UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
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ATLANTA, GEORGIA 30303-8931

June 11, 2001

Carolina Power and Light Company
ATTN: Mr. J. S. Keenan
Vice President
Brunswick Steam Electric Plant
P. O. Box 10429
Southport, NC 28461

SUBJECT: BRUNSWICK STEAM ELECTRIC PLANT - NRC INSPECTION REPORT 50-325/01-06, 50-324/01-06

Dear Mr. Keenan:

On May 11, 2001, the NRC completed a triennial fire protection inspection at your Brunswick Steam Electric Plant, Units 1 and 2. The enclosed report documents the inspection findings which were discussed on May 11, 2001, with you 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 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's Document system (ADAMS). ADAMS is accessible from the NRC web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

Should you have any questions concerning this letter, please contact us.

Sincerely,

/RA/

Charles R. Ogle, Chief
Engineering Branch
Division of Reactor Safety

Docket Nos.: 50-325, 50-324
License Nos: DPR-71, DPR-62

Enclosure: (See page 2)

Enclosure: Inspection Report 50-325/01-06, 50-324/01-06

Attachments: (1) List of Documents Reviewed
(2) List of Acronyms Used

cc w/encl and Attachments:
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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos:	50-325, 50-324
License Nos:	DPR-71, DPR-62
Report No:	50-325/01-06, 50-324/01-06
Licensee:	Carolina Power and Light Company
Facility:	Brunswick Steam Electric Plant, Units 1 & 2
Location:	8470 River Road SE Southport, NC 28461
Dates:	May 7-11, 2001
Inspectors:	D. Billings, Resident Inspector E. Brown, Resident Inspector N. Merriweather, Senior Reactor Inspector C. Smith, P.E., Senior Reactor Inspector M. Thomas, Senior Reactor Inspector (Lead Inspector) G. Wiseman, Senior Reactor Inspector
Approved by:	C. Ogle, Chief Engineering Branch Division of Reactor Safety

Enclosure

SUMMARY OF FINDINGS

IR 05000325-01-06, IR 05000324-01-06, on 05/07-11/01, Carolina Power and Light Company, Brunswick Steam Electric Plant, Units 1 & 2. Triennial fire protection baseline inspection.

The inspection was conducted by a team of regional and resident inspectors. No findings of significance were identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 0609 “Significance Determination Process” (SDP). The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at http://www.nrc.gov/NRR/OVERSIGHT/index.html. Findings for which the SDP does not apply are indicated by “No Color” or by the severity level of the applicable violation.

Report Details

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R05 FIRE PROTECTION

.1 Systems Required To Achieve and Maintain Post-Fire Safe Shutdown

a. Inspection Scope

The team used the licensee's individual plant examination for external events (IPEEE) to select three risk significant fire areas. The team reviewed the IPEEE, Safe Shutdown Analysis (SSA), associated procedures, and system drawings to identify those systems credited for safe shutdown (SSD) of the facility in the event of a fire in the selected fire areas. The inspection included review of the post-fire safe shutdown capability and the fire protection features to ensure that at least one post-fire SSD success path was maintained free of fire damage in the event of a fire as defined in 10 CFR 50 Appendix R. For each of the fire areas selected, the team focused its inspection on the fire protection features, and the structures, systems, and components (SSCs) necessary to achieve and maintain SSD conditions. Applicable fire protection related licensing documents and plant design output documents were reviewed to verify that the shutdown methodology had properly identified and included those SSCs necessary to achieve and maintain safe shutdown. The documents reviewed included the Fire Hazards Analysis (FHA) contained in Section 9.5.1 of the Updated Final Safety Analysis Report (UFSAR), the SSA, the Safe Shutdown Component Index, various piping and instrumentation drawings (P&IDs), electrical one-line drawings, cable routing data, plant monitoring instrumentation, and plant fire area drawings. The objective of these reviews was to ensure that the post-fire safe shutdown analytical approach, safe shutdown equipment, and procedures were consistent and complied with the Appendix R reactor performance criteria for safe shutdown (i.e., reactivity control, reactor coolant makeup, reactor heat removal, process monitoring, and support system functions), and the SSD components were physically separated from the fire area. The fire areas selected for inspection included the following:

Fire Area CB-23E, Control Building: This fire area included Fire Zone CB-05 (Unit 1 cable spreading room) and Fire Zone CB-23 (main control room area). The main control room (MCR) area is shared between Unit 1 and Unit 2. A fire in this area could involve evacuation of the MCR for both units and alternate shutdown of both units from their remote shutdown panels.

