UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

January 30, 2005

Southern Nuclear Operating Company, Inc.
ATTN: D. E. Grissette, Jr.
Vice President - Vogtle Project
P. O. Box 1295
Birmingham, AL 35201-1295

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT - NRC INTEGRATED INSPECTION REPORT 05000424/2005005 AND 05000425/2005005

Dear Mr. Grissette:

On December 31, 2005, the U. S. Nuclear Regulatory Commission (NRC) completed an inspection at your Vogtle Electric Generating Plant (VEGP), Units 1 and 2. The enclosed integrated inspection report documents the inspection results, which were discussed on January 11, 2006, with Mr. T. Tynan and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel. Based on the results of this inspection, no findings of significance were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at *http://www.nrc.gov/reading-rm/adams.html* (the Public Electronic Reading Room).

Sincerely,

/RA/

Malcolm T. Widmann, Chief
Reactor Projects Branch 2
Division of Reactor Projects

Docket Nos.: 50-424, 50-425
License Nos.: NPF-68, NPF-81

Enclosure: Inspection Report 05000424/2005005
and 05000425/2005005
w/Attachment: Supplemental Information

cc w/encl: (See page 2)

cc w/encl:
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ADAMS: ☐ Yes ACCESSION NUMBER:_____

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NAME	GMccoy	BAnderson	DSimpkins	JHickey	DRose	RBaldwin	JKreh
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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos.:	50-424, 50-425
License Nos.:	NPF-68, NPF-81
Report Nos.:	05000424/2005005 and 05000425/2005005
Licensee:	Southern Nuclear Operating Company, Inc.
Facility:	Vogtle Electric Generating Plant, Units 1 and 2
Location:	7821 River Road Waynesboro, GA 30830
Dates:	October 1, 2005 through December 31, 2005
Inspectors:	G. McCoy, Senior (Sr.) Resident Inspector B. Anderson, Resident Inspector D. Simpkins, Sr. Resident Inspector, Edwin I. Hatch Nuclear Plant J. Hickey, Resident Inspector, Edwin I. Hatch Nuclear Plant S. Rose, Sr. Operations Engineer (Section 1R11) R. Baldwin, Sr. Operations Engineer (Section 1R11) J. Kreh, Emergency Preparedness Inspector (Section 4OA1)
Approved by:	Malcolm T. Widmann, Chief Reactor Projects Branch 2 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000424/2005-005, 05000425/2005-005; 10/01/2005 - 12/31/2005; Vogtle Electric Generating Plant, Units 1 and 2; routine integrated report.

The report covered a three-month period of inspection by resident inspectors, operations engineers, and an emergency preparedness inspector. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. NRC-Identified and Self-Revealing Findings

No findings of significance were identified.

B. Licensee-Identified Violations

None.

REPORT DETAILS

Summary of Plant Status

Unit 1 operated at rated thermal power (RTP) until October 17 when the unit tripped due to a feedwater regulating valve failing shut. The unit was restarted on October 19 and operated at full RTP for the remainder of this report period.

Unit 2 started the inspection period in a refueling outage. The unit was restarted on October 14 and attained RTP on October 18. On December 9, the unit was shutdown to repair a failed primary boundary weld. The unit was restarted on December 18 and operated at full RTP for the remainder of this report period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R01 Adverse Weather Protection

a. Inspection Scope

Seasonal Readiness Review. The inspectors performed a walkdown of the following two systems to verify they would remain functional during low temperature conditions. The inspectors reviewed preventive maintenance activities associated with heat tracing and freeze protection systems to verify they were appropriately scheduled and completed prior to the onset of cold weather. The inspectors reviewed compensatory actions to verify they were implemented for degraded or inoperable heat trace and freeze protection equipment. Additionally, the inspectors reviewed the condition report (CR) database to verify that adverse weather related items were being identified and appropriately resolved. Documents reviewed are listed in the Attachment.

- Unit 1 auxiliary feedwater (AFW) system
- Unit 2 safety injection (SI) system

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment

a. Inspection Scope

Partial Walkdown. The inspectors performed partial walkdowns of the following three systems to verify correct system alignment. The inspectors checked for correct valve and electrical power alignments by comparing positions of valves, switches, and breakers to the procedures and drawings listed in the Attachment. Additionally, the inspectors reviewed the CR database to verify that equipment alignment problems were being identified and appropriately resolved.

