

United States Nuclear Regulatory Commission

PLANT ISSUE MATRIX

By Primary Functional Area

Region III
BRAIDWOOD

Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
01/25/2000	1999019	Pri: OPS Sec:	NRC	MISC	Pri: 1A Sec: Ter:	COLD WEATHER PREPARATIONS The inspectors reviewed the licensee's preparations for cold weather operation and concluded that station's safety-related equipment was configured in accordance with the freezing weather protection surveillance procedure.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
01/25/2000	1999019	Pri: OPS Sec:	NRC	NEG	Pri: 1A Sec: 5C Ter:	OPERATOR KNOWLEDGE AND PERFORMANCE - VERIFICATION PRACTICES The inspectors observed operators perform a return-to-service of the 1B residual heat removal pump and concluded that the method of independent verification prescribed by the work execution center supervisor during the pre-job briefing and used by the operators during the pumps restoration was contrary to the station administrative procedure. Based on the review of recent NRC and Nuclear Oversight assessments, inspectors concluded that operations management personnel were ineffective in ensuring that verification procedure guidance was consistently applied over the last 6 months during the removal and return-to-service of some safety-related equipment.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
01/25/2000	1999019	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: Ter:	ROUTINE CONTROL ROOM OBSERVATIONS The inspectors concluded that operators routinely performed good turnover briefings, control board operations, response to alarms, and three-way communications. The control room operators were attentive to critical parameters associated with the systems being tested and kept the unit nuclear station operator and the unit supervisor informed of plant changes. The unit supervisors demonstrated good performance in the minimization of control room distractions, in the direction of personnel, in the conduct of briefings, and in the control of evolutions.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
01/25/2000	1999019	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: Ter:	CONTROL ROOM OBSERVATIONS DURING THE YEAR 2000 (Y2K) TRANSITION The inspectors concluded that the licensee was prepared for the year 2000 transition with written action plans, contingency plans, and the appropriate staffing of personnel. The plant responded as expected and no problems occurred at the Braidwood site that impacted plant operations, plant security, or off-site power source stability.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
12/20/1999	1999018	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: 5A Ter: 5C	Effectiveness of Braidwood Operations Department Controls in Identifying, Resolving and Preventing Problem The inspectors concluded that the Braidwood Operating Department's controls in identifying, resolving, and preventing problems were effective. The inspectors also concluded that self-assessments performed by the operations department were critical, utilized a broad range of performance information, and provided appropriate improvement initiatives.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
11/17/1999	1999302	Pri: OPS Sec:	NRC	POS	Pri: 3B Sec: Ter:	Pre-Examination Activities The facility training staff developed an operating test that could be used to evaluate an applicant with no revision by the NRC examiner.
Dockets Discussed: 05000456 Braidwood 1						

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11/17/1999	1999302	Pri: OPS Sec:	NRC	POS	Pri: 3B Sec: Ter:	Examination Activities The applicant was well prepared for retake operating test.
Dockets Discussed: 05000456 Braidwood 1						
11/17/1999	1999302	Pri: OPS Sec:	NRC	POS	Pri: 3B Sec: Ter:	Post Examination Activities The examiner did not identify any significant issues during post examination activities.
Dockets Discussed: 05000456 Braidwood 1						
11/17/1999	1999302	Pri: OPS Sec:	NRC	POS	Pri: 3B Sec: Ter:	Simulator Fidelity The simulator performed well during examination with no noted deficiencies.
Dockets Discussed: 05000456 Braidwood 1						
11/08/1999	1999016	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: Ter:	Review of Operations Overtime The inspectors concluded that the guidance provided by Braidwood's new overtime control procedure was consistent with the requirements listed in Generic Letter 82-12. The inspectors concluded that the corporate interpretations of the Generic Letter 82-12 8-hour break requirement had not been adequately communicated to provide a consistent understanding among supervisors, shift schedulers, and shift personnel.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
11/08/1999	1999016-01	Pri: OPS Sec:	NRC	NCV	Pri: 1A Sec: Ter:	Failure to Follow Procedure For Shift Turnover The inspectors concluded that operators demonstrated twice that they were not completely aware of plant conditions. The lighted indication for "B" train of the Unit 2 core exit thermocouples was extinguished for about 5 hours without being identified by control room operators and a nuclear station operator was not aware of the reason for an existing alarm on the Unit 1 main control room control board when asked by the inspectors. The inspectors had previously identified and documented similar issues.
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10/04/1999	1999015	Pri: OPS Sec:	NRC	NEG	Pri: 3B Sec: Ter:	Requalification Examination Materials The inspectors identified two opportunities for improvement associated with the exam materials: the licensee's use of "verify" actions as part of JPM critical steps that were not critical to the tasks and the absence of specific test items associated with the training conducted on station-observed human performance problems.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						

