July 13, 1981

DIRECTOR OF NUCLEAR REACTOR REGULATION
ATTENTION DARRELL G EISENHUT DIRECTOR
DIVISION OF LICENSING
U S NUCLEAR REGULATORY COMMISSION
WASHINGTON D C 20555

DOCKET 50-312
RANCHO SECO NUCLEAR GENERATING STATION
UNIT NO 1
AUXILIARY FEEDWATER SYSTEM SEISMIC QUALIFICATION

The Sacramento Municipal Utility District has reviewed your letter of
February 10, 1981 (Generic Letter No. 81-14) requesting information on the
seismic qualification of the Rancho Seco Unit 1 auxiliary feedwater system.

The entire Auxiliary Feedwater (AFW) System at Rancho Seco was designed and
constructed to Seismic Category I requirements. The analytical techniques,
testing, evaluation methods and acceptance criteria used in the design of the
AFW System are consistent with the methods used for other safety-grade systems
at Rancho Seco Unit 1. The AFW system has been included within the scope of
seismic related Bulletins 79-02, 79-04, 79-07, 79-14, 80-11, and IE Information
Notice 80-21.

The analysis methodology for Seismic Class I systems such as the AFW system
uses the "response spectrum" approach. The response spectrum approach uses the
natural period, mode, shape, and dampening factors that are characteristic of
the system and equipment, to determine the dynamic loads that would result from
a seismic event. General primary stresses, including those resulting from
gravity loads, operating loads and operating temperatures, are combined with the
seismic stresses resulting from the amplified earthquake response spectrum. The
combination of stress is required to be below allowable stress set forth in the
appropriate codes and standards, such as ASME Section III. A more detailed
description of the methodology is given in Appendix 5B of the FSAR.

John J. Mattimoe
Assistant General Manager
and Chief Engineer

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