

SAFETY EVALUATION
BY THE OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS
RELATED TO AMENDMENT NO. 132
TO FACILITY OPERATING LICENSE (POSSESSION ONLY) NO. DPR-54
SACRAMENTO MUNICIPAL UTILITY DISTRICT
RANCHO SECO NUCLEAR GENERATING STATION
DOCKET NO. 50-312

1.0 INTRODUCTION

By letter dated January 24, 2005, the Sacramento Municipal Utility District (SMUD or the licensee) proposed to amend Facility Operating License (Possession Only) No. DPR-54 for the Rancho Seco Nuclear Generating Station (Rancho Seco or the plant). The proposed changes would eliminate unnecessary and obsolete information from facility operating license sections 2.A., 2.C.(4), 2.C.(5), 2.C.(6), 2.C.(7), 2.C.(8), 2.C.(9), 2.C.(10), 2.C.(11), 2.C.(12), 2.C.(13), and 2.D. Additionally, the deletion of a number of orders has been proposed.

2.0 BACKGROUND

On June 7, 1989, Rancho Seco terminated nuclear power operations permanently. On December 8, 1989, Rancho Seco completed defueling the reactor. On March 17, 1992, the NRC amended the Rancho Seco operating license to possession-only status. On March 20, 1995, the NRC issued the Rancho Seco Decommissioning Order. The Order authorized Rancho Seco to decommission and accepted the Rancho Seco decommissioning funding plan. SMUD began actively decommissioning Rancho Seco in February 1997. In March 1997, SMUD revised the Rancho Seco Decommissioning Plan to conform to the content requirements of the Post Shutdown Decommissioning Activities Report.

On June 30, 2000, the NRC issued Materials License SNM-2510 for the Rancho Seco Independent Spent Fuel Storage Installation (ISFSI). This site specific license authorizes SMUD to store Rancho Seco spent fuel at the Rancho Seco ISFSI. The licensee completed transferring all of their spent fuel to the ISFSI on August 21, 2002. All of the spent fuel is now stored at the ISFSI and no fuel is stored at the 10 CFR Part 50 licensed facility. Accordingly, the only quality-related structures, systems, or components (SSCs) at the Rancho Seco 10 CFR Part 50 licensed site are the radioactive sources used to calibrate the instrumentation used to measure radioactivity in gaseous and liquid effluents.

Enclosure

Plant dismantlement is substantially complete and most of the SSCs that were safety-related or important-to-safety have been removed from the plant and shipped for disposal. The pressurizer was shipped to Envirocare for disposal in April 2004. One steam generator was shipped to Envirocare in December 2004, and the second was shipped in January 2005. The licensee is currently segmenting the reactor vessel internals.

3.0 EVALUATION

The licensee has proposed to revise license section 2.A. to remove the parenthetical information that names the specific amendment numbers for the Final Safety Analysis Report (FSAR) and the Environmental Report (ER). References to specific amendments for the FSAR and the ER are not required by Commission guidance to be included in the license. Control of revisions to the FSAR and the ER are by 10 CFR Part 50.59 and 10 CFR Part 50.71 so references to specific revisions in the licensee are unnecessary. Based on the above, the proposed deletion is administrative in nature and acceptable.

License condition 2.C.(4) currently reads:

The licensee shall implement and maintain in effect all provisions of the approved fire protection program, as described in the Fire Protection Plan for Rancho Seco Nuclear Generating Station, and as approved in the SER dated September 10, 1990 subject to the following provision:

The licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

The licensee has proposed to delete this license condition in its entirety.

The Rancho Seco Decommissioning Order issued by the NRC on March 20, 1995, required the licensee to maintain a fire protection program consistent with the decommissioning plant conditions and activities. This requirement, which the licensee has incorporated into the Rancho Seco Decommissioning Safety Analysis Report, superseded license condition 2.C.(4), and is more appropriate with the permanently shutdown and decommissioning status of the plant. Based on license condition 2.C.(4) being superseded by the Decommissioning Order and the fact that it is inappropriate for the current plant status, the proposed deletion is acceptable.

