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June 17, 1988

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

Subject: Dresden Station Unit 3
Summary of Augmented IGSCC Inspection
Results for 1988 Refueling Outage
NRC Docket No. 50-249

Reference: Letter from J.A. Silady to T.E. Murley
dated October 27, 1987.

Dear Mr. Murley:

The attachment summarizes the results of several Intergranular Stress Corrosion Cracking (IGSCC) piping and other inspection activities during the current Dresden 3 refueling outage. The piping inspection plan was submitted in the above reference. Neither the piping nor the in-vessel, shroud related inspections produced any significant findings.

Please contact this office should further information be required.

Very truly yours,

J. A. Silady
Nuclear Licensing Administrator

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Attachment

cc: A.B. Davis - Regional Administrator, RIII
B.L. Siegel - Project Manager, NRR
S.G. DuPont - Senior Resident Inspector, Dresden

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Dresden Unit 3

Summary of Augmented Inspection Activities

Winter 1988 Outage

During the Fall 1985/Spring 1986 Recirculation Pipe Replacement outage most of the IGSCC susceptible piping was replaced using IGSCC resistant material. There is some remaining class 1 stainless steel piping that is susceptible to IGSCC. There are a total of fifty (50) welds in this category of which twenty-eight (28) were stress improved. The following paragraphs summarize the IGSCC related activities performed during the Winter 1988 refueling outage at Dresden Unit 3.

1. A total of twelve (12) IGSCC susceptible piping welds were ultrasonically examined this outage in accordance with the sampling plan which follows the requirements of Generic Letter 84-11. This plan was submitted to the NRC for approval on October 15, 1987. Table 1 provides the details of the inspection scope.
2. No IGSCC indications were reported in any piping welds that were examined under the aforementioned inspection scope. Table 2 summarizes the IGSCC piping inspection results.
3. Examination services was provided by inspectors of General Electric Co. (GE) using approved Commonwealth Edison Co. (CECo) procedures. CECo NDE personnel were utilized for review and ultimate resolution of piping examination results.
4. CECo and GE IGSCC NDE personnel were qualified at the EPRI NDE Center after September 1985.
5. In addition to the piping inspection required by Generic Letter 84-11, the following ultrasonic examinations were also performed by GE inspectors.
 - a. Shroud Head Bolting - A total of 48 shroud head bolts were ultrasonically re-examined. Evidence of cracking greater than 10% of the bolt area was detected in four (04) additional bolts during this outage. Two (02) of the seven (07) bolts previously identified as cracked (in the 1985/1986 outage) had indications of increased cracking. The remaining five (05) of the seven (07) bolts previously identified as cracked appear to have essentially unchanged indications from the previous inspection. To date a total of eleven (11) bolts with evidence of cracking greater than 10% of the bolt area have been found in Unit 3. No corrective action is necessary since the engineering evaluation by CECo BWR Engineering indicates that Dresden Unit 3 can be safely operated with the present complement of shroud head bolts.

Figure 1 is a map of shroud head bolts with indication. The year in which the cracked bolt was first discovered is marked next to the bolt.

- b. Shroud Support Plate Access Hole Covers - Both access hole covers in unit 3 were examined using the GE developed technique. No evidence of cracking was detected.

Table 1
 Augmented Stainless Steel Weld Inspection Plan
 Winter 1988
 Dresden Unit Three

Category	Size	Total	Prev. Exam (1)	Not. Prev. Exam (2) (Inaccessible)	Sample	
					1988 Prev. Exam	84-11 Not Prev. Exam
Isolation						
Condenser	14"	14(3)	13	1	3	0
Core Spray	10"	29	27	2	5	0
Reactor Head Vent	4"	3	3	0	2	0
Spare Nozzle	6"	2	2	0	1	0
Head Spray	6"	2	2	0	1	0
		50	47	3	12	0

Weld with known flaws 0
 Previously examined weld - 1988 sample 12
 Not previously examined weld - 1988 sample 0
 Weld overlay sample 0

Total 1988 Sample 12 Inspections

- Note: (1) Welds that were ultrasonically examined previously to address IGSCC concerns.
 (2) Welds that were not ultrasonically examined previously to address IGSCC concerns.
 (3) Includes the Nozzle - Safe End Weld

