June 11, 2000

EA-00-129

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: BRAIDWOOD INSPECTION REPORT 50-456/2000005(DRP); 50-457/2000005(DRP)

Dear Mr. Kingsley:

On May 15, 2000, the NRC completed an inspection at your Braidwood Units 1 and 2 reactor facilities. The results were discussed with Mr. Tulon 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.

During this inspection, one issue of very low safety significance involving the failure to follow adverse weather procedure requirements, and one issue of very low safety significance involving the 2A essential service water pump being inoperable for longer than the Technical Specification allowed outage time were identified and are discussed in the summary of findings and in the body of the attached inspection report.

The two issues were considered violations of NRC requirements, but because of their very low safety significance, the violations were not cited. 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 and the enclosure will be placed in the NRC Public Electronic Reading Room link at the NRC homepage, namely http://www.nrc.gov/NRC/ADAMS/index.html.

Sincerely,

Original signed by
Michael J. Jordan

Michael J. Jordan, Chief
Reactor Projects Branch 3

Docket Nos. 50-456; 50-457
License Nos. NPF-72; NPF-77

Enclosure: Inspection Report 50-456/2000005(DRP);
50-457/2000005(DRP)

cc w/encl: D. Helwig, Senior Vice President, Nuclear Services
C. Crane, Senior Vice President, Nuclear Operations
H. Stanley, Vice President, Nuclear Operations
R. Krich, Vice President, Regulatory Services
DCD - Licensing
T. Tulon, Site Vice President
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State Liaison Officer
Chairman, Illinois Commerce Commission

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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos:	50-456; 50-457
License Nos:	NPF-72; NPF-77
Report No:	50-456/2000005(DRP); 50-457/2000005(DRP)
Licensee:	Commonwealth Edison Company (ComEd)
Facility:	Braidwood Nuclear Power Station, Units 1 and 2
Location:	35100 S. Route 53 Suite 84 Braceville, IL 60407-9617
Dates:	April 2 through May 15, 2000
Inspectors:	C. Phillips, Senior Resident Inspector J. Adams, Resident Inspector J. Roman, Illinois Department of Nuclear Safety
Approved by:	Michael J. Jordan, Chief Reactor Projects Branch 3 Division of Reactor Projects

NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) recently 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 and assessing 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

- Initiating Events
- Mitigating Systems
- Barrier Integrity
- Emergency Preparedness

Radiation Safety

- Occupational
- Public

Safeguards

- Physical Protection

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 very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

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 varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. And RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

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. 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. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

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

SUMMARY OF FINDINGS

Braidwood Nuclear Power Station, Units 1 & 2
NRC Inspection Report 50-456/2000005(DRP); 50-457/2000005(DRP)

The report covers a 6-week period of resident inspection. The significance of issues is indicated by their color (green, white, yellow, red) and was determined by the Significance Determination Process in Inspection Manual Chapter 0609.

SUMMARY OF FINDINGS

INITIATING EVENTS

- GREEN. The inspectors identified two examples of a non-cited violation for the failure to ensure that the area surrounding the Unit 1 transformer yard was free from loose debris in accordance with procedural requirements on two occasions. On April 20, 2000, and on May 8, 2000, the licensee implemented adverse weather preparation procedures 0BwOA ENV-1, 1BwOA ENV-1, and 2BwOA ENV-1 due to the issuance of a tornado watch for an area that included Braidwood Station. One of the required protective actions performed by the licensee was an inspection of the switchyard and the Unit 1 and 2 transformer yards and loose materials were to be secured or removed. The inspectors identified loose material in the Unit 1 transformer yard on both occasions that had not been removed and was not secured. Since no loss of off-site power occurred because of the failure to secure loose materials, this finding is considered to be of very low risk significance (GREEN). (Section 1RO1)

Mitigating Systems

- GREEN. Between March 26 and April 1, 2000, the 2A essential service water pump was inoperable for longer than the allowed outage time for Technical Specification 3.7.8. The licensee performed maintenance on the A train of essential service water that required draining of the suction piping. The design of the piping did not allow for adequate fill and vent upon return to service and the licensee's fill and vent procedure was not adequate to overcome the design deficiency. Since it was shown that the design basis accident criteria could be met and that the Technical Specification limiting condition for operation time was not met, this event was of very low risk significance (GREEN). (Section 1R19.2)

Report Details

Plant Status

Unit 1 entered the inspection period in a refueling outage. Unit 1 was made critical at 7:48 a.m. on April 5, 2000, and synchronized to the grid at 7:00 p.m. on April 5, 2000. Unit 2 entered the period at full power but tripped at 5:14 p.m. on April 15, 2000, from a negative flux rate trip due to a dropped control rod. Unit 2 was made critical at 11:46 a.m. on April 1, 2000, and synchronized to the grid at 6:46 p.m. on April 19, 2000.

