



**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

DAGM/NUC 93-143

July 12, 1993

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D. C. 20555

Docket No. 50-312  
Rancho Seco Nuclear Station  
License No. DPR-54

**REVIEW AND APPROVAL OF EMERGENCY PLAN SECTION 5,  
REVISION 6, AND IMPLEMENTATION OF RP RESPONDER  
PROGRAM**

References:

1. D. Keuter (SMUD) to S. Weiss (NRC) letter AGM/NUC 90-238, dated September 20, 1990, Exemption from Certain Requirements of 10 CFR 50.47(b) and 10 CFR 50, Appendix E
2. D. Keuter (SMUD) to S. Weiss (NRC) letter AGM/NUC 90-307, dated December 20, 1990, Response to Request for Additional Information - Exemption Request from Certain Requirements of 10 CFR 50.47(b) and 10 CFR 50, Appendix E
3. D. Crutchfield (NRC) to D. Keuter (SMUD) letter dated February 22, 1991, Issuance of Exemption to 10 CFR 50.54(q) for Rancho Seco and Approval of Rancho Seco Emergency Plan, Change 4, "Long Term Defueled Condition" (TAC NO. 76792)

Attention: Seymour Weiss

In References 1 and 2, the District proposed a new Emergency Plan for Rancho Seco (the Long Term Defueled Condition Emergency Plan) that addressed the emergency response needs for a nuclear facility in the permanently defueled mode. This new plan represented a change in focus from previous emergency plans, which addressed the potential, postulated emergencies applicable to an operating nuclear power reactor. This new plan was based on the reduced spectrum of applicable postulated accidents, the reduced source terms, and the corresponding

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reduction in potential exposures to the public. The NRC approved this new Emergency Plan in Reference 3.

Based on shutdown operations and new Emergency Plan implementation experience, and in accordance with 10 CFR 50.54(q) and 10 CFR 50.4(b)(5), the District hereby submits Revision 6 to Section 5, "Organizational Control of Emergencies," of the Rancho Seco Long Term Defueled Condition Emergency Plan (RSEP) for NRC review and approval. The District is revising the RSEP in preparation for implementation of its Radiation Protection (RP) Responder program, which removes the requirement for continuous RP Technician shift coverage. Because the current RSEP requires a RP Technician to be continuously on-shift, the District concluded, per 10 CFR 50.54(q), that this RSEP revision decreases the effectiveness of the RSEP and requires NRC approval prior to implementation.

The RP Responder program consists of training and qualifying plant Operators to provide routine radiation protection support and initial emergency response. This change will allow the District to take RP Technicians off continuous shift coverage and place them on the normal work-day shift (i.e., Monday through Thursday 0630 to 1700, except holidays). During times other than normal working hours, RP Responders will be tasked to perform routine radiation protection functions and perform the initial response actions for any unusual radiological conditions or circumstances. The RSEP changes, administrative controls, program scope and limitations, and the training and qualification requirements for the RP Responder program are defined in:

1. RSEP Section 5, Revision 6, "Organizational Control of Emergencies,"
2. Procedure RP.305.40, "RP Responder Instructions," and
3. RP Responder Qualification Documentation training program.<sup>2</sup>

Item 1 is attached for your review and approval, while items 2 and 3 are attached for your information and to support your review of item 1.

The District evaluated changing its approach to meeting radiation protection coverage requirements during off-normal hours in the 10 CFR 50.59 evaluations performed for Revision 6 to RSEP Section 5 and procedure RP.305.40. Below, is a summary of the justification that supports NRC approval of the proposed RSEP changes and District implementation of its new RP Responder program:

