



**SMUD**

SACRAMENTO MUNICIPAL UTILITY DISTRICT □ 6201 S Street, Box 15830, Sacramento, California 95813; (916) 452-3211

DOCKET NUMBER July 3, 1980  
PROPOSED RULE PR 50 (+8)  
(45 FR 36082)



Secretary of the Commission  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Attn: Docketing and Service Branch

Gentlemen:

Proposed Rule Change on Fire Protection

The District committed, in a June 30, 1980 letter, to provide you with specific comments on the proposed rule change on fire protection by July 3, 1980. Our comments are attached to this letter.

As stated in our June 30, 1980 letter to you, the District is again requesting that the proposed rule change not be adopted as written. The justification for this request is contained in the attached detailed review of the proposed rule change.

If you have any questions or comments, please do not hesitate to contact us.

Sincerely,

John J. Mattimoe  
Assistant General Manager  
and Chief Engineer

Attachment

Acknowledged by card.....7-8-80

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ATTACHMENT 1

SMUD  
COMMENTS ON PROPOSED SECTION  
50.48 FIRE PROTECTION

Issued July 3, 1980

COMMENTS

PARAGRAPH (a)

No Comment

PARAGRAPH (b)

No Comment

PARAGRAPH (c)

The District cannot implement the modifications contained within the proposed rule change by November 1, 1980. This required completion date is unreasonable for the following reasons:

- (1) The deadline does not consider the overall fire protection program in existence at Rancho Seco. The District's existing fire protection program has just gone through two years and seven million dollars of modifications. It provides an adequate fire protection system. Therefore the implementation of any new modifications by November 1, 1980 is not required.
- (2) If the modifications are not complete by November 1, 1980, Rancho Seco would have to be shutdown. Each day the plant is shutdown, costs northern California consumers 440,000 dollars. The modifications required do not improve the fire protection system enough to justify this expense.
- (3) The plant modifications required by TMI-II, IE Bulletin 79-01B and other NRC requirements have placed a burden on the District's manpower. Therefore, the District does not have the available manpower to implement the modifications required in the rule by November 1, 1980 without impacting the schedule for other NRC mandated modifications.

Therefore, the District request that the schedule be based on:

- (1) A consideration of the existing fire protection program.
- (2) A cost benefit analysis.
- (3) Availability of manpower.

This schedule would be determined by agreement between the District and the NRC, and not contained in the rule.

ATTACHMENT 2

SMUD  
COMMENTS ON PROPOSED  
APPENDIX R  
FIRE PROTECTION PROGRAM FOR NUCLEAR  
POWER FACILITIES OPERATING PRIOR TO  
JANUARY 1, 1979

Issued July 3, 1980

## COMMENTS

### PARAGRAPH I - Introduction and Scope

#### Comments

A detailed statement should be added to this paragraph that states that this rule does not apply to any modifications or requirements accepted by the staff and resolved in the District's safety evaluation report on fire protection.

### PARAGRAPH II.A - Fire Protection Program

#### Comments

This paragraph requires a fire protection program that establishes policy for items "important to safety." The District has performed a fire hazard analysis, necessary modifications, and established a fire protection program based on items required for "safe shutdown." The "safe shutdown" requirement is sufficient since it is not assumed that the fire is occurring simultaneously with an accident. Therefore, equipment that is only required to mitigate the consequences of an accident does not have to be included in the fire hazard analysis or fire protection program.

Paragraph II.A.2.(e) is too specific in requiring automatic suppression systems whenever there are "large fire hazards or to protect redundant systems ... important to safe shutdown." The fire hazard analysis should be used to determine what type of suppression system is required. It should not be detailed in a rule.

Paragraph II.A.2.(g) requires fire stops that are rated less than three hours to exceed the duration of the in situ fire load by at least one-half hour. The District has installed, with NRC approval, fire barriers that do not meet this requirement. The District has installed 82 one hour fire stops where the in situ fire is greater than 30 minutes and less than one hour. To upgrade these stops to have a 30 minute margin would require 800,000 dollars and 3 to 4 months construction effort. This effort is not justified by the marginal increase in the improvement of the fire protection program.

Paragraph II.A.2.(h) requires that the fire detection and suppression systems be "Designed, installed, maintained and tested by personnel properly qualified by experience and testing in fire protection system." This is an unnecessary and unreasonable requirement. A reasonable requirement would be to have people who are qualified in their particular field perform work on the fire protection system. Therefore, a craftsperson pulling electrical cable associated with the fire protection system would be a qualified electrician. He would not have to be "Qualified by experience and testing in fire protection systems."



PARAGRAPH III.B - Sectional Control Valves

Comments

The District's design meets the requirements of this paragraph.

PARAGRAPH III.C - Hydrant Block Valves

Comments

The District's design meets the requirements of this paragraph as it relates to equipment required for safe shutdown.

