Georgia Power Company
Post Office Box 1600
Waynesboro, Georgia 30830
Telephone 404 724 1562
404 554 9961

Nuclear Plant Vogtle

Georgia Power
the southern electric system

January 21, 1992

Simulator Facility Certification
Annual Update
Log: NOT-02359
Ref: Docket Nos. 50-424 & 50-425

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

Gentlemen:

Attached is a summary of the annual certification testing exceptions for Vogtle Electric Generating Plant Units 1 & 2. Though these changes are minor in nature and are not required to be submitted, we are doing so to keep you aware of the status of our program.

Sincerely,

W. B. Shipman
General Manager

WBS/RJB/gww

Attachment

xc: R. E. Dorman
NORMS
C. K. McCoy

28007

A005 1/1

The Vogtle Simulator Certification Update has been completed for 1991. The results are:

The exceptions have not changed from the 1990 report. There are still two modifications that have not been completed within the time allowed by the standard. They are:

DR 8809012	"Proteus" Computer system simulation is not current
DR 8809011	The simulated MCR lighting is controlled by only two relays & no dimmer switches.

Both projects are currently in progress.

Lighting

The lighting upgrade is requiring extensive rewiring of the lighting fixtures in the simulator. It is currently approximately 50% complete. We expect completion of the project by 4/1/92. At that time the DR will be closed. The training impact is very insignificant because the lighting does go to backup supplies when power is lost to lighting busses. The only impact is that, in the simulator, all main lighting is lost on loss of power from either of two lighting transformers. In the plant the lights are split between power supplies some of which are 1E.

Proteus

Georgia Power Co. currently has a contract with the "ABB" corporation to replace the "Proteus" computer system. We expect the "Proteus" replacement to be available for training by the end of 1993. At that time the DR will be closed.

The current simulation of "Proteus" is limited and differs in some aspects of operation from the plant system. However, this has very little impact on training because the plant has two other computer systems that have more information in a more user-friendly environment. Plant operators normally use the "Emergency Response Facility Computer", which has over 1000 analog points or the "Plant Safety Monitoring System" computer. These computers have most of the points that "Proteus" has in a much better format. We do use the actual plant system to train the operators on the features of the system.

The following minor changes were made to the testing program. Some were made due to plant changes, some to improve the testing, and some due to inconsistencies between the test guides and the abstracts.

1. Malfunction test #05-05, "LOCA: Small Break," was modified as follows:

   a. Verification of containment spray actuation was removed since containment pressure will not increase above the HI-3 containment pressure setpoint given the small LOCA specified in the test.

   b. Some parameters from the critical parameters worksheet were either removed or modified because they were either redundant or incorrect.

   c. The malfunction severity, as specified in the test abstract, was changed to agree with the severity specified in the test procedure.

   The following documents were updated:

   a. PERFORMANCE TEST ABSTRACT: 05-05 (FORM: 05-02)
   b. MALFUNCTION TEST NUMBER: 05-05 (FORM: 05-03)
   c. CRITICAL PARAMETERS LIST: 05-05 (FORM: 09-01)

2. Malfunction test #05-09, "Loss of Emergency Power," was modified to clarify the procedure steps. In doing so, 05-09 was broken up into to sub-procedures 05-09A and 05-09B. The following documents were either updated or added because of this change:

   a. PERFORMANCE TEST ABSTRACT: 05-09 (FORM: 05-02)
   b. MALFUNCTION TEST NUMBER: 05-09 (FORM: 05-03)
   c. CRITICAL PARAMETERS LIST: 05-09A (FORM: 09-01)
   d. CRITICAL PARAMETERS LIST: 05-09B (FORM: 09-01)

3. Malfunction test #05-13, "Loss of Instrument DC Busses," was modified as follows:

   a. Additional verifications were added to tests #05-13A, #05-13B, #05-13C and #05-13D to make the tests more complete.

   b. Verification of loss of individual 1AY1A loads was removed from test #05-13A since the loss of 1AY1A is checked in test #05-12.

c. Several parameters that are evaluated in #05-13C were changed to better verify loss of the associated power supply.

