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June 3, 1989

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

Gentlemen:

Subject: Docket No. 50-206
Integration of SEP Topic VI-7.C.2, "Failure Mode Analysis (ECCS)," and Regulatory Guide 1.97 Separation Issues
San Onofre Nuclear Generating Station
Unit 1

By letter dated November 18, 1988, SCE informed the NRC of a delay in the submittal to resolve the remaining open issues of SEP Topic VI-7.C.2 as a result of new findings of deficiencies in the Reactor Protection System single failure analysis with the failure of PT-459. In addition, during the upgrade of the nuclear instrumentation system (NIS), unresolved SEP Topic VI-7.C.2 and RG 1.97 issues were identified in the separation and redundancy of the electrical power supplies, i.e., vital buses and regulated buses, and cables which provided power to the Reactor Protection System (RPS) and Engineered Safety Features (ESF) components.

By letters dated December 29, 1988, and February 17, 1989, SCE has committed to integrate issues from SEP Topic VI-7.C.2, "Failure Mode Analysis (Emergency Core Cooling System)," and Regulatory Guide (RG) 1.97, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following an Accident," to provide a comprehensive resolution to single failure and separation of power supplies and cabling issues of the plant components required for safe shutdown of the plant after a postulated design basis accident. The sixteen recommendations in SEP Topic VI-7.C.2 encompass environmental qualification of ECCS components, separation of cables and power supplies for ECCS components, and separation and isolation of electrical divisions to provide redundancy. The separation and redundancy requirements in RG 1.97 provide general guidelines for all instrumentation necessary for safe shutdown of the plant after a postulated design basis accident. The purpose of this letter is to provide our plan for resolution of these interrelated issues.

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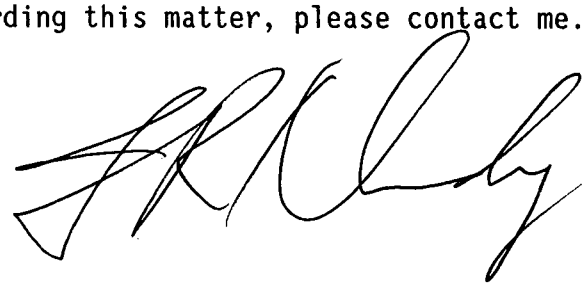
By letter dated March 17, 1989, "Technical Issues Impacting San Onofre Unit 1 Restart," SCE committed to redo the 1976 NUS Single Failure Analysis of the emergency core cooling system (ECCS) and supporting systems within nine months from the return to service. The 1976 NUS Single Failure Analysis has been the basis for previous efforts to complete SEP Topic VI-7.C.2. Past experience from the PT-459 failure and the NIS upgrade has demonstrated that items required for safe shutdown of the plant require comprehensive and in-depth review to cover the single failure, environmental qualification, and electrical separation requirements. In this regard, the separation of vital buses and regulated buses, i.e., provisions for redundancy and separation of cables and power supplies to the RPS and ESF components from two electrically independent trains, remains the best example of the interrelationship between these unresolved issues from SEP Topic VI-7.C.2 and RG 1.97. The basis for resolution of these related issues will depend greatly on the results of the single failure reanalysis. Therefore, SCE has determined that it is prudent to provide an integrated resolution of the remaining SEP Topic VI-7.C.2 and RG 1.97 issues after the completion of the single failure reanalysis. The integrated resolution will be provided to the NRC six months after the submittal of the single failure reanalysis. The remaining RG 1.97 issues which are considered unaffected by the results of the single failure reanalysis are under evaluation and a separate submittal to address these issues will be provided by September 1, 1989.

If you have any questions regarding this matter, please contact me.



cc: J. B. Martin, Regional Administrator, NRC Region V
F. R. Huey, NRC Senior Resident Inspector, San Onofre Units 1, 2, and 3

bcc: (See attached sheet)