

November 16, 1978

Note to: Jerry Zwetzig, ORB 4

RANCHO SECO DELETION OF TECHNICAL SPECIFICATION

Enclosed is your original letter to Mattimoe (Rancho Seco), a hard-marked suggested revision, and a freshly typed original incorporating the revisions if you wish to use it. I apologize for delay on this matter, but the legal questions raised by it are fairly difficult. In brief, the interpretation reflected in the letter is based upon (1) the fact that the Federal Register gave permission for incorporation by reference into the regulation of Reg. Guide 8.15 but not for the further incorporation of NUREG-0041, and (2) some language in both the Reg. Guide and the NUREG supports the idea that the specifics of the NUREG represent guidance rather than mandatory specifics. The revisions in the letter are attempts to more accurately represent the legal relationships among the documents.

Marcia Mulkey
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Enclosure:
As Stated Above

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Sacramento Municipal Utility District

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EVALUATION OF PROPOSED CLARIFICATION/EXCEPTIONS TO NUREG 0041

Ref.: SMUD letter of February 2, 1978 as supplemented by letter of July 27, 1978

- 1) Chapters 5.2.2 and 5.2.2.2 state that sorbent cannisters will not be used. Rancho Seco will use sorbent cannisters when isotopes of iodine may be present but no protection factor will be credited. The assigned exposures shall be from air samples unless superceded by bioassay tests.

Staff Position: Although you do not propose to take credit for the use of sorbent cannisters, the fact that they will be available on site for issue affords the opportunity for inadvertent misuse. You should, therefore, establish written procedures to prevent misuse. The proposed methods for assigning personnel exposures as described in the referenced submittals conform to the provisions of 10 CFR 20.103(a)(3) and are acceptable.

- 2) Chapter 5.2.3.5 limits the reuse of particulate cartridges after the seal has been broken. These filters do not significantly degrade with time. The respirator use cycle at Rancho Seco is characterized by extensive use during refueling shutdown and sporadic use during the remainder of the year. No limitation should force the unnecessary disposal of large quantities of good cartridges. The program at Rancho Seco will require that the cartridges be resealed after inspection and DOP tested after one year of use.

Staff Position: The limit on time of use applies to sorbent cartridges and cannisters, not to particulate filters. Section 5.2.3.5 specifically permits reuse of particulate filters under specified conditions. Accordingly, particulate filters used for protection against radioactive particles may be reused if the conditions of Section 5.2.3.5 are satisfied.

- 3) Chapter 6 indicates the protection factors to be used with the various types of respirator equipment. The factor stated in Table 6-1 will be used until Rancho Seco develops the protection factor for each individual. The factor will be based on three independent DOP man tests for each person tested and the lowest factor observed during the tests will be used. The results will be documented for each person tested.

Staff Position: Until such time as your use of higher factors is authorized by the Commission pursuant to paragraph C.7. of Regulatory Guide 8.15, the maximum protection factors to be used are those listed in Table 1 of Regulatory Guide 8.15 or as identified in response to IE Bulletin No. 78-07.

- 4) Chapter 7.2 states that several models of facepieces from various manufacturers be made available. The maintenance of a varied inventory contains several serious drawbacks. These include difficulty of control during issuance of brand for each individual, confusion of spare parts and added cost. Individuals who can not be properly fitted will utilize hoods or other equipment or they will be prohibited from working within challenge atmosphere.

Staff Position: Use of hoods or other protective equipment by individuals who cannot be properly fitted with facepieces is acceptable provided such equipment has been approved by NIOSH.

- 5) Chapter 7.4 requires that each person utilizing the respiratory program have a physical examination at least annually. Physical screening is merited but due to the extensive training program for the site employees, the transient nature of contract personnel and the time and cost involved in the medical examinations, Rancho Seco will pursue an alternate program. A consulting physician will establish a questionnaire for each worker to complete which will identify specific problems that may effect their performance with the equipment. A reasonable effort will be made to identify the problems as stated in Chapter 7.4 but the major emphasis will be the individual's responsibility to determine the physical or mental ability to use respiratory equipment during the training/retraining program.

Staff Position: Use of a consulting physician as indicated, in lieu of annual examinations, is acceptable provided the physician(s) preparing and evaluating the questionnaires is familiar with the guidance given in Section 7.4 of NUREG-0041.

- 6) Chapter 8.5.2.2 states that stannic chloride smoke tubes can be used for qualitative mask fit testing. Experience shows that the smoke from stannic chloride tubes (MSA) can not be detected even when breathing the smoke cloud directly. This method will not be used at Rancho Seco and acceptable alternate tests will be used to verify acceptable mask fitting.

Staff Position: Pursuant to Regulatory Guide 8.15, Table 1, footnote f, credit may be taken for use of half-mask facepiece, air purifying respirators operated in the negative pressure mode only if the mask is tested for fit with irritant smoke, prior to use, each time it is donned. NUREG-0041, Section 8.5.2.3.2 states that either stannic chloride or titanium tetrachloride is suitable for such a test.

- 7) Chapter 9.2 requires that respirators be checked after each use at least monthly. Respirators are seldom used at Rancho Seco during normal operation but frequently during refueling outages when extensive inspections and modifications are made. This requires that a large inventory of respirators be available during the refueling period. Presently after each respirator use, it is cleaned, disinfected, inspected and then sealed in a plastic bag to prevent deterioration. This should eliminate any necessity for periodic checks. Respirators assigned to emergency use are checked monthly and all respirators are checked annually. Rancho Seco intends to continue these procedures.

Staff Position: The monthly inspection requirement may be waived for that group of respirators reserved for use during refueling outages, provided the other provisions of Section 9.2 of NUREG-0041 are met.

- 8) Chapter 9.6 states several limits for contamination surveys and decontamination of respiratory equipment. The limits that will be used at Rancho Seco will require decontamination to a minimum of 1000 cpm fixed beta gamma and 200 dpm/100cm² smearable inside the facepiece and 5000 cpm and 200 dpm/100 cm² smearable on the exterior of the facepiece. Contamination levels will be determined with a GM type pancake probe.

Staff Position: The contamination limits for respiratory protective equipment to be reused by the same individual on the same working day should be as stated in Section 9.6 of NUREG-0041. The contamination limits for respirators made available for reissuance or reuse should not exceed 1000 dpm (beta-gamma)/100cm² and 100 dpm (alpha)/ 100cm² smearable at any accessible surface. The fixed contamination limit should not exceed 0.2 mrad/hr at contact at any accessible surface. (Note: all values are limits above background).