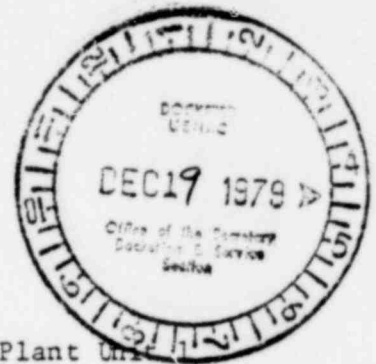


Wisconsin's
Environmental
Decade

December 17, 1979

Hon. John F. Ahearne, Chairman
Hon. Joseph M. Hendrie, Commissioner
Hon. Victor Gilinsky, Commissioner
Hon. Richard T. Kennedy, Commissioner
Hon. Peter A. Bradford, Commissioner
U. S. Nuclear Regulatory Commission
1717 H Street, N.W.
Washington, D. C. 20555



Re: Point Beach Nuclear Plant Unit
Docket No. 50-266

Dear Chairman Ahearne and Commissioners Hendrie, Gilinsky,
Kennedy and Bradford:

Enclosed please find five copies of the submission of Wisconsin's Environmental Decade, Inc., in the above-matter, made this day, requesting of the Staff a hearing on its Confirmatory Order dated November 30, 1979.

Also on November 30, 1979, the Staff issued its Director's Decision under 10 C.F.R. 2.206 denying our Petition, dated November 14, 1979. We understand that the agency's regulations do not permit persons to file petitions with the Commission seeking its review of director's decisions. (See: 10 C.F.R. 2.206(c)(2).) However, we are certain that the Commission will want as complete and accurate a record as possible to conduct its own review of the Director's Decision during its twenty day review period. (See: 10 C.F.R. 2.206(c)(1).) Thus, we are enclosing copies of our request to the Staff for a hearing on the Confirmatory Order to assist in providing that complete and accurate record.

At the same time, we would underscore a matter of the utmost gravity which is contained in the attached papers. As you may recall, the safety concerns surrounding steam generator tube degradation involve the question of whether secondary-to-primary inleakage through ruptured tubes during a LOCA will cause steam binding and prevent adequate reflooding of the core.

On November 28, 1979, the Staff informed the Commission that in the case of Point Beach there still existed satisfactory bases for continued operation because the corrosion was confined to the crevice in the tube-sheet where ruptures would be more unlikely and any leakage which did occur would be throttled.

We have just received a document, which the Staff had since November 19, 1979, showing that during the October 1979 refueling there were eddy current test indications of defects one-half inch above the tubesheet in one tube and at the top of the tubesheet in four other tubes. (A copy of

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Hon. Ahearn, Hendrie, Gilinsky
Kennedy and Bradford
December 17, 1979
Page 2

this document, Licensee Event Report No. 79-017/01T-0, is appended to this letter for the convenience of the Commission, with the salient information found in Tables 1 and 2 of the Report.)

That is to say, not only does the primary basis for continued operation of Point Beach 1 not exist, but it appears that the Staff was aware that the basis did not exist at the time it informed the Commission that the basis did exist.

This, in addition to the other material set forth in the attached request to the Staff for a hearing on the Confirmatory Order, show, in our view, that all necessary factors were not considered by the Staff and that the Director's Decision is demonstrably untenable. (See: In the Matter of Consolidated Edison Company, 2 N.R.C. 173, at 175.)

The operating license for Point Beach 1 should be suspended forthwith pending replacement of the steam generator or other appropriate permanent solution and an adjudicatory hearing should be held on the generic issues raised by steam generator tube degradation.