Fire Area DG-14, 4160 Volt Switchgear Room for Bus E4: This fire area contained the safety-related alternating current (AC) electrical Bus E4 (Unit 2, Division II). A fire in this area could involve shutdown of Unit 2 from the MCR using alternative safe shutdown (ASSD) Train A equipment.

Fire Area RB2-1, Unit 2 Reactor Building: This fire area included Fire Zone RB2-1g(SE), south east area 20 foot elevation of the reactor building and the adjacent Fire Zone RB2-1g(SC), south central area 20 foot elevation of the reactor building. Fire Zone RB2-1g(SE) contained the Unit 2 remote shutdown panel. A fire in this area could involve shutdown of Unit 2 from the MCR using ASSD Train A equipment.

b. Findings

No findings of significance were identified.

.2 Fire Protection of Safe Shutdown Capability

a. Inspection Scope

The team reviewed the licensee's FHA and plant administrative control procedures for the fire protection program to verify that the objectives established by the NRC-approved fire protection program were met. The team toured the selected plant fire areas to observe the licensee's implementation of the program for limiting fire hazards. Selected 10 CFR 50 Appendix R exemptions, plant modifications, and engineering evaluations for National Fire Protection Association (NFPA) code deviations were reviewed and compared against the physical configuration of the selected fire areas. Additionally, the team reviewed the March 2001 fire protection program summary and fire incident reports to assess the effectiveness of the fire prevention program. The team reviewed fire protection features in the selected fire areas to verify that they were installed in accordance with the licensee's Code of Record.

The team reviewed Calculation BNP-E-9.006, Appendix R Separation Analysis, Revision 1A, cable routing data for a sample of safe shutdown components, and conducted walkdown inspections of the selected fire areas to evaluate the separation of systems, including power, control and instrumentation cables necessary to achieve safe shutdown and verify that fire protection features were in place to satisfy the separation and design requirements of Section III.G of 10 CFR 50, Appendix R and the NRC approved Fire Protection Program.

The team performed a walk down of the fire brigade house and response vehicle to assess the condition of fire fighting equipment. Fire brigade personal protective equipment was reviewed to evaluate equipment accessibility and functionality. The team also inspected battery-powered backup lighting provided in the fire brigade house to verify that the lights were operable and provided an adequate level of lighting in support of fire brigade operations should a power failure occur from any cause during a fire emergency. The adequacy of the fire brigade self contained breathing apparatuses (SCBAs) was reviewed as well as the availability of supplemental breathing air tanks. Team members also performed walk downs of the selected fire areas to compare associated fire brigade pre-fire strategy plan drawings with as-built plant conditions and potential fire conditions.

The team reviewed the fire brigade drill program and observed fire brigade response during an unannounced fire brigade drill in fire area DG-14. The drill was observed to verify the following:

- the fire brigade properly donned their protective clothing and turnout gear
- SCBAs were properly worn and used
- fire hoses were capable of reaching the location and properly laid out
- the fire brigade made a controlled fire area entry
- the pre-fire plan was utilized
- the fire brigade leaders directions were clear
- radio communications were effective
- the brigade's response and drill performance met the established drill objectives
- the fire brigade performed a search for smoke and/or fire propagation, as well as search activities for fire victims

The team reviewed critiques of other operating shifts' drill performances and fire brigade training/drill records to verify that fire brigade personnel qualifications and drill participation met the requirements of the licensee's approved fire protection program.

Additionally, the team reviewed flow diagrams, and engineering evaluations associated with floor drains to verify that systems and operator actions required for post-fire safe shutdown would not be inhibited by leakage or flooding from fire suppression activities or rupture of fire suppression systems.

b. Findings

No findings of significance were identified.

.3 Post-Fire Safe Shutdown Circuit Analysis

a. Inspection Scope

The team reviewed, on a sample basis, electrical schematics for control circuits of safe shutdown components to look for the potential effects of open circuits, short circuits, and shorts to ground. In addition, power and control circuit cable routing information was evaluated for potential damage due to fire in the selected fire areas. The team reviewed the licensee's breaker/fuse coordination analysis for a sample of safe shutdown power supplies (e.g., motor control centers and distribution panels) in order to verify that safe shutdown components had proper breaker and fuse selective coordination.

b. Findings

No findings of significance were identified.

