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

Report No.: 50-348/89-26 and 50-364/89-26

Licensee: Alabama Power Company
600 North 18th Street
Birmingham, AL 35291-0400

Docket No.: 50-348 and 50-364 License No.: NPF-2 and NPF-8

Facility Name: Farley 1 and 2

Inspection Conducted: October 2-6, 1989 and October 16-20, 1989

Inspection at Farley site near Dothan, Alabama

Inspectors: S. Tingen 11/21/89
Date Signed

S. Sparks 11/21/89
Date Signed

Approved by: G. A. Belisle, Chief 11/21/89
Date Signed
Test Programs Section
Engineering Branch
Division of Reactor Safety

SUMMARY

Scope:

This routine, announced inspection was conducted in the areas of inservice testing, complex surveillance, Inspection and Enforcement (IE) Bulletin followup, and action on previous inspection findings.

Results:

Violations were identified for inadequate inservice testing, (paragraphs 3, 4 and 5) and inadequate complex surveillance testing, (paragraph 7). A strength was identified in the area of IE Bulletin 85-03 differential pressure testing, (paragraph 8).

REPORT DETAILS

1. Persons Contacted

Licensee Employees

*R. Badham, System Performance Engineer
*R. Berryhill, Systems Performance and Planning Manager
*C. Buck, Plant Modification Manager
*L. Enfinger, Administrative Manager
*S. Fulmer, Supervisor, Safety Audit and Engineering Review
*R. Hill, Assistant General Manager - Plant Operations
*D. Morey, General Manager - Farley Nuclear Plant
*J. Thomas, Maintenance Manager

Other licensee employees contacted during this inspection included craftsmen, engineers, operators, mechanics, technicians, and administrative personnel.

NRC Resident Inspectors

G. Maxwell
*W. Miller

*Attended exit interview

Acronyms and initialisms used throughout this report are listed in the last paragraph.

2. IST Introduction (73756)

10 CFR 50.55a(g) and Farley Nuclear Plant TS Surveillance Requirement 4.0.5 require that ASME Code Class 1, 2 and 3 pumps and valves be inservice tested in accordance with Section XI of the ASME Boiler Pressure and Vessel Code. Section XI specifies rules and requirements for inservice testing to assess operational readiness of certain Class 1, 2 and 3 pumps and valves which are required to perform a specific function in shutting down a reactor to the cold shutdown condition in mitigating the consequences of an accident or in providing over pressure protection. Farley Nuclear Plant is required to follow the requirements of ASME Code, Section XI, 1983 Edition through the Summer 1983 Addenda. During this inspection, the inspectors reviewed the licensee's Inservice Test Program, Inservice Test Plan, implementing procedures, and test results that accomplish Section XI pump and valve IST. The results of this review are stated in paragraphs three through six. Pumps and valves that are in the AFW system or support the operation of the AFW system, pressurizer safety valves, and PORVs were reviewed during this inspection.

In the area of IST, one violation with four examples was identified. These are discussed in paragraphs three through five.

3. Pump Testing (73756)

The inspectors reviewed IST of MDAFWPs A and B, and the TDAFWP, for each Unit to determine whether testing was performed in accordance with Section XI, Subsection IWP requirements. The following AFW IST implementing procedures and test results were reviewed:

FNP-1-STP-22.1, Auxiliary Feedwater Pump 1A Quarterly Inservice Test, Rev. 1

FNP-1-STP-22.2, Auxiliary Feedwater Pump 1B Quarterly Inservice Test, Rev. 17

FNP-1-STP-22.26, Auxiliary Feedwater Pump 1A Cold Shutdown Inservice Test, Rev. 1

FNP-1-STP-22.27, Auxiliary Feedwater Pump 1B Cold Shutdown Inservice Test, Rev. 1

FNP-1-STP-22.16, Turbine Driven Auxiliary Feedwater Pump Quarterly Inservice Test, Rev. 14

Similar IST procedures were reviewed for Unit 2.

