

## (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

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EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

7 8 9		SYSTEM CODE		CAUSE CODE		CAUSE SUBCODE		COMPONENT CODE				COMP. SUBCODE		VALVE SUBCODE					
0	9	C	B	11	E	12	F	13	H	T	E	X	C	H	14	F	15	Z	16
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
(17) LER/RO REPORT NUMBER		EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE				REPORT TYPE		REVISION NO.							
8 2		8 2		0 0 7		0 1				T		0							
21 22		23 24		25 26		27 28 29				30 31		32							
ACTION TAKEN FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS				ATTACHMENT SUBMITTED		NPRD-4 FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER			
B	Z	Z	Z	Z	0 0 0 0	Y				Y		N		W 1 2 0					
33 34	35 36	37 38	39 40	41 42	43 44	45 46	47 48	49 50	51 52	53 54	55 56	57 58	59 60						

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									
ACTIVITY CONTENT										RELEASED OF RELEASE										AMOUNT OF ACTIVITY																																							
1 6 Z 33										Z 34 N/A										35										N/A										36																			

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

PERSONNEL INJURIES		DESCRIPTION	
NUMBER			
1	8	0	0
0	0	0	40
		N/A	

7	8	9	11	12		80
LOSS OF OR DAMAGE TO FACILITY				(43)		
TYPE		DESCRIPTION				
1	9	Z	(42)	N/A		

7 8 9 10  
 PUBLICITY (45) 8204220394 820416  
 ISSUED DESCRIPTION (44) PDR ADQCK 05000266  
 S PDR NRC USE ONLY

NAME OF PREPARER C. W. Fay PHONE: 414/277/2811

ATTACHMENT TO LICENSEE EVENT REPORT 82-007/01T-0

Wisconsin Electric Power Company  
Point Beach Nuclear Plant Unit 1  
Docket 50-266

On 03/25/82 Unit 1 was shut down for a scheduled steam generator eddy current inspection. The 2000 psid primary-to-secondary hydrostatic test condition was established during cool-down of the unit. An 800 psid secondary-to-primary leakage check was performed on both steam generators on 03/29/82. The 800 psid secondary-to-primary leakage check was performed visually with the aid of remote video equipment. The visual inspection was initially performed at 0100 hours on 03/29/82. Due to steam generator humidity conditions, an additional verification inspection was performed at 0900 hours on the same day. The secondary side was held at pressure throughout this interval. The specific conditions identified during the leakage checks are noted below.

"A" STEAM GENERATOR  
HOT LEG

		<u>Original Inspection</u>	<u>Verification</u>
R24C37	Explosive Plug	21 Drops/Min.	16 Drops/Min.
R21C49	Explosive Plug	5 Drops/Min.	Boric Acid Coated
R31C31	Explosive Plug	2 Drops/Min.	1 Drop/Min.
R19C33	Explosive Plug	Dry	<1 Drop/2 Min.
R03C09	Explosive Plug	Boric Acid Coated	Boric Acid Coated
R01C22	Explosive Plug	Boric Acid Coated	Boric Acid Coated
R12C25	Tube	Wet	Wet ~ 1 Drop/10 Min.

COLD LEG

R25C27	Tube	20 Drops/Min.	20-30 Drops/Min.
	(Explosive Plug Removed 10/81)		

"B" STEAM GENERATOR  
HOT LEG

R23C38	Explosive Plug	20 Drops/Min.	20 Drops/Min.
R24C37	Explosive Plug	Boric Acid Coated	Boric Acid Coated
R29C35	Explosive Plug	5 Drops/Min.	5 Drops/Min.
R29C40	Explosive Plug	3 Drops/Min.	3 Drops/Min.
R13C61	Explosive Plug	Boric Acid Coated	Boric Acid Coated
R29C37	Explosive Plug	Boric Acid Coated	Boric Acid Coated
R23C63	Tube	2-3 Drops/Min.	Dry

COLD LEG

R24C50	Explosive Plug	Wet	Not Verified
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4/16/82

The eddy current inspection program, performed this outage, consisted of the following:

1. Inspection of all readily remotely accessible tubes to the first support plate in the hot legs of both steam generators.
2. Inspection, over the U-bend from the leaking side, of the three tubes which were identified as leakers or potential leakers in the visual tubesheet check.
3. Inspection, to the first tube support from the cold leg, of the tubes in the cold leg of "A" steam generator which had either an explosive or mechanical plug removed during the sleeving demonstration in 10/81, and were not subsequently sleeved.