.4 Alternative Shutdown Capability

a. Inspection Scope

The team reviewed the licensee's procedures for fire response and ASSD and Attachment 3 to licensee Calculation BNP-E-9.006, Appendix R Separation Analysis, for the fire areas selected. Selected portions of the procedures were walked down to verify that the procedures could reasonably be performed within the required times, given the minimum required staffing level of operators, concurrent with a loss of offsite power.

The team reviewed the licensee's smoke control procedures, ventilation systems, and SCBA availability to verify that smoke would not prevent operators from performing the procedures.

The team reviewed the electrical isolation and protective fusing in the transfer circuits of selected components (e.g. motor operated valves and safety relief valves) required for post-fire safe shutdown at remote shutdown panels to verify that the safe shutdown components were physically and electrically separated from the fire areas. This review included examining the electrical isolation and calibration data packages for a sample of instruments (e.g., pressure and level indicators) used for safe shutdown. The team's review also included verifying that SSD equipment could be powered from both onsite and offsite power. Portions of completed surveillance test procedures were reviewed for the remote shutdown panel, reactor building motor control centers (MCCs), and E3 and E4 bus tie breakers to establish whether the licensee conducted periodic operational tests of the alternative shutdown transfer capability and instrumentation and control functions.

b. Findings

No findings of significance were identified.

.5 Operational Implementation Of Alternative Shutdown Capability

a. Inspection Scope

The team reviewed the operational implementation of the alternative shutdown capability for a fire in the selected fire areas to verify that: (1) the training program for licensed personnel included alternative or dedicated safe shutdown capability; (2) personnel required to achieve and maintain the plant in hot shutdown from outside the MCR could be provided from normal onsite staff, exclusive of the fire brigade; and (3) the licensee periodically performed operability testing of the ASSD instrumentation and transfer and control functions. The team reviewed the contents of ASSD equipment bags in accordance with Alternative Safe Shutdown Procedure 0ASSD-00, User's Guide, Revision 23, to verify that equipment needed to implement the SSD procedures was properly staged and available. Staffing for the fire brigade was reviewed to verify compliance with the Technical Specifications (TS) and that the plant could be shut down with the minimum required shift staffing exclusive of the fire brigade. The team reviewed the training requirements for the shift incident commander, fire brigade members, and related support personnel such as control operators (COs) and senior control operators (SCOs) to verify compliance with the licensee's fire protection program. The team reviewed lesson plans and job performance measures (JPMs) to verify that ASSD activities were included in the training program.

b. Findings

No findings of significance were identified.

.6 Communications for Performance of Alternative Shutdown Capability

a. Inspection Scope

The team reviewed the periodic testing of the ASSD sound-powered phone system and inventory surveillance of ASSD operator equipment to assess whether the surveillance test program for the sound-powered phones was sufficient to verify proper operation of the system. The team walked down the remote shutdown equipment identified in Alternative Safe Shutdown Procedure 0ASSD-02, Control Building, Revision 30, in the Unit 2 reactor building, diesel building, and service water building to verify that the ASSD sound-powered phone jacks were in good condition, free of foreign material, and installed at the proper locations to support required shutdown actions identified in the procedures.

b. Findings

No findings of significance were identified.

.7 Emergency Lighting for Performance of Alternative Shutdown Capability

a. Inspection Scope

The team reviewed the design, operation, and manufacturer's data sheets on the installed individual direct current (DC) emergency lighting system self-contained, battery powered units to verify that battery power supplies were rated with at least an 8-hour capacity as required by III.J of Appendix R. The team performed a walk down of the remote shutdown equipment identified in Alternative Safe Shutdown Procedure 0ASSD-02, Control Building, Revision 30, for the service water and diesel generator buildings to verify that emergency lighting units (ELUs) were operational and the lamp heads were aimed to provide adequate illumination to perform the shutdown actions required by the procedures. The team reviewed the adequacy of emergency lighting for safe-shutdown activities in the selected fire areas to verify that it was adequate for the access and egress pathways to the required safe shutdown equipment. The team also reviewed periodic test and maintenance procedures and documents to determine if adequate surveillance testing was in place to ensure operation of the ELUs in the event of a fire at the site.

b. Findings

No findings of significance were identified.

