February 10, 2000

EA # 00-017
EA # 00-006

Mr. Oliver D. Kingsley
President, Nuclear Generation Group
Commonwealth Edison Company
ATTN: Regulatory Services
Executive Towers West III
1400 Opus Place, Suite 500
Downers Grove, IL 60515

SUBJECT: QUAD CITIES INSPECTION REPORT 50-254/99025(DRP); 50-265/99025(DRP)

Dear Mr. Kingsley:

On January 19, 2000, the NRC completed an inspection at your Quad Cities Units 1 and 2 reactor facilities. The results were discussed with Mr. Dimmette and other members of your staff. The enclosed report presents the results of that inspection.

The inspection was an examination of activities conducted under your license as they relate to safety and to compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas the inspection consisted of a selective examination of procedures and representative records, observations of activities, and interviews with personnel. Specifically, this inspection focused on resident inspection activities.

Based on the results of this inspection, the NRC has identified three non-cited violations. These issues have been entered into your corrective action program. The non-cited violations and other findings that were determined to have low risk significance are listed in the summary of findings and are discussed in the report.

If you contest a violation or the severity level of the non-cited violations, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-001, with a copy to the Regional Administrator, Region III, Resident Inspector and the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-001.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if you choose to provide one, will be placed in the NRC Public Document Room.

Sincerely,

Original Signed By
Mark A. Ring

Mark A. Ring, Chief
Reactor Projects Branch 1

Docket Nos. 50-254; 50-265
License Nos. DPR-29; DPR-30

Enclosure: Inspection Report 50-254/99025(DRP);
50-265/99025(DRP)

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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos:	50-254; 50-265
License Nos:	DPR-29; DPR-30
Report No:	50-254/99025(DRP); 50-265/99025(DRP)
Licensee:	Commonwealth Edison Company (ComEd)
Facility:	Quad Cities Nuclear Power Station, Units 1 and 2
Location:	22710 206th Avenue North Cordova, IL 61242
Dates:	December 4, 1999, through January 19, 2000
Inspectors:	C. Miller, Senior Resident Inspector K. Walton, Resident Inspector L. Collins, Resident Inspector
Approved by:	Mark Ring, Chief Reactor Projects Branch 1 Division of Reactor Projects

NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

Reactor Safety	Radiation Safety	Safeguards
! Initiating Events	! Occupational	! Physical Protection
! Mitigating Systems	! Public	
! Barrier Integrity		
! Emergency Preparedness		

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent little effect on safety. WHITE findings indicate issues with some increased importance to safety, which may require additional NRC inspections. YELLOW findings are more serious issues with an even higher potential to effect safety and would require the NRC to take additional actions. RED findings represent an unacceptable loss of safety margin and would result in the NRC taking significant actions that could include ordering the plant shut down.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. The color for an indicator corresponds to levels of performance that may result in increased NRC oversight (WHITE), performance that results in definitive, required action by the NRC (YELLOW), and performance that is unacceptable but still provides adequate protection to public health and safety (RED). GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, as described in the matrix. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings.

More information can be found at: http://www.nrc.gov/NRR/OVERSIGHT/index.html.

SUMMARY OF FINDINGS

Quad Cities Nuclear Power Station, Units 1 & 2
NRC Inspection Report 50-254/99025(DRP); 50-265/99025(DRP)

The report covers a 6-week period of resident inspection.

Mitigating Systems

- GREEN. The inspectors found that design control deficiencies related to heaters in the contaminated condensate storage tanks allowed degradation of the heaters to the extent that high pressure injection systems could have been adversely affected. Modifications to the system did not evaluate the facility change as required by 10 CFR 50.59. This was considered to be a non-cited violation of 10 CFR 50.59. This issue was first documented by the licensee in August 1999 and addressed in Inspection Report 50-254/99020; 50-265/99020.

