

Southern California Edison Company



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

K. P. BASKIN
MANAGER OF NUCLEAR ENGINEERING,
SAFETY, AND LICENSING

January 5, 1981

TELEPHONE
(213) 572-1401

Director, Office of Nuclear Reactor Regulation
Attention: D. M. Crutchfield, Chief
Operating Reactors Branch No. 5
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Gentlemen:

Subject: Docket No. 50-206
Clarification of TMI Action Plan Requirements
San Onofre Nuclear Generating Station
Unit 1

US NRC
DISTRIBUTION SERVICES
BRANCH

1981 JAN 12 AM 11 32

RECEIVED DISTRIBUTION
SERVICES UNIT

Your letter dated October 31, 1980, forwarded NUREG-0737 containing all TMI-related items approved for implementation by the Commission at that time. You requested that we provide confirmation that the implementation dates for all approved TMI-related items contained in NUREG-0737 will be met, or propose revised dates with justification for delay and planned compensating safety actions during the interim. By letter dated December 23, 1980, we advised you that a response to your October 31, 1980 letter would be submitted by January 5, 1981.

The purpose of this letter is to advise you that we have completed our review of NUREG-0737, as well as previous correspondence addressing TMI-related items. Based on our review, we intend to meet the implementation dates contained in NUREG-0737, with the following exceptions:

- II.B.1 Reactor Coolant System Vents
- II.B.2 Design Review of Plant Shielding and Environmental Qualification of Equipment For Spaces/Systems Which May Be Used In Post Accident Operations
- II.B.3 Post Accident Sampling Capability
- II.F.1, Attachment 1, Noble Gas Effluent Monitor
- II.F.1, Attachment 2, Sampling and Analysis of Plant Effluents
- II.F.1, Attachment 3, Containment High-Range Radiation Monitor
- II.F.1, Attachment 4, Containment Pressure Monitor
- II.F.1, Attachment 5, Containment Water Level Monitor
- II.F.1, Attachment 6, Containment Hydrogen Monitor

Pool
5/10

8101180289

p

January 5, 1981

The implementation of these TMI Action Plan Requirements is targeted for completion by July 1, 1982 (II.B.1) and January 1, 1982 (II.B.2, II.B.3 and II.F.1, Attachments 1 through 6) as required. However, a precise completion date cannot be established until the current steam generator repair is completed and San Onofre Unit 1 resumes power operation. Following completion of the steam generator repair, it is expected that operation of San Onofre Unit 1 will be restricted to an appropriate interval prior to an interim shutdown to perform an inspection to monitor the effectiveness of the repair. The shutdown date to implement these TMI Action Plan Requirements will be scheduled with consideration of the interim shutdown required to perform the steam generator inspection.

Accordingly, we will advise you of the precise shutdown date to implement these TMI Action Plan Requirements prior to resumption of power operation following completion of the steam generator repair. If the shutdown date does not permit implementation of these TMI Action Plan Requirements by July 1, 1982 or January 1, 1982, respectively, we will also advise you of any planned compensating safety actions which will be implemented during the interim.

II.E.1.1 Auxiliary Feedwater System Evaluation

By letter dated November 15, 1979, the NRC identified short-term and long-term recommendations to upgrade the Auxiliary Feedwater System (AFWS). All short-term recommendations will be completed by July 1, 1981 as required. However, as stated in the NRC November 15, 1979 letter, the long-term recommendations for improving AFWS reliability will not be fully established until after the completion of related Systematic Evaluation Program (SEP) review topics with regard to internally and externally generated missiles, pipe whip and jet impingement (including main steam and main feedwater breaks inside and outside containment), quality and seismic design requirements, and the effects of earthquakes, tornados and floods and design basis evaluations. Accordingly, by letter dated January 23, 1980, we deferred implementation of the long-term recommendations pending completion of the integrated assessment of potential modifications identified by review of station design and operation in connection with the above SEP topics.

The modifications to the AFWS to meet the requirements set forth in II.E.1.2, Auxiliary Feedwater System Automatic Initiation and Flow Indication of NUREG-0737 will be completed by July 1, 1981, as stated therein. Pending completion of the SEP and the identification of all long-term recommendations by the NRC for improving AFWS reliability, the modifications implemented in accordance with II.E.1.2 of NUREG-0737 will assure that the AFWS will perform its intended function to mitigate the consequences of design basis events as described in the safety analysis report. In addition, upon completion of the modification to the AFWS to meet the requirements of II.E.1.2 of NUREG-0737, we will terminate the stationing of an operator to promptly initiate adequate AFWS flow to the steam generators. The stationing of an operator was initially directed by IE Bulletin No. 79-06A forwarded by NRC letter dated April 14, 1979, for those facilities for which the AFWS is not automated.

II.E.1.2, Part 2, Auxiliary Feedwater System Flowrate Indication

As discussed in our October 16, 1980 letter, the flowrate indication and control system utilizes one narrow-range steam generator level indicator in conjunction with one AFWS flowrate indicator per steam generator. The design concept is to convert the wide-range indicator installed in January, 1980 as part of the controls grade automatic AFWS to the narrow-range scale. The conversion is necessary to improve signal resolution and accuracy for the automatic actuation of the AFWS. In addition, a second, redundant narrow-range indicator will be installed.