.9 Fire Barrier and Fire Area/Zone/Room Enclosures and Penetration Seals

a. Inspection Scope

The team reviewed the selected fire areas to evaluate the adequacy of the fire resistance of fire area barrier enclosure walls, ceilings, floors, cable coatings, structural support protection, fire barrier penetration seals, fire doors, and fire dampers by observing the material condition and configuration of the installed fire barrier features,

as well as, construction details and supporting fire endurance tests for the installed fire barrier features. The team also reviewed the fire loading calculations to verify that the fire loading used by the licensee was appropriate for determining the fire resistive rating of the fire barrier enclosures. The team reviewed ASSD procedures, selected pre-fire strategy plans, and flow diagrams associated with heating ventilation and air conditioning (HVAC) systems to verify that ASSD equipment and operator manual actions would not be inhibited by smoke migration from one fire area to adjacent plant areas used to accomplish safe shutdown. In addition, the team reviewed the licensing documentation, such as 10 CFR 50 Appendix R exemptions, engineering evaluations of fire barrier features, and engineering evaluations for NFPA code deviations to verify that the fire barrier installations met design requirements and license commitments.

b. Findings

No findings of significance were identified.

.10 Fire Protection Systems, Features, and Equipment

a. Inspection Scope

The team reviewed flow diagrams, cable routing information, periodic test, and operational valve lineup procedures associated with the electric and diesel driven fire pumps and fire protection water supply system. The review was to determine whether the common fire protection water delivery and supply components could be damaged or inhibited by fire-induced failures of electrical power supplies or control circuits. Additionally, the team performed a walk down of the electric and diesel driven fire pumps and accessible portions of the fire protection water supply system in the selected fire areas to assess the material condition and operational effectiveness. This review also assessed whether the design of the manual fire fighting fire hose equipment and fire extinguishers were properly reflected in the fire brigade pre-fire plans.

The team walked down accessible portions of the fire detection and alarm systems in the selected fire areas to evaluate the engineering design and operation of the installed configurations. The team also reviewed engineering evaluations for the detection, design, spacing criteria, and detector locations for the installed detection systems in the selected fire areas to verify effectiveness of the systems and compliance with the NFPA code.

The team reviewed the design, installation and maintenance of selected portable extinguishers and the manual fire hose and standpipe system for Fire Area DG-14; Fire Zones RB2-1g (SE) and RB2-1g (SC); and the manual sprinkler system located in Fire Zone CB-05. Team members performed a walk down of the selected areas to assure proper placement and spacing of sprinkler heads and the lack of obstructions. Design calculations were reviewed to ensure that the required fire hose water flow and sprinkler system density for each protected area was available. The team reviewed a sample of manual fire hose lengths to verify that they could reach the safe shutdown equipment.

b. Findings

No findings of significance were identified.

.11 Compensatory Measures

a. Inspection Scope

The team reviewed existing fire protection and safe shutdown SSCs which were identified as degraded or unavailable against the fire protection and SSD program administrative controls contained in Plant Program Procedure 0PLP-01.2, Fire Protection System Operability, Action, and Surveillance Requirements, Revision 18, and Plant Program Procedure 0PLP-01.5, Alternative Shutdown Capability Controls, Revision 11. The review was performed to verify that the risk associated with removing fire protection and/or post-fire systems or components was properly assessed and adequate compensatory measures were implemented in accordance with the approved fire protection program.

b. Findings

No findings of significance were identified.

.12 Identification and Resolution of Problems

a. Inspection Scope

The team reviewed a sample of licensee audits, self-assessments, and action requests to verify that items related to fire protection and safe shutdown were appropriately entered into the licensee's corrective action program in accordance with the licensee's quality assurance program and procedural requirements. The items selected were also reviewed for classification and appropriateness of the corrective actions taken or initiated to resolve the items.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA6 MEETINGS

.01 Exit Meeting Summary

The lead inspector presented the inspection results to Mr. J. Keenan, Site Vice President, and other members of licensee management and staff at the conclusion of the inspection on May 11, 2001. The licensee acknowledged the findings presented. Proprietary information is not included in this inspection report.

PARTIAL LIST OF PERSONS CONTACTED

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L. Beller, Licensing Supervisor, Regulatory Affairs
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K. Sawyer, Technical Specialist, Training
R. Sims, Fire Protection Project Engineer, BESS
W. Stackhouse, Project Engineer, Nuclear Assessment Section
K. Ward, Superintendent, Mechanical Engineering, BESS

Other licensee employees contacted included engineers, operations personnel, maintenance personnel, security personnel, and administrative personnel.