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10/04/1999	1999015	Pri: OPS Sec:	NRC	NEG	Pri: 3B Sec: Ter:	Requalification Examination Administration Practices The inspectors identified that the licensee had not established clear expectations or grading policies associated with student response to annunciator alarms during simulator JPMs.
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10/04/1999	1999015	Pri: OPS Sec:	NRC	NEG	Pri: 3B Sec: Ter:	Requalification Training Feedback The inspectors identified that the students did not consistently fill out the training critique forms completely for the licensee's training feedback system.
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10/04/1999	1999015	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: Ter:	Control Room Operator Performance Control room operators performed appropriately during the inspectors' observation period in the control room. The inspectors noted appropriate control room staffing levels, appropriate shift turnover activities, adequate crew communications, and adequate operator knowledge of plant status.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
10/04/1999	1999015	Pri: OPS Sec:	NRC	POS	Pri: 3B Sec: Ter:	Operator Training on Human Performance Weaknesses The inspectors noted that the licensee performed appropriate operator training in response to human performance problems identified in 1998 and 1999.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
10/04/1999	1999015	Pri: OPS Sec:	NRC	POS	Pri: 3B Sec: Ter:	Requalification Examination Materials Overall, the licensee-developed requalification exam materials were satisfactory.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
10/04/1999	1999015	Pri: OPS Sec:	NRC	POS	Pri: 3B Sec: Ter:	Requalification Examination Administration Practices The licensee's overall administration of the requalification operating tests was satisfactory. In general, licensee personnel properly administered the examinations, properly evaluated the crews and individuals, and maintained adequate examination security.
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Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
10/04/1999	1999015	Pri: OPS Sec:	NRC	POS	Pri: 3B Sec: Ter:	Requalification Training Feedback The licensee's use of training feedback was appropriate. The licensee properly incorporated into the training program insights from station events, findings from training self assessments, and the training comments from students and station managers.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
10/04/1999	1999015	Pri: OPS Sec:	NRC	POS	Pri: 3B Sec: Ter:	Requalification Training - Remedial Training Program The licensee's remedial training program was satisfactory. The licensee properly removed operators with performance deficiencies from licensed duties, effectively remediated these operators, and properly reevaluated these operators prior to operators' resumption of licensed duties.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
09/27/1999	1999014-01	Pri: OPS Sec:	NRC	NCV	Pri: 1A Sec: 3A Ter:	FAILURE TO FOLLOW PROCEDURES Based on observations made during the performance of emergency core cooling system venting and valve alignment surveillance test, the inspectors concluded that management efforts to correct long standing procedure compliance problems by explaining and reinforcing procedure usage has not been completely effective in that the operators continue to have instances of failure to follow procedural requirements. The use of unauthorized operator aids and failure to have the procedure at the work site resulted in a non-cited violation. Additionally, operating first line field supervision has demonstrated limited effectiveness in enforcing standards such as procedure compliance.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
09/27/1999	1999014-02	Pri: OPS Sec:	NRC	NCV	Pri: 1A Sec: Ter:	FAILURE TO FOLLOW PROCEDURES Poor shift turnover communications between operating crews resulted in some operations management personnel being unaware of equipment status on three occasions. The 2A emergency diesel generator ventilation low temperature switch being disconnected resulted in a Non-Cited Violation.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
08/17/1999	1999012	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: Ter:	CONTROL ROOM OBSERVATIONS The inspectors observed control room operators throughout the inspection period and concluded that operators routinely performed good turnover briefings, control board operations, response to alarms, and three-way communications. The inspectors particularly noted that operators closely monitored the ultimate heat sink temperature which was approaching the Technical Specification limit due to an extended period of hot weather. The unit supervisors demonstrated good performance in the minimization of control room distractions, in the direction of personnel, in the conduct of briefings, and in the control of evolutions.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
07/21/1999	1999010	Pri: OPS Sec:	NRC	MISC	Pri: 5C Sec: 3A Ter:	CORRECTIVE ACTION APPROACH TO ADDRESS RECURRING CONFIGURATION CONTROL OCCURRENCES In June 1998, the licensee identified configuration control as a multi-site issue that affected all sites within the Nuclear Generation Group. In response to the continuing configuration control occurrences, the licensee implemented numerous corrective action initiatives to improve performance in this area. While these initiatives have resulted in improved performance, the continuing events at the Braidwood, Byron, and Quad Cities Stations indicated that the corrective actions had not been fully effective. These occurrences were primarily attributable to human performance deficiencies with the largest contributor to these occurrences involving maintenance activities.
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07/21/1999	1999010	Pri: OPS Sec:	NRC	NEG	Pri: 1A Sec: Ter:	LICENSEE STAFF KNOWLEDGE - AUTHORIZATION TO OPERATED PLANT EQUIPMENT Station personnel did not have a consistent understanding of who was authorized to operate plant equipment, specifically, who was authorized to operate equipment within out-of-service boundaries.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
07/21/1999	1999010	Pri: OPS Sec:	NRC	NEG	Pri: 1A Sec: Ter:	EFFECTIVENESS OF COMMUNICATION METHODS The licensee's communication method (e.g., daily station bulletin handouts, departmental briefings, and bulletin boards) for establishing and maintaining a consistent awareness and understanding of plant issues had not been fully effective.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
07/21/1999	1999010	Pri: OPS Sec:	NRC	NEG	Pri: 3B Sec: Ter:	LICENSEE STAFF KNOWLEDGE - ABNORMAL COMPONENT POSITION PROCESS The inspectors concluded that with the exception of operators, station personnel were not knowledgeable of the abnormal component position process delineated in Common Work Practice Instruction NSP-OP-1-20, "Operational Configuration Control."
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
07/21/1999	1999010	Pri: OPS Sec:	NRC	NEG	Pri: 3B Sec: 5A Ter:	FIRST LINE SUPERVISOR REINFORCEMENT OF STANDARDS AND EXPECTATIONS First line supervision did not meet licensee management's expectation to spend between 40 and 50 percent of their time in the field reinforcing standards and expectations. First line supervision also exhibited an insufficient understanding of the station's performance issues and demonstrated knowledge weaknesses in the areas of verification practices and the abnormal component position process. Consequently, the effectiveness of first line supervision was limited.
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07/21/1999	1999010	Pri: OPS Sec:	NRC	NEG	Pri: 3B Sec: 5C Ter:	LICENSEE STAFF KNOWLEDGE - RECOGNITION OF PLANT ISSUES Station personnel generally did not recognize and understand the configuration control and human performance issues that existed at their site. As a result, the licensee had not been fully effective in improving performance in these areas since station personnel did not recognize the need to improve.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
07/21/1999	1999010	Pri: OPS Sec:	NRC	NEG	Pri: 5A Sec: Ter:	SELF-ASSESSMENT OF CONFIGURATION CONTROL AND HUMAN PERFORMANCE The licensee did not consistently perform self-assessments regarding operational configuration control and human performance to a standard; and in some cases, these assessments were not self-critical. Consequently, the quality and effectiveness of these self-assessments varied significantly.
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07/21/1999	1999010	Pri: OPS Sec:	NRC	NEG	Pri: 5A Sec: Ter:	OPERATING EXPERIENCE LESSONS LEARNED PROGRAM - NUCLEAR OPERATIONS NOTIFICTIONS The licensee did not fully utilize the intra-lessons learned program to ensure that configuration control problems identified at other Commonwealth Edison stations were addressed at each site. Specifically, the licensee frequently focused too narrowly on the details of the issue identified in the nuclear operations notification and did not address the causes of the problem.
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07/21/1999	1999010	Pri: OPS Sec:	NRC	NEG	Pri: 5A Sec: 3B Ter:	LICENSEE STAFF KNOWLEDGE - VERIFICATION PRACTICES Station personnel had an inconsistent understanding of verification practices. Specifically, confusion existed regarding the differences between the verification practices, when each was required to be performed, and who was allowed to perform these verification practices.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
07/21/1999	1999010	Pri: OPS Sec:	NRC	NEG	Pri: 5B Sec: Ter:	CORPORATE NUCLEAR OVERSIGHT FIVE STATION CONFIGURATION CONTROL ASSESSMENT The licensee implemented corrective actions to address the issues identified during the Corporate Nuclear Oversight Five Station Configuration Control Assessment, which was conducted in June 1998, with the following exception. The licensee had not implemented corrective actions to address the finding that nuclear oversight inconsistently responded to configuration control events and missed opportunities to provide the stations with configuration control event insights.
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07/21/1999	1999010	Pri: OPS Sec:	NRC	NEG	Pri: 5B Sec: Ter:	EFFECTIVENESS REVIEW OF IMPLEMENTED CORRECTIVE ACTIONS The licensee did not fully utilize the effectiveness review process to evaluate implemented corrective actions to address recurring configuration control issues. Consequently, the licensee had missed opportunities to proactively identify which corrective action initiatives had not been fully effective in addressing the long-standing configuration control issues at each of these stations.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
07/21/1999	1999010	Pri: OPS Sec:	NRC	NEG	Pri: 5C Sec: Ter:	NUCLEAR GENERATION GROUP CONFIGURATION CONTROL ACTION PLAN Several of the Nuclear Generation Group Configuration Control Action Plan items had not been completed. In addition, the licensee had not evaluated the effectiveness of the action plan in addressing the long-standing configuration control issue at each of the sites.
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07/21/1999	1999010	Pri: OPS Sec:	NRC	NEG	Pri: 5C Sec: Ter:	NUCLEAR OVERSIGHT ASSESSMENT OF CONFIGURATION CONTROL The inspectors concluded that the site nuclear oversight organizations were occasionally not effective at identifying precursor level issues prior to their manifestation in plant events. In addition, site nuclear oversight organizations were not consistently escalating long-standing issues to ensure that the issues were addressed effectively and in a timely manner.
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07/21/1999	1999010	Pri: OPS Sec:	NRC	POS	Pri: 5A Sec: Ter:	NUCLEAR OVERSIGHT ASSESSMENT OF CONFIGURATION CONTROL The inspectors concluded that the Nuclear Oversight Monthly Issues Report contained a thorough evaluation of the issues that needed to be resolved at each station.
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07/21/1999	1999010	Pri: OPS Sec:	NRC	POS	Pri: 5C Sec: Ter:	NUCLEAR GENERATION GROUP CONFIGURATION CONTROL ACTION PLAN The Nuclear Generation Group Configuration Control Action Plan represented a comprehensive corrective action initiative.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
07/21/1999	1999010	Pri: OPS Sec:	NRC	WK	Pri: 1C Sec: Ter:	IMPLEMENTATION OF CONFIGURATION CONTROL PROCESSES The licensee did not consistently implement the standardized processes for operational configuration control and verification practices. In addition, the policies and expectations were not proceduralized, and differences existed regarding who was authorized to manipulate plant equipment. The implementation of processes at each site which had not been standardized including aspects of the out-of-service program, the system line-up process, and the locked valve program. These inconsistencies were notable since the licensee frequently shared personnel between sites. These individuals may not be aware of the differences.
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07/21/1999	1999010	Pri: OPS Sec:	NRC	WK	Pri: 1C Sec: Ter:	DEFICIENCIES WITH THE IMPLEMENTATION OF STANDARDIZED PROCEDURES The manner in which standardized procedures had been implemented at each of the sites resulted in a large backlog of procedures in the review and approval process. Consequently, some standardized procedures were not implemented in a timely manner. In addition, a lack of rigor in the licensee's implementation of the procedural review and approval process resulted in multiple procedures existing for the same topic and insufficient training on some procedure changes. This contributed to knowledge weaknesses regarding the implementation of verification practices and the abnormal component position process.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
07/06/1999	1999011	Pri: OPS Sec:	NRC	POS	Pri: 3B Sec: 5C Ter:	OBSERVATION OF LICENSED OPERATOR REQUALIFICATION SIMULATOR TRAINING The inspectors concluded that the simulator instructors possessed a heightened level of awareness to the deficiencies previously identified during a nuclear oversight assessment of operations simulator training. Corrective actions addressing several of the deficiencies were evident in the training observed by the inspectors. The inspectors concluded that control room expectation and standards were consistently applied at the simulator during the observed training.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
07/06/1999	1999011	Pri: OPS Sec:	NRC	POS	Pri: 5A Sec: Ter:	REVIEW OF THE FIRST QUARTER 1999 OPERATIONS SELF-ASSESSMENT The licensee's conclusions in the operations quarterly self-assessment report were self-critical, clearly stated, and supported by multiple examples and documentation. Improvement initiatives were implemented and had the support of management personnel.
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07/06/1999	1999011-01	Pri: OPS Sec:	NRC	NCV	Pri: 1A Sec: Ter:	Failure to Follow Overtime Procedures There were three examples of licensed operators exceeding licensee's administrative procedural limits of overtime worked without prior station manager approval during the last Unit 2 refueling outage in April and May 1999. This was non-cited violation of Tech Spec 5.2.2.d as implemented by station's administrative overtime procedures.
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06/11/1999	1999301	Pri: OPS Sec:	NRC	MISC	Pri: 3B Sec: Ter:	OPERATOR LICENSING EXAM RESULTS Operating and written examinations were administered to four license applicants. All three SRO applicants passed all sections of the examinations and were issued SRO licenses to operate your Braidwood Nuclear Generating Station, Units 1 and 2. The RO applicant failed the administrative section of the operating examination and was subsequently denied an operator license. The training staff submitted good quality examination material and performed well during the review, validation, and administration of the examinations. Licensed operators involved in the validation and administration of the examination also performed well. It is our expectation that the Braidwood training department instructors will use the performance deficiencies demonstrated by the applicants and noted in the accompanying report as feedback to improve the operator license training program in accordance with your Systematic Approach to Training (SAT) program.
05/24/1999	1999007	Pri: OPS Sec:	NRC	NEG	Pri: 1B Sec: Ter:	OPERATOR PERFORMANCE DURING SEVERAL UNIT 2 EVENTS AND EVOLUTIONS. The inspectors observed during a Unit 2 reactor startup, at the beginning of the inspection period, reactor operators did not consistently adhere to the operations department standards for control room formality, and operations management was not observed correcting this behavior. However, there were seven subsequent Unit 2 startup and shutdown evolutions during the period. During these evolutions the inspectors observed control room operators consistently adhering to procedures, using good three way communications, and demonstrating a good questioning attitude. Operations management personnel were observed frequently challenging licensee personnel on the reasons for expected alarms and taking actions to minimize distractions in the control room. This more recent performance was an improvement and was more consistent with previous operations department personnel performance. In addition, the inspectors concluded that operators responded well to two Unit 2 reactor trips during the period.
04/13/1999	1999006	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: 3A Ter:	Control Room Observations The inspectors observed control room operators throughout the inspection period and concluded that operators routinely performed good turnover briefings, control board operations, response to alarms, and three-way communications. The unit supervisors demonstrated good performance in the minimization of control room distractions, in the direction of personnel, in the conduct of briefings, and in the control of evolutions. The inspectors concluded that the control room operators assigned to perform surveillance and special test kept the unit nuclear station operator informed of plant changes and the unit nuclear station operator was not distracted from his responsibility of unit oversight.