As part of the new requirement of NUREG-0737, we will qualify the existing wide-range steam generator level indicator or replace the indicator with a qualified indicator, if necessary. In accordance with the October 24, 1980 Order for Modification of License of San Onofre Unit 1, the qualification will be completed by no later than June 30, 1982.

II.E.4.2 Containment Isolation Dependability

Position (5) requires that we provide and justify, the minimum containment pressure that will be used to initiate containment isolations by January 1, 1981 and be in full compliance by July 1, 1981. We are continuing to review containment pressure history during normal operation and the accuracy of the containment pressure sensor. The results of the review will be used as a basis for arriving at an appropriate minimum pressure setpoint for initiating containment isolation. It is expected that the review will be completed and the results submitted to the NRC by April 1, 1981. Submittal by April 1, 1981 will permit the completion of any necessary corrective actions by July 1, 1981 as required by NUREG-0737.

II.F.2 Instrumentation For Detection Of Inadequate Core Cooling

Our March 25, 1980 letter clarified our position regarding the need for additional instrumentation for inadequate core cooling (i.e., reactor vessel water level system). We stated that existing instrumentation, used in conjunction with procedural guidelines and operator training, is sufficient, and that additional instrumentation to detect inadequate core cooling is not warranted. Therefore, no additional instrumentation is scheduled for installation by January 1, 1982, as required by NUREG-0737.

II.K.3.2 Report On Overall Safety Effect Of Power-Operated Relief Valve Isolation System

As discussed in our June 13, 1980 letter, the Westinghouse Owners Group is in the process of developing a report (including historical valve failure rate data and documentation of actions taken since the TMI event to decrease the probability of a stack-open PORV) to address the NRC concerns. However, due to the time-consuming processing of data gathering, breakdown and evaluation, the report is scheduled for submittal to the NRC on March 1, 1981 rather than by January 1, 1981 as required by NUREG-0737. The report will be used to support a decision on the necessity of incorporating an automatic PORV Isolation System as specified in II.K.3.1 of NUREG-0737.

II.K.3.5 Automatic Trip Of Reactor Coolant Pumps During Loss-Of-Coolant Accident

As discussed in our June 13, 1980 letter, we have installed the automatic RCP trip design, except the final electrical connection. The details of the automatic RCP trip design were provided as part of our August 29, 1979 response to IE Bulletin No. 79-06C concerning this subject. We concluded that automatic RCP trip coincident with safety injection initiation is appropriate for San Onofre Unit 1 to provide assurance that the peak clad temperatures following all LOCA and non-LOCA transients remain within acceptable limits.

As directed by letter dated October 3, 1979 from the Office of Inspection and Enforcement, Region V, we have not made the final electrical connection of the design change pending review and approval by the Office of Nuclear Reactor Regulation. Following review and approval of the design change by the Office of Nuclear Reactor Regulation, we will make the final electrical connection and place the systems in service.

II.K.3.17 Report On Outages Of Emergency Core-Cooling Systems Licensee Report and Proposed Technical Specification Changes

As discussed in our June 13, 1980 letter, station operating, maintenance and test records for the emergency core cooling systems for the last five years are currently being reviewed to determine (1) outage dates and duration of outages, (2) cause of the outage, (3) systems or components involved in the outage, and (4) corrective action taken. Due to the time-consuming process of data gathering, reduction and evaluation documenting the results of our review will be submitted by April 1, 1981, rather than by January 1, 1981 as required by NUREG-0737. The report will include proposed changes, if determined to be appropriate, to improve the availability of the emergency core cooling systems.

San Onofre Unit 1 is currently shutdown for steam generator repair with the emergency core cooling systems not required to be operable. It is expected that any proposed changes to the testing and maintenance programs determined to be appropriate to improve the availability of the emergency core cooling systems will be implemented prior to resumption of power operation following the steam generator repair.

II.D.3.4 Control Room Habitability Requirements

A preliminary evaluation of control room habitability using the guidelines contained in NUREG-0737 has been completed. Additional time is required to finalize the information contained in the evaluation and identify any modifications shown to be necessary. It is expected that our evaluation will be completed and the report submitted to the NRC by April 1, 1981 rather than by January 1, 1981, as required by NUREG-0737.

January 5, 1981

As discussed in our June 13, 1980 letter, we will initiate preliminary design and engineering efforts required to implement any modifications shown to be necessary. However, we do not plan to initiate any procurement or construction activities until after the Regulatory Staff has reviewed our evaluations and concurs with them. It is our intention to target the modifications for completion by January 1, 1983. A more precise implementation schedule will be included with the report submitted by April 1, 1981.

If you have any questions or desire further information concerning our commitments discussed above, please contact me.

Subscribed on this 5th day of January, 1981.

Very truly yours,
SOUTHERN CALIFORNIA EDISON COMPANY

By K P Baskin
K. P. Baskin
Manager of Nuclear Engineering,
Safety, and Licensing

Subscribed and Sworn to before me on
this 5th day of January, 1981

Agnes Crabtree
Notary Public in and for the County
of Los Angeles, State of California