NRC

H. Christensen, Deputy Director, Division of Reactor Safety, Region II
T. Easlick, Senior Resident Inspector
E. Guthrie, Resident Inspector

ITEMS OPENED, CLOSED, AND DISCUSSED

None

LIST OF DOCUMENTS REVIEWED

Procedures

Administrative Procedure, 0AP-005, Generic Procedure Writer's Guide, Revision 9

Alternative Safe Shutdown Procedure, 0ASSD-00, User's Guide, Revision 23

Alternative Safe Shutdown Procedure, 0ASSD-01, Alternate Safe Shutdown Procedure Index, Revision 21

Alternative Safe Shutdown Procedure, 0ASSD-02, Control Building, Revision 30

Alternative Safe Shutdown Procedure, 1ASSD-04, Train A Shutdown, Revision 16

Alternative Safe Shutdown Procedure, 2ASSD-04, Train A Shutdown, Revision 15

Alternative Safe Shutdown Procedure, 2ASSD-06, Reactor Building South, Revision 17

Abnormal Operating Procedure, 0AOP-16, RBCCW System Failure, Revision 11

Abnormal Operating Procedure, 0AOP-18, Nuclear Service Water System Failure, Revision 15

Abnormal Operating Procedure, 0AOP-32.0, Plant Shutdown From Outside Control Room, Revision 33

Abnormal Operating Procedure, 0AOP-36.1, Loss of Any 4160V Buses or 480V E-Buses, Revision 20

NGGM-PM-007, Quality Assurance Manual Program Manual, Revision 4

Operating Procedure, 2OP-43, Service Water System Operating Procedure, Revision 105

Plant Program Procedure 0PLP-01.1, Fire Protection Commitment Document, Revision 21

Plant Program Procedure 0PLP-01.2, Fire Protection System Operability, Action, and Surveillance Requirements, Revision 18

Plant Program Procedure 0PLP-01.5, Alternative Shutdown Capability Controls, Revision 11

Engineering Procedure 0ENP-317, Fire Protection Safe Shutdown and Station Blackout Screening, Revision 5

Fire Protection Procedure 0FPP-005, Fire Watch Program, Revision 19

Fire Protection Procedure 0FPP-007, Control and Use of Fire Fighting Equipment, Revision 15

Fire Protection Procedure 0FPP-008, Fire Protection Equipment Weekly Surveillance, Revision 27

Fire Protection Procedure 0FPP-013, Transient Fire Load Evaluation, Revision 27

Fire Protection Procedure 0FPP-014, Control of Combustible Transient Fire Loads and Ignition Sources, Revision 22

Fire Protection Procedure 0FPP-019, Incident Report and Investigation, Revision 13

Fire Protection Procedure 0FPP-031, Fire Brigade Staffing Roster and Equipment Requirements, Revision 24

Fire Protection Procedure 0FPP-038, Operation of the SCBA Refill System, Revision 2

Standard Procedure FIR-NGGC-0001, Fire Detection Systems, Revision 0

Standard Procedure FIR-NGGC-0004, Determination of Combustible Loading and Equivalent Fire Severity, Revision 0

Pre-fire Plan Procedure 0PFP-013, General Fire Plan, Revision 20

Pre-fire Plan Procedure 0PFP-CB-23, Control Building Control Room, Revision 1

Pre-fire Plan Procedure 0PFP-MBPA, Miscellaneous Buildings-Makeup Water Treatment, Revision 2

Pre-fire Plan Procedure 1PFP-CB-5, Control Building Unit 1 Cable Spreading Room, Revision 1

Pre-fire Plan Procedure 1PFP-CB-7, Control Building Unit 1 Battery Room 1A, Revision 1

Pre-fire Plan Procedure 1PFP-CB-8, Control Building Unit 1 Battery Room 1B, Revision 1

Pre-fire Plan Procedure 2PFP-DG-14, E4 Switchgear Room Pre-fire Plan, Revision 4

Pre-fire Plan Procedure 2PFP-RB, Reactor Building Pre-fire Plans, Revision 2

Lesson Plans/Job Performance Measures:

Brunswick Training Section Lesson Plan, CLS-LP-304, Alternate Safe Shutdown, Revision 0

Job Performance Measure, AOR-OJT-JP-304-A01, Defeat HPCI/RCIC High Temperature Isolations per 2 ASSD-07, Revision 2

Job Performance Measure, AOR-OJT-JP-304-A02, Manually Start and Load A DG Locally During A Control Building Fire (ASSD-02) Emergency, Revision 5

