ENCLOSURE 1

PROPOSED TECHNICAL SPECIFICATION
SEQUOYAH NUCLEAR PLANT
UNIT 2

TVA-SQN-TS-45

TEMPORARY CHANGE IN THE SURVEILLANCE
REQUIREMENTS FOR ROD DROP TIME (TS 4.1.3.4.C)
AND FOR FULL LENGTH CONTROL ROD POSITION LIMIT
SWITCHES ON TABLE 4.3-6 (TS 4.3.3.5)

ROD DROP TIME

LIMITING CONDITION FOR OPERATION

3.1.3.4 The individual full length (shutdown and control) rod drop time from the fully withdrawn position shall be less than or equal to 2.2 seconds from beginning of decay of stationary gripper coil voltage to dashpot entry with:

a. T_{avg} greater than or equal to 541°F, and

b. All reactor coolant pumps operating.

APPLICABILITY: MODES 1 and 2.

ACTION:

a. With the drop time of any full length rod determined to exceed the above limit, restore the rod drop time to within the above limit prior to proceeding to MODE 1 or 2.

b. With the rod drop times within limits but determined with 3 reactor coolant pumps operating, operation may proceed provided THERMAL POWER is restricted to less than or equal to 71% of RATED THERMAL POWER.

SURVEILLANCE REQUIREMENTS

4.1.3.4 The rod drop time of full length rods shall be demonstrated through measurement prior to reactor criticality:

a. For all rods following each removal of the reactor vessel head,

b. For specifically affected individual rods following any maintenance on or modification to the control rod drive system which could affect the drop time of those specific rods, and

c. At least once per 18 months. *

* For cycle 1, this surveillance is to be completed before the next cooldown or by August 5, 1983 whichever is earlier.

TABLE 4.3-6

REMOTE SHUTDOWN MONITORING INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION
1. Source Range Nuclear Flux	M	R
2. Reactor Trip Breaker Indication	M	N.A.
3. Reactor Coolant Temperature - Hot Leg	M	R
4. Pressurizer Pressure	M	R
5. Pressurizer Level	M	R
6. Steam Generator Pressure	M	R
7. Steam Generator Level	M	R
8. Full Length Control Rod Position Limit Switches	M	R *
9. RHR Flow Rate	M	R
10. RHR Temperature	M	R
11. Auxiliary Feedwater Flow Rate	M	R
12. Pressurizer Relief Tank Pressure	M	R
13. Containment Pressure	M	R

* For cycle 1, this surveillance is to be completed before the next cooldown or by August 5, 1983 whichever is earlier.

ENCLOSURE 2

JUSTIFICATION FOR PROPOSED TECHNICAL SPECIFICATION CHANGE

SEQUOYAH NUCLEAR PLANT
UNIT 2

TVA-SQN-TS-45

JUSTIFICATION FOR PROPOSED TECHNICAL SPECIFICATION

Increase in Rod Drop Test and Remote Shutdown Control Rod Limit Switch Calibration Surveillance Intervals

Sequoyah unit 2 surveillance requirement 4.1.3.4.c requires that the rod drop time be measured every 18 months. The last test was performed on September 2, 1981. The test results expire on July 21, 1983 if one year is assumed to have 366 days, one-half year is assumed to be 184 days, and the 25-percent allowance permitted by specification 4.0.2 is used. (NOTE: the expiration date would be July 31, 1983 if eighteen 31 days months and the 25-percent allowance are assumed.)

Unit 2 surveillance requirement 4.3.3.5, item 8 requires calibration of the control rod bottom lights in the remote shutddown control room every eighteen months. The last test performed was on August 28, 1981. The test results will expire on July 16, 1983. (NOTE: the expiration date would be July 26, 1983 if the second method is used for the calculation.)

The present shutdown date for the first Sequoyah unit 2 refueling outage is August 5, 1983. This date is based on the fuel currently available in this core, the state of outage preparation, and the assumed capacity factor for the remainder of the cycle. The expiration dates for both the rod drop test and the rod bottom light calibration will occur before the end of cycle.

The unrecoverable cost to TVA if Sequoyah unit 2 were required to shut down on July 16, 1983 rather than August 5, 1983 amounts to over $1.5 million. This cost results from the unused fuel that would remain in the fuel bundles to be replaced during the refueling. The plant would not be restarted after a July 16, 1983 shutdown to complete the fuel burn because of the additional costs that occur with water processing, plant heatup, and startup surveillance testing.

The increase in the surveillance interval amounts to a maximum of 20 days. The last day for extension of the surveillance interval is August 5, 1983. The maximum surveillance interval permitted by specification 4.0.2 amounts to 687 days. The increase is less than 3 percent of the total allowed interval. We believe that this small increase in the surveillance interval would not increase the rod drop time. Furthermore, the control rods are verified operable every 31 days in accordance with surveillance requirement 4.1.3.1.2. Also, rod drop times have not been a problem at Westinghouse plants. The testing and experience to date lead us to believe with a high degree of confidence that the rods would drop into the core in the required time. We believe that the increase in the surveillance interval would not increase the possibility that the rod bottom limit switches will not operate properly. The remaining portion of the circuit will be tested before the extended period is entered to verify the operability of the rod bottom lights in the remote shutdown control room. Also, the rod position indicators, which provide input to the bottom light bistables, have not exhibited calibration problems in the hot condition. These conditions lead us to believe with a high degree of confidence that the rod bottom lights would work in the remote shutdown control room in the unlikely event they were needed.

The requested change has been evaluated pursuant to 10 CFR 50.92 and no significant hazards considerations are involved because the change does not:

1) Involve an increase in the probability or consequences of an accident previously evaluated.

   Based on the testing that we are continuing to perform and the experience to date, we believe that the rods will drop within the required time limits and that the rod bottom lights will work if needed. Also, because the increase in the surveillance interval is less than 3 percent of the total time interval, we do not believe there will be an increase in the rod drop time, or that the increase in surveillance interval will increase the possibility of the rod bottom switches to not operate properly.

2) Create the possibility of a new or different kind of accident from any accident previously evaluated.

   Based on the fact that the control rods are tested every 31 days in accordance with the surveillance requirements and that rod drop times have not been a problem at other plants with Westinghouse equipment, we believe that the equipment will respond as designed.

3) Involve a reduction in the margin of safety.

   The increase in the surveillance interval does not reduce the margin of safety and the testing and experience to date lead us to believe that the equipment will operate as designed.