

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

500A Chestnut Street Tower II

January 19, 1981

Director of Nuclear Reactor Regulation
Attention: Mr. A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Schwencer:

In the Matter of
Tennessee Valley Authority

) Docket No. 50-327
)

In accordance with the provisions of 10 CFR 50.59, we have determined that the Essential Raw Cooling Water System configuration required to allow modifications to Component Cooling Water Heat Exchanger C constitutes an unreviewed safety question. Therefore, we request an amendment to license DPR-77 to allow completion of the proposed modification for Sequoyah Nuclear Plant unit 1.

Enclosed are 41 copies of the following information.

- (1) The proposed amendment to license DPR-77
- (2) TVA's justification for the modification

In accordance with requirements of 10 CFR 170.22, we have determined the proposed amendment to be Class III. This classification is based on our belief that no significant hazards consideration is involved. The remittance of \$4000 is being wired to the Nuclear Regulatory Commission, Attention: Licensing Fee Management Branch.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

J. L. Cross

J. L. Cross
Executive Assistant to the
Manager of Power

Sworn to and subscribed before me
this 19th day of Jan. 1981

Paulette H. White
Notary Public

My Commission Expires 9-5-84

Enclosures (41)

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ENCLOSURE 1

SEQUOYAH NUCLEAR PLANT UNIT 1
PROPOSED LICENSE AMENDMENT

In order to complete modifications of Component Cooling Water Heat Exchanger C, we request that the following paragraph be added to license DPR-77.

Before unit 2 operation (unit 2 in either mode 1, 2, 3, or 4), TVA shall be allowed to operate unit 1 with 2A and 1B ERCW headers tied together (this removes the independent trains of ERCW as required by Technical Specification 3.7.4.1). This change shall be allowed for a period of eight weeks while performing modifications to Component Cooling Water Heat Exchanger C.

ENCLOSURE 2

REASONS AND JUSTIFICATIONS FOR CHANGES TO

SEQUOYAH NUCLEAR PLANT UNIT 1

OPERATING LICENSE DPR-77

JUSTIFICATION FOR PROPOSED LICENSE

Reason Change Required

Component Cooling System (CCS) Heat Exchanger C is to have its tubes staked to provide stability of the tubes during heat exchanger design flow conditions. The repair work is required to be completed before two-unit operation. In order to guarantee a fully redundant and qualified CCS, CCS Heat Exchanger B must be substituted for Heat Exchanger C, and Essential Raw Cooling Water (ERCW) headers 1B and 2A must be tied together. The reduction in ERCW header independence constitutes a loss of independence as required by Technical Specification 3.7.4.1.

Safety Evaluation

Postulated design basis ERCW pipe breaks are limited to "through wall leakage cracks." Six hours of auxiliary building sump capacity are available before filling the sump which allows ample time to isolate the faulty header without having to shut the header down. Large breaks are not postulated.

Sufficient isolation capability exists for CCS Heat Exchanger A to be isolated from ERCW header 1B in the event that train A power is lost. The inlet valve to Heat Exchanger A is a motor-operated valve powered from train B. Upon loss of train B power, a train A valve automatically closes to isolate ERCW header 2A from ERCW header 1B.

The CCS and ERCW System are described in section 9.2 of the Sequoyah Final Safety Analysis Report.