1R01 Adverse Weather Preparations

a. Inspection Scope

The inspectors reviewed the licensee's implementation of Braidwood Abnormal Operating Procedures (0BwOA) ENV-1, "Adverse Weather Protection Unit 0," Revision 3; 1BwOA ENV-1, "Adverse Weather Protection Unit 1," Revision 4; and 2BwOA ENV-1 "Adverse Weather Protection Unit 2," Revision 4 during a tornado watch. The inspectors toured Unit 1 and Unit 2 Transformer areas and reviewed Problem Identification Forms (PIF) A2000-01970 and A2000-2183.

b. Issues and Findings

The inspectors identified on April 20, 2000, and May 8, 2000, that equipment had not been secured or removed from the Unit 1 transformer yard contrary to procedural steps of 0BwOA ENV-1. The inspectors discussed the potential impact that this material could have on offsite power sources and station transformers under actual tornado and high wind conditions with the shift manager on both occasions. The shift manager recognized the potential impact to offsite power source and station transformer availability and both times entered the condition into their corrective action program.

On April 20, 2000, the licensee implemented adverse weather preparation procedures 0BwOA ENV-1, 1BwOA ENV-1, and 2BwOA ENV-1 due to the issuance of a tornado watch for an area that included Braidwood Station. The inspectors reviewed the protective actions taken by the licensee in response to the tornado watch. During this review, the inspectors identified that a portable enclosure mounted on a lightweight trailer and a 55 gallon drum of oil were located in the Unit 1 transformer yard. In addition, light weight pieces of scaffold material were stacked near to the Unit 1 transformer yard. The inspectors determined that none of these materials had been secured. The inspectors discussed the existence of the unsecured materials in the Unit 1 transformer yard with the shift manager, who entered the issue into the corrective action program.

On May 8, 2000, the licensee again implemented adverse weather preparation procedures 0BwOA ENV-1, 1BwOA ENV-1, and 2BwOA ENV-1 due to the issuance of a tornado watch for an area that included Braidwood Station. The inspectors reviewed the protective actions taken by the licensee in response to the tornado watch. During this review, the inspectors identified that numerous pieces of lightweight material were scattered and unsecured in and around the Unit 1 transformer yard. In addition, the scaffold materials which were stacked near to the Unit 1 transformer yard on April 20 were still present. The inspectors determined that these materials had not been picked up and secured. 0BwOA ENV-1, Section 2, states, in part, "Secure or remove any loose material and equipment from around the plant exterior that could impact offsite power availability." The inspectors discussed the existence of the unsecured materials in the Unit 1 transformer yard with the shift manager, who entered the issue into the corrective action program with PIF A2000-01970.

Technical Specification (TS) 5.4.1.a states, in part, that written procedures shall be established, implemented, and maintained covering the applicable procedures recommended in Appendix A, of Regulatory Guide 1.33, Revision 2, February 1978. Regulatory Guide 1.33, Revision 2, Appendix A, Section 6, "Procedures for Combating Emergencies and Other Significant Events," specifically address the need to have procedures for acts of nature, including tornados. 0BwOA ENV-1, "Adverse Weather Protection Unit 0," Revision 3, Section 2, states, in part, "Secure or remove any loose material and equipment from around the plant exterior that could impact offsite power availability." Contrary to the above, on April 20, and May 8, 2000, the licensee failed to remove or secure loose materials in the Unit 1 transformer yard. This issue was considered a non-cited violation of TS 5.4.1 **(50-456/2000005-01(DRP))**. This violation is in the licensee's corrective action program as PIFs A2000-01970 and A2000-02183. The inspectors later verified the loose material was removed from the vicinity of the Unit 1 transformer.