  The risk significance for the loss of heaters in the contaminated condensate storage tanks was low, partially because both units were shut down during times when the high pressure injection sources could have been rendered inoperable due to lack of sufficient tank heating (Section 1R01).

- GREEN. The inspectors found that corrective action deficiencies related to heaters in the contaminated condensate storage tanks allowed degradation of the heaters to the extent that high pressure injection systems could have been adversely affected.

  The risk significance for the loss of heaters in the contaminated condensate storage tanks was low, partially because both units were shut down during times when the high pressure injection sources could have been rendered inoperable due to lack of sufficient tank heating (Section 1R01).

Barrier Integrity

- GREEN. High pressure coolant injection system steam supply valve (1-2301-5) failures on September 20, 1999, and October 4, 1999, were not properly classified as repetitive functional failures under the maintenance rule program. As a result, the system was not adequately monitored under 10 CFR 50.65(a)(1). This was considered to be a non-cited violation of 10 CFR 50.65.

  These equipment failures were considered to have low risk significance using the Significance Determination Process because the redundant containment isolation valve was fully functional (Section 1R12).

- GREEN. A failure of a Unit 2 containment spray system valve was not properly classified as a maintenance rule functional failure under the maintenance rule program. This individual classification failure was corrected and did not impact the licensee's ability to demonstrate maintenance effectiveness for the system.

The valve failure was considered to be of low risk significance using the Significance Determination Process because the other train of containment spray was fully functional (Section 1R12).

- GREEN. During surveillance testing on December 12, 1999, residual heat removal torus spray/test return valve 2-1001-34A closed with 116,831 pounds of thrust which was almost double the previous as-left thrust setting of the valve. This value also exceeded the seismic thrust limit for the valve. Corrective actions recommended to determine extent of condition after failure of a similar valve in 1998 were not taken. This was considered to be a non-cited violation of 10 CFR Part 50, Appendix B, Criterion XVI.

  The excessive thrust problem was considered to have low risk significance because the valve remained operable (Section 1R03.3).

Report Details

1. REACTOR SAFETY

Plant Status (71150)

Both units operated at or near full power operation during the period.

1R01 Adverse Weather

.1 Contaminated Condensate Storage Tank Heaters Inoperable

a. Inspection Scope (71111-01)

The inspectors reviewed calculations, operability evaluations, and other corrective action documents related to the discovery that not all heaters in the contaminated condensate storage tanks were working properly. This was initially documented in NRC Inspection Report 50-254/99020; 50-265/99020 and Problem Identification Form Q1999-02971.

b. Observations and Findings

The inspectors found that high pressure injection sources could have been inoperable due to significant deficiencies in design control and in corrective actions associated with the contaminated condensate storage tank heaters. However, the risk significance for the loss of heaters in the contaminated condensate storage tanks was low, partially because both units were shut down during times when the high pressure injection sources were adversely affected due to a lack of sufficient tank heating. As a result of the August 25,1999, discovery that heaters in the contaminated condensate storage tanks were not sufficient to prevent freezing, the licensee and the inspectors pursued further information to determine the risk significance of the finding. The inspectors continued with Phase 2 of the Significance Determination Process in order to refine assumptions documented in a previous report and to clarify plant and weather conditions. The initial Phase 2 Significance Determination Process indicated the potential for a high risk condition because freezing in the tanks could have prevented operation of three high pressure injection sources for both units.

The inspectors found the following information after further investigation:

- Either tank could provide water to any of the high pressure injection systems, and a low tank level in either tank would cause a safety-related signal to change suction sources of all three injection sources to the respective unit's suppression pool.

- Various contaminated condensate storage tank heaters were inoperable for at least four different reasons including inadequate repairs, lack of calibration of the heater controller, and the failure to address the impact of removing heaters under

both authorized and unauthorized plant modifications.

