

December 29, 1988

POSTED

Docket Nos. 50-327/328

Am 92 to DPR-77
See Correction Letter
of 1-22-89

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

SBlack
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Dear Mr. Kingsley:

SUBJECT: RESIDUAL HEAT REMOVAL SYSTEM ISOLATION (TAC R00203/R00204)
(TS 87-27) - SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2

The Commission has issued the enclosed Amendment No. 92 to Facility Operating License No. DPR-77 and Amendment No. 82 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 August 5, 1987 which was supplemented by clarifying information provided in your letter dated October 20, 1988.

The amendments modify the Sequoyah, Units 1 and 2 Technical Specifications (TS). The changes revise Surveillance Requirement 4.5.2.d.1 for both units. The changes reduce the setpoint, where the automatic isolation and interlock action of the residual heat removal system is verified to act, from a reactor coolant system pressure of above 750 psig to above 700 psig.

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 Special Projects

Enclosures:

1. Amendment No. 92 to License No. DPR-77
2. Amendment No. 82 to License No. DPR-79
3. Safety Evaluation

cc w/enclosures:
See next page

OSP:TVA/LA	OSP:TVA/SPM	OGC	TVA:AD/P		
NAME:MSimms	Doohew:as	AS	SBlack		
DATE:12/16/88	12/23/88	12/27/88	12/29/88		

Mr. Oliver D. Kingsley, Jr.

-2-

Sequoyah Nuclear Plant

cc:

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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. 92
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 August 5, 1987 and supplemented by an October 20, 1988 letter, complies 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. 92, 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, Assistant Director
for Projects
TVA Projects Division
Office of Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 29, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 92

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.

REMOVE

3/4 5-6

INSERT

3/4 5-6

EMERGENCY CORE COOLING SYSTEMS (ECCS)

SURVEILLANCE REQUIREMENTS (Continued)

- | <u>Valve Number</u> | <u>Valve Function</u> | <u>Valve Position</u> |
|---------------------|--------------------------------|-----------------------|
| a. FCV-63-1 | RHR Suction from RWST | open |
| b. FCV-63-22 | SIS Discharge to Common Piping | open |
- b. At least once per 31 days by:
1. Verifying that the ECCS piping is full of water by venting the ECCS pump casings and accessible discharge piping high points, and
 2. Verifying that each valve (manual, power operated or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
- c. By a visual inspection which verifies that no loose debris (rags, trash, clothing, etc.) is present in the containment which could be transported to the containment sump and cause restriction of the pump suction during LOCA conditions. This visual inspection shall be performed:
1. For all accessible areas of the containment prior to establishing CONTAINMENT INTEGRITY, and
 2. Of the areas affected within containment at the completion of each containment entry when CONTAINMENT INTEGRITY is established.
- d. At least once per 18 months by:
1. Verifying automatic isolation and interlock action of the RHR system from the Reactor Coolant System when the Reactor Coolant System pressure is above 700 psig.
 2. A visual inspection of the containment sump and verifying that the subsystem suction inlets are not restricted by debris and that the sump components (trash racks, screens, etc.) show no evidence of structural distress or corrosion.
- e. At least once per 18 months, during shutdown, by:
1. Verifying that each automatic valve in the flow path actuates to its correct position on a safety injection test signal and automatic switchover to containment sump test signal.



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. 82
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 August 5, 1987 and supplemented by an October 20, 1988 letter, complies 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. 82, 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, Assistant Director
for Projects
TVA Projects Division
Office of Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: December 29, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 82

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

3/4 5-6

INSERT

3/4 5-6

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- | <u>Valve Number</u> | <u>Valve Function</u> | <u>Valve Position</u> |
|---------------------|--------------------------------|-----------------------|
| a. FCV-63-1 | RHR Suction from RWST | open |
| b. FCV-63-22 | SIS Discharge to Common Piping | open |
- b. At least once per 31 days by:
1. Verifying that the ECCS piping is full of water by venting the ECCS pump casings and accessible discharge piping high points, and
 2. Verifying that each valve (manual, power operated or automatic) in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.
- c. By a visual inspection which verifies that no loose debris (rags, trash, clothing, etc.) is present in the containment which could be transported to the containment sump and cause restriction of the pump suction during LOCA conditions. This visual inspection shall be performed:
1. For all accessible areas of the containment prior to establishing CONTAINMENT INTEGRITY, and
 2. Of the areas affected within containment at the completion of each containment entry when CONTAINMENT INTEGRITY is established.
- d. At least once per 18 months by:
1. Verifying automatic isolation and interlock action of the RHR system from the Reactor Coolant System when the Reactor Coolant System pressure is above ~~750~~⁷⁰⁰ psig.
 2. A visual inspection of the containment sump and verifying that the subsystem suction inlets are not restricted by debris and that the sump components (trash racks, screens, etc.) show no evidence of structural distress or corrosion.
- e. At least once per 18 months, during shutdown, by:
1. Verifying that each automatic valve in the flow path actuates to its correct position on a safety injection test signal and automatic switchover to containment sump test signal.



ENCLOSURE

SAFETY EVALUATION BY THE OFFICE OF SPECIAL PROJECTS

SUPPORTING AMENDMENT NO. 92 TO FACILITY OPERATING LICENSE NO. DPR-77

AND AMENDMENT NO. 82 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 the letter dated August 5, 1987, the Tennessee Valley Authority (TVA or the licensee) requested a change to the Sequoyah, Units 1 and 2 Technical Specifications (TS) involving the interlock pressure setpoint for the isolation of the residual heat removal (RHR) system from the reactor coolant system (RCS). This is the licensee's TS change request 87-27.

TVA provided supplemental information in its letter dated October 20, 1988. This information clarified the information provided in TVA's application for these proposed amendments. It did not change the substance of the proposed action in the Federal Register Notice (52 FR 49233) on December 30, 1987 for the proposed amendments and does not affect the staff's initial determination of no significant hazards consideration in that notice.

2.0 EVALUATION

The design of the RHR system includes two isolation valves (flow control valves FCV-74-1 and FCV-74-2) in series on the inlet line between the high-pressure RCS and the lower-pressure RHR system. These valves are designed to close on a pressure signal from the RCS. The licensee's proposed TS change involves lowering the RHR isolation setpoint pressure from 750 psig to 700 psig. These flow control valves isolate the RHR system from the RCS and prevent overpressurization of the RHR by the RCS. Overpressurization of the RHR is also prevented by administrative controls that require the operator to close the isolation valves when the RCS pressure reaches 400 psig and a safety relief valve that releases into the containment when the RHR pressure reaches 450 psig.

The selection of the 700 psig setpoint for automatic RHR isolation is based on the setpoint listed in the Westinghouse Standard Technical Specifications. The 700 psig setpoint is low enough to protect the RHR system from overpressurization and high enough to prevent spurious isolation of the RHR from the RCS due to pressure transients in the RHR. RHR system design pressure is 600 psig. The American Society of Mechanical Engineers' Code, Section III, requires the

hydrostatic test pressure to be 1.25 times the system design pressure; therefore, the RHR system has been tested to withstand a pressure of 750 psig. The RCS setpoint pressure is set at 700 psig to ensure the RHR system is isolated before the pressure reaches 750 psig.

Because reducing the setpoint pressure to 700 psig improves the overpressure protection for the RHR System and is consistent with the Westinghouse Standard Technical Specifications, the staff concludes TS change request 87-27 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 (52 FR 49233) on December 30, 1987, 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.

Principal Contributor: P. Hearn

Dated: December 29, 1988