



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

Report No.: 50-395/88-12

Licensee: South Carolina Electric and Gas Company
Columbia, SC 29218

Docket No.: 50-395

License No.: NPF-12

Facility Name: V. C. Summer

Inspection Conducted: May 2 - 5, 1988

Inspector: Larry S. Mellen
Larry S. Mellen

5/15/88
Date Signed

Accompanying Personnel: T. Cooper

Approved by : G. A. Belisle
G. A. Belisle, Chief
Quality Assurance Programs Section
Division of Reactor Safety

5/18/88
Date Signed

SUMMARY

Scope: This routine, unannounced inspection was conducted in the areas of reportability determination, quality assurance reviews, and security.

Results: No violations or deviations were identified.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *K. Beale, Manager, Nuclear Protection Services
- *O. Bradham, Director, Nuclear Plant Operations
- *R. Campbell, Senior Engineer
- *R. Clary, Manager, Design Engineering
- *S. Cunningham, Associate Manager, Design Basis Engineering
- *W. Higgins, Supervisor, Regulatory Compliance
- *S. Hunt, Manager, Quality Systems
- *A. Koon, Manager, Nuclear Licensing
- *K. Nettles, General Manger, Nuclear Safety
- *J. Roper, Associate Manager, Quality Assurance
- *J. Skolds, General Manager, Station Operations
- *G. Soult, Manager, Operations
- *M. Williams, General Manager, Nuclear Services

NRC Resident Inspectors

- *P. Hopkins, Resident Inspector
- *R. Prevatte, Senior Resident Inspector

Other licensee employees contacted included engineers, technicians, operators, shift supervisors, mechanics, security force members, and office personnel.

*Attended exit Interview

2. Exit Interview (30703)

The inspection scope and findings were summarized on May 5, 1988, with those persons indicated in paragraph 1 above. The inspectors described the areas inspected and discussed the inspection findings. The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspectors during the inspection.

3. Licensee Action on Previous Enforcement Matters

This subject was not addressed in this inspection.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Reportability Determination (90711B, 90714, 92700)

Various records were reviewed for compliance with reportability requirements of 10 CFR 21, 10 CFR 50.72, 10 CFR 50.73, and NUREG 1022 and its associated supplements.

a. Off-normal Occurrence Report (ONO)

The inspectors reviewed the list of off-normal occurrence packages from May 1987, until present to determine compliance with applicable regulatory requirements. The following packages were reviewed in detail:

<u>ONO</u>	<u>Subject</u>
LIC-ON0880018	Pressurizer Pressure Reset Point
LIC-ON0880017	Improperly installed jumper during performance of slave relay test
LIC-ON0880014	Reactor trip breaker failed to close during surveillance
LIC-ON0880013	DC control breaker alignment for C HVAC chiller
LIC-ON0880012	DC under voltage
LIC-ON0880010	Boron concentration in XTK-0012A
LIC-ON0880003	Steam generator narrow range level indication error
LIC-ON0880002	Reactor trip breaker failure to close
LIC-ON0870108	Diesel generator A air start filter installation error
LIC-ON0870104	Reactor trip breaker under voltage trip device test failure
LIC-ON0870098	Early warning siren system test failure
LIC-ON0870095	Chiller A inoperability
LIC-ON0870091	Operability of 115 KV off-site power
LIC-ON0870087	Auto start of A motor driven emergency feedwater pump on loss of MFP A
LIC-ON0870086	Valve bonnet to yoke connection loose

<u>ONO</u>	<u>Subject</u>
LIC-ON0870082	Reactor trip following main generator stator ground
LIC-ON0870079	Turbine driven emergency feedwater pump manual overspeed trip device sluggish
LIC-ON0870076	Control room ventilation actuation on inadvertent RM-A1 signal
LIC-ON0870072	Rod control urgent failure alarm
LIC-ON0870069	Reactor trip following loss of inverter
LIC-ON0870068	Hydrogen concentration in pressurizer relief tank
LIC-ON0870065	Charcoal plenum B flooded by deluge valve
LIC-ON0870062	Pressurizer relief tank hydrogen accumulation
LIC-ON0870053	Service water booster pump start failure
LIC-ON0870052	Operability of station battery A
LIC-ON0870051	Control room ventilation LCO violation
LIC-ON0870050	Diesel generator B load shed during surveillance test
LIC-ON0870044	Transmitter calibration out of tolerance