In general, inspection results indicated that Code requirements were satisfied in the areas of testing frequency, establishing new reference values, post-maintenance testing, and evaluating test results. However, review of procedures FNP-1-STP-22.16 and FNP-2-STP-22.16 revealed that acceptance criteria for quarterly IST of the TDAFWP were not in accordance with Section XI, Subsection IWP requirements. Specifically, Subsection IWP-3100 requires that each measured test quantity (such as inlet pressure, differential pressure, flow rate, and vibration amplitude) be compared with the reference value of the same quantity. Any deviations determined shall be compared with the limits given in Table IWP-3100-2 and the specified corrective action taken. The TDAFWP IST procedures did not contain acceptance criteria for a comparison of pump differential pressure for the high values in the Alert Range (1.02 to 1.03 of differential pressure) and Required Action Range (>1.03 of differential pressure). However, comparisons of other measured test quantities were performed. The licensee had initiated correction action to revise the appropriate procedures during the inspection. However, this item is a violation of Subsection IWP-3100, and is identified as Part A to violation 50-348,364/89-26-01, Failure to Provide TDAFWP IST Acceptance Criteria.

The inspectors also reviewed corporate QA audit FNP-NC-39-89/15(29), which identified a noncompliance in the pump testing area. GL 89-04, Guidance on Developing Acceptable Inservice Testing Programs, dated April 3, 1989, provides NRC staff positions on IST, and states the following:

When the data is determined to be within the Required Action Range of Table IWP-3100-2 the pump is inoperable and the TS Action statement time starts. The provisions in IWP-3230(d) to recalibrate the instruments involved and rerun the test to show the pump is still capable of fulfilling its function are an alternative to replacement or repair, not an additional action that can be taken before declaring the pump inoperable.

The corporate QA audit identified several pump IST procedures where a second test may be run after instrument recalibration prior to declaring the pump inoperable, which is not consistent with GL 89-04. The licensee stated that their policy was not to declare equipment inoperable or take TS action based on erroneous data. If instrument recalibration makes no difference, the pump is considered inoperable from the time of the first test, which by the licensee's interpretation is allowed by the ASME Code and the Inservice Test Plan. The licensee also stated that their Inservice Test Plan and implementing procedures were based on conformance with the ASME Code, and compliance with the NRC staff positions contained in GL 89-04 was not a requirement.

The inspectors also witnessed IST for Unit 2 Containment Spray pump 2B. Test personnel were knowledgeable of acceptance criteria, procedural requirements, and were familiar with surveillance procedure FNP-2-STP-16.2. The inspectors noted during the test performance that the Containment Spray pump suction pressure indicator PI-946A was oscillating. Test personnel recorded a conservative reading, which subsequently led to a differential pressure that was in the Alert Range as required by the procedure. PI-946A was recalibrated which is allowed by Subsection IWP-3230(d) of the Code; however, the as-found calibration was satisfactory. During the re-test, test personnel throttled the instrument line isolation valve to reduce instrument fluctuations as permitted by Subsection IWP-4150. Acceptance criteria were satisfied during the re-test. The inspectors commented to licensee management that damping hydraulic instruments is addressed by the Code, which may provide more consistent and accurate test data.

Within the areas inspected, one example of the IST violation was identified.

4. Check Valve Full Stroke and Reverse Flow Testing (73756)

The inspectors reviewed the full stroke and reverse flow IST methods and results for the following check valves for each unit:

NV001	NV005	NV009
NV013	QV002A	QV002B
QV002C	QV002D	QV002E
QV002F	QV002G	QV002H
QV003	QV006	QV007A
QV007B	QV011A	QV011B
QV011C	HV3235A	HV3235B
QV010A	QV010B	

The inspectors reviewed the following Unit 1 (corresponding procedures were also reviewed for Unit 2 testing) procedures which performed IST on the previously listed check valves:

