



SMUD

SACRAMENTO MUNICIPAL UTILITY DISTRICT □ 6201 S Street, P.O. Box 15830, Sacramento CA 95852-1830, (916) 452-3211
AN ELECTRIC SYSTEM SERVING THE HEART OF CALIFORNIA

RJR 85-375

August 1, 1985

DIRECTOR OF NUCLEAR REACTOR REGULATION
ATTENTION HUGH L THOMPSON JR DIRECTOR
DIVISION OF LICENSING
U S NUCLEAR REGULATORY COMMISSION
WASHINGTON DC 20555

DOCKET NO. 50-312
LICENSE NO. DPR-54
PROPOSED AMENDMENT NO. 137

In accordance with 10 CFR 50.59, the Sacramento Municipal Utility District hereby proposes to amend its Operating License DPR-54 for Rancho Seco Nuclear Generating Station Unit No. 1. Per the requirements of 10 CFR 50.92, this Proposed Amendment 137 has been evaluated by a No Significant Hazards Consideration in Attachment 1.

The attached Technical Specifications are provided to upgrade the existing Technical Specifications to be in compliance with the applicable Appendix R requirements based on the 1985 Rancho Seco FHAR update. In addition, as stated in the District's letter to NRC dated May 16, 1985, the District committed to provide by August 1, 1985, Technical Specifications to address NRC concerns as to fire protection features of the NSEB

Attachment II to this submittal is a description of the proposed changes for Proposed Amendment 137.

Enclosed is a check for \$150.00 as required by 10 CFR 170.21, "Statement of Fees."

Should you have any questions concerning this proposal, please contact Mr. Ron Colombo at Rancho Seco Nuclear Generating Station.

R. J. Rodriguez
R. J. RODRIGUEZ
ASSISTANT GENERAL MANAGER,
NUCLEAR

Enclosure

Subscribed and sworn to before me
this 1st day of August, 1985.

Patricia K. Geisler
Notary Public



Limited Dist
Aug w/ check \$150.00
#085450

8508190259 850801
PDR ADOCK 05000312
PDR

SACRAMENTO MUNICIPAL UTILITY DISTRICT
3201 S Street, P.O. Box 15830, Sacramento, CA 95813 (916) 452-3211

* ADJUSTMENT CODES:
1 - Freight 4 - Credit Memo
2 - Sales Tax 5 - Retention
3 - Debit Memo 6 - Other

VENDOR NO. 8880267-201 CHECK NO. 088450

INVOICE NO.	DATE	GROSS	INVOICE ADJUSTMENTS		DISCOUNT	NET
			AMOUNT	*		
NO. 137	07/25/85	150.00	0.00		0.00	150.00
						*****150.00

SMUD-0279 8/83

DETACH BEFORE DEPOSITING CHECK



SACRAMENTO MUNICIPAL UTILITY DISTRICT
6201 S Street, P.O. Box 15830, Sacramento CA 95813

BANK OF AMERICA
Main Office, Sacramento CA

088450

1210/0035

REFERENCE NO.
8880267-201

DATE
07/25/85

PAY EXACTLY \$ *****150.00

PAY TO THE
ORDER OF

U.S. NUCLEAR REGULATORY COMM.
ATTN: WILLIAM O. MILLER, CHIEF
LICENSE FEE MANAGEMENT BRANCH
OFFICE OF ADMINISTRATION
WASHINGTON DC 20555

DISBURSING ACCOUNT

VOID 6 MONTHS AFTER DATE OF ISSUE

⑈088450⑈ ⑆121000358⑆ 01484⑈80160⑈

APPENDIX R TECHNICAL SPECIFICATIONS

The District has embarked on an Appendix R reevaluation program. This program, to date, has resulted in the identification of 1) revisions to previously submitted exemptions; 2) additional exemption requests; 3) plant modifications; and 4) revision to the response to Generic Letter 81-12 (i.e., alternate shutdown capability). In addition, the District has developed the 1985 Rancho Seco Fire Hazard Analysis Report (FHAR) update based on providing alternative shutdown capability. Fire areas requiring plant modifications to comply with Appendix R requirements are provided with necessary compensatory measures until such time as those modifications are completed. The District has ensured Rancho Seco's compliance with Appendix R, III.G, either by analysis, modification, exemption request, or by putting suitable compensatory measures into place until resolution of the concern is reached.

The attached Technical Specifications are provided to upgrade the existing Technical Specifications to be in compliance with the applicable Appendix R requirements based on the 1985 Rancho Seco FHAR update. In addition, as stated in the District's letter to NRC dated May 16, 1985, the District committed to provide by August 1, 1985, Technical Specifications to address NRC concerns as to fire protection features of the NSEB. This submittal provides these additional Technical Specifications for the NSEB fire protection features. In support of this effort, the District has revised or drafted a total of 50 Appendix R procedures.