Sincerely,

WISCONSIN'S ENVIRONMENTAL DECADE, INC.

by *Kathleen M. Falk*
KATHLEEN M. FALK
General Counsel

KMF/mt

Enclosures:

- (1) Licensee Event Report No. 79-017/01T-0
 - (2) Request for Hearing on Confirmatory Order
 - (3) Memorandum in Support of Request for Hearing on Confirmatory Order
- cc: Gerald Charnoff, Esq.
Mr. Edson G. Case

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RECEIVED DEC 13 1979

DSB



Wisconsin Electric POWER COMPANY
231 W. MICHIGAN, P.O. BOX 2046, MILWAUKEE, WI 53201

POOR ORIGINAL

November 16, 1979

Mr. J. G. Keppler, Regional Director
Office of Inspection and Enforcement,
Region III
U. S. NUCLEAR REGULATORY COMMISSION
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Dear Mr. Keppler:

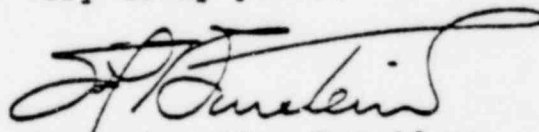
DOCKET NO. 50-266
POINT BEACH NUCLEAR PLANT UNIT 1
LICENSEE EVENT REPORT NO. 79-017/01T-0



Enclosed is Licensee Event Report No. 79-017/01T-0 (a 14-day followup report) with an attachment which provides a description of an event reportable in accordance with Technical Specification 15.6.9.2.A.3, "Abnormal degradation discovered in fuel cladding, reactor coolant pressure boundary, or primary containment."

We will provide you with an additional summary report including the results of our investigations of the tube samples which were removed for metallurgical analysis upon completion of our review of this data. This matter will be the subject of a meeting with representatives of the Office of Nuclear Reactor Regulation in Bethesda, Maryland, on November 20, 1979.

Very truly yours,


Executive Vice President

Sol Burstein

Enclosure

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LICENSEE EVENT REPORT

CONTROL BLOCK: 1

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 WIPBHI 200-000000-000 341111 4 5
7 8 9 14 15 25 26 57 CAT 58
 LICENSEE CODE LICENSE NUMBER LICENSE TYPE JO

CON'T
01 L 605000266 7110379 8111679 9
7 8 60 61 68 69 74 75 83
 REPORT SOURCE DOCKET NUMBER EVENT DATE REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES 10

02 Steam generator tube eddy current testing during refueling seven
03 and completed 11-3-79 revealed 69 defective tubes in the "A" steam
04 generator and 62 defective tubes in the "B". All but five of the
05 defects were in the tubesheet crevice region and all were on the inlet
06 side. 100% of the inlet sides of the tubes in both generators were
07 examined up to the first support by multifrequency eddy current
08 techniques. This event is reportable per T.S. 15.6.9.2.A.3 and similar
7 8 9 previous LERS.

09 CB 11 E 12 D 13 HTEXCH 14 F 15 Z 16
7 8 9 10 11 12 13 18 19 20
 SYSTEM CODE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP SUBCODE VALVE SUBCODE
17 79 017 01 T 0
21 22 23 24 25 26 27 28 29 30 31 32
 LER NO. REPORT NUMBER EVENT YEAR SEQUENTIAL REPORT NO. OCCURRENCE CODE REPORT TYPE REVISION NO.
B X C Z 0000 Y Y N W120
33 34 35 36 37 40 41 42 43 44
 ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS ATTACHMENT SUBMITTED NPRO-4 FORM SUB. PRIME COMP SUPPLIER COMPONENT MANUFACTURER

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS 27

10 Three inlet tubesheet samples of tubing were removed for metallurgical
11 evaluation. Plugs were welded in the three tubesheet holes. The
12 defective tubes were explosively plugged. Also explosively plugged
13 after leak testing were two dripping tubes in the "B" steam generator
14 and one in the "A" steam generator.
7 8 9

15 H 100 29 N/A C 31 Eddy current testing 32
7 8 9 10 12 13 44 45 46 80
 FACILITY STATUS % POWER OTHER STATUS METHOD OF DISCOVERY DISCOVERY DESCRIPTION
16 Z Z N/A N/A N/A 35 36
7 8 9 10 11 44 45 46 80
 ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY LOCATION OF RELEASE

17 000 Z 39 N/A 39
7 8 9 11 12 13 30
 PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION

18 000 40 N/A 41
7 8 9 11 12 13 30
 PERSONNEL INJURIES NUMBER DESCRIPTION

19 Z 42 N/A 43
7 8 9 10 11 12 43
 LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION

20 Y 44 Newspaper, TV, and radio coverage 45
7 8 9 10 11 45
 PUBLICITY ISSUED DESCRIPTION

NAME OF PREPARER Sol Burstein

PHONE: (414) 277-2121

POOR ORIGINAL

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NRC USE ONLY

ATTACHMENT TO LICENSEE EVENT REPORT NO. 79-017/01T-0

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

Steam generator tube eddy current testing was conducted in both steam generators on October 16 and 18, 1979, for further evaluation of certain tubes examined during an outage in August 1979. A post outage review of the August 100% eddy current inspection, a 400 KHz program, had raised questions on a number of tubes which it was felt should be verified by an additional multifrequency inspection. Thirty-eight (38) tubes were inspected in the hot legs of both steam generators.