- The maximum number of heaters for most situations was eight, which was less than the original design, but sufficient for heating in all past weather conditions. The maximum number of heaters available during some winter conditions was four. This was evaluated by the licensee using a revised calculation (QDC-3300-M-0872, Revision 0). The licensee and inspectors reviewed weather conditions experienced in areas near the site during the last several years and found no instances where the temperature and wind conditions exceeded the capacity of the four tank heaters while high pressure injection sources were required. The inspectors found one instance where the number of heaters for both tanks was reduced to one. During this time, which lasted about 15 days at the end of 1997 and the beginning of 1998, freezing in the contaminated condensate storage tanks was likely. However, both units were in cold shutdown as of December 21, 1997, due to Appendix R concerns, which eliminated the need for high pressure injection.

- Heat tracing for the suction piping of the high pressure injection systems was not on the winterizing checklist, and therefore not controlled by operator procedure or practice. The inspectors were not aware of any time that the heat trace was not energized during cold weather periods, and the heat trace was working when checked by the licensee.

Based on the additional information mentioned above, the inspectors concluded through the use of the Significance Determination Process that the risk to the plant for the degraded heaters was low. However, the licensee was not aware of the combined effects of the heater degradation due to poor design control and poor corrective action for identified problems. Therefore, it was only fortuitous that the operators placed the plant in cold shutdown and thus lowered risk in the same time frame that only one heater was available. During this time frame, operability of the high pressure coolant injection system, the reactor core isolation cooling system, and safe shutdown makeup pump could not be assured with only one available heater. For this reason the design control problems and corrective action problems were not considered minor.

Title 10 CFR 50.59, “Changes, Tests and Experiments,” permits the licensee, in part, to make changes to the facility as described in the safety analysis report without prior Commission approval provided the change does not involve an unreviewed safety question. The licensee shall maintain records of changes in the facility and these records must include a written safety evaluation which provides the bases for the determination that the change does not involve a unreviewed safety question. Changes made to the contaminated condensate storage tank heaters, which were described in the Updated Final Safety Analysis Report Section 9.2.6.2, from 1974 until 1999 did not include a written safety evaluation which provided a determination that a unreviewed safety question did not exist. The failure to include a written safety evaluation was considered to be a violation of 10 CFR 50.59. This violation is considered a **Non-cited Violation (50-254/99025-01; 50-265/99025-01)** consistent with the Interim Enforcement Policy for pilot plants. This violation is in the licensee’s corrective action program as Problem Identification Form Q1999-02971.

The failure to promptly correct contaminated condensate storage tank heater deficiencies was considered to be a corrective action problem, as described in Inspection Report 50-254/99020; 50-265/99020. A violation is not being cited because the equipment was not safety-related and the actual effect of the failure to correct the nonsafety-related equipment deficiencies on safety-related equipment was not conclusively known. However, the potential for an adverse effect on the operability of the high pressure injection sources clearly existed. Therefore, the failure to correct the heater deficiencies in a timely manner had potential for significant impact on plant risk.

.2 (Closed) Unresolved Item (50-254/99020-03; 50-265/99020-03): Reduced Contaminated Condensate Storage Tank Heater Capacity Due to Design Errors and Corrective Action Problems. Based on the discussion in Section 1R01.1 above, these items are closed.

1R03 Emergent Work

.1 Unit 2 "C" Condensate Pump

a. Inspection Scope (71111-03)

The inspectors reviewed Work Package 980077927 (28), reviewed the prompt investigation for Problem Identification Form Q1999-04218, spoke to mechanical maintenance workers, observed work activities, and reviewed the licensee's risk plan associated with work on the Unit 2 "C" condensate pump.

b. Observations and Findings

There were no findings associated with this inspection activity.

.2 Unit 1 Condensate System Transient

a. Inspection Scope (71111-03)

The inspectors reviewed the licensee's corrective actions associated with the following problem identification form:

Problem Identification Form Q1999-04092, "Unit One Condensate System Transient."

b. Observations and Findings

The inspectors did not identify any findings associated with this activity.