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04/13/1999	1999006	Pri: OPS Sec:	NRC	POS	Pri: 1B Sec: 3A Ter:	Unit 1 Forced Shutdown and Startup Due to Failed Heater Drain Tank Rupture Disc. The licensee conducted a reactor shutdown and startup on April 5 and April 8, respectively, due to a failure of the Unit 1 heater drain tank rupture disk. The inspectors concluded that both evolutions were well planned and controlled. Pre-evolution planning, clear communications, and strict procedural compliance resulted in a reactor shutdown and startup free of human performance errors. Additionally, the operators successfully addressed challenges due to material condition problems during the performance of the unit startup.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
04/13/1999	1999006-01	Pri: OPS Sec:	NRC	NCV	Pri: 1A Sec: 3A Ter:	FAILURE TO FOLLOW PROCEDURE Between March 20 and March 27, the position of 1AB8465, a suction valve to the Unit 0 boric acid pump, which was required for the emergency boration of Unit 1, was poorly controlled. A procedure error in 1BwOP AB-7, "Transfer of the Boric Acid Batching Tank to Unit 2 Boric Acid Tank," Revision 10, regarding the correct position of the valve upon completion of the procedure, went unnoticed by non-licensed operators twice. On one occasion non-licensed operators noted the procedure error regarding the correct position of the valve at the conclusion of the procedure and notified their supervisor. However, due to unclear communication between the work execution center supervisor and an operations procedure writer, BwOP AB-7 was not corrected before the next time it was used. Procedure BwOP AB-7 was not properly maintained which was a Non-Cited Violation of Technical Specification 5.4.1.
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03/01/1999	1999002	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: 3A Ter:	CONTROL ROOM OBSERVATIONS The inspectors observed control room operators throughout the inspection period and concluded that operators routinely performed good turnover briefings, control board operations, response to alarms, and three-way communications. The unit supervisors demonstrated good performance in the minimization of control room distractions, in the direction of personnel, in the conduct of briefings, and in the control of evolutions. The inspectors concluded that the control room operators exhibited a heightened level of awareness to recent configuration control problems.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
03/01/1999	1999002	Pri: OPS Sec:	NRC	POS	Pri: 1B Sec: Ter:	OPERATOR RESPONSE TO UNIT 1 ANNUNCIATOR POWER SUPPLY FAILURES The inspectors were notified and responded to the site on two occasions following the unusual event emergency declaration for the loss of Unit 1 annunciators. The inspectors concluded that the licensee properly classified the event, was timely in making the required notifications, and promptly implemented conservative compensatory actions. The inspectors concluded that the operator aid containing instructions for the use of a temporary inverter was clearly written, and was understood by the operators.
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03/01/1999	1999002	Pri: OPS Sec:	NRC	POS	Pri: 1B Sec: 3A Ter: 3B	OPERATOR RESPONSE TO A UNIT 2 UPPER CABLE SPREADING ROOM HALON FIRE SUPPRESSION SYSTEM / The inspectors responded to the control room following the plant notification for evacuation of the Unit 2 cable spreading room due to indication of the Halon fire suppression system initiation. The inspectors concluded that the Unit 2 unit supervisor demonstrated excellent command and control by providing timely direction to operators, by properly prioritizing response efforts, and by promptly establishing compensatory fire watches. The control room operators promptly and accurately implemented supervisory direction by communicating with non-licensed operators, radiation protection, and security personnel. The inspectors concluded that the unit nuclear station operators were not distracted from monitoring of their respective control boards. No actual release of Halon occurred.
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03/01/1999	1999002	Pri: OPS Sec:	NRC	POS	Pri: 5B Sec: Ter:	REVIEW OF APPARENT CAUSE EVALUATIONS (ACE'S) The inspectors reviewed six safety-related or risk significant apparent cause evaluations (ACEs) and concluded that the ACEs were completed within the required time, clearly stated the problem and the apparent causes, and proposed appropriate corrective actions to prevent recurrence.
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01/25/2000	1999019	Pri: MAINT Sec:	NRC	NEG	Pri: 2A Sec: 2B Ter:	MATERIAL CONDITION PROBLEMS Two centrifugal charging pumps and two essential service water pumps had degraded material condition. Three of the four pumps had adequate operability evaluations and all had plans for repair. The 1A SX pump did not have a problem identification form which documented a prompt determination of operability. The licensee later determined that the 1A essential service water pump was operable.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
01/25/2000	1999019	Pri: MAINT Sec:	NRC	POS	Pri: 2A Sec: 2B Ter:	CONDUCT OF MAINTENANCE The inspectors observed the performance of five surveillance tests. The inspectors concluded that the surveillance tests adequately tested the system, the operators followed the procedures, and that the procedures included the required testing discussed in the Technical Specifications. The inspectors also concluded that appropriate actions were taken by the licensee in regards to the 1A emergency diesel generator erratic output frequency observed during the performance of surveillance testing. The inspectors concluded that the licensee utilized good maintenance work practices during the observed portions of the replacement of the inboard and outboard mechanical seals on the 1B centrifugal charging pump and the overhaul of the 1SI8812B valve actuator. However, during post maintenance operation of the 1B charging pump, approximately a quart of oil sprayed from the pump's thrust bearing due to a missing thermocouple. The inspectors concluded that this event was the result of poor maintenance work practices and poor planning.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
12/20/1999	1999018	Pri: MAINT Sec:	NRC	POS	Pri: 2A Sec: 2B Ter:	Observation of Miscellaneous Surveillance Activities The inspectors observed the performance of four surveillance tests. The inspectors concluded that the surveillance tests adequately tested the system, the operators followed the procedures, and that the procedures included the required testing discussed in the Technical Specifications.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
12/20/1999	1999018	Pri: MAINT Sec:	NRC	POS	Pri: 2A Sec: 2B Ter:	Medium and Low Voltage Circuit Breaker Maintenance The inspectors concluded that the licensee's maintenance program for safety-related medium and low voltage circuit breakers was satisfactory in the areas of training, preventive maintenance, corrective maintenance, vendor interface, engineering calculations, and operating experience.
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11/08/1999	1999016	Pri: MAINT Sec:	Licensee	NEG	Pri: 2A Sec: Ter:	Licensee Identified Configuration Control Event Instrument maintenance technicians demonstrated poor work practices when working in close proximity to the breakers supplying power to the core exit thermocouples and took no actions to prevent inadvertent mispositioning of the breakers. The technicians accidentally mispositioned one of the breakers and restored the breaker to it's original condition without contacting their supervisor and obtaining operations department concurrence. The technicians did not enter this problem into the licensee's corrective action program when it was originally identified by filling out a Problem Identification Form.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
11/08/1999	1999016	Pri: MAINT Sec:	NRC	POS	Pri: 2A Sec: 2B Ter:	Observation of Miscellaneous Surveillance Activities The inspectors observed the performance of five surveillance tests. The inspectors concluded that the surveillance tests adequately tested the system, the operators followed the procedures, and that the procedures included the required testing discussed in the Technical Specifications.
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11/08/1999	1999016	Pri: MAINT Sec:	NRC	POS	Pri: 2A Sec: 2B Ter:	Maintenance Activity Observations The inspectors observed all or portions of various maintenance activities and concluded that activities were performed in accordance with the applicable procedures, that the procedures provided the requisite information necessary to perform the work, that maintenance personnel were knowledgeable of the associated Technical Specification limiting condition for operations and high-risk work activity requirements, and that out-of-services were appropriate for associated work activities and placed properly in the field.
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09/27/1999	1999014	Pri: MAINT Sec:	NRC	NEG	Pri: 2A Sec: 3A Ter:	Material Condition Deficiencies Not Entered Into Corrective Maintenance Program The licensee missed prior opportunities to enter some material condition deficiencies (e.g. oil seal leaks, valve gasket leaks, etc.) into the corrective maintenance program for repairs.
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09/27/1999	1999014	Pri: MAINT Sec:	NRC	NEG	Pri: 2B Sec: 3B Ter:	Maintenance Activity Observations Coordination between operations, engineering, and maintenance department personnel minimized the potential for a reactor trip during the replacement of a DEHC circuit card. However, maintenance personnel were in violation of station work instructions when they covered and potentially disabled an ionization smoke detector during spent fuel pit cubicle cooler work. Because temporarily disabling the detector did not violate the stations fire protection plan, the inspectors considered the failure to follow the work instructions to be of minor significance and not subject to formal enforcement action. This problem was documented because of several observations this period where plant personnel did not adhere to plant procedures or instructions.
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09/27/1999	1999014	Pri: MAINT Sec:	NRC	POS	Pri: 1A Sec: 2A Ter:	Operability of SX System Discharge Isolation Valves OSX-165A and OSX-165B The licensee demonstrated conservative decision making and a good safety culture when initially placing Unit 1 and Unit 2 in an on-line potentially risk significant status ("Orange") when they identified that the essential service water (SX) system discharge isolation valves OSX-165A and OSX-165B could not be closed remotely. The purpose of the valves is to mitigate an internal flooding event. The inspectors concluded that the licensee made good use of probabilistic risk analysis to support their initial on-line risk conclusions. However, the inspectors concluded that the licensee did not demonstrate conservative decision making when the on-line risk status for both units was returned to an on-line non-risk significant status ("Green") based on the ability to manually close the OSX-165A and OSX-165B valves without having demonstrated the ability to manually close OSX-165A and OSX-165B. This conclusion was supported by the fact that when the licensee did attempt to cycle the valves, they would not move. The inspectors concluded that although the SX system discharge isolation valves OSX-165A and OSX-165B could not be closed, the SX system remained operable.
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09/27/1999	1999014	Pri: MAINT Sec:	NRC	POS	Pri: 2B Sec: Ter:	Observation of Miscellaneous Surveillance Activities The inspectors observed the performance of five surveillance tests. The inspectors concluded that the surveillance tests adequately tested the system, the operators followed procedures, and that the procedures included the required testing discussed in the TS.
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09/27/1999	1999014	Pri: MAINT Sec:	NRC	POS	Pri: 2B Sec: Ter:	Maintenance Rule (10 CFR 50.65) Program Review The inspectors concluded that maintenance rule monitoring of the rod control system, control room annunciators, DEHC system, and SSPS effectively managed by the licensee in accordance with 10 CFR 50.65.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
08/17/1999	1999012	Pri: MAINT Sec:	NRC	POS	Pri: 2B Sec: Ter:	OBSERVATION OF MISCELLANEOUS SURVEILLANCE ACTIVITIES The inspectors observed the performance of five surveillance tests. The inspectors concluded that the surveillance tests adequately tested the system, the operators followed the procedures, and that the procedures included the required testing discussed in the Technical Specifications.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
08/17/1999	1999012	Pri: MAINT Sec:	NRC	POS	Pri: 3A Sec: 3B Ter:	MAINTENANCE ACTIVITY OBSERVATIONS The inspectors observed portions of maintenance activities associated with the 2B residual heat removal pump motor bearing oil change out, and the inspection of limitorque valve actuator for the closed cooling water outlet from the 2B residual heat removal heat exchanger outlet valve. The inspectors concluded that activities were performed in accordance with the applicable procedures, the procedures provided the necessary information to perform the work, and that maintenance personnel were knowledgeable of the associated limiting conditions for operations (LCO). The inspectors concluded that the entry into and exit from LCO were properly entered into operating logs.
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07/06/1999	1999011	Pri: MAINT Sec:	Self	NEG	Pri: 2A Sec: Ter:	MATERIAL CONDITION OF ESSENTIAL SERVICE WATER MAINTENANCE VALVES The licensee made the Unit 2 "A" train of emergency core cooling system inoperable for about 8 hours. The licensee had to isolate the essential service water to the Unit 2 "A" train to perform a Generic Letter 89-13 inspection of the 2A safety injection pump lube oil cooler. The poor material condition of the 2A safety injection pump oil cooler maintenance ball valves prevented proper isolation at the cooler. The licensee properly classified the on-line risk status and took adequate compensatory actions to minimize the time necessary to restore essential service water if necessary.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
07/06/1999	1999011	Pri: MAINT Sec:	NRC	POS	Pri: 2B Sec: Ter:	OBSERVATION OF SURVEILLANCE ACTIVITIES The inspectors observed the performance of three surveillance tests associated with 1B auxiliary feed pump and 2A emergency diesel generator, both risk sensitive systems. The inspectors concluded that the surveillance tests adequately tested the system, the operators followed the procedures, and that the procedures included the required testing discussed in the Technical Specifications.
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07/06/1999	1999011	Pri: MAINT Sec: OPS	NRC	POS	Pri: 3B Sec: Ter:	REPLACEMENT OF THE MAIN GENERATOR VOLTAGE REGULATOR MINIMUM EXCITATION LIMIT CIRCUIT CARD The inspectors observed the installation and calibration of the main generator voltage regulator minimum excitation limit circuit card and concluded that the heightened level of awareness briefing met procedural requirements, the work instructions contained a level of detail sufficient to perform the required work, and the work was performed in accordance with the work package instructions. The inspectors concluded that operators and operational analysis department personnel used proper three-way communication techniques, that operators correctly performed peer and self-checks, and that operators appropriately stopped the activity when unexpected indications were observed. The inspectors concluded that the connection of test equipment by operational analysis department personnel while operators were adjusting the automatic voltage regulator without prior notification was a poor practice.
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05/24/1999	1999007	Pri: MAINT Sec:	NRC	MISC	Pri: 2A Sec: 3A Ter:	UNIT 2 URGENT CONTROL ROD FAILURE TROUBLESHOOTING ACTIVITIES. The inspectors concluded that the licensee performed acceptable troubleshooting activities in attempting to determine the cause of multiple rod control system urgent failures. However, the licensee was unable to determine the root cause due in part to the intermittent nature of the problem and problems with diagnostic equipment that complicated the troubleshooting efforts.
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05/24/1999	1999007	Pri: MAINT Sec:	NRC	NEG	Pri: 2B Sec: Ter:	UNIT 1 UNDERVOLTAGE SIMULATED START OF 1A AUXILIARY FEEDWATER PUMP SURVEILLANCE MONTHLY The inspectors identified a surveillance procedure that did not test the Technical Specification surveillance requirement that was stated in the procedure which indicated a misunderstanding of the actual surveillance requirements. The inspectors verified that the Technical Specification surveillance requirements were met by other surveillance tests within the required periodicity and that there was no violation of Technical Specification requirements.
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05/24/1999	1999007	Pri: MAINT Sec:	NRC	POS	Pri: 2A Sec: Ter:	UNIT 2 CONTAINMENT CLOSEOUT. On May 16, the inspectors performed a closeout inspection of the Unit 2 containment. The inspectors concluded containment cleanliness was excellent and had improved when compared to previous containment closeouts inspections. The problems identified during the inspection were few in number, were promptly corrected, and had little if any safety consequence.
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05/24/1999	1999007	Pri: MAINT Sec:	Licensee	POS	Pri: 2A Sec: 3A Ter:	OBSERVATION OF NUCLEAR INSTRUMENTATION INTERMEDIATE RANGE CHANNEL N36 TROUBLESHOOTING. On May 19, operators observed spiking on nuclear instrumentation intermediate range Channel N36 that resulted in a Unit 2 trip on intermediate range high flux. The inspectors concluded that the instrument maintenance department promptly developed and implemented a comprehensive troubleshooting plan in accordance with the licensee's procedure. The inspectors concluded the results of the troubleshooting activities were documented with sufficient detail.
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05/24/1999	1999007	Pri: MAINT Sec:	NRC	POS	Pri: 2A Sec: 3A Ter:	MAINTENANCE AND SURVEILLANCE OBSERVATIONS The inspectors observed the performance of eleven surveillance tests. The inspectors concluded that the surveillance tests adequately tested the system, the operators followed the procedures, and that the procedures included the required testing discussed in the Technical Specifications. The inspectors observed all or portions of seven maintenance activities and concluded that activities were performed in accordance with the applicable procedures, that the procedures provided the requisite information necessary to perform the work, that maintenance personnel demonstrated good general work practices, and that maintenance personnel were knowledgeable of the associated Limiting Condition for Operation and high-risk work activity requirements. The entry into and exit from Limiting Conditions for Operation were properly entered into operating logs.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
05/18/1999	1999008	Pri: MAINT Sec:	NRC	MISC	Pri: 2B Sec: Ter:	ISI MAINTENANCE PROCEDURES AND DOCUMENTATION The inservice inspection procedures and documentation complied with the ASME Code and Technical Specification requirements.
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05/18/1999	1999008	Pri: MAINT Sec:	NRC	POS	Pri: 2A Sec: 2B Ter:	INSERVICE INSPECTION PROGRAM OBSERVATIIONS, FLOW ACCELERATED CORROSION PROGRAM, AND ST ISI program requirements were implemented in accordance with Regulatory and American Society of Mechanical Engineers (ASME) Code requirements. The corporate SG and self assessment was self critical and thorough. Observation of examinations in progress, review of data packages and personnel qualifications indicated that the ISI examinations were conducted in accordance with applicable procedures and ASME Code. ISI inspection implementation was found to be well-controlled and monitored by licensee engineering and corporate nondestructive examination specialist. The Flow Accelerated Corrosion program was aggressive and utilized the latest industry guidelines and procedures. The licensee has developed a comprehensive steam generator inspection program. Performance of eddy current examination data acquisition, data analysis, and data resolution of the SG tubing was performed to well formulated procedures and guidelines.
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05/18/1999	1999008	Pri: MAINT Sec:	NRC	POS	Pri: 3B Sec: Ter:	MAINTENANCE STAFF KNOWLEDGE AND PERFORMANCE The knowledge and performance of the engineering staff and contractors in the area of ISI was good. Strong corporate and station engineering experience in the steam generator inspection and repair program resulted in effective inspection and maintenance programs. Training for SG analysts was comprehensive and thorough.
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04/13/1999	1999006	Pri: MAINT Sec:	NRC	NEG	Pri: 2B Sec: 3B Ter:	UNIT 2A CONTAINMENT SPRAY (CS) PUMP MOTOR BEARING REPLACEMENT The inspectors identified several weaknesses in the control of measurement and test equipment during a maintenance activity on the 2A containment spray pump. An electrician demonstrated a lack of knowledge of the requirements for use of maintenance and test equipment on safety-related components. The maintenance department demonstrated an example of poor control of maintenance and test equipment by being unable to find a piece of equipment when it was due for calibration and then using it later on safety-related equipment. The work package used to measure 2A CS pump end play was weak, in that, it did not include instruction to perform required post maintenance calibration checks of the maintenance and test equipment used.
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04/13/1999	1999006	Pri: MAINT Sec:	NRC	POS	Pri: 2A Sec: Ter:	OBSERVATION OF VARIOUS SURVEILLANCE ACTIVITIES. The inspectors concluded that the three surveillance tests observed adequately tested the systems, the operators followed the procedures, and that the procedures included the required surveillance testing described in the Improved Technical Specifications. Additionally, the inspectors concluded that the two completed seismic instrumentation surveillance procedures that were reviewed by inspectors contained acceptance criteria that addressed Improved Technical Specification requirements, and supported system operability.
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04/13/1999	1999006	Pri: MAINT Sec: OPS	NRC	POS	Pri: 3A Sec: 3C Ter:	NEW FUEL RECEIPT The inspectors observed fuel handling personnel during the receipt of new nuclear fuel for Refueling Outage A2R07 and concluded that fuel handling personnel had properly established foreign material exclusion areas; carefully moved and opened fuel shipping containers; carefully upended fuel elements; closely monitored the Dillon Load Scale during movement of the fuel to the fuel storage vaults; and carefully inspected the new fuel using check sheets from the new fuel inspection procedure. Fuel handling personnel were knowledgeable of new fuel inspection requirements. The fuel handling supervisor directly supervised the movement and inspection of new fuel, maintained tag boards, and properly documented fuel receipt activities in accordance with the applicable procedures.
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03/01/1999	1999002	Pri: MAINT Sec:	NRC	POS	Pri: 2A Sec: Ter:	MAINTENANCE AND SURVEILLANCE OBSERVATIONS The inspectors observed all or portions of various maintenance activities and concluded that activities were performed in accordance with the applicable procedures and that the procedures provided the requisite information necessary to perform the work. The inspectors concluded that the licensee had effectively implemented maintenance rule requirements for the essential service water and the residual heat removal systems. The inspectors concluded that the five surveillance tests observed adequately tested the system, the operators followed the procedures, and that the procedures included the required surveillance testing described in the Technical Specifications.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
01/25/2000	1999019	Pri: ENG Sec:	NRC	POS	Pri: 4B Sec: Ter:	OPERABILITY EVALUATION REVIEWS The inspectors concluded that the three operability determinations reviewed reflected good engineering judgement and safety focus, compensatory actions were understood by operations personnel, and corrective actions were entered into the station's action tracking system.
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12/20/1999	1999018	Pri: ENG Sec:	NRC	POS	Pri: 4B Sec: 4C Ter:	Engineering Staffing The inspectors concluded that staffing of the Braidwood engineering department was sufficient to maintain a minimal backlog of engineering work products. The inspectors determined that the minimal backlog was not simply due to few requests for engineering support but was, in fact, due to effective management and completion of outstanding engineering commitments.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
11/08/1999	1999016	Pri: ENG Sec:	NRC	POS	Pri: 4B Sec: Ter:	Operability Determination Reviews The inspectors concluded that six operability determination reviews reflected good engineering judgement and safety focus, compensatory actions were understood by operations personnel, and corrective actions were entered into the stations nuclear tracking system.
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11/08/1999	1999016	Pri: ENG Sec:	NRC	POS	Pri: 4B Sec: 4C Ter:	Review of Completed 10 CFR 50.59 Screenings and Safety Evaluations Based on a sample of six safety evaluations, the inspectors concluded that the safety evaluations were performed in accordance with 10 CFR 50.59 and the station procedures.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
11/08/1999	1999016-02	Pri: ENG Sec:	NRC	NCV	Pri: 4A Sec: Ter:	Failure to Follow Design Control Measures The inspectors concluded that a licensee identified missing seismic restraint on the 2A emergency diesel generator constituted a field change for which design control measures commensurate with those applied to the original design were not applied. However, the inspectors concluded that the diesel remained operable. A non-cited violation was issued.
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09/27/1999	1999014	Pri: ENG Sec:	NRC	POS	Pri: 5A Sec: 5B Ter: 5C	Engineering Root Cause and Self-Assessment Activities The licensee's periodic self-assessments of engineering department performance were thorough, critical, and identified new areas requiring improvement. Actions taken by the licensee as a result of self-assessments were timely and commensurate with the problems noted. Engineering department generated root cause analysis reports were also thorough, timely and included corrective actions that addressed the stated root causes.
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08/24/1999	1999013	Pri: ENG Sec:	NRC	POS	Pri: 4A Sec: 5C Ter:	Corrective Actions and Engineering Related Activities Related to the AE Design Inspection Completed April 24 Overall the inspection results indicated that the corrective actions were effective in addressing the concerns identified by the AE team and steps were taken to prevent recurrence of the noted problems.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
08/24/1999	1999013-01	Pri: ENG Sec:	NRC	NCV	Pri: 4B Sec: Ter:	Inadequate AFW Tests Two examples of inadequate test controls were identified: (1) the licensee's testing program did not test auxiliary feedwater (AFW) diesel engine cooling system expansion tank safety-related solenoid operated relief valve; and (2) the AFW diesel engine starting circuit K11 time delay relay was inadequately tested. A non-cited violation was issued.
Dockets Discussed: 05000456 Braidwood 1						
08/24/1999	1999013-02	Pri: ENG Sec:	NRC	NCV	Pri: 4B Sec: Ter:	Inadequate Calculation & Controls Two examples of inadequate design controls were identified: (1) calculation Nos. L-VA-809 and L-VA-811 did not include additional hot piping and motor heat loads in the heat capacity determinations; and (2) calculation No. CWBS-C-149 did not consider safety injection and charging pump degradation allowances in the flow determination. A non-cited violation was issued.
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08/24/1999	1999013-03	Pri: ENG Sec:	NRC	NCV	Pri: 4C Sec: Ter:	Inadequate Procedures Two examples of inadequate procedures were identified: (1) procedure No. BwVS 0.5.2 SI. 2-3 contained inadequate closure acceptance criteria for valve Nos. CV 8546 and SI 8926; and (2) procedure No. BwVS 4.6.2.2-1 had a required procedure step removed without justification. A non-cited violation was issued.
Dockets Discussed: 05000456 Braidwood 1						
08/17/1999	1999012	Pri: ENG Sec:	NRC	POS	Pri: 3A Sec: Ter:	REVIEW OF COMPLETED 10 CFR 50.59 SCREENING AND SAFETY EVALUATION The inspectors concluded that the licensee properly performed a 10 CFR 50.59 screening for a temporary modification to the Unit 1 annunciator power supplies and properly performed a 10 CFR 50.59 safety evaluation for the upgrading of three safety injection relief valves. The inspectors concluded that the licensee's justifications were technically correct and referenced applicable vendor analyses, Updated Final Safety Analysis Report, Technical Specifications, and American Society of Mechanical Engineers Boiler and Pressure Vessel Code.
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08/17/1999	1999012	Pri: ENG Sec:	NRC	POS	Pri: 3B Sec: Ter:	OPERABILITY EVALUATION REVIEWS The inspectors concluded that the operability evaluation concerning the seismic qualification of relays and large break loss of coolant accident computer code error reflected sound engineering judgement and safety focus, and were performed in accordance with the appropriate procedure. The inspectors concluded that corrective actions were entered and were being tracked in the licensee's action tracking system, and the required compensatory action was properly implemented and the Technical Specification required report was submitted.
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07/06/1999	1999011	Pri: ENG Sec:	NRC	POS	Pri: 4B Sec: 5C Ter:	EFFECTIVENESS OF LICENSEE CONTROLS FOR CORRECTIVE ACTIONS The licensee's engineering evaluations of problems identified with reactor pressure control at low power levels and an auxiliary feedwater testing anomaly demonstrated adequate root cause assessment. The associated corrective actions were thorough and timely.
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07/06/1999	1999011-02	Pri: ENG Sec:	NRC	NCV	Pri: 3B Sec: Ter:	Failure to Establish Acceptance Criteria The licensee's engineering evaluations of problems identified with reactor pressure control at low power levels and an AF testing anomaly demonstrated adequate root cause assessment. The associated corrective actions were thorough and timely. The licensee identified that the high voltage setting to the Unit 2 source range nuclear instrument N31 was set to the wrong voltage. The licensee's apparent cause evaluation was weak in that it did not identify that the surveillance used to determine the high voltage set point did not have adequate acceptance criteria. A non-cited violation was issued.
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05/24/1999	1999007	Pri: ENG Sec:	NRC	POS	Pri: 4B Sec: Ter:	LATCHING PROBLEMS WITH WESTINGHOUSE TWICE BURNED FUEL ASSEMBLIES. The inspectors concluded that the licensee's review of the Industry Operating Experience Program for the Westinghouse twice burned fuel assembly gap phenomena was effective, based on the demonstrated implementation of corrective actions. The issues reviewed by the inspectors appeared to be appropriately dispositioned in a conservative manner.
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04/23/1999	1999005	Pri: ENG Sec:	NRC	MISC	Pri: 3B Sec: Ter:	ENGINEERING TRAINING The verification and the tracking of engineering training appeared satisfactory. The program, procedures and certification guides provided a sufficient level of training.
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04/23/1999	1999005	Pri: ENG Sec:	NRC	POS	Pri: 4B Sec: Ter:	E&TS INSPECTION RESULTS Based on the results of the E&TS inspection, the inspectors concluded that the methods used to control design changes and modifications at the Braidwood plant were effective. The modifications were adequately designed and of good technical quality. Appropriate controls were established over installation activities. Post modification testing was very good, especially in the case of the Woodward governor replacement. The 10 CFR 50.59 evaluations and screenings were effective, thorough and appropriate to the plant changes. Temporary modifications were well controlled, including having stringent controls to ensure that temporary modification were removed when no longer needed. While the final numerical results were acceptable, calculations, at times, contained unverified assumptions or used incorrect methodologies. There was good correlation among the calculations, the technical specifications, and the updated final safety analysis report. Inservice testing surveillances for the residual heat removal and safety injection pumps ensured that both the American Society of Mechanical Engineers (ASME) Code requirements and the design basis requirements were satisfied.
04/23/1999	1999005	Pri: ENG Sec:	NRC	POS	Pri: 4B Sec: Ter:	ENGINEERING PROGRAMS AND PROCESSES. Adequate engineering interface and support was provided to the modification process. Final closeout of the modifications occurred in a timely fashion. The operability determination process was effective. Adequate bases were provided for the operability determinations and the evaluations could be followed without difficulty. The methods used to obtain and disposition industry operating experience were effective. A strength noted was the support provided to the Operating Experience Program Coordinator by the corporate and other site coordinators.
04/23/1999	1999005	Pri: ENG Sec:	NRC	POS	Pri: 5A Sec: Ter:	ONSITE AND OFFSITE REVIEW COMMITTEES The onsite and offsite review committees were effective in performing their assigned reviews, investigations and evaluations. Members of these committees were aggressive in pursuing plant problems and issues.
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04/23/1999	1999005	Pri: ENG Sec:	NRC	POS	Pri: 5A Sec: 5B Ter: 5C	ENGINEERING SELFASSESSMENT Actions taken once a problem was identified were indicative of a strong corrective action program. The majority of plant problems appeared to be identified, assessed, and had corrective actions assigned. Root cause investigations were accurate and thorough. The licensee's trending program and effectiveness reviews contributed to identifying repetitive problems which required additional corrective actions. The assessment process used by the licensee's independent oversight group met the requirements of 10 CFR Part 50, Appendix B. The continuous assessment process provided an acceptable review of the area being assessed. The self-assessment program provided sufficiently in-depth information so that the assessed group could make the appropriate corrections in the areas of weakness.
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04/23/1999	1999005-01	Pri: ENG Sec:	NRC	NCV	Pri: 2B Sec: Ter:	Inadequate Maintenance Rule Performance Criteria The emergency lighting units maintenance rule performance criteria of 15 functional failures per month was not adequate and could have resulted in masking performance problems with emergency lighting units. A non-cited violation was issued as immediate corrective actions were taken and the issue was entered into the corrective action system.
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04/23/1999	1999005-02	Pri: ENG Sec:	NRC	NCV	Pri: 2B Sec: Ter:	Inadequate Emergency Lighting Unit Surveillance Procedure The licensee failed to identify potentially adverse battery conditions due to an inadequate surveillance procedure and inadequate surveillance procedure reviews. A non-cited violation was issued as immediate corrective actions were taken and the issue was entered into the corrective action system.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
04/23/1999	1999005-03	Pri: ENG Sec:	NRC	NCV	Pri: Sec: Ter:	TS Violation Due to a Safety Injection (SI) Relief Valve Lifting and Failing to Reseat. LER 50-457/97005-00/-01/-02: Violation of Technical Specifications Due to a Safety Injection (SI) Relief Valve Lifting and Failing to Reseat. During operational testing, safety injection relief valves lifted and failed to reseat due to a limited margin between the safety injection pump start pressure transient and the valve setpoints. The licensee determined that the safety consequences of the event were minimal. Corrective actions included procedure revision, setpoint tolerance evaluation, testing methodology review, and replacement of the failed relief valves. The licensee has completed all committed actions, with the exception of completion of an effectiveness review. This final action is being tracked by the licensee's corrective action program (AR No. 00003665-05). The inspector reviewed the response to this minor error and verified that adequate corrective actions were taken. Although this was a violation of the technical specifications it is not being cited, consistent with Appendix C of the NRC Enforcement Policy (50-457/99005-03(DRS)). This item is closed.
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04/23/1999	1999005-04	Pri: ENG Sec:	NRC	NCV	Pri: Sec: Ter:	MSSVs Tested in Excess of Required Setpoint Due to Suspected Metallic Bonding LER 50-456/98004-00: Main Steam Safety Valves (MSSVs) Tested in Excess of Required Setpoint Due to Suspected Metallic Bonding. During setpoint verification testing of Unit 1 main steam safety valves, five valves lifted in excess of their setpoints by greater than the three percent technical specification tolerance. The licensee's root cause investigation suspected metallic bonding between the disc and nozzle seats caused by differences in the coefficient of expansion between the disc and the nozzle. Corrective actions included evaluation of recent valve test data, which concluded that the acceptance criteria for the applicable updated final safety analysis report accident scenarios were not exceeded, rebuilding of the five valves, and a revision to the rebuild procedure. Additionally, the licensee planned to review past rebuild packages at both Byron and Braidwood to assess differences and their potential effect on the main steam safety valve failures. The licensee also planned to issue a supplement to the LER. These items are being tracked in the licensee's corrective action program (AR No. 00003094-03). The inspector reviewed the response to the event and verified that adequate corrective actions were taken. Although this was a violation of the technical specifications it is not being cited, consistent with Appendix C of the NRC Enforcement Policy (50-456/99005-04(DRS)). This item is closed
04/23/1999	1999005-05	Pri: ENG Sec:	NRC	NCV	Pri: Sec: Ter:	Failure to Test Contacts as Required by TS Due to Inadequate Surveillance Procedure Development Prior to I LER 50-456/98006-00: Failure to Test Contacts as Required by Technical Specifications Due to Inadequate Surveillance Procedure Development Prior to Initial Plant Start-Up. During the Generic Letter 96-01 reviews, the licensee identified portions of two circuits that were not being adequately tested. A contact associated with the nuclear channel test card for the refueling water storage tank level instrument loop input to the solid state protection system was not verified to return to its original state after performance of the quarterly analog channel operational test. The significance of this issue was minimal since the closed position of the contacts was verified once every six months during response time testing. The inspectors determined that all required testing to verify proper contact operation was completed by the licensee. The inspectors also noted that a revision to the appropriate operating surveillance (BWOS 7.1.2.1.b.1(2)) was scheduled for completion on 5/1/99. Although this was a violation of the technical specifications it is not being cited, consistent with Appendix C of the NRC Enforcement Policy (50-456/99005-05(DRS)). This item is closed.
03/01/1999	1999002	Pri: ENG Sec:	NRC	POS	Pri: 2A Sec: Ter:	AUXILLARY FEEDWATER SYSTEM WALKDOWN AND OBSERVATONS The inspector performed a walkdown of the auxiliary feedwater system and reviewed system design documentation and procedures. The inspectors concluded that the material condition of the auxiliary feedwater system was good and was aligned in accordance with plant procedures.
03/01/1999	1999002	Pri: ENG Sec:	NRC	POS	Pri: 4B Sec: Ter:	OPERABILITY DETERMINATION REVIEWS AND 10 CFR 50.59 SAFETY EVALUATION PROGRAM The inspectors concluded that the nine operability determinations reviewed reflected good engineering judgement and safety focus, compensatory actions were understood by operations personnel, and corrective actions were entered into the stations nuclear tracking system. Based on a sample of four safety evaluations, the inspectors concluded that the safety evaluation program was implemented in accordance with 10 CFR 50.59 and the station procedures.