SAFETY ANALYSIS

RANCHO SECO NUCLEAR GENERATING STATION

Log No. 645

ECN. NO. <div style="text-align: center; font-size: 1.2em;">N/A</div>	NCR NO. <div style="text-align: center; font-size: 1.2em;">N/A</div>	WORK REQUEST NO. <div style="text-align: center; font-size: 1.2em;">N/A</div>
--	---	--

Description:

(A detailed description of the desired changes with material and process specifications shall be included. The Design Basis Report will be referenced.) Revised existing fire protection technical specifications to include additional fire protection components in the auxiliary building, turbine building, and NSEB, and clarify requirements on fire barriers. The minimum operable requirements for heat, flame, and smoke detectors have been increased from approximately 50 percent of those available to requiring 100 percent of the available detectors being operable.

Reason for Change:

(A statement as to why the change is being requested.)

These revisions will upgrade the existing technical specifications to be in compliance with the applicable Appendix R requirements based on the 1985 Rancho Seco Fire Hazard Analysis Report (FHAR) update.

Evaluation and Basis for Safety Findings:

(The evaluation will address itself to specific sections of the SAR or Technical Specifications as applicable. If a safety question is involved, this will be so stated.) The fire protection components are based on the 1985 Rancho Seco FHAR update which defines areas containing redundant systems important to safe shutdown. The circuits for detection systems, CO2 systems, and water suppression systems are non-class 1 and have no impact on safety related circuits or equipment. Failure considerations for water systems are discussed in USAR section 9.9.2.2 for auxiliary building and there is no adverse safety impact. * For NSEB, evaluation is provided in May 14, 1985 letter to NRC and there is no adverse impact.

(See Attached)

Safety Findings:

Yes No

- ☐ ☒ The proposed change is a change to the facility as described in the SAR.
- ☒ ☐ The proposed change affects Nuclear Safety. *The fire protection components, if actuated, may impact nuclear safety.
- ☐ ☒ The proposed change does involve an Unreviewed Safety Question (If an Unreviewed Safety Question is involved, check the appropriate reason).
 - ☐ Probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report may be increased.
 - ☐ Possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report may be created.
 - ☐ The margin of safety as defined in the basis for any Technical Specification is reduced.
- ☒ ☐ The proposed change does involve a change in the Technical Specifications.
- ☒ ☐ The proposed change does involve an addition to the Technical Specifications.

LICENSING ENGINEER <div style="font-size: 1.2em; font-family: cursive;">Robert Roehl</div>	DATE <div style="font-size: 1.2em; font-family: cursive;">7/8/85</div>	REVIEW ENGINEER <div style="font-size: 1.2em; font-family: cursive;">[Signature]</div>	DATE <div style="font-size: 1.2em; font-family: cursive;">7/14/85</div>
---	---	---	--

SAFETY ANALYSIS

RANCHO SECO NUCLEAR GENERATING STATION

ATTACHMENT

The minimum operable requirements for detectors have been increased because the present operability requirement does not adequately address the cross zoning features of some of the detection systems. Also there are certain conditions when the loss of the second detector in a system will not be detectable in the control room and only a walkdown of the system can determine detector operability. Other changes are administrative in nature and have no safety impact.

Attachment I
No Significant Hazards Determination

The proposed technical specifications have been evaluated and the District has determined that there is "No Significant Hazard Consideration". The basis of this determination is:

1. Additional detectors, water suppression systems, carbon dioxide systems, and hose stations have been added to the Tables to reflect the 1985 Rancho Seco FHAR update which defines the safety related fire areas or areas containing redundant systems important to safe shutdown. Attachment II contains a detailed analysis of each proposed change. (See items 2 through 14, 16 through 21, 23 through 26, 28, and 29.)

This change is a "No Significant Hazard Consideration" based in example (ii) on page 14870 of Federal Register notice dated April 6, 1983 which states "A change that constitutes an additional limitation, restriction or control. not presently included in the Technical Specifications; for example, a more stringent surveillance requirement."

2. Specifications 3.14.3.1, 3.14.4.1 and 3.14.5.1 have been reformatted to a table format. The system location titles and zone designations have been revised to be consistent with the titles and zone designations used on the control room displays. The fire protection technical specification bases and definition of the areas protected by fire barriers have been revised to be consistent with the 1985 Rancho Seco FHAR update. The reporting requirements of specification 6.9.5.E has been modified to be consistent with specification 3.14. Attachment II contains a detailed analysis of each proposed change. See items 1, 15, 22, 27, 30, 31, and 32.

