



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JUL 08 1991

Docket No. 50-206

Mr. Harold B. Ray
Senior Vice President
Southern California Edison Co.
Irvine Operations Center
23 Parker Street
Irvine, California 92718

Dear Mr. Ray:

SUBJECT: OPERATOR ACTIONS ASSOCIATED WITH RESPONSE TO SMALL BREAK LOSS OF COOLANT ACCIDENTS AT SAN ONOFRE NUCLEAR STATION, UNIT 1

In a letter dated February 27, 1991, you provided rationale for operating San Onofre Unit 1 until the next refueling outage (refueling outage 12) with procedures that require an operator to perform several actions outside of the control room following a small break loss of coolant accident (SBLOCA). You acknowledged that projected accident dose rates in the areas accessed by the operator would be prohibitive if calculated using the post accident source term specified by Regulatory Guide 1.4. However, in the case of a SBLOCA, your computer model using the NOTRUMP code indicates that core damage would not occur and that the source term for area dose rates would consist of normal primary water activity rather than the RG 1.4 source term that assumes core damage and release of fission products from the fuel assemblies. Based on dose rates computed from the NOTRUMP scenario, the operator could perform the SBLOCA tasks without risking overexposure.

By letter dated February 7, 1991, the NRC staff authorized the use of the NOTRUMP code for analyzing the SBLOCA at San Onofre. However, the staff does not find it appropriate for licensees to limit their ability to respond to accidents by bounding accident severity to computer projections alone. As an example, the TMI-2 accident was essentially a SBLOCA with consequences exacerbated by operators in a way that computer models could not project. A licensee's ability to respond to accident events should include some margin to deal with uncertainties. As a result, the NRC staff requires licensees to utilize post-accident source terms based on RG 1.4 guidelines when developing systems and procedures to respond to accidents, recognizing that this requirement may be overly restrictive for some accident scenarios. However, the conservatism is intentionally included to account for accident related uncertainties.

We note that you have committed to modify plant equipment during the next refueling outage to eliminate the need for the operator actions outside of the control room when responding to a SBLOCA. We concur with this ultimate

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Mr. Harold B. Ray

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resolution of the SBLOCA. In the interim, we view your letter and evaluation of the SBLOCA as a justification for continued operation until the next refueling outage. Please notify us when the proposed plant modifications are completed.

Sincerely,

ORIGINAL SIGNED BY
George Kalman, Senior Project Manager
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

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*See previous concurrence

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