Of the 38 tubes inspected in the "A" steam generator, 12 tubes were found defective. Of the tubes inspected in the "B" steam generator, six tubes were found defective. All defects found were located in the tubesheet region.

The tube at position R15C45, one of the defective tubes in the "A" steam generator, was chosen to be removed for metallurgical evaluation.

While doing profilometry inspections of the tubes adjacent to R15C45 prior to its removal, a defect was found in a tube which had not been part of the original sample program. Discovery of this additional defective tube required an expanded inspection program in accordance with Technical Specification Table 15.4.2-1.

Prior to commencing the expanded eddy current inspection, the tube at position R15C45 in the "A" hot leg was cut just below the second support plate and removal procedures began on October 20. With pulling pressures up to 25,380 pounds and several equipment failures, five pieces of tube totalling approximately 21 inches in length were removed on October 21 and 22.

An examination of the tube portions, plus a later eddy current probe verification, indicated that the pulling operation had broken off the tube at a known defect, approximately one inch below the top of the tubesheet.

Following completion of the removal of the sections of tube from R15C45, a 2S (approximately 199) tube sample eddy current inspection was commenced in the "A" hot leg on October 23. The analysis of the 199 tubes determined that 28 of the tubes were defective. All defects in the tubes were located within the tubesheet. The inspection program was again expanded in accordance with Technical Specification Table 15.4.2-1 to 100% of the tubes in the "A" inlet. This also required that an eddy current program be conducted in the "B" steam generator.

The 100% multifrequency eddy current inspection in the "A" inlet commenced on October 24 and was completed on October 27. The analysis of the eddy current data showed 69 tubes with defects >40% which would require plugging of the tubes. See Table 1 for details.

Following completion of eddy current testing in the "A" steam generator inlet, a decision was made to remove two additional tube samples from the generator. The first of the two tubes was chosen as a good tube from an area where no deep crevice tubesheet defects were evident. The tube at position R20C73 was cut just below the second support plate on October 28 and four pieces of tube totalling over 140 inches were removed on October 29. The breaking force for this tube was 10,400 pounds, the pulling force varied between 3,000 and 1,500 pounds.

The final tube to be removed was chosen as a good tube with no previous defects located in an area of the tube bundle where numerous deep crevice defects have been found. This tube at position R22C37 was cut just below the first support plate on October 29. The tube broke loose at a loading of 25,380 pounds on October 30 and three sections totalling 74 inches were removed on October 31. After breaking loose, the pulling force varied between 4,400 and 10,000 pounds during this operation.

The holes from which the three tubes were removed from the "A" inlet were weld repaired on November 2 and 3. Prior to the weld plugging of the hole at R15C45, a stabilizing rod was inserted 132 inches up into the tube to tie the tube which was cut just below the second support plate, but broken off one inch below the tubesheet top, to form a single member with the original tube and tubesheet hole.

The 2S (approximately 199 tube) multifrequency eddy current inspection of the "B" hot leg was commenced on October 29 and was completed on November 3. The analysis of the eddy current data showed 62 tubes with defects greater than 40%, which would require the tubes to be plugged. See Table 2 for details.

Prior to explosive plugging, an 800 psi secondary side leak test was performed on the "B" steam generator on November 5 to determine if any of the 90% (plus) defective tubes would leak or if other leaks could be generated by the test. Seven leaks were identified. Four of the leaks were leaking plugs in previously explosively plugged tubes, the other three being tube leaks. Of the tubes identified as leaking, one was previously identified as defective during the eddy current program; two tubes with extremely small leaks, in the range of one drip every ten seconds, were not identified as defective by the eddy current program.