These changes are a "No Significant Hazard Consideration" based on example (i) on page 14870 of Federal Register notice dated April 6, 1983 which states "A purely administrative change to Technical Specifications, for example, a change to achieve consistency throughout the Technical Specifications, correction of an error, or a change in nomenclature"

ATTACHMENT II

Description of Proposed Changes

1. Table 3.14-1, pages 3-55 through 3-55c--Instrument location title and zone designations have been revised to be consistent with titles and zone designations used on the control room displays. (NSHC No. 2)*
2. Table 3.14-1, pages 3-55 through 3-55c--The minimum operable requirements for heat, flame, and smoke detectors have been increased from approximately 50 percent of those available to requiring 100 percent of the available detectors being operable. A reanalysis of the system design and control room display features has shown that the present operability requirement does not adequately address the cross zoning features of some of the detection systems. Also, there are certain conditions where the loss of the second detector in a system will not be detectable in the control room and only a walkdown of the system can determine detector operability. Therefore, the operability requirements have been increased in a conservative manner such that the loss of a single detector will result in the establishment of hourly fire watch until the problem can be repaired. (NSHC No. 1)
3. Table 3.14-1, page 3-55--Existing detector zones 5 (South East Uncontaminated Area--Turbine Deck, Auxiliary Building) and 7 (Contaminated Area--Turbine Deck, Auxiliary Building) have been added to provide fire detection for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco Fire Hazard Analysis Report (FHAR) update. See fire area RT1. (NSHC No. 1)
4. Table 3.14-1, pages 3-55 through 3-55b--Existing detections zones 31 (Auxiliary Lube Oil Area--Grade Level, Turbine Building), 32 (Main Lube Oil Area--Grade Level, Turbine Building), 33 (Hydrogen Sealed Oil Unit--Grade Level, Turbine Building), 35 (Main Feed Pump Area), and 53-54 (Turbine Area) have been added to provide fire detection for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area 71. (NSHC No. 1)
5. Table 3.14-1, pages 3-55--Existing detection zone 20 (Electrical Penetration Room--Mezzanine Level, Auxiliary Building) has been added to provide fire detection for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire areas 27 and 28. (NSHC No. 1)
6. Table 3.14-1, page 3-55--Existing detection zone 21 (Reactor Building, 20 feet to 40 feet Level) has been added to provide detection for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area 69. (NSHC No. 1)

*(NSHC--Refers to "No Significant Hazards Consideration" in Attachment I)

7. Table 3.14-1, page 3-55a--Existing detection zone 42 (Electrical Penetration Room--Grade Level, Auxiliary Building) has been added to provide fire detection for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire areas 36, 62, and RB1. (NSHC No. 1)
8. Table 3.14-1, page 3-55a--Existing detection zone 43 (Chemical Mix Area--Grade Level, Auxiliary Building) has been added to provide fire detection for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire areas 36 and RG1. (NSHC No. 1)
9. Table 3.14-1, page 3-55b--Existing detection zone 46 (Hut Area--Basement Level, Auxiliary Building) has been added to provide fire detection for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire areas 47 and RB2. (NSHC No. 1)
10. Table 3.14-1, page 3-55b--Existing detection zone 83 (NSEB Corridor, 1 foot Level) has been added to provide fire detection for portions of redundant systems important to safe shutdown as described in the 1985 Rancho seco FHAR update. See fire area 83. (NSHC No. 1)
11. Table 3.14-1, page 3-55b--Existing detection zone 85 (NSEB Corridor, 40 feet Level) has been added to provide fire detection for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire are 85. (NSHC No. 1)
12. Table 3.14-1, page 3-55c--Existing detection zone 87 (NSEB Computer Room B) has been added to provide fire detection for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area 87. (NSHC No. 1)
13. Table 3.14-1, page 3-55c--Existing detection zone 89 (NSEB Computer Room A) has been added to provide fire detection for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area 89. (NSHC No. 1)
14. Table 3.14-1, page 3-55c--New detection zone 104 (Technical Support Center) has been added to provide fire detection for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area 2. (NSHC No. 1)
15. Table 3.14-1, page 3-55c--New detection zone 109 (Chemical Lab Area--Auxiliary Building) has been added to provide fire detection for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area RT1. (NSHC No. 1)