- Unit 1 train A emergency diesel generator (EDG) during EDG train B maintenance
- Unit 2 train B motor driven auxiliary feedwater (MDAFW) and turbine driven auxiliary feedwater (TDAFW) during EDG train A maintenance
- Unit 1 train A auxiliary component cooling water (ACCW) system during train B ACCW maintenance

Complete System Walkdown. The inspectors performed a complete walkdown of the Unit 1 nuclear service cooling water (NSCW) system. The inspectors performed a detailed check of valve positions, electrical breaker positions, and operating switch positions to evaluate the operability of the redundant trains or components by comparing the required position in the system operating procedure to the actual position. The inspectors also interviewed personnel, reviewed control room logs and CRs to verify that alignment and equipment discrepancies were being identified and appropriately resolved. The documents reviewed are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R05 Fire Protection

a. Inspection Scope

The inspectors walked down the following nine plant areas to verify the licensee was controlling combustible materials and ignition sources as required by procedures 92015-C, Use, Control, and Storage of Flammable/Combustible Materials, and 92020-C, Control of Ignition Sources. The inspectors assessed the observable condition of fire detection, suppression, and protection systems and reviewed the licensee's fire protection Limiting Condition for Operation log and CR database to verify that the corrective actions for degraded equipment were identified and appropriately prioritized. The inspectors also reviewed the licensee's fire protection program to verify the requirements of Updated Final Safety Analysis Report (UFSAR) Section 9.5.1, Fire Protection Program, and Appendix 9A, Fire Hazards Analysis, were met. Documents reviewed are listed in the Attachment.

- Unit 1, train B component cooling water (CCW) pump room
- Unit 1, train A and B remote shutdown panel rooms
- Unit 1, train A and B class 1E 4.16 KV switchgear rooms
- Unit 2, train A and B SI pump rooms
- Unit 2, train B EDG and associated day tank rooms
- Unit 1, train B cable spreading room
- Unit 1, train A ESF chiller and filter rooms
- Unit 2, train B NSCW cooling tower
- Unit 2, train A NSCW cooling tower

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification

a. Inspection Scope

Resident Quarterly Review. The inspectors evaluated operator performance on October 24, 2005 during licensed operator simulator training as described on Dynamic Simulator Scenario DS-10. The simulator scenario covered operator actions resulting from a total loss of ACCW flow resulting in a manual plant trip and a safety injection due to a subsequent loss of coolant accident. Documents reviewed are listed in the Attachment. The inspectors specifically assessed the following areas:

- Correct use of the abnormal and emergency operating procedures
- Ability to identify and implement appropriate actions in accordance with the requirements of the Technical Specifications
- Clarity and formality of communications in accordance with procedure 10000-C, Conduct of Operations
- Proper control board manipulations including critical operator actions
- Quality of supervisory command and control
- Effectiveness of post-evaluation critique

Biennial Requalification Program Inspection. The inspectors reviewed the facility operating history, documentation, interviewed licensee personnel, and observed the administration of simulator operating tests associated with the licensee's operator requalification program to assess the effectiveness of the licensee in implementing requalification requirements of 10 CFR 55. The evaluations were also performed to determine if the licensee effectively implemented operator requalification guidelines established in NUREG-1021, Operator Licensing Examination Standards for Power Reactors, and Inspection Procedure (IP) 71111.11, Licensed Operator Requalification Program. The inspectors also reviewed and evaluated the licensee's simulation facility for adequacy for use in operator licensing examinations and observed two operator crews during the performance of the operating tests. Documentation reviewed included written examinations, Job Performance Measures (JPMs), simulator scenarios, licensee procedures, on-shift records, simulator modification request records and performance test records, the feedback process, licensed operator qualification records, remediation plans, watchstanding, and medical records. The records were inspected against the criteria listed in IP 71111.11. Documents reviewed during the inspection are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness

a. Inspection Scope

The inspectors reviewed the following two risk significant systems to assess the effectiveness of the licensee's handling of equipment performance problems and to verify that the licensee's maintenance efforts met the requirements of 10 CFR 50.65 (the Maintenance Rule) and licensee procedure 50028-C, Engineering Maintenance Rule Implementation. The reviews included adequacy of the licensee's failure characterization, establishment of performance criteria or 50.65 (a)(1) performance goals, and adequacy of corrective actions. Other documents reviewed during this inspection included system health reports, the maintenance rule database, and maintenance work orders (MWOs). Also, the inspectors interviewed system engineers and the maintenance rule coordinator to assess the accuracy of identified performance deficiencies and extent of condition. Documents reviewed are listed in the Attachment.

