## Southern California Edison Company



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M. O. MEDFORD

MANAGER, NUCLEAR LICENSING

November 21, 1984

TELEPHONE (818) 572-1749

Director, Office of Nuclear Reactor Regulation

Attention: Mr. J. A. Zwolinski, Chief

Operating Reactors Branch No. 5

Division of Licensing

U. S. Nuclear Regulatory Commission

Washington, D.C. 20555

Gentlemen:

Subject: Docket No. 50-206

Increased Power Peakings

San Onofre Nuclear Generating Station

Unit 1

Reference: Letter dated October 17, 1984, M. O. Medford, SCE,

to W. A. Paulson, NRC, Concerning Increased Power Peakings

The reference letter provided a proposed change to the basis for Technical Specification 3.5.2 "Control Group Insertion Limits". This change was proposed in connection with the safety evaluation for the Cycle 8 restart of San Onofre Unit 1. A recent three-way telephone conversation among parties from SCE, Westinghouse Nuclear Technology Division and NRC staff identified the need for additional information relating to the safety evaluation submitted with the proposed basis change. Specifically the NRC staff reviewer asked why the justification for the continued applicability of the small break LOCA analysis is brief and does not contain numerical detail similar to the large break LOCA justification. In response, Westinghouse provided a verbal explanation which is reiterated below.

The large break LOCA analysis used F $\Delta$ H as an explicit input with other parameters to determine the magnitude of the chopped cosine power shape for the hot rod axial power distribution. In the small break LOCA analysis, however, F $\Delta$ H is not an explicit input. A conservative hot rod axial power distribution was input to the code directly. The actual power shape assumed is provided in the attached figure. The peak linear power assumed in the small break analysis (14.2 Kw) is conservative with respect to the technical specification value (13.7 Kw). Additionally, an implied F $\Delta$ H can be derived by determining the ratio of the average heat flux assumed in the hot rod and the average heat flux assumed in the core. This results in an implied enthalpy rise peaking factor of approximately 1.95.

The small break LOCA analysis was performed when the technical specification value for F $\Delta$ H was 1.75. Additionally, the peak linear power assumed is conservative. As discussed in Section 4.3 of the Safety Evaluation for the F $\Delta$ H increase, a reduction in F $\Delta$ H from 1.75 to 1.57 results in a less limiting LOCA situation. Therefore, the small break LOCA analysis is conservative and remains applicable for an F $\Delta$ H of 1.57.

If you have any questions or desire additional information, please call me.

Very truly yours,

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cc: E. McKenna, NRC Project Manager

B. D. McKenzie, Westinghouse Nuclear Technology Division

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