

Enclosure II

SACRAMENTO MUNICIPAL UTILITY DISTRICT

RANCHO SECO NUCLEAR GENERATING  
STATION, UNIT NO. 1

RESPONSE TO:

NUCLEAR REGULATORY COMMISSION  
REQUEST FOR INFORMATION  
REGARDING ENCLOSURE 1 OF NRC TO SMUD LETTER  
DATED JUNE 3, 1977 TITLED  
SAFETY EVALUATION AND STATEMENT OF STAFF  
POSITIONS RELATIVE TO THE EMERGENCY POWER  
SYSTEMS FOR OPERATING REACTORS

Issued: July 19, 1977  
Revision 1: August 1, 1980  
Revision 2: September 22, 1980

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## 4. SURVEILLANCE STANDARDS

4.1 OPERATIONAL SAFETY REVIEW

TABLE 4.1-1

## INSTRUMENT SURVEILLANCE REQUIREMENTS

Add item 48 to Table 4.1-1.

Channel Description	Check	Test	Calibrate	Remarks
48. Voltage Protection	S			Compare voltmeter readings
a. Undervoltage		M	R	
b. Overvoltage		M	R	
c. Time Delay		M	R	

S = Each Shift

M = Monthly

R = Once during the refueling interval

4.6 EMERGENCY POWER SYSTEM PERIODIC TESTINGSpecification

Substitute 4.6.2 with the following:

- 4.6.2 During each refueling interval, a test of the diesel generators and emergency start circuits shall be performed to verify that these emergency power sources and associated equipment are operable by:
- A. Simulating a loss of offsite power in conjunction with a safety injection actuation signal, and:
    - 1) Verifying deenergization of the nuclear services buses and operation of the load shedding circuitry.
    - 2) Verifying the diesel starts from ambient condition on the auto-start signal and energizes the nuclear services buses, and by verifying proper operation of the automatic load sequencing circuitry. The diesel generators will be operated for at least 5 minutes in this condition.

TABLE 3.7.1

VOLTAGE PROTECTION SYSTEM RELAY TRIP VALUES

	Trip Value	Time Delay
Undervoltage	(Note 1)	
a. Dropout	3771 $\pm$ 38V	12s $\pm$ 1.2s
b. 75-percent of 4160V	3120 $\pm$ 31V	1.9 $\pm$ 0.2s
c. Complete loss	0	1.5 $\pm$ 0.2s
Overvoltage	4580 $\pm$ 46V	3.0 $\pm$ 0.3s
<p>Note 1 - The relay voltage values shown have been converted by the PT ratio (40:1) for review convenience.</p>		

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