FNP-1-STP-21.3, TDAFWP Steam Supply Valve Inservice Test, Rev. 2

FNP-1-STP-22.16, Turbine Driven Auxiliary Feedwater Pump Quarterly Inservice Test, Rev. 14

FNP-1-STP-22.1, Auxiliary Feedwater Pump 1A Quarterly Inservice Test, Rev. 19

FNP-1-STP-22.2, Auxiliary Feedwater Pump 1B Quarterly Inservice Test, Rev. 17

FNP-1-STP-644.1, Auxiliary Feedwater Pump Check Valve (Q1N23V006, Q1N23V007A, B) Full Stroke Test, Rev. 1

FNP-1-STP-22.8, Auxiliary Feedwater Inservice Valve Exercise Test, Rev. 9

FNP-1-STP-22.24, Auxiliary Feedwater System Check Valve Reverse Flow Closure Operability Test, Rev. 1

FNP-1-STP-22.12, Motor Driven Auxiliary Feedwater Check Valves Flow Verification, Rev. 7

Requirements for full stroke and reverse flow exercising check valves are contained in Section XI, Subsection IWV-3522 of the Code.

The inspectors reviewed testing frequencies, results, and appropriate relief requests for the above check valves. In addition, where full stroke testing was performed, the inspectors verified that flow rates were specified by procedure and were greater than design accident flow rates.

The inspectors also reviewed check valve reverse flow testing, which is required by the Code for check valves which perform a safety function in the closed position. Subsection IWV-3522 requires check valve testing in a manner that verifies the disk travels to the seat on cessation or reversal of flow. The inspectors identified the following two examples where the check valve reverse flow function was not verified:

TDAFWP steam supply stop check valves HV3235A and HV3235B are reverse flow tested by procedure STP-21.3 on a quarterly basis. These stop check valves are AOVs which fail in the open position, and reverse flow closure is verified by stroking the valve by a manual handswitch to verify reverse flow closure. However, these stop check valves are also required and designed to close on flow reversal. The licensee's testing only verifies stem movement, and does not verify that the

disk travels to the seat on flow reversal. This method does not verify the reverse flow function of check valves HV3235A and HV3235B in accordance with Subsection IWV-3522, and is identified as Part B of violation 50-348, 364/89-26-01, Failure to Verify Units 1 and 2 Check Valves HV3235A and HV3235B Reverse Flow Function.

MDAFWP discharge check valves V002A and V002B are reverse flow tested by procedure STP-22.24 on a quarterly basis. The procedure records temperature from a temperature element located upstream of the check valves and downstream of the MDAFWPs. The licensee verifies reverse flow closure, in that, if the check valves do not travel to the seat on reversal or cessation of flow, a high temperature reading would be present due to high temperature steam from the steam generators. However, check valves V002C, D, E, F, G, and H are located downstream of check valves V002A and V002B. These check valves, although not reverse flow tested, may isolate the high temperature steam from the steam generators. This would prevent check valves V002A and V002B from being exposed to a high temperature source, and thus the temperature elements upstream of check valves V002A and V002B would not see an elevated temperature. As such, check valves V002A and V002B may not be capable of reverse flow closure, and the licensee's testing method would not detect this. This method does not verify the reverse flow function of V002A and V002B in accordance with Subsection IWV-3522, and is identified as Part C to violation 50-348,364/89-26-01, Failure to Verify MDAFWP Discharge Check Valves V002A and V002B Reverse Flow Function.

Within the areas inspected, two examples of the IST violation were identified.

5. Power Operated Valve IST (73756)

The inspectors reviewed IST for the following MOVs and AOVs in Units 1 and 2 AFW, SW, and reactor coolant systems.

