



September 4, 1996

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 Numbers 50-237/249 and 50-254/265

- References: 1) J. Hosmer letter to NRC dated August 27, 1996
2) I. M. Johnson letter to NRC dated August 28, 1996

The purpose of this letter is to provide additional information addressing questions raised concerning the potential impact of a RWCU HELB at less than rated power conditions. An overall assessment was provided in Reference (1) and the radiological dose calculation was transmitted in Reference (2).

Assessment and Resolution Plan - In Reference (1), ComEd committed to submit a response within 30 days to complete our assessment of this issue and apprise the NRC of our long term resolution plan. The 30 day response was intended to complete a final assessment of the safety significance of this issue and a detailed implementation to resolve this issue. However, in the interim, ComEd has decided to proceed with implementing a modification to automatically isolate the RWCU system on direct indication of a line break. Given this decision, ComEd is proceeding to begin the conceptual design work for the modifications for both Dresden Station Units 2 and 3 and Quad Cities Station Units 1 and 2. Some time will be required to complete sufficient engineering in order to determine the modification schedule. Therefore, in lieu of a 30 day report, ComEd will submit a response within 90 days of this letter describing the modification and detailing our completion schedule.

ComEd believes that both Dresden and Quad Cities are within their licensing bases. However, if at any time we reach a different conclusion, ComEd will report this to the NRC pursuant to 10CFR50.72.

Administrative Controls - Administrative controls were established to limit reactor coolant activity to $<0.2\mu\text{Ci/g}$ I-131 Dose Equivalent. If this limit is exceeded, the RWCU system will be isolated. This coolant activity limit already exists in Dresden Station's Technical Specification as a steady state coolant activity limit; it will be formally incorporated into the Quad Cities Technical Specification with the implementation of the Technical Specification Upgrade Program in September. The necessary procedures and appropriate 'just in time' operator training

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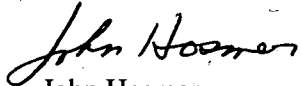
necessary to implement this action was completed prior to the return to service of both Dresden Unit 2 and Quad Cities Unit 2. Existing Offgas monitoring procedures will trigger increased sampling of the reactor coolant activity.

Radiological Dose Assessment - Reference (2) transmitted ComEd's calculation of the offsite thyroid dose due to the postulated RWCU HELB. A revised calculation, without the disclaimers, is enclosed as Attachment A. The attached calculation concludes that the resultant dose of 4.4 Rem for Dresden Station and 8.3 Rem for Quad Cities Station is less than the maximum value reported in the UFSAR Section 15.6 for both Main Steam and 1 inch Instrument Line breaks and is a small fraction of the 10CFR100 thyroid dose limit of 300 rem.

Environmental Qualification - . A preliminary assessment of the environmental qualification from a bounding RWCU HELB scenario was performed. Based on existing test data and material analysis, ComEd has concluded that the equipment necessary to isolate the RWCU valves and safely shutdown the unit will perform their design function under this postulated RWCU HELB. Therefore, both stations are in compliance with 10 CFR 50.49. A summary of our assessment is detailed in Attachment B.

Please direct any questions pertaining to this issue to this office.

Sincerely,



John Hosmer
Engineering Vice President

Attachments:

- A). Offsite Radiological Assessment of Postulated Line Break for Dresden and Quad Cities Stations.
- B). Reactor Water Cleanup Line Break - Environmental Qualification of Affected Equipment

cc:

- A. Beach, Regional Administrator - RIII
- R. Capra, Project Director III-2 - NRR
- J. Stang, Project Manager - NRR
- R. Pulsifier, Project Manager - NRR
- C. Vanderniet, Senior Resident Inspector - Dresden
- C. Miller, Senior Resident Inspector - Quad Cities
- Office of Nuclear Facility Safety - IDNS

ATTACHMENT A

**OFFSITE RADIOLOGICAL DOSE ASSESSMENT OF
POSTULATED LINE BREAK FOR DDRESDEN AND QUAD CITIES**