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Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
03/01/1999	1999002	Pri: ENG Sec:	NRC	POS	Pri: 5A Sec: 5B Ter:	UNIT 1 ANNUNCIATOR FAILURES The inspectors concluded that the licensee made a significant effort to determine the root cause of failures in the Unit 1 annunciator system. The inspector concluded that the licensee's repairs and temporary modifications have placed the annunciator in an operable condition pending root cause determination and installation of permanent modifications or repairs.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
01/25/2000	1999019	Pri: PLTSUP Sec:	NRC	MISC	Pri: 1C Sec: Ter:	RADIOLOGICAL CONTROLS The inspectors concluded that radiologically controlled areas were properly posted, and locked high radiation area doors were locked and properly controlled by radiation protection personnel. The inspectors concluded that proper radiation work practices were used by maintenance and operating personnel while working in contaminated areas.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
01/25/2000	1999019	Pri: PLTSUP Sec:	NRC	MISC	Pri: 1C Sec: Ter:	REVIEW OF CHEMICAL ANALYSES REQUIRED BY IMPROVED TECHNICAL SPECIFICATIONS The inspectors reviewed the results of Unit 1 and Unit 2 chemical analysis required by Technical Specifications for the period from November 1, 1999, through January 15, 2000. The inspectors concluded that the results of all analyses met Technical Specification acceptance criteria and the results were clearly documented.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
01/25/2000	1999019	Pri: PLTSUP Sec:	NRC	MISC	Pri: 1C Sec: Ter:	SECURITY CONTROLS The inspectors concluded that the protected area fence, isolation zone, and alarm station equipment were properly maintained. Plant personnel followed security requirements for vital area entrance and exit.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
01/25/2000	1999019	Pri: PLTSUP Sec:	NRC	MISC	Pri: 1C Sec: Ter:	FIRE PROTECTION OBSERVATIONS The inspectors concluded that fire alarm panels, fire suppression equipment, emergency lights, and fire barriers were properly maintained and if needed should perform their functions. The inspectors concluded that combustible materials were properly controlled or eliminated from safety-related areas of the plant. Hot work (welding) was also controlled in accordance with plant procedures.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
12/20/1999	1999018	Pri: PLTSUP Sec:	NRC	NEG	Pri: 1C Sec: Ter:	After Hours Emergency Planning Drill Conduct During a drill conducted on November 17, 1999, the licensee was initially unable to meet the minimum staff drill objective within an hour of the declaration of an alert in the Technical Support Center and the Emergency Operations Facility as called for in the emergency plan. However, the licensee successfully completed a remediation drill on December 7, 1999. The licensee demonstrated some weaknesses in the conduct of the drill including that station management personnel were slow in identifying and prioritizing repair work.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						

