



UNITED STATES  
 NUCLEAR REGULATORY COMMISSION  
 REGION II  
 101 MARIETTA ST., N.W., SUITE 3100  
 ATLANTA, GEORGIA 30303

Report No. 50-395/80-18

Licensee: South Carolina Electric and Gas Company

Facility Name: J. C. Summer

License No. CPPR-94

Inspection at J. C. Summer Nuclear Station

Inspector: J. L. Skold *[Signature]*

9/24/80  
Date Signed

Approved by: P. J. Kelly *[Signature]*

9/24/80  
Date Signed

SUMMARY

Inspection on June 1, 1980-July 3, 1980

Areas Inspected

This routine, announced inspection by the Resident Inspector involved 180 inspector-hours onsite in the areas of Preoperational Test Procedure Review, Preoperational Test Procedure Results Review, Witnessing Preoperational Tests, Plant Tour, Independent Inspection Effort, Followup of Open Items.

Results

Of the 6 areas inspected, no apparent items of noncompliance or deviations were identified in 5 areas: 1 apparent item of noncompliance was found in 1 area (Failure to follow procedure-paragraph 7).

## DETAILS

### 1. Persons Contacted

- \*O. S. Bradham, Plant Manager
- \*J. G. Connelly, Assistant Plant Manager
- \*S. Smith, Maintenance Supervisor
- \*K. Woodward, Assistant Operations Supervisor
- \*A. A. Smith, Site QA Coordinator
- C. L. Ligon, Administrative Supervisor
- \*A. Koom, Technical Staff Engineer
- \*D. Moore, Manager QA
- \*L. Storz, Operations Supervisor

Other licensee employees contacted included construction craftsmen, technicians, operators, mechanics and office personnel.

#### Other Organizations

C. W. Bowman-Westinghouse

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on June 13 and July 3, 1980 with those persons indicated in Paragraph 1 above. The item of noncompliance was discussed during the exit interview on July 3, 1980. The inspector also attended the exit interview of T. Burdette on June 12, 1980 and E. Girard on June 27, 1980.

### 3. License Action on Previous Inspection Findings

(Item 79-41-06) Out of SPEC HYDRAZINE. This item dealt with the failure to document corrective action for an out of spec hydrazine reading on the condensate storage tank. The licensee took adequate corrective action and the start up supervisor are more sensitive to out of spec chemistry readings also. The chemistry department has initiated an instruction to formally document and followup on out of spec readings. This item is closed.

(Items 79-41-10 and 80-06-06) Tagout Problems. These items involved the failure to properly hang red tags. The inspector reviewed the corrective action taken including training of operators as well as changes to the tagging system. The inspector looked at numerous tags in the plant and it appears that the corrective action had improved the tagging system. These items are closed.

4. Unresolved Items

Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve noncompliance or deviations. New unresolved items identified during this inspection are discussed in paragraph 8.

5. Preoperational Test Procedure Review

The following preoperational test procedures were reviewed:

HR-1	Post Accident Containment Hydrogen Recombiner
EF-1	Motor Driven Emergency Feed Pumps
AH-P8	Control Building Controlled Access Ventilation
AH-P42	Safety MCC Switchgear Cooling Coil
AH-P43	Relay Room Cooling Coil
AH-P44	Control Room Cooling Coil
HR-3	Post Accident Gas Sampling
SP-1	Spray Ring Flow Verification
CS-4	Charging, Seal Injection and Letdown
CS-9	BTRS Demineralizer Thermal Performance
CS-10	Boron Exchange Functional Test
MS-1	Atmospheric Steam Dump Via the PORV
MB-1	Steam Dump Valves Interlock Check
MS-2	Steam Dump Functional Test Under Actual Operating Condition
AH-P16	Reactor Building Temperature Test

The procedures were reviewed to ensure they were technically adequate and to ensure they were consistent with the commitments made in Chapter 14 of the FSAR and Regulatory Guide 1.68. The inspector felt that the technical adequacy of the preoperational tests has improved. The inspector had the following comments concerning the tests:

a. HR-1

Table 14.1-49 of the FSAR states that one of the objectives of this test is to demonstrate the capability to provide adequate flow for removal of combustible gases. This procedure makes the measurement of air flow optional. Also, due to the configuration of the air inlets to the recombiner, it is very difficult to obtain an actual air flow reading. An air flow test is described in the Westinghouse Instruction Manual for the recombiner. It was not clear to the inspector how this test would verify air flow during actual operating conditions since it involved the use of a fan blowing air into the intake of the recombiner. This item will remain open pending a decision by the licensee how air flow is going to be measured. (80-18-01)

b. EF-1

This test verified a discharge pressure on recirculation of at least 1620 psig. The proposed Technical Specifications indicates a minimum pressure of 1580 psig on recirculation. This item will remain open (80-18 -02) pending resolution by the licensee.

c. HR-3

This procedure verifies that a containment air sample can be obtained using procedure HPP-137, "Post Accident Reactor Building Gas Sampling." HPP-137 has not yet been written. This item will remain open (80-18-03) pending review of HPP-137 when written.

d. CS-4

This procedure verified that maximum of .5 psid exist across the RC filter under clean conditions and 120gpm. The Westinghouse PLS indicates a maximum of 5 psid.

Step 6.4.3 requires a flow of 60 GPM  $\pm$  3 GPM as indicated on Flow Indicator FI150. This cannot be accurately done since FI 150 is scaled in increments of 40, 60 and 80 GPM on the low end of the scale. This cannot also applies to steps 6.4.7 and 6.4.11.

Step 6.8.4 should close valve 8514 unstead of 8522B to initiate flow through the Cation demineralizer.