.3 Overthrust of Motor Operated Valve 2-1001-34A

a. Inspection Scope (71111-03)

The inspectors reviewed the licensee's corrective actions associated with the following problem identification forms:

Problem Identification Form Q1999-04303, "2-1001-34A Potential Overthrust," and Problem Identification Form Q1998-03892, "1-1001-34B Overthrust."

b. Observations and Findings

During surveillance testing on December 12, 1999, residual heat removal torus spray/test return valve 2-1001-34A closed with 116,831 pounds of thrust which was almost double the previous as-left thrust setting of the valve. This value also exceeded the structural seismic thrust limit for the valve. The licensee later determined that the valve was still operable. Therefore the risk significance of this individual valve overthrust was low. A root cause report for the December failure was pending at the close of the inspection period. Corrective actions recommended to determine extent of condition after failure of a similar valve in 1998 had not been taken.

Problem Identification Form Q1998-03892 documented overthrust conditions of the Unit 1 B train valve (1-1001-34B) of 105,300 pounds. The as-left thrust of the previous test was 65,160 pounds. The licensee found that these valves had been subject to a high number of cycles due to being used to reduce pressure in the residual heat removal system caused by valve leakby. This cycling, combined with a tendency for decreased stem friction factor, were the apparent causes for the overthrust condition in 1998. Therefore, engineers expected other valves to be subject to similar overthrust concerns. The apparent cause evaluation for the problem identification form in 1998 was insufficient in that it did not address the scope of action needed to ensure other similar valves were not affected by the problem. However, licensee internal correspondence recognized the need for additional action to identify the scope of the problem. In a September 22, 1998, e-mail from Bunte to Vanderheyden and Bohlke, a subheading of "Scope of Problem at Quad Cities" contained the following:

> "Several other Quad Cities valves have been frequently cycled. The 1001-36A/B valve (Torus Cooling Isolation) is cycled at the same time as the 1001-34A/B valve. The 1402-4A/B valve (Core Spray Isolation) is cycled about 200 times per year to relieve pressure buildup in the Core Spray piping. Based on a review of past test results, only one of these MOVs [motor-operated valves] (2-1001-34A) has the potential for being significantly above the thrust rating. The station is developing a plan to determine the current closing thrust for this MOV."

The plan was not completed following this problem, and was not addressed when the inspectors identified a similar overthrust problem for other valves in the summer of 1999 (reference Inspection Report 50-254/99012; 50-265/99012). Title 10 CFR Part 50, Appendix B, Criterion XVI required in part that measures shall be established to assure that conditions adverse to quality, such as failures, deficiencies, and non-conformances are promptly identified and corrected. Failure to correct the condition in similar valves that led to overthrust of the 1-1001-34B valve in 1998, led to similar valves being operated with significant overthrust conditions and is considered to be a violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action." This violation is considered a **Non-cited Violation (50-254/99025-02; 50-265/99025-02)** consistent with the Interim Enforcement Policy for pilot plants. This violation is in the licensee's corrective action program as

Problem Identification Form Q1999-04303.

1R05 Fire Protection

a. Inspection Scope (71111-05)

The inspectors toured both reactor feed water regulating valve control areas and the reactor feedwater pump rooms to ensure that any transient combustible material was adequately controlled. The inspectors observed portions of Quad Cities Mechanical Maintenance Surveillance 4100-21, "Unit 1 Feedwater Regulating Valve Station Deluge Test," to determine the functionality of necessary fire detection and mitigation equipment.

b. Observations and Findings

The inspectors did not identify any findings with this inspection activity.

1R07 Heat Sink Performance

.1 Residual Heat Removal Heat Exchanger Performance Test

a. Inspection Scope (71111-07)

The inspectors observed portions of the performance of Quad Cities Operating Surveillance 1000-29, "RHR [residual heat removal] Heat Exchanger Thermal Performance Test" on the "2A" and "1B" residual heat removal heat exchangers. The inspectors reviewed the completed test results.

b. Observations and Findings

The inspectors did not identify any findings with this inspection activity.