Table 2
Dresden Unit 3 IGSCC 1988 Piping Inspection Results

System	Weld No.	
Isolation Condenser (14")-Steam Supply	14-K2 (E-P)	No Recordable Indication (NRI)
Core Spray A (10")	14-K1A (P-E)	NRI
	14-3 (P-E)	NRI
	10-10 (P-V)	ID and OD Geometries
	10-K11 (Tee-P)	NRI
Core Spray B (10")	10-K12 (P-Tee)	OD Geometry
	10-44C (Tee-P)	ID and OD Geometries
	10-44F (P-Tee)	ID Geometry
Reactor Head Vent (4")	N8 (Noz-SE)	OD Geometry
	4A-1 (SE-FIng)	OD Geometry
Reactor Head Spray (6")	N18A (SE-Noz)	ID Geometry
Reactor Head Spare Noz. (6")	N18B (Noz-SE)	ID Geometry

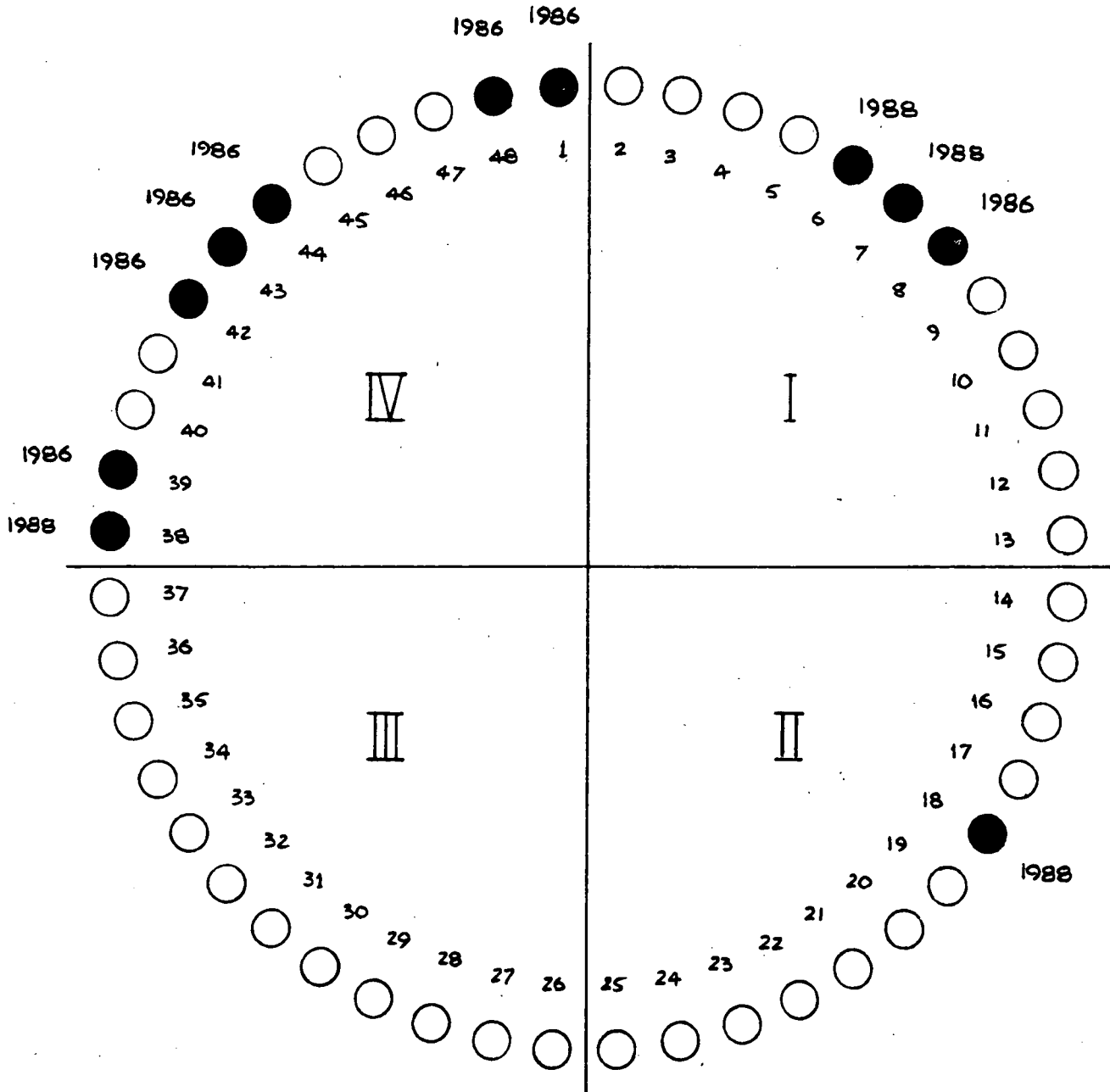


FIGURE 1
 DRESDEN UNIT 3 SHROUD HEAD BOLTS
 WITH INDICATIONS