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

Mailing Address:
Post Office Box 4545
Atlanta, Georgia 30302

Georgia Power
the southern electric system

Nuclear Operations Department

SL-4860
0993m
X7GJ17-V820

July 18, 1988

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

PLANT VOGTLE - UNITS 1, 2
NRC DOCKETS 50-424, 50-425
OPERATING LICENSE NPF-68, CONSTRUCTION PERMIT CPPR-109
CORRIGENDA FOR "DUAL UNIT LICENSES" SUBMITTAL

Gentlemen:

In our letter SL-4696 dated May 19, 1988, Georgia Power Company provided certain information requested by the NRC regarding physical differences between Units 1 and 2 of Plant Vogtle. This information was submitted for your use in evaluation of the feasibility of dual unit licenses for Plant Vogtle operators. Subsequent to that submittal, errors in transcription from the source document and the need for some clarifications were discovered. Provided in the enclosure to this letter is a corrected version of "Enclosure 2" to SL-4696. Please replace the original "Enclosure 2" with the one provided herewith.

We regret any inconvenience these errors may have caused.

Sincerely,

W. G. Hairston, III
Senior Vice President,
Nuclear Operations

WEB/lm

Enclosure:
Revision 1 to "Enclosure 2" of SL-4696

c: (see next page)

B021

Georgia Power

c: Georgia Power Company
Mr. P. D. Rice
Mr. G. Bockhold, Jr.
Mr. P. D. Rushton
Mr. J. J. Badgett
GO-NORMS

U. S. Nuclear Regulatory Commission
Dr. J. N. Grace, Regional Administrator
Mr. J. B. Hopkins, Licensing Project Manager, NRR (2 copies)
Mr. J. F. Rogge, Senior Resident Inspector-Operations, Vogtle
Mr. J. F. Monroe, Chief-Operator and Licensing, Section I, Region II

0993m

Georgia Power

ENCLOSURE

PLANT VOGTLE - UNITS 1, 2
NRC DOCKETS 50-424, 50-425
OPERATING LICENSE NPF-68, CONSTRUCTION PERMIT CPPR-109
CORRIGENDA FOR "DUAL UNIT LICENSES" SUBMITTAL

Revision 1 to "ENCLOSURE 2" to SL-4696

700775

Georgia Power

ENCLOSURE 2

PLANT VOGTLE - UNITS 1, 2
NRC DOCKETS 50-424, 50-425
OPERATING LICENSE NPF-68, CONSTRUCTION PERMIT CPPR-109
FACILITY DESIGN AND SYSTEMS RELEVANT TO CONTROL ROOM
PERSONNEL AND OPERATIONAL CHARACTERISTICS

1. Boron Injection Tank (BIT) and the BIT Recirc System
   Reference: 1X4DB119
   2X4DB119
   Description of Change: The BIT and BIT recirc system were not piped up on Unit 2 while Unit 1 has the components piped up but disabled in place. This is not an operating difference but a physical difference. The unit 2 high head injection valves will use the same nomenclature (BIT Outlet Valves) as unit 1.

2. Waste Evaporator
   Reference: DCN-6164
   Description of Change: The Unit 2 Waste Evaporator Installation will not be completed.

3. Waste Monitor Tank Capacity
   Reference: DCN-6164
   Description of Change: Unit 2 will have 2 additional 20,000 gallon tanks designated as common tanks.

4. NSCW Tower Fans
   Reference: DCR 87-V1E0261
   2X3D-BD-K03A, B, C, D, E, F, G, and H
   2X3D-BA-D03F
   2X3D-AA-F39A
   Description of Change: Unit 2 will have a time delay on the vibration alarm for the NSCW Tower Fans.

5. NSCW Aux Containment Cooler Isolation Valves
   Reference: 2X4DB135-1, 135-2
   2X3D-BD-K04L and M
   Description of Change: Unit 2 valves are interlocked so that the outlet valves must be opened first. When opening the outlet valves they stroke 3 seconds, wait for 60 seconds, and then finish stroking open. This allows the header to backfill.