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12/17/1999	1999021	Pri: PLTSUP Sec:	NRC	NEG	Pri: 1C Sec: Ter:	Effluent Monitoring Instrumentation Operability and Calibration The inspectors identified an error in the licensee's tracking system, which erroneously indicated that an effluent monitor's calibration had been completed following a maintenance task. The error resulted in the licensee unknowingly entering the grace period for the monitor's calibration.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
12/17/1999	1999021	Pri: PLTSUP Sec:	NRC	NEG	Pri: 1C Sec: 5C Ter:	Chemistry Sampling Procedures The inspectors noted some problems with the sampling procedure. Management's response to the finding was appropriate.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
12/17/1999	1999021	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	Effluent Monitoring Instrumentation Operability and Calibration Effluent monitors were operational, calibrated, and had set points in compliance with the Offsit Dose Calculation Manual.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
12/17/1999	1999021	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	Meteorology/REMP Self-assessments A comprehensive meteorological/REMP self-assessment program was conducted by licensee personnel. The assessments confirmed compliance with the station procedures and adequate data collection capabilities.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
12/17/1999	1999021	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: 2A Ter:	Chemistry Lab Instrumentation Operability and Calibration The QC data demonstrated that chemistry laboratory instruments were operable and capable of producing accurate analytical results. The chemistry staff effectively maintained and calibrated the instruments, and there were no material condition issues.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
12/17/1999	1999021	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: 3A Ter:	Chemistry Technician Work Practices A chemistry technician exhibited good radiation worker practices during the collection of a CVCS demineralizer outlet grab sample.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						

