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. 45
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 17, 1983, 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:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 45 , 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 the date of its 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: March 11, 1983

ATTACHMENT TO LICENSE AMENDMENT NO. 45

FACILITY OPERATING LICENSE NO. DPR-54

DOCKET NO. 50-312

Replace the following pages of the Appendix B 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. The corresponding overleaf pages are also provided to maintain document completeness.

Remove	Insert
i	i
1	1
4	4
5	-
6	-
7	-
8	-
26	26
29	29
30	-
45	45
47	47
50	50

TABLE OF CONTENTS

1.0 DEFINITIONS

1.1 Environmental Technical Specification -

Limitations, conditions and requirements which are considered necessary for the protection of the environment and require appropriate action to be taken if exceeded.

1.2 Emergency Load Demand - Load demand in excess of power supply which, if not met, would result in system voltage reductions or load shedding of some Sacramento Municipal Utility District customers or contractual customers.

1.3 A Grab Sample is defined as an individual sample collected in fewer than 15 minutes.

1.4 Deleted.

1.5 Noise - The mechanical vibrations within the audible range as measured within the requirements set forth in the USASI American National Standard Specification for General Purpose Sound Level Meters S1.4 (1971).

1.6 State of California Department of Water Resources Contract - The Davis-Grunsky Act Grant Contract No. D-GGR28 between State of California and Sacramento Municipal Utility District of April 6, 1971, Exhibit B.

1.7 Continuous Monitoring - Defined as the automatic analysis equipment that produces a permanent recording of the measured parameter or an increased grab sampling technique for obtaining the values of the measured parameter as described in Section 4 of these specifications.

1.8 Deleted.

1.9 Environmental Deviation - An environmental deviation is said to occur whenever an environmental protection condition or report level is exceeded, or whenever, in the opinion of the plant superintendent, an unusual event involving significant environmental impact has occurred.

1.10 Daily - A time period a within 24-hour span from 0000 to 2400 hours from Monday through Friday excluding District holidays.

1.11 Weekly - A time period from Monday through Sunday spaced to occur 52 times a year.

1.12 Fortnightly - A time period covering two consecutive weeks spaced to occur 26 times a year.

1.13 Monthly - A time period from the first to last day of a calendar month spaced to occur 12 times a year.

1.14 Quarterly - A time period of three calendar months spaced to occur four times a year.

1.15 Semi-Annual - Time periods from January 1 and July 1 covering the subsequent six months.

1.16 Composite Sample - A composite sample is defined as a combination of no fewer than eight individual samples obtained over the specified sampling period. The volume of each individual sample is proportional to the discharge flow rate at the time of sampling. The sampling period shall equal the discharge period, or 24 hours, whichever period is shorter.

1.17 Radioactive Materials - The radioactive materials originated by the nuclear reactive process. This specifically excludes the concentrating of naturally-occurring environmental radionuclides.

1.18 Critical Path - Any significant food chain mechanism which terminates with consumption (eating or drinking) by man.

1.19 Receiving Waters - The water body downstream from the confluence of Clay Creek and Hadselville Creek.

1.20 Shift - A time period covering 8 hours, three shifts equally dividing a 24-hour time period.

1.21 Functional Test - Injection of an internal or external test signal into the channel to verify its proper response, including alarm and/or trip initiating action, where applicable.

1.22 Instrument Check - Verification of acceptable instrument performance by observation of its behavior and/or state; this verification includes comparison of output and/or state of independent channels measuring the same variable.

1.23 Instrument Channel Calibration - An instrument channel calibration is a measurement, and adjustment (if necessary), to establish that the channel output responds with acceptable range and accuracy to known values of the parameter which the channel measures or an accurate simulation of these values. Calibration shall encompass the entire

2.0 ENVIRONMENTAL PROTECTION CONDITIONS

2.1 Deleted

2.2 Deleted

2.3 Deleted

2.4 Deleted

2.5 Deleted

Note: Pages 5-8 have been deleted. The next page is 9.

3.0 NON-RADIOLOGICAL ENVIRONMENTAL SURVEILLANCE PROGRAMS

3.1 Erosion

Objective

To prevent effluent water from Rancho Seco from causing severe erosion of the stream bed and degradation of soil banks surrounding the effluent stream.

Specification

Visual inspection of the water course shall be made quarterly and documented. Prior to initial criticality, a baseline inspection will be performed. Any channeling or erosion by the stream resulting in vertical cuts greater than 2 feet or lateral washouts greater than 5 feet in excess of the baseline shall be corrected.

Reporting Requirement

Erosion above the specification limits that is not or cannot be corrected shall be reported as required in Section 5.6.1.

Bases

The hardpack at the discharge structure is not expected to show significant soil erosion. However, if erosion is detected, corrective action can be taken well in advance of causing ecological damage.