On 04/03/82, verification of all initial steam generator eddy current data for tubes with indications exceeding the plugging limit was completed. Nineteen tubes in the "A" steam generator and nine tubes in the "B" steam generator were verified to have degradation greater than 40%, which is the plugging limit of Technical Specification 15.6.2.A.5.

Of the 2,848 open tubes in the "A" steam generator, 2,835 were inspected and 2,833 of the 2,850 open tubes in the "B" steam generator were inspected. The tubes that were not inspected are as follows:

<u>Number of Tubes Not Inspected</u>		<u>Reason for Not Inspecting</u>
<u>"A"</u>	<u>"B"</u>	
12	14	Contained Template Plugs
1	2	Restricted Tube Ends
0	1	Located near environmental ledge (not accessible with remote equipment).
—	—	
13	17	

These tubes were not inspected because of the radiation exposure associated with moving template plugs, manual eddy current probing, and reworking restricted tube ends. The non-inspected tubes constitute less than 1% of the unplugged tubes, most are not located in the zones where large numbers of defects have occurred, and the overall eddy current results did not indicate the necessity to inspect the tubes. Following is a summary of the eddy current indications and comparisons with the data from the three previous eddy current inspections. A blank entry under the results of previous eddy current inspections in the following table indicates that the tape for that specific inspection was not examined for this comparison.

"A" STEAM GENERATORHOT LEG SIDE TO FIRST SUPPORT PLATE

<u>Tube</u>	<u>Defect</u>	<u>Location</u>	<u>10/81</u>	<u>07/81</u>	<u>12/80</u>
R05C07 *	97%	15" ATE	UDI	UDI	UDI
R11C07 *	UDI	11" ATE		UDI	
R18C07 *	UDI	6" ATE	NT		
R01C13 *	90/95%	14" & 7½" ATE	C	UDI	UDI
R13C33 *	UDI	15" ATE	NDD		
R18C35 *	92%	10-15" ATE	NDD		
R31C37 *	UDI	11" ATE	NC	C	NDD
R18C37 *	UDI	8" ATE	NC	NC	C
R23C38 *	UDI	20" ATE	NC	NC	NDD
R27C38 *	UDI	20" ATE	NC	NC	C
R10C40 *	UDI	Roll to TTS	NC	NC	C
R12C41 *	79%	12" ATE	C/UDI	C	NDD
R11C43 *	87%	18-20" ATE	C/UDI	UDI	UDI
R18C44 *	UDI	20" ATE	NDD		
R15C20 *	UDI	8-14" ATE	NC	NC	NC
R29C45 *	79%	7½" ATE	NDD		
R29C47 *	UDI	8-14" ATE	NC	NC	NC
R09C55 *	96%	16-19" ATE	NDD		
R12C58 *	88%	18-20" ATE	NDD		
R13C59 *	UDI	20" ATE	NDD		
R15C59 *	58%	7-20" ATE	C/UDI	NDD	
R15C60 *	UDI	14-18" ATE	NC	NC	NC
R11C62 *	52%	21" ATE	NDD		
R12C62 *	93%	18-21" ATE	NDD		
R07C64 *	89%	12" ATE	NDD		
R15C65 *	UDI	6-19" ATE	NT	NDD	
R05C68	<20%	½" ATS	NC	NC	NC
R15C68 *	93%	10-15" ATE	C/UDI	C	NDD
R05C69	<20%	½" ATS	NC	NDD	
R15C71 *	UDI	8" ATE	NC		
R05C72 *	78%	7½" ATE	NDD		
R08C73 *	96%	17" ATE	NDD		
R09C73 *	94%	17" ATE	NDD		
R08C74 *	92%	17" ATE	NDD		
R06C81	<20%	1" ATS	NC	NC	NC
R14C22 *	UDI	14-17" ATE	NDD		
R15C22 *	UDI	14" ATE	NDD		
R18C23 *	69%	19" ATE	NDD		
R15C25 *	73%	16" ATE	NDD		
R15C27 *	UDI	10-15" ATE	NDD		
R36C29	36%	TTS	NC	NC	NC