- 125 Volts Direct Current (VDC) battery chargers
- Residual Heat Removal (RHR) system

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

The inspectors reviewed the following five risk significant and emergent work activities to verify plant risk was properly assessed by the licensee prior to conducting the work. The inspectors reviewed risk assessments and risk management controls implemented for these activities to verify they were completed in accordance with procedure 00354-C, Maintenance Scheduling, and 10 CFR 50.65(a)(4). The inspectors also reviewed the CR database to verify that maintenance risk assessment problems were being identified and appropriately resolved.

- Unit 1 train A sequencer failure
- Unit 2 train A CCW outage
- Unit 2 train B NSCW fan replacement
- Unit 2 slave relay tests
- Risk evaluation to allow entering Mode 2 for startup following the Unit 2 forced outage

b. Findings

No findings of significance were identified.

1R14 Operator Performance During Non-Routine Plant Evolutions

a. Inspection Scope

For the following two non-routine plant evolutions, the inspectors reviewed the operating crew's performance, operator logs, control board indications, and plant computer data to verify that operator response was in accordance with the associated plant procedures. Documents reviewed are listed in the Attachment.

- Unit 1 reactor trip after the failure of 1FV0510, Loop 2 Main Feed Regulating Valve
- Unit 2 reactor shutdown and cooldown to repair leak near 2HV8701B, A train RHR upstream suction isolation valve from Loop 1 hot leg

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the following four evaluations to verify they met the requirements of Nuclear Management Procedure (NMP)-GM-002, Corrective Action Program, and NMP-002-GL02, Corrective Action Program Details and Expectations Guideline. This scope included a review of the technical adequacy of the evaluations, the adequacy of compensatory measures, and the impact on continued plant operation.

- CR 2005100831, Overtorque condition on 2FV5155, AFW miniflow control valve
- CR 2005110040, Failure of 2A sequencer
- CR 2005108771, Erratic bearing temperature indication on the 2B MDAFW pump
- CR 2005109313, Leak on seal table flux thimble J-10

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications

a. Inspection Scope

The inspectors reviewed the following Design Change Package (DCP) to verify the requirements of procedure 58007-C, Design Change Packages, were being met. The inspectors reviewed the modification to verify it did not degrade the system design bases, licensing bases, or performance capability, and that plant risk was not increased unnecessarily during implementation of the modification.

- DCP 2009006401, Diesel Generator K1 and FF Relay Replacement

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing

a. Inspection Scope

The inspectors either observed post-maintenance testing or reviewed the test results for the following six maintenance activities to verify that the testing met the requirements of procedure 29401-C, Work Order Functional Tests, for ensuring equipment operability and functional capability was restored. The inspectors also reviewed the test procedures to verify the acceptance criteria was sufficient to meet the Technical Specifications (TS) operability requirements.

- MWO 20533399, Failure of plant protection card 2TY-421A
- MWO 20495051, Unit 2 train B AFW pump motor replacement
- DCP 20190034, TDAFW turbine speed control replacement
- MWO 20201282, Diesel generator K1 and FF relay replacement
- MWO 20538861, Repair of Unit 2 train A NSCW fan 1
- MWO 20534901, Repair of 2PV3000

b. Findings

No findings of significance were identified.

1R20 Refueling and Outage Activities

a. Inspection Scope

Refueling Outage. The inspectors performed the inspection activities described below for the Unit 2 refueling outage that began on September 17, 2005.

The inspectors confirmed that, when the licensee removed equipment from service, the licensee maintained defense-in-depth commensurate with the outage risk control plan for key safety functions and applicable technical specifications and that configuration changes due to emergent work and unexpected conditions were controlled in accordance with the outage risk control plan. During the outage, the inspectors:

- Reviewed reactor coolant system (RCS) pressure, level, and temperature instruments to verify that the instruments provided accurate indication and that allowances were made for instrumentation errors.
- Reviewed the status and configuration of electrical systems to verify that those systems met TS requirements and the licensee's outage risk control plan.
- Observed decay heat removal parameters to verify that the system was properly functioning and providing cooling to the core.

