Georgia Power Company
Post Office Box 282
Waynesboro, Georgia 30830
Telephone 404 554-9961
404 724-8114

Southern Company Services, Inc.
Post Office Box 2625
Birmingham, Alabama 35202
Telephone 205 870-6011

Vogtle Project

September 27, 1988

United States Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

File: X7BC35
Log: GN-1493

PLANT VOGTLE - UNIT 2
NRC DOCKET NUMBER 50-425
CONSTRUCTION PERMIT NUMBER CPPR-109
INSERVICE TEST PROGRAM: ISI-P-016, REVISION 1

Gentlemen:

We have enclosed ten (10) copies of the affected pages for Revision 1 to the VEGP Inservice Test Program; ISI-P-016 transmitted on March 25, 1988. This revision is being made so that the Unit 2 program will remain consistent with the VEGP-1 Inservice Test Program changes which will be submitted for review in the near future. Revision 1 contains two (2) relief requests (RR-26 and RR-27) and one (1) cold shutdown justification (CS-39). Relief Request 26 is "intentionally blank" (as is Unit 1) and Relief Request 27 pertains to valve leakage trending. Cold Shutdown Justification 39 pertains to RHR valve HV-8804A.

If any additional information is required, please do not hesitate to contact me.

Sincerely,

J. A. Bailey
Project Licensing Manager

JAB/sem

xc: NRC Regional Administrator
NRC Resident Inspector
P. D. Rice
J. P. Kane
R. A. Thomas
B. W. Churchill, Esquire
J. B. Hopkins (2)
G. Bockhold, Jr.
J. E. Joiner, Esquire
R. J. Goddard, Esquire
R. W. McManus
Vogtle Project File

B001

Revision Insertion Instructions for Distribution of ISI-P-016, Rev. 1

Replace the following pages as provided:

Approval Page
1-2
1-3
12-31
12-94

Add the following pages as provided:

13-26
13-27
14-39

SOUTHERN COMPANY SERVICES
INSPECTION, TESTING, AND ENGINEERING DEPARTMENT
FOR
GEORGIA POWER COMPANY

ISI-P-016
INSERVICE TEST PROGRAM
VOGTLE ELECTRIC GENERATING PLANT
UNIT 2

REV.	DATE	DESCRIPTION	SCS			GPC		
			PREP'D BY	REV'D BY	APPV. DEPT. MGR.	REV'D BY	SUPT. PLANT ENG.	APPV. GEN. MGR.
0	3-2-88	ISSUED FOR PST / IST	3-2-88	JMA 3/2/88	JMA for TNE 3/2/1988	3-4-88	3/4/88	3/21/88
1	8-25-88	INCORPORATED RR-27 & CS-39	8-25-88	9-6-88	JMA for TNE 9/6/1988	9/13/88	9/19/88	9/20/88

Section XI requires quarterly testing of all components unless it is impractical to do so. This program specifies quarterly testing of pumps and valves unless it has been determined that such testing would:

a. Be impractical due to system or component design.

b. Render a safety-related system inoperable.

c. Cause a reactor or turbine trip.

d. Require significant deviations from normal plant operations.

e. Require entry into inaccessible plant areas.

f. Increase the possibility of an intersystem LOCA.

Each component excluded from quarterly testing has been analyzed to determine when appropriate testing may be performed. If operation of a valve is not practical during plant operation, the Code allows part-stroke exercising during normal plant operation and full-stroke exercising at cold shutdown.

Since the Code accepts cold shutdown testing, this program does not request relief for those valves for which testing is delayed until cold shutdown. The Program does provide a justification for delay of testing until cold shutdown. These justifications are prepared in a format similar to relief requests, and are located behind the Cold Shutdown Justification tab.

Where it has been determined that testing is not practical during plant operation, or at cold shutdown, a specific relief request has been prepared. Each specific relief request provides justification for not performing the Code-specified tests, and provides appropriate alternative testing. In addition to specific relief requests, general relief requests which address specific Code requirements found to be impractical for this site have been prepared. Relief requests are located behind the Relief Requests tab.

The three general relief requests which have been written are RR-2, RR-3,and RR-27. RR-2 requests relief from IWV-3417(b) and IWV-3523 which state that, when corrective action is required as a result of tests made during cold shutdown, the condition shall be corrected before startup. Relief was requested to allow corrective action to be perfowmed prior to the valve being required for plant operability as defined in the Plant Technical Specifications. RR-3 requests relief from IWV-3417 for valves with stroke times of 2 seconds or less. Relief was requested to require the acceptance of the test to be based only on the stroke time limit and not the "50 percent" criterion in IWV-3417. RR-27 requests relief from IWV-3427(b) for all Catagory A and AC valves

6 inch nominal diameter and larger. Relief is requested from performing valve trending to determine seat degradation.