Since these materials had not been removed or secured and were in close proximity to the Unit 1 transformers, the inspectors determined that the frequency of an initiating event, such as a loss of offsite power, could have increased. Due to the potential increase in initiating event frequency, the inspectors performed a risk significance determination of this issue in accordance with NRC Inspection Manual 0609, "Significance Determination Process." Since no actual loss of offsite power occurred because of the failure to ensure loose materials were secured, this finding was considered to be of very low risk significance (GREEN).

1R04 Equipment Alignment

a. Inspection Scope

The inspectors walked down the 2A motor-driven auxiliary feedwater pump while the reactor was in operational Mode 3 with all the main feedwater pumps out-of-service for the inspection and repair of main feedwater check valves 2FW079A-D.

b. Issues and Findings

The were no findings identified and documented during this inspection.

1R05 Fire Protection

a. Inspection Scope

The inspectors walked down the following risk significant areas looking for any fire protection degradations:

- The Division 11 switch gear room using the Byron/Braidwood stations Fire Protection Report, Section 2.3.5.3;

- The Division 21 switch gear room using the Byron/Braidwood stations Fire Protection Report, Section 2.3.5.4.

b. Observations and Findings

There were no findings identified and documented during this inspection.

1R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors reviewed the licensee's implementation of the maintenance rule requirements, including a review of scoping, goal setting, performance monitoring, short-term and long-term corrective actions, and current equipment performance status, for the 1B auxiliary feedwater pump and the 2A essential service water (SX) pump.

b. Issues and Findings

There were no findings identified and documented during this inspection.

1R13 Maintenance Work Prioritization and Control

.1 Emergent Work From Damage to Unit 2 Feedwater Check Valves

a. Inspection Scope

The inspectors reviewed the licensee's evaluation of plant risk and equipment configuration associated with the performance of emergent maintenance activities on Unit 2 feedwater check valves 2FW079A-D. The inspectors observed the control of the emergent work by attending planning and status meetings in the outage control center and by observing work at the job site. The inspectors reviewed the prompt investigation report for PIF A2000-01910, PIF A2000-01910, and PIF A2000-1922 addressing the problems identified during the inspection and corrective maintenance on feedwater check valves 2FW079A-D.

b. Issues and Findings

There were no findings identified and documented during this inspection.

.2 Risk Assessment of Switch Yard Bus Maintenance

a. Inspection Scope

The inspectors reviewed the licensee's evaluation of plant risk and equipment configuration associated with the performance of planned maintenance activities on Unit 2 switch yard bus 9. The inspectors discussed the impact on plant risk due to the maintenance with station work control personnel and reviewed the station computer risk model determination of the change to plant risk. In addition, the inspectors walked down the Unit 2 control room panels to determine if any plant equipment was degraded or inoperable that was not taken into account in the computer risk model.

b. Issues and Findings

There were no findings identified and documented during this inspection.

.3 Risk Assessment of Instrument Bus 214 Inverter Failure, Troubleshooting, and Repair

a. Inspection Scope

The inspectors reviewed the licensee's evaluation of plant risk and equipment configuration associated with the failure of instrument bus 214 and subsequent troubleshooting and repair of the Inverter. The inspectors discussed the impact on plant risk due to the maintenance with station work control personnel and reviewed the station computer risk model determination of the change to plant risk. In addition, the inspectors walked down the Unit 2 control room panels to determine if any plant equipment was degraded or inoperable that was not taken into account in the computer risk model. The inspectors also reviewed PIF A2000-02171 which discussed that the on-line risk at the time of the loss of the inverter was originally misclassified as orange rather than red. The inspectors verified that the required actions for either condition were identical and were completed in a timely manner.

b. Issues and Findings

There were no findings identified and documented during this inspection.

1R14 Non-routine Plant Evolutions

a. Inspection Scope

On May 4, 2000, the inspectors observed the Unit 2 control room crew respond to a degraded voltage condition on instrument bus 214. The inspectors reviewed 2BwOA Elec-2, "Loss of Instrument Bus Unit 2," Revision 7A; Unit Operator Logs; sequence-of-event recorder printouts; and primary plant parameter records for pressurizer pressure, average reactor coolant system temperature, and reactor power.

b. Observations and Findings

There were no findings identified and documented during this inspection.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the following operability evaluations and any associated compensatory actions:

- Operability Evaluation 00-003, "Periodic Noise Affecting Intermediate Range Nuclear Instrument N-36 Steady State Signal;"

- Operability Evaluation 00-024, "Storage of Lead Blankets In the Unit 1 and 2 Containments," Revision 0;

- Operability Evaluation 00-024, "Storage of Lead Blankets In the Unit 1 and 2 Containments," Revision 1; and

- Operability Evaluation 00-024, "Storage of Lead Blankets In the Unit 1 and 2 Containments," Revision 2.

