

United States Nuclear Regulatory Commission

PLANT ISSUE MATRIX

By Primary Functional Area

Region II

BROWNS FERRY

| Date | Source | Functional Area | ID | Type | Template Codes | Item Title Item Description |
|--|------------|--------------------------------|-----|------|--|--|
| 01/08/2000 | 1999008 | Pri: OPS Sec: | NRC | POS | Pri: 1C Sec: Ter: | Corrective Action Program The corrective action program was effective in identifying and correcting problems and provided a useful risk-informed tool for the licensee. Licensee management fully participated in the program. The Management Review Committee was in the direct review path of the major input and output segment of the program. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 01/08/2000 | 1999008 | Pri: OPS Sec: | NRC | POS | Pri: 1C Sec: 1A Ter: 1B | Licensed Operator Requalification Program The licensed operator requalification examination program simulator scenarios, JPMs, and written examinations were found to be challenging and effective test tools. The operators' performance during the site visit met the testing objectives. Examination security practices were satisfactory. The licensee requalification training feedback program for operational events was in place and effective. The licensed operator remedial training program was being administered in a timely and effective manner. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 01/08/2000 | 1999008-01 | Pri: OPS Sec: | NRC | NCV | Pri: 1C Sec: 3A Ter: | FAILURE TO MEET POST-MAINTENANCE TEST REQUIREMENTS This NCV is the result of a violation of Step 3.5.D of Standard Programs and Processes (SPP) 6.3, Pre-/Post-Maintenance Testing, Rev. 0, which required that PMTs not performed at the time of field work completion be scheduled for completion. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 | | | | | | |
| 11/27/1999 | 1999007 | Pri: OPS Sec: | NRC | POS | Pri: 1A Sec: 1C Ter: | Configuration of Risk-Significant Systems, Structures, and Components Based on a general walkdown inspection of selected risk-significant systems, structures, and components (SSCs), the SSCs were found in a configuration appropriate to the mode of plant operation. |
| Dockets Discussed: 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 11/27/1999 | 1999007 | Pri: OPS Sec: | NRC | POS | Pri: 1A Sec: 1C Ter: | Freeze Protection Based on walkdowns of freeze protection equipment, susceptible and risk-significant plant systems were adequately protected from cold weather. |
| Dockets Discussed: 05000296 Browns Ferry 3 | | | | | | |
| 10/16/1999 | 1999006 | Pri: OPS Sec: | NRC | NEG | Pri: 1A Sec: Ter: | Non-conservative Calculations During a September 18, 1999, Unit 2 startup, the point of single-notch control rod withdrawal was non-conservatively calculated. It was based on source range monitor readings taken several hours prior to the startup under different plant conditions. |
| Dockets Discussed: 05000260 Browns Ferry 2 | | | | | | |

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| 10/16/1999 | 1999006 | Pri: OPS Sec: | NRC | NEG | Pri: 2B Sec: Ter: | Poor Documentation Coordination A normally-open valve on the Unit 3 low pressure coolant injection system was found closed to compensate for another leaking valve, without supporting documentation. |
| Dockets Discussed: 05000296 Browns Ferry 3 | | | | | | |
| 10/16/1999 | 1999006 | Pri: OPS Sec: | NRC | POS | Pri: 1A Sec: Ter: | Operator Conduct Operators conducted routine business in a professional manner. They responded promptly to alarms and communicated them to the unit supervisor in a clear manner, and they were alert to control panel indications. Operators responded appropriately when two channels of neutron instrumentation became inoperable during a September 16, 1999, startup of Unit 2. |
| Dockets Discussed: 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 09/04/1999 | 1999005 | Pri: OPS Sec: | NRC | POS | Pri: 1A Sec: Ter: | Operator Performance Plant operators demonstrated good professionalism, conservatism, and communications. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 07/24/1999 | 1999004 | Pri: OPS Sec: | NRC | POS | Pri: 1A Sec: Ter: | UNIT 1 REQUIRED SYSTEMS Required Unit 1 systems were being maintained in acceptable materiel condition and were aligned as required for operation. |
| Dockets Discussed: 05000259 Browns Ferry 1 | | | | | | |
| 07/24/1999 | 1999004 | Pri: OPS Sec: | NRC | POS | Pri: 1A Sec: 3A Ter: 4B | REPAIR OF LOW PRESSURE COOLANT INJECTION VALVE Licensee actions to repair a damaged 24-inch low pressure coolant injection valve were safety-focused and performed within the Technical Specification allowed outage times. Good plant management oversight and involvement were demonstrated throughout the repair process. |
| Dockets Discussed: 05000296 Browns Ferry 3 | | | | | | |
| 07/24/1999 | 1999004-01 | Pri: OPS Sec: | Licensee | NCV | Pri: 3A Sec: Ter: | WRONG CS PUMP SELECTED FOR TESTING This NCV was identified for failure to comply with a surveillance test procedure. The wrong CS pump was selected for testing, which resulted in placing the plant in a condition prohibited by TS. Poor self-checking and peer checking practices contributed to this issue. (The licensee reported this problem in LER 50-296/1999-004-000.) |
| Dockets Discussed: 05000296 Browns Ferry 3 | | | | | | |