The four leaking plugs were weld repaired in the "B" inlet during the week of November 5. The defective tubes totalling 67 were explosively plugged during the period between November 6 and 8.

In summary, a total of 68 tubes were plugged in the "B" steam generator on the above dates: 62 tubes had defects greater than 40%; three tubes had defects less than 40%, but were plugged as a conservative measure; two tubes were found leaking during the leak test; and one tube, a sound tube, was plugged by mistake. See Table 2 for details.

An 800 psi secondary side leak test was scheduled to be performed in the "A" steam generator on November 7. Preparations for the leak test were terminated abruptly during the initial filling of the generator when water was found to be issuing from a tube directly over the cold leg manway and out the manway. It was immediately recognized that a scheduling error had been made in that the "A" steam generator should not have been filled prior to explosive plugging the outlet side of the tubes opened up to the cold leg side by removal of the three sample tube lengths on the hot leg side. For further details, reference Licensee Event Report No. 79-019/01T-0, "Inadvertent Reactor Coolant System Dilution During Refueling Shutdown". The outlet tube ends were explosively plugged on November 8.

The 800 psi secondary side leak test was performed in the "A" steam generator on November 9 prior to explosive plugging of the defective tubes. One leaking tube (R24C32) was noted which had been previously identified as having a 92% defect by eddy current testing.

Explosive plugging of the defective tubes in the "A" steam generator on November 12 revealed one additional leaking tube (one drip every 20 seconds), R29C25, with 0% defect indicated during the eddy current program. This final tube was plugged on November 12.

In summary, a total of 77 tubes were explosively plugged in the "A" steam generator: 69 tubes had defects greater than 40%; three tubes had defects less than 40%, but were plugged as a conservative measure; two tubes were plugged by mistake; one tube was identified as a leaker. Two good tubes were plugged because of the above described tube removal program. See Table 1 for details.

This event is reportable per Technical Specification 15.6.9.2.A.3.

TABLE 1

Plugged Tubes with Defects X40%

<u>Tube</u>	<u>% Defect</u>	<u>Location</u>
R18C24	84%	18" above tube end
R24C32	91%	5" above tube end
R09C24	93%	11" above tube end
R10C41	94%	18" above tube end
R10C42	95%	21" above tube end
R22C41	87%	21", 15" and 5" above tube end
R15C45	89%	20" above tube end
R23C62	89%	7" above tube end
R19C54	83%	20" above tube end
R19C53	92%	20" above tube end
R12C54	92%	20" above tube end
R12C55	93%	18" above tube end
R08C53	93%	20" above tube end
R12C53	71%	17" above tube end
R13C53	75%	20" above tube end
R09C51	89%	20" above tube end
R13C50	95%	20" above tube end
R05C50	90%	11" above tube end
R13C49	92%	20" above tube end
R15C49	88%	21" above tube end
R19C49	91%	20" above tube end
R15C47	92%	20" above tube end
R10C46	96%	20" above tube end
R10C45	93%	20" above tube end
R17C45	92%	20" above tube end
R19C45	90%-81%	20", 21" above tube end
R15C44	97%	21" above tube end
R12C44	84%	12" above tube end
R23C41	80%	6" above tube end
R27C40	81%	20" above tube end
R24C40	93%	4" to 12" above tube end
R23C39	65%	5" above tube end
R27C39	59%	21" above tube end
R23C37	87%	10" above tube end
R24C36	82%	6" above tube end
R22C36	76%	11" above tube end
R27C35	90%	21" above tube end
R23C33	89%	3" to 8" above tube end
R20C32	42%	20" above tube end
R08C43	82%	15" above tube end
R11C37	88%	17" above tube end
R03C36	91%	10" above tube end
R13C26	95%	16" above tube end
R11C26	58%	19" above tube end
R20C25	92%	17" above tube end
R21C45	79%	21" above tube end
R22C46	55%	Top of tubesheet
R29C46	84%	21" above tube end