The inspectors verified that problems identified had been entered in the licensee's corrective actions program with PIF A1999-02893 for the lead blanket storage issue, and PIF A2000-00932 for N-36 spiking issue.

b. Issues and Findings

There were no findings identified and documented during this inspection.

1R16 Operator Workarounds

a. Inspection Scope

The inspectors reviewed the following operator workaround and operator challenge to identify any potential effect on the function of mitigating systems:

- Operator Workaround 10, "Numerous Feedwater Relief Valves Open and Frequently Fail to Reset Following a Reactor/Turbine Trip," and

- Operator Challenge, "Long Term Inoperability of the Boron Dilution Prevention System."

b. Issues and Findings

There were no findings identified and documented during this inspection.

1R19 Post Maintenance Testing

.1 Failure of Instrument Bus 214 Inverter Power Supply

a. Inspection Scope

The inspectors reviewed and observed the following post-maintenance testing activity involving risk significant mitigating system equipment: Work Request 990069989, “Bus 214 Inverter Instrument 214 Contingency, 2IP08E Troubleshoot Repair Engineered Safety Feature Inverter.”

b. Issues and Findings

There were no findings identified and documented during this inspection.

.2 **(Closed) Unresolved Item (50-456/457/2000002-02(DRP)) and Licensee Event Report 50-457/2000-001-00**: 2A SX Pump Inoperable for More Than the TS Allowed Outage Time Resulting from Inadequate Testing Criteria Due to a Design Deficiency and Inadequate Methodology for the Return to Service. On March 26, 2000, at 7:00 p.m., the licensee declared the 2A SX pump inoperable, and entered TS 3.7.8 in order to conduct planned maintenance. The licensee then drained A train suction piping from the lake screen house to the 1A and 2A SX pump discharge valves 1SX143A and 2SX143A to support the replacement of the 1A and 2A SX pump suction valves 1SX001A and 2SX001A. Technical Specification 3.7.8 allows continued operation with one inoperable SX pump for a period not to exceed 72 hours when the associated unit is in Modes 1, 2, 3, or 4. Unit 2 was in Mode 1 (power operation) and Unit 1 was in Mode 6 (refuel) during and following the SX suction valve replacement. Following the replacement of 1SX001A and 2SX001A, operations personnel performed static and dynamic venting of the A train of SX suction piping and declared the 2A SX pump operable at 12:41 p.m., on March 29, 2000.

On March 30, 2000, at 12:06 p.m., operators started the 2A SX pump and secured the 2B SX pump to establish the desired SX configuration. This was the first operation of the 2A SX pump since it was declared operable on March 29, 2000. Shortly after securing the 2B SX pump, operators observed a decrease in SX discharge header pressure from greater than 90 pounds per square inch to 30 pounds per square inch, a decrease in the 2A SX pump motor amperage, and an increase in temperatures on Unit 2 plant components cooled by SX. All these parameters indicated that the 2A SX pump was not pumping sufficient amounts of cooling water to cool system loads. Operators started the 2B SX pump and secured the 2A. Operators declared the 2A SX pump inoperable and entered TS 3.7.8. A significant amount of air was vented from the 2A SX pump casing and from the A train suction piping. The licensee initiated a prompt investigation of the event and identified two apparent causes for the inadequate venting of the A train SX suction piping. The licensee determined the suction piping’s design was inadequate since no vent valve was provided for a 650 foot section of 48 inch suction diameter pipe. The licensee also determined that acceptance criteria for the restoration of the A train SX pumps was inadequate since it did not address parallel pump operations and the impact of the parallel operation on the dynamic venting process.

Following the declaration of inoperability of the 2A SX pump on March 30, 2000, the license conducted significant static and dynamic venting activities on the A trains of SX, performed simultaneous high flow rate operation of the 1A and 2A SX pumps, and performed American Society of Mechanical Engineers surveillance tests prior to declaring the 2A SX pump operable on April 1, 2000, at 10:45 a.m. The total duration of inoperability of the 2A SX pump was 135 hours and 45 minutes. Unit 2 remained in Mode 1 during the entire period that the 2A SX pump was not operable.

