April 2, 1990

Docket Nos. 50-327
and 50-328

Mr. Oliver D. Kingsley, Jr.
Senior Vice President, Nuclear Power
Tennessee Valley Authority
6N 38A Lookout Place
1101 Market Street
Chattanooga, Tennessee 37402-2801

Dear Mr. Kingsley:

SUBJECT: MINIMUM RESIDUAL HEAT REMOVAL LOOP FLOWRATE IN MODE 6 (TAC 75745/75746) (TS 89-02) - SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2

The Commission has issued the enclosed Amendment No. 134 to Facility Operating License No. DPR-77 and Amendment No. 121 to Facility Operating License No. DPR-79 for the Sequoyah Nuclear Plant, Units 1 and 2, respectively. These amendments are in response to your application dated January 12, 1990 and the supplements dated February 9 and March 1, 1990 to your application.

The amendments modify Section 3/4.9.8, Residual Heat Removal and Coolant Circulation, of the Sequoyah Nuclear Plant, Units 1 and 2, Technical Specifications. The change to Surveillance Requirement 4.9.8.1.1 for both units decreases the minimum allowed flowrate for a residual heat removal loop from 2,500 gpm to 2,000 gpm in Reactor Mode 6, refueling.

A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's Bi-Weekly Federal Register Notice.

Sincerely,

Original signed by

Suzanne Black, Assistant Director
for Projects
TVA Projects Division
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No. 134 to License No. DPR-77
2. Amendment No. 121 to License No. DPR-79
3. Safety Evaluation

cc w/enclosures:
See next page

DF01
1/1

OFC	:NRR:TVA/PM	:OGC	:TVA:AD/P	:	:	:	:
NAME	:JDonohew:as	:APH	:SBlack	:	:	:	:
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Document Name: TS 89-02

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AMENDMENT NO. 134 FOR SEQUOYAH UNIT NO. 1 - DOCKET NO. 50-327 and
AMENDMENT NO. 121 FOR SEQUOYAH UNIT NO. 2 - DOCKET NO. 50-328
DATED: April 2, 1990

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H. Balukjian	(8-E-23)

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-327

SEQUOYAH NUCLEAR PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 134
License No. DPR-77

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Tennessee Valley Authority (the licensee) dated January 12, 1990, and its supplements dated February 9, and March 1, 1990, comply with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-77 is hereby amended to read as follows:

   (2) Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 134, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Suzanne Black

Suzanne Black, Assistant Director
for Projects
TVA Projects Division
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 2, 1990

ATTACHMENT TO LICENSE AMENDMENT NO. 134

FACILITY OPERATING LICENSE NO. DPR-77

DOCKET NO. 50-327

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change. Overleaf pages* are provided to maintain document completeness.

REMOVE	INSERT
3/4 9-8	3/4 9-8
B3/4 9-1	B3/4 9-1*
B3/4 9-2	B3/4 9-2
B3/4 9-3	B3/4 9-3

REFUELING OPERATIONS

3/4.9.8 RESIDUAL HEAT REMOVAL AND COOLANT CIRCULATION

ALL WATER LEVELS

LIMITING CONDITION FOR OPERATION

3.9.8.1 At least one residual heat removal (RHR) loop shall be in operation.

APPLICABILITY: MODE 6.

ACTION:

a. With less than one residual heat removal loop in operation, except as provided in b. below, suspend all operations involving an increase in the reactor decay heat load or a reduction in boron concentration of the Reactor Coolant System. Close all containment penetrations providing direct access from the containment atmosphere to the outside atmosphere within 4 hours.

b. The residual heat removal loop may be removed from operation for up to 1 hour per 8 hour period during the performance of CORE ALTERATIONS in the vicinity of the reactor pressure vessel hot legs.

c. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.8.1 At least one residual heat removal loop shall be verified to be in operation and circulating reactor coolant at a flow rate of greater than or equal to 2000 gpm at least once per 12 hours.

