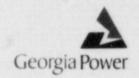
Georgia Power Company 333 Piedmont Avenue Atlanta, Georgia 30308 Telephone 404 526-6526

Mailing Address: Post Office Box 4545 Atlanta, Georgia 30302



L. T. Gucwa Manager Nuclear Safety and Licensing the southern electric system SL-2042

SL-2042 0110m

March 4, 1987

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D.C. 20555

NRC DOCKETS 50-424, 50-425

OPERATING LICENSE NPF-61, CONSTRUCTION PERMIT CPPR-109

VOGTLE ELECTRIC GENERATING PLANT UNITS 1, 2

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

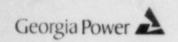
RELATIVE TO NRC 1&E BULLETIN 85-03

Gentlemen:

During a telephone conversation between Ms. M. A. Miller, the NRC NRR Vogtle Licensing Project Manager, and Georgia Power Company (GPC) personnel on February 4, 1987, it was requested that GPC provide additional information in response to NRC I&E Bulletin 85-03, "Motor-Operated Valve Common Mode Failures During Plant Transients Due To Improper Switch Settings," for Vogtle Units 1 and 2. Specifically, it was requested that GPC provide a clarification of system designators and copies of applicable drawings to assist in the NRC's review of our responses to the subject bulletin. Our response to the request for additional information is discussed herein and should be forwarded to the Director of Nuclear Reactor Regulation for action.

Georgia Power letter GN-905 dated May 13, 1986 (see Enclosure 1), indicated that GPC was developing a program to ensure that valve operator switches are selected, set, and maintained in accordance with the design basis for the operation of each valve. In addition, it was indicated that GPC had identified the motor-operated valves in the "high pressure coolant injection, core spray, and emergency feedwater systems" that are required to be tested for operational readiness in accordance with 10 CFR 50.55a(g). The phrase "high pressure coolant injection, core spray, and emergency feedwater systems" apparently has caused some confusion and should not have been used since these are common boiling water reactor (BWR) system designators rather than pressurized water reactor (PWR) system designators. The May 13, 1986 submittal should have indicated that the PWR-equivalent of those systems would be addressed in our subsequent response(s) to NRC I&E Bulletin 85-03. Page 1 of the attachment to GPC letter GN-1065 dated August 28, 1986 (see Enclosure 2), indicated that the PWR-equivalent of those BWR systems were being addressed in our response(s) to the Bulletin and specified the appropriate PWR systems. The systems at Vogtle Units 1 and 2 that are addressed in response to the Bulletin are the Safety Injection, Chemical and Volume Control, and Auxiliary Feedwater systems.





U. S. Nuclear Regulatory Commission March 4, 1987 Page Two

In addition to the above clarification, it was requested that six (6) copies of the piping and instrumentation drawings (P&IDs) for the affected systems at Vogtle Units 1 and 2 be provided to assist the NRC in the review of our responses to the Bulletin. Enclosed are six (6) copies of each P&ID for the affected systems from point-of-suction to point-of-injection. A list of the drawings is included as Enclosure 3.

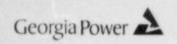
Should you require any additional information in this regard, please contact this office at any time.

Sincerely, Om Crowne for

L. T. Gucwa

JAE/1m

Enclosures



U. S. Nuclear Regulatory Commission March 4, 1987 Page Three

c(w/o): Georgia Power Company
Mr. R. E. Conway
Mr. J. P. O'Reilly
Mr. G. Bockhold, Jr.
Mr. R. E. Folker
GO-NORMS

Southern Company Services Mr. J. A. Bailey

Shaw, Pittman, Potts & Trowbridge Mr. B. W. Churchill, Attorney-at-Law

Troutman, Sanders, Lockerman & Ashmore Mr. J. E. Joiner, Attorney-at-Law

U. S. Nuclear Regulatory Commission
Dr. J. N. Grace, Regional Administrator
Mr. H. H. Livermore, Senior Resident Inspector-Construction, Vogtle
Ms. M. A. Miller, Licensing Project Manager, NRR
Mr. J. F. Rogge, Senior Resident Inspector-Operations, Vogtle