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12/17/1999	1999021	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: 5A Ter:	Chemistry QA Audit The inspectors concluded that the Chemistry Department quality assurance audit was comprehensive and effective in identifying areas of improvement.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
12/17/1999	1999021	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: 5C Ter:	Chemistry/REMP PIF Assessments Problem Identification Forms identified issues related to the Chemistry and REMF programs that were minor in nature and were generally attributed to personnel error. The corrective actions taken were appropriate.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
12/17/1999	1999021	Pri: PLTSUP Sec:	NRC	STR	Pri: 1C Sec: Ter:	Implementation of REMF Program The REMF program was well implemented, and the 1998 data demonstrated that the environmental impact from plant operations was not a significant contributor to public dose.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
12/17/1999	1999021	Pri: PLTSUP Sec:	NRC	STR	Pri: 1C Sec: Ter:	Walkdowns Within Radiologically Controlled Area Plant housekeeping was effective in maintaining areas free of unnecessary equipment. Radiological posting and labeling in the plant was appropriate. Staff followed required radiation work permits and procedures.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
12/17/1999	1999021	Pri: PLTSUP Sec:	NRC	STR	Pri: 1C Sec: Ter:	Water Chemistry Control Program Plant water chemistry continued to be excellent, as indicated by chemistry parameter trend data.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
12/07/1999	1999020	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	Security and Safeguards Procedures and Documentation Records and documents reviewed were complete and accurate. Procedures reviewed were well written. Minor administrative revision to the written agreement between the licensee and security contractor was required.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						

