations and component failures which occurred at other plants. The resident inspectors informed the licensee of the details of all events which potentially had applicability to components or activities at Quad Cities.

### LER Review

 (1) (Closed) LER 254/89017, Revision 00: Reactor Protection System Electrical Protection Assemblies Not Completed on Time.

On October 22, 1989, with Unit 1 in the refuel mode and shut down at zero percent power, the licensee discovered that the six-month functional test procedure QOS 500-3, Functional Test

for Reactor Protection System Electrical Protection Assemblies (EPAs), had not been completed within the Technical Specification allotted time frame. The reactor mode switch was place in the shutdown mode as required by Technical Specification 3.9.F.1 to insert a scram. The Operational Analysis Department (OAD) completed the surveillance later that day.

The cause of this event was a misunderstanding of the EPA surveillance requirements when the reactor is subcritical, depressurized, and cold. All corrective actions have been implemented. This is a violation of Technical Specification 4.9.F.1.a and is considered to be a Severity Level IV violation (254/89026-05). Because this violation satisfied the criteria of 10 CFR 2 Appendix C Section V.G (it was licensee-identified, was promptly reported and corrected, was Severity Level IV or V, and could not have been prevented by the licensee's corrective action for a previous violation) no Notice of Violation will be issued. This item is considered closed.

(2) (Open) LER 254/89018, Revision 00: Diesel Generator Voltage Regulator Failure Could Result in a Loss of All But One ECCS Loop.

This is a voluntary LER.

On October 12, 1989, it was determined that during a Loss of Offsite Power (LOOP), in conjunction with a Loss of Coolant Accident (LOCA), it is possible that the Unit Diesel Generator voltage regulator could fail in such a manner that the only emergency core cooling system (ECCS) available would be one loop of the core spray (CS) system. The scenario is of minimal safety significance because of the low probability of such an occurrence, calculated to be on the order of once in one hundred million years. Regular surveillances and monitoring of diesel generator parameters during operation, and a new procedure were developed to further mitigate the affects of such an occurrence.

This LER will remain open pending the determination and implementation of permanent corrective actions.

(3) (Closed) LER 254/89019, Revision 00: ESF Actuation during Outage Surveillance.

This event is discussed in paragraph 6.b.(2) of this report. It was determined to be a violation of NRC requirements; corrective actions will be followed under non-compliance (254/89026-01a).

This item is considered closed.

(4) (Closed) LER 254/89020, Revision DD: Reactor Scram While Shutdown.

This event is discussed in paragraph 8.b of this report. It was determined to be a violation of NRC requirements; corrective actions will be followed under non-compliance (254/89025-01b).

This item is considered closed.

### c. Evaluation of Licensee Self-Assessment Capability (40500)

The inspectors evaluated the licensee's off-site assessment program, which consists of Quality Assurance audits, team assessments and the Off-Site Nuclear Safety Group (ONSG).

Quality Assurance audits are performed approximately three times per year and team assessments of departments are scheduled so that each department is assessed at least once per year. The ONSG reviews proposed Technical Specifications changes, modifications, special tests, deviations and LERs. Quad Cities does not have an On-Site Nuclear Safety Group.

The inspector reviewed the following:

- Quad Cities off-site audit report number 04-89-I, which reviewed activities and documentation associated with maintenance, operations, radiation protection, radioactive waste, fire protection, emergency preparedness and quality verification.
- (2) Quad Cities Station Emergency Preparedness Assessment, August 7 - 11, 1989, and response dated October 26, 1989.
- (3) Quality Assurance/Nuclear Safety Department Nuclear Safety Activities Report October, 1989.

The licensee uses a computer database called the Nuclear Tracking System (NTS) to track the results of audits/assessments. When an item is entered into the NTS, a followup date is also entered. The NTS also can be utilized by other stations as a resource for lessons learned.

During the inspection period the resident inspectors attended the pre startup On-Site Review Committee meeting. The committee was properly staffed, adequately addressed the relevant issues, and demonstrated adequate concern for reactor safety.

The inspectors also discussed the organization, staffing, and functions of the licensee's Quality Control, Quality First, and Offsite Assessment organizations with the supervisors of these organizations.

### d. Meetings with Public Officials (94600)

The Resident Inspectors were interviewed by representatives of the electronic media on November 16,1989, concerning a contractor control problem which occurred during the previous inspection period and is discussed in paragraph 5.a.(3) of inspection report (254/89022; 265/89022).

The Senior Resident Inspector toured the Local Public Document Room.

No violations or deviations were noted.

### 11. Open Items

Open items are matters which have been discussed with the licensee, which will be reviewed further by the inspector, and which involve some action on the part of the NRC or licensee or both. Open items discussed during the inspection are discussed in Paragraphs 6.b.(1) and 9.C.

# 12. Management Meetings - Entrance and Exit Interviews (30703)

The inspectors met with licensee representatives (denoted in Paragraph 1) throughout the inspection period and at the conclusion of the inspection on December 22, 1989, and summarized the scope and findings of the inspection activities.

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.

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The Senior Resident Inspector toured the Local Public Document Room.

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