Georgians Against Nuclear Energy Mr. D. Feig Ms. C. Stangler

Georgia Power Company 333 Piedmont Avenue Atlanta, Georgia 30308 . Telephone 404 526-6724

Mailing Address: Post Office Box 4545 Atlanta, Georgia 30302

k

TO GEORGIA POWER COMPANY LETTER SL-2042

ENCLOSURE 1

R. E. Conway Senior Vice President

#### CORRECTED COPY

the southern electric system

6/228

May 13, 1986

United States Nuclear Regulatory Commission Region II Suite 2900 101 Marietta Street. Northwest Atlanta, Georgia 30323

Reference: RII: JNG: 50-424 50-425

Attention: Mr. J. Nelson Grace

File: X78C24 Log: GN-905

The following information is submitted in response to I&E Bulletin 85-03, "Motor-Operated Valve Common Mode Failures During Plant Transients Due To Improper Switch Settings:"

Georgia Power Company is currently developing a program to ensure that valve operator switches are selected, set, and maintained in accordance with the design basis for the operation of each valve. At this point, Georgia Power Company has identified the motor-operated valves in the high pressure coolant injection, core spray, and emergency feedwater systems that are required to be tested for operational readiness in accordance with 10 CFR 50.55a(g). The Vogtle Project architectengineer, Bechtel Power Corporation, has been requested to provide the necessary design information to complete action item "a" of the bulletin. Upon receipt of this information, a schedule will be developed for implementation of action items "b" through "d" of the bulletin. Georgia Power Company expects to provide the USNRC with this schedule by September 12, 1986.

This response contains no proprietary information and may be placed in the NRC Public Document Room.

Yours truly.

R. E. Conway

REF/DOF/tdm

8608130077 -200

R. E. Conway states that he is the Senior Vice President, Project Director of the Vogtle Project and is authorized to execute this oath on behalf of Georgia Power Company and that to the best of his knowledge and belief the facts set forth in this letter are true.

GPC: 125 leongay

Sworn to and subscribed before me this At day of May, 1986.

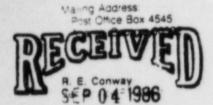
My Commission expires 4/11/88

xc: U. S. Nuclear Regulatory Commission Document Control Desk Washington, D. C. 20555

J.	н.	Miller	P. R. Bemis	W. T. Nickerson
		Head	J. A. Bailey	D. S. Read
		Beckham	O. Batum	Sr. Resident (NRC)
		Conway	G. Bockhold	D. L. Kinnsch (BPC)
		O'Reilly	C. E. Belflower	F. B. Marsh (BPC)
		Pinson	H. H. Gregory	C. S. McCall (OPC)
		Rice	E. D. Groover	D. A. Bartol (W)
В.	M.	Guthrie	L. T. Gucwa	J. E. Joiner
		Dutton	C. W. Hayes	(Troutman, et. al.
-		Thomas	G. A. McCarley	D. C. Teper (GANE)
		Altman	R. W. McManus	NORMS

read to mare secting to them

Georgia Power Compania 333 Predmont Avenue Atlantal Georgia 30308 Telephone 404 526-6724 ENCLOSURE 2
TO
GEORGIA POWER COMPANY
LETTER SL-2042



HUCLEAR SAFETY AND LICENSING

August 28, 1986

United States Nuclear Regulatory Commission Region II Suite 2900 101 Marietta Street, Northwest Atlanta, Georgia 30323 Reference: RII: JNG: 50-424 50-425

File: X78C24 Log: GN-1065

Attention: Mr. J. Nelson Grace

The attached information is submitted further to our letter of May 13, 1986 (File: X7BC24, Log: GN-905), and completes Georgia Power Company's initial response to I&E Bulletin 85-03, "Motor-Operated Valve Common Mode Failures During Plant Transients Due To Improper Switch Settings."