3.2 Drift Contaminants

Objective

The objective of monitoring cooling tower drift contaminants is to determine and estimate deposition of entrained chemicals discharged as drift and particulates in some offsite regions.

Specification

The sulfate content in soil shall be monitored quarterly from three sampling points located symmetrically 0.25 miles from the cooling towers.

The data on leachable sulfate in soil shall be used to determine the significance of drift contaminants as addition to the existing sulfate content level in soil.

Reporting Requirement

If the sulfate content in soil exceeds 1500 ppm as sulfate, a report will be made to the NRC as per specification 5.6.1.

Bases

The most predominant dissolved ion in the cooling water will be sulfate (430 ppm SO_4 expected) due to the sulfuric acid injection into the cooling water to reduce alkalinity. Sample locations will be selected after drift rain patterns have been observed from cooling tower operation.

3.3 Deleted.

3.4 Noise

Objective

To insure that noise levels emitted from the plant are within normally acceptable limits and to obtain a representative noise level at the plant boundaries.

Specification

The thermal plume will be plotted on a map showing the intersection of the plume along State Highway 104 at ground elevation whenever such intersections are observed. Appropriate action will be initiated to warn motorists of possible fog cover at locations east and west of the plant.

Reporting Requirement

The extent of the fogging and duration shall be recorded and a report will be made to the AEC in accordance with Section 5.6.1 of these specifications.

Bases

There is little that can be done to prevent infrequent plume intersection with the ground since this will be greatly dependent on atmospheric conditions. If there is an extended period of fogging, the plant power may have to be increased to produce maximum updraft to produce a greater lift force to penetrate the lower atmosphere.

The vapor plume from the cooling towers has received extensive analysis. Environmental Report, Table 9.4-1 Incremental Environment Effects, Section 3.1 states that there will be zero hours of fogging that will interfere with ground and air transportation. The effects are discussed at length in Appendix 3C of the Rancho Seco Environmental Report and stated as "negligible" in the Final Environmental Statement.

3.6 Deleted.

Page 30 has been deleted. The next page is 31.

5.6.2 Non-Routine Reports

A. Radioactive Discharge

The reporting requirements for radioactive discharges are specified in Section 2.6 of these specifications.

B. Radiological Environmental Monitoring

1. If a measured level of radioactivity in "critical pathway environmental medium samples" indicates that the resultant annual dose to an individual from these levels could equal or exceed 3 times the design objective, a plan will be submitted within one week advising the NRC of the proposed action to ensure the plant related annual doses will be within the design objective.

2. If samples of "critical pathway environmental media" collected over a calendar quarter show total levels of radioactivity that could result in accumulated plant related doses to an individual for that quarter of 1/2 the annual design objective, the results shall be reported and a plan submitted and implemented within 30 days to limit conditions so that the annual dose to an individual will not exceed the design objective.

C. Nonradiological

In the event a report level (Sections 3 and 4) is reached, or an unusual event involving a significant environmental impact

occurs, a report will be made within 24 hours by telephone or telegraph to the Director of the Regional Regulatory Operations Office, followed by a written report within 10 days to the Director of the Regional Regulatory Operations Office (cc to Director of Licensing).

The written report and to the extent possible, the preliminary telephone and telegraph report, will: (a) describe, analyze and evaluate the occurrence, including extent and magnitude of the impact, (b) describe the cause of the occurrence and (c) indicate the corrective action (including any significant changes made in procedures) taken to preclude repetition of the occurrence and to prevent similar occurrences involving similar components or systems.

5.6.3 Changes

1. When a change to the plant design, to the plant operation, or to the procedures described in Section 5.5 is planned which would have a significant adverse effect on the environment or which involves an environmental matter or question nor previously reviewed and evaluated by the AEC, a report on the change will be made to the AEC prior to implementation. The report will include a description and evaluation of the change including a supporting benefit-cost analysis.

2. Changes or additions to permits and certificates required by Federal, State, local and regional authorities for the protection of the environment will be reported. When the required changes are submitted to the concerned agency for approval, they will also be submitted to the Deputy Director for Reactor Projects, Directorate of Licensing, USAEC, for information. The submittal will include an evaluation of the environmental impact of the change.

3. Request for changes in environmental technical specifications will be submitted to the Deputy Director of Reactor Projects, Directorate of Licensing, USAEC, for prior review and authorization. The request will include an evaluation of the impact of the change, including a supporting benefit-cost analysis.

5.7 Records Retention

5.7.1 Records and logs relative to the following areas will be retained for the life of the plant:

A. Records and drawing changes reflecting plant design modifications made to systems and equipment as described in Section 5.6.3.

B. Records of environmental monitoring data.

5.7.2 All other records and logs relating to the environmental technical specifications will be retained for five years.

5.8 Deleted.

Table 5-1 Deleted