Table 1
Page 2

<u>Tube</u>	<u>% Defect</u>	<u>Location</u>
R20C40	99%	19" to 21" above tube end
R30C53	65%	14" above tube end
R17C53	73%	15" above tube end
R15C51	81%	20" above tube end
R05C56	87%	10" above tube end
R30C57	80%	Top of tubesheet
R17C57	76%	8" above tube end
R09C57	71%	20" above tube end
R15C58	85%	18" above tube end
R05C59	97%	10" above tube end
R15C61	73%	17" above tube end
R13C61	94%	19" above tube end
R13C62	81%	21" above tube end
R14C62	95%	15" above tube end
R13C63	96%	21" above tube end
R12C63	76%	21" above tube end
R13C64	91%	17" above tube end
R23C64	72%	19" above tube end
R13C65	92%	19" above tube end
R05C76	85%	8" above tube end
R15C62	94%	20" above tube end

Tubes Plugged as Conservative Measure "A" Steam Generator

R19C38	34%	8" above tube end
R28C25	26%	14" above tube end
R24C54	37%	21" above tube end

Tubes Plugged by Mistake "A" Steam Generator

R24C30
R23C63

Tube Plugged - Leaker

R29C25

TABLE 2

Plugged Tubes with Defects >40%

<u>Tube</u>	<u>% Defect</u>	<u>Location</u>
R14C61	86%	20" above tube end
R14C48	86%	21" above tube end
R23C43	63%	16" above tube end
R24C30	90%	8", 14", 16" above tube end
R06C39	90%	11" above tube end
R06C35	87%	12" above tube end
R22C31	90%	5" above tube end
R20C32	89%	17" above tube end
R23C32	94%	10" above tube end
R22C33	78%	20" above tube end
R25C38	90%	6" above tube end
R23C41	87%	3" to 11" above tube end
R12C43	91%	21" above tube end
R24C45	84%	6" above tube end
R23C45	73%	6" to 8" above tube end
R22C45	92%	15" above tube end
R14C46	93%	21" above tube end
R24C46	75%	13" above tube end
R26C54	93%	20" above tube end
R09C16	83%	3" to 8" above tube end
R11C18	83%, 92%	15" and 18" above tube end
R04C19	77%	8" above tube end
R11C24	73%	20" above tube end
R17C27	78%	11" above tube end
R12C27	72%	20" above tube end
R06C27	64%	20" above tube end
R11C29	85%	21" above tube end
R11C30	92%	21" above tube end
R13C30	53%	21" above tube end
R13C31	92%	19" above tube end
R04C32	76%	6" above tube end
R09C33	86%	14" above tube end
R27C36	95%	5" above tube end
R04C37	90%	4" above tube end
R28C38	45%	Top of tubesheet
R09C39	62%	19" above tube end
R08C39	95%	8" to 13" above tube end
R32C42	61%	1/2" above tubesheet
R29C44	65%, 50%, 90%	20", 10", 5" above tube end
R30C44	83%	Top of tubesheet
R31C44	90%	3" to 13" above tube end
R29C45	77%	11" above tube end
R10C46	87%	20" above tube end
R27C50	89%	3" to 15" above tube end
R22C56	91%	10" to 15" above tube end
R20C57	82%	17" above tube end
R21C57	83%	6" above tube end

Table 2
Page 2

<u>Tube</u>	<u>% Defect</u>	<u>Location</u>
R20C58	93%	14" to 21" above tube end
R03C58	90%	3" above tube end
R06C59	90%	15" above tube end
R15C59	84%	20" above tube end
R08C60	89%	10" above tube end
R21C61	94%	5" to 10" above tube end
R23C62	96%	5" above tube end
R13C62	61%	20" above tube end
R03C62	48%	15" above tube end
R21C64	76%	7" above tube end
R08C65	64%	12" above tube end
R10C66	40%	13" above tube end
R01C68	95%	11" above tube end
R24C71	93%	5" above tube end
R02C77	95%	3" above tube end

Tubes Plugged as Conservative Measure "B" Steam Generator

R25C36	32%	21" above tube end
R13C39	36%	15" above tube end
R13C59	36%	20" above tube end

Tube Plugged by Mistake "B" Steam Generator

R09C32

Tubes Plugged - Leakers

R23C47
R20C39

Leaking Plugs Weld Repaired "B" Steam Generator (Inlet)
(RE: