

# UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20666

# TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-328

# SEQUOYAH NUCLEAR PLANT, UNIT 2

# AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 138 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 27, 1990, 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 1;
  - 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 . 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. 138, 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 Frederick J. Hebdon, Director Project Directorate II-4 Division of Reactor Projects - 1/II Office of Nuclear Reactor Regulation Attachment: Changes to the Technical Specifications Date of Issuance: December 17, 1990

# ATTACHMENT TO LICENSE AMENDMENT NO. 138

# FACILITY OPERATING LICENSE NO. DPR-79

# DOCKET NO. 50-328

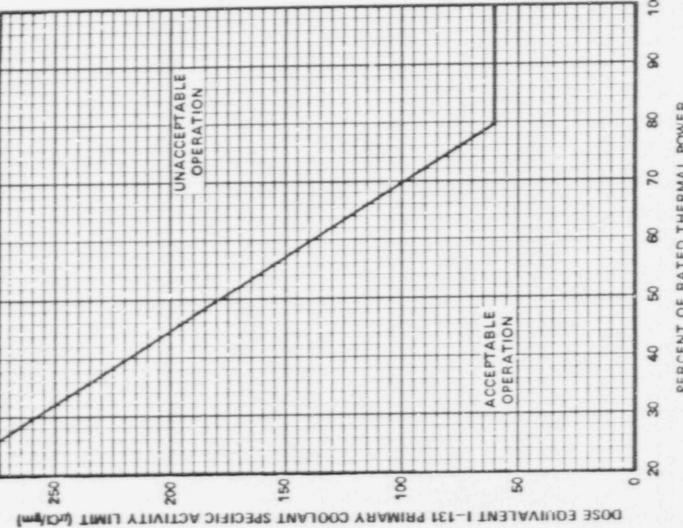
Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change. Overleaf pages\* are provided to maintain document completeness.

REMOVE	INSERT	
VI	Vİ	
3/4 4-27	3/4 4-27*	
3/4 4-28	3/4 4-28	
3/4 4-29	***	
3/4 4+30	3/4 4-29	
3/4 4-31	3/4 4-30	
3/4 4-32	3/4 4-31	
3/4 4+33	3/4 4-32	
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PERCENT OF RATED THERMAL POWER

# FIGURE 3.4-1

DOSE EQUIVALENT 1-131 Primary Coolant Specific Activity Limit Versus Percent of RATED THERMAL POWER with the Primary Coolant Specific Activity > 1.0 LCI/gram Dose Equivalent I-131

# 3/4.4.9 PRESSURE/TEMPERATURE LIMITS

# LIMITING CONDITION FOR OPERATION

- 3.4.9.1 The Reactor Coolant System (except the pressurizer) temperature and pressure shall be limited in accordance with the limit lines shown on Figures 3.4-2 and 3.4-3 during heatup, cooldown, criticality, and inservice leak and hydrostatic testing with:
  - a. A maximum heatup of 100°F in any one hour period.
  - b. A maximum cooldown of 100°F in any one hour period.
  - c. A maximum temperature change of less than or equal to 5°F in any one hour period during inservice hydrostatic and leak testing operations above the heatup and cooldown limit curves.

APPLICABILITY: At all times.

# ACTION:

With any of the above limits exceeded, restore the temperature and/or pressure to within the limit within 30 minutes; perform an engineering evaluation to determine the effects of the out-of-limit condition on the structural integrity of the Reactor Coolant System; determine that the Reactor Coolant System remains acceptable for continued operation or be in at least HOT STANDBY within the next 6 hours and reduce the RCS  $T_{\rm avg}$  and pressure to less than 200°F and 500 psig, respectively, within the following 30 hours.

- 4.4.9.1.1 The Reactor Coolant System temperature and pressure shall be determined to be within the limits at least once per 30 minutes during system heatup, cooldown, and inservice leak and hydrostatic testing operations.
- 4.4.9.1.2 The reactor vessel material irradiation surveillance specimens shall be removed and examined, to determine changes in material properties in accordance with 10 CFR 50. Appendix H. The results of these examinations shall be used to update Figures 3.4-2 and 3.4-3.