- Reviewed system alignments to verify that the flow paths, configurations, and alternative means for inventory addition were consistent with the outage risk plan
- Reviewed selected control room operations to verify that the licensee was controlling reactivity in accordance with the technical specifications.
- Reviewed the outage risk plan to verify that activities, systems, and/or components which could cause unexpected reactivity changes were identified in the outage risk plan and were controlled.
- Observed licensee control of containment penetrations to verify that the requirements of the technical specifications were met.
- Reviewed the licensee's plans for changing plant configurations to verify that technical specifications, license conditions, and other requirements, commitments, and administrative procedure prerequisites were met prior to changing plant configurations.
- Reviewed RCS boundary leakage and the setting of containment integrity.
- Examined the containment prior to reactor startup to verify that debris had not been left which could affect performance of the containment sumps.

Forced Outages. For the two forced outages during the inspection period, the inspectors performed the following inspection activities.

- Reviewed RCS pressure, level, and temperature instruments to verify that the instruments provided accurate indication and that allowances were made for instrumentation errors.
- Reviewed the status and configuration of electrical systems to verify that those systems met TS requirements and the licensee's outage risk control plan.
- Observed decay heat removal parameters to verify that the system was properly functioning and providing cooling to the core.
- Reviewed selected control room operations to verify that the licensee was controlling reactivity in accordance with the technical specifications.
- Reviewed the outage risk plan to verify that activities, systems, and/or components, which could cause unexpected reactivity changes, were identified in the outage risk plan and were controlled.
- Observed licensee control of containment penetrations to verify that the requirements of the technical specifications were met. (Unit 2 only)
- Reviewed the licensee's plans for changing plant configurations to verify that technical specifications, license conditions, and other requirements, commitments, and administrative procedure prerequisites were met prior to changing plant configurations.
- Examined containment prior to reactor startup to verify that debris had not been left which could affect performance of the containment sumps. (Unit 2 only)

The two forced outages are described below. Documents reviewed are listed in the Attachment.

- Unit 1 Main Feedwater Regulating Valve (MFRV) for Loop 2, 1FV0510, failed shut
- Unit 2 shutdown to investigate increased RCS unidentified leakage and repair a failed RHR suction bypass line weld

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors reviewed the following five surveillance test procedures and either observed the testing or reviewed test results to verify that testing was conducted in accordance with the procedures and that the acceptance criteria adequately demonstrated that the equipment was operable. Additionally, the inspectors reviewed the CR database to verify that the licensee had adequately identified and implemented appropriate corrective actions for surveillance test problems.

Surveillance Tests
C 14666-2, train A EDG and engineered safety feature ventilation system (ESFAS) test
C 14667-2, train B EDG and ESFAS test
C 14980B-2, Unit 2 train B EDG operability test

In-Service Test
C 14807-2, MDAFW Pump and Check Valve Inservice and Response Time Test

Containment Isolation Valve Test
C 14210-2, Containment building penetration verification test

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications

a. Inspection Scope

The inspectors evaluated the following two Temporary Modifications (TMs) and associated 10 CFR 50.59 screening against the system design basis documentation and UFSAR to verify that the modifications did not adversely affect the safety functions of important safety systems. Additionally, the inspectors reviewed licensee procedure 00307-C, Temporary Modifications, to verify if the modification was properly developed and implemented.

C TM 20524619, ultrasonic level detection
C TM 20542256, temporary freeze seal to allow repair of 2HV8701B

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation

a. Inspection Scope

The inspectors reviewed Dynamic Scenario #29 and observed the following emergency response activity to verify the licensee was properly classifying emergency events, making the required notifications, and making appropriate protective action recommendations in accordance with procedures 91001-C, Emergency Classification and Implementing Instructions, 91002-C, Emergency Notifications, and 91305-C, Protective Action Guidelines. Additionally, the inspectors reviewed the licensee's critique to verify one was conducted to identify performance weaknesses and improvements.

- On October 25, the licensee conducted a simulator exercise involving a major steam line break and a simultaneous failure of the reactor to automatically trip.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification

a. Inspection Scope

The inspection was conducted in accordance with NRC Inspection Procedure 71151, Performance Indicator Verification. The applicable planning standard 10 CFR 50.9 and NEI 99-02, Regulatory Assessment Performance Indicator Guidelines, Revision 3, were used as reference criteria.