Georgia Power Company will submit a final response as required by the Bulletin within 60 days of completion of the valve operator switch verification program for each unit of the Vogtle Electric Generating Plant.

This response contains no proprietary information and may be placed in the NRC Public Document Room.

Yours truly,

R. E. Conway

REF/REC/tdm

Attachment

Hpp

R. E. Conway states that he is the Senior Vice President, Project Director of the Vogtle Project and is authorized to execute this oath on behalf of Georgia Power Company and that to the best of his knowledge and belief the facts set forth in this letter are true.

GPC: 18 leonway

Sworn to and subscribed before me this 28 de of August, 1986.

My Commission expires 6/16/90

xc: U. S. Nuclear Regulatory Commission Document Control Desk Washington, D. C. 20555

J. H. Miller	R. A. Thomas	L. T. Gucwa
J. P. O'Reilly	D. R. Altman	C. W. Hayes
G. F. Head	P. R. Bemis	G. A. McCarley
D. O. Foster	J. A. Bailey	D. S. Read
J. T. Beckham	O. Batum	Sr. Resident (NRC)
R. H. Pinson	G. Bockhold	C. S. McCall (OPC)
P. D. Rice	C. E. Belflower	J. E. Joiner (TSLA)
B. M. Guthrie	J. F. D'Amico	D. C. Teper (GANE)
D. E. Dutton	E. D. Groover	NORMS

#### RESPONSE TO IEB 85-03

SUBJECT:

USNRC IE Bulletin 85-03, "Motor-Operated Valve Common Mode Failures During Plant Transients Due To Improper Switch Settings"

REFERENCES:

- 1) GN-905 dated May 13, 1986
- 2) 10CFR50.55 a(g) "Inservice Inspection Requirements"

INTRODUCTION:

The following information is provided in response to IEB 85-03 Action Item (e), parts 1 and 2, pursuant to the provisions and commitments of our letter dated May 13, 1986 for Vogtle Electric Generating Plant Units 1 and 2.

PURPOSE:

The purpose of this response is to provide information relative to program development and implementation plans for Plant Vogtle commensurate with the requirements of IEB 85-03.

DISCUSSION:

Past performance/industry related experience clearly reflect the need for enhanced maintenance and setpoint controls for motor-operated valves. Consistent with Plant Vogtle's evolving motor-operated valve reliability program, based on lessons learned and experience gained, programmatic aspects associated with setpoint requirements have been evaluated per IEB 85-03.

RESPONSE:

IEB 85-03 directly targets motor-operated valves in high pressure coolant injection/core spray and emergency feedwater systems (RCIC for BWR's), which are required to be tested for operational readiness in accordance with 10CFR50.55 a(g). Corresponding motor-operated valve selections have been made as deemed appropriate consistent with the "Four Loop Westinghouse Pressurized Water Reactor Nuclear Steam Supply System" and associated design aspects for Plant Vogtle, with respect to the high pressure coolant systems identified in the bulletin. In accordance with 10CFR50.55 a(g) and consistent with IEB 85-03, valve selections specifically have been made on the basis of applicable "active" in-service test program motoroperated valves in appropriate portions of the Safety Injection, Chemical and Volume Control, and Auxiliary Feedwater Systems. Enhanced programmatic aspects associated with IEB 85-03 response requirements for these valves are represented per the following items:

<sup>°</sup>Valve Design Information

Setpoint Requirements

Operability Testing

<sup>°</sup>Procedures

<sup>°</sup>Initial Response/Schedule

<sup>°</sup>Test Reports

Response To IEB 85-03 Page Two

ITEM #1:

VALVE DESIGN INFORMATION (Ref. IEB 85-03 Action Item "a")

Valve, valve operator, and maximum expected differential pressure information is provided in Table 1 for selected valves in the appropriate portions of the Safety Injection, Chemical and Volume Control, and Auxiliary Feedwater Systems. Valve operator nameplate information for Table 1 was collected by means of equipment walkdowns/field verification. (Reference Table 1)