MOVs	AOVs
MOV3350 A,B,C	HV3227 A,B,C
MOV3764 A,B,C,D,E,F	HV3228 A,B,C
MOV3209 A,B	HV3226
MOV3210 A,B	HV3234 A,B
MOV3216	HV3235 A,B
MOV3406	FCV498
MOV3232 A,B,C	FCV488
MOV8000 A,B	FCV478
	FCV499
	FCV489
	FCV479
	PCV445A
	PCV444B

The inspectors interviewed licensee personnel regarding the general methods used to stroke time power operated valves and reviewed the following implementing procedures for IST of the previously listed valves:

FNP-1-STP-201.28, Revision 4, Pressurizer Power Operated Relief Valves Position Indication Verification

FNP-O-AP-16, Revision 19, Conduct of Operations - Operations Group

FNP-1-STP-21.3, Revision 2, TDAFWP Steam Supply Valves Inservice Test

FNP-2-STP-45-11, Revision 2, Miscellaneous Cold Shutdown Valves Inservice Test

FNP-1-STP-47.0, Revision 10, Miscellaneous Valves Inservice Test

FNP-1-STP-45.11, Revision 3, Miscellaneous Cold Shutdown Valves Inservice Test

The inspectors observed the performance of an AFW system valve lineup which was accomplished in accordance with FNP-2-STP-22.5, Revision 12, Auxiliary Feed Water System Flow Path Verification.

The inspectors reviewed the stroke times of Unit 1 Power Operated Valves contained in the Control Room Valve Stroke Time Log.

The criteria for IST power operated valves is contained in Subsections IWV 3412, 3413, 3415 and 3417 of the ASME code. These subsections specify stroke timing, fail-safe testing, and corrective action requirements.

Air operated stop check valves HV3235A and B are located in the steam supply lines to the TDAFWP. HV3235A is the steam supply valve from the "C" SG. These valves open automatically on an automatic TDAFWP start and their fail-safe position is open. Review of the Inservice Test Plan indicated that these valves were not being stroke timed in the open and closed positions. Review of implementing procedure FNP-2-STP-21.3 indicated that, although not required by the valve IST plan, valves HV3235A and B were being stroked quarterly and the open direction stroke time was being measured with a limiting value of ten seconds assigned, however the valves closed direction stroke time was not being measured nor was a stroke time closed limiting value assigned. During an accident involving a "B" or "C" SG tube rupture, valves HV3235A or B would be required to be shut to isolate the affected SG from the TDAFWP; therefore, the valves are required to be stroke timed in the shut direction. This item is identified as Part d to violation 50-348, 364/89-26-01, Failure to stroke time Units 1 and 2 Valves HV3235A and HV3235B and assign a limiting stroke time values.

Review of the Inservice Test Plan indicated that the PORVs were being stroked timed in the open direction but not in the closed direction. The licensee stated that, by design, the block valves are required to be shut

if a PORV sticks open; therefore, testing of the PORV in the shut direction was not required per the ASME code. However, the licensee agreed that it would be prudent to stroke test these valves in the closed directing and agreed to do so in the future.

All other items inspected in the area of PORV IST were accomplished in accordance with Section X1 of the ASME Code.

Within the areas inspected, one example of the IST violation was identified.

6. Safety and Relief Valve IST (73756)

The inspectors reviewed IST for the following safety and relief valves in Units 1 and 2 reactor coolant and AFW systems.

Q2B13V031 A,B,C
Q1B13V031 A,B,C
PSV2922A B,C

The inspectors interviewed licensee personnel regarding the methods used to test relief valves and reviewed the following implementing procedures for IST of the previously listed valves:

FNP-1-STP-628.5, Revision 1, Auxiliary Feedwater Pump Suction Line Relief Valve Operational Test

FNP-1-STP-604.0, Pressurizer Safety Valve Test

The inspectors reviewed the results of the pressurizer safety valve test dating back to 1987.

The criteria for the IST safety and relief valve is contained in Subsections IWV 3511, 3512, and 3513 of the ASME Code. These Subsections specify test methods and frequency. TS 3/4.4.3 specifies the Pressurizer Safety Setpoint tolerance of 2485 ± 1 percent psig.