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12/07/1999	1999020	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	Security and Safeguards Staff Knowledge and Performance Records and documents reviewed were complete and accurate. Procedures reviewed were well written. Minor administrative revision to the written agreement between the licensee and security contractor was required.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
11/08/1999	1999016	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	Status of Security Facilities and Equipment The inspectors concluded that the protected area security barriers and isolation zone were properly maintained. The inspectors concluded that the perimeter lighting was adequate to allow for the proper surveillance of the protected area.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
11/08/1999	1999016-03	Pri: PLTSUP Sec:	NRC	NCV	Pri: 1C Sec: Ter:	Failure to Post Contaminated Area The inspectors concluded that radiologically controlled areas were generally properly posted; that locked high radiation area doors observed were locked and properly controlled by radiation protection personnel; as-low-as-reasonably-achievable controls, such as briefings, were used to minimize exposure to personnel; and proper radiation work practices were demonstrated by the observed personnel. However, the inspectors identified instances of poor radiological work practices as well as an unposted contamination area within the auxiliary building floor drain tank pump room. A non-cited violation was issued.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
10/13/1999	1999017	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	Activity Determinations of Radwaste The RP staff properly implemented the 10 CFR 61 waste characterization program. The staff sampled waste streams and evaluated results of analyses in accordance with plant procedures and NRC regulations.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
10/13/1999	1999017	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	Conduct of Radioactive Material and Waste Shipments The RP staff properly packaged radioactive materials and wastes for shipment. Reviewed shipments were performed in accordance with the current site procedures and the requirements of 10 CFR 71 and 49 CFR Parts 172 and 173.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
10/13/1999	1999017	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	Radioactive Waste Processing and Storage The radwaste processing and storage areas were secured, clean and well-organized, and waste containers were properly sealed and labeled.
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10/13/1999	1999017	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	External Dose Control The licensee effectively implemented administrative external dose controls to ensure that personnel doses were maintained ALARA. Personnel doses were maintained in accordance with the established administrative controls and were below the limits contained in 10 CFR Part 20.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
10/13/1999	1999017	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	Calibration Functional Tests for Electronic Alarming Dosimeters The RP staff calibrated and tested the electronic dosimeters properly. The inspector did not identify any material condition issues associated with the electronic dosimetry program.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
10/13/1999	1999017	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	Radwaste Program Procedures The radioactive waste staff effectively use radwaste program procedures for radwaste processing, handling, labeling, packaging, storage, and shipment.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
09/27/1999	1999014	Pri: PLTSUP Sec:	NRC	NEG	Pri: 1C Sec: 3A Ter:	Fire Watch Responsibilities The inspectors concluded that welding and grinding activities performed in the Unit 2 lower cable spreading room(LCSR) were performed in accordance with the associated work request packages and that the proper compensatory actions were in place while the LCSR carbon dioxide fire protection system was out of service. However, the inspectors concluded that an individual assigned as a fire watch was performing collateral duties in the over-head of the lower cable spreading room which was contrary to station fire watch requirements. The inspectors considered this to be a violation of minor significance and not subject to enforcement action.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
09/27/1999	1999014	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	Personnel and Vehicle Entry The inspectors concluded that the licensee's access control requirements were properly implemented.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
08/17/1999	1999012	Pri: PLTSUP Sec:	NRC	MISC	Pri: 1A Sec: 5A Ter: 5C	SECURITY CONTROLS The inspectors concluded that the protected area fence and isolation zone were properly maintained. Although the licensee identified a trend concerning individuals leaving security doors unsecured after use, the inspectors concluded that immediate actions taken by security minimized the risk of unauthorized personnel gaining access to secured areas within the plant.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						

