



Commonwealth Edison
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DMB

March 4, 1985

Mr. James G. Keppler
Regional Administrator
U.S. Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

Subject: Dresden Station Unit 2
Part 21 Notification
Degradation of 125V DC
Battery
NRC Docket No. 50-237

Dear Mr. Keppler:

Commonwealth Edison (CECO) personnel have discovered a potentially significant degradation on the Unit 2 125V DC battery. Since this battery is installed in a Nuclear Class 1E application and the determination of battery operability has not yet been completed, this condition is being reported under the requirements of 10 CFR 21. This 125V DC battery is required to be operable for both units by Technical Specifications.

Thirty (30) of the cells on the 125V DC battery show corrosion around the weld between the plates and internal bus bar which provides electrical connection and physical support of the plates (refer to attachments). Of these thirty, fourteen (14) cells have plates that are considered severely corroded since these plates indicate the plate is corroded through for more than 30% of the length of the weld. One plate of one cell shows nearly 90% corrosion has taken place on the weld length.

Three failure modes are currently being addressed: (1) loss of cell capacity from the electrical separation of one or more plates in any given cell, (2) shorting a cell internally, and (3) open circuiting a cell. The case of the open cell is considered the most severe since this would cause precipitous battery failure. Regardless of the failure mode of this battery, high stresses from large current outputs and seismic loading must be addressed. This 125V DC battery is approximately eighteen (18) years old. The basis for this notification is whether this degradation of the battery is due to other reasons than its end of useful life.

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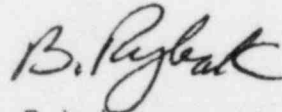
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Commonwealth Edison has taken steps to purchase from GNB Batteries, Inc. a 58 cell NCT-1344 lead calcium battery and associated racks for Dresden Station to replace the existing Unit 2 battery. In the interim, CECO is exploring the use of the existing Dresden Unit 1 HPCI 125V DC battery to supply the Unit 2 loads. This would be a temporary installation until the new battery is available.

The remaining three 125V DC batteries for Dresden 3 and Quad Cities 1 and 2 have been initially inspected along with the 250V DC batteries at both Stations. Zion also has performed the initial inspection of their five (5) 125V DC batteries for both units. Results of the inspections at all three stations indicate these batteries show no significant corrosion. However, CECO plans to perform additional inspections to confirm and establish their present useful condition.

There are no plans at the present time to inspect the batteries at LaSalle, Byron, and Braidwood Stations since these batteries are of a later vintage than Dresden, Quad Cities and Zion Stations.

Very truly yours,



B. Rybak

Nuclear Licensing Administrator

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cc: Director, Office of Inspection
and Enforcement - 3 copies
NRC Resident Inspector - Dresden
R. Gilbert - NRR