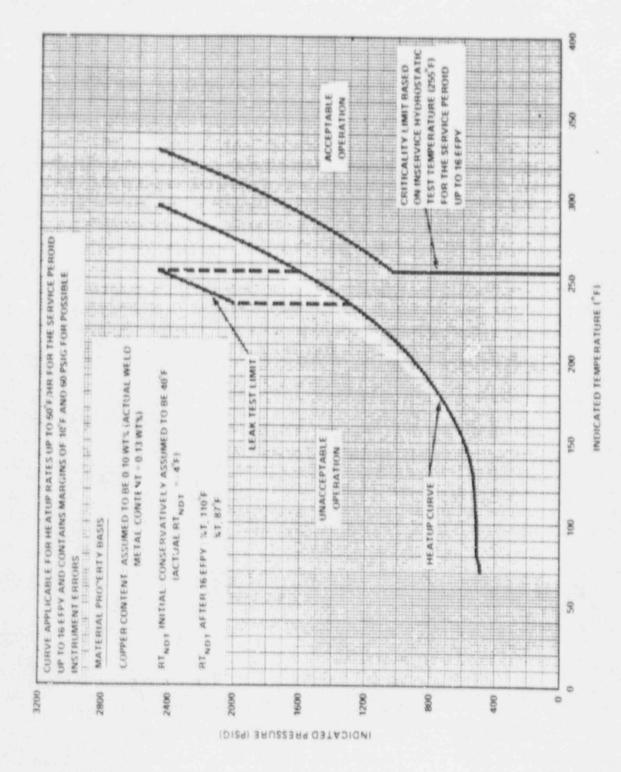


Figure 3.4.2. Sequoyah Unit 2 Reactor Coolant System Heatup Limitations Applicable up to 16 EFPY

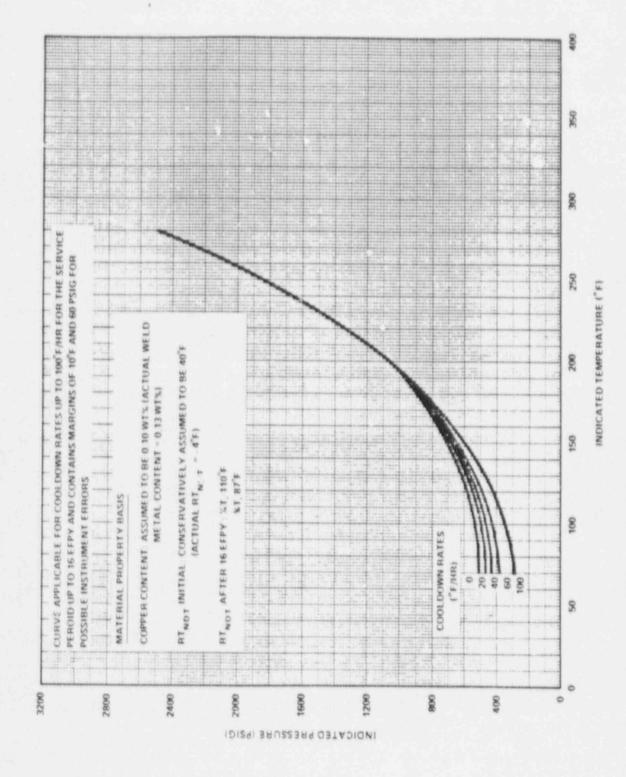


Figure 3.4.3 Sequoyah Unit 2 Reactor Coolant System Cooldown Limitations Applicable up to 16 EFPY

#### PRESSURIZER

#### LIMITING CONDITION FOR OPERATION

- 3.4.9.2 The pressurizer temperature shall be limited to:
  - a. A maximum heatup of 100°F in any one hour period,
  - b. A maximum cooldown of 200°F in any one hour period, and
  - c. A maximum spray water temperature differential of 560°F.