3/4.9 REFUELING OPERATIONS

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. Maintaining the listed valves in the closed position precludes an uncontrolled boron dilution accident by closing the flow paths for possible sources of unborated water. These limitations are consistent with the initial conditions assumed for the boron dilution incident in the accident analyses.

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 pressure 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 accident 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.

3/4.9.6 MANIPULATOR CRANE

The OPERABILITY requirements for the manipulator cranes ensure that: 1) manipulator cranes will be used for movement of drive rods and fuel assemblies, 2) each crane has sufficient load capacity to lift a drive rod or fuel assembly, and 3) the core internals and pressure vessel are protected from excessive lifting force in the event they are inadvertently engaged during lifting operations.

3/4.9.7 CRANE TRAVEL - SPENT FUEL PIT AREA

The restriction on movement of loads in excess of the nominal weight of a fuel and control rod assembly and associated handling tool over other fuel assemblies in the storage pool ensures that in the event this load is dropped: 1) the activity release will be limited to that contained in a single fuel assembly, and 2) any possible distortion of fuel in the storage racks will not result in a critical array. This assumption is consistent with the activity release assumed in the accident analyses.

3/4.9.8 RESIDUAL HEAT REMOVAL AND COOLANT CIRCULATION

The requirement that at least one residual heat removal (RHR) loop be in operation ensures that; 1) sufficient cooling capacity is available to remove decay heat and maintain the water in the reactor pressure vessel below 140°F as required during the REFUELING MODE, and 2) sufficient coolant circulation is maintained through the reactor core to minimize the effects of a boron dilution incident and prevent boron stratification. The minimum required flow rate of 2000 gpm ensures decay heat removal, minimizes the probability of losing an RHR pump by air-entrainment from pump vortexing, and minimizes the potential for valve damage due to cavitation or chatter. Losing an RHR pump is a particular concern during reduced RCS inventory operation. The 2000 gpm value is limited by the potential for cavitation in the control valve and chattering in the 10-inch check valve.

The requirement to have two RHR loops OPERABLE when there is less than 23 feet of water above the reactor pressure vessel flange ensures that a single failure of the operating RHR loop will not result in a complete loss of residual heat removal capability. With the reactor vessel head removed and 23 feet of water above the reactor pressure vessel flange, a large heat sink is available for core cooling. Thus, in the event of a failure of the operating RHR loop, adequate time is provided to initiate emergency procedures to cool the core.

3/4 9.9 CONTAINMENT VENTILATION SYSTEM

The OPERABILITY of this system ensures that the containment vent and purge penetrations will be automatically isolated upon detection of high radiation levels within the containment. The OPERABILITY of this system is required to restrict the release of radioactive material from the containment atmosphere to the environment.

3/4.9.10 and 3/4.9.11 WATER LEVEL - REACTOR VESSEL AND SPENT FUEL PIT

The restrictions on minimum water level ensure that sufficient water depth is available to remove 99% of the assumed 10% iodine gap activity released from the rupture of an irradiated fuel assembly. The minimum water depth is consistent with the assumptions of the accident analysis.

3/4.9.12 AUXILIARY BUILDING GAS TREATMENT SYSTEM

The limitations on the auxiliary building gas treatment system ensure that all radioactive material released from an irradiated fuel assembly will be filtered through the HEPA filters and charcoal adsorber prior to discharge to the atmosphere. Cumulative operation of the system with the heater on for 10 hours over a 31 day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters. The OPERABILITY of this system and the resulting iodine removal capacity are consistent with the assumptions of the accident analyses. ANSI N510-1975 will be used as a procedural guide for surveillance testing.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-328

SEQUOYAH NUCLEAR PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 121
License No. DPR-79

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Tennessee Valley Authority (the licensee) dated January 12, 1990, and its supplements dated February 9, and March 1, 1990, comply with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-79 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No.121 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Suzanne Black

Suzanne Black, Assistant Director
for Projects
TVA Projects Division
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 2, 1990

ATTACHMENT TO LICENSE AMENDMENT NO. 121

FACILITY OPERATING LICENSE NO. DPR-79

DOCKET NO. 50-328

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change. Overleaf pages* are provided to maintain document completeness.

