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July 16, 1991

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

Gentlemen:

Subject: **Docket No. 50-206**  
**Amendment Application to Revise TSP and Boron Limits**  
**San Onofre Nuclear Generating Station, Unit 1**

Reference: Letter, F. R. Nandy, SCE to NRC, "Post Accident pH in Containment Sump," February 27, 1991.

The purpose of this letter is to reschedule submittal of an amendment application to revise San Onofre Nuclear Generating Station Unit 1 (SONGS 1) Technical Specifications. By the referenced letter, SCE committed to submit an amendment application to incorporate into the Technical Specifications new limits for combined boron inventory in the refueling water storage tank (RWST), reactor coolant system (RCS), and the boric acid storage tank (BAST), and for the increased amount of Trisodium Phosphate (TSP) to be stored in the containment sump. Due to reasons discussed below, submittal of this amendment application is being deferred until September 15, 1991. SCE has discussed the revised schedule with our NRC Project Manager, Mr. J. O. Bradfute.

BACKGROUND

SCE recently discovered that the contents of the boric acid storage tank (BAST) had not been considered in previous containment sump post-LOCA pH calculations for SONGS 1. Although no procedural requirements exist in which the contents of the BAST are to be used during post-LOCA scenarios, the contents of the BAST could be added to the sump, post-LOCA, due to operator action or component failure, and therefore should have been considered in the earlier calculations. Recalculation of the post-LOCA sump pH with the BAST included indicated that, with the operational limiting conditions specified by the earlier calculations, the post-LOCA sump pH could have fallen outside the Technical Specification range.

Following discussions with the NRC, SCE committed as an interim measure to implement administrative controls to ensure plant operation within ranges specified by the new pH calculations without violating the current Technical Specifications. The general administrative controls are described in the above referenced letter. In that letter, SCE also committed to submit an amendment application, within three months after restart from Cycle 11 refueling outage, to incorporate the new limits into SONGS 1 Technical Specifications.

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REVISED SUMP pH CALCULATIONS

New limits for TSP and boron have been established by revised containment sump post-accident pH calculations to ensure that the post-accident containment sump pH is maintained between 7.0 and 7.5. These calculations include the BAST, in addition to the RWST, as a potential source of borated water in the containment sump following design basis accidents. The calculations have resulted in an increased amount of TSP to be stored in the containment sump, and an upper limit for the combined boron inventory in the RCS, RWST, and the BAST. The results of the calculations were discussed in detail in the above referenced letter. The amendment application to incorporate the necessary changes to the Technical Specifications is currently being prepared.

During preparation of the amendment application, SCE identified a need for additional calculations related to the containment sump pH level. The current Technical Specifications require that the containment sump water pH be maintained greater than 7.0 within four hours following occurrence of safety injection. However, documentation of calculations to support this four hour criterion could not be found. Necessary calculations to provide a basis for this criterion are currently being performed.

REVISED SUBMITTAL SCHEDULE

To ensure that the four hour pH criterion in the Technical Specifications can be supported by documented calculations, submittal of the amendment application to the NRC is being deferred pending completion of the additional calculations. These calculations are scheduled to be completed by July 31, 1991. Accordingly, SCE will submit the amendment application to incorporate new TSP/boron limits into the Technical Specifications by September 15, 1991. In the interim, SCE will continue to implement the administrative controls discussed in the referenced letter to ensure plant operation within ranges specified by the new calculations without violating the current Technical Specifications.

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

Very truly yours,



cc: George Kalman, NRC Senior Project Manager, San Onofre Unit 1  
J. O. Bradfute, NRC Project Manager, San Onofre Unit 1  
J. B. Martin, Regional Administrator, NRC Region V  
C. W. Caldwell, NRC Senior Resident Inspector, San Onofre Units 1, 2&3