ITEM #2:

SETPOINT REQUIREMENTS (Ref. IEB 85-0. Action Item "b")

Setpoint review and revision requirements/methods have been evaluated with interim setpoint requirements established within the maintenance program for motor-operated valves at Plant Vogtle. Specific plant design aspects, relative to potential consequences associated with setpoint change implementation, were also considered as a part of the Plant Vogtle program evaluations. As a result of these evaluation efforts, appropriate wiring changes have been implemented for Unit 1 to enhance limitorque operator control switch function adjustment capabilities, with similar changes planned for Unit 2. With the exception of butterfly valves, dampers. and some special design change application requirement valves, wholesale separation of open bypass rotor functions are being enacted to allow open torque switch bypass adjustments without impacting other control switch functions. These changes provide an independent means of setpoint adjustment, eliminating the need for excessive compensatory actions such as raising torque or torque bypass switch settings significantly obove that required.

Adjustments in setpoint requirements will be made as warranted per test results obtained in Item #3.

ITEM #3:

OPERABILITY TESTING (Ref. IER 85-03 Action Item "c")

The Plant Vogtle motor-operated valve reliability program has implemented initial program testing by using a "Motor-Operated Valve Analysis and Test System" (MOVATS) to provide demonstrated operability of valves, to the extent possible, to verify the switch setpoint criteria established per Item 2 above such that these valves will perform their design function when exposed to maximum differential pressure conditions. Initial testing includes evaluation of static signatures for valve degradation, incorrect adjustments, and other abnormalities in motor-operated valves. Additional demonstrated operability testing will include evaluation of dynamic signatures for optimizing setpoint criteria, such that appropriate protection margins may be adjusted to ensure valve operability when subjected to

Response To IEB 85-03 Page Three

maximum differential pressure conditions, without unduely jeopardizing valve protection against catastrophic failure during normal plant operations. In addition to verifying valve operability, dynamic test results also provide a tangible means of re-evaluating setpoint criteria as established in Item 2 above, thereby formulating a system of checks and balances within the valve reliability program.

#### ITEM #4: PROCEDURES (Ref. IEB 85-03 Action Item "d")

Procedural requirements for program implementation are being integrated into existing Plant Vogtle procedures to prevent duplication of program effort and to assure maximum benefit potential from lessons learned.

Current procedural actions include the generation of a MOVATS test procedure and extensive motor-operated valve maintenance and checkout/setup procedure upgrades to provide a higher degree of detail consistent with valve performance/switch setting requirements. Additional procedural and training enhancements will be enacted as deemed appropriate pursuant to the test results and findings per Items 2 and 3 above.

### ITEM #5: INITITAL RESPONSE/SCHEDULE (Ref. IEB 85-03 Action Item "e")

This response meets IEB 85-03, Action Item "e", initial response requirements.

A collateral completion schedule has been selected to facilitate ongoing program adjustments commensurate with the lessons learned and experience gained during IEB 85-03 test program implementation at Plant Vogtle. In view of system availability and required plant configurations to support dynamic testing under simulated accident conditions, the scheduled parallel completion of programmatic goals and test phase requirements is forecasted for Unit 1 on or before the commencement date of commercial operation.

Unit 2 programmatic goals and test phase requirements, pending system completion/operational availability to support dynamic testing, are forecasted for completion prior to the date of Unit 2 operating license issuance in accordance with the provisions and requirements of IEB 85-03 Action Item "e", part 2.

#### ITEN #6: TEST REPORTS (Ref. IEB 85-03 Action Item "f")

Appropriate written reports of test results will be submitted within 60 days after program completions to the governing Regional Administrator pursuant to the requirements of IEB 85-03.

Response To IEB 85-03 Page Four

Any changes in program form or content within this response as a result of program development will be amended as applicable in the final test reports.