REMOVE	INSERT
3/4 9-9	3/4 9-9
3/4 9-10	3/4 9-10*
B3/4 9-1	B3/4 9-1*
B3/4 9-2	B3/4 9-2
B3/4 9-3	B3/4 9-3

3/4.9.8 RESIDUAL HEAT REMOVAL AND COOLANT CIRCULATION

ALL WATER LEVELS

LIMITING CONDITION FOR OPERATION

3.9.8.1 At least one residual heat removal (RHR) loop shall be in operation.

APPLICABILITY: MODE 6.

ACTION:

a. With less than one residual heat removal loop in operation, except as provided in b. below, suspend all operations involving an increase in the reactor decay heat load or a reduction in boron concentration of the Reactor Coolant System. Close all containment penetrations providing direct access from the containment atmosphere to the outside atmosphere within 4 hours.

b. The residual heat removal loop may be removed from operation for up to 1 hour per 8 hour period during the performance of CORE ALTERATIONS in the vicinity of the reactor pressure vessel hot legs.

c. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.9.8.1 At least one residual heat removal loop shall be verified to be in operation and circulating reactor coolant at a flow rate of greater than or equal to 2000 gpm at least once per 12 hours.

3/4.9 REFUELING OPERATIONS

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. Maintaining the listed valves in the closed position precludes an uncontrolled boron dilution accident by closing the flow paths for possible sources of unborated water. These limitations are consistent with the initial conditions assumed for the boron dilution incident in the accident analyses.

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 pressure 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 accident 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.

3/4.9.6 MANIPULATOR CRANE

The OPERABILITY requirements for the manipulator cranes ensure that: 1) manipulator cranes will be used for movement of drive rods and fuel assemblies, 2) each crane has sufficient load capacity to lift a drive rod or fuel assembly, assembly, and 3) the core internals and pressure vessel are protected from excessive lifting force in the event they are inadvertently engaged during lifting operations.

3/4.9.7 CRANE TRAVEL - SPENT FUEL PIT AREA

The restriction on movement of loads in excess of the nominal weight of a fuel and control rod assembly and associated handling tool over other fuel assemblies in the storage pool ensures that in the event this load is dropped 1) the activity release will be limited to that contained in a single fuel assembly, and 2) any possible distortion of fuel in the storage racks will not result in a critical array. This assumption is consistent with the activity release assumed in the accident analyses.

3/4.9.8 RESIDUAL HEAT REMOVAL AND COOLANT CIRCULATION

The requirement that at least one residual heat removal (RHR) loop be in operation ensures that; 1) sufficient cooling capacity is available to remove decay heat and maintain the water in the reactor pressure vessel below 140°F as required during the REFUELING MODE, and 2) sufficient coolant circulation is maintained thru the reactor core to minimize the effects of a boron dilution incident and prevent boron stratification. The minimum required flow rate of 2000 gpm ensures decay heat removal, minimizes the probability of losing an RHR pump by air-entrainment from pump vortexing, and minimizes the potential for valve damage due to cavitation or chatter. Losing an RHR pump is a particular concern during reduced RCS inventory operation. The 2000 gpm value is limited by the potential for cavitation in the control valve and chattering in the 10-inch check valve.

The requirement to have two RHR loops OPERABLE when there is less than 23 feet of water above the reactor pressure vessel flange ensures that a single failure of the operating RHR loop will not result in a complete loss of residual heat removal capability. With the reactor vessel head removed and 23 feet of water above the reactor pressure vessel flange, a large heat sink is available for core cooling. Thus, in the event of a failure of the operating RHR loop, adequate time is provided to initiate emergency procedures to cool the core.

3/4.9.9 CONTAINMENT VENTILATION SYSTEM

The OPERABILITY of this system ensures that the containment vent and purge penetrations will be automatically isolated upon detection of high radiation levels within the containment. The OPERABILITY of this system is required to restrict the release of radioactive material from the containment atmosphere to the environment.

3/4.9.10 and 3/4.9.11 WATER LEVEL - REACTOR VESSEL AND SPENT FUEL PIT

The restrictions on minimum water level ensure that sufficient water depth is available to remove 99% of the assumed 10% iodine gap activity released from the rupture of an irradiated fuel assembly. The minimum water depth is consistent with the assumptions of the accident analysis.

3/4.9.12 AUXLIARY BUILDING GAS TREATMENT SYSTEM

The limitations on the auxiliary building gas treatment system ensure that all radioactive material released from an irradiated fuel assembly will be filtered through the HEPA filters and charcoal adsorber prior to discharge to the atmosphere. Cumulative operation of the system with the heater on for 10 hours over a 31 day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters. The OPERABILITY of this system and the resulting iodine removal capacity are consistent with the assumptions of the accident analyses. ANSI N510-1975 will be used as a procedural guide for surveillance testing.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

ENCLOSURE 3

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 134 TO FACILITY OPERATING LICENSE NO. DPR-77

AND AMENDMENT NO. 121 TO FACILITY OPERATING LICENSE NO. DPR-79

TENNESSEE VALLEY AUTHORITY

SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2

DOCKET NOS. 50-327 AND 50-328

1.0 INTRODUCTION

By letters dated January 12, February 9, and March 1, 1990, the Tennessee Valley Authority (TVA) proposed a change to Section 3/4.9.8, Residual Heat Removal and Coolant Circulation, of the Technical Specifications (TSs) for Sequoyah Nuclear Plant, Units 1 and 2. The proposed change to TS 3/4.9.8.1 and the associated Bases 3/4.9.8 will reduce the minimum allowed residual heat removal (RHR) system flowrate during Mode 6 operation. TVA proposed to add a Surveillance Requirement SR 4.9.8.1.2 to reduce the minimum allowed flowrate for a RHR loop from 2,500 gpm to 2,000 gpm. The loop flowrate could be greater than the 2,000 gpm. This is TVA TS Change Request 89-02.

In the submittal dated January 12, 1990, TVA originally proposed reducing the minimum allowed RHR loop flowrate from 2,500 gpm to 2,000 gpm only after at least 278 hours following core subcriticality during unit shutdown for refueling. Because Mode 6 operation is restricted to reactor coolant system (RCS) temperatures less than 140°F and TS 3/4.9.8.1 only requires that the minimum RHR loop flowrate can not be below a value but may be above that value to keep RCS temperatures below the 140°F, there is no need to restrict the minimum allowed RHR loop flowrate to a certain time period after core subcriticality. The RCS temperature must be kept below 140°F and the plant has two RHR loops and an allowed flowrate of at least at 2,000 gpm to do this. At least one RHR loop is required to be in operation in Mode 6 and this is not being changed by the proposed changes to TS 3/4.9.8.1.

In its submittal dated February 9, 1990, TVA revised its TS Change Request 89-02 to remove the 278 hours and the restriction on when the RHR loop flowrate could be reduced to the 2,000 gpm. As explained below, this would allow the plant to operate sooner at a reduced loop flowrate when there would be a greater margin against RHR pump vortexing and loss of RHR decay heat removal. SR 4.9.8.1.1 would be revised to allow a minimum RHR loop flowrate of 2,000 gpm. A new SR 4.9.8.1.2 would not be added to TS 3/4.9.8.1.

In its submittal dated March 1, 1990, TVA stated that although there is no TS requirement on minimum RHR loop flowrate for Mode 5, as there is in TS 3/4.9.8.1 for Mode 6, the flowrate is maintained generally above the minimum flow rate

for Mode 6 to keep the RCS temperatures below 200°F, the maximum temperature allowed for Mode 5 operation. Since the flowrate will continue to be limited by the RCS temperature, these submittals, including the revision to SR 4.9.8.1.1, do not change the substance of the proposed action in the Federal Register Notice (55 FR 4279) published on February 7, 1990 for the proposed amendments and do not affect the staff's initial determination of no significant hazards consideration in that notice.