All items inspected in the area of safety and relief valve IST were accomplished in accordance with the ASME Code and TS.

Within the areas inspected, no violations or deviations were identified.

7. Complex Surveillance Testing (61701)

TS Surveillance Requirement 4.4.5.1 requires that each pressurizer PORV be demonstrated operable at least once every 18 months by performing a channel calibration and operating the valve through one cycle of full travel. The inspectors reviewed the following procedures that accomplished this surveillance requirement:

FNP-1-STP-33.0A, Revision 10, Solid State Protection System Train A Operability Test.

FNP-1-IMP-201.24, Revision 5, Pressurizer Pressure Control, NIB31PT004

FNP-1-STP-201.3, Revision 3, Pressurizer Pressure, NIB31PT0444Z Loop Calibration

FNP-1-IMP-201.23, Revision 7, Pressurizer Pressure Control NIB31PT0445

FNP-1-STP-33.1A, Revision 2, Safeguards Test Cabinet Train A Functional Test

FNP-1-STP-201.28, Revision 4, Pressurizer Power Operated Relief Valves Position Verification

The pressurizer PORV channel calibration was accomplished by performing a series of overlapping procedures. Results of the inspector's review of the PORV channel calibration procedures was that the channel function test was not being properly performed. A channel function test is required to be performed when a channel calibration is performed. This requires that a simulated pressurizer pressure signal be injected to verify automatic actuation of the PORVs. The PORV logic circuitry that actuates as a result of the channel bistables energizing and/or deenergizing was not being verified. For example, the PORV logic circuitry contains contacts that make or break on high or low pressurizer pressure in order for the PORVs to automatically open or close. The automatic operation of these contacts were not being verified. This function has never been verified. If the condition existed where contacts were burnt or stuck shut then the PORVs would not automatically open or close as designed. Failure to adequately test the PORV logic circuitry in accordance with TS Surveillance Requirement 4.4.5.1 is identified as violation 50-348 364/89-26-02.

Within the areas inspected, one violation was identified.

8. Bulletin Followup (92701)

(Closed) 50-348,364/85-BU-03, TI 2515/73, Motor Operated Valve Common Mode Failure During Plant Transients Due to Improper Switch Settings.

The purpose of this Bulletin is to require licensees to develop and implement a program to ensure that switch setting for high pressure coolant injection and emergency feedwater system MOVs subject to testing for operational readiness in accordance with 10 CFR 50.55a(g) are properly set, selected, and maintained.

The licensee's IE Bulletin 85-03 program was previously discussed in NRC Inspection Report 50-348,364/87-31 and is further discussed in paragraph 9

of this Inspection Report. The final review of the licensee's program indicated that the licensee had satisfactorily completed all IE Bulletin 85-03 requirements. In accomplishing these requirements, the licensee did a commendable job in the area of differential pressure testing, in that, a large number of valves were tested. This testing identified problem areas that were aggressively resolved by the licensee.

Within the areas inspected, no violations were identified.

9. Action on Previous Inspection Findings (92701, 92702)

a. (Closed) IFI 50-348, 364/87-31-02, Valves Failing to Operate Under a Differential Pressure.

When differential pressure testing valves in accordance with IE Bulletin 85-03, five Unit 2 valves failed to fully shut. The failure of valve MOV8133A was attributed to a loose spring pack elastic stop nut which was reused following overhaul of the actuator. As a result of this failure, procedures were revised to not allow reusing elastic stop nuts. Valves MOV3764C and F failed to close under a differential pressure. These valves were four inch flex-wedge gate valves manufactured by Velan. In Units 1 and 2 there are 10 other valves identical to MOV3764C and F; therefore, all Velan flex-wedge four inch gate valves were grouped in a single group of 12 valves. All 12 valves in this group were differential pressure tested with only valves MOV3764C and F failing to fully shut. As a result of these failures valves MOV3764C and F were disassembled and inspected. The inspection of the valve internals did not reveal any causes for the previous failures. The valve's disks, with carbon steel guide slots, were replaced with new disks with stellite guide slots and repacked with a different type of packing. The valves were subsequently satisfactorily differential pressure tested. Valves MOV8803A and B also failed differential pressure testing. These are three inch flex wedge gate valves manufactured by Velan. The failures were attributed to nonconservative thrust equations, and as a result of the failures, Westinghouse revised the thrust equations by changing the valve factors from .3 to .5. The torque switch settings were increased based on the .5 valve factor and the valves were satisfactorily differential pressure tested. A .5 valve factor was then used to determine the required thrust for all IE Bulletin 85-03 three inch Velan flex-wedge gate valves.