# VOGTLE ELECTRIC GENERATING PLANT UNITS 1 & 2

		HANDFACTURER/	VALVE			VALVE OPERATOR			
TAG NUMBER	TYPE/ SIZE		RATING (1bs)	PRESS. (PSIG)	DESIGN (PSID) C/O	HANLIFACTURER/ HODEL	MOTOR (RPM)	OPERATOR (RPM)	VALVE FUNCTION
HV-3009	GATE 4IN.	ANCHOR/DARLING E9001-12	9000	1185	1185 1185	LIMITORQUE	1900	63.3	STEAM GEN TO AFPT STEAM ISOLATION VALVE
EV-3019	GATE 4IN.	ANCHOR/DARLING E9001-12	9000	1185	1185 1185	LIMITORQUE SMB-00	1900	63.3	STEAM GEN TO AFPT STEAM ISOLATION VALVE
HV-5106	GATE 4IN.	ANCHOR/DARLING E9001-59	9000	1185	1185 1185	LIMITORQUE SMB-00	1900	82.6	AUX. FEEDMATER PUMP TURBINE ISOLATION VALVE
HV-5113	BFLY 10IN.	FISHER 9290	1500	150	40 40	LIMITORQUE SMB-000	1900	57.6	CONDENSATE STORAGE TANK V4002 TO PUMP P4001
HV-5118	BFLY BIN.	FISHER 9280	1508	150	40 40	LIMITORQUE SMB-000	3600	57.6	CONDENSATE STORAGE TANK V4002 TO PUMP P4002
HV-5119	BFLY BIN.	FISHER 9280	1500	150	40 40	LIMITORQUE SMB-000	3600	57.6	CONDENSATE STORAGE TANK V4002 TO PUMP P4003
HV-5120	GLOBE 4IN.	FISHER SS-120	9000	1800	1715 1715	LIMITORQUE SMB-00	1900	76.6	AUXILIARY FEEDWATER PUMP P4001 DISCHARGE
HV-5122	GLOBE 4IN.	FISHER SS-120	9000	1800	1715 1715	LIMITORQUE S8-00	1900	76.6	TURBINE DRIVEN AFMP DISCHARGE TO HEADER
HV-5125	GLOBE 4IN.	FISHER 99-120	9008	1900	1715 1715	LIMITORQUE SB-00	1900	76.6	TURBINE DEIVEN AFWP DISCHARGE TO HEADER
HV-5127	GLOBE 41N.	FISHER SS-120	9000	1000	1715 1715	LIMITORQUE S8-00	1900	76.6	TURBINE DRIVEN AFWP DISCHARGE TO HEADER
HV-5132	GLOBE 4IN.	FISHER SS-120	900#	1900	1645 1645	LIMITORQUE SB-00	3400	78.0	AUXILIARY FEEDWATER PUMP DISCHARGE
HV-5134	GLOBE 41N.	FISHER SS-120	900#	1800	1645 1645	LIMITORQUE S8-00	3400	78.0	AUXILIARY FEEDWATER PUMP DISCHARGE

