



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

YANKEE ATOMIC ELECTRIC COMPANY

DOCKET NO. 50-29

YANKEE NUCLEAR POWER STATION (YANKEE-ROWE)

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 61
License No. DPR-3

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Yankee Atomic Electric Company (the licensee) dated September 24, 1979, (Proposed Change No. 167) 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 the 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, Facility Operating License No. DPR-3 is hereby amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, paragraph 2.C.(2), and the addition of a new paragraph 2.C.(5), to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 61, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

(5) Secondary Water Chemistry Monitoring Program

The licensee shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall include:

- (a) Identification of a sampling schedule for the critical parameters and control points for these parameters;
- (b) Identification of the procedures used to measure the values of the critical parameters;
- (c) Identification of process sampling points;
- (d) Procedures for the recording and management of data;
- (e) Procedures defining corrective actions for off control point chemistry conditions; and
- (f) A procedure identifying (a) the authority responsible for the interpretation of the data, and (b) the sequence and timing of administrative events required to initiate corrective action.

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

FOR THE NUCLEAR REGULATORY COMMISSION

Dennis M. Crutchfield
Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: July 21, 1980

ATTACHMENT TO LICENSE AMENDMENT NO. 61

FACILITY OPERATING LICENSE NO. DPR-3

DOCKET NO. 50-29

Revise Appendix A Technical Specifications by removing the following pages and inserting the enclosed pages. The revised pages contain the captioned amendment number and vertical lines indicating the area of change. Overleaf pages are included for document completeness.*

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PLANT SYSTEMS

TURBINE GENERATOR THROTTLE AND CONTROL VALVES

LIMITING CONDITION FOR OPERATION

3.7.1.5 Each turbine generator throttle and control valve shall be OPERABLE.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

MODES 1 - With one turbine generator throttle or control valve inoperable, POWER OPERATION may continue provided the inoperable valve is either restored to OPERABLE status or closed within 4 hours;

Otherwise, be in at least HOT SHUTDOWN within the next 12 hours.

MODES 2 - With one turbine generator throttle or control valve inoperable, and 3 subsequent operation in MODES 1, 2 or 3 may proceed provided the inoperable valve is maintained closed; otherwise, be in at least HOT SHUTDOWN within the next 12 hours. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.1.5 Each turbine generator throttle and control valve that is open shall be demonstrated OPERABLE by:

- a. Cycling each valve through at least one complete cycle of full travel at least once per month, and
- b. Verifying full closure within 2 seconds on any closure actuation signal whenever shutdown longer than 24 hours, if not performed in the previous 92 days.

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PLANT SYSTEMS

BASES

3/4.7.1.4 ACTIVITY

The limitations on secondary system specific activity ensure that the resultant off-site radiation dose will be limited to a small fraction of 10 CFR Part 100 limits in the event of a steam line rupture. This dose also includes the effects of a coincident 1.0 GPM primary to secondary tube leak in the steam generator of the affected steam line. These values are consistent with the assumptions used in the accident analyses.

The steam break accident is based upon a postulated release of the entire contents of the secondary system to the atmosphere using a site boundary dose limit of 1.31 rem for thyroid dose.

The limiting dose for this accident results from iodine in the secondary coolant. The reactor distribution of iodine isotopes with 1% failed fuel was used for this calculation. I-131 is the dominant isotope because of its low MPC in air and because the other iodine isotopes have shorter half-lives and therefore cannot build up to significant concentrations in the secondary coolant, given the limitations on primary system leak rate and activity. The entire secondary system contains approximately 132m³ of water at standard conditions. One-tenth of the contained iodine is assumed to reach the site boundary, making allowance for plate-out and retention in water droplets.

3/4.7.1.5 TURBINE GENERATOR THROTTLE AND CONTROL VALVES

The OPERABILITY of the turbine generator throttle and control valves ensures that each steam generator will be isolated at the instant of scram for a LOCA with an area smaller than 0.1 ft², as assumed in the accident analysis. The OPERABILITY of the turbine generator throttle and control valves within the closure times of the surveillance requirements is consistent with the assumptions used in the accident analyses.

PLANT SYSTEMS

BASES

3/4.7.2 STEAM GENERATOR PRESSURE/TEMPERATURE LIMITATION

The limitation on steam generator pressure and temperature ensures that the pressure induced stresses in the steam generators do not exceed the maximum allowable fracture toughness stress limits. The limitations are based on a steam generator initial RT_{NDT} plus 60°F and are sufficient to prevent brittle fracture.

3/4.7.3 PRIMARY PUMP SEAL WATER SYSTEM

(Deleted)

3/4.7.4 SERVICE WATER SYSTEM

(Deleted)

3/4.7.5 CONTROL ROOM VENTILATION SYSTEM EMERGENCY SHUTDOWN

The OPERABILITY of the control room ventilation system emergency shutdown enhances the opportunity for the control room to remain habitable for operations personnel during and following accident conditions.

3/4.7.6 SEALED SOURCE CONTAMINATION

The limitations on sealed source removable contamination ensure that the total body or individual organ irradiation does not exceed allowable limits in the event of ingestion or inhalation of the source material. The limitations on removable contamination for sources requiring leak testing, including alpha emitters, is based on 10 CFR 70.39(c) limits for plutonium. Leakage of sources excluded from the requirements of this specification represent less than one maximum permissible body burden for total body irradiation if the source material is inhaled or ingested.