The events and licensee reviews involved in the subject ONOs were reviewed against Technical Specification requirements. The reports that were determined to be non-reportable by the licensee had acceptable evaluations, with a few exceptions, but these exceptions had been noted by the resident inspector and cited in earlier reports. The level of detail provided for the evaluations was considered a strength relative to reportability determinations.

b. Plant Safety Review Committee (PSRC) Meeting Minutes

The inspectors reviewed PSRC meeting minutes for approximately six months preceding the inspection to determine the level of management involvement in off-normal events, nonconformances, safety reviews, and procedure revisions. The following PSRC meeting minutes were reviewed:

<u>Meeting</u>	<u>Date</u>	<u>Report No.</u>
88-21	04/29/88	CGSS-09-2856-NO
88-20	04/27/88	CGSS-09-2854-NO
88-19	04/20/88	CGSS-09-2850-NO
88-18	04/13/88	CGSS-09-2844-NO
88-17	04/07/88	CGSS-09-2839-NO
88-16	04/06/88	CGSS-09-2842-NO
88-15	04/05/88	CGSS-09-2837-NO
88-14	03/30/88	CGSS-09-2852-NO
88-13	03/23/88	CGSS-09-2834-NO
88-12	03/09/88	CGSS-09-2833-NO
88-11	03/02/88	CGSS-09-2827-NO
88-10	03/01/88	CGSS-09-2849-NO
88-09	02/24/88	CGSS-09-2848-NO
88-08	02/17/88	CGSS-09-2808-NO
88-07	02/10/88	CGSS-09-2847-NO
88-06	02/03/88	CGSS-09-2802-NO
88-05	01/27/88	CGSS-09-2824-NO
88-04	01/22/88	CGSS-09-2823-NO
88-03	01/21/88	CGSS-09-2822-NO
88-02	01/20/88	CGSS-09-2821-NO
88-01	01/06/88	CGSS-09-2820-NO
87-60	12/30/87	CGSS-09-2819-NO
87-59	12/28/87	CGSS-09-2818-NO
87-58	12/14/87	CGSS-09-2817-NO
87-57	12/02/87	CGSS-09-2816-NO

<u>Meeting</u>	<u>Date</u>	<u>Report No.</u>
87-56	11/30/87	CGSS-09-2795-NO
87-55	11/25/87	CGSS-09-2815-NO
87-54	11/12/87	CGSS-09-2786-NO
87-53	11/04/87	CGSS-09-2785-NO

c. Independent Safety Engineering Group (ISEG) Progress Reports

The inspectors reviewed the ISEG monthly progress reports for June 1987 through March 1988 to determine concerns identified by the group and any reportability issues raised by these concerns. These reports identified concerns generated during normal reviews and concerns generated by a licensee initiated Safety System Functional Inspection. The following activities were reviewed against requirements to determine adherence:

<u>ISEG No.</u>	<u>Activity No.</u>	<u>Description</u>
EP-01	8-28-87/GAR	Transformer Ratings
EP-02	8-13-87/WRC	7.2 KV Emergency Bus Undervoltage Calculation
EP-03	8-14-87/GPP	Battery Sizing
EP-04	7-23-87/GPP	Equipment Qualification of Rotork Operators
EP-05	8-21-87/LC	480 Volt Relay and Breaker Setting
EP-06	8-22-87/LC	Control Logic Diagram Discrepancy
EP-07	8-20-87/LC	Time Current Characteristic Curves
EP-08	8-7-87/GTL	Class 1E Battery Voltage Selection
EP-09	8-5-87/GTL	125 Volt DC Distribution Drawing Discrepancy
EP-10	7-28/GTL	TS Battery Electrolyte Temperature
EP-11	8-19-87/GTL	DC System Documentation Inconsistency