ENCLOSURE 2 (Continued)

FACILITY DESIGN AND SYSTEMS RELEVANT TO CONTROL ROOM
PERSONNEL AND OPERATIONAL CHARACTERISTICS

6. NSCW High Point Vacuum Breakers
Reference: 1X4DB134 and 1X4DB135
2X4DB134 and 2X4DB135
Description of Change: Unit 2 has added Vacuum breakers to the High points in the NSCW Systems. Unit 1 has no plans to incorporate the change.

7. Main Feed Pump Seal Injection
Reference: 2X4DB168-2
Description of Change: Unit 2 MFP seal injection filters have filter D/P indication that unit 1 doesn't.

8. Diesel Generator System
Reference: 1X4DB170-1 and 2
2X4DB170-1 and 2
2X3D-BH-G02B
Description of Change: The Unit 2 "B" train DG fuel oil transfer pumps have local/remote transfer switches (2HS-9045A and 2HS-9047A) to tranfer control of the pumps out of the control room in case of a control room fire. The switches are located on the front of the breaker cubicles. This may have an impact on AOP 18038.

Reference: DCR-87V1E0206
2X5DT0029 and 30
Description of Change: The fuel oil storage tank low level alarm setpoint was raised from 54 +/- 3.6 inches to 56 +/- 3.6 inches to allow more time for operator action. Unit 1, which is presently 45 inches +/- 3.6 inches, will be changed in the future.

Reference: 2X4DB170-1 and 2
NOE-02268
Description of Change: Unit 2 has a drain line installed on the day tank so that the day tank can be drained back to the fuel oil storage tank. The line has a lock closed isolation valve.

Reference: ODR T-2-87-0034 and MWO 2-88-01663
2X4AK01-361 and 369, MFCRB-18026
Description of Change: Unit 2 has added orifices in the air logic system to allow the low lube oil pressure trip to be active during an emergency start coincident with a normal shutdown. Unit 1 has not made this change.

Georgia Power

ENCLOSURE 2 (Continued)

FACILITY DESIGN AND SYSTEMS RELEVANT TO CONTROL ROOM
PERSONNEL AND OPERATIONAL CHARACTERISTICS

Reference: ODR T-2-87-00447 and MWO 2-88-00060
Bill of Material 2X3AEC1-107 Item #103
Description of Change: On Unit 2 the sync. mode select switches turn in the opposite direction. They have been revised to make-up in the manual and auto positions as shown on elementaries and instruction manual bill of materials. No design change documents have been issued to make this change in unit 1.

Reference: DR T-1-86-2118
Deferred Modification #90-0001
Description of Change: The Unit 2 sequencers have a reset pushbutton to allow resetting of the sequencer if the sequencer fails to complete the required loading sequence. Unit 1 requires a circuit card to be pulled to complete this task. Unit 1 plans to install the reset pushbutton in 1990. This difference may have an impact on the EOPs.

9. Heater Drain Pumps
Reference: 2X4DB163-3 and 163-4
2X4DB159
Description of Change: Valves 2-1310-X4-521 and 522 were added on unit 2 to allow warm up of the heater drain pumps prior to placing them in service to reduce thermal shock.

10. Auxiliary Building HVAC
Reference: YFCRB-6471, DCR-87V1E0177
2X3D-BG-D02C, F, L. P and S
2X5DB026-1
2X5DN050-1
2X4DB208-1
Description of Change: On a CVI signal the Unit 2 Auxiliary Building HVAC units will trip to comply with FSAR 9.4.3.2.2.3

11. CRDM Low Flow Alarm
Reference: DCR-87V1E0297
2X3D-BG-B02A
Description of Change: On unit 2 with less than 2 CRDM fans running a low flow alarm will annunciate on ALB52E08. Unit 1 has deferred this change.

700778

ENCLOSURE 2 (Continued)

FACILITY DESIGN AND SYSTEMS RELEVANT TO CONTROL ROOM
PERSONNEL AND OPERATIONAL CHARACTERISTICS

12. Control Building Electrical Penetration Filter Units
Reference: 1X4DB209
2X4DB209
Description of Change: The unit 2 electrical penetration filter units have been deleted. The unit 1 filter units will remain in service.