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| 06/12/1999 | 1999003 | Pri: OPS Sec: | NRC | POS | Pri: 1A Sec: Ter: | Startup from the Unit 2 Refueling Outage During the recovery and startup from the Unit 2 refueling outage, operators generally exhibited conservative operating practices and maintained a focus on safety. |
| Dockets Discussed: 05000260 Browns Ferry 2 | | | | | | |
| 06/12/1999 | 1999003 | Pri: OPS Sec: | NRC | POS | Pri: 1B Sec: Ter: | Reactor Scram Due to Main Turbine Trip. Unit 2 safety systems responded properly following a reactor scram which occurred when the main turbine tripped during mechanical overspeed testing. During the subsequent rod withdrawal to criticality, control room distractions were minimized and operators demonstrated professionalism and good reactivity controls. Control room formality was notably improved from recent observations. |
| Dockets Discussed: 05000260 Browns Ferry 2 | | | | | | |
| 06/12/1999 | 1999003-01 | Pri: OPS Sec: | NRC | NCV | Pri: 1C Sec: 1A Ter: | FAILURE TO COMPLY WITH SR 3.10.4.3. Operators demonstrated inattention to detail in reactivity management and misinterpretation of procedures by failing to implement a TS surveillance requirement to verify that all other control rods were fully inserted when withdrawing single control rods for testing. The licensee stated that the root cause was procedure inadequacy leading to operator misinterpretation of Procedure 2-SR-3.10.4. |
| Dockets Discussed: 05000260 Browns Ferry 2 | | | | | | |
| 06/12/1999 | 1999003 | Pri: OPS Sec: MAINT | NRC | POS | Pri: 1A Sec: 1C Ter: | Control Room Operator Performance During Testing Control room operators were sensitive to minor issues which occurred during testing and good administrative controls were noted during TS 3.10.2 implementation. However, one example of poorly performed second-party verification was noted. |
| Dockets Discussed: 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 05/28/1999 | 1999002-01 | Pri: OPS Sec: | Licensee | NCV | Pri: 3A Sec: Ter: | FAILURE TO REMOVE MSRV VACUUM BREAKER COVERS The licensee demonstrated poor system configuration controls and attention-to-detail by failing to remove all of the foreign material exclusion covers from the inlets of the main steam relief valve discharge pipe vacuum breakers prior to the previous Unit 2 post-outage drywell closure, as required by procedures. The safety significance was reduced, however, because the affected relief valves were not rendered inoperable. |
| Dockets Discussed: 05000260 Browns Ferry 2 | | | | | | |
| 05/28/1999 | 1999002-02 | Pri: OPS Sec: | NRC | NCV | Pri: 1A Sec: Ter: | FAILURE TO MEET RHR SERVICE WATER SYSTEM DISCHARGE TEMPERATURE LIMITATION During shutdown cooling lineup checks for the Unit 2 refueling outage, precautions intended to control temperature on the common service water discharge piping of the residual heat removal heat exchangers were not followed by operators. However, the design temperature of the piping was not exceeded. |
| Dockets Discussed: 05000260 Browns Ferry 2 | | | | | | |

