Docket No. 50-206
LS05-85-11-014

NOV 07 1985

Mr. Kenneth Baskin, Vice President
Nuclear Engineering
Safety and Licensing Department
Southern California Edison Company
2244 Walnut Grove Avenue
Post Office Box 800
Rosemead, California 91770

Dear Mr. Baskin:

SUBJECT: NUREG-0737 ITEM II.B.3 - POST-ACCIDENT SAMPLING SYSTEM

Re: San Onofre Nuclear Generating Station, Unit 1 (SONGS-1)

Reference: Letter dated September 1, 1983, D. M. Crutchfield (NRC) to R. Dietch (SCE)

The above-referenced letter transmitted the NRC staff's evaluation of the subject item at SONGS-1. That evaluation concluded that nine of the eleven review criteria of NUREG-0737 Item II.B.3 had been satisfied. A discussion of the open items (criterion 2 and criterion 10) was provided. On July 17, 1985, you provided additional information in response to the open items. The staff has completed its review of your recent submittal. We have concluded that the two open items have been satisfactorily resolved, thus NUREG-0737 Item II.B.3 is completed for San Onofre Unit 1.

Enclosed is the staff's Safety Evaluation of the two items (criterion 2 and criterion 10).

Sincerely,

Original signed by

John A. Zwolinski, Chief
Operating Reactors Branch No. 5
Division of Licensing

Enclosure:
Safety Evaluation

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

November 7, 1985

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John A. Zwolinski, Chief
Operating Reactors Branch No. 5
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO POST-ACCIDENT SAMPLING SYSTEM (NUREG-0737), II.B.3

SOUTHERN CALIFORNIA EDISON COMPANY

SAN ONOFRE GENERATING STATION UNIT NO. 1

DOCKET NO. 50-206

1.0 INTRODUCTION

Based on a previous evaluation, dated September 1, 1983, the staff concluded that nine of the eleven post-accident sampling criteria were acceptable. The following criteria remained unresolved:

Criterion (2) Provide a core damage estimate procedure.

Criterion (10) Provide information demonstrating applicability of procedures and instrumentation in the post-accident water chemistry and radiation environment, equipment calibration on semiannual basis.

By letter dated July 17, 1985, the licensee provided additional information.

2.0 EVALUATION

2.1 CRITERION:

The licensee shall establish an onsite radiological and chemical analysis capability to provide, within three-hour time frame established above, quantification of the following:

a) certain radionuclides in the reactor coolant and containment atmosphere that may be indicators of the degree of core damage (e.g., noble gases; iodines and cesiums, and non-volatile isotopes);

b) hydrogen levels in the containment atmosphere;

c) dissolved gases (e.g., H_2), chloride (time allotted for analysis subject to discussion below), and boron concentration of liquids;

d) alternatively, have in-line monitoring capabilities to perform all or part of the above analyses.

The PASS provides for a grab sample of reactor coolant for pH, dissolved oxygen and hydrogen, chloride, boron and radionuclide analysis in the chemistry lab. Containment hydrogen monitor and containment atmosphere grab samples provide measurements of containment hydrogen and radionuclides concentrations. By letter dated July 17, 1985, the licensee provided a procedure for core damage assessment. The procedure incorporates the Westinghouse Owner's Group Core Damage Assessment guidance and takes into consideration San Onofre Unit 1 plant specific parameters. The staff concludes that these provisions meet Criterion (2) of Item II.B.3. of NUREG-0737 and are, therefore, acceptable.

2.2 CRITERION (10)

Accuracy, range, and sensitivity shall be adequate to provide pertinent data to the operator in order to describe radiological and chemical status of the reactor coolant systems.

The accuracy, range and sensitivity of the PASS instruments and analytical procedures are consistent with the recommendations of Regulatory Guide 1.97, Rev. 3, and the clarifications of NUREG-0737, Item II.B.3, Post-Accident Sampling Capability, transmitted to the licensee on June 30, 1982. Therefore, they are adequate for describing the radiological and chemical status of the reactor coolant. The analytical methods and instrumentation were selected for their ability to operate in the post-accident sampling environment. Equipment used in post-accident sampling and analyses will be calibrated according to the recommendations in the clarifications of NUREG-0737. Retraining of operators for post-accident sampling is scheduled at a frequency of once every six months. The staff concludes that these provisions meet Criterion (10) and are, therefore, acceptable.

3.0 CONCLUSION

On the basis of the above evaluation, the staff concludes that the Post-Accident Sampling System at San Onofre Unit 1 meets the criteria of Item II.B.3 in NUREG-0737 and is, therefore, acceptable.

4.0 ACKNOWLEDGEMENT

This Safety Evaluation was prepared by P. Wu.

Dated: November 7, 1985