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January 13, 1995

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Gentlemen:

Subject: **Docket Nos. 50-361 and 50-362**
Second 10-Year Interval Inservice Inspection Program
San Onofre Nuclear Generating Station
Units 2 and 3 (TAC Nos. M88906 and M88907)

References: 1) Letter from Mel B. Fie[illegible]s (NRC) to Mr. Harold B. Ray (Edison) dated November 14, 1994; Subject: Request for Additional Information on the Second 10-Year Interval Inservice Inspection Program for San Onofre Nuclear Generating Station, Units 2 and 3(TAC Nos. M88906 and M88907)

2) Letter from W. C. Marsh (Edison) to the Document Control Desk (NRC) dated October 4, 1993; Subject: ASME Code Update for the Second Ten Year Interval, Inservice Inspection Programs, San Onofre Nuclear Generating Station, Units 2 and 3

3) Letter from W. C. Marsh (Edison) to the Document Control Desk (NRC) dated June 1, 1994; Subject: Second Ten Year Inservice Inspection Interval, San Onofre Nuclear Generating Station, Units 2 and 3

This letter is to provide information requested by the NRC in Reference 1 to complete the review of the Second 10-year Inservice Inspection (ISI) Interval Program for San Onofre Units 2 and 3. Each NRC item, A through H, is listed below with the response from Southern California Edison (Edison).

A. The title pages, approval pages, and Sections 1 through 10 appear to be original issue. Sections 11 through 13 appear to be Revision 1. Section 6 contains a review of Revision 0 and Revision 1. The transmittal letter does not include a revision number nor does the program contain a "List of Revisions". Verify that the latest revision applicable for each section has been transmitted.

Response: The latest revision applicable for each section of the Edison ISI Program was submitted to the NRC. The ISI Program submittal, Reference 2, which provided the ISI Program Documents, was complete and current at the time it

A047

was submitted. The only revision to the ISI Program Submittal, Revision 1, was submitted by Reference 3.

Appendices 11 through 14 consist of tables and drawings all controlled within the Edison Drawing Control System. These tables and drawings all have varying Edison document revision numbers, even though they are part of the ISI program submitted by Reference 2. Appendices 11, 12, and 13 are Class 1, 2, and 3 Zone Tables, respectively. These appendices are contained in one Edison document. For Unit 2, this document is Edison Drawing 90063, Revision 1 "Unit 2 Second Ten-year ISI Program Document 90063."

Appendix 6 is the documentation that the Authorized Inspection Agency reviewed and approved the program. They reviewed and approved all Sections, 1 through 14, as submitted to the NRC by Reference 2. Their letter specifically identifies that they reviewed and commented on Revision 0 of document 90063, and that they reviewed Revision 1 to document 90063 to ensure their comments were incorporated. They also did this for Unit 3 and the corresponding document 90064.

B. Paragraph 1.5.6 of the program implies that the licensee is using every approved Code Case. If this is in error, please list all approved Code Cases that are to be used.

Response: Edison does not intend to use every Code Case. However, Edison believes every Code Case that is approved by the NRC as documented in Regulatory Guide 1.147 is available for use. If an NRC approved Code Case is used it will be documented in the Summary Report which is submitted to the NRC after each outage. If Edison wishes to use a Code Case before it is included in Regulatory Guide 1.147, Edison will seek written permission from the NRC.

Edison is currently planning to use the following Code Cases in the 2nd 10-Yr Interval:

N-416 Alternate rules for hydrostatic testing of repair or replacement of class 2 piping.

*N-416-1 Alternate pressure test requirement for welded repairs or installation of replacement items by welding class 1, 2, and 3. (*This Code Case has been approved by the ASME, is being reviewed by the NRC, but has not been endorsed by the NRC and published in Regulatory Guide 1.147 "Inservice Inspection Code Case Acceptability ASME Section XI, Division 1.")

N-461	Alternative rules for piping calibration block thickness.
N-481	Alternative examination requirements for cast austenitic pump casings.
N-491	Alternative rules for examination of class 1, 2, 3, and MC component supports of light-water cooled power plants.
N-498	Alternative rules for 10-year hydrostatic pressure testing for class 1 and 2 systems.
*N-498-1	Alternative rules for 10-year system hydrostatic testing for class 1, 2, and 3 systems. (*This Code Case has been approved by the ASME, is being reviewed by the NRC, but has not been endorsed by the NRC and published in Regulatory Guide 1.147.)
*N-509	"Alternate Rules for the Selection and Examination of Class 1, 2 and 3, Integrally Welded Attachments Section XI Division 1." (*This Code Case has been approved by the ASME, is being reviewed by the NRC, but has not been endorsed by the NRC and published in Regulatory Guide 1.147.)