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|--|---------|--------------------------------|-----|------|---|---|
| 05/01/1999 | 1999002 | Pri: OPS Sec: | NRC | POS | Pri: 1A Sec: Ter: | Operator Performance Operator performance in support of the Unit 2 refueling outage was acceptable. Prior to the outage, when a high pressure coolant injection (HPCI) actuation logic circuit wire was found loose, the operators conservatively declared the system inoperable and promptly reported the event to the NRC pursuant to 10 CFR 50.72. |
| Dockets Discussed: 05000260 Browns Ferry 2 | | | | | | |
| 05/01/1999 | 1999002 | Pri: OPS Sec: | NRC | POS | Pri: 1A Sec: Ter: | The Unit 2 Refueling Outage The Unit 2 refueling outage was well-planned and executed, notwithstanding unexpected emergent work. Coordination and communications between plant departments was excellent and was an essential contributor to the timely implementation of the outage schedule. |
| Dockets Discussed: 05000260 Browns Ferry 2 | | | | | | |
| 05/01/1999 | 1999002 | Pri: OPS Sec: | NRC | POS | Pri: 1B Sec: Ter: | Operator Response to Recirculation Pump Motor-Generator Failure Proper plant conditions were established to minimize the impact of a plant transient prior to troubleshooting voltage fluctuations on the 3A recirculation pump motor-generator (MG) voltage regulator. Operators responded well to the transient and no problems were identified with the transition to single loop operation. |
| Dockets Discussed: 05000296 Browns Ferry 3 | | | | | | |
| 03/20/1999 | 1999001 | Pri: OPS Sec: | NRC | POS | Pri: 1A Sec: 1B Ter: | Performance of Control Room Shift Personnel Control room shift personnel continued to perform professionally and with an emphasis on safety. For example, the operators took timely action to isolate a small ASME Code Class 2 boundary leak in the Unit 2 reactor core isolation cooling steam throttle valve body. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 03/20/1999 | 1999001 | Pri: OPS Sec: | NRC | STR | Pri: 1B Sec: 3A Ter: | Operator Response The operators responded conservatively and appropriately to the failures associated with the standby gas treatment system, which resulted in entry into Technical Specification 3.0.3 and the commencement of a shutdown of both Units 2 and 3. Engineering and Maintenance support of the troubleshooting and correction of the causes of the failures was effective. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 03/20/1999 | 1999001 | Pri: OPS Sec: | NRC | STR | Pri: 1C Sec: Ter: | Fuel Receipt Inspections During fuel receipt inspection activities for Unit 2, the licensee's team demonstrated excellent teamwork and attention to detail. A missing fuel rod spring was identified by the team which could have been overlooked. This was the second time the team identified such a discrepancy. In 1998, on Unit 3, an improperly fastened partial length rod was identified. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |

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|--|------------|----------------------------------|----------|--------|---|---|
| 03/05/1999 | 1998009-01 | Pri: OPS Sec: | NRC | VIO IV | Pri: 1C Sec: Ter: | Inadequate Instrument Checks and Observations Procedure. Procedure 2/3-SR-2 was not adequately established or maintained to ensure that TS surveillance requirements were met, in that the licensee's methodology for calculating unidentified reactor coolant system leakage in Table 1.2 of the procedure resulted in a leak rate that was averaged over the previous 24-hour period in lieu of the required frequency of 12 hours; procedural steps for performing checks on the 2-out-of-4 Voter channels of the Average Power Range Monitors were not established in plant procedures; and Procedure 2/3-SR-2 was not adequate to cover TS-required surveillance checks for reactor vessel water level narrow range instruments when the plant was in Modes 4 and 5. |
| Dockets Discussed: 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 02/06/1999 | 1998009 | Pri: OPS Sec: | NRC | POS | Pri: 1A Sec: 1C Ter: | Plant Operators The operators continued to demonstrate good professionalism, conservatism, and communications in control of the plant. The operators demonstrated a good questioning perspective by identifying the control room emergency ventilation (CREV) surveillance procedure inadequacy and its effect on the plant. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 01/08/2000 | 1999008-02 | Pri: MAINT Sec: | NRC | NCV | Pri: 2B Sec: 3A Ter: | FAILURE TO MAINTAIN AN ADEQUATE PROCEDURE The licensee demonstrated that multiple barriers to failure could be broken in the work order process with a resultant inadvertent loss of safety function. Such was the case with the Unit 2 HPCI system as repeated inattention to detail prevailed after a drawing from the incorrect unit was included in a work instruction package. An NCV was identified for failure to maintain adequate instructions for safety-related work. |
| Dockets Discussed: 05000260 Browns Ferry 2 | | | | | | |
| 11/27/1999 | 1999007 | Pri: MAINT Sec: | NRC | NEG | Pri: 2A Sec: 2B Ter: | Drywell Leakage Detection Equipment The licensee has not been successful in resolving long-standing problems affecting the accuracy of drywell leakage detection equipment. |
| Dockets Discussed: 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 11/27/1999 | 1999007 | Pri: MAINT Sec: | NRC | POS | Pri: 1A Sec: Ter: | Surveillance Testing The licensee met regulatory requirements while performing surveillance tests. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 10/16/1999 | 1999006 | Pri: MAINT Sec: | Licensee | NEG | Pri: 1A Sec: 3C Ter: | Operator Inattention to Detail The operators performing the SLC functional test demonstrated poor attention to detail in shutting a water supply valve prematurely and by throttling the wrong instrument isolation valve. |
| Dockets Discussed: 05000260 Browns Ferry 2 | | | | | | |

