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June 4, 1984

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Dresden Station Units 1 and 2
Quad Cities Station Units 1 and 2
Response to NRC Generic Letter 84-11
NRC Docket Nos. 50-237, 50-249, 50-254, and 50-265

Reference (a): D. G. Eisenhut letter to All Licensees dated April 19, 1984 (Generic Letter 84-11).

Dear Mr. Denton:

Following is our response to the NRC Generic Letter 84-11 as it applies to Dresden and Quad Cities Stations:

1. We have a program to reinspect piping susceptible to IGSCC as suggested. The program encompasses stainless steel welds in piping 4 inch diameter and greater, that are part of or connected to the reactor coolant pressure boundary out to the second isolation valve.

   Our schedule for reinspection is:

   Dresden Unit 2 - Fall, 1984
   Dresden Unit 3 - Spring, 1985
   Quad Cities Unit 1 - Fall, 1985
   Quad Cities Unit 2 - Winter, 1985

2. (a) The number of welds scheduled for inspection in each pipe size, may be less than 20% depending on past experience. The selection of welds to be examined will be biased to the higher temperature portions of the branch systems and to fittings. Dresden Unit 2 having hydrogen water chemistry applied is considered a special case and the sample may be less than 20%. Also, welds treated by IHSI, and with no crack indications on the post ultrasonic (UT) inspection are no longer considered susceptible to IGSCC and will be reinspected per the ISI Programs established at both Dresden and Quad Cities Stations.

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A047

(b) All unrepaired cracked welds will be reinspected.

(c) A representative sample (at least one in each 12 inch, 22 inch, 28 inch, 16 inch, 20 inch, & 10 inch pipe size) of overlayed welds, where circumferential cracks longer than 10% of circumference were measured, will be selected to reinspect the overlay. The reinspection will be equivalent to the inspection performed following the overlay application.

An industry program is underway to develop a method for inspecting a weld through an overlay.

(d) All welds treated by induction heating stress improvement will be UT inspected after the IHSI treatment.

(e) The inspection scope will be expanded in accordance with IEB 83-02 where new cracks or significant growth of old cracks are encountered.

3. All level 2 and level 3 UT examiners will have demonstrated competence in accordance with IEB 83-02 and level 1 examiners will have demonstrated field performance capability.

We contract for examiners and therefore availability is dependent on industry demand.

4. It is our opinion that the leak detection and leakage limits as they now exist are sufficiently restrictive to ensure a timely investigation of unidentified leakage. For Dresden Units 2 & 3 and Quad Cities Unit 2 either Technical Specification limits were modified or Confirmatory Orders issued as a result of our previous inspections. Those requirements, in the area of leak detection and leakage limits, met the intent of Attachment 1. Quad Cities Unit 1 is currently in its' refueling outage and it is our intent to commit to the leakage requirements imposed on Unit 2.

However, we disagree on the need for visual inspection for leakage as requested in Item E of Attachment 1. If the leakage detection and leakage limits are more restrictive and allow for a timely investigation of unidentified leakage, the need for a visual examination is questionable and not in the best interest of ALARA. These units have been sufficiently examined to determine the condition of the plant and remedies are in place (weld overlays, IHSI, and hydrogen water chemistry on Dresden Unit 2) that further reduce the chance for leakage. Any requirement for visual examination would unnecessarily lengthen any outage and would be of questionable benefit.

5. We concur with the requirements of Attachment 2 for crack evaluation and repair criteria. However, we take exception with Item 2(b) (i) and (ii) requirement to dye-penetrant test the first weld layer and not take credit for it in the repair.

   It is our opinion that it is difficult to clean the dye-penetrant from the weld, cleaning unnecessarily increases man-rem exposure, and the residual dye-penetrant left may cause a defect.

   In lieu of this we assure that the first layer is an effective crack barrier by;

   1. Actually measuring that the delta ferrite content is greater than 7.5 Ferrite Number.

   2. Enhanced visual examination for cracks, lack of fusion and any evidence of flaw being continued in first layer.

   3. All welding is video taped. The tapes are reviewed for evidence of flaws in first layer.

   It is our opinion that this is a more effective program than the dye-penetrant.

   All weld overlays have a minimum of two weld layers including the first layer.

It is the intent of this response to address:

(a) Scope and schedule of planned inspections. See response to Item 1.

(b) Availability and qualification of examiners. See response to Item 3.

(c) We have no special surveillance measures in effect or proposed for primary system leak detection beyond those measures described in Item 4.

(d) The results of inspections at Quad Cities Unit 1 will be presented to the NRC on June 8, 1984.

(e) When cracks are discovered a crack growth analysis is performed, in accordance with ASME Section XI, and where necessary a weld overlay repair is designed and implemented.

To the best of my knowledge and belief the statements contained herein are true and correct. In some respects these statements are not based on my personal knowledge but upon information furnished by other Commonwealth Edison and contractor employees. Such information has been reviewed in accordance with Company practice and I believe it to be reliable.

If you have any questions regarding this matter, please contact this office.

One signed original and forty (40) copies of this letter are provided for your use.

Very truly yours,

B Rybak

B. Rybak
Nuclear Licensing Administrator

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cc: NRC Resident Inspector - Dresden
NRC Resident Inspector - Quad Cities
R. Gilbert - NRR
R. Bevan - NRR

SUBSCRIBED AND SWORN to
before me this 4th day
of June, 1984

Rosalie A. Prenta
Notary Public

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