6. Preoperational Test Procedure Results Review

The following procedure results were reviewed to ensure the results were within the acceptance criteria and that the records indicated the procedure was carried out in accordance with the FSAR and the Start Up Manual.

CS-06-H1	RCP Seal Stand Pipe Hydro
SI-09-H1	Hydro Test Pump Hydro
RC-01-H2	Reactor Vessel Leakoff Hydro
RC-02-F1	Pressurizer Spray Line Flush
SI-04-FI	RHR Pump Suction Flush

Findings were acceptable.

7. Witness of Preoperational Test Performance

The following procedures were witnessed in part to ensure the performance of the tests were in accordance with Chapter 14 of the FSAR, the Start Up Manual and Regulatory Guide 1.68:

CS-7	Rev 2	Boric Acid Transfer
DG-5		Diesel Generator "A"
DG-7		Diesel Generator B

The inspector also observed Maintenance runs on the A and B Diesel Generators. Findings were acceptable with the following exceptions:

- a. The Diesel Generator Panels (both A and B) have an alarm on them labeled "Close to Alarm." This alarm indicates that the Remote-Local-Maintenance switch is in Local. The inspector felt that this alarm label was misleading. This item will remain open (80-18-05)
- b. During the performance of D/G-7, B D/G experienced a crankcase explosion and shutdown. Investigation revealed that number one piston and cylinder bound up. It appears that some foreign material entered the system and caused the piston and cylinder to rub together. The exact cause has not been determined.
- c. During a maintenance run on A D/G it was discovered that two phases on the output of the D/G were out of phase. The inspector observed the corrective action to reverse two of the phases.
- d. 10 CFR 50 Appendix B, Criterion V implemented by South Carolina Electric and Gas Company FSAR Section 17.1.5, "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings... and shall be accomplished in accordance with these instructions, procedures and drawings." Section 3.1 of Start Up Manual procedure SUM 1-8, "Conduct of Start-Up Testing" states "an official Test Copy" of the approved test procedure, will be followed in performing the test. On June 10, 1980 the inspector observed the performance of CS-7, "Boric Acid Transfer." The inspector noted that the procedure was being performed using a draft copy of Revision 2 to the procedure. This is considered an apparent item of noncompliance (80-18-06) The licensee has taken adequate corrective action on this item and no response is required.

#### 8. Plant Tour

The inspector toured the plant at various times to observe construction activities, housekeeping, maintenance, equipment preservation and logbooks. Findings were acceptable with the following exceptions:

- a. The Circulating Water Pumps were being run with no discharge pressure indication in the control room. The pumps did have amperage readings on them. The inspector felt that since the pumps were undergoing an initial run, there should be some discharge pressure indication for the operators in the control room. The discharge pressure meter was subsequently placed in service.
- b. The inspector noted that the Diesel Generator Buildings need to be repaired to keep rainwater from entering the building. During a rainstorm, water entered the building from numerous locations and in some cases the water ran onto electrical panels.

- c. The inspector noted that two relief valves on the jacket water heaters of both diesel generators had pieces of pipe threaded into the discharge. The pipe was installed when the jacket water system was flushed. Colt Industries drawing 11870080, page 4 of 7, indicates that flexible hose is connected to the relief valves. This item will remain unresolved until it is determined why the piping is still installed and why the actual installation doesn't match the design drawing. (80-18-07)

9. Independent Inspection Effort

a. Review of Revision to Operational QA Plan

Revision 3 to the Operational QA Plan (OQAP) was reviewed. The inspector had the following comments:

- The OQAP states that the Group Manager, QA and Security is a permanent member of the Nuclear Safety Review Committee. The proposed Technical Specifications do not indicate this but rather leave the membership up to the Vice President and Group Executive-Power Production and System Operations.
- Section 15.3 states that evaluation of surveillances for substitution as audits is done by a qualified auditor. Later portions of Section 15 state a qualified lead auditor will perform this evaluation.

This item will remain open (80-18-08) pending future inspector review.

b. Instrument and Control Procedure

The following Instrument and Control Procedures (ICP) were reviewed to ensure the records indicate they were done in accordance with the Start Up Manual and that the results were within the acceptance criteria:

ICP	130.001	VCT Level LT 112
ICP	130.002	VCT Level LT 115
ICP	130.014	LTDN HX OUTLET TE 139
ICP	160.020	CCW LTEN HX FLOW FT-7194
ICP	195.001	CST Level 3621
ICP	195.002	CST Level 3631
ICP	235.010	FWBP Discharge FT-3228

Findings were acceptable with the following exceptions:

- (1) In 4 of the procedures, math errors were present in determining the deviation from the acceptance criteria. None of the math errors resulted in a reading being outside the tolerance.
- (2) ICP 195.001 had acceptance criteria listed with no positive or negative symbol listed. The technician wrote in negative (-) signs on the procedure. The inspector felt that the absence of a

positive or negative sign implied the number was positive. If the acceptance criteria is intended to be negative, the procedure should be written to indicate negative numbers. This item will remain open (80-18-09) pending future inspector reviews of ICP's.

10. Followup of Open Items.

The following open items were reviewed and the corrective action found to be satisfactory:

79-25-06	NDT Temperature DATA
78-14-02	D/G Fuel Lines, Lube Oil Header, Fuel Injection Pumps
79-31-05	CS-7 Comments
79-41-04	DG-2 Comments
79-41-12	Eddy Current Tests
80-01-03	SW-1 Comments
80-13-04	CR-1 Comments
80-13-06	LR-4 Comments
80-13-10	HVAC Flow Recorder

These items are considered closed.