Job Performance Measure, AOR-OJT-JP-304-A06, ASSD-02 - Alternate Safe Shutdown Procedure D-6, Shutdown Cooling; E11-F004D Breaker Tripped, Revision 3

Job Performance Measure, LOR-OJT-JP-304-A07, ASSD-02 Pressure Control at RSDP - Rapid Depressurization Required, Revision 0

Job Performance Measure, AOR-OJT-JP-304-A08, ASSD-02 Section D: Emergency Switchgear Operator DG Bldg Actions, Revision 0

Job Performance Measure, LOR-OJT-JP-304-E01, ASSD-02 Control Building Fire, Revision 3

Periodic Test Procedures and Records

Periodic Test Procedure 0PT-34.2.2.1, Fire Door, ASSD Access/Egress Door, Severe Weather Door Inspection, Revision 24

Periodic Test Procedure 0PT-34.2.5.0, Fire Suppression System Control Valve Position Verification, Revision 16

Periodic Test Procedure 0PT-34.5.2.1, Fire Hose Station Inspection, Revision 2

Periodic Test Procedure 0PT-34.5.9.1, Battery Powered Emergency Lighting Units Functional Test, Revision 21

Periodic Test Procedure 0PT-34.5.9.2, Plant Battery Powered Emergency Lighting, Revision 6

Periodic Test Procedure 0PT-34.7.1.0, Fire Suppression Water System Flow Test, Revision 9

Periodic Test Procedure 0PT-34.13.3.0, Battery Powered Emergency Lighting Units Inspection, Revision 13

Periodic Test Procedure 0PT-48.4, ASSD Sound-Powered Phone System Functional Test, Revision 10

0PT-19.11.L, Safety Relief Valve Local Control Operability Test, Revision 7, Completed 3/11/01

0PT-19.11.L, Safety Relief Valve Local Control Operability Test, Revision 7, Completed 3/9/00

0PT-08.11.L, LPCI/RHR System LOOP “B” Valves Local Control Operability Test, Revision 5, Completed 6/21/00

0PT-08.11.L, LPCI/RHR System LOOP “B” Valves Local Control Operability Test, Revision 5, Completed 1/19/00

0PT-12.19.L E1 - E3 Cross-Tie Breaker Selector Switch Operability Test, Revision 0, Completed 2/9/00

Instrument Calibration Records

0MST-CAC26R, Revision 2, CAC-LI-3342 calibrated on 2/10/00

0MST-CAC26R, Revision 1, CAC-LI-3342 calibrated on 10/27/97

0MST-CAC24R, Revision 0, CAC-TR-778 calibrated on 2/24/98

2MST-RSDP21R, Revision 0, B21-LI-R604BX calibrated on 9/25/00

2MST-RSDP21Q, Revision 22, B21-LI-R604BX calibrated on 6/1/98

0MST-FWC24R, Revision 0, C32-PI-3332 calibrated on 9/24/00

0MST-FWC21Q, Revision 2, C32-PI-3332 calibrated on 7/23/98

0MST-FWC21Q, Revision 2, C32-PT-3332 calibrated on 4/14/98

2MST-CAC25Q, Revision 5, 2-CAC-PT/PI - 3341 calibrated on 10/27/98

0PIC-U1001, Revision 24, 2-B21-LI-5977 calibrated on 1/21/99

Calculations

Unit 2 DC Coordination Curves (Calculation BNP-E-6.085, Revision 2):
MCC 2-2XDB (B30), Curve 2B-GL3, 2B-GL3-B35, 2B-GL3-B36
MCC 2-2XDA (B10), Curve 2A-GJ3, 2A-GJ3-B11, 2A-GJ3-B13
2-2B-125VDC (HC2), Curve 2A-G16, 2B-GL6/2
2-4A (H23), Curve 2A-G16, 2A-4A-11, 2A-4A-2
2-4B (H24), Curve 2B-GK6, 2B-4B-8
2-12A (HZ3), Curve 2A-GJ4
2-12B(HZ5), Curve 2B-GL4

Unit 2 DC Coordination Curves (Calculation BNP-E-6.095, Revision 0, Amendment 0A)
1-1A-125VDC (HA7), Curve 1A-GJ6, 1A-1A-17, 1A-1A-18, 1A-GJ6/2
1-1B-125VDC (HA8), Curve 1B-GL6, 1B-1B-17, 1B-1B-18, 1B-GL6/2

Unit 2 AC Coordination Curve (Calculation BNP-E-8.010, Revision 2, Amendment 2A), Drawing No. E7-AY0, dated 8/29/95

Calculation 0FP-1024, Units 1&2 Reactor Buildings NFPA Code Compliance Engineering Evaluation, Revision 1

Calculation 0FP-1027, Control Building Code Compliance Evaluation NFPA 14, Revision 1

Calculation 0FP-1033, Control Building Code Compliance Evaluation NFPA 72E, Revision 0

Calculation 0FP-1035, Diesel Generator and Service Water Building Code Compliance Evaluation NFPA 72E, Revision 1

Calculation 0FP-1036, Reactor Buildings Code Compliance Evaluation NFPA 72E, Revision 1

Calculation 0FP-1039, Control Building Code Compliance Evaluation NFPA 13, Revision 1

Calculation 0FP-1043, Code Compliance Evaluation NFPA 72D, Revision 1

Calculation 704U-M-05, Evaluation of Adequacy of Control Building HVAC Fire Dampers, Revision 0

Calculation 704U-M-22, Evaluation of Fire Barrier Penetration Seals at Control/Reactor Building Conduit Penetrations, Revision 2

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ENGINEERING EVALUATIONS

Engineering Evaluation Report No. 84-0482, Evaluation of Fire Barrier Wall Common to 4160 Volt Switchgear Rooms, Revision 0

Engineering Evaluation Report No. 89-0052, Evaluation of NFPA 13 Deviations for Sprinkler Locations Not at Ceiling, Revision 0

Engineering Evaluation Report No. 89-0063, Evaluation of Non-Labeled Doors in Control Building, Revision 0

Engineering Evaluation Report No. 90-0286, Evaluation of Control Room/Cable Spreading Room Fire Area Boundary, Revision 1

Engineering Evaluation Report No. 92-0169, Evaluation of Control Building Seals for Stairwell Gaps, Revision 0

Engineering Evaluation Report No. 94-00267, Evaluation of Upgrade of Diesel Generator Building Penetration Fire Seals, Revision 1

Engineering Evaluation Report No. 94-00530, Evaluation of Heat Collectors on Sprinkler Systems, Revision 0

Engineering Service Request (ESR) No. 95-01466, Fire Suppression Systems Hydraulic and Design Evaluation, Revision 0

ESR 99-0071. Decommission ABT Switch for Motor Driven Fire Pump, Revision 0

APPLICABLE CODES AND STANDARDS

NFPA 13, Standard for the Installation of Sprinkler Systems, 1983 Edition.

NFPA 14, Standard for the Installation of Standpipe and Hose Systems, 1976 Edition.

NFPA 15, Standard for Water Spray Fixed Systems for Fire Protection, 1973 Edition.

NFPA 20, Standard for the Installation of Centrifugal Fire Pumps, 1982 Edition.

NFPA 72D, Standard for the Installation, Maintenance, and Use of Proprietary Protection Signaling Systems, 1973 Edition.

NFPA 72E, Standard on Automatic Fire Detectors, 1974 Edition.

NFPA 80, Standard on Fire Doors and Windows, 1983 Edition.

NFPA 90A, Standard on Air Conditioning and Ventilating Systems, 1981 Edition.

NUREG-1552, Supplement 1, Fire Barrier Penetration Seals in Nuclear Power Plants, dated January 1999

AUDITS AND SELF ASSESSMENTS

Brunswick Nuclear Assessment Section Report No. B-FP-99-01, Brunswick Fire Protection Annual Assessment, dated March 12, 1999

Brunswick Nuclear Assessment Section Report No. B-FP-00-01, Brunswick Fire Protection Program, dated March 2, 2000

Fire Protection Program Self Assessment No. 14944, dated September 8, 2000

Fire Protection Program Self Assessment No. CES Passport AR 10262, dated September 29, 2000

Brunswick Nuclear Assessment Section Report No. B-FP-00-02, Brunswick Fire Protection Program Assessment, dated December 18, 2000

ACTION REQUESTS (ARs)

AR 00019469, DG Basement Sprinkler Inadvertent Actuation

AR 00019917, Engine Driven Fire Pump Functional Failure

AR 00020009, OP-41 Guidance for Pump Shutdown

AR 00021568, Evaluate Fire Drill Program (BNAS 00-037)

