

Westinghouse Electric Corporation Water Reactor Divisions Box 355 Pittsburgh Pennsylvania 15230

September 29, 1982

NS-EPR-

Ref. a) NS-EPR-2637

Mr: Richard C. DeYoung, Director Office of Inspection and Enforcement U.S. Nuclear Regulatory Commission 7920 Norfolk Avenue Bethesda, Maryland 20014

Dear Mr. DeYoung:

As identified in Reference a), Westinghouse reported a Substantial Safety Hazard under 10CFR Part 21 concerning sheared pinion keys in Limitorque Model SB-0-25 motor operators. Since identifying this item Westinghouse and Limitorque have continued to investigate the reasons for the sheared pinion keys. The purpose of this letter is to provide a status report of this investigation.

Metallurgical evaluations of the sheared pinion keys have indicated that the keys were made of a resulfurtized carbon steel (1100 series) in lieu of the required 1018 carbon steel material. Additionally, Limitorque has conducted extensive stall tests of the SB-0-25 motor operator with the 1018 pinion key material and verified the adequacy of this material for its intended use. Based on the current available information it appears that the previously reported sheared pinion keys were a result of the use of inappropriate materials. Limitorque and Westinghouse are continuing to investigate this item to determine the Model SB-0-25 motor operators affected and required long-term corrective actions.

Based on the investigations, in-shop and pre-service testing do not preclude the possibility of having keys with inappropriate material. Until the investigation is complete, we have recommended to utilities that particular attention be paid to the periodic valve exercise program for indication of failed pinion keys. In addition, we have recommended that, during the normal inservice inspection and maintenance program, keys be inspected. If replacement keys are required, utilities should make special arrangements with Limitorque to ensure that the keys are fabricated from the proper material.

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Mr. Richard C. DeYoung -2-September 29, 1982 Additional information will be provided to the Staff as it becomes available. If you have any questions, please contact Mr. R. A. Wiesemann (412 373-5132) of my staff. Very truly yours, WESTINGHOUSE ELECTRIC CORPORATION E. P. Rahe, Jr., Manager Nuclear Safety JJM/anj cc: R. J. Kiessel, REB