COLD LEG

R26C53	25%	2" ATS
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"B" STEAM GENERATORHOT LEG TO FIRST SUPPORT PLATE

R02C15 *	UDI	6-11" ATE	NC	NC	NC
R02C17 *	63%	8" ATE	NDD	NDD	
R24C25 *	72%	11" ATE	NDD		
R27C30	<20%	1" ATS	NC	NC	NC
R21C34 *	90%	5" ATE	NDD		
R08C35 *	93%	10" ATE	NDD	NDD	
R14C40 *	30%, UDI	1" & 20" ATE	NC	NC	NDD
R10C42 *	73%	21" ATE	NDD		
R26C42 *	30%, UDI	21" & 19-21" ATE	NC	NC	NDD
R13C47 *	UDI	21" ATE	NDD		
R26C50 *	91%	12" ATE	NC	NC	NC
R01C47 *	95%	21" ATE	C	DNA	NDD
R22C59 *	72%	17" ATE	NDD		
R21C66 *	UDI	21" ATE	NC	NC	NDD
R03C47 *	91%	20" ATE	NT	NT	NT



DNA - Data Not Available  
ATE - Above Tube End  
NDD - No Defect Detected  
UDI - Undefinable Indication  
ATS - Above Tubesheet  
TTS - Top of Tubesheet  
NT - Not Tested  
NC - No Change  
C - Change  
\* - Tubes Plugged This Outage

Nineteen tubes in the "A" steam generator and nine tubes in the "B" steam generator contained indications exceeding the 40% plugging limit. These tubes and the two leaking tubes in the "A" steam generator have been mechanically plugged. Of the 28 indications exceeding the plugging limit, eleven are new indications in the "A" steam generator and six are new indications in the "B" steam generator. The other indications identified were either previously noted as undefinable indications or defects that previously existed, but were not identified in prior inspections. As in the past, all indications were small volume. As a conservative measure, all of the tubes containing undefinable indications have been plugged to further insure the reliability of the unit. The tubes marked with an asterisk (\*) in the preceding table have been plugged. Correct plugging was visually verified via the use of tubesheet photography.

The explosive plugs verified to be leaking in excess of two drops per minute ("A" steam generator hot leg, R24C37; "B" steam generator hot leg, R23C38, R29C35, and R29C40) have been repaired with a welded plug. Based on the history of the plugs, personnel radiation exposure encountered during weld repair and future steam generator replacement, the plugs leaking at a very low rate ( $\pm$  one drop per minute) were not weld repaired this outage.

Eddy current examinations of the tubes noted to be wet or leaking during the visual leakage check revealed no indications. The tubes verified to be leaking were plugged. Tube R12C25 in the "A" steam generator was plugged with mechanical plugs in both hot and cold legs. Tube R25C27 in the "A" steam generator was plugged with a welded plug in the hot leg since it was sleeved during the 10/81 outage, and mechanically plugged in the cold leg. The type, or location, of the defect(s) existing in these tubes is unknown. They were both inspected through the U-bend from the leaking side.

Eddy current examinations of the cold leg ends of tubes which had either mechanical or explosive plugs removed during the sleeving demonstration of 10/81 and which were not subsequently sleeved revealed one indication in Tube R26C53 of 25% at 2" above the tubesheet from the cold leg side. The indication was previously reported during the 1978 refueling outage steam generator inspection. No other indications were identified.

An eddy current exam of the 12 tubes sleeved during the 10/81 refueling outage was also performed this outage. The exam consisted of using the same probe type and eddy current parameters used in 10/81 and comparing the signals to the 10/81 signals. There were no noticeable changes in the eddy current signals.

To minimize the rate of corrosion, the Unit 1 primary system was returned to power at a reduced hot leg temperature of 557°F. In addition, a crevice flush was performed before the unit was returned to service to remove impurities from the tubesheet crevice.

The NRC Resident Inspector has been notified of these findings. This event is reportable in accordance with Technical Specification 15.6.9.A.3 and is similar to others.