The following documents were updated:

a. MALFUNCTION TEST NUMBER: 05-13 (FORM: 05-03)
b. CRITICAL PARAMETERS LIST: 05-13A (FORM: 09-01)
c. CRITICAL PARAMETERS LIST: 05-13B (FORM: 09-01)
d. CRITICAL PARAMETERS LIST: 05-13C (FORM: 09-01)
e. CRITICAL PARAMETERS LIST: 05-13D (FORM: 09-01)

4. Malfunction test #05-17 "Loss of Component Cooling," was modified as follows:

a. Several additional verifications were added to tests #05-17A and #05-17C to make the tests more complete.

b. Test #05-17B was completely rewritten because a new CCW model has been installed since the last time this test was performed. The change in the leak location between the old and the new CCW models necessitated the change in the test procedure. Although the leak location has been changed between the old and new CCW models there is no significant difference between the overall CCW system response and the actions the operator would take in response to the leak.

The following documents were updated:

a. PERFORMANCE TEST ABSTRACT: 05-17 (FORM: 05-02)
b. MALFUNCTION TEST NUMBER: 05-17 (FORM: 05-03)
c. CRITICAL PARAMETERS LIST: 05-17A (FORM: 09-01)
d. CRITICAL PARAMETERS LIST: 05-17B (FORM: 09-01)
e. CRITICAL PARAMETERS LIST: 05-17C (FORM: 09-01)

5. Malfunction test #05-21, "Fuel Cladding Failure," was modified as follows:

a. The order and severities of the malfunctions, as specified in the test abstract, were changed to agree with the order and severities of the malfunctions specified in the test procedure.

The following document was updated:

a. PERFORMANCE TEST ABSTRACT: 05-21 (FORM: 05-02)

6. Malfunction test #05-25, "Main Steam Line Break Outside Containment," was modified as follows:

a. IC condition was changed from 49% EOL, EqXe to 48% BOL, EqXe for both test #05-25A and #05-25B. This change was necessary since there is no 49% EOL, EqXe IC currently being maintained as a controlled IC.

b. The malfunction severity, as specified in the test abstract for test #05-25B, was changed to agree with the severity specified in the test procedure.

c. Because the IC's for this test were changed from EOL to BOL, a larger change in Tavg is expected. Therefore the reference to small or slight changes in Tavg were removed in the test procedure and the parameter qualification worksheet.

The following documents were updated:

a. PERFORMANCE TEST ABSTRACT: 05-09 (FORM: 05-02)
b. MALFUNCTION TEST NUMBER: 05-25 (FORM: 05-03)
c. CRITICAL PARAMETER LIST: 05-25A (FORM: 09-01)

7. Malfunction test #05-29,"Process Instrument Failures," was modified as follows:

a. Expected PRZR level response for test 05-29E was modified to be consistent with the test procedure.

b. Verification of a reactor trip due to low SG level was removed in #05-29G because the malfunction severities and timing specified will not cause a SG low level condition.

The following documents were updated:

a. MALFUNCTION TEST NUMBER: 05-29 (FORM 05-03)
b. CRITICAL PARAMETER LIST: 05-29E

8. Normal Operations test #06-01, "Plant Startup to Hot Standby," was modified as follows:

a. General procedure steps were removed since they are covered by the governing Unit Operating Procedures and to avoid making revisions to the cert test procedure every time there is a major update to the Unit Operating Procedures.

b. Initial conditions were changed to 140 °F to be consistent with the Unit Operating Procedure.

The following documents were updated:

a. PERFORMANCE TEST ABSTRACT: 06-01 (FORM 06-02)
b. NORMAL OPERATIONS TEST: 06-01 (FORM 06-03)

9. Normal Operations test #06-05, "Cooldown to Cold Shutdown Conditions," was modified as follows:

   a. General procedure steps were removed since they are covered by the governing Unit Operating Procedures and to avoid making revisions to the cert test procedure every time there is a major update to the Unit Operating Procedures.

   b. Final conditions were changed to 140 °F to be consistent with the Unit Operating Procedure.