Cornerstone: Emergency Preparedness
- Drill and Exercise Performance (DEP)
- Emergency Response Organization (ERO) Drill Participation
- Alert Notification System (ANS) Reliability

The inspectors reviewed the licensee's procedure for developing the data for the EP PIs. The inspectors examined data reported to the NRC for the period January - June 2005. Procedural guidance for reporting PI information and records used by the licensee to identify potential PI occurrences were also reviewed. The inspectors verified the accuracy of the PI for ERO drill and exercise performance through review of a sample of drill and event records. The inspectors reviewed selected training records to verify the accuracy of the PI for ERO drill participation for personnel assigned to key positions in the ERO. The inspectors verified the accuracy of the PI for ANS reliability

through review of a sample of the licensee's records of periodic system tests. Documents reviewed are listed in the Attachment.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems

.1 Daily Screening of Corrective Action Items

As required by Inspection Procedure 71152, Identification and Resolution of Problems, and in order to help identify repetitive equipment failures or specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the licensee's corrective action program. This review was accomplished by either attending daily screening meetings that briefly discussed major CRs, or accessing the licensee's computerized corrective action database and reviewing each CR that was initiated.

.2 Annual Sample Review

a. Inspection Scope

The inspectors performed a detailed review of the following CR to verify the full extent of the issue was identified, an appropriate evaluation was performed, and appropriate corrective actions were specified and prioritized. The inspectors evaluated the CR against the licensee's corrective action program as delineated in licensee procedure NMP-GM-002, Corrective Action Program, and 10 CFR 50, Appendix B. Documents reviewed are listed in the Attachment.

C CR 2005106877, Failure of the K1 relay on the Unit 2 train B diesel generator

b. Findings and Observations

No findings of significance were identified.

.3 Semi-Annual Trend Review

a. Inspection Scope

As required by Inspection Procedure 71152, Identification and Resolution of Problems, the inspectors performed a review of the licensee's Corrective Action Program (CAP) and associated documents to identify trends, which could indicate the existence of a more significant safety issue. The inspector's review was focused on repetitive equipment issues, but also considered the results of daily inspector CR item screening discussed in section 4OA2.1, licensee trending efforts, and licensee human performance results. The inspector's review nominally considered the six month period of June 2005 through December 2005, although some examples extended beyond

those dates when the scope of the trend warranted. Inspectors also reviewed several CRs associated with operability determinations, which occurred during the period. The inspectors compared and contrasted their results with the results contained in the licensees two latest quarterly trend reports. Corrective actions associated with a sample of the issues identified in the licensee's trend reports were reviewed for adequacy. The inspectors also evaluated the trend reports against the requirements of the licensee's corrective action program as specified in licensee procedure NMP-GM-002, Corrective Action Program, and 10 CFR 50, Appendix B.

b. Findings and Observations

No findings of significance were identified.

4OA3 Event Follow-up

a. Inspection Scope

Unit 1 Reactor Trip. The inspectors reviewed the licensee's actions associated with the reactor trip that occurred on October 17. The inspectors observed plant parameters for mitigating systems and fission product barriers, evaluated performance of systems and operators, and confirmed the proper classification and reporting of the event. Documents reviewed are listed in the Attachment.

b. Findings

No findings of significance were identified.

4OA6 Meetings, Including Exit

On January 11, 2006, the resident inspectors presented the inspection results to Mr. T. Tynan and other members of his staff, who acknowledged the findings. The inspectors confirmed that proprietary information was not provided or examined during the inspection.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel:
R. Brown, Training and Emergency Preparedness Manager
C. Buck, Chemistry Manager
J. Robinson, Operations Manager
K. Dyar, Security Manager
T. Tynan, Nuclear Plant General Manager
I. Kochery, Health Physics Manager
J. Williams, Assistant General Manager - Plant Support
S. Swanson, Engineering Support Manager
R. Dedrickson, Assistant General Manager - Operations

NRC personnel:
M. Widmann, Chief, Region II Reactor Project Branch 2

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

Procedures
11877-1/2, Cold Weather Checklist
11901-1/2, Heat Tracing System Alignment
13901-1/2, Heat Tracing System
50050-C, Heat Tracing Program
CR 2005107217