1R09 In Service Testing

a. Inspection Scope (71111-09)

The inspectors observed and reviewed the following in-service tests and verified the tests satisfactorily implemented the code requirements for pump and valve testing:

QCOS 6600-05, "Shared Emergency Diesel Generator Fuel Oil Transfer Pump Flow Rate Test," and
QCOS 6600-07, "Quarterly Diesel Generator Cooling Water Pump Flow Rate Test."

b. Findings and Observations

The inspectors did not identify any findings associated with this activity.

1R12 Maintenance Rule Implementation

.1 (Closed) Unresolved Item (50-254/99023-01): Repetitive Failures Under the Maintenance Rule. High pressure coolant injection system steam supply valve (1-2301-5) failures on September 20, 1999, and October 4, 1999, were not properly classified as repetitive functional failures under the maintenance rule program. As a result, when the performance criterion of no repetitive functional failures was exceeded, adequate performance of the valve was no longer demonstrated as required by 10 CFR 50.65(a)(2). However, the licensee did not establish goals and monitor system performance as required by 10 CFR 50.65 (a)(1). As a result, this was considered to be a violation of 10 CFR 50.65. This violation is considered a **Non-cited Violation (50-254/99025-03)**, consistent with the Interim Enforcement Policy for pilot plants because the risk significance was determined to be low by the Significance Determination Process since a redundant valve was fully functional. This violation is in the licensee's corrective action program as Problem Identification Form Q1999-04264. This item is closed.

.2 (Closed) Unresolved Item (50-265/99023-02): Containment Spray Valve Functional Failure. The failure to capture the Unit 2 outboard containment spray valve failure on June 29, 1999, as a maintenance rule functional failure was considered to be maintenance rule performance issue but not a violation of 10 CFR 50.65. No performance criteria were exceeded and the system remained in (a)(2) status. This issue is in the licensee's corrective action program as Q1999-04265. The valve failure had low risk significance because a redundant train was fully functional. This item is closed.

1R13 Maintenance Work Prioritization and Control

a. Inspection Scope (71111-13)

The inspectors reviewed the licensee's work week safety Profile 99-49-07 for the week of December 6, 1999. The inspectors reviewed ongoing work activities, spoke with licensee staff, and toured the control room and various work areas.

b. Observations and Findings

The inspectors did not identify findings associated with this activity.

1R15 Operability Evaluations

.1 High Pressure Coolant Injection System Operability Evaluation

a. Inspection Scope (71111-15)

The inspectors reviewed an operability evaluation for pipe wall thinning on non-safety related Unit 1 high pressure coolant injection system steam drain line piping (Problem Identification Form Q1999-04382). Also, the inspectors reviewed related problem identification forms documenting wall thinning issues on safety-related high pressure coolant injection system drain line piping (Q1999-04386). The inspectors reviewed Procedure NES-MS-03.1, "Piping Minimum Wall Thickness Calculation," which was used in conducting the operability assessment.

b. Observations and Findings

On November 30, 1999, the licensee discovered a leak in nonsafety-related Unit 1 high pressure coolant injection system steam drain line piping. This 1-inch pipe drains high pressure coolant injection system steamline condensate to the main condenser with the system in a standby status. Upon a system initiation signal, this line would be isolated and the condensate would be drained via safety-related piping to the suppression pool. The system remained operable. The licensee repaired the leak and scheduled further inspection of other piping for mid-December. On December 15, during replacement of the leaking pipe, additional pipe wall thinning was found in both safety-related and nonsafety-related piping. The safety-related piping was replaced. These issues were placed into the corrective action program under Problem Identification Form Q1999-04382. The shift manager screened the problem identification form and concluded that an operability assessment was required for the additional wall thinning found in the nonsafety-related piping that was not replaced. Also, the shift manger specified that the safety-related pipe wall thinning issue be reviewed for reporting to the NRC under 10 CFR 50.72 and 10 CFR 50.73.