   The following documents were updated:

   a. PERFORMANCE TEST ABSTRACT: 06-05 (FORM 06-02)
   b. NORMAL OPERATIONS TEST: 06-05 (FORM 06-03)

10. Normal Operations test #06-09, "Steady State Test at 30%," was modified as follows:

   a. Test run time was changed to 60 minutes to make the test abstract and the test procedure consistent.

   The following documents were updated:

   a. PERFORMANCE TEST ABSTRACT: 06-09 (FORM 06-02)
   b. NORMAL OPERATIONS TEST: 06-09 (FORM 06-09)

11. Normal Operations test #06-10, "Steady State Test at 75%," was modified as follows:

   a. Test run time was changed to 60 minutes to make the test abstract and the test procedure consistent.

   The following documents were updated:

   a. PERFORMANCE TEST ABSTRACT: 06-10 (FORM 06-02)
   b. NORMAL OPERATIONS TEST: 06-10 (FORM 06-09)

12. Transient test #07-01, "Manual Reactor Trip," was modified as follows:

   a. Verification of the Pressurizer Low Level Deviation Annunciator was removed. Pressurizer program level is scaled to accommodate the Pressurizer level shrink following a reactor trip. Therefore assuming no other malfunctions and with the pressurizer level control systems in auto, a pressurizer low level deviation condition should not occur.

The following document was updated:

a. TRANSIENT TEST: 07-01 (FORM 07-03)

13. Transient test #07-02, "Simultaneous Trip of All Feedwater Pumps," was modified as follows:

a. Verification that the MFWP suction flow decreases was changed to verification that the MFWP discharge flow decreases.

The following document was updated:

a. TRANSIENT TEST: 07-02 (FORM 07-03)

14. Transient test #07-04, "Simultaneous Trip of All Reactor Coolant Pumps," was modified as follows:

a. Because of a plant modification which removed the RCP undervoltage trip and the RCP underfrequency (with an undervoltage condition) trip, verification that the RCP breakers trip and the RCP amber trouble lamps light was removed.

b. The malfunctions, as specified in the test abstract, were changed to agree with the malfunctions specified in the test procedure.

The following documents were updated:

a. PERFORMANCE TEST ABSTRACT: 07-04 (FORM 07-02)
a. TRANSIENT TEST: 07-04 (FORM 07-03)

15. Transient Test #07-05, "Single Reactor Coolant Pump Trip," was modified as follows:

a. The total exercise time, as specified in the test abstract, was changed to agree with the test procedure.

The following document was updated:

a. PERFORMANCE TEST ABSTRACT: 07-05 (FORM 07-02)

16. Transient Test #07-07, "Max Rate Power Ramp," was modified as follows:

a. The transient test title was incorrect.

b. The time at which the return to full power is started was changed in the test abstract to agree with the test procedure.

The following documents were updated:

a. PERFORMANCE TEST ABSTRACT: 07-07 (FORM 07-02)
b. TRANSIENT TEST: 07-07 (FORM 07-03)

17. Transient Test #07-09, "Unisolable Main Steam Line Rupture Inside Containment," was modified as follows:

a. The IC, as specified in the test abstract, was changed to agree with the test procedure.

The following document was updated:

a. PERFORMANCE TEST ABSTRACT: 07-09 (FORM 07-09)

18. Transient Test #07-10, "Slow Primary Depressurization to Saturated Condition w/Stuck Safety Valve," was modified as follows:

a. The verification that letdown isolation occurs was removed. Saturated conditions occur in the RCS prior to Pressurizer level decreasing below 17% at which time Pressurizer level begins to increase.

The following document was updated:

a. TRANSIENT TEST: 07-10 (FORM 07-10)

19. "Simulator Real Time Report," Form 08-03 was modified as follows:

a. Valve HV9002 was replaced with valve HV8923A in the valve stroke timing test because valve HV9002 did not meet the minimum 15 second stroke time required.

20. "Exceptions Worksheet" Form 00-01, pages 11-12 were changed to reflect the current status of work on the two DR's that are beyond the time allotted by the standard.