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December 10, 1996

ComEd

U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attn: Document Control Desk

Subject: Dresden Nuclear Power Station Units 2 and 3
Quad Cities Nuclear Power Station Units 1 and 2
Reactor Water Clean Up (RWCU) System High Energy Line Break (HELB)
Outside the Drywell
NRC Docket Number 50-237/249 and 50-254/265

References: 1) J. Hosmer (ComEd) letter to the U.S.NRC dated August 27, 1996

2) J. Hosmer (ComEd) letter to the U.S.NRC dated September 4, 1996

ComEd committed in Reference (2) to implement a modification to automatically isolate the RWCU system on direct indication of a line break. The purpose of this letter is to describe the modification and provide a completion schedule.

MODIFICATION SCOPE

This modification will be an environmentally qualified single failure tolerant design using existing RTDs and a high fluid temperature isolation as described below.

Areas that contain high energy (greater than 200°F and 275 psig) RWCU piping include the heat exchanger room and the main steam tunnel. Dresden Station also has high energy RWCU piping in the RWCU pipeway and RWCU pump room. Two trains of environmentally qualified resistance temperature devices (RTDs) are installed in all of these areas except for the main steam tunnel. These RTDs are currently connected to temperature switches which alarm annunciators, one for each train, in the main control room on high temperature. Under the proposed modification, the RTDs will provide a signal to automatically close the RWCU containment isolation valves when high area temperature is sensed. The RWCU and existing leak detection systems are described in Section 5.4.8 of Dresden's Updated Final Safety Analysis Report (UFSAR) and Section 5.4.7.5 and 5.4.8 of the Quad Cities UFSAR.

With respect to the RWCU piping in the main steam tunnel, preliminary calculations indicate that large breaks in the RWCU piping in the main steam tunnel will result in the isolation of the RWCU system on high fluid temperature downstream of the non-regenerative heat exchanger. This high temperature isolation currently exists to protect the resins in the demineralizers but, as it is indicative of a large leak or break in the cold portion of the RWCU system downstream of the non-regenerative heat exchangers, it will be employed as the isolation signal to detect breaks in the main steam tunnel.

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SCHEDULE

Considerable physical work is required to provide automatic isolation. New and rerouted cables and panels need to be installed. To provide sufficient time to perform detailed engineering and procure long lead time material, ComEd proposes to install the RWCU auto isolation modification during Dresden Unit 2 and 3's fifteenth refueling outages and Quad Cities Unit 1 and 2's fifteenth refueling outages. D2R15 and D3R15 are currently scheduled to begin on 1/17/98 and 1/2/99. Q1R15 and Q2R15 are currently planned for 4/18/98 and 3/20/99.

INTERIM MEASURES

The interim measures described in our August 27, 1996 letter (Reference 1) will remain in effect until the proposed modifications are installed. Furthermore, IGSCC susceptible RWCU piping and components in Dresden Unit 2 and Quad Cities Units 1 & 2 were replaced with IGSCC resistant materials during their fourteenth refueling outages. The IGSCC susceptible RWCU piping and components in Dresden Unit 3 will be replaced during D3R14 which is currently scheduled to begin in March 1997. Replacement of IGSCC susceptible piping and components further reduces the probability of developing a leak or break in the RWCU system.

If there are any questions regarding this issue, please contact this office.

Respectfully,

John B. Hosmer

John B. Hosmer
Vice President

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