## VOGTLE ELECTRIC GENERATING PLANT

			VALVE.			VALVE OPERATOR			
TAC MARKED	TYPE/ SIZE	HANLIFACTURER/ * HODEL	RATING (1bs)	PRESS. (PSIG)	DESIGN (PSID) C/O	MANUFACTURER/ MODEL	MOTOR (RPM)	OPERATOR (RPM)	VALVE FUNCTION
HV-5137	GLOBE 4IN.	FISHER SS-120	900#	1900	1645 1645	LIMITORQUE S8-00	3400	78.0	AUXILIARY FEEDMATER PUMP DISCHARGE
HV-5139	GLOSE 4IN.	FISHER SS-120	900#	1800	1645 1645	SB-00	3400	78.0	AUXILIARY FEEDNATER PUMP DISCHARGE
HV-8104	GLOSE 2IN.	VELAN 2TH78FN	15000	2500	2750 2750	LIMITORQUE SMB-00	1700	16.7	BORIC ACID TANK TO CHARGING PUMP
HV-8105	GATE 3IN.	MESTINGHOUSE 3GH79FN	15000	2500	2750 2750	LIMITORQUE S8-00	. 3400	82.9	CHARGING PUMP TO RCS ISOLATION
HV-8106	GATE 3IN.	MESTINGHOUSE 3GM78FN	15000	2500	2750 2750	LIMITORQUE SB-00	3400	82.9	CHARGING PUMP TO RCS ISOLATION
HV-8110	GLOBE 2IN.	VELAN 2TH78FN	15000	2500	2750 2750	LIMITORQUE SMB-00	1700	16.78	CHARGING PUMP TO MINIFLOW ISOLATION
HV-8111A	GLOBE 21N.	VELAN 2TH78FN	15000	2500	2750 2750	LIMITORQUE SMB-00	1700	18.1	CHARGING PUMP TO MINIFLOW ISOLATION
HV-81118	GLOBE 2IN.	VELAN 2TH78FN	1500#	2500	2750 2750	LIMITORQUE SMB-00	1790	16.78	CHARGING PUMP TO MINIFLOW ISOLATION
HV-8146	GATE 3IN.	MESTINGHOUSE 3GH99FNH	15000	2500	500 2750	LIMITORQUE SMB-000	1700	46.6	CHARGING TO RCS ISOLATION
HV-8147	GATE 3IN.	WEST INGHOUSE	15000	2500	500 2750	LIMITORQUE SMB-000	1700	46.4	CHARGING TO RCS ISOLATION
HV-8438	GATE 4IN.	MESTINGHOUSE 4GM78FN	15000	2500	2750 0	LIMITORQUE SB-00	1700	44.0	CHARGING PUMP & DISCHARGE
HV-8471A	GATE 61N.	MEST INGHOUSE 6GM72FB	1500	200	200 200	LIMITORQUE SMB-000	3400	93.2	CHARGING PUMP A SUCTION

Table 1 Page: 3

# VOGTLE ELECTRIC GENERATING PLANT UNITS 1 & 2

			VALVE			VALVE			
	TYPE/	HANLIFACTURER/	RATING (1bs)	PRESS. (PSIG)	DESIGN (PSID) C/O	HANLIFACTURER/ HODEL	MOTOR (RPM)	OPERA!OR (RPM)	VALVE FUNCTION
HV-84718	GATE 6IN.	MESTINGHOUSE SQM72FB	1500	200	200 200	LIMITORQUE SHB-000	3400	93.2	CHARGING PUMP B SUCTION
HV-8485A	GATE 4IN.	MEST INGHOUSE 4GH7SFN	15000	2500	100 2750	LIMITORQUE SB-00	1700	44	CHARGING PUMP A DISCHARGE
HV-84858	GATE 4IN.	MEST INGHOUSE 4GH79FN	15000	2500	100 2750	LIMITORQUE S8-00	1700	44	CHARGING PUMP B DISCHARGE
HV-8508A	GLOSE 2IN.	VELAN 2TH78FN	15000	2500	2750 2750	LIMITORQUE SMB-00	1700	26.98	CHARGING PUMP A RECIRC TO RUST (CHRG. PMP. MINFLW)
HV-85098	GL.08E 2IN.	VELAN 2TH/GFN	15000	2500	2750 2750	LIMITORQUE SMB-00	1700	26.98	CHARGING PUMP B RECIRC TO RWST (CHRG. PMP. MINFLW)
HV-8801V	GATE 4IN.	MESTINGHOUSE 4GH78FN	15000	2500	0 2750	LIMITORQUE SB-00	1700	41.46	BORON INJECTION TANK DISCHARGE ISOLATION VALVE
HV-99018	GATE 4IH.	MESTINGHOUSE 4GH78FN	15000	2500	0 2750	LINITORQUE S8-00	1700	41.46	BORON INJECTION TANK DISCHARGE ISOLATION VALVE
HV-8802A	GATE 4IN.	MESTINGHOUSE 4GH78FN	15000	2500	0 2750	LIMIYORQUE S8-00	1700	41.46	RCS HOTLEG LOOPS 184 HEADER ISOLATION
HV-80028	GATE 4IN.	MEST INGHOUSE	15000	2500	0 2750	LIMITORQUE S8-00	1700	44	RCS HOTLEG LOOPS 263 HEADER BYPASS
HV-8606	GATE BIN.	MESTINGHOUSE BGH72FB	1500	200	200 200	LIMITORQUE S8-00	1700	49.85	SAFETY INJECTION PUMP SUCTION HEADER ISOLATION
HV-8807A	GATE 6IN.	MESTINGHOUSE 6GM72FB	1506	200	200 200	LIMITORQUE SMB-JOO	3400	93.15	SAFETY INJECTION PUMP SUCTION HEADER
HV-8807B	GATE 6IN.	MESTINGHOUSE 6GM72FB	150#	200	200 200	LIMITORQUE SMB-000	3400	93.15	SAFTY INJECTION PUMP SUCTION HEADER

