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July 18, 1984

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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
Generic Letter 83-28
Position 1.1: Post Trip Review - Program
Description and Procedure
San Onofre Nuclear Generating Station
Unit 1

Provided as an enclosure to this letter is our response to Position 1.1 of Generic Letter 83-28: Post Trip Review (Program Description and Procedure). San Onofre Unit 1 Operating Instruction SOI-14-27, "Post-Trip/Transient Review," has been finalized and implemented. This instruction provides a method for completing post-trip review documentation prior to authorizing re-entry into Mode 2.

Please contact me if you have any questions or desire additional information.

Subscribed on this 18th day of July, 1984.

Respectfully submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

By: M. O. Medford
M. O. Medford
Manager of Nuclear Licensing

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Subscribed and sworn to before me this
18th day of July 1984.

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

My Commission Expires: Aug 27, 1986

Enclosure

cc: Document Control Desk (10 copies)
E. McKenna, NRC Project Manager



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1.1 POST-TRIP REVIEW (PROGRAM DESCRIPTION AND PROCEDURE)

Position

Licenses and applicants shall describe their program for ensuring that unscheduled reactor shutdowns are analyzed and that a determination is made that the plant can be restarted safely. A report describing the program for review and analysis of such unscheduled reactor shutdowns should include, as a minimum:

1. The criteria for determining the acceptability of restart.
2. The responsibilities and authorities of personnel who will perform the review and analysis of these events.
3. The necessary qualifications and training for the responsible personnel.
4. The sources of plant information necessary to conduct the review and analysis. The sources of information should include the measures and equipment that provide the necessary detail and type of information to reconstruct the event accurately and in sufficient detail for proper understanding. (See Action 1.2)
5. The methods and criteria for comparing the event information with known or expected plant behavior (e.g., that safety-related equipment operates as required by the Technical Specifications or other performance specifications related to the safety function).
6. The criteria for determining the need for independent assessment of an event (e.g., a case in which the cause of the event cannot be positively identified, a competent group such as the Plant Operations Review Committee, will be consulted prior to authorizing restart) and guidelines on the preservation of physical evidence (both hardware and software) to support independent analysis of the event.
7. Items 1 through 6 above are considered to be the basis for the establishment of a systematic method to assess unscheduled reactor shutdowns. The systematic safety assessment procedures compiled from the above items, which are to be used in conducting the evaluation, should be in the report.

Response

In response to this position, an evaluation of the post-trip review procedure for San Onofre Unit 1 was performed. The methods used to procedurally address each criteria are described below. The Unit 1 procedure addressing post-trip review is Operating Instruction S01-14-27, Revision 0, "Post-Trip/Transient Review."

Post-Trip Review Procedure Evaluation

With respect to the criteria outlined in the position statement, the operating instruction referenced above addresses the criteria as follows:

1.1.1 Criteria for Determining the Acceptability of Restart

The Post-Trip Review procedure includes requirements to:

- o Determine the cause of the trip and implement any required corrective actions.
- o Verify that the Reactor Protection System functioned properly, and implement any required corrective actions.
- o Verify that Safety Systems, those systems designed for accident mitigation purposes (Safety Injection, Steam Dump, Auxiliary Feedwater, etc.), have functioned properly and implement any required corrective actions.
- o Verify that all automatic actions (generator anti-motoring trip, auto bus transfer, etc.) and operator actions have been reviewed and that for any off-normal occurrences identified, corrective action has been implemented.

Authorization to restart is based on completing the Post-Trip/Transient Review Constraint Closure and ensuring that for any applicable incomplete corrective actions, entry into Mode 2 is constrained. If the cause of the trip is known and all significant aspects of the transient are well understood by the Shift Superintendent, authorization for restart is given by the Shift Superintendent and the Unit 1 Superintendent or his designee.

If the cause of the trip is not known or if all significant aspects of the transient are not well understood by the Shift Superintendent, then the Post-Trip Review must additionally be approved by the Station Manager, or his superior, as authorization for restart.

1.1.2 Responsibilities and Authorities of Personnel Who Will Perform the Review and Analysis of the Events

- o The Shift Superintendent is responsible for determining the circumstances, analyzing the cause, and authorizing return to power following a trip or unscheduled power reduction as discussed in Item 1.1.1.
- o The Shift Technical Advisor (STA) or designee with suitable qualifications is responsible for performing the technical review of the transient records and advising the Shift Superintendent prior to his rendering a determination of the cause.

1.1.3 Necessary Qualifications and Training for the Responsible Personnel

Technical Specification Section 6.3 specifies the necessary qualifications and training for the responsible personnel.

The responsible personnel meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions. The Shift Technical Advisor has a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design and analysis of the plant for transients and accidents.

The retraining and replacement training program for the facility staff meets or exceeds the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and Appendix "A" of 10 CFR Part 55.

The SCE quality Assurance Organization annually audits the training and qualification of the entire facility staff.

1.1.4 Sources of Plant Information Necessary to Conduct the Review and Analysis

The sources of information utilized in conducting the Post-Trip Review include the FOX-3 computer, chart recorders and various other sources. The primary source of information for assessing the sequence of events is the control room Events Recorder. Our response to Position 1.2 in our letter of November 28, 1983, provides a description of the equipment for diagnosing unscheduled reactor shutdowns. For additional information regarding the sources of plant information, please refer to that response.

1.1.5 Methods and Criteria for Comparing the Event Information With Known or Expected Plant Behavior

The performance of plant systems is evaluated by reviewing the actual performance, as recorded in computer printouts and recorder charts, against the expected performance, as outlined in the emergency; normal and abnormal operating instructions used to bring the plant to a stable condition and the requirements delineated in the applicable plant Technical Specifications.

1.1.6.A Criteria for Determining the Need for Independent Assessment of an Event

If, after performing the Post-Trip Review, the cause of the trip or significant aspects of the transient are not sufficiently well understood, a more thorough investigation will be made until the cause of the trip is known or has been investigated to the extent reasonable. The standard Post-Trip Review will default to an enhanced investigation if more than approximately 8 hours is required to complete the Post-Trip Review.

1.1.6.B Guidelines on the Preservation of Physical Evidence to Support Independent Analysis of the Event

The recorder charts are marked to show all major significant events that occurred prior to and following the trip. The time marks will be no less than 30 minutes prior to the trip and no less than 30 minutes after a stable steady-state condition is achieved.

In the event that equipment malfunctions are involved or suspected, the STA will notify the responsible individual in the technical section if items are not necessary to safe shutdown or operation of the Unit. These individuals will take steps to preserve the physical hardware involved in support of later independent analysis.

The SRO Operations Supervisor shall verify that charts are properly time marked per S01-14-8, "Operations Charts and Data Logs Control."

S01-14-27, when completed, is forwarded to the Nuclear Operations Assistant to be placed in the outage file.

1.1.7 Systematic Safety Assessment Procedures Used in the Evaluation

The procedures used in conducting the post-trip review evaluation are as follows:

- o Operating Instruction S01-14-27, Revision 0, "Post-Trip/Transient Review"
- o Emergency, normal and abnormal operating instructions that were used to bring the plant to a stable condition.

The post-trip review program, as addressed in the referenced procedures, meets or exceeds the criteria for ensuring that unscheduled reactor shutdowns are analyzed and that a determination is made that the plant can be restarted safely.

MJT:1974F