Section 1R04: Equipment Alignment

Procedures
14980A-1, Diesel Generator 1A Operability Test
11145-1, Diesel Generator Alignment
11146-1, Diesel Generator Fuel Oil Transfer System Alignment
13610-2, Auxiliary Feedwater System
11610-2, Auxiliary Feedwater System Alignment
11716-1, Auxiliary Component Cooling Water System Alignment
13716-1, Auxiliary Component Cooling Water System
11150-1, Nuclear Service Cooling Water System Alignment

Drawings
1X4DB170-1, P&I Diagram Generator System Train A
2X4DB161-1, P&I Diagram Aux Feedwater System Condensate Storage and Degasifier System
2X4DB161-2, P&I Diagram Aux Feedwater System
2X4DB161-3, P&I Diagram Aux Feedwater System Aux Feedwater Pump Turbine Driver
1X4DB138, Aux Component Cooling Water System
1X4DB133-1, 2, P&I Diagram, NCSW System
1X4DB134, P&I Diagram, NCSW System
1X4DB135-1, 2, P&I Diagram, NCSW System
AX4DD300, Plot Plan

1X4DE315, Equipment Location Layout, Unit 1 Aux Bldg level 2
1X4DE316, Equipment Location Layout, Unit 1 AFW Pumphouse and CST
1X4DE317, Equipment Location Layout, Unit 1 Containment, Control and Fuel Handling Bldg, level 1
1X4DE318, Equipment Location Layout, Unit 1 Aux Bldg level 1
1X4DE320, Equipment Location Layout, Unit 1 Containment, Control and Fuel Handling Bldg, level A
1X4DE321, Equipment Location Layout, Unit 1 Aux Bldg level A
1X4DE322, Equipment Location Layout, Unit 1 Containment, Control and Fuel Handling Bldg, level B
1X4DE323, Equipment Location Layout, Unit 1 Aux Bldg level B
1X4DE324, Equipment Location Layout, Unit 1 Aux Bldg level C
1X4DE325, Equipment Location Layout, Unit 1 Aux Bldg level D
1X4DE327, Equipment Location Layout, Unit 1 Diesel Generator Bldg.
1X4DE330, Equipment Location Layout, Unit 1 Diesel Generator Bldg.

Other Documents
Condition Report 2005107781
Work Order 10302403
Caution Tag 1-CA-05-00614

Section 1R05: Fire Protection
Procedures
92732-1, Zone 32, Auxiliary Building - Level B Fire Fighting Preplan
92862-2, Zone 162 Diesel Generator Building Fire Fighting Preplan
92864-2, Zone 164 Diesel Generator Building, Train B DFO Day Tank Fire Fighting Preplan
92792-1, Zone 92 Control Building Level A Fire Fighting Preplan
92791-1, Zone 91 Control Building Level A Fire Fighting Preplan
92798-1, Zone 98 Control Building Level A Fire Fighting Preplan
92803-1, Zone 103 Control Building Level A Fire Fighting Preplan
92737-1, Zone 37 Auxiliary Building Level A Fire Fighting Preplan
92820-1, Zone 120 Control Building Level 2 Fire Fighting Preplan
92826A-1, Zone 126A Control Building Level 3 Fire Fighting Preplan
92860B-2, Zone 160B - NSCW Pumphouse - Train B Fire Fighting Preplan
92860-2, Zone 160A - NSCW Pumphouse - Train A Fire Fighting Preplan

Section 1R11: Licensed Operator Requalification
Resident Quarterly Review
Procedures
18001-C, Primary Systems Instrumentation Malfunction
19000-C, E-0 Reactor Trip or Safety Injection
19010-C, E-1 Loss of Reactor or Secondary Coolant
19012-C, ES-1.2 Post-LOCA Cooldown and Depressurization
91001-C, Emergency Classification and Implementing Instructions

Biennial Requalification Program Inspection
Procedures
00709-C, Training Review Boards and Working Committees, Revision 15
00750-C, Systems Approach to Training, Revision 7.0
00715-C, Licensed Operator Requalification Program, Revision 19.2
10010-C, Operator Qualification Program, Revision 29
60001-C, Exam Administration Policy, Revision 13.2
60007-C, Licensed Operator Requlification Examination Guidelines, Revision 12
60008-C, Examination Security Program, Revision 5.0
60200-C, Simulator Maintenance Procedure, Revision 11
60201-C, Simulator Training & Documentation, Revision 14
60203-C, Simulator Certification, Revision 6.1

Scenarios: DS #34, Revision 4, Scenario DS #13, Revision 15
Badge Access Transaction Reports for Reactivation of Licenses (3)
Licensed Operator Medical Records (10)
Feedback Summaries
Human Performance Errors
Written Exams Reviewed: five written exams that were administered for the 2003-2004 biennial requalification exams, weeks 1, 2, 3, 4 and 5.