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| 10/16/1999 | 1999006 | Pri: MAINT Sec: | NRC | POS | Pri: 2B Sec: Ter: | Maintenance Activities Observed maintenance activities were conducted in a satisfactory manner and regulatory requirements were met. |
| Dockets Discussed: 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 09/04/1999 | 1999005 | Pri: MAINT Sec: | NRC | POS | Pri: 3A Sec: Ter: | Maintenance Work Activities Observed maintenance work activities were performed in a professional manner. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 09/04/1999 | 1999005 | Pri: MAINT Sec: | NRC | POS | Pri: 3A Sec: 3B Ter: | High Risk Main Turbine Control Troubleshooting The licensee's staff demonstrated good coordination, communication, and attention to detail while performing high risk main turbine control troubleshooting. |
| Dockets Discussed: 05000260 Browns Ferry 2 | | | | | | |
| 09/04/1999 | 1999005 | Pri: MAINT Sec: ENG | NRC | POS | Pri: 2A Sec: 2B Ter: | Reactor Core Isolation Cooling Turbine Trip/Throttle Valve Troubleshooting Good engineering direction of troubleshooting and good maintenance support of repair activities were observed during resolution of a reactor core isolation cooling turbine trip/throttle valve failure to trip. |
| Dockets Discussed: 05000260 Browns Ferry 2 | | | | | | |
| 07/24/1999 | 1999004 | Pri: MAINT Sec: | NRC | POS | Pri: 3A Sec: 2B Ter: | MAINTENANCE AND SURVEILLANCE ACTIVITIES Maintenance and surveillance activities observed during this inspection period were conducted adequately, in a professional manner, with emphasis on self-checking and accurate communications. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 07/24/1999 | 1999004-02 | Pri: MAINT Sec: | Licensee | NCV | Pri: 3A Sec: 3B Ter: | Failure to Properly Install HPCI Relay Contact Inhibits This NCV was identified for failure to follow a surveillance procedure. A Maintenance technician did not utilize a referenced illustration intended to assure that the correct relay contacts were inhibited for an ESF trip unit functional test. Consequently, an error was made resulting in an inadvertent isolation of the HPCI system steam supply. |
| Dockets Discussed: 05000260 Browns Ferry 2 | | | | | | |

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| 07/24/1999 | 1999004-03 | Pri: MAINT Sec: | NRC | NCV | Pri: 2B Sec: Ter: | FAILURE TO MAINTAIN AND IMPLEMENT SAFETY-RELATED PROCEDURE This NCV was identified for failure to maintain and implement a safety-related calibration procedure. The procedure could not be conducted as written. Plant personnel should have stopped and corrected errors in the procedure prior to its implementation. |
| Dockets Discussed: 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 07/24/1999 | 1999004-04 | Pri: MAINT Sec: | Licensee | NCV | Pri: 1A Sec: 2B Ter: 3A | FAILURE TO CONDUCT PRIMARY CONTAINMENT OXYGEN CONCENTRATION TS SURVEILLANCE This event was the result of a lack of tracking and turnover communication related to a failed oxygen sample pump on the 3B hydrogen/oxygen analyzer on Unit 3, and water present in the sample lines for the 2B hydrogen/oxygen analyzer on Unit 2. The licensee reported this problem in Licensee Event Report (LER) 50-260/1999-007-000. |
| Dockets Discussed: 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 06/12/1999 | 1999003-02 | Pri: MAINT Sec: | NRC | NCV | Pri: 3B Sec: 3A Ter: | INADEQUATE TEST CONTROL OF HYDRAULIC SNUBBERS. As a result of the licensee's failure to provide sufficient technical guidance, TRM surveillance testing for several Unit 2 and Unit 3 Bergen-Paterson Type HSSA-3 hydraulic snubbers was not properly performed. However, the improperly tested snubbers did not result in any loss of system safety function. In addition, during snubber retesting, the inspectors identified incorrect operator interpretation and administration of TRM LCOs for snubbers removed for testing. |
| Dockets Discussed: 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 05/28/1999 | 1999002-03 | Pri: MAINT Sec: | NRC | NCV | Pri: 3A Sec: 2B Ter: | FAILURE TO FOLLOW HYDRAULIC SNUBBER FUNCTIONAL TEST INSTRUCTIONS During review of periodic surveillance functional testing and maintenance of system hydraulic snubbers during the Unit 2 outage, as-left acceptance criteria were exceeded for a residual heat removal system snubber. However, the snubber was signed off as satisfactory, based on inappropriate, undocumented evaluation. |
| Dockets Discussed: 05000260 Browns Ferry 2 | | | | | | |
| 05/01/1999 | 1999002 | Pri: MAINT Sec: | NRC | POS | Pri: 2B Sec: Ter: | Surveillance Testing Performance Surveillance tests observed during the inspection period were generally performed in a professional and safe manner. Good coordination and communications were demonstrated during the C diesel generator emergency load acceptance test. This complex test required the coordination of numerous personnel in different plant areas to perform plant manipulations and gather test data. The evolution was completed without problems. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 05/01/1999 | 1999002 | Pri: MAINT Sec: | NRC | POS | Pri: 2B Sec: 3A Ter: | Inservice Inspection Activities Inservice inspection activities observed were performed in a thorough manner by knowledgeable examiners using approved procedures. |
| Dockets Discussed: 05000260 Browns Ferry 2 | | | | | | |