License condition 2.C.(5) currently reads:

The licensee shall perform the supplementary inservice tests and inspection of Nuclear Class 2 and Class 3 systems and components committed to in the letter of February 27, 1978, form J. J. Mattimoe to R. W. Reid.

The licensee has proposed to delete this license condition in its entirety.

As part of the decommissioning process, the licensee has removed all Class 2 and 3 systems from the site. With all applicable systems removed, license condition 2.C.(5) is no longer necessary. Therefore, the proposed deletion is administrative and acceptable.

License condition 2.C.(6) currently reads:

In accordance with the provisions of 10 CFR Part 50.12(a) an exemption from the provisions of 10 CFR Part 50.55a(g)(4)(v) is granted, and the effective date for the start of the next 40-month period is extended from August 18, 1978 to October 18, 1979.

The licensee has proposed to delete this license condition in its entirety.

10 CFR Part 50.55a(g)(4)(v) addresses the in-service inspection requirements for metal and concrete containment components. With all the irradiated fuel having been permanently removed from the reactor containment to the ISFSI, the licensee is no longer required to maintain a functional containment or perform the associated in-service inspection. Therefore, this section of the regulations is no longer applicable and the associated license condition is also unnecessary. Based on the above, this proposed change is administrative and acceptable.

License condition 2.C.(7) currently reads:

Systems Integrity

The licensee shall implement a program to reduce leakage from systems outside containment that would or could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. This program shall include the following:

1. Provisions establishing preventive maintenance and periodic visual inspection requirement, and
2. Integrated leak test requirements for each system at a frequency not to exceed refueling cycle intervals.

The licensee has proposed to delete this license condition in its entirety.

This license condition was imposed to minimize the possibility of a system permitting the release of radioactive materials via a containment bypass during a design basis accident. However, the design basis accidents this license condition addressed are no longer possible with all the spent fuel having been moved to the ISFSI. Therefore, this license condition is no longer necessary to minimize radioactive releases and the proposed deletion is acceptable.

The text of license conditions 2.C.(8) through 2.C.(11) were deleted from the license by prior amendments but the numerical listing was retained for consistency. With these proposed amendments the numerical listing will be deleted. This deletion is purely administrative and acceptable.

License Condition 2.C.(12) currently reads:

- (a) The schedule for completion of Item III.D.3.4 under Section III of the Commission's March 14, 1983, as revised November 10, 1983, Order Confirming Licensee Commitments on Post-TMI Related Issues, is revised to show the

licensee's completion date as startup from the refueling outage currently estimated to begin in September 1986.

- (b) Prior to startup from the refueling outage which started in March 1985, the licensee will:
 - (1) complete the installation of a redundant, two-train Heating Ventilation and Air Conditioning System and, on loss of offsite power, load the B train automatically onto the existing diesel generators; and
 - (2) change procedures to reflect the interim installation, and instruct the operators on the modified procedures.

The licensee has proposed to delete this license condition in its entirety.

License condition 2.C.(12) addresses NUREG-0737, Control Room habitability requirements. With all of the spent nuclear fuel in dry storage at the Rancho Seco ISFSI, the Rancho Seco control room is no longer in use. Therefore, these requirements are no longer required. Based on the above, this proposed change is administrative and acceptable.

The licensee has proposed to move the text currently in 2.C.(13) to 2.C.(3). Section 2.C.(3) was previously deleted by amendment 131, but was retained in the license for numerical consistency. The movement of the text in section 2.C.(13) to 2.C.(3) provides numerical consistency with the changes proposed, is administrative in nature and acceptable.

License condition 2.D currently states:

This license is subject to the following additional condition for the protection of the environment:

If harmful effects or evidence of irreversible damage are detected by monitoring programs including in the Technical Specifications (Appendix E), the Applicant will provide an analysis of the problem and a proposed course of action to alleviate the problem.