<u>ISEG No.</u>	<u>Activity No.</u>	<u>Description</u>
EP-12	8-31-87/WRC	Loss of Offsite Power to A ESF Bus
EP-14	9-8-87/GAR	Cable Impedances
EP-15	9-9-87/GPP	Control Calculations
EP-16	9-24-87/LC	Design Calculation
EP-17	9-8-87/GPP	Battery Service Test Discrepancies
EP-18	9-23-87/GAR	115 KV ESF Power Supply Voltage
EP-19	11-12-87/WRC	Degraded Voltage Relay Set Points
EP-20	11-13-87/WRC	XTF4 and XTF5
EP-22	11-15-87/GPP	Breaker Testing
EP-23	11-16-87/GTL	Battery Test Procedure Discrepancies
EP-24	11-17-87/GTL	125 VDC Operating Procedures Discrepancies
EP-25	11-18-87/WRC	Operability of Electric Power Distribution
EP-26	11-17-87/WRC	Output 5 of ESFLS
EP-27	11-18-87/LC	Discrepancy Between Vendor Manual and EQ File For 480 Volt Load Centers
EP-28	11-19-87/LC	Electrical Penetration Over Current Protection
EP-29	11-20-87/LC	Discrepancy Between Vendor Manual and Electrical Maintenance Procedure
EP-30	11-9-87/GTL	Cell Temperature Acceptance Criteria
EP-31	11-19-87/GTL	Class 1E 125 Volt DC Power Loads
EP-32	12-3-87/GAR	Loads Listed in Champs

<u>ISEG No.</u>	<u>Activity No.</u>	<u>Description</u>
EP-33	12-9-87/GAR	Running Loads Used in Calculations
EF-1	11-13-86/GAR	SG Supply Check Valves
EF-2	11-18-86/GTL	Setpoint Switch Over Condensate Storage Tank Volume
EF-3	11-14-86/GAR	Control Valve Air
EF-4	11-20-86/GPP	Control Valve Accumulator Classification
EF-5	11-17-86/GAR	IFV-2030
EF-6	11-18-86/GAR	Common Mode
EF-7	11-19-86/GAR	EFW Nozzles
EF-8	11-25-86/WRC	Circuit Protection Coordination
EF-9	11-26-86/WRC	Freeze Protection
EF-10	11-20-86/GAR	Probabilistic Risk Vs. Single Failure
EF-11	1-13-87/GAR	Drawing Inconsistencies
EF-13	11-26-87/GPP	EFW Pump Suction
EF-14	11-25-87/GAR	Control Valve Stroke and Handwheel Position
EF-15	11-25-86/GAR	Flow in Steam Generator
EF-16	12-10-86/GAR	Steam Drain Trap Design
EF-17	12-11-86/WRC	EFW Air Volume Tank
EF-18	12-12-86/WRC	EOP EFW Flow Requirements
EF-20	12-16-86/WRC	Guidance for Faulted SG Isolation
EF-21	12-17-86/WRC	Post Safety Injection
EF-22	12-18-86/WRC	Guidance for CST Fills