2.0 EVALUATION

Generic Letter (GL) 88-17, "Loss of Decay Heat Removal", was issued by the staff on October 17, 1988 to address the potential loss of RHR decay heat removal during nonpower operation including reduced RCS inventory. The staff's concerns included the loss of RHR pumps due to vortexing at high flowrates. The GL was based in part on the Diablo Canyon event which was reported in NUREG-1269 (Reference 4).

At the currently required loop flowrate of 2,500 gpm, the RHR system could be susceptible to vortexing at the RHR pumps suction piping during reduced RCS inventory operation. Vortexing can lead to RHR system air entrainment and pump cavitation and subsequent loss of RHR system flow. TVA has proposed a reduction of the RHR loop flowrate to 2,000 gpm in SR 4.9.8.1.1. By letter dated March 1, 1990, TVA stated that there is no TS requirement for flowrate for operation in Mode 5, while the RCS is partially drained. However, the flowrate for Mode 5 is maintained by procedures, the same as for Mode 6, to keep RCS temperatures below 200°F, the maximum allowed RCS temperature for Mode 5.

Operation with the RCS partially drained in Mode 6 is necessary for required inspection and maintenance of RCS components such as reactor coolant pumps and steam generators. As indicated in NUREG-1269 (Reference 4), reduced RHR flowrate would provide a greater margin against vortexing and preclude an inadvertent loss of RHR decay heat removal capability due to air entrainment and cavitation of the RHR pumps. As the time after plant shutdown increases, decay heat removal requirements for the RHR system are reduced since decay heat decreases as a function of time after initial reactor shutdown. The TS change proposed by TVA will provide sufficient flowrate to maintain the RCS less than 140°F as required for Mode 6 operation because TVA can increase the RHR loop flowrate above the 2,000 gpm minimum allowable. In addition, a minimum RHR flowrate is required to prevent boron stratification to minimize the potential for localized variation in boron concentration in the RCS. For Sequoyah, Westinghouse has recommended a minimum flowrate of 2,000 gpm. The 2,000 gpm value is limited by the potential for cavitation in the control valve and chattering in the 10-inch check valve. The proposed TS change will require that the RHR loop flowrate is maintained at least equal to or greater than 2,000 gpm. The actual flowrate must be sufficient to maintain RCS temperature less than 140°F, as required for Mode 6 operation.

The text that TVA proposes to add to the Bases for TS 3/4.9.8.1 is correct and consistent with the basis for the proposed change to SR 4.9.8.1.2. Therefore, these proposed changes are acceptable.

The proposed TS change is a reduction in the minimum allowed RHR loop flowrate from 2,500 gpm to 2,000 gpm during Mode 6 operation, for which the RCS temperature is maintained below 140°F. The changes are consistent with the staff's positions in GL 88-17 and, as discussed above, on technical requirements for RHR decay heat removal. Therefore, the revision of SR 4.9.8.1.1 proposed for both units in TS Change Request 89-02 is acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change to a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes to the surveillance requirements. The staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement nor environmental assessment need be prepared in connection with the issuance of these amendments.

4.0 CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (55 FR 4279) on February 7, 1990 and consulted with the State of Tennessee. No public comments were received and the State of Tennessee did not have any comments.

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendments will not be inimical to the common defense and security nor to the health and safety of the public.

5.0 REFERENCES

1. Letter, M. J. Ray, Tennessee Valley Authority, to USNRC, Subject: Technical Specification (TS) Change 89-02, dated January 12, 1990.

2. Letter, M. J. Ray, Tennessee Valley Authority, to USNRC, Subject: Technical Specification (TS) Change 89-02, Additional Information, dated February 9, 1990.

3. Letter, E. G. Wallace, Tennessee Valley Authority, to USNRC, Subject: Technical Specification (TS) Change 89-02, Additional Information, dated March 1, 1990.

4. NUREG-1269, "Loss of Residual Heat Removal at Diablo Canyon, Unit 2, April 10, 1987", dated June 1987.

Principal Contributor: H. Balukjian

Dated: April 2, 1990