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07/06/1999	1999011	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	ACCESS CONTROL OBSERVATIONS During inspection observations station access control equipment was well maintained and station employees were adequately searched. Security guards were attentive to their duties and received frequent supervision.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
06/23/1999	1999009	Pri: PLTSUP Sec:	Licensee	NEG	Pri: Sec: Ter:	Individual Fails to Follow Station RP Procedure The licensee identified one non-licensed individual who failed to adhere to the station policy regarding attentiveness to duty inside the radiologically controlled area. Upon identification, the licensee took immediate disciplinary action. The fact that the attentiveness to duty policy was not clearly delineated in station procedure represents a procedural weakness.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
06/23/1999	1999009	Pri: PLTSUP Sec:	NRC	POS	Pri: Sec: Ter:	Radiologically Controlled Area (RCA) Housekeeping and Outage RCA Control Plant walkdowns of the radiologically controlled area (RCA) revealed that plant housekeeping was effective in maintaining areas free of unnecessary equipment and debris. Radiological posting and labeling in the plant was appropriate. Contamination control actions were effectively implemented during the outage.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
06/23/1999	1999009	Pri: PLTSUP Sec:	NRC	POS	Pri: Sec: Ter:	ALARA Planning Proper ALARA planning contributed to the lowest cumulative dose for a Braidwood station refueling outage. The staff's planning was thorough, and dose estimates were challenging. The RP staff properly controlled work activities and implemented the ALARA program.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
06/23/1999	1999009	Pri: PLTSUP Sec:	NRC	POS	Pri: Sec: Ter:	Corrective Action Tracking The licensee used the corrective action program to document and track actions related to a variety of deviations from expected performance. This program was successfully used to trend worker performance and allowed the licensee staff to analyze the potential for significant performance declines.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
06/23/1999	1999009	Pri: PLTSUP Sec:	NRC	POS	Pri: Sec: Ter:	Internal Dosimetry The licensee effectively implemented the internal dosimetry program. Specifically, radiation workers were effectively monitored for internal deposition of radioactive material via the passive monitoring program, and the licensee properly evaluated internal contaminations during the refueling outage.
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Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
06/23/1999	1999009	Pri: PLTSUP Sec:	NRC	POS	Pri: Sec: Ter:	External Dosimetry The licensee effectively maintained individual and cumulative occupational dose during the aggressive refueling outage schedule. While the total dose for the Unit 2 refueling outage (121.6 Person-Rem) was about 20 percent higher than the licensee's original estimate, it was the lowest outage dose in the station history. This demonstrated effective RP oversight and proper use of the external dosimetry program.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
06/23/1999	1999009	Pri: PLTSUP Sec:	NRC	POS	Pri: Sec: Ter:	Respiratory Protection The RP staff properly evaluated the use of respiratory protection equipment. The staff's evaluation process was based on sound ALARA principles. The staff maintained an effective respirator equipment maintenance and fit testing program.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
06/23/1999	1999009	Pri: PLTSUP Sec:	NRC	POS	Pri: Sec: Ter:	Plant Recovery and Contamination Control The licensee continued to limit the areas of contamination within the plant. Licensee staff demonstrated effective recovery techniques and radiation monitoring during plant start-up and changing conditions.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
06/23/1999	1999009	Pri: PLTSUP Sec:	NRC	POS	Pri: Sec: Ter:	Contract RP Technician Training Contract personnel involved in the RP program were properly trained. Training lesson plans were comprehensive and presented a broad review of the radiation protection program. In addition, the licensee had expanded the RP technician training to address added responsibilities.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
05/24/1999	1999007	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	RADIOLOGICAL PROTECTION - ALARA BRIEFING FOR CONTAINMENT ENTRY. The inspectors concluded that the as-low-as-reasonably-achievable briefing for entry into the Unit 2 containment provided the necessary information to allow personnel to avoid unnecessary radiation exposure. The as-low-as-reasonably-achievable briefing was comprehensive, concise, and effectively used survey maps to convey information on area dose rates. Inspectors concluded that the radiation work permit was complete and contained the necessary information for personnel to safely access the Unit 2 containment building.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
05/24/1999	1999007	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	OBSERVATION OF HOT WORK ACTIVITIES The inspectors concluded that the hot work observed was performed in accordance with Braidwood administrative procedure for control of hot work. This was an improvement over performance during previous refueling outages where inspectors found multiple examples of unattended energized welding equipment.
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05/24/1999	1999007	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	Communication of Radiological Control Information The inspectors concluded that the as-low-as-reasonably-achievable briefing for entry into the Unit 2 containment provided the necessary information to allow personnel to avoid unnecessary radiation exposure. The as-low-as-reasonably-achievable briefing was comprehensive, concise, and effectively used survey maps to convey information on area dose rates. Inspectors concluded that the radiation work permit was complete and contained the necessary information for personnel to safely access the Unit 2 containment building.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
04/13/1999	1999006	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	ALARA BRIEFING FOR CS PUMP REMOVAL The as-low-as-reasonably-achievable briefing for the removal of 2A containment spray pump provided complete and useful information to the workers performing the task.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
04/13/1999	1999006	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	REVIEW OF CHEMICAL ANALYSIS REQUIRED BY IMPROVED TECHNICAL SPECIFICATIONS The inspectors reviewed the results of several chemical analysis that were conducted in March 1999. The inspectors concluded that the results of all analyses met Technical Specification acceptance criteria.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
03/11/1999	1999004	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	STATUS OF SECURITY FACILITIES AND EQUIPMENT, AND SECURITY AND SAFEGUARDS PROCEDURES AND C Equipment observed functioned as designed and compensatory measures were seldom needed. Repetitive problems seldom occurred. Maintenance support for security equipment was generally timely. Records and documents reviewed were complete and accurate. Some automated records systems enhanced vehicle controls. Procedures reviewed were well written
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
03/11/1999	1999004	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	QUALITY ASSURANCE IN SECURITY AND SAFEGUARDS ACTIVITIES. The quality of self-assessment efforts for security and safeguards activities were thorough, well documented, and findings monitored until resolved.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
03/11/1999	1999004	Pri: PLTSUP Sec:	NRC	STR	Pri: 1C Sec: Ter:	SECURITY AND SAFEGUARDS STAFF KNOWLEDGE AND PERFORMANCE. Security force performance was a strength, as demonstrated by a significant reduction in performance errors. An issue was identified pertaining to the security force turnover rate, primarily as it pertains to armed security personnel. Firewatch responsibilities have not degraded the security force's capability to respond to security contingencies.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						

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03/01/1999	1999002	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	ROUTINE RADIOLOGICAL PROTECTION AND CHEMISTRY (RP&C) CONTROLS The inspectors observed the posting of radiation areas, the control of locked high radiation areas, the application of ALARA principles, and the radiation work practices of station personnel. The inspectors concluded that radiologically controlled areas that were observed were properly posted; that locked high radiation area doors observed were locked and properly controlled by radiation protection personnel; that ALARA controls, such as ALARA briefings, cameras, and remote reading dosimetry were used to minimize exposure to personnel; and that proper radiation work practices were demonstrated by the observed personnel.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
03/01/1999	1999002	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: 2A Ter:	STATUS OF FIRE PROTECTION FACILITIES AND EQUIPMENT The inspectors inspected eight floor plugs associated with rooms containing emergency core cooling equipment and concluded that each floor plug was properly installed and sealed. No barrier impairments existed on the inspected floor plugs and plug seals were free from degradation. The inspectors inspected Appendix R emergency lights and concluded that the emergency lights were properly mounted, directed, and charged. Many of the lights had been recently updated.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
02/12/1999	1999003	Pri: PLTSUP Sec:	NRC	NEG	Pri: 1C Sec: Ter:	Implementation of the Augmentation Drill Process The implementation of the augmentation drill process did not effectively demonstrate the capability to augment the on shift staff in a short period of time.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
02/12/1999	1999003	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	EMERGENCY PREPAREDNESS PROGRAM ASSESSMENT Overall, the EP program had been maintained in an effective state of operational readiness. Management support to the program was strong, and interviewed key emergency response personnel demonstrated a working knowledge of responsibilities and emergency procedures.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
02/12/1999	1999003	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	Effectiveness of EP Training and Organization The overall effectiveness of the licensee's EP training and organization was very good.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
02/12/1999	1999003	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	Management Support for EP Program Upgrades Management support for the program appeared strong as indicated by the successful implementation of a number of program upgrades. The station implemented a four team concept for emergency response on June 1, 1997, and conversion to the Community Alert Network.
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02/12/1999	1999003	Pri: PLTSUP Sec:	NRC	POS	Pri: 2A Sec: Ter:	Condition of Emergency Response Facilities Emergency response facilities and equipment were well maintained and in an excellent state of operationsl readiness.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
02/12/1999	1999003	Pri: PLTSUP Sec:	NRC	POS	Pri: 3A Sec: Ter:	Personnel Performance During Emergency Plan Activities Licensee personnel performed proper classifications and timely notifications during three actual activations of the Emergency Plan.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
02/12/1999	1999003	Pri: PLTSUP Sec:	NRC	POS	Pri: 5B Sec: Ter:	EP Program Evaluations The licensee's 1998 Site Quality and Safety Assessment EP program audit and 1998 EP Self-Assessment Report provided an effective evaluation of the program and satisfying the requirements of 10 CFR 50.54(t).
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						
02/12/1999	1999003	Pri: PLTSUP Sec:	NRC	POS	Pri: 5C Sec: Ter:	Tracking and Closing EP Issues The Nuclear Tracking System was an effective method to track and close EP issues. No problems were identified in the procedures or documents reviewed.
Dockets Discussed: 05000456 Braidwood 1 05000457 Braidwood 2						

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Legend

Type Codes:

BU	Bulletin
CDR	Construction
DEV	Deviation
EEI	Escalated Enforcement Item
IFI	Inspector follow-up item
LER	Licensee Event Report
LIC	Licensing Issue
MISC	Miscellaneous
MV	Minor Violation
NCV	NonCited Violation
NEG	Negative
NOED	Notice of Enforcement Discretion
NON	Notice of Non-Conformance
OTHR	Other
P21	Part 21
POS	Positive
SGI	Safeguard Event Report
STR	Strength
URI	Unresolved item
VIO	Violation
WK	Weakness

Template Codes:

1A	Normal Operations
1B	Operations During Transients
1C	Programs and Processes
2A	Equipment Condition
2B	Programs and Processes
3A	Work Performance
3B	KSA
3C	Work Environment
4A	Design
4B	Engineering Support
4C	Programs and Processes
5A	Identification
5B	Analysis
5C	Resolution

ID Codes:

NRC	NRC
Self	Self-Revealed
Licensee	Licensee

Functional Areas:

OPS	Operations
MAINT	Maintenance
ENG	Engineering
PLTSUP	Plant Support
OTHER	Other

EEIs are apparent violations of NRC Requirements that are being considered for escalated enforcement action in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Action" (Enforcement Policy), NUREG-1600. However, the NRC has not reached its final enforcement decision on the issues identified by the EEIs and the PIM entries may be modified when the final decisions are made.

URIs are unresolved items about which more information is required to determine whether the issue in question is an acceptable item, a deviation, a nonconformance, or a violation. A URI may also be a potential violation that is not likely to be considered for escalated enforcement action. However, the NRC has not reached its final conclusions on the issues, and the PIM entries may be modified when the final conclusions are made.