1. The potential radiological consequences associated with credible accidents during the Permanently Defueled Mode (PDM) continue to decrease.
2. The RSEP change is based on the near static conditions and reduced activities, radiation levels, and potential credible accidents and exposures associated with spent fuel preservation at Rancho Seco.
3. No activities will be performed or scheduled outside normal working hours that would require an ANSI qualified RP Technician, unless a RP Technician is on-site or scheduled to be on-site, respectively.
4. RP Responders are trained and qualified to perform the initial response actions for the anticipated radiological situations that could reasonably occur during off-normal working hours [i.e., back shift, holidays, and weekends (Friday through Sunday)], considering the limited activities that will be undertaken.
5. During off-normal hours, RP Responders will be comprised of on-shift Operators, who currently are trained in RSEP requirements and perform the initial RSEP response actions in accordance with the approved RSEP.
6. RP Responders are trained to call the Emergency Response Organization (ERO) Radiological Assessment Coordinator (RAC) upon identification of an off-normal radiological event (i.e., a fire in the Radiological Controlled Area, a personnel contamination, an RSEP event, a liquid radwaste spill, etc.).
7. In accordance with Technical Specification D6.2.2c, fuel handling operations are not allowed to be conducted without an individual on-site who is qualified in radiation protection practices and procedures. RP Technicians will be on-site to meet this requirement.
8. Most radioactive plant systems are drained, de-activated, or not required to function during the PDM.
9. Physical work on radioactive systems is not allowed in a Radiological Controlled Area (RCA) without a RP Technician on-site.
10. Entry into Hot Particle Areas will normally only occur when a RP Technician is on-site.

11. Entry into an area where the radiological conditions are unknown and have not been evaluated will not occur without an RP Technician on-site.
12. Organizational freedom is maintained in accordance with Technical Specification D6.2.1d, because RP Responders are not being trained or qualified to perform any health physics functions or other activities that require an ANSI qualified RP Technician.
13. RP Responders are trained in the requirements of 10 CFR 19 and 10 CFR 20 and have the prerogative to (1) go to upper management with Radiation Protection program concerns, (2) request an NRC investigation without concern for reprisal, and (3) not follow directives that knowingly violate radiation protection regulations, thus ensuring organizational freedom is maintained when operators perform the RP Responder function.
14. Operators who become RP Responders will perform routine Operator activities (such as surveillances, inspections, and/or operation of plant equipment) in radiation or contamination areas only under the appropriate Radiation Work Permit (RWP) in accordance with their RP Responder training.
15. The RP Responder program requires RP Supervision (i.e., the Radiological Assessment Coordinator) to be on-call so that RP Responders may contact an individual qualified to perform RP Technician functions when RP Responders encounter radiological situations or conditions beyond the scope of their training and qualifications.
16. The RP Responder program and the Emergency Plan require a maximum two hour response time for qualified RP personnel to report to the site, when necessary.
17. Area contamination survey results obtained by RP Responders are for information only and are used only to verify that existing radiological conditions are comparable to the most recent RP Technician performed area contamination surveys.
18. RP Responders may only use the appropriate active/standing RWP to enter a RCA or provide coverage for Emergency Response Team, Fire Brigade, and Off-site Fire Suppression personnel during emergency situations that potentially involve exposure to radiation or radioactive material.

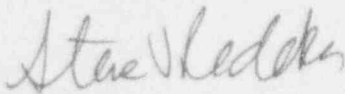
Additional changes, that the District evaluated as acceptable and appropriate in the 10 CFR 50.59 determination for this RSEP change and that do not require prior NRC approval, are:


1. Editorial reference to the general technician title used at Rancho Seco during the PDM (i.e., Chem/RP Decommissioning Technician), instead of the titles used previously (i.e., RP Technician and Chemistry Technician),
2. Reduce the total number of Chemistry and RP Technicians available for additional emergency response support within 2 hours of emergency declaration from 4 (3 RP Technicians and 1 Chemistry Technician) to 3 Chem/RP Decommissioning Technicians, and
3. Add "direct chemistry activities" to the RAC duties performed in the Technical Support Center (TSC).

These changes are based on a previous administrative change that modified the RP and Chemistry Technician titles into one title, Chem/RP Decommissioning Technician, and justifications 1 through 4 listed above.

Members of your staff requiring additional information or clarification may contact Jerry Delezenski at (916) 452-3211, extension 4914.

Sincerely,



 James R. Shetler  
Deputy Assistant General Manager  
Nuclear

Attachments

cc w/atch: B. Faulkenberry, NRC, Walnut Creek (2 copies)  
S. Brown, NRC, Rockville



## ATTACHMENTS

1. Revision 6 to Emergency Plan Section 5, "Organizational Control of Emergencies,"
2. New procedure RP.305.40, "RP Responder Instructions," and
3. RP Responder Qualification Documentation training program.