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| 05/01/1999 | 1999002 | Pri: MAINT Sec: | NRC | POS | Pri: 3A Sec: 2B Ter: | Conduct of Maintenance Work activities observed were conducted in a well-planned and professional manner. Workers were familiar with the assigned tasks. Engineering support of the maintenance, where applicable, was good. The engineers frequently monitored the work and were knowledgeable of the equipment. Proper radiological controls were maintained, where required. |
| Dockets Discussed: 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 04/15/1999 | 1999001-01 | Pri: MAINT Sec: | Licensee | NCV | Pri: 1C Sec: 3A Ter: | INADEQUATE SURVEILLANCE PROCEDURE The surveillance procedure for performing CREV system flow rate and filter testing was inadequate, in that complying with the procedure as written resulted in entering TS 3.0.3, which requires a plant shutdown. Both trains of CREV were inoperable for approximately 11 hours. |
| Dockets Discussed: 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 04/15/1999 | 1999001-02 | Pri: MAINT Sec: | Licensee | NCV | Pri: 1A Sec: Ter: | FAILURE TO FOLLOW SURVEILLANCE PROCEDURE. Incomplete communications between Operations and Maintenance personnel caused the failure to promptly declare the shutdown board 3EB battery inoperable. Maintenance personnel failed to follow the procedure which required that they immediately notify the US at the time of the failure. The inspectors concluded that the lack of detailed questioning on the part of the US was a contributing factor. |
| Dockets Discussed: 05000296 Browns Ferry 3 | | | | | | |
| 03/20/1999 | 1999001 | Pri: MAINT Sec: | NRC | POS | Pri: 3A Sec: 3B Ter: | Observed Work Activities Work activities observed during the inspection period were conducted in a professional manner. Workers demonstrated competence in their assigned tasks and proper work instructions and documentation were observed. In general, radiological controls observed during the inspection period were effective and consistent with licensee expectations. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 02/06/1999 | 1998009 | Pri: MAINT Sec: | NRC | POS | Pri: 3A Sec: 1C Ter: | Surveillance Testing Surveillance testing was performed satisfactorily. The licensee's response to a failed hydraulic valve operator during high pressure coolant injection system testing was prompt and well-executed. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 02/06/1999 | 1998009 | Pri: MAINT Sec: | NRC | POS | Pri: 3A Sec: 2B Ter: | Performance of Work Activities Observed work activities were performed in a professional manner. Good self-checking and engineering support were noted during implementation of a temporary alteration that bypassed a failed rod position indication switch. The temporary alteration package and engineering drawings were actively checked to ensure that the work was properly performed. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |

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| 01/08/2000 | 1999008 | Pri: ENG Sec: | NRC | POS | Pri: 4B Sec: 4C Ter: | Engineering Support Engineering support of the corrective action program was good. Site engineering personnel performed extent-of-condition reviews; root cause analysis, and apparent cause evaluations of plant problems in support of both maintenance and operations Engineering support activities. Corrective action plans developed were technically adequate and provided reasonable assurance for effective control of the identified deficiencies. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 11/27/1999 | 1999007 | Pri: ENG Sec: | NRC | POS | Pri: 4B Sec: 4C Ter: 4A | Y2K Readiness Program The Browns Ferry Year 2000 (Y2K) readiness programs had been satisfactorily completed. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 11/27/1999 | 1999007-01 | Pri: ENG Sec: | NRC | NCV | Pri: 4C Sec: 4B Ter: | BLOCKING AN EECW VALVE OPEN WITHOUT A SAFETY EVALUATION While establishing a clearance for Unit 1 maintenance, operators blocked an emergency equipment cooling water (EECW) crosstie valve open. While this action was a change to the facility as described in the FSAR it was not supported by a safety evaluation, as required by 10 CFR 50.59. |
| Dockets Discussed: 05000259 Browns Ferry 1 | | | | | | |
| 10/16/1999 | 1999006 | Pri: ENG Sec: | NRC | POS | Pri: 4B Sec: 5B Ter: | Power Suppression Testing Licensee operators, engineers, and chemists performed power suppression testing and analysis of detected fuel leaks in a professional manner. |
| Dockets Discussed: 05000296 Browns Ferry 3 | | | | | | |
| 05/28/1999 | 1999002-04 | Pri: ENG Sec: | NRC | NCV | Pri: 4C Sec: Ter: | FAILURE TO PERFORM A SAFETY EVALUATION The licensee failed to perform a safety evaluation in support of work/testing on the HPCI system with the system being operable, as required by plant procedures and 10 CFR 50.59. |
| Dockets Discussed: 05000260 Browns Ferry 2 | | | | | | |
| 05/01/1999 | 1999002 | Pri: ENG Sec: | NRC | NEG | Pri: 4A Sec: Ter: | Modeling Assumptions for Turbine Trip Transients The modeling assumptions for most turbine trip transients in the licensee's core reload analysis, General Electric Standard Application for Reactor Fuel (GESTAR II), NEDE-24011-P-A, incorrectly assumed that the associated transient pressure response was controlled by the turbine stop valves vice the turbine control valves. However, the operating limit minimum critical power ratio was not affected for the current operating cycles of Units 2 and 3. |
| Dockets Discussed: 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |

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| 04/15/1999 | 1999001-03 | Pri: ENG Sec: | Licensee | NCV | Pri: 1A Sec: 1C Ter: 2A | FAILURE TO PERFORM A SAFETY EVALUATION The licensee identified that a plant alteration was implemented on FSAR-described EHC circuits associated with the Units 2 and 3 stop valves without first performing a written safety evaluation as required by 10 CFR 50.59. |
| Dockets Discussed: 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 04/15/1999 | 1999001-04 | Pri: ENG Sec: | Licensee | NCV | Pri: 4B Sec: 1C Ter: | FAILURE TO ESTABLISH PROCEDURES TO PROPERLY TEST CREV SYSTEM LOGIC. Procedures were not established to perform logic system functional testing of the CREV system low air flow trip circuitry. The licensee identified additional examples of CREV system testing inadequacies. |
| Dockets Discussed: 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 03/05/1999 | 1998009-05 | Pri: ENG Sec: | NRC | NCV | Pri: 4A Sec: Ter: | Failure to Maintain Proper Controls Over CAD Design. During a review for the Thermal Power Uprate Program, the licensee identified a non-conservative calculation for the amount of nitrogen required to meet the seven-day design basis supply in the containment atmospheric dilution (CAD) tanks. The amount of nitrogen required by the TS would not be sufficient for seven days of post-loss-of-coolant-accident (LOCA) operation, as required by the design basis. Immediate corrective actions were implemented to maintain the tank levels above 95% to ensure the design basis requirements were met. The licensee took prompt actions to repair the tanks and restore the vacuum to an acceptable value. Technical Instruction 0-TI-384, CAD Tank Boil-Off Determination, was issued to address the nitrogen boil-off rate in a formal manner |
| Dockets Discussed: 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 11/27/1999 | 1999007 | Pri: PLTSUP Sec: | NRC | POS | Pri: 1A Sec: 1C Ter: | Radioactive Material Shipping Program The licensee's program for shipping radioactive material had been effectively implemented and was in accordance with NRC and Department of Transportation regulations. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 11/27/1999 | 1999007 | Pri: PLTSUP Sec: | NRC | POS | Pri: 1A Sec: 4C Ter: | Liquid and Gaseous Radioactive Effluent Control Program The licensee had maintained an effective program for the control of liquid and gaseous radioactive effluents from the plant. The radiation doses from those releases were a small percentage of regulatory limits. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |

United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

By Primary Functional Area

Region II

BROWNS FERRY

| Date | Source | Functional Area | ID | Type | Template Codes | Item Title Item Description |
|--|------------|-----------------------------------|-----|------|--|--|
| 11/27/1999 | 1999007 | Pri: PLTSUP Sec: | NRC | POS | Pri: 1A Sec: 4C Ter: 2A | Radiological Environmental Monitoring Program The licensee complied with the sampling, analytical and reporting requirements for the radiological environmental monitoring program; the environmental sampling equipment was well-maintained; and the monitoring program was effectively implemented. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 10/16/1999 | 1999006 | Pri: PLTSUP Sec: | NRC | POS | Pri: 1C Sec: Ter: | Security Licensee security officers were attentive to their posts and demonstrated alertness when they locked the West Gate turnstiles as a licensee employee prematurely crossed the "red line," thus preventing concurrent access through a turnstile that controlled access to the protected area. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 10/16/1999 | 1999006-01 | Pri: PLTSUP Sec: | NRC | NCV | Pri: 3A Sec: Ter: | FAILURE TO PERFORM SLC CHEMISTRY SURVEILLANCE REQUIREMENT The licensee failed to perform TS Surveillance Requirement (SR) 3.1.7.9, to verify the boron enrichment of the Unit 3 standby liquid control system tank. This failure also exceeded the allowed surveillance extension of six hours and the TS 3.1.7 action statement of eight hours. |
| Dockets Discussed: 05000296 Browns Ferry 3 | | | | | | |
| 07/24/1999 | 1999004 | Pri: PLTSUP Sec: | NRC | POS | Pri: 1A Sec: Ter: | SECURITY PERFORMANCE Security personnel were observed to have met their responsibilities in a professional manner. They were alert and attentive to their posts. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 06/12/1999 | 1999003 | Pri: PLTSUP Sec: | NRC | NEG | Pri: 1C Sec: Ter: | Emergency Exercise Areas for Improvement Areas for improvement were: (1) proper adherence to procedural requirements; (2) consistently updating the Technical Assessment Team regarding plant repair priorities; and (3) improving the performance of the technical support groups in the Central Emergency Control Center. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |

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By Primary Functional Area

Region II

BROWNS FERRY

| Date | Source | Functional Area | ID | Type | Template Codes | Item Title Item Description |
|--|---------|-----------------------------------|-----|------|---|---|
| 06/12/1999 | 1999003 | Pri: PLTSUP Sec: | NRC | NEG | Pri: 5A Sec: Ter: | Erroneous Protective Action Recommendation The second of the licensee's two protective action recommendations was erroneous, and constituted a failure to meet one of the established emergency preparedness exercise objectives. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 06/12/1999 | 1999003 | Pri: PLTSUP Sec: | NRC | POS | Pri: 1C Sec: Ter: | Personnel Exposure Records Reconciliation Project Appropriate and effective corrective actions were being taken to resolve problems in the licensee's radiation exposure records systems identified by the Personnel Exposure Records Reconciliation Project. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 06/12/1999 | 1999003 | Pri: PLTSUP Sec: | NRC | POS | Pri: 1C Sec: Ter: | 1999 Biennial Emergency Preparedness Exercise The licensee's submittals of the scope and objectives, as well as the scenario package, were timely and appropriate for the 1999 biennial emergency preparedness exercise. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 06/12/1999 | 1999003 | Pri: PLTSUP Sec: | NRC | POS | Pri: 4C Sec: 3B Ter: | Emergency Response Capabilities The licensee's overall performance in responding to the simulated emergency was satisfactory, and the exercise was a successful demonstration of the licensee's emergency response capabilities. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 05/01/1999 | 1999002 | Pri: PLTSUP Sec: | NRC | POS | Pri: 3C Sec: Ter: | Monitoring and Control of Personnel Radiation Exposure The licensee properly monitored and controlled personnel radiation exposure during the Unit 2 Cycle 10 refueling outage and posted area radiological conditions in accordance with 10 CFR Part 20. |
| Dockets Discussed: 05000260 Browns Ferry 2 | | | | | | |
| 05/01/1999 | 1999002 | Pri: PLTSUP Sec: | NRC | POS | Pri: 3C Sec: Ter: | ALARA Goals The licensee was generally successful in meeting established ALARA goals, in that eight of ten goals were met during 1994 through 1998. |
| Dockets Discussed: 05000260 Browns Ferry 2 | | | | | | |

