ENCLOSURE 3

VOGTLE ELECTRIC GENERATING PLANT
REQUEST TO REVISE TECHNICAL SPECIFICATIONS
3/4.4.1.4.2 AND 3/4.9.1
INSTRUCTIONS FOR INCORPORATION

The proposed change to the Vogtle Unit 1 and Unit 2 Technical Specifications would be incorporated as follows:

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B3/4 9-1	B3/4 9-1

COLD SHUTDOWN - LOOPS NOT FILLED

LIMITING CONDITION FOR OPERATION

3.4.1.4.2 Two residual heat removal (RHR) trains shall be OPERABLE* and at least one RHR train shall be in operation.** Reactor Makeup Water Storage Tank (RMWST) discharge valves (1208-U4-175, 1208-U4-176#, 1208-U4-177# and 1208-U4-183) shall be closed and secured in position.

APPLICABILITY: MODE 5 with reactor coolant loops not filled.

ACTION:

a. With less than the above required RHR trains OPERABLE, immediately initiate corrective action to return the required RHR trains to OPERABLE status as soon as possible.

b. With no RHR train in operation, suspend all operations involving a reduction in boron concentration of the Reactor Coolant System and immediately initiate corrective action to return the required RHR train to operation.

c. With the Reactor Makeup Water Storage Tank (RMWST) discharge valves (1208-U4-175, 1208-U4-176#, 1208-U4-177#, and 1208-U4-183) not closed and secured in position, immediately close and secure in position the RMWST discharge valves.

SURVEILLANCE REQUIREMENTS

4.4.1.4.2.1 At least one RHR train shall be determined to be in operation and circulating reactor coolant at least once per 12 hours.

4.4.1.4.2.2 Valves 1208-U4-175, 1208-U4-176#, 1208-U4-177#, and 1208-U4-183 shall be verified closed and secured in position by mechanical stops at least once per 31 days.

*One RHR train may be inoperable for up to 2 hours for surveillance testing provided the other RHR train is OPERABLE and in operation.

**The RHR pump may be deenergized for up to 1 hour provided: (1) no operations are permitted that would cause dilution of the Reactor Coolant System boron concentration, and (2) core outlet temperature is maintained at least 10°F below saturation temperature.

#RMWST discharge valves 1208-U4-176 and 1208-U4-177 may be open under administrative control provided the Reactor Coolant System is in compliance with the SHUTDOWN MARGIN requirements of Specification 3.1.1.2 and the high flux at shutdown alarm is OPERABLE with a setpoint of 2.30 times background in accordance with Note 9 of Table 4.3-1.

3/4.9 REFUELING OPERATIONS

3/4.9.1 BORON CONCENTRATION

LIMITING CONDITION FOR OPERATION

3.9.1 The boron concentration of all filled portions of the Reactor Coolant System and the refueling canal shall be maintained uniform and sufficient to ensure that the more restrictive of the following reactivity conditions are met:

a. A K_{eff} of 0.95 or less, or

b. A boron concentration of greater than or equal to 2000 ppm.

Additionally, valves 1208-U4-175, 1208-U4-177#, 1208-U4-183, and 1208-U4-176# shall be closed and secured in position.

APPLICABILITY: MODE 6.

ACTION:

a. With the requirements of a. and b. above not satisfied, immediately suspend all operations involving CORE ALTERATIONS or positive reactivity changes and initiate and continue boration at greater than or equal to 30 gpm of a solution containing greater than or equal to 7000 ppm boron or its equivalent until K_{eff} is reduced to less than or equal to 0.95 or the boron concentration is restored to greater than or equal to 2000 ppm, whichever is the more restrictive.

b. With valves 1208-U4-175, 1208-U4-177#, 1208-U4-183, and 1208-U4-176# not closed and secured in position, immediately close and secure in position.

SURVEILLANCE REQUIREMENTS

4.9.1.1 The boron concentration of the Reactor Coolant System and the refueling canal shall be determined by chemical analysis at least once per 72 hours.

4.9.1.2 Valves 1208-U4-175, 1208-U4-177#, 1208-U4-183, and 1208-U4-176# shall be verified closed and secured in position by mechanical stops at least once per 31 days.

#RMWST discharge valves 1208-U4-176 and 1208-U4-177 may be open under administrative control provided the Reactor Coolant System is in compliance with the requirements of Specification 3.9.1 and the high flux at shutdown alarm is operable with a setpoint of 2.30 times background. For the purpose of this specification, the high flux at shutdown alarm will be demonstrated OPERABLE pursuant to Specification 4.9.2.

3/4.4 REACTOR COOLANT SYSTEM

BASES

3/4.4.1 REACTOR COOLANT LOOPS AND COOLANT CIRCULATION

The plant is designed to operate with all reactor coolant loops in operation and maintain DNBR above 1.30 during all normal operations and anticipated transients. In MODES 1 and 2 with one reactor coolant loop not in operation this specification requires that the plant be in at least HOT STANDBY within 6 hours.

