



Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

February 25, 1992

Dr. Thomas E. Murley, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Attn: Document Control Desk

Subject: Dresden Station Units 2 and 3
Quad Cities Station Units 1 and 2
Resolution Plan for Open Items Associated with
Response to Generic Letter 88-11
NRC Docket Nos. 50-237/50-249 and 50-254/50-265

References: (a) B.L. Siegel (NRR) to T.J. Kovach (CECo) letter
dated September 5, 1991

(b) L.N. Olshan (NRR) to T.J. Kovach (CECo) letter
dated September 25, 1991

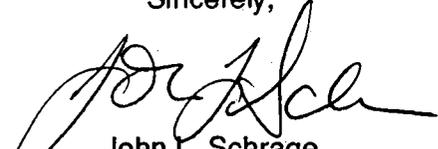
Dear Dr. Murley:

In the referenced letters, the NRC provided an evaluation of Commonwealth Edison Company's (CECo) response to Generic Letter (GL) 88-11, "NRC Position on Radiation Embrittlement of Reactor Vessel Materials and its Impact on Plant Operations". The letters also issued amendments to Facility Operating Licenses DPR-19/25 for Dresden Station (Reference (a)) and DPR-29/30 for Quad Cities Station (Reference (b)). These license amendments modified the Technical Specification for the Primary System Boundary Pressurization Temperature.

As a result of the evaluation of CECo's response to GL 88-11, the NRC identified two open items pertaining to the unirradiated upper shelf energy (USE) of all beltline materials, and compliance of the surveillance programs with ASTM E 185 and 10 CFR 50 Appendix H. The NRC requested that CECo provide a plan to resolve these two open items. The Open Items and associated resolution plans are described in Attachment A.

If there are any questions or comments on this resolution plan, please direct them to John L. Schrage at (708) 515-7283.

Sincerely,



John L. Schrage
Nuclear Licensing Administrator

Attachment

cc: A. Bert Davis, Regional Administrator-RIII
L.N. Olshan, Project Manager-NRR
T.E. Taylor, Senior Resident Inspector-Quad Cities
Office of Nuclear Safety-IDNS

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ATTACHMENT A

Action Plan for Resolution of GL 88-11 Open Items

NRC OPEN ITEM 1 Section IV.B of Appendix G requires that the predicted Charpy upper shelf energy (USE) at end-of-life (EOL) be above 50 ft-lb. Since you could not provide unirradiated USE values for beltline materials for Dresden, Units 2 and 3 (and Quad Cities, Units 1 and 2), the staff could not determine whether the limiting USE at end-of-life satisfies the minimum of 50 ft-lb requirement. The surveillance capsule reports provided a few USE data, however, the data could not be used in calculating the limiting USE because it could not be correlated to a specific vessel material. The staff needs to know the unirradiated USE of all beltline materials in order to determine the limiting USE.

RESPONSE Data does not exist to establish the plant specific unirradiated Charpy upper shelf energy (USE) for the Dresden Units 2 and 3 and Quad Cities Units 1 and 2 reactor pressure vessel (RPV) beltline materials. Regulatory requirements related to USE did not exist until the early 1970s, which is after the time of fabrication of the Dresden and Quad Cities RPVs. The only Charpy data available from fabrication records were performed at a test temperature of +10°F which is generally below the temperature range at which upper shelf behavior can be established.

The BWR Owners' Group (BWROG) has formed an RPV Fracture Toughness Committee, which requested that General Electric develop USE estimation methods for plants with insufficient fabrication data to establish the unirradiated USE for the RPV beltline materials. CECo is participating in this BWROG project. A preliminary draft report titled "Upper Shelf Energy Estimation Methods" was discussed at a BWROG RPV Fracture Toughness Committee meeting held December 18, 1991. Additional work is being performed by GE and a final draft is expected by the end of March, 1992. The intent is that the final report would be submitted to the NRC for acceptance of the estimation methodology on a generic basis. Individual utilities could then apply the methodology to their specific RPVs.

NRC OPEN ITEM 2 The reactor vessel materials surveillance program for Dresden, Units 2 and 3 (and Quad Cities, Units 1 and 2), does not comply with ASTM E 185 and 10 CFR 50, Appendix H, because the surveillance specimens could not be correlated with the reactor vessel beltline materials.

RESPONSE The Dresden Units 2 and 3 and Quad Cities Units 1 and 2 reactor vessel material surveillance programs were established prior to the existence of Appendix H which was first published in the early 1970s.

CECo has initiated a work effort to search for any documents related to the CECo BWR surveillance programs. These documents will include original vendor specifications, vessel fabricator specifications, surveillance specimen fabrication drawings, and supplemental documentation describing the surveillance program. It is anticipated that some useful information will be found, but probably not to the extent to establish complete unit specific correlations between surveillance specimens and the reactor beltline materials.

A point-by-point review will be made of compliance by the CECo BWRs with ASTM E 185 requirements in place at the time of surveillance program development. The review will provide justifications, where applicable, for deviations from E 185 requirements.

A report providing the above information is expected to be available by the end of June, 1992.