Southern California Edison Company

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August 16, 1995

WALTER C. MARSH
MANAGER OF NUCLEAR REGULATORY AFFAIRS

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

Gentlemen:

Subject: **Docket Nos. 50-361 and 50-362**
Response to Generic Letter 92-01, Revision 1, Supplement 1, "Reactor Vessel Structural Integrity, 10 CFR 50.54(f)"
San Onofre Nuclear Generating Station
Units 2 and 3

References:

1. Letter from W. C. Marsh (SCE) to U. S. Nuclear Regulatory Commission Document Control Desk, dated May 23, 1995, Response to Generic Letter 92-01, Revision 1, "Reactor Vessel Structural Integrity, 10 CFR 50.54(f)"

2. Letter from R. M. Rosenblum (SCE) to U. S. Nuclear Regulatory Commission Document Control Desk, dated July 6, 1992, Response to Generic Letter 92-01, Revision 1, "Reactor Vessel Structural Integrity, 10 CFR 50.54(f)"

3. Letter from W. C. Marsh (SCE) to U. S. Nuclear Regulatory Commission Document Control Desk, dated January 29, 1993, Supplemental Response to Generic Letter 92-01, Revision 1, "Reactor Vessel Structural Integrity, 10 CFR 50.54(f)"

4. Letter from W. C. Marsh (SCE) to U. S. Nuclear Regulatory Commission Document Control Desk, dated June 22, 1994 Revision to Supplemental Response to Generic Letter 92-01, Revision 1, "Reactor Vessel Structural Integrity, 10 CFR 50.54(f)"

This letter provides Southern California Edison's (Edison's) response for the San Onofre Nuclear Generating Station Units 2 and 3 (SONGS 2 and 3) to NRC Generic Letter 92-01, Revision 1, Supplement 1 (GL 92-01, Rev. 1, Supp.1), "Reactor Vessel Structural Integrity, 10 CFR 50.54(f)." In summary, Edison considers the SONGS 2 and 3 reactor pressure vessel data complete as previously submitted (Reference 1) and no further response is required.

To respond to previous NRC information requests and GL 92-01, Edison has expended considerable effort to identify, collect, and report new data pertinent to the analysis of structural integrity of the SONGS 2 and 3 reactor pressure vessels (RPV) as well as assess the impact of this data on the SONGS 2 and 3 RPV integrity analyses relative to the requirements of 10 CFR 50.60,

10 CFR 50.61, Appendices G and H to 10 CFR Part 50, and any potential impact on low temperature overpressure (LTOP) limits or pressure-temperature (P-T) limits. This effort resulted in three proprietary submittals and one non-proprietary submittal as new information became available (References 1 through 4).

Additionally, Edison has reviewed the NRC Reactor Vessel Integrity Database (RVID) Version 1.1, as it applies to the SONGS 2 and 3 reactor vessels, for data inconsistencies relative to sister plants. Although there were minor data inconsistencies between the SONGS 2 and 3 data and the data for sister plants, the inconsistencies do not affect the results of our most recent GL 92-01, Rev. 1 submittal (Reference 1).

The Enclosure provides specific responses to the information required by the generic letter. If you have questions or require further information, please let me know.

Sincerely,

Walter C. Marsh

State of California
County of San Diego
On August 16, 1995 **before me,** Linda L. Rulon/Notary Public, **personally appeared** Walter C. Marsh, **personally known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.**

WITNESS my hand and official seal.

Signature Linda L. Rulon

LINDA L. RULON
COMM. #950229
Notary Public-California
ORANGE COUNTY
My comm. expires MAR 04,1998

Enclosure

cc: L. J. Callan, Regional Administrator, NRC Region IV
J. E. Dyer, 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

Required Information for GL 92-01, Rev. 1, Supplement 1, Reactor Vessel Structural Integrity, SONGS 2 and 3

Required Information (within 90 days from date of the generic letter):

1. A description of those actions taken or planned to locate all data relevant to the determination of RPV integrity, or an explanation of why the existing data base is considered complete as previously submitted.

   Response:

   Edison has located all necessary data relevant to determining the SONGS 2 and 3 reactor pressure vessel (RPV) integrity and therefore considers the existing data base complete. Edison has obtained heat numbers, chemistry, and Charpy data for all reactor vessel beltline plate and weld materials. During development of the SONGS surveillance program, a second data point for the limiting plate and weld material was collected. A third data point was collected when the surveillance capsules were pulled from SONGS 2 and from SONGS 3. These independent data points resulted in little or no change in the mechanical and chemical properties of the surveillance material. This information has been previously transmitted to the NRC through references 1 through 4 below.

   In addition, 1) copper coated electrodes were not used in the fabrication of the SONGS 2 and 3 RPV beltline region, 2) the beltline plate material is the limiting material in the derivation of the Pressurized Thermal Shock (PTS) screening criteria, and 3) although other plants may share material heat numbers with the SONGS 2 and 3 RPVs, slight variations in copper content (i.e., differences in chemistry results between different laboratories) will not impact the SONGS 2 and 3 PTS results.

Required Information (within 6 months from date of the generic letter):

2. An assessment of any change in best-estimate chemistry based on consideration of all relevant data.

   Response:

   Since the concentration of copper in our reactor pressure vessel beltline welds is below 0.10%, they were probably fabricated with limits for copper, and variability in percent copper should not be a concern. The weld materials for which we have multiple sets of data show that any variability is on the order of 0.001% copper. This magnitude of variability will not have a significant effect on best estimate chemistry values.

3. A determination of the need for use of the ratio procedure in accordance with the established Position 2.1 of Regulatory Guide 1.99, Revision 2, for those licensees that use surveillance data to provide a basis for the RPV integrity evaluation.

Response:

Position 2.1 of Regulatory Guide 1.99, Revision 2 was not used as the basis for the SONGS 2 and 3 RPV integrity evaluation. The SONGS 2 and 3 RPV integrity evaluations are based on initial material data and were subsequently adjusted when surveillance capsule fluence data was obtained. SONGS 2 and 3 have each removed only one surveillance capsule to date.

4. A written report providing any newly acquired data as specified above and (1) the results of any necessary revisions to the evaluation of RPV integrity in accordance with the requirements of 10 CFR 50.60, 10 CFR 50.61, Appendices G and H to 10 CFR Part 50, and any potential impact on the LTOP or P-T limits in the technical specifications or (2) a certification that previously submitted evaluations remain valid. Revised evaluations and certifications should include consideration of Position 2.1 of Regulatory Guide 1.99, Revision 2, as applicable, and any new data.

Response:

As indicated in the response to Item 1, Edison has acquired all necessary data for meeting the requirements of GL 92-01, Rev. 1. The report transmitted to the NRC with the submittal date of May 23, 1995 is the final report in response to GL 92-01, Rev. 1 and remains valid.

References:

1. Letter from W. C. Marsh (SCE) to U. S. Nuclear Regulatory Commission Document Control Desk, dated May 23, 1995, Response to Generic Letter 92-01, Revision 1, "Reactor Vessel Structural Integrity, 10 CFR 50.54(f)"

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