

## (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

09		SYSTEM CODE C B		CAUSE CODE E	CAUSE SUBCODE D	COMPONENT CODE H T E X C H		COMP. SUBCODE F	VALVE SUBCODE Z
7	8	9	10	11	12	13	14	15	16
17		EVENT YEAR 8 2		SEQUENTIAL REPORT NO. 0 0 2		OCCURRENCE CODE 0 1		REPORT TYPE T	REVISION NO. 0
18		21		22		23		24	
ACTION TAKEN B		FUTURE ACTION Z		EFFECT ON PLANT Z		SHUTDOWN METHOD Z		HOURS 0 0 0 0	
33		34		35		36		37	
ATTACHMENT SUBMITTED Y		NPRD-4 FORM SUB. Y		PRIME COMP. SUPPLIER N		COMPONENT MANUFACTURER W 1 2 0		22	
41		42		43		44		45	

CAUSE : DESCRIPTION AND CORRECTIVE ACTIONS (27)

7	8	9												80	
FACILITY STATUS			% POWER			OTHER STATUS			METHOD OF DISCOVERY			DISCOVERY DESCRIPTION			
1	5	G	28	0	0	0	29	N/A	30	C	31	Eddy current examination			32
7	8	9	10	11	12	13									80
ACTIVITY CONTENT			RELEASED OF RELEASE			AMOUNT OF ACTIVITY						LOCATION OF RELEASE			
1	6	Z	33	Z	34	N/A	35	N/A			36				
7	8	9	10	11	12	13									80

PERSONNEL EXPOSURES									
NUMBER			TYPE	DESCRIPTION					
1	7	0	0	0	(37)	Z	(38)	N/A	(39)

PERSONNEL INJURIES		NUMBER		DESCRIPTION	
1	8	0	0	0	N/A

		LOSS OF OR DAMAGE TO FACILITY		(43)
		TYPE	DESCRIPTION	
7	8	9	10	
1	9	Z	N/A	

ISSUED 2 0 DESCRIPTION Z 44 N/A 45

NRC USE ONLY

8205180368 S C. W. Fay PHONE 414/277-2811

ATTACHMENT TO LICENSEE EVENT REPORT NO. 82-002/01T-0

Wisconsin Electric Power Company  
Point Beach Nuclear Plant, Unit 2  
Docket No. 50-301

On April 16, 1982, Unit 2 was shut down for its eighth annual refueling. Eddy current examination of the steam generators commenced on April 24, 1982. The original eddy current program for each steam generator was set up to meet the requirements of the Technical Specifications and Regulatory Guide 1.38. The "A" steam generator program consisted of inspecting 575 tubes through the U-bend. This included 276 tubes which were identified as having degradation in the hot leg during the Refueling 7 inspection. The "B" steam generator program consisted of inspecting 250 tubes through the U-bend and 31 tubes for the full length. The 250 tubes included 120 which were identified as having degradation in the hot leg during Refueling 7. All 31 tubes inspected for the full length had degradation identified in the cold leg during Refueling 7.

The eddy current program in both the "A" and "B" steam generator hot legs was expanded in accordance with the Technical Specifications as defects were identified. An expansion in excess of 200 tubes in the hot legs of both steam generators was performed after the original program. The results from the expansion in the "A" steam generator required an additional 400 tubes to be inspected, however, the program was expanded to include essentially all of the tubes in the area of concern. Based on the results of the expansion in "A", the program in "B" was also expanded to include essentially all of the tubes in the area of concern. This expansion in "B" was not required by the Technical Specification but was performed for prudent conservative engineering reasons. All the tubes in the expansion were inspected through the first tube support plate as the defects found were in the tubesheet region or just above the tubesheet. In excess of 60% of the tubes in the "A" steam generator and 50% of the tubes in the "B" steam generator were inspected.

A two-fold evaluation of the "B" steam generator cold leg indications was done to determine if it was necessary to expand the eddy current program in the cold leg. First, the history of the tubes with indications was looked at. The percentage size of the indication was compared with what was reported for the previous five years. Second, the Level IIA evaluator did a direct comparison of this year's eddy current signal with last year's signal. Both comparisons indicated that there was not a significant change in the condition in the cold leg and coupled with the exposure associated with setting up in the cold leg an expansion was not conducted.

The results of the eddy current inspection identified a total of 13 tubes which required plugging. The following table lists the tubes which required plugged along with three other tubes in the "A" steam generator which were plugged as a conservative measure.

"A" Steam Generator Hot Leg

<u>Tube</u>	<u>Indication</u>	<u>Location</u>
R16C34	96%	5" Above Tube End
R17C36	90%	5" Above Tube End
R20C38	77%	6-9" Above Tube End
R18C41	82%	8" Above Tube End
R18C43	Undefinable	9-13" Above Tube End
R17C45	Undefinable	12" Above Tube End
R13C46	89%	14" Above Tube End
R21C47	87%	14" Above Tube End
R12C63	48%	.5" Above Tubesheet
R19C63	27%	14" Above Tube End

"B" Steam Generator Hot Leg

<u>Tube</u>	<u>Indication</u>	<u>Location</u>
R23C26	55%	Top of Tubesheet
R23C27	43%	Top of Tubesheet
R27C27	41%	Top of Tubesheet
R23C28	53%	Top of Tubesheet
R21C34	43%	Top of Tubesheet
R06C44	55%	.5" Above Tubesheet

All of the above listed tubes were mechanically plugged on April 29, 1982. All of the tubes with indications at the top of the tubesheet or above had identifiable indications during the 1981 refueling outage. Only one of the tubes with indications in the tubesheet area had an identified indication during the 1981 refueling outage. Tube R19C63 had a 25% indication at 14" above the tube end in 1981.

The indications within the tubesheet area are believed to be the result of intergranular attack caused by caustic corrosion. The indications at the top of the tubesheet or above are believed to be remnants of phosphate wastage as evidenced by the fact that they were noted during previous outages. The called indications are not significantly greater than the plugging limit and for the most part the difference in comparison to previous outages is within the expected range of scatter for small volume indications which are masked by a tubesheet signal.

In an attempt to reduce corrosion, the steam generators have been sludge lanced. Also, a crevice flush will be conducted prior to returning the unit to service. The crevice flush removes some of the corrosive materials from the crevice region.

This event is reportable in accordance with Technical Specification 15.6.9.2.A.3.

The Resident Inspector has been notified of this event.