1.5 DEFINTIONS

Terms below, when used in the Inservice Testing Program, are defined as follows:

Quarterly: An interval of 92 days for testing components which can be tested during normal plant operation.

Cold Shutdown: Testing scheduled for cold shutdown will commence no later than 48 hours after entering cold shutdown. Testing will continue until all tests are complete or the plant is ready to return to power. Completion of all testing is not a prerequisite to return to power. Testing not completed at one cold shutdown will be performed during subsequent cold shutdowns that may occur before the refueling outage. In case of frequent cold shutdowns, valve testing will not be performed more often than once every 3 months. The 48-hour interval need not hold for planned cold shutdowns when their duration is of sufficient time to accomplish all shutdown testing.

Refueling: Testing scheduled for refueling will be performed during the normal scheduled refueling shutdowns before returning to power operation.

VEGP Unit No. 2
Valve Test List
System: Residual Heat Removal - System No. 1205

016 REV 1

Valve Number	Class ISI	Class Proj.	P&ID (Coord.)	Valve Size Cat	Valve Size (in.)	Valve Size Type	Act. Type	Position Norm	Position Fail	Position Safety	Act. or Pass	Tests and Freq. PI	Tests and Freq. ET	Tests and Freq. ST	Tests and Freq. FSV	Tests and Freq. LT	Relief Req. or C.S. Just.	Description and Notes
FV 0610	2	212	2X4DB122 (H-5)	B	3.00	GA	MO	O	AI	O/C	A	Y	Q	Q				RHR Pump P6-001 Miniflow
FV 0611	2	212	2X4DB122 (E-5)	B	3.00	GA	MO	O	AI	O/C	A	Y	Q	Q				RHR Pump P6-002 Miniflow
HV 8716A	2	212	2X4DB122 (F-7)	B	8.00	GA	MO	O	AI	O/C	A	Y	Q	Q				RHR Train A Hot Leg Isolation
HV 8716B	2	212	2X4DB122 (D-7)	B	8.00	GA	MO	O	AI	O/C	A	Y	Q	Q				RHR Train B Hot Leg Isolation
HV 8804A	2	212	2X4DB122 (F-8)	B	8.00	GA	MO	C	AI	O/C	A	Y	CS	CS			CS-39 RR-2	RHR Heat Exchanger (HX) Train A to CVCS Charge Pump Suction

NOTES

1. Valves included in the Appendix J, Type C local leak rate test program. The Appendix J, Type C requirements are implemented in lieu of paragraphs IWV-3421 through IWV-3425. Leakage rate analysis and corrective actions as required by IWV-3426 and 3427(a) will be performed.

2. This is a RCS pressure isolation valve and is leak rate tested per plant Technical Specifications.

3. These are Anchor-Darling testable check valves. These valves have a manual operation lever.

4. These valves perform a safety function in the open position. These valves are normally open therefore testing from the closed to open position is unnecessary.

RELIEF REQUEST

RR-26

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RELIEF REQUEST

RR-27

SYSTEM: All

VALVE(S): All Category A and AC Containment Isolation Valves 6 in. Nominal Diameter and Larger

CATEGORY: A, AC

CLASS: 1 and 2

FUNCTION: Containment Isolation

TEST REQUIREMENT: IWV-3427(b) requires that for valves 6 in. nominal pipe size and larger, if a leakage rate exceeds the rate determined by the previous test by an amount that reduces the margin between measured leakage rate and the maximum permissible rate by 50% or greater, the test frequency shall be doubled; the tests shall be scheduled to coincide with a cold shutdown until corrective action is taken, at which time the original test frequency shall be resumed. If tests show a leakage rate increasing with time, and a projection based on three or more tests indicates that the leakage rate of the next scheduled test will exceed the maximum permissible leakage rate by greater than 10%, the valve shall be replaced or repaired.

BASIS FOR RELIEF: IWV-3427(b) is apparently attempting to predict the failure of a valve based on gradual degradation that is of a trendable nature. This would apply to a valve where the seat, internals, etc. are wearing at a measurable rate, and the eventual failure of the valve could be predicted from successive leakage tests.

However, historical data at Plant Hatch, Plant Vogtle and other nuclear plants has demonstrated that, in general, valves do not exhibit gradually increasing leakage rates as implied by IWV-3427(b). The two general patterns of behavior for valves are: (1) essentially constant leakage rates followed by sudden failure or (2) erratic test results which do not trend. Therefore, trending as required by IWV-3427(b) does not serve any useful function.

ALTERNATE TESTING: Valves with leakage limits exceeding the allowable limits will be repaired or replaced per IWV-3427(a).

COLD SHUTDOWN JUSTIFICATION

CS-39

SYSTEM: Residual Heat Removal System No. 1205

VALVE(S): 1205-HV-8804A

CATEGORY: B

CLASS: 2

FUNCTION: This valve opens to allow flow from the RWST through the RHR Pumps to the centrifugal charging pumps during post-accident recirculation.

