



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

SACRAMENTO MUNICIPAL UTILITY DISTRICT

DOCKET NO. 50-312

RANCHO SECO NUCLEAR GENERATING STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 70
License No. DPR-54

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Sacramento Municipal Utility District (the licensee) dated February 14, 1985, as revised by letter of May 6, 1985, 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-54 is hereby amended to read as follows:

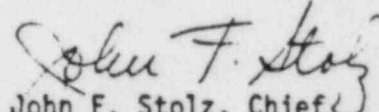
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Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 70, 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



John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 7, 1985

ATTACHMENT TO LICENSE AMENDMENT NO. 70

FACILITY OPERATING LICENSE NO. DPR-54

DOCKET NO. 50-312

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages as indicated. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change.

<u>Remove</u>	<u>Insert</u>
3-52	3-52
4-41	4-41
4-41a	4-41a
4-41b	4-41b
6-12f	6-12f

Limiting Conditions for Operation

3.13 AIR FILTER SYSTEMS

Applicability

This specification applies to the operability of the Control Room/TSC Emergency Filtering System, the Auxiliary and Spent Fuel Building filter systems, and the Reactor Building Purge Exhaust filter system.

Objective

To assure that these systems will be able to perform their design functions.

Specification

- 3.13.1 The Control Room/TSC Emergency Filter System and the Reactor Building Purge Exhaust filter system shall be operable at all times when containment integrity is required, except as noted in 3.13.3 and 3.13.4 below.
- 3.13.2 One Auxiliary and Spent Fuel Building filter unit must be operable. The reactor shall be placed in a hot shutdown condition within twelve (12) hours any time both units become inoperable. One Auxiliary and Spent Fuel Building filter system must be operating whenever spent fuel movement is being made unless the spent fuel has decayed for a continuous 30-day period. If no Auxiliary or Spent Fuel Building filter system is operable, then all fuel handling operations involving movement of fuel within the storage pool or crane operations with loads over the storage pool shall be suspended until at least one Auxiliary and Spent Fuel Building filter system is restored to the operable status.
- 3.13.3 With one Control Room/TSC Emergency Filter System inoperable, restore the system to operable status within 7 days or be in at least hot standby within the next six (6) hours and in cold shutdown within the following thirty (30) hours. With both Control Room/TSC Emergency ventilation room filter systems inoperable, restore the system to operable status within 3.5 days or be in at least hot standby within the next six (6) hours and in cold shutdown within the following thirty (30) hours. In addition, prepare and submit a special report to the Commission pursuant to Specification 6.9.5F within 30 days outlining the action taken, the cause of the inoperability, and the plans and schedule for restoring the system to operable status.
- 3.13.4 If at any time the Reactor Building Purge Exhaust filter system is determined to be inoperable, continued reactor operation, at power, is allowable only if the inner and outer Reactor Building Purge Exhaust isolation valves and the Reactor Building Equalizing Line isolation valves are closed.

Bases

Sections 4.10, 4.11 and 4.12.

4.10 CONTROL ROOM/TECHNICAL SUPPORT CENTER EMERGENCY FILTERING SYSTEM

Applicability

Applies to the Control Room/TSC Emergency Filtering System and related components.

Objective

To verify that this system and its components will be able to perform their design functions.

Specification

4.10.1 The Control Room/TSC Emergency Filtering System shall be:

- A. Demonstrated operable at least once per 31 days by initiating flow through the HEPA filters and charcoal adsorbers.
- B. Demonstrated operable at least once per refueling interval, or once every 18 months, whichever occurs first, or after each partial or complete replacement of the HEPA filter bank or charcoal adsorber bank, or following painting, fire, or chemical release in the operating air makeup system, or after any structural maintenance on the HEPA filter or charcoal adsorber housings, by:
 1. Verifying that the charcoal adsorbers remove ≥ 99.5 percent of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510 while operating the filter train at a flow rate of $3200 \text{ cfm} \pm 10$ percent. (1600 cfm makeup air plus 1600 cfm recirculate air)
 2. Verifying that the HEPA filter banks remove ≥ 99.9 percent of the DOP when they are tested in-place in accordance with ANSI N510 while operating the filter train at a flow rate of $3200 \text{ cfm} \pm 10$ percent. (1600 cfm makeup air plus 1600 cfm recirculate air)
 3. Verifying within 31 days after removal that a laboratory analysis of a carbon sample from either at least one test canister or carbon sample removed from one of the charcoal adsorbers demonstrates a removal efficiency of ≥ 95 percent for radioactive methyl iodide when the sample is tested in accordance with ASTM D3803 (30°C, 95% R.H.). The carbon samples not obtained from test canisters shall be prepared by either:
 - (a) Emptying one entire bed from a removed adsorber tray, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed.

