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

April 28, 1983

DIRECTOR OF NUCLEAR REACTOR REGULATION
ATTENTION JOHN F STOLZ CHIEF
OPERATING REACTORS BRANCH 4
U S NUCLEAR REGULATORY COMMISSION
WASHINGTON D C 20555

DOCKET 50-312
RANCHO SECO NUCLEAR GENERATING STATION
UNIT NO 1
EMERGENCY FEEDWATER INSTRUMENTATION AND CONTROL (EFIC)
SYSTEM; UPGRADED AUXILIARY FEEDWATER SYSTEM (AFWS)
NUREG 0737 ITEMS II.E.1.2 AND II.K.2.10

Your November 15, 1982 letter, requested that the Sacramento Municipal Utility District submit detailed electrical schematic diagrams showing the automatic initiation circuitry and pump and valve control circuits. Accordingly, we are submitting the items detailed in Enclosure 1 which should provide adequate information for your review. The descriptions provided reflect changes to the "generic" EFIC design which were necessitated by Rancho Seco plant specifics. It should be noted that some additional minor modifications can be expected as detailed engineering work progresses. Should any changes affect the automatic initiation or pump/valve control logic, you will be informed of the details of the modification.

Regarding the schedule for installation and placing the upgraded AFWS in service, I would like to confirm our telephone conversation of March 28, 1983, and augment schedule information supplied to you in our April 15, 1983 submittal, regarding NUREG 0737, Supplement 1.

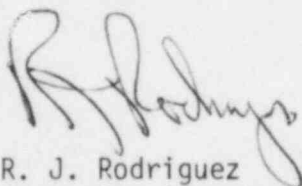
During that conversation, I and members of my staff informed you of the District's problem with installation of the EFIC/AFWS upgrade during the ext refueling outage (which had previously been our plan). The problem centers around the main control room console(s) for indication and control of the EFIC/AFWS. The Rancho Seco control room is very compact and significant additions to the instrument and control requirements quickly escalate into major control room console changes. Due to cable pulling and termination requirements for console changes, qualification requirements for new consoles, instruments, indicators, etc., such changes require long outages for installation preceded by lengthy periods for hardware procurement. The current design of the Rancho Seco EFIC indicates that the necessary control room changes are of sufficient magnitude that we anticipate a very long outage to

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accommodate them. This situation becomes untenable when it is realized that the detailed control room design review (DCRDR) and Regulatory Guide 1.97 requirements of NUREG 0737, Supplement 1 also can cause modifications of a similar magnitude. Due to the length of time required to perform DCRDR and Reg. Guide 1.97 review plus design changes, hardware procurement, etc., it is not possible to plan to implement changes earlier than two refuelings beyond the current outage. Consequently, the District considers that installation of the EFIC control room consoles during the next refueling outage would require one extremely long outage and the results of the DCRDR and Reg. Guide 1.97 reviews would require a subsequent long outage which potentially could require redoing the same consoles modified for EFIC. Because of this situation, the District believes it to be impractical to implement EFIC prior to the startup of cycle 8. This is not to imply that no modifications will be made until the refueling outage prior to cycle 8. Following delivery and checkout, equipment can and will be installed during plant operation (where practical) and during planned and unplanned outages of sufficient duration (where an outage is required).

This change in schedule affects certain prior District commitments to the NRC. One significant effect is upon NUREG 0737, Item II.K.2.10; Safety Grade Anticipatory Trips. The Loss of Main Feedwater portion of this modification is to be made fully safety grade by implementation of EFIC as described in our December 14, 1982 letter. We consider this to be acceptable since only one non-safety grade component (the pressure switches) will remain in the system following the current refueling outage, thus the system will be safety grade in design but will include one non-pedigreed component. However, this schedule change does affect the NRC Order dated March 14, 1983, and we request exemption from that portion. This change does not affect Item II.E.1.2; AFW Initiation and Flow Indication, as described in the Order letter. Those changes will be implemented during the current refueling outage as previously described in the references given in the Order letter.



R. J. Rodriguez
Executive Director, Nuclear

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ENCLOSURE 1

LIST OF ATTACHMENTS

B&W DOCUMENT NUMBER	DOCUMENT TITLE
15-1120850-03	System Description for Auxiliary Feedwater System for Sacramento Municipal Utility District Rancho Seco
1121327D-03	Auxiliary Feedwater System P&ID
1122924F-00	EFIC Organization
1122923E-01	EFIC Logic 12 Steam Generator Control
1122927C-01	EFIC Logic 3 Steam Generator Pressure
1122928C-01	EFIC Logic 2 Steam Generator B Level Input
1122930C-01	EFIC Logic 1 Steam Generator A Level Input
1122922D-02	EFIC Logic 5 Initiate Logic
1122926E-00	Trip Logic
1122925C-00	EFIC Logic 6 Vector Logic
1122921C-00	EFIC Trip Test Philosophy
1121322C-02	CM&D Equipment OTSG Level Sensing
1122920B-00	EFIC Symbology