In MODE 3, two reactor coolant loops provide sufficient heat removal capability for removing core decay heat even in the event of a bank withdrawal accident; however, a single reactor coolant loop provides sufficient heat removal capacity if a bank withdrawal accident can be prevented, i.e., by opening the Reactor Trip System breakers.

In MODE 4, and in MODE 5 with reactor coolant loops filled, a single reactor coolant loop or RHR train provides sufficient heat removal capability for removing decay heat; but single failure considerations require that at least two trains/loops (either RHR or RCS) be OPERABLE.

In MODE 5 with reactor coolant loops not filled, a single RHR train provides sufficient heat removal capability for removing decay heat; but single failure considerations, and the unavailability of the steam generators as a heat removing component, require that at least two RHR trains be OPERABLE. The locking closed of the required valves in Mode 5 (with the loops not filled) precludes the possibility of uncontrolled boron dilution of the filled portion of the Reactor Coolant System. ~~This~~ action prevents flow to the RCS of unborated water ~~by closing flowpaths from sources of unborated water~~. These limitations are consistent with the initial conditions assumed for the boron dilution accident in the safety analysis. These in excess of that analyzed.

The operation of one reactor coolant pump (RCP) or one RHR pump provides adequate flow to ensure mixing, prevent stratification and produce gradual reactivity changes during boron concentration reductions in the Reactor Coolant System. The reactivity change rate associated with boron reduction will, therefore, be within the capability of operator recognition and control.

The restrictions on starting an RCP with one or more RCS cold legs less than or equal to 350°F are provided to prevent RCS pressure transients, caused by energy additions from the Secondary Coolant System, which could exceed the limits of Appendix G to 10 CFR Part 50. The RCS will be protected against overpressure transients and will not exceed the limits of Appendix G by restricting starting of the RCPs to when the secondary water temperature of each steam generator is less than 50°F above each of the RCS cold leg temperatures.

{except valves 1208-U4-176 and 1208-U4-177 for short periods of time to maintain chemistry control,

BASES

3/4.9.1 BORON CONCENTRATION

The limitations on reactivity conditions during REFUELING ensure that: (1) the reactor will remain subcritical during CORE ALTERATIONS, and (2) a uniform boron concentration is maintained for reactivity control in the water volume having direct access to the reactor vessel. The locking closed of the required valves during refueling operations precludes the possibility of uncontrolled boron dilution of the filled portions of the Reactor Coolant System. ~~This~~ action prevents flow to the RCS of unborated water ~~by closing flowpaths from sources of unborated water.~~ These limitations are consistent with the initial conditions assumed for the Boron Dilution Accident in the safety analysis. The Boron concentration value of 2000 ppm or greater ensures a K_{eff} of 0.95 or less and includes a conservative allowance for calculational uncertainties of 100 ppm of boron.

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3/4.9.2 INSTRUMENTATION

The OPERABILITY of the Source Range Neutron Flux Monitors ensures that redundant monitoring capability is available to detect changes in the reactivity condition of the core.

3/4.9.3 DECAY TIME

The minimum requirement for reactor subcriticality prior to movement of irradiated fuel assemblies in the reactor vessel ensures that sufficient time has elapsed to allow the radioactive decay of the short-lived fission products. This decay time is consistent with the assumptions used in the safety analyses.

3/4.9.4 CONTAINMENT BUILDING PENETRATIONS

The requirements on containment building penetration closure and OPERABILITY ensure that a release of radioactive material within containment will be restricted from leakage to the environment. The OPERABILITY and closure restrictions are sufficient to restrict radioactive material release from a fuel element rupture based upon the lack of containment pressurization potential while in the REFUELING MODE.

3/4.9.5 COMMUNICATIONS

The requirement for communications capability ensures that refueling station personnel can be promptly informed of significant changes in the facility status or core reactivity conditions during CORE ALTERATIONS.

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REACTOR COOLANT SYSTEM

COLD SHUTDOWN - LOOPS NOT FILLED

LIMITING CONDITION FOR OPERATION

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APPLICABILITY: MODE 5 with reactor coolant loops not filled.

ACTION:

a. With less than the above required RHR trains OPERABLE, immediately initiate corrective action to return the required RHR trains to OPERABLE status as soon as possible.

b. With no RHR train in operation, suspend all operations involving a reduction in boron concentration of the Reactor Coolant System and immediately initiate corrective action to return the required RHR train to operation.

c. With the Reactor Makeup Water Storage Tank (RMWST) discharge valves (1208-U4-175, 1208-U4-176#, 1208-U4-177#, and 1208-U4-183) not closed and secured in position, immediately close and secure in position the RMWST discharge valves.

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4.4.1.4.2.1 At least one RHR train shall be determined to be in operation and circulating reactor coolant at least once per 12 hours.

4.4.1.4.2.2 Valves 1208-U4-175, 1208-U4-176#, 1208-U4-177#, and 1208-U4-183 shall be verified closed and secured in position by mechanical stops at least once per 31 days.

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3/4.9 REFUELING OPERATIONS

3/4.9.1 BORON CONCENTRATION

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