Although the pipe was nonsafety-related, it was included in the boundary used in the seismic analysis for the safety-related piping. As a result, an operability determination was required to determine if the safety-related piping would remain operable with the degradation of the nonsafety-related piping. The licensee used Procedure NES-MS-03.1, "Piping Minimum Wall Thickness Calculation," to calculate minimum pipe thickness due to pipe stresses to aid in the operability evaluation.

At the end of the inspection period the inspectors developed several questions regarding the operability evaluation. The required minimum pipe thickness due to various stresses in some cases exceeded the actual as-found thickness. In those cases an average pipe thickness was used to conclude that the pipe could withstand the stresses. The inspectors could not conclude that averaging was appropriate to support the conclusion and asked the licensee to provide additional technical justification for averaging. Also, the inspectors determined that several sections of Procedure NES-MS-03.1 were not used in evaluating the wall thinning issue. It appeared that the entire procedure was applicable and would have required the calculation of a wear rate and predicted thickness and potentially could have required a more detailed analysis. The inspectors asked the licensee to explain why all sections of the procedure were not used. Lastly, the inspectors were continuing to review the licensee's decision on whether the condition required a report to the NRC under 10 CFR 50.72 and 10 CFR 50.73. These issues were considered to be an **Unresolved Item (50-254/99025-04)** pending further information from the licensee and review by the inspectors.

.2 Reactor Protection System Operability Assessment

a. Inspection Scope (71111-15)

The inspectors reviewed the operability evaluation associated with the following problem identification form:

Q1999-04216, “Possible Incorrect Application of a Reactor Protective System Pressure Switch.”

b. Observations and Findings

There were no findings identified during the review of this operability evaluation.

1R20 Refueling and Outage

a. Inspection Scope (71111-20)

The inspectors reviewed the licensee’s shutdown risk assessment for the upcoming Unit 2 outage.

b. Observations and Findings

There were no findings associated with this inspection activity.

1R22 Surveillance Testing

a. Inspection Scope (71111-22)

The inspectors observed the performance of the following surveillance tests:

QCIS 0200-09, “Reactor 2/3 Core Water Level Analog Trip System Indication Calibration and Functional Test,”
QCOS 6600-01, “Emergency Diesel Generator Load Test,” and
QCOS 6600-20, “Diesel Generator Endurance and Full Load Reject Test.”

The inspectors reviewed applicable data collected during the tests and ensured compliance with Technical Specifications. In addition, the inspectors reviewed the licensee’s corrective actions associated with the following problem identification forms:

Problem Identification Form Q1999-03724, “Technical Specification Surveillance Not on Schedule,” and
Problem Identification Form F Q1999-03824, “Possible Missed Technical Specification Surveillance Test.”

b. Observations and Findings

There were no findings or observations associated with this inspection activity.

1R23 Temporary Modifications

a. Inspection Scope (71111-23)

The inspectors reviewed licensee temporary modifications as implemented by following

Quad Cities Operating Procedures (QCOP):

QCOP 0500-05, “Bypassing Scram Signal when Shutdown,” and
QCOP 0500-07, “Bypassing Reactor Mode Switch to Shutdown Scram.”

b. Observations and Findings

There were no findings associated with the inspection activity.

4. OTHER ACTIVITIES (OA)

4OA3 Event Follow-up

a. Inspection Scope

The inspectors reviewed licensee event reports and other items using Inspection Procedure 71153.

b. Observations and Findings

(Closed) Licensee Event Report 50-254/99001: Missed Technical Specification Surveillance for Primary Containment Isolation Valves. Three manual containment isolation valves on spare lines for Unit 1 primary containment were not included in the surveillance test procedure when it was revised in 1996. Upon discovery, the licensee verified that the valves were closed and lock-wired shut. The valves were added to the surveillance test procedure. This issue has no risk significance because the function of primary containment isolation was not affected. However, the failure to perform the required surveillance test per Technical Specification 4.7.A.2, which required verification of the valve positions every 31 days, was a violation. This failure constitutes a violation of minor significance and is not subject to formal enforcement action. This item is closed.