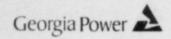
# VOGTLE ELECTRIC GENERATING PLANT UNITS 1 & 2

		VALVE			VALVE	OPERATOR			
TAG NUMBER	TYPE/ SIZE	MANUFACTURER/ * MODEL	RATING (1bs)	DESIGN PRESS. (PSIG)	DESIGN (PSID) C/O	MANUFACTURER/ MODEL	MOTOR (RPM)	OPERATOR (RPM)	YALVE FUNCTION
HA-8813	GLOSE 2IN.	VELAN 2TH78FN	15000	2500	2750 2750	LIMITORQUE SMB-000	1700	15.6	SAFETY INJECTION MINIFLOW HEADER ISOLATION
HV-8814	GLOSE 1.5IN	VELAN 1.5TM78FN	15000	2500	2750 2750	LIHITORQUE SMB-00	1700	16.78	SAFETY INJECTION MIMIFLOW ISOLATION
HV-8821A	GATE 4IN.	WESTINGHOUSE .	9008	1750	1500 1590	LIMITORQUE SMB-00	1700	34.69	SAFETY INJECTION PMP "A" RCS LOUP HEADER ISOLATION
HV-98218	GATE 4IN.	MESTINGHOUSE 4GH77FH	9000	1750	1500 1500	LIMITORQUE SM8-00	1700	34.69	SAFETY INJECTION PMP "B" LOOP HEADER ISOLATION
HV-8835	GATE 4IN.	WESTINGHOUSE 4GM79FN	15000	2500	0 2750	LIMITORQUE SB-00	1700	41.46	SAFETY INJECTION SYS RCS COLDLEG INLET ISOLATION VALVE
HV-8920	GLOBE 1.5IN	VELAN 1.5TM78FN	15000	2500	2750 2750	LIMITORQUE SMB-00	1700	16.78	SAFETY INJECTION PMP "B" MINIFLOW ISO. VALVE
HV-8923A	GATE 6IN.	MESTINGHOUSE	1500	200	200 200	LIMITORQUE SMB-000	3400	93.15	SAFETY INJECTION PMP INLET TRAIN A
HV-89238	GATE 6IN.	MESTINGHOUSE	1500	200	200 200	LIMITORQUE SMB-000	3400	93.15	SAFETY INJECTION PMP INLET TRAIN B
HV-9924	GATE 6IN.	MESTINGHOUSE 6GH72FB	1500	200	200 200	LIMITORQUE SMB-000	3400	93.15	CHARGING PUMP TO SAFETY INJECTION PMP CROSS TIE
LV-01128	GATE 4IN.	WESTINGHOUSE 4GM72FB	1500	200	100 200	LIMITORQUE SMB-000	1700	46.6	VOLUME CONTROL TANK OUTLET ISOLATION
LV-0112C	GATE 4IN.	MESTINGHOUSE 4GH72FB	1500	200	100 200	LIMITORQUE SM6-000	1700	46.6	VOLUME CONTROL TANK OUTLET ISOLATION
LV-0112D	GATE BIN.	MESTINGHOUSE BGM72FB	1500	200	200 200	LIMITORQUE SMB-00	1700	49.85	REFUELING WATER STOR AGE TANK TO CHARGING PUMP