PARAGRAPH III.D - Manual Fire Suppression

Comments

The District has a stand-pipe and hose system in the auxiliary building that can reach any location that contains or could present an exposure fire hazard to equipment required for safe shutdown. As pointed out in comments in other paragraphs the District's fire hazard analysis dealt with safe shutdown system and not safety related systems.

The District has installed hose carts inside the containment that are attached to the miscellaneous waste water system. As stated in our comment to paragraph III.A this system does not meet the requirements of the proposed rule change. However, the added expense to meet this proposed rule change does not justify the marginal increase in performance of the fire protection system inside the containment.

PARAGRAPH III.E - Hydrospactic Hose Tests

Comments

The District will meet this requirement.

PARAGRAPH III.F - Automatic Fire Detection

Comments

The District has installed automatic fire detection in all areas of the plant that contain combustibles and safe shutdown systems or components. The fire detection systems were not installed in areas that contain safety related systems not required for safe shutdown. As stated in comments for other paragraphs, the design requirement is to safely shut the plant down with a fire. It is not assumed that any other accidents have occurred. Therefore, the added requirement to protect safety related equipment is unnecessary.

PARAGRAPH III.G - Protection of Safe Shutdown Capability

Comments

The criteria listed in paragraph III.G has been implemented and met by the District in performing the modifications indicated in our fire hazard analysis except for the definition of when fixed fire suppression systems and alternate shutdown capability as shown on Table 1 are required. Table 1 is very ambiguous with the use of such qualitative and subjective words as good and poor. The District's analysis, and subsequent modification have provided an adequate fire protection system which insured safe shutdown. Therefore, Table I requirements are unnecessary.

PARAGRAPH III.H - Fire Brigade

Comments

The District meets the requirements of this paragraph except for the annual physical examinations for the fire brigade members.

PARAGRAPH III.I - Fire Brigade Training

Comments

This section of the proposed rule is too specified. It provides too much detail on the requirements for fire brigade training. The District recommends that this wording be issued as a guide and not as a proposed rule. As a rule it does not allow for any deviation in meeting the requirements.

PARAGRAPH III.J - Emergency Lighting

Comments

The District meets the requirement of providing emergency 8-hour minimum battery powered supply lighting in all areas needed for operation of safe shutdown equipment, not safety equipment as required by the rule. As pointed out in other comments, the District's analysis only addresses safe shutdown equipment.

PARAGRAPH III.K - Administrative Controls

Comments

The details listed to meet the requirements are too specific and should not be contained in a rule. Other methods of meeting the requirements should be allowed. However, this is not possible with the specific wording used in the proposed rule change.



PARAGRAPH III.L - Alternate Shutdown Capabilities

Comments

This paragraph does not apply to the District. The combination of fire protection features required for safe shutdown does not include alternate shutdown capabilities independent of a specific fire area.

PARAGRAPH III.M - Fire Barriers

Comments

The District's fire barriers meet the requirements of this paragraph.

PARAGRAPH III.N - Fire Barrier Penetration Seal Qualification

Comments

The District's fire barrier penetration seals have been qualified in accordance with this paragraph.

PARAGRAPH III.O - Fire Doors

Comments

The District's fire doors meet the requirements of the paragraph.

PARAGRAPH III.P - Reactor Coolant Pump Lubrication System

Comments

The District's reactor coolant pump motors are installed with an oil collection system capable of collecting lube oil from all potential pressurized and unpressurized leakage sites in the reactor coolant pump motor lube oil systems. The lube oil collection system is designed to collect the entire reactor coolant pump motor lube oil inventory. The drain line is large enough to accommodate the largest potential oil leak.

The District's oil collection system and the oil lube system are not designed to withstand the safe shutdown earthquake. (SSE) The District's fire hazard analysis, which was approved by the NRC, did not assume that an SSE was occurring simultaneously with a fire. If this requirement is imposed upon the District, it is not reasonable to complete all modifications by November 1, 1980. Approximately 6 months of engineering and 2 months of construction would be required to either upgrade the lube oil catch basin or the lube oil systems components and piping to withstand an SSE. The construction can only be performed with the plant shutdown. The added cost does not justify the marginal increase in safety that is gained. The District requests that this paragraph be rewritten to allow other methods to insure safe shutdown with a fire and SSE besides a seismic catch basin on RCP lube oil system.

PARAGRAPH III.Q - Associated Circuits

Comments

The District's fire hazard analysis looked at associated circuits that were not electrically isolated from circuits required for safe shutdown. In this analysis it verified that hot shorts open circuits or short circuits to ground would not prevent safe shutdown. This design criteria does not meet the intent of Paragraph III.Q. Paragraph III.Q should be written to address failure of associated circuits and their impact on safe shutdown, and not their impact on safety related equipment.

To perform the analysis required in this paragraph would take an extensive amount of man-hours and there would be no improvement in the ability of the plant to be safely shutdown during a fire.