<u>ISEG No.</u>	<u>Activity No.</u>	<u>Description</u>
EF-23	1-12-87/WRC	Loss of Secondary Heat Sink
EF-24	12-11-86/GTL	Unidentified Switch
EF-25	11-21-86/GTL	Untested Control Room Annunciators
EF-27	12-10-86/GPP	Speed Setting for Verification of Turbine Driven EFW
EF-28	12-17-86/GPP	Non-monitoring of Turbine Driven Pump Room Temperature
EF-29	12-31-86/GTL	Insufficient Instructions to Reset EFW Pumps
EF-30	12-31-86/GPP	Minimum Stroke Time
EF-31	2-3-87/GPP	Maintenance of XVC-1009A, B and C
EF-32	2-4-87/GPP	Maintenance Discrepancies
EF-33	2-5-87/WRC	Misapplication of PAD
EF-34	2-9-87/GPP	Maintenance Lubrication
EF-35	3-11-87/WRC	Starting Duty For Motor Driven EFW
EF-36	3-16-87/GPP	Terry Turbine Overspeed
AEF-1	2-2-84/WRC	Heat Tracing Freeze Protection
AEF-2	3-26-84/GAR	Asiatic Clam Infestation
AEF-3	3-4-86/GPP	Service Water Pumphouse Fan Failure
AEF-4	3-4-86/GPP	Evaluation of As Found Condition
AEF-5	7-21-86/GAR	Service Water Flow Degradation
AEF-6	8-13-86/GAR	RG 1.47

<u>ISEG No.</u>	<u>Activity No.</u>	<u>Description</u>
AEF-7	4-22-86/WRC	Preventing Sensing Line Blockage

The ISEG concern reviews addressed impact and reportability issues of the items adequately and comply with regulatory requirements. The inspectors concluded that issues reviewed were in accordance with applicable regulations. Within these areas, no violations or deficiencies were identified.

6. Quality Assurance Reviews (40702, 40704)

The inspectors reviewed the following Quality Assurance (QA) audits and surveillances for various activities, including reportability and corrective actions:

<u>Audit/Surveillance</u>	<u>Description</u>
II-23-87-T	Nonconformance Control and Corrective Action (ONOs, LERs, Dosimetry Deficiency Reports, Health Physics Problem Reports, and Chemistry Deviation Reports)
II-18-87-T	Nonconformance Control and Corrective Action (NCN/PAD Application)
II-03-88-T	Nonconformance Control and Corrective Action (NCN/PAD Application)
II-17-87-Q	Surveillance Test and Operating License Conditions
II-16-86-E	Control Room and Station Operations
II-13-87-T	Nonconformance Control (Health Physics and Chemistry Problem Reports, ONOs)
II-06-87-T	Nonconformances
04-BLT-88-E	Control Room Turnover
01-HMK-88-Q	Service Water System Valve Lineup Verification
01-LCN-88-E	System Operating Procedures-Random Review
05-LPC-88-E	Verify Control of Lifted Leads and Jumpers
06-LPC-88-E	Verify Implementation of the Removal and Restoration Program

<u>Audit/Surveillance</u>	<u>Description</u>
02-HMK-88-E	Implementation of the Station Logs Program
01-AEC-88-DD	Closed NRC Violations
01-BLT-88-E	Review of the Removal and Restoration System
08-AEC-87-DD	LER 87-011
18-LPC-87-E	Observation of Operations Taking Log Readings
19-LPC-87-P	Observation of Mechanical Quality Control Activity
18-ESL-87-0	Calibration Lab Activity
21-HMK-87-P	Reactor Trip Breaker Testing
19-LCN-87-0	EQ (Electrical) Equipment Calibration
11-BLT-87-U	Procedure Change Temporary Approval
14-ESL-87-0	STP-396.013
03-HMK-87-A	MRF 20787, Addition of Appendix R Air Accumulators for XVG-3105 A&B-SW
12-JRN-87-0	Overspeed Trip Test

The inspectors found the audits to be generally compliance in nature. For the audits concerning nonconformances, the items were verified to have been correctly assessed for reportability requirements. The QA surveillances were more performance oriented than the audits. They covered more daily operational aspects such as modification package implementation. The level of detail in the surveillance packages and the presurveillance instructions have contributed significantly to the overall quality of the surveillances and is considered a programmatic strength.

Within this area, no violations or deviations were identified.

7. Security

The inspectors identified a security matter which will not be addressed in this report. This matter will be reviewed by Region 2 security staff in a subsequent inspection.

Within this area, no violations or deviations were identified.