## VOGTLE ELECTRIC GENERATING PLANT

			VALVE			VALVE			
TAG NUMBER	TYPE/ SIZE	MANUFACTURER/  * MODEL	RATING (1bs)	PRESS. (PSIG)	DESIGN (PSID) C/Q	MANUFACTURER/ MODEL	MOTOR (RPH)	OPERATOR (RPM)	VALVE FUNCTION
LV-0112E	GATE BIN.	HESTINGHOUSE BGM72FB	1500	200	200 200	LIMITORQUE SMB-00	1700	49.85	REFUELING WATER STOR AGE TANK TO CHARGING PUMP
PV-15129	GLOSE AIN.	GIMPEL	9000	1500	1185 1185	LIMITORQUE SMB-000	1900	56.72	TERRY TURBINE TRIP

<sup>\*</sup> APPLICABLE E-SPEC DESIGNATIONS HAVE BEEN PROVIDED FOR MESTINGHOUSE SUPPLIED VALVES.



# ENCLOSURE 3 TO GEORGIA POWER COMPANY LETTER SL-2042

The following list of prints represents the piping and instrumentation drawings (P&IDs) from the point-of-suction to the point-of-injection for the Vogtle Units 1 and 2 Safety Injection, Chemical and Volume Control, and Auxiliary Feedwater systems. Six (6) copies of each print are included herein. Drawing numbers for those valves identified in the attachment to Georgia Power Company letter GN-1065 dated August 28, 1986 are also noted below.

Vogtle Unit 1	Vogtle Unit 2
1X4DB111	2X4DB111
1X4DB112	2X4DB112
1X4DB114 (See Note 1)	2X4DB114 (See Note 1)
1X4DB115	2X4DB115
1X4DB116-1 (See Note 2)	2X4DB116-1 (See Note 2)
1X4DB116-2 (See Note 3)	2X4DB116-2 (See Note 3)
1X4DB117	2X4DB117
1X4DB118	2X4DB118
1X4DB119 (See Note 4)	2X4DB119 (See Note 4)
1X4DB120	2X4DB120
1X4DB121 (See Note 5)	2X4DB121 (See Note 5)
1X4DB122	2X4DB122
1X4DB131	2X4DB131
1X4DB159-2 (See Note 6)	2X4DB159-2 (See Note 6)
1X4DB161-1	2X4DB161-1
1X4DB161-2 (See Note 7)	2X4DB161-2 (See Note 7)
1X4DB161-3 (See Note 8)	2X4DB161-3 (See Note 8)
1X4DB168-3	2X4DB168-3

#### Notes:

- (1) Denotes valves HV-8146, HV-8147
- (2) Denotes valves HV-8104, HV-8105, HV-8106, LV-0112B, LV-0112C
- (3) Denotes valves HV-8110, HV-8111A, HV-8111B, HV-8438, HV8471A, HV-8471B, HV-8485A, HV-8485B, HV-8508A, HV-8508B, HV-8924, LV-0112D, LV-0112E
- (4) Denotes valves HV-8801A, HV-8801B
- (5) Denotes valves HV-8802A, HV-8802B, HV-8806, HV-8807A, HV-8807B, HV-8813, HV-8814, HV-8821A, HV-8821B, HV-8835, HV-8920, HV-8923A, HV-8923B
- (6) Denotes valves HV-3009, HV-3019
- (7) Denotes valves HV-5113, HV-5118, HV-5119, HV-5120, HV-5122, HV-5125, HV-5127, HV-5132, HV-5134, HV-5137, HV-5139
- (8) Denotes valves HV-5106, PV-15129