b. (Closed) IFI 50-348,364/88-18-01, Determine the Effectiveness of the Licensee's Service Water Chlorination Program.

The inspectors reviewed the licensee's actions for this area, which consisted of a chlorination program for control of Corbicula. The licensee uses procedure FNP-0-CCP-708, Rev. 10, Chemical Addition/Control of the Service Water System, in which sodium hypochlorite is added continuously to the scheduled unit for Corbicula treatment for a period up to eight weeks or until a clam

mortality of greater than 90 percent is achieved in sidestream aquaria, whichever occurs first. The inspectors discussed operational and maintenance problems with licensee personnel, and reviewed Clam Inspection Reports performed during disassembly or maintenance on the Component Cooling Water Heat Exchangers, and did not note any Corbicula problems. The licensee's actions to address this issue were satisfactory.

c. (Closed) Violation 50-348,364/87-31-01, Incorrect Procedure and Incomplete Emergency Diesel Generator Test Data Logs.

The Licensee's response dated 12/22/87 was considered acceptable by Region II. The inspectors reviewed the licensee's corrective actions in this area, which consisted of revising acceptance criteria, proper logging of invalid diesel starts, and elapsed time to reach rated speed and voltage in the diesel Test Data Log. The licensee's actions to address this issue were satisfactory.

Within the areas inspected, no violations or deviations were identified.

10. Exit Interview

The inspection scope and results were summarized on October 20, 1989, with those persons indicated in paragraph 1. The inspectors described the areas inspected and discussed in detail the inspection results listed above. Proprietary information is not contained in this report. Dissenting comments were received from the licensee in the area of measuring stroke time for the PORVs in the closed direction. The licensee stated that the PORVs do not have a safety function in the closed direction in mitigating the consequences of an accident or shutting down a reactor to the cold shutdown condition. As such, stroke timing was not a Section XI Code requirement and thus did not warrant a violation. However, licensee management stated that a knowledge of the PORV stroke time in the closed direction would be prudent in determining valve degradation, and agreed to begin PORV stroke timing in the closed direction.

Subsequent to the inspection, the inspectors agreed that PORV stroke timing in the closed direction was not a Code requirement. Licensee management was informed via telephone on October 26, 1989, that this item would not be identified as a violation.

Item Number	Description and Reference
348,364/89-26-01, Part A	Violation - Failure to provide TDAFWP IST acceptance criteria, paragraph 3.
348,364/89-26-01, Part B	Violation - Failure to verify Units 1 and 2 check valves HV3235A and HV3235B reverse flow function, paragraph 4.

Item Number (cont'd)	Description and Reference
348,364/89-26-01, Part C	Violation - Failure to verify MDAFWP discharge check valves V002A and V002B reverse flow function, paragraph 4.
348,364/89-26-01 Part D	Violation - Failure to stroke time Units 1 and 2 valves HV3235A and HV3235B and assign a limiting stroke time value, paragraph 5.
348,364/89-26-02	Violation - Failure to adequately test PORV logic circuitry, paragraph 7.

Licensee management was informed that the following items were closed:

IE Bulletin 85-03, paragraph 8.
IFI 50-364/87-37-02, paragraph 9.
IFI 50-348,364/88-18-01, paragraph 9.
Violation 50-348,364/87-37-01, paragraph 9.

