Commonwealth Edison One First National Plaza, Chicago, Illinois Address Reply to: Post Office Box 767 Chicago, Illinois 60690

November 10, 1981

Mr. James G. Keppler, Director Directorate of Inspection and Enforcement - Region III U.S. Nuclear Regulatory Commission 799 Roosevelt Road Glen Ellyn, IL 60137

> Subject: Zion Station Units 1 and 2 Response to I.E. Bulletin 79-14 "Temperature Effects on Level Measurements" NRC Docket Nos. 50-295 and 50-304

References (a): August 13, 1979, letter from J. G. Keppler to Byron Lee, Jr.

(b): September 21, 1979, letter fromD. L. Peoples to J. G. Keppler.

Dear Mr. Keppler:

Reference (a) required Commonwealth Edison to take certain actions with regard to I.E. Bulletin No. 79-21, "Temperature Effects on Level Measurements." Our response was provided in Reference (b). Item 3 of that response described how the bias induced by the heatup of the steam generator level reference leg could delay or prevent reactor trip/auxiliary feedwater initiation on low-low steam generator water level. Since this signal provides the primary trip function for a feedline rupture accident, the low-low steam generator level setpoint was revised upward to accomodate the maximum bias that could occur.

Westinghouse generically estimated the maximum bias to be 10% for temperatures up to 280°F. Above 280°F, reactor trip/ auxiliary feedwater actuation would occur on a high containment pressure signal. Westinghouse stated that a plant-specific containment analysis, possibly combined with changes in the high containment pressure setpoint, could be used to justify reducing the bias that had been estimated generically.

Since the low-low steam generator level setpoint was raised from 10% to 15%, several reactor trips have occurred as a result of brief water level transients, causing unnecessary challenges to safety-related equipment and personnel. In an effort to prevent these undesirable trips, Commonwealth Edison has performed the plant-

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specific evaluation suggested by Westinghouse and concluded that a reduction in the value of the maximum temperature-induced bias is justified. For the present high containment pressure setpoint of 4.5 psig, the maximum temperature reached prior to unit trip is approximately 150°F. This results in a maximum bias of 2%, as compared to the 10% estimated by Westinghouse.

Therefore, Commonwealth Edison has concluded that the lowlow steam generator level setpoint may be returned to a value of 10%, which will provide adequate margin for the existing instrument inaccuracies and the 2% maximum temperature-induced bias. This change will be accomplished on Unit 2 prior to startup following the current refueling outage, and on Unit 1 shortly thereafter.

Please address questions regarding this matter to this office.

Very truly yours.

F. D. Lentine

F. G. Lentine Nuclear Licensing Administrator

cc: NRC Office of Inspection and Enforcement - Wash., D.C. Zion Resident Inspector

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These two letters were returned to us because officializate address I am address I am address I am porry for the delay and I hope it host in anyway is anyway Sharkope Vilia