C. Paragraph 2.1.3 of the program states that work started in the first interval and completed in the second interval will follow the Repair and Replacement Plan for the first interval. Provide clarification regarding the intent of this statement.

Response: Paragraph 2.1.3 was intended to clarify what happens to work in progress as of the start of the second ISI interval.

Work which was physically completed, but not administratively closed as of the second interval transition date will be processed in accordance with first interval code requirements.

The remainder of the work, (a) work planned, but not started, and (b) work started, but not completed, will be processed in accordance with the second interval code requirements. Edison reviewed the Codes for the two intervals, determined the technical differences, and revised the affected work plans to address those differences. The remaining work plans were not revised because the Code requirements are the same.

D. Paragraph 2.1.9.3 of the program states that a system inservice test will be performed instead of a hydrostatic test if the hydrostatic test conditions conflict with limitations contained in the Technical Specifications. Pursuant to 10 CFR 50.55a(g)(5)ii, if such a conflict arises an amendment to the Technical Specifications shall be submitted. If the Technical Specifications are not amended, requests for relief specific to the system(s) affected are required. Provide technical discussion regarding the testing situations this paragraph applies to and why one of the two options is not required.

Response: IWA-5214 (d) states: "Where the system hydrostatic test of (b) above imposes system conditions which conflict with limitations included in the plant Technical Specifications, a system inservice test [IWA-5211(c)] at nominal operating temperature shall be acceptable in lieu of the system hydrostatic test." Therefore, the Edison program meets the Code, and neither a Technical Specification change nor a relief request is required.

E. Paragraph 2.4.11 of the program states that the piping weld examinations under Examination Category B-J may include the inspection areas required by Table IWB-2500-1, Examination Category B-J, Note 1. This should not be considered an option. Verify that all the required examination areas of Table IWB-2500-1, Examination Category B-J, Note 1, are included for examination or provide technical justification for not meeting the Code requirement.

Response: Enclosed is Revision 2 to the ISI Program, which includes a revised "Page 13 of 41," changing the word "may" to "shall" in Sections 2.4.11 and 2.4.13.

F. Paragraph 2.4.13 of the program states that the piping weld examinations under category B-F may include all dissimilar metal welds. This should not be considered an option. Verify that all the required examination areas of Table IWB-2500-1, Examination Category B-F, are included for examination or provide technical justification for not meeting the Code requirement.

Response: Enclosed is Revision 2 to the ISI Program, which includes a revised "Page 13 of 41," changing the word "may" to "shall" in Sections 2.4.11 and 2.4.13.

G. Paragraph 2.6.5 of the program states "For portions of some systems a substitute test to the system hydrostatic test may be performed at or near the end of the ten year inspection interval and is defined in Section 3.5.2." Section 3.5.2 was unavailable to the staff. Provide this section, any other section of the program plan that has not been included, or any renumbering scheme that was used in Revision 1.

Resp. se: Enclosed is Revision 2 to the ISI Program, which includes a revised Page 17 of 41, which corrects 3.5.2 to 3.5.1. All sections of the ISI Program have been submitted to the NRC.

H. Paragraph 2.1.10 of the program states that relief requests from the first and second intervals have been incorporated into the plan as substitute examinations, tests, or repairs. The proposed method lacks sufficient information to evaluate the acceptability of alternatives. Examples of insufficient information include: Alternate Examination 2.9.2, which does not contain a basis for the alternative examination, and Substitute Examination 3.2.2.1. which does not include the percent coverage attainable for the examination. Where Code requirements are not being met, the licensee shall submit requests for relief for staff review pursuant to 10 CFR 50.55a(g)(5). Relief granted for the first 10-year interval cannot be assumed for the second 10-year interval. Please provide the necessary requests for relief for all areas where the Code requirements will not be met for the second 10-year interval. For use as a suggested guide when preparing requests for relief, attached is Appendix A, "Inservice Inspection: Guidance for Preparing Requests for Relief from Certain Code Requirements Pursuant to 10 CFR 50.55a(g)(5)".

Response: Based on conversations between the NRC Project Manager and the Edison Plant Licensing Manager for Units 2 and 3, the response to this item will be provided on or before March 13, 1995.

Please let me know if you have any additional questions.

Very truly yours,

Walter C. Marsh

Enclosures

cc: L. J. Callan, Regional Administrator, NRC Region IV
A. B. Beach, Director, Division of Reactor Projects, Region IV
K. E. Perkins, Jr., Director, Walnut Creek Field Office, NRC Region IV
J. A. Sloan, NRC Senior Resident Inspector, San Onofre Units 2 & 3
M. B. Fields, NRC Project Manager, San Onofre Units 2 and 3

Enclosure 1

Revision 2 Changes to
Second 10-Year Interval Inservice Inspection Program
San Onofre Nuclear Generating Station Unit 2

pipe connection welds, socket welds, and integrally welded attachments. The piping weld examinations may shall include: Rev 2

.1 All terminal ends connected to vessels;

.2 All terminal ends and joints in high stress piping connected to other components;

.3 All dissimilar metal welds;

.4 Additional piping welds so that the total number of circumferential butt welds or branch connection welds or socket welds selected for examination equals 25% of these types of welds in the reactor coolant piping system. This total number of welds does not include welds excluded by IWB-1220 (see Section 3.1.1). These additional welds may be located in one system loop or train.