13. RHR Injection Orifices
Reference: 1-X6AA06-489-3, Note 3
YFCRB-613N
Description of Change: Unit 1 RHR injection orifices are sized larger than the unit 2 orifices. The open stroke on valves 1HV-606 and 1HV-607 is limited to prevent pump runout.

14. Annunciator Power Supplies
Reference: NOE-02268
Description of Change: Unit 2 uses a different type of annunciator inverter which incorporates an automatic transfer between the AC/DC power supplies. Both Unit 1 and Unit 2 power supplies will auto swap from the primary AC to the backup DC on a loss of primary power. Unit 2 power supplies will auto swap from the DC backup to primary AC when the primary power is available provided the source selector switch is in the AC position. On Unit 1, it is a manual operation to transfer from DC back to AC.

15. Condensate System
Reference: MFCRB-4046
2X4DB185-1
2X4DB168-1
Description of Change: Fill and vent of the unit 2 condensate system will be by use of the condensate demin backwash pump using the CSTs as a water source. The water will enter the condensate system through a 12" flush connection on the condensate pump discharge header. Unit one will use the condensate pumps and the condenser as a water source.

16. Heat Tracing
Reference: P&IDs 1X4DB124, 133-1, 133-2, 146-2, 161-1, 164-2, and 184
2X4DB124, 133-1, 133-2, 146-2, 161-1, 164-2, and 184
AX4DB190-2
Description of Change: Some outside areas of unit 2 rely on room (area) heating instead of heat tracing for freeze protection. Unit 1 has heat tracing for freeze protection in these areas. These areas include the RWST, RMWST, CSTs, NSCW pump and valve rooms, and underground tunnels.

ENCLOSURE 2 (Continued)

FACILITY DESIGN AND SYSTEMS RELEVANT TO CONTROL ROOM
PERSONNEL AND OPERATIONAL CHARACTERISTICS

17. Steam Dump Control in the Steam Pressure Mode
Reference: EA 2-88-12
YFCRB-7026
Description of Change: Unit 2 has changed the pressure control valves (PV-507A, B, C) such that they have equal percentage cams (Flow Demand) instead of linear percentage cams (Valve Stem Demand) as unit 1 does. This change will provide better control characteristics at low steam (heat) loads.

Technical Specifications

Anticipated Differences and/or Changes to be made to the Unit 1 Tech Specs when Common Tech Specs are issued.

1. RTNDT Limits and Copper Content
References: TS 3.4.9 page 3/4 4-30
Figure 3.4-2 page 3/4 4-31

Description:	Unit 1 Values	Unit 2 Values
Actual Copper Content	.06 WT.%	.05 WT.%
Actual Initial RTNDT	30 F	40 F

TS will be revised to reflect unit 2.

2. Spray Additive Flowrates
Reference: TS 4.6.2.2d page 3/4 6-14

Description:	Unit 1 Values	Unit 2 Values
Train A Eductor Flowrate	120 +/- 30 GPM	Not Determined
Train B Eductor Flowrate	130 +/- 30 GPM	Not Determined

3. Piping Penetration Area Filtration System
Reference: TS 3.7.7 and 4.7.7 page 3/4 7-17

Description:	Unit 1 Value	Unit 2 Value
Flow Rate Through HEPA Filter	15500 CFM	Not Determined

4. Area Temperature Monitoring
Reference: TS 3.7.10 page 3/4 7-27
Table 3.7-3 page 3/4 7-28
Description: There will be new rooms associated with unit 2 added to table 3.7-3.

ENCLOSURE 2 (Continued)

FACILITY DESIGN AND SYSTEMS RELEVANT TO CONTROL ROOM
PERSONNEL AND OPERATIONAL CHARACTERISTICS

5. Spent Fuel Storage Pools Capacity
   Reference: TS 5.6.3 page 5-5
   Description: East Pool (Unit 1) 288 fuel assemblies
   West Pool (Unit 2) 2098 fuel assemblies
   Both numbers are proposed.

6. High Energy Line Break (HELB) Protection
   Reference: T. S. 3.3.3.11
   Description: There have been new HELB instruments added to table 3.3-11 for unit 2.