16. Table 3.14-1, page 3-55c--New detection zone 110 (Auxiliary Feed-water Pump Area) has been added to provide fire detection for portion of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area 69. (NSHC No. 1)
17. Specification 3.14.3.1, pages 3-56, 3-56b, and 3-56c--Specification 3.14.3.1 has been reformatted to refer to Table 3.14-3 which provide a list of water suppression zones required to be operable. The area location titles and zone designations have been revised to be consistent with the titles and zone designations used on the control room displays. (NSHC No. 2)
18. Table 3.14-2, page 3-56b--Existing water suppression zones 5 (South East Uncontaminated Area--Turbine Deck, Auxiliary Building), 6 (North West Uncontaminated Area--Turbine Deck, Auxiliary Building), and 7 (Contaminated Area--Turbine Deck, Auxiliary Building) have been added to provide fire suppression for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area RT1. (NSHC No. 1)
19. Table 3.14-2, page 3-56b--Existing water suppression zones (Mezzanine Level--Turbine Building), 31 (Auxiliary Lube Oil Area--Grade Level, Turbine Building), 33 (Hydrogen Sealed Oil Unit), and 35 (Main Feed Pump Area) have been added to provide fire suppression for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area 71. (NSHC No. 1)
20. Table 3.14-2, page 3-56b--Existing water suppression zone 18 (Air Condition Equipment Room-Mezzanine Level, Auxiliary Building) has been added to provide fire suppression for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area RG1. (NSHC No. 1)
21. Table 3.14-2, page 3-56b--Existing water suppression zone 19 (Communications Room--Mezzanine Level, Auxiliary Building) has been added to provide fire suppression for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire areas 27 and 28. (NSHC No. 1)
22. Table 3.14-2, page 3-56c--Existing water suppression zone 47 (Pipe Penetration Area--Basement Level, Auxiliary Building) has been added to provide fire suppression for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area RB1. (NSHC No. 1)
23. Table 3.14-2, page 3-56c--Existing water suppression zone 83 (NSEB Corridor, 1 foot Level) has been added to provide fire suppression for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area 83. (NSHC No. 1)

24. Table 3.14-2, page 3-56c--Existing water suppression zone 85 (NSEB Corridor, 40 feet Level) has been added to provide fire suppression for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area 85. (NSHC No. 1)
25. Table 3.14-2, page 3-56c--Existing water suppression zone 87 (NSEB Computer Room B) has been added to provide fire suppression for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area 87. (NSHC No. 1)
26. Table 3.14-3, page 3-56c--Existing water suppression zone 89 (NSEB Computer Room A) has been added to provide fire suppression for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area 89. (NSHC No. 1)
27. Specification 3.14.4.2, pages 3-56, 3-56d, and 3-56e--Specification 3.14.4.2 has been reformatted to refer to Table 3.14-4 which provides a list of carbon dioxide suppression zones required to be operable. The area location titles and zone designations have been revised to be consistent with the titles and zone designations used on the control room display. (NSHC No. 2)
28. Table 3.14-3, page 3-56d--Existing carbon dioxide suppression zone 11 (West Battery Room--Mezzanine Level, Auxiliary Building) has been added to provide fire suppression for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area 15. (NSHC No. 1)
29. Table 3.4-3, page 3-55e--Existing carbon dioxide suppression zones 53-54 (Turbine Area) have been added to provide fire suppression for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area 71. (NSHC No. 1)
30. Table 3.14-3, page 3-55e--Existing carbon dioxide suppression zone 79 (NSEB Battery GB) has been added to provide fire suppression for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area 79. (NSHC No. 1)
31. Table 3.14-3, page 3-55e--Existing carbon dioxide suppression zone 80 (NSEB Battery GA) has been added to provide fire suppression for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area 80. (NSHC No. 1)
32. Specification 3.14.5.1, pages 3-56a, 3-57a, 3-57a and 3-57b--Specification 3.14.5.1 has been reformatted to place the list of required hydrants in Table 3.14-4. (NSHC No. 2) The hose stations

33. Table 3.14-4, page 3-57a--Existing NSEB Hose Stations FPHS-N-005 and FPHS-N-006 (Third Floor Corridor) have been added to provide fire suppression for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area 85. (NSHC No. 1)
34. Table 3.14-4, pages 3-57a and 3-57b--Existing Turbine Building Hose Stations (6 hose stations per level with a total of 18 hose stations) have been added to provide fire suppression for portions of redundant systems important to safe shutdown as described in the 1985 Rancho Seco FHAR update. See fire area 71. (NSHC No. 1)
35. Specification 3.14.6.1, page 3-58--Specification 3.14.6.1 has been revised to require all fire rated assemblies separating safety-related areas or separating portions of redundant systems important to safe shutdown within a fire area to be operable. The 1985 Rancho Seco FHAR update is based on separating portions of redundant systems important to safe shutdown within a fire area and this specification has been revised to be consistent with the FHAR. (NSHC No. 2)
36. Bases, pages 3-58 and 3-59--The bases have been revised to be consistent with the revised specifications and the method used in the 1985 Rancho Seco FHAR update. (NSHC No. 2)
37. Specification 6.9.5.E, pages 6-12f and 6-12g--The special reporting requirement of item E has been revised to be consistent with the reporting requirements of technical specification 3.14. (NSHC No. 2)