The licensee performed a design basis evaluation for the event and determined that the cooling requirements would have been fully met in the event of the design basis accident on Unit 2. The basis for this conclusion was that the 1B and 2B SX pumps (each 100 percent capacity) were available and observed to be functioning normally.

In the event that the design basis accident on Unit 2 occurred with the additional failure of the 2B SX pump or the 2B diesel generator, the licensee determined that the necessary cooling could have been provided from the 1B SX pump through the SX unit cross-tie. This was determined through an engineering analysis using a SX flow model. The flow model results revealed that the 1B SX pump room cooler/oil cooled, and 0B control room chiller would receive less than their Updated Final Safety Analysis Report designed SX flow rate. The flow model assumed an ultimate heat sink (suction source for SX) temperature of 100°F but the actual ultimate heat sink temperature during the period of interest was approximately 58°F. Based on the actual temperature, the licensee determined that system heat exchanger would have been capable of coping with design basis heat loads.

The inspectors discussed the Braidwood phase two Significance Determination Process (SDP) results with the regional senior reactor analyst and requested that the senior reactor analyst perform a phase three screening based on the licensee's safety significance assessment for review. The senior reactor analyst's review of the event stated that the licensee's calculations were reviewed and determined to be appropriate in assumptions used and the conclusions made. Since the design bases cooling requirements would have been met and the TS requirements were not met, this issue was considered by the NRC to have very low risk significance (Green).

Technical Specification 3.7.8 states that two unit-specific trains of SX and one opposite-unit SX train for unit-specific support shall be operable in Modes 1, 2, 3, and 4. Technical Specification 3.7.8 allows continued operation with one inoperable unit-specific SX pump for an allowed outage time of 72 hours. If the operability of the unit-specific SX pump has not been restored at the expiration of the allowed outage time, the licensee is required to place the unit in Mode 3 within six hours and be in Mode 5 within 36 hours. Contrary to the above, on March 29, 2000, at 7:00 p.m., the period of inoperability for the 2A SX pump exceeded the allowed outage time of 72 hours by 63 hours and 45 minutes and Unit 2 was not placed in Mode 3 within 6 hours and in Mode 5 within 36 hours. Since the evaluation showed that the design basis accident criteria could be met and the TS limiting condition for operation time was not met, this issue was of very low safety significance and is considered a non-cited violation of TS 3.7.8 **(50-456/2000005-02(DRP))** because of the very low risk significance. This violation is in the licensee's corrective action program as PIF A2000-01641. The licensee’s root cause evaluation and corrective actions were described in the Licensee Event Report.

1R20 Refueling and Outage

a. Inspection Scope

The inspectors observed the following Unit 1 refueling outage activities for conformance with the applicable procedure and reviewed the listed procedures:

Observed Activity	Applicable Procedure
Containment Closeout	Braidwood Operating Surveillance Procedure (1BwOS) TRM 2.5.b.1
Reactor Startup	Braidwood General Procedure (1BwGP) 100-2
Reactor Physics Testing	Braidwood Engineering Surveillance Procedure (BwVS) 500-6

b. Issues and Findings

There were no findings identified and documented during this inspection.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors observed the performance of the following surveillance testing:

- BwVSR 5.5.8.SX.2, “American Society of Mechanical Engineers Surveillance Requirements For 2B SX Pump,” Revision 0; and
- 2BwVSR 5.5.8.RH.1, “American Society of Mechanical Engineers Surveillance Requirements For Residual Heat Removal Pump 2RH01PA,” Revision 1; and
- 2BwOSR 3.7.5.3-1, “Unit Two Motor Driven Auxiliary Feedwater Pump Quarterly Surveillance,” Revision 0E1.

b. Issues and Findings

There were no findings identified and documented during this inspection.

4. OTHER ACTIVITIES (OA)

4OA1 Performance Indicator Verification

.1 Safety System Unavailability, High Pressure Injection System

a. Inspection Scope

The inspectors verified the Safety System Unavailability, High Pressure Injection System Performance Indicator data reported by the licensee for April 1997 through March 2000 for Unit 1 and Unit 2. This was accomplished in part through evaluation of the LCO Log times for the safety injection system and required support systems, review of applicable work requests, and discussions with licensee personnel.

b. Issues and Findings

There were no findings identified and documented during this inspection.