Simulator Performance Testing:
Steady State Test 100%, Tested 4/29/04
Transient Test 07-01, Reactor Trip from 100% power BOL, Tested 4/22/04
Transient Test 07-05, Single Reactor Coolant Pump Trip at 20% power, Tested 4/24/04
Transient Test 07-06, Main Turbine Trip W/O a Reactor Trip 35% power, Tested 4/22/04
Malfunction Testing 05-02, LOCA Inside Containment from 100% power hot leg #2
Malfunction Testing 05-10, Loss of Emergency Generators 100% power, EOL, EDG 1A Fails to Start
Malfunction Testing 05-34(a), CVCS Makeup & RCS Dilution from CVCS Malfunction

Section 1R12: Maintenance Effectiveness
CRs 2005109045, 2005108628, 2005108459, 2004150610, 2004151434, 2005100901, 2005100909, 2005101276, 2005102076, 2005102859, 2005102894, 2005103849, 2005107704, 2005108706, 2005109196

WOs 20529550, 20529642, 20529835, 20529642, 20530658, 20529835, 10400508, 10404472, 10515679, 10517379, 10517454, 10517701, 10517702, 20101327, 20202075, 20202843, 20404473, 20519191, 20526797

Action Items 2005203262, 2005203263, 2005203264, 2005203265, 2005203266, 2005203267, 2005203268, 2005203626, 2005203628, 2005204021,

System Health Report, Residual Heat Removal System, 3rd Quarter 2005
System Health Report, 125 VDC System, 1st Quarter 2005
System Health Report, 125 VDC System, 2nd Quarter 2005
System Health Report, 125 VDC System, 3rd Quarter 2005

Section 1R14: Operator Performance During Non-Routine Plant Evolutions

12004-C, Power Operation
12005-C, Reactor Shutdown to Hot Standby
12006-C, Unit Cooldown to Cold Shutdown
19000-C, E-0 Reactor Trip or Safety Injection
19001-C, ES-0.1 Reactor Trip Response

Section 1R20: Refueling and Outage Activities

Procedures

93663-C, Verification of Core Loading Pattern
93300-C, Conduct of Refueling Operations
12005-C, Reactor Shutdown to Hot Standby (Mode 2 to Mode 3)
12006-C, Unit Cooldown to Cold Shutdown
12007-C, Refueling Operations (Entry into Mode 6)
12008-C, Midloop Operations
14900-C, Containment Exit Inspection

Section 4OA1: Performance Indicator (PI) Verification

Procedures, Records, and Data

Documentation package (scenario/time line/event notification forms/critique report) for ERO drill on 04/28/2005
Documentation package (Control Room log/event time line/critique report) for Notification of Unusual Event (missed) declaration on 03/16/2005
Documentation of DEP opportunities: Licensed Operator Requalification Simulator Log for 06/13/2005, 06/17/2005, 06/20/2005, 06/27/2005
Documentation of offsite siren weekly silent tests, 01/01/2005 - 06/30/2005
Records of drill and exercise participation by ERO personnel, 2003-2005

Section 4OA2: Identification and Resolution of Problems

Quarterly CAP Trend Report, May through July 2005
CR 2005111142, 2005111449, 2005111573, 2005110659, 2005109678, 2005109388, 2005110657, 2005110866,
CR 2005104123
3rd Quarter 2005 system health report for the diesel generators
Vendor relay specification sheet, Telemechanique NEMA rated industrial controls
MWOs 20519648, 20525436, 10525503, 10525505

Section 4OA3: Event Follow-up

Procedures

19000-C, E-0 Reactor Trip or Safety Injection
19001-C, ES-0.1 Reactor Trip Response
91001-C, Emergency Classification and Implementing Instructions