Due to an accessibility and ALARA concerns 24 welds in the reactor coolant primary piping may be examined in accordance with the substitute examinations defined in Section 3.3.1.2.

2.4.12 Valves, Categories B-G-2, B-K-1, B-M-1, and B-M-2:

Areas include valve body welds, internal surface of valve body, integrally welded attachments for supports, and pressure retaining bolting. The pressure retaining bolting (bolts, studs, and nuts) may be examined in place under tension, when the bolted connection is not disassembled. For NPS 4 and larger the pressure retaining body welds will be examined by the volumetric method, except for cast austenitic steel valve bodies which may be examined by the substitute examination methods defined in Section 3.3.1.3. For less than NPS 4 pressure retaining body welds will be examined by the surface method. Examinations of valves may be limited to at least one valve within each group that are of the same size and design and perform a similar function in the system.

2.4.13 Dissimilar Metal Welds, Category B-F:

Areas include nozzle-to-safe end butt and socket welds in vessels, and butt and socket welds in piping. The examinations may shall include all dissimilar metal welds. Rev 2

2.4.14 System Pressure Tests, Category B-P:

System pressure tests and VT-2 visual examinations may be performed on the pressure retaining boundary of all components. The Code required tests include system leakage tests (IWB-5221) and a system hydrostatic test (IWB-5222) and will be performed in accordance with Article IWA-5000, Table IWA-5210-1. System leakage tests may be performed at the end of each refueling outage. An alternative

Feedwater Systems.

.7 The Class 3 portions of the Waste Gas System will be tested to the requirements of Examination Category D-B. The Waste Gas System provides for the collection of potentially radioactive gaseous wastes that are generated during startup, shutdown, and normal plant operational conditions.

2.6.3 Examination Category D-C

This category applies to systems designed to support residual heat removal from the spent fuel storage pool.

.1 The Class 3 portion of the noncritical CCW System that supplies cooling water to and from the Spent Fuel Pool Heat Exchanger and the Class 3 portion of the Spent Fuel Pool Cooling System will be tested per the requirements of Examination Category D-C.

2.6.4 Integral Attachments, Categories, D-A, D-B, and D-C:

Visual Examinations (VT-3) will be performed on integral attachment welds for supports and restraints. Examinations of integral attachments may be limited to at least one component within each group of components that are of the same size and design and perform a similar function in the system. The integral attachments selected for examination will correspond to the component supports selected per Code Case N-491, Table -2500-1 (see Section 2.9.4).

2.6.5 Pressure Retaining Components, Categories D-A, D-B, and D-C:

System pressure tests and VT-2 visual examinations will be performed on the pressure retaining boundary of all components. The Code required tests include functional tests (IWD-5222), inservice tests (IWD-5221), and a hydrostatic test (IWD-5223) and will be performed in accordance with Article IWA-5000, Table IWA-5210-1. System functional and inservice tests may be performed during each inspection period. For portions of some systems a substitute test to the system hydrostatic test may be performed at or near the end of the ten year inspection interval and is defined in Section ~~3.5.2~~. 3.5.1

Rev 2

2.7 Examination of Class 1, 2, and 3 Component Supports

Components supports may be examined in accordance with Code Case N-491 as an alternative examination (see Section 2.9.4).

Enclosure 2

Revision 2 Changes to
Second 10-Year Interval Inservice Inspection Program
San Onofre Nuclear Generating Station Unit 3

pipe connection welds, socket welds, and integrally welded attachments. The piping weld examinations may shall include: Rev 2

.1 All terminal ends connected to vessels;

.2 All terminal ends and joints in high stress piping connected to other components;

.3 All dissimilar metal welds;

.4 Additional piping welds so that the total number of circumferential butt welds or branch connection welds or socket welds selected for examination equals 25% of these types of welds in the reactor coolant piping system. This total number of welds does not include welds excluded by IWB-1220 (see Section 3.1.1). These additional welds may be located in one system loop or train.

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.7 The Class 3 portions of the Waste Gas System will be tested to the requirements of Examination Category D-B. The Waste Gas System provides for the collection of potentially radioactive gaseous wastes that are generated during startup, shutdown, and normal plant operational conditions.

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Rev 2

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