(Closed) Licensee Event Report 50-254/99005: “B” Control Room Ventilation System Inoperable Due to Refrigeration Control Unit Breaker Trip. During shutdown of the system, the refrigeration control unit unexpectedly restarted and then tripped. The root cause was determined to be a malfunction of the control switch. The control switch was replaced and the system operated properly. This event did not constitute a violation of NRC requirements. This licensee event report is closed.

4OA5 Meetings (Including Exit Meeting)

.1 Exit Meeting Summary

The inspectors presented the inspection results to Mr. Dimmette and other members of licensee management at the conclusion of the inspection on January 19, 2000. The licensee acknowledged the findings presented. No proprietary information was identified.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

J. Dimmette	Site Vice President
G. Barnes	Station Manager

NRC

M. Ring	Branch Chief, Division of Reactor Projects
A. Spector	NRR
A. Madison	NRR

Illinois Department of Nuclear Safety

Cecil Settles	Division Chief
Bob Ganser	Resident Engineer

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-254/99025-01; 50-265/99025-01	NCV	Contaminated Condensate Storage Tank Heaters Inoperable
50-254/99025-02; 50-265/99025-02	NCV	Overthrust of Motor-Operated Valve 2-1001-34A
50-254/99025-03	NCV	Maintenance Rule Implementation
50-254/99025-04	URI	High Pressure Coolant System Operability Evaluation

Closed

50-254/99025-01; 50-265/99025-01	NCV	Contaminated Condensate Storage Tank Heaters Inoperable
50-254/99025-02; 50-265/99025-02	NCV	Overthrust of Motor-Operated Valve 2-1001-34A
50-254/99025-03	NCV	Maintenance Rule Implementation
50-254/99020-03; 50-265/99020-03	URI	Reduced Contaminated Condensate Storage Tank Heater Capacity Due to Design Errors and Corrective Action Problems
50-254/99023-01	URI	Repetitive Failures Under the Maintenance Rule
50-265/99023-02	URI	Containment Spray Valve Functional Failure
50-254/99001	LER	Missed Technical Specification Surveillance for Primary Containment Isolation Valves
50-254/99005	LER	“B’ Control Room Ventilation System Inoperable Due to Refrigeration Control Unit Breaker Trip

LIST OF BASELINE INSPECTIONS PERFORMED

The following inspectable-area procedures were used to perform inspections during the report period. Documented findings are contained in the body of the report.

Inspection Procedure		Report
Number	Title	Section
71111-01	Adverse Weather Preparations	1R01
71111-03	Emergent Work	1R03
71111-05	Fire Protection	1R05
71111-07	Heat Sink Performance	1R07
71111-09	In-Service Testing	1R09
71111-13	Maintenance Work Prioritization & Control	1R13
71111-15	Operability Evaluations	1R15
71111-20	Refueling and Outage Activities	1R20
71111-22	Surveillance Testing	1R22
71111-23	Temporary Plant Modifications	1R23
71150	Plant Status	
71153	Event Follow-up	4OA3
(none)	Other	4OA4
(none)	Management Meetings	4OA5

LIST OF ACRONYMS AND INITIALISMS USED

CFR	Code of Federal Regulations
IFI	Inspection Follow-up Item
LER	Licensee Event Report
MOV	Motor-Operated Valve
NRC	Nuclear Regulatory Commission
PIF	Problem Identification Form
QCIS	Quad Cities Instrument Surveillance
QCOP	Quad Cities Operating Procedure
QCOS	Quad Cities Operating Surveillance
URI	Unresolved Item
VIO	Violation