United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

By Primary Functional Area

Region II

BROWNS FERRY

| Date | Source | Functional Area | ID | Type | Template Codes | Item Title Item Description |
|--|---------|-----------------------------------|-----|------|--|--|
| 03/20/1999 | 1999001 | Pri: PLTSUP Sec: | NRC | POS | Pri: 1C Sec: Ter: | Training of Radiation Protection and Chemistry Personnel Training was provided to Radiation Protection and Chemistry personnel in accordance with the descriptions delineated in the licensee's radiation protection, chemistry, and nuclear training manuals. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 03/20/1999 | 1999001 | Pri: PLTSUP Sec: | NRC | POS | Pri: 1C Sec: Ter: | Gaseous Effluent Analysis Program The licensee had established and implemented an adequate program for assuring the quality of gaseous effluent analyses. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 03/20/1999 | 1999001 | Pri: PLTSUP Sec: | NRC | POS | Pri: 1C Sec: 3A Ter: 4C | Access Authorization Program The licensee was appropriately following the guidance provided by Regulatory Guide 5.66 and Nuclear Management and Resources Council (NUMARC) 89-01 to implement the access authorization program. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 03/20/1999 | 1999001 | Pri: PLTSUP Sec: | NRC | POS | Pri: 1C Sec: 3B Ter: 5B | Safeguards Events The licensee appropriately analyzed, tracked, resolved, and documented safeguards events in the security event logs in accordance with regulatory requirements. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 03/20/1999 | 1999001 | Pri: PLTSUP Sec: | NRC | POS | Pri: 1C Sec: 3B Ter: 5B | Qualifications of Security Officers Security officers were appropriately trained and qualified to perform their duties in accordance with the licensee's Training and Qualification Plan. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |

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By Primary Functional Area

Region II

BROWNS FERRY

| Date | Source | Functional Area | ID | Type | Template Codes | Item Title Item Description |
|--|---------|-----------------------------------|-----|------|--|---|
| 03/20/1999 | 1999001 | Pri: PLTSUP Sec: | NRC | POS | Pri: 2A Sec: Ter: | Availability of Continuous Air Radiation Monitors Availability of continuous air radiation monitoring systems has improved; however, the Unit 2 monitors were not meeting established licensee performance goals due to a lack of proper attention on corrective maintenance. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 03/20/1999 | 1999001 | Pri: PLTSUP Sec: | NRC | POS | Pri: 2B Sec: Ter: | Emergency Preparedness Program The licensee's Emergency Preparedness Program was being maintained in a state of full operational readiness. Changes to the program since December 1997 were consistent with the licensee's Emergency Plan and NRC requirements. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 03/20/1999 | 1999001 | Pri: PLTSUP Sec: | NRC | POS | Pri: 2B Sec: 4C Ter: | Physical Security/Contingency Plan Changes The Physical Security/Contingency Plan changes did not decrease the effectiveness of the Physical Security/Contingency Plan. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 03/20/1999 | 1999001 | Pri: PLTSUP Sec: | NRC | STR | Pri: 1C Sec: 4C Ter: 5B | Security Audits Licensee-conducted audits were thorough, complete, and effective in terms of uncovering weaknesses in the security system, procedures, and practices. The corrective actions taken were technically adequate and performed in a timely manner. The security audit/self-assessment program continues to be a strength. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |
| 02/06/1999 | 1998009 | Pri: PLTSUP Sec: | NRC | POS | Pri: 1A Sec: 1C Ter: | Radiation Controls The licensee continued to demonstrate good radiation controls. |
| Dockets Discussed: 05000259 Browns Ferry 1 05000260 Browns Ferry 2 05000296 Browns Ferry 3 | | | | | | |

United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

By Primary Functional Area

Region II

BROWNS FERRY

| Date | Source | Functional Area | ID | Type | Template Codes | Item Title Item Description |
|---------------------------|---------|-----------------------------------|-----|------|---|---|
| 02/06/1999 | 1998009 | Pri: PLTSUP Sec: | NRC | POS | Pri: 1A Sec: 1C Ter: | Plant Security Plant Security continued to be well-implemented. |
| Dockets Discussed: | | | | | | |
| 05000259 Browns Ferry 1 | | | | | | |
| 05000260 Browns Ferry 2 | | | | | | |
| 05000296 Browns Ferry 3 | | | | | | |

United States Nuclear Regulatory Commission PLANT ISSUE MATRIX

By Primary Functional Area

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 |
| SGL | 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.