APPLICABILITY: At all times.

#### ACTION:

With the pressurizer temperature limits in excess of any of the above limits, restore the temperature to within the limits within 30 minutes; perform an engineering evaluation to determine the effects of the out-of-limit condition on the structural integrity of the pressurizer; determine that the pressurizer remains acceptable for continued operation or be in at least HOT STANDBY within the next 6 hours and reduce the pressurizer pressure to less than 500 psig within the following 30 hours.

- 4.4.9.2.1 The pressurizer temperatures shall be determined to be within the limits at least once per 30 minutes during system heatup or cooldown.
- 4.4.9.2.2 Any occurrence of spray operation with a differential temperature greater than  $320^{\circ}\mathrm{F}$  shall be recorded for evaluation of the cyclic limits in Table 5.7.1.

# 3/4.4.10 STRUCTURAL INTEGRITY

# ASME CODE CLASS 1, 2 and 3 COMPONENTS

#### LIMITING CONDITION FOR OPERATION

3.4.10 The structural integrity of ASME Code Class 1, 2 and 3 components shall be maintained in accordance with Specification 4.4.10.

APPLICABILITY: All MODES

#### ACTION:

- a. With the structural integrity of any ASME Code Class 1 component(s) not conforming to the above requirements, restore the structural integrity of the affected component(s) to within its limit or isolate the affected component(s) prior to increasing the Reactor Coolant System temperature more than 50°F above the minimum temperature required by NDT considerations.
- b. With the structural integrity of any ASME Code Class 2 component(s) not conforming to the above requirements, restore the structural integrity of the affected component(s) to within its limit or isolate the affected component(s) prior to increasing the Reactor Coolant System temperature above 200°F.
- c. With the structural integrity of any ASME Code Class 3 component(s) not conforming to the above requirements, restore the structural integrity of the affected component(s) to within its limit or isolate the affected component(s) from service.
- d. The provisions of Specification 3.0.4 are not applicable.

- 4.4.10 In addition to the requirements of Specification 4.0.5.
  - a. Each Reactor Coolant Pump flywheel shall be inspected per the recommendations of Regulatory Position C.4.b of Regulatory Guide 1.14, Revision 1, August 1975.
  - b. The reactor vessel nozzles shall be inspected at the end of each 10 year inspection interval, using techniques at least as sensitive as those used to conduct the supplemental examination performed prior to fuel loading. The results of this examination will be reported to the Commission.

# 3/4.4.11 REACTOR COOLANT SYS "EM HEAD VENTS

#### LIMITING CONDITION FOR OPERATION

3.4.11 At least one Reactor Coolant System Head Vent (RCSHV) path shall be OPERABLE.\*

APPLICAPILITY: MCDES 1, 2, and 3.

# ACTION:

- a. With no RCSHV path OPERABLE\*, restore at least one path to OPERABLE status within 30 days or be in HOT STANDBY within 6 hours and HOT SHJTDOWN within the following 6 hours.
- b. The provisions of Specification 3.0.4 are not applicable.

- 4.4.11 Each RCSHV path shall be demonstrated OPERABLE at least once per 18 months by:
  - a.# Verifying that the upstream manual isolation valves are locked in the open position,
  - Operating each remotely controlled valve through at least one cycle from the control room, and
  - c. Verifying flow through each RCSHV path.

<sup>\*</sup>Inoperable paths must be maintained closed with power removed from the valve actuators. If any RCSHV path is declared inoperable while in an applicable MODE, power shall be removed from the valve actuators within one hour.

<sup>#</sup>The requirement to verify that the upstream manual isolation valves are locked in the open position is waived until the Cycle 4 refueling outage. This waiver is granted on a one-time basis. At the first Mode 5 outage following issuance of the above waiver, a flow verification test will be performed to verify that the manual isolation valves are open.