AR 00022685, Engine Driven Fire Pump Performance

AR 00023032, Thermal Detector Failure

AR 00023942, Transformer Fire Investigation

AR 00024029, TAC Building Water Heater Failure - Smoke Event

AR 00024699, 2A Heater Drain Pump Fire - Unusual Event Declared

AR 00026531, NAS B-FP-00-02-W1 Assessment, Fire Drill Program

OTHER DOCUMENTS

NRC Letter dated December 30, 1986 Subject: Exemption From Requirements Of Appendix R To 10 CFR Part 50, Sections III.G And J

UFSAR Section 9.5.1.4.4.3, Emergency Lighting System

Brunswick Safety Evaluation Report, dated November 22, 1977

Brunswick Safety Evaluation Report, dated April 6, 1979

Brunswick Safety Evaluation Report, dated June 11, 1980

Brunswick Safety Evaluation Report, dated November 10, 1981

Brunswick Safety Evaluation Report, dated July 27, 1983

Brunswick Safety Evaluation Report, dated December 30, 1986

Brunswick Safety Evaluation Report, dated May 29, 1987

Brunswick Safety Evaluation Report, dated August 27, 1987

Brunswick Safety Evaluation Report, dated February 10, 1994

Brunswick 1&2 Updated FSAR, Section 9.5.1

System Description, SD-17, Residual Heat Removal, Revision 3

System Description, SD-43, Service Water System , Revision 4

Brunswick Individual Examination for External Events (IPEEE) Submittal, dated June 30, 1995

Brunswick Fire Protection Program Summary, dated March 2001

Brunswick Safe Shutdown Component Index, dated October 23, 2000

Fire Drill Evaluation, Shift B, Drill No. 01-F-DG-07, Fire In Switchgear E4, dated May 9, 2001

Underwriters Laboratory (UL) Reports R7643-1 and -2, Test Report on Special Purpose Fire Door and Frame Assembly, dated September 16, 1975

Engineering Planning and Management Report, “Post-Fire Safe Shutdown Sequence for a fire in the Main Control Room (CB-23E)”, December 1983

Letter from A.B. Cutter, CP&L, to Harold Denton, NRC, dated December 21, 1984, Alternative Shutdown Capability Assessment Report Amendment No. 1

Letter and Safety Evaluation from Daniel Muller, NRC to E.E. Utley, CP&L, dated December 30, 1986, Exemption From Requirements of Appendix R to 10 CFR Part 50, Sections III.G and J

Letter from Darrell Eisenhut, NRC to E.E. Utley, CP&L, dated July 27, 1983, Exemption From Requirements of 10 CFR 50 Appendix R, Sections III.G.3

Letter from E.E. Utley, CP&L, to Joseph Hendrie, dated March 6, 1981, Petition of Carolina Power & Light Company for Exemptions from Certain Requirements of 10 CFR 50.48 and Appendix R to 10 CFR Part 50

Letter from S.R. Zimmerman, CP&L, to the NRC, dated May 19, 1987, Appendix R Safety Evaluation Report Comments

Letter from E.G. Tourigny, NRC, to Lynn Eury, CP&L, dated December 6, 1989, Appendix R Safety Evaluation Clarification and Revision

ACTION REQUESTS INITIATED DURING INSPECTION

AR 00030793, IPEEE Error

AR 00031382, Fire Barrier Not Under Surveillance Program

AR 00031410, ASSD Procedure Typographical Error Incorrectly Addressed

AR 00031428, Incorrect Drawing Reference Concerning the Flame Impingement Barrier Separating the Motor-Driven and Diesel-Driven Fire Pumps

AR 00031487, Control Building Pre-fire Plan Discrepancy

AR 00031503, Running Fire Drill Feedback Followup Tracking

AR 00031545, Fire Protection Triennial Inspection Discrepancies

AR 00031615, Fire Barrier Repair at Diesel Fire Pump Room

ACRONYMS

AC	Alternating Current
ASSD	Alternative Safe Shutdown
CO	Control Operator
DC	Direct Current
ELU	Emergency Lighting Unit
FHA	Fire Hazards Analysis
HVAC	Heating, Ventilation, and Air Conditioning
IPEEE	Individual Plant Examination of External Events
JPM	Job Performance Measure
MCC	Motor Control Center
MCR	Main Control Room
NFPA	National Fire Protection Association
P&ID	Piping and Instrumentation Drawing
SCBA	Self Contained Breathing Apparatus
SCO	Senior Control Operator
SSA	Safe Shutdown Analysis
SSC	Structures, Systems, and Components
SSD	Safe Shutdown
TS	Technical Specifications
UFSAR	Updated Final Safety Analysis Report
VDC	Volts Direct Current