



**Commonwealth Edison**  
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January 8, 1990

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

Subject: Zion Station Units 1 and 2  
Supplemental Response to NRC Bulletin 89-01  
NRC Docket Nos. 50-295 and 50-304

References (a): NRC Bulletin 89-01, dated May 15, 1989.

(b): CECO Response to NRC Bulletin 89-01,  
dated June 16, 1989.

Dear Sir:

Reference (a) requested that addressees determine whether certain mechanical plugs supplied by Westinghouse are installed in their steam generators, and if so, that an action plan be implemented to ensure that these plugs will continue to provide adequate assurance of reactor coolant system pressure boundary integrity. Reference (b) presented the Commonwealth Edison Company (CECO) response for Byron, Braidwood and Zion Stations. In that response CECO indicated that Zion Station would perform remedial actions on the steam generator hot leg plugs fabricated from suspect heats during the next refueling outage for each unit. CECO's remedial actions consist of removal, examination (on a sample basis) and replacement of the plugs fabricated from suspect heats. This letter is intended to notify the NRC that the hot leg plugs (from suspect heats) removed from Zion Unit 1 during the recent refueling outage (Fall 1989) will not be examined for primary water stress corrosion cracking (PWSCC).

As indicated in Reference (b), remedial actions for the 28 hot leg plugs from suspect heats (5 plugs from heat 3513 and 23 plugs from heat 4523) were scheduled to begin during the Fall 1989 refueling outage for Zion Unit 1. These plugs have been removed from the Unit 1 steam generators and were replaced with Combustion Engineering rolled mechanical plugs or welded plugs, as appropriate. The mechanical plugs were fabricated from Inconel-690 material. Of the 28 hot leg plugs removed, 19 were removed using the "Stretch-and-Pull" method and 9 were removed by either Electro-Discharge Machining (EDM) or mechanical drilling. The 9 plugs removed by EDM or mechanical drilling (5 plugs from heat 3513 and 4 plugs from heat 4523) were destroyed during the removal process.

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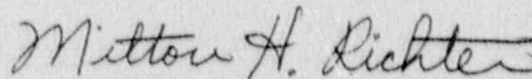
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The remaining plugs (19 plugs from heat 4523) were to have been examined on a sample basis for PWSCC. However, during interim storage of the plugs, they were inadvertently disposed of as radioactive waste. Therefore, no examination of any Unit 1 hot leg plugs was able to be performed.

The hot leg plugs (27 total) to be removed from the Unit 2 steam generators, scheduled for the refueling outage beginning in March 1990, are all fabricated from heat 4523. Measures will be taken to ensure that these plugs are handled with sufficient controls to preclude inadvertent disposal. The plugs which are not destroyed during removal will be examined on a sample basis for PWSCC.

Please direct any questions concerning this letter to this office.

Respectfully,

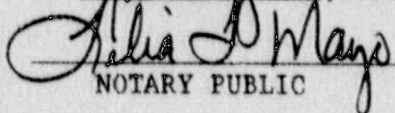


Milton H. Richter  
Generic Issues Administrator

gad

cc: A.B. Davis - Regional Administrator, Region III  
Resident Inspector - Zion  
C. Patel - NRR, Zion Station Project Manager

SUBSCRIBED AND SWORN to  
before me this 8<sup>th</sup> day  
of January, 1990

  
NOTARY PUBLIC