.2 Unplanned Scrams Per 7000 Critical Hours

The inspectors verified the Unplanned Scrams Per 7000 Critical Hours Performance Indicator data reported by the licensee for Unit 1 and Unit 2. This was accomplished in part through evaluation of the Operation Logs, review of TS required Monthly Operating Report, the Licensee Event Report database, and discussions with licensee personnel.

b. Issues and Findings

There were no findings identified and documented during this inspection.

4OA3 Event Follow-up

Cornerstone: Initiating Event

a Inspection Scope

The inspectors responded to the site on April 15, 2000, to review a Unit 2 reactor trip that occurred at 5:14 p.m. due to a blown fuse on the stationary gripper coil on control rod P-10. The blown fuse resulted in a dropped control rod and a nuclear instrumentation negative rate trip. The Inspectors observed the post-trip status of the unit, reviewed the sequence of events, reviewed the performance of licensee personnel, and verified proper performance of mitigating systems. The inspectors verified that the problem that caused the reactor trip and problems experienced as a result of the trip were not due to personnel performance deficiencies. The inspectors verified that resulting problems were entered into the licensee’s corrective action program and reviewed associated PIFs A2000-01901, A2000-01906, A2000-01907, and A2000-1925.

b Issues and Findings

There were no findings identified and documented during this inspection.

4OA5 Meetings

Exit Meeting Summary

The inspectors presented the inspection results to Mr. Tulon and other members of licensee management at the conclusion of the inspection on May 17, 2000. The licensee acknowledged the findings presented. No proprietary information was identified.

PARTIAL LIST OF PERSONS CONTACTED

<u>Licensee</u>

T. Tulon	Site Vice President
K. Schwartz	Station Manager
C. Dunn	Operations Manager
L. Guthrie	Maintenance Manager
A. Haeger	Radiation Protection Manager
R. Graham	Work Control Manager
T. Simpkin	Regulatory Assurance Manager
T. Luke	Engineering Manager
M. Cassidy	Regulatory Assurance - NRC Coordinator

<u>NRC</u>

M. Jordan	Branch Chief, Division of Reactor Projects
C. Phillips	Senior Resident Inspector
J. Adams	Resident Inspector

<u>Illinois Department of Nuclear Safety</u>

J. Roman	Resident Engineer

ITEMS OPENED, CLOSED, AND DISCUSSED

<u>Opened</u>

50-456/457/2000005-01	NCV	failure to follow adverse weather requirements
50-456/457/2000005-02	NCV	failure to follow TS outage time limit

<u>Closed</u>

50-457/2000-001-00	LER	inadequate testing criteria
50-456/457/2000002-02	URI	inadequate testing criteria
50-456/457/2000005-01	NCV	failure to follow adverse weather requirements
50-456/457/2000005-02	NCV	failure to follow TS outage time limit

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 Number	Title	Report Section
71111-01	Adverse Weather Preparations	1R01
71111-04	Equipment Alignment	1R04
71111-05	Fire Protection	1R05
71111-12	Maintenance Rule Implementation	1R12
71111-13	Maintenance Work Prioritization & Control	1R13
71111-14	Non-routine Plant Evolutions	1R14
71111-15	Operability Evaluations	1R15
71111-16	Operator Workarounds	1R16
71111-19	Post Maintenance Testing	1R19
71111-20	Refueling and Outage Activities	1R20
71111-22	Surveillance Testing	1R22
71151	Performance Indicator Verification	40A1
71153	Event Follow-up	4OA3

LIST OF ACRONYMS AND INITIALISMS USED

BwGP	Braidwood General Procedure
BwOA	Braidwood Abnormal Operating Procedure
BwOS	Braidwood Operating Surveillance Procedure
BwVS	Braidwood Engineering Surveillance Procedure
CFR	Code of Federal Regulations
EA	Escalated Action
LCO	Limiting Condition for Operation
NRC	Nuclear Regulatory Commission
NRR	Nuclear Reactor Regulations
PIF	Problem Identification Form
SDP	Significance Determination Process
SX	Essential Service Water