

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of

SACRAMENTO MUNICIPAL UTILITY DISTRICT

(Rancho Seco Nuclear Generating
Station)

}
} Docket No. 50-312
}

EXEMPTION

I.

The Sacramento Municipal Utility District (the licensee) is the holder of a Facility Operating License No. DPR-54, which authorizes the operation of the Rancho Seco Nuclear Generating Station (the Facility) at a steady-state reactor power level not in excess of 2772 megawatts thermal. The license provides, among other things, that the licensee is subject to all rules, regulations, and orders of the Nuclear Regulatory Commission (the Commission or NRC) now or hereafter in effect.

In a letter on July 24, 1990, the licensee submitted a request for an exemption from performing an annual exercise of the emergency plan, activation of the alert and notification system, and distribution of public information brochures as required by 10 CFR 50.47 and 10 CFR Part 50, Appendix E.

The facility consists of a pressurized water reactor (PWR) located at the licensee's site in Sacramento County, California.

II.

The NRC may grant exemptions from the requirements of the regulations which, pursuant to 10 CFR 50.12(a), are (1) authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security; and (2) present special circumstances.

Section 50.12(a)(2)(ii) of 10 CFR Part 50 provides that special circumstances exist when application of the regulations in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule.

Section 50.12(a)(iii) of 10 CFR Part 50 provides that special circumstances exist when compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated.

Section 50.12(a)(2)(vi) of 10 CFR Part 50 provides that special circumstances exist when there is present any other material circumstance not considered when the regulation was adopted for which it would be in the public interest to grant an exemption.

By letter dated July 24, 1990, the licensee requested exemptions from the following requirements:

- (1) 10 CFR 50.47(b)(14) requires periodic drills and exercises and 10 CFR Part 50, Appendix E, Section IV.F, requires annual (onsite) emergency preparedness exercises and biennial (offsite) emergency preparedness exercises. The offsite exercises require State and local government participation. NUREG-0654/FEMA-REP-1, Rev. 1 titled, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," also recommends in Appendix 3 that a complete cycle test of the siren system be conducted at least annually and as required for formal exercises.

- (2) 10 CFR 50.47(b)(7) requires the periodic dissemination of information to the public on actions to be taken in an emergency and 10 CFR 50, Appendix E, Section IV.D.2, sets an annual frequency for dissemination of this information to the public within the plume exposure pathway (10-mile radius) emergency planning zone (EPZ).

In the same letter, the licensee supplied the following information in support of its request:

- ° The licensee states that Rancho Seco is permanently shut down and completely defueled and, therefore, the potential for postulated accidents are much less than those considered when the NRC promulgated the emergency preparedness regulation.
- ° The licensee points out that it has submitted the "Long Term Defueled Condition Emergency Plan" and the supporting accident analysis for NRC review. The licensee states that the Environmental Protection Agency (EPA) plume exposure protective action guides (PAGs) will not be exceeded (offsite) for any postulated event at Rancho Seco in the defueled condition.
- ° The licensee states that it successfully passed the 1989 annual exercise.
- ° The licensee provides letters from State and local officials which approve the licensee's decision to seek relief from the requirement for an exercise.

- ° The licensee concludes that activation of the alert and notification system, annual distribution of information to the public and full (State and local) participation exercises are not required for a shut-down, defueled facility.
- ° The licensee offers to perform communications drills in lieu of the annual exercise. The licensee states that the scope of the drills will include the annual communication drill necessary to ensure that State and local authorities are notified of emergencies in a timely manner.

III.

The NRC staff is reviewing the licensee's defueled emergency plan, has examined the licensee's dose calculations supporting the defueled emergency plan, and has independently calculated the offsite doses resulting from a fuel handling accident. Both the licensee's and the staff's calculations show that the offsite doses resulting from a fuel handling accident would not exceed the EPA PAGs offsite. For example, the lower level EPA PAG for protective action is 1 Rem whole-body dose. The staff's calculations show that the accumulated whole-body radiation dose at the site boundary for the 30 days following a fuel handling accident would be approximately 0.14 Rem. Thus, the long times that are available permit ad hoc actions by State and local authorities to avoid exceeding EPA PAGs for the public. The NRC staff considers that onsite emergency plans for a defueled plant are required to provide for the protection of individuals on site and provide notifications and training for officials offsite. Exercises of offsite plans, testing of the alert and notification system, and distribution of public information materials are not required.

On September 23, 1988, the Commission promulgated new emergency preparedness regulations for fuel loading and low power testing. These regulations in 10 CFR 50.47(d) do not require exercises with offsite officials, prompt public notification systems (such as sirens), or the distribution of public information materials. This is precisely the relief sought by the licensee for the defueled condition.

The new (low-power) regulations were promulgated because:

- ° The fission product inventory during low power testing is much less than during full power operation.
- ° At low power there is a significant reduction in the required capacity of systems designed to mitigate the consequences of accidents.
- ° The time available for taking actions to identify accident causes and mitigate accident consequences at low power is much longer than at full power.

IV.

Because the risk of a defueled nuclear power plant is significantly less than even that on a fueled plant operating at low power, the Commission concludes that the emergency preparedness requirements of 10 CFR 50.47(d) regarding offsite preparedness are more appropriate for the Rancho Seco Nuclear Generating Station than the requirements of 10 CFR 50.47(b). Therefore, it is not necessary for the Rancho Seco Nuclear Generating Station, in its defueled condition, to conduct biennial offsite exercises, test its sirens or distribute public information materials. Therefore, based on a consideration of the facts presented in Section III above and as requested by the licensee, the Commission finds the following factors support the granting of the requested exemptions:

- ° The reactor has been shut down since June 1989, the fuel has been removed from the reactor vessel and is stored in the spent fuel pool. Consequently, EPA PAGs will not be exceeded offsite and no offsite public protective actions will be warranted in case of an accident.
- ° Emergency plans for a defueled plant were not contemplated when the regulation was adopted.
- ° Requiring offsite exercises, testing of sirens, and dissemination of public information would not significantly reduce the risk to the public from any credible accident that has been postulated for a defueled nuclear plant.

V.

For these reasons the Commission has determined that, pursuant to 10 CFR 50.12(a)(1), (a)(2)(ii), (iii), and (vi) the exemptions requested by the licensee's letter of July 24, 1990, are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security, and special circumstances are present as contemplated in the regulation.

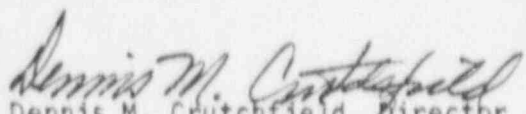
Accordingly, the Commission hereby approves the following exemptions, applicable to Rancho Seco in its defueled condition:

- (1) "The Rancho Seco Nuclear Generating Station is exempt from the requirements of 10 CFR Part 50, Appendix E, Section IV.F.3, for the conduct of biennial offsite full-participation emergency preparedness exercises, including any testing of the siren system."
- (2) "The Rancho Seco Nuclear Generating Station is exempt from the requirements of 10 CFR 50.47(b)(7) and 10 CFR 50, Appendix E, Section IV.D, requiring the dissemination of public information materials."

Pursuant to 10 CFR 51.32, the Commission has previously determined that the granting of these Exemptions will have no significant impact on the quality of the human environment and an environmental impact statement is not required (55 FR 35481 August 22, 1990).

This Exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION


Dennis M. Crutchfield, Director
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Dated at Rockville, Maryland,
this 30 day of November, 1990.