11. Acronyms and Initialisms

AFW	Auxiliary Feedwater
AOV	Air Operated Valve
ASME	American Society of Mechanical Engineers
FNP	Farley Nuclear Plant
GL	Generic Letter
IFI	Inspector Followup Item
IST	Inservice Testing
LOCA	Loss of Coolant Accident
MDAFWP	Motor Driven Auxiliary Feedwater Pump
MOV	Motor Operated Valve
PORV	Power Operated Relief Valve
PSIG	Pounds per Square Inch, Gage
QA	Quality Assurance
REV	Revision
SG	Steam Generator
SW	Service Water
TDAFWP	Turbine Driven Auxiliary Feedwater Pump
TS	Technical Specifications

ENCLOSURE 3
November 15, 1989

MEMORANDUM FOR: D. B. Matthews, Project Director (14H-25)
Project Directorate II-3
Division of Reactor Projects - I/II

FROM: Robert C. Jones, Acting Chief
Reactor Systems Branch
Division of Systems Technology

SUBJECT: VOGTLE UNIT 1, INTERPRETATION OF TS 3.4.4 LIMITING CONDITION FOR OPERATION, RELIEF VALVES

Plant Name:	Vogtle Unit 1
TAC No(s).:	72371
Docket No(s).:	50-424
Project Directorate:	Project Directorate II-3
Project Manager:	J. Hopkins
Review Branch:	SRXB/DST
Review Status:	Complete

In telephone discussion on November 9, 1989, the NRC Region II Vogtle Unit 1 Senior Resident Inspector (SRI) and the licensee (Georgia Power Company) requested an NRR position with regard to surveillance requirement 4.4.4 addressing PORV testing. The issue is whether or not the automatic function of the PORV need be tested in order to satisfy the requirements of TS 4.4.4. In addition, the licensee stated its intent to pursue the "automatic" surveillance mode in January 1990 at their next block valve surveillance interval.

The licensee performed the "manual" PORV surveillance testing at the required interval. However, the SRI interpreted the surveillance requirement to mean that the "Automatic" function should also be included. The difference of the two approaches means that a small portion of the circuitry is not tested. (The valve is stroked in the manual mode.) However, if the surveillance requirement is intended to include the automatic mode and the automatic function is not tested, then the PORVs should be declared inoperable. For causes of inoperability other than excessive seat leakage, action statement "b" applies and the plant must shut down.

The licensee's interpretation is that the manual mode is adequate because:

1. action statement "a" of this LCO (if there was excessive seat leakage) would allow indefinite plant operation with both block valves closed i.e., without the PORV automatic function,

2. the language of the Vogtle FSAR Chapter 15 which does not require (nor use) the PORV automatic actuation, and

Contact: L. Lois, SRXB/DST, x20890

3. the fact that under severe accident conditions the PORVs will be used in the manual mode.

The reasons for their present avoidance of this test are: (1) to avoid another PORV stroking, and (2) because the part of the circuit which has not been tested is a passive circuit of very high reliability.

The staff's interpretation of the surveillance requirements are that the automatic function of the PORVs must be assured except for cases of excessive PORV seat leakage. This is because of the following safety considerations associated with the automatic function: (1) assurance that the valves will not open at or below normal primary system pressure (thus causing a small break LOCA) and (2) minimizing challenges to the pressurizer code safety valves.

With regard to the licensee's plan to continue operation until January 1990 prior to testing the automatic function, we find this acceptable because: (1) the block valves are operable and can be closed in the event of an inadvertent PORV opening, (2) the PORVs are not directly credited in the licensee's safety analyses, (3) identical components have been recently successfully tested at the other Vogtle Unit, (4) the portion of the surveillance test performed covered the major parts of the circuitry and the mechanical portion of the valve including the setpoints, and (5) the licensee plans to include the automatic function in future surveillances.

/S/

Robert C. Jones, Acting Chief
Reactor Systems Branch
Division of Systems Technology