- 4.10.1 B. 3. (b) Emptying a longitudinal sample from an adsorber tray, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed.
4. Verifying that the pressure drop across the combined HEPA filters, and charcoal adsorber banks is <6 inches Water Gauge while operating the ventilation makeup system at a flow rate of $1600 \text{ cfm} \pm 10$ percent.
 5. Verifying that on a high radiation signal (Alert Alarm), the normal system is automatically isolated and that the Emergency Filtering System operates.
 6. Verifying that on a toxic gas (Ammonia excluded) isolation test signal, the system automatically switches into the isolation mode of operation with flow through the HEPA filters and charcoal absorber banks.
 7. Verifying the air makeup system maintains the Control Room/TSC at a positive pressure of >0.125 inches W.G. relative to the outside atmosphere with a flow of $1600 \text{ cfm} \pm 10$ percent in the emergency mode.
 8. Verifying a system flow rate of $3200 \text{ cfm} \pm 10$ percent during system operation when tested in accordance with ANSI N510.
- C. Demonstrated operable after every 720 hours of charcoal adsorber operation by:
1. Verifying within 31 days after removal that a laboratory analysis of a carbon sample from either at least one test canister or carbon sample removed from one of the charcoal adsorbers demonstrates a removal efficiency of >95 percent for radioactive methyl iodide when the sample is tested in accordance with ASTM D3803 (30°C , 95% R.H.). Carbon samples not obtained from test canisters shall be prepared by either:
 - (a) Emptying one entire bed from a removed adsorber tray, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed or,
 - (b) Emptying a longitudinal sample from an adsorber tray, mixing the adsorbent thoroughly, and obtaining samples at least two inches in diameter and with a length equal to the thickness of the bed.
 2. After reinstallation of the sampled adsorber tray, per C.1:
 - (a) Verify that the charcoal adsorbers remove >99.5 percent of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510 while operating the filter train at a flow rate of $3200 \text{ cfm} \pm 10$ percent.

RANCHO SECO UNIT 1
TECHNICAL SPECIFICATIONS

Surveillance Standards

Specification (Continued)

- 4.10.1 C. 2. (b) Verify that the HEPA filter bank removes ≥ 99.9 percent of the DOP when tested in-place in accordance with ANSI N510 while operating the filter train at a flow rate of 3200 cfm \pm 10 percent.
- D. Started on a manual signal and operated for 15 minutes in each 31-day period.

Bases

The purpose of the Control Room/TSC Emergency Filtering System is to limit the particulate and gaseous fission products and toxic products to which the Control Room area and Technical Support Center would be subjected during an accidental radioactive or chemical release in or near the Auxiliary Building. The system is designed with two redundant filter trains each of which consists of a moisture separator, a heater, a high efficiency particulate filter, two banks of charcoal filters, a second high efficiency particulate filter and a booster fan to pressurize the Control Room and Technical Support Center with outside air.

Since this system is not normally operated, a periodic test is required to ensure its operability when needed. Monthly testing of this system will show that the system is available for its designed safety action. During this test the system will be observed for unusual or excessive noise or vibration when the fan motors are running. The flow of 1600 cfm makeup air was selected to limit the maximum radiation dose to occupants of the Control Room/TSC in an accident. For this analysis, both charcoal filter banks were assumed to provide DF's of 10, while the HEPA filter DF is assumed to be 100. The laboratory analysis to show ≥ 95 percent removal of methyl radioiodide is necessary to receive credit for a DF of 10.

Refueling interval testing will verify the methyl iodide removal efficiency of the charcoal and the amount of leakage past the charcoal and HEPA filters are at least equal to the design values.

The filtering system is automatically started, and the normal system isolated, when the radiation level in the Control Room/TSC increases or when the Chlorine level increases. The system is manually started when the Ammonia level in the Control Room/TSC increases. During an SFAS and a loss of offsite power, the "B" Train of essential HVAC equipment is sequenced to automatically start upon its actuation signals approximately 6 minutes after the diesel generator breaker closes. The "A" Train of HVAC equipment can be manually energized and started as before following automatic application of all essential loads.

The testing required after painting, fire or chemical release, is not to be interpreted to include minor touch-up painting, housekeeping chemicals and detergents, or other routine maintenance or housekeeping activities.

RANCHO SECO UNIT 1
TECHNICAL SPECIFICATIONS

Administrative Controls

Special Reports

- 6.9.5 Special reports shall be submitted to the Director of the Regulatory Operations Regional Office within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification:
- A. A one-time only, "Narrative Summary of Operating Experience" will be submitted to cover the transition period (calendar year 1977).
 - B. A Reactor Building structural integrity report shall be submitted within ninety (90) days of completion of each of the following tests covered by Technical Specification 4.4.2 (the integrated leak rate test is covered in Technical Specification 4.4.1.1).
 - 1. Annual Inspection
 - 2. Tendon Stress Surveillance
 - 3. End Anchorage Concrete Surveillance
 - 4. Liner Plate Surveillance
 - C. Inservice Inspection Program
 - D. Reserved for Proposed Amendment No. 43
 - E. Status of Inoperable Fire Protection Equipment
 - F. Inoperable Emergency Control Room/TSC Ventilation Room Filter System
 - G. Radioactive Liquid Effluent Dose 30 days (3.17.2)
 - H. Noble Gas Limits 30 days (3.18.2)
 - I. Radioiodine and Particulates 30 days (3.18.3)
 - J. Gaseous Radwaste Treatment 30 days (3.19)
 - K. Radiological Monitoring Program 30 days (3.22)
 - L. Monitoring Point Substitutions 30 days (3.22)
 - M. Land Use Census 30 days (3.23)
 - N. Fuel Cycle Dose 60 days (4.25)
 - O. Liquid Holdup Tanks 30 days (3.17.3)