

Southern California Edison Company



P. O. BOX 800
2244 WALNUT GROVE AVENUE
ROSEMEAD, CALIFORNIA 91770

K. P. BASKIN
MANAGER, NUCLEAR ENGINEERING
AND LICENSING

TELEPHONE
(213) 572-1401

April 18, 1980

Director of Nuclear Reactor Regulation
Attention: D. L. Ziemann, Chief
Operating Reactors Branch No. 2
Division of Operating Reactors
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Gentlemen:

Subject: Docket No. 50-206
Automatic Initiation of Auxiliary Feedwater System
San Onofre Nuclear Generating Station
Unit 1

By letter dated January 16, 1980, we indicated that the information requested in the Enclosure to your letter dated December 21, 1979 concerning the impact of Auxiliary Feedwater System (AFWS) automation on the Main Steam Line Break (MSLB) Safety Analysis would be submitted by October 1, 1980. During telephone discussions with members of the Regulatory Staff held on March 17 and 19, 1980, we stated that we had been and would continue to do whatever possible to expedite the completion of that analysis.

The purpose of this letter is to provide you with initial information which has been obtained from scoping studies performed as a first part of the analysis in order to make analytical results available as quickly as possible. Preliminary results indicate that for the conservatively assumed worst break of the main steam line without auxiliary feedwater included, the peak pressure inside containment may exceed the design basis pressure for the containment. These scoping studies were performed with certain overly conservative assumptions including non-plant specific information, such as:

1. a hot metal quantity in excess of that appropriate for a 3-loop plant was used
2. the heat transfer characteristics of the steam generators were not reduced to reflect the effects of tube plugging and crud formation

A042
S
1/0

P

8004230

494

3. main feedwater flow control valve automatic actuation to limit flow based on the average temperature of the primary system was not included
4. an assumed constant large main feedwater pump runout flow was used instead of a realistic time dependent pump runout flow.

We are currently revising the input assumptions used in the scoping studies to remove some of the excessive conservatisms and to incorporate plant specific information to determine the containment pressure response. It is expected that the revised scoping studies will be completed by May 16, 1980. Should the revised scoping studies indicate that the calculated peak pressure is above the design basis containment pressure and remedial action or corrective measures are required, we will promptly notify the NRC Region V in accordance with the San Onofre Unit 1 Technical Specifications.

In parallel with the performance of the revised scoping studies discussed above, we are evaluating corrective measures which would; (1) assure the integrity of the main steam lines, and (2) maintain the calculated peak pressure below the design basis containment pressure. These corrective measures include inservice inspection of the main steam lines, automatic isolation of the main feedwater lines at an early time into the transient in order to limit the amount of additional water inventory supplied to the steam generators, and limiting the rate of steam blowdown into containment.

If you have any questions, or desire further information, please contact me.

Very truly yours,

K P Bushaw