The environmental monitoring programs that were previously included in the Technical Specifications have been relocated to the Rancho Seco Quality Manual (Appendix A). The licensee has proposed to revise this license condition to refer to the monitoring programs in the Rancho Seco Quality Manual rather than the Technical Specifications, consistent with the previously approved change. This proposed change provides consistency with the previously approved change, is administrative in nature and acceptable.

The licensee has proposed to delete the Order for Modification of License, dated July 21, 1978. This Order required a re-evaluation of Emergency Core Cooling System performance, provided limits on steady state reactor core power, and set a completion time for operator action following accidents that occur during power operations. These requirements were subsequently superceded by the exemption issued in conjunction with amendment number 26 on December 15, 1978. In addition, these requirements are applicable to systems which have been removed and are not required for the facility's permanently shutdown condition. Therefore, the proposed deletion (termination) of the Order dated July 21, 1978, is acceptable.

The licensee has proposed to delete the Order for Modification of License, dated April 1, 1980. This Order required the implementation of procedures for independent verification of valving line-ups and equipment operability whenever safety-related equipment is removed from or placed into service and that existing procedures and controls be reviewed and revised as necessary to reflect changes in safety related plant systems and their operation. With the removal of all spent fuel to the ISFSI, there is no safety related equipment at the site for which this requirement would be applicable. Therefore, the proposed deletion (termination) of the Order dated April 1, 1980, is acceptable.

The licensee has proposed to delete the Order for Modification of License, dated September 19, 1980. This Order required a response as specified in I & E Bulletin 79-01B by November 1, 1980. The licensee complied with this Order by responding to I & E Bulletin 79-01B on October 31, 1980. Additionally, I & E Bulletin 79-01B required the licensee to address environmental qualification of Class 1E electrical equipment. However, the facility does not have any required Class 1E electrical equipment in its permanently shutdown and defueled condition. Therefore, the requirements of this Order are no longer applicable to Rancho Seco, and the proposed deletion (termination) of the Order dated September 19, 1980, is acceptable.

The licensee has proposed to delete the Order for Modification of License, dated April 20, 1981. This Order required new PCS pressure isolation valve Technical Specification (TS) surveillances and limiting conditions for operation (LCOs) and check valve-testing requirements. The valves this Order applied to have been removed from the facility as part of the decommissioning process. Additionally, the required TS surveillances and LCOs were previously deleted from the TS as part of a TS change to reflect the permanently shutdown and defueled status of the facility. Based on the change in plant status, this Order is no longer applicable to Rancho Seco. Therefore, the proposed deletion (termination) of the Order dated April 20, 1981, is acceptable.

The licensee has proposed to delete the Order for Modification of License, dated December 10, 1982. This Order required the installation of an Inadequate Core Cooling (ICC) instrumentation system in conformance with the design parameters specified in NUREG-0737. With the facility permanently shutdown and defueled, there is no longer a need for an ICC instrumentation system. Therefore, this required modification is no longer required and the Order is unnecessary. Based on the above, the proposed deletion (termination) of the Order dated December 10, 1982, is acceptable.

The licensee has proposed to delete the Order for Modification of License, dated May 2, 1990. This Order confirmed the licensee's commitment not to move new or spent fuel into the reactor building without prior NRC approval. This commitment is also confirmed by license condition 2.C.(13), which is proposed to be renumbered to 2.C.(3) by this amendment, which states:

The movement of nuclear fuel into the Reactor Building is prohibited without prior NRC approval.

This Order is redundant with the existing license condition and is therefore not required. Based on the above, the proposed deletion (termination) of the Order dated May 2, 1990, is acceptable.

Based on the above discussions, the license changes as proposed by the licensee in their January 24, 2005, submittal are acceptable. In conjunction, the proposed termination of certain Orders, as described in that same submittal, are also acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the California State official was notified of the proposed issuance of the amendments. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments relate to changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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