7. Positive Moderator Temperature Coefficient (PMTC)
   Reference: T. S. 3.1.1.3
   Description: Unit 1's PMTC T. S. will change concurrent with the unit 1 refueling outage. In association with this change the RWST volumn and boron concentration, and the boron dilution flow rates may change.

Procedures, Primarily Abnormal and Emergency Operating Procedures

Limited operational differences should exist in the EOPs and AOPs. These differences may include:

1. A reference in the remote shutdown AOP regarding the remote operation of the unit 2 DG fuel oil transfer pumps.

2. Reference in the EOPs to the sequencer reset pushbutton.

Control Room Design and Instrument Locations

Control Room Layout

The Unit 2 Main Control Board (QMCB) is a rotated image of the Unit 1 Main Control Board. On sections A, B, and C of the Main Control Board the left-right relationship for all the controls and displays is identical. This identical relationship for the A, B, and C section includes the board layout and labeling. The Control Room Design Review will note any differences this summer. None are planned or expected.

ENCLOSURE 2 (Continued)

FACILITY DESIGN AND SYSTEMS RELEVANT TO CONTROL ROOM
PERSONNEL AND OPERATIONAL CHARACTERISTICS

The one exception to identical layout on the Main Control Board is the D section. The D section was a backfit after the control room design was completed and floor space did not allow an identical arrangement. Section D contains the same equipment on both units (RVLIS, PSMS, and Main Steam Bypass Isolation Valves). Section D is on the left end of section A on unit 1 and to the right of section B on unit 2. This will require looking left on unit 1 and right on unit 2 to verify that the Main Steam Bypass Isolation Valves are shut on a Main Steam Isolation. There should be no impact on routine unit operation.

The rest of the Unit 2 Control Boards appear as if the Unit 1 Boards were moved west. Their appearance on unit 2 will be the same as on unit 1 if you are standing in front of them. The Electrical Auxiliary Board (QEAB) will appear somewhat different from the center of the control room. In unit 1 it is over the right shoulder and in unit 2 it will be over the left shoulder. This will require a slightly different scanning pattern during immediate operator action in the EOPs but should have no impact on unit operation. The high voltage section of the QEAB is different to reflect the differences in the switchyards but the Unit 2 inplant distribution systems will appear identical Unit 1. The common distribution system is on the Unit 1 QEAB.

The control boards will be different to the extent that most common equipment is located on unit one. The Process and Effluent Radiation Monitoring System Panel (PERMS) non-safety related communications console for unit 2 will be at the west end of the QEAB instead of the east end of the Relay Panel as it is on unit 1. See AX5D52-A02 (Attached) for the control room layout.

Control Room Wall

A security wall was erected through the center of the common control room to separate unit 1 from unit 2 when unit 1 security went into effect. Original plans were for this wall to be removed when unit 2 security went into effect. Current plans are to leave most of the wall to reduce cost, provide unit separation, and reduce inter-unit noise. The wall will be open on the Shift Supervisors station, near the south door, and behind the QPCP.

ENCLOSURE 2 (Continued)

FACILITY DESIGN AND SYSTEMS RELEVANT TO CONTROL ROOM
PERSONNEL AND OPERATIONAL CHARACTERISTICS

Plant Computers

The plant computer (PROTEUS and ERF) terminals will be in mirror image locations. The PROTEUS computer function will be different in that no common inputs go to unit 2. The ERF computer will be identical except that the common radiation monitors and weather data will be displayed only on unit 1.

Planned Differences

Valve and Instrument Labeling Program

The valves and instruments located at the Vogtle Electric Generating Plant are labeled with unique labels that indicate unit number, system number, valve or instrument number, the name of the valve or instrument indicating its purpose, the train if appropriate, and any special notes about the component. Unit 1 has white rectangular (3" X 4") labels and unit 2 has round (4" diameter) blue labels

Operations Procedure Binders

The unit specific procedure binders (system operating procedures, lineup procedures, operations surveillance procedures, etc.) are marked indicating which unit they belong to. Unit 1 procedures are marked with a large 1 and unit 2 procedures are marked with a large 2.