QUARTERLY TEST REQUIREMENT: Exercise and time

COLD SHUTDOWN TEST JUSTIFICATION: Exercising this valve during normal operation could introduce refueling water into the RCS through the normally operating charging pump. RCS boron concentration could be adversely affected and could cause a plant shutdown.

QUARTERLY PARTIAL STROKE TESTING: None

COLD SHUTDOWN TESTING: Exercise and time

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1-2
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12-31
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SOUTHERN COMPANY SERVICES
INSPECTION, TESTING, AND ENGINEERING DEPARTMENT
FOR
GEORGIA POWER COMPANY

ISI-P-016
INSERVICE TEST PROGRAM
VOGTLE ELECTRIC GENERATING PLANT
UNIT 2

REV.	DATE	DESCRIPTION	SCS			GPC		
			PREP'D BY	REV'D BY	APPV. DEPT. MGR.	REV'D BY	SUPT. PLANT ENG.	APPV. GEN. MGR.
0	3-2-88	ISSUED FOR PST / IST	GPC 3-2-88	JMA 3/2/88	JMA for TNE 3/2/1988	GAC 3-4-88	RLH 3/4/88	[signature] 3/21/88
1	8-25-88	INCORPORATED RR-27 & CS-39	TELV 8-25-88	GPC 9-6-88	JMA for TNE 9/6/1988	GAC 9/13/88	RLH 9/19/88	[signature] 9/20/88

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VEGP Unit No. 2
Valve Test List
System: Residual Heat Removal - System No. 1205

018 REV 1

Sheet 1 of 4

Valve Number	Class ISI	Class Proj.	P&ID (Coord.)	Valve Size Cat	Valve Size (in.)	Valve Size Type	Act. Type	Position Norm	Position Fail	Position Safety	Act. or Pass	Tests and freq. PI	Tests and freq. ET	Tests and freq. ST	Tests and freq. FSV	Tests and freq. LT	Relief Req. or C.S. Just.	Description and Notes
FV 0610	2	212	2X4DB122 (H-5)	B	3.00	GA	MO	O	AI	O/C	A	Y	Q	Q				RHR Pump P6-001 Miniflow
FV 0611	2	212	2X4DB122 (E-5)	B	3.00	GA	MO	O	AI	O/C	A	Y	Q	Q				RHR Pump P6-002 Miniflow
HV 8716A	2	212	2X4DB122 (F-7)	B	8.00	GA	MO	O	AI	O/C	A	Y	Q	Q				RHR Train A Hot Leg Isolation
HV 8716B	2	212	2X4DB122 (D-7)	B	8.00	GA	MO	O	AI	O/C	A	Y	Q	Q				RHR Train B Hot Leg Isolation
HV 8804A	2	212	2X4DB122 (F-8)	B	8.00	GA	MO	C	AI	O/C	A	Y	CS	CS			CS-39 RR-2	RHR Heat Exchanger (HX) Train A to CVCS Charge Pump Suction

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RELIEF REQUEST

RR-26

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COLD SHUTDOWN JUSTIFICATION

CS-39

SYSTEM: Residual Heat Removal System No. 1205

VALVE(S): 1205-HV-8804A

CATEGORY: B

CLASS: 2

FUNCTION: This valve opens to allow flow from the RWST through the RHR Pumps to the centrifugal charging pumps during post-accident recirculation.

QUARTERLY TEST REQUIREMENT: Exercise and time

COLD SHUTDOWN TEST JUSTIFICATION: Exercising this valve during normal operation could introduce refueling water into the RCS through the normally operating charging pump. RCS boron concentration could be adversely affected and could cause a plant shutdown.

QUARTERLY PARTIAL STROKE TESTING: None

COLD SHUTDOWN TESTING: Exercise and time

RELIEF REQUEST

RR-27

SYSTEM: All

VALVE(S): All Category A and AC Containment Isolation Valves 6 in. Nominal Diameter and Larger

CATEGORY: A, AC

CLASS: 1 and 2

FUNCTION: Containment Isolation

TEST REQUIREMENT: IWV-3427(b) requires that for valves 6 in. nominal pipe size and larger, if a leakage rate exceeds the rate determined by the previous test by an amount that reduces the margin between measured leakage rate and the maximum permissible rate by 50% or greater, the test frequency shall be doubled; the tests shall be scheduled to coincide with a cold shutdown until corrective action is taken, at which time the original test frequency shall be resumed. If tests show a leakage rate increasing with time, and a projection based on three or more tests indicates that the leakage rate of the next scheduled test will exceed the maximum permissible leakage rate by greater than 10%, the valve shall be replaced or repaired.

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