

November 1, 1999

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

Subject: **Docket Nos. 50-361 and 50-362  
Additional Information Relative to Final Accident Sequence Precursor  
Analysis of Linestarter Failure San Onofre Nuclear Generating Station,  
Units 2 and 3**

- References: 1) Letter from L. Raghavan (USNRC) to Mr. Harold B. Ray, Subject: Final Accident Sequence Precursor Analysis of Operational Condition at San Onofre Nuclear Generating Station, Unit 2, dated September 28, 1999.
- 2) Letter from A. Edward Scherer (SCE) (Signed by J. L. Rainsberry) to Document Control Desk (USNRC), Subject: Docket Nos. 50-361 and 50-362 Comments on Preliminary Accident Sequence Precursor Analysis of Linestarter Failure, San Onofre Nuclear Generating Station Units 2 and 3, dated April 27, 1999.
- 3) Letter from Dwight E. Nunn (SCE) to Document Control Desk (USNRC), Subject: Docket Numbers 50-361 and 50-362, Response to Inspection Report 98-05 Regarding Linestarters, San Onofre Nuclear Generating Station Units 2 and 3, dated June 22, 1998.

Gentlemen:

Reference 1 transmitted the final accident sequence precursor analysis associated with the February 1998 failure of the containment sump isolation valve linestarter (HV9305). Southern California Edison (SCE) provided comments on the preliminary accident sequence precursor analysis in Reference 2. Regarding the adjustment of the common-cause failure probability, Reference 1 indicated that there was not sufficient evidence to indicate that the effect of the grit was isolated. SCE believes that sufficient evidence does exist to indicate that the effect of the grit was isolated and adjustment of the common-cause failure probability is overly conservative.

As discussed in Reference 3, the grit was most likely introduced during construction. Since initial operation, the linestarters were operated thousands of times without a failure attributed to grit until the February 1998 failure. Thus, plant experience demonstrates that the grit problem did not affect the overall reliability of the linestarters. SCE made a proportional comparison of the estimated HV9305 actuations to the estimated number of actuations of other valves in the same Motor Control Center (MCC). HV9305 is not typically stroked, except for testing or maintenance activities, whereas, for example, the Component Cooling Water (CCW) valves are stroked approximately every two weeks. The comparison showed at least six valves, whose linestarters are located in MCC 2BE, which had at least 20% more actuations prior to replacement than HV9305 had prior to failure. In fact, one of the interlocks was estimated to have had at least four times as many actuations. (The interlock associated with this valve was examined and was noted to have grit present.) Finally, as indicated in the associated Licensee Event Report, there were no additional failures found of the various linestarters.

As a result, it is SCE's belief that the failure due to the grit was an isolated event. Further had the overly conservative common cause assumption not been made in the NRC's Reference 1 analysis, this event would not meet the criterion of an accident precursor. Nevertheless, SCE understands the complexity of the linestarter issue and the need to let others benefit from this experience.

If there are any questions please feel free to contact me.

Sincerely,



cc: E. W. Merschoff, Regional Administrator, NRC Region IV  
J. A. Sloan, NRC Senior Resident Inspector, San Onofre Units 2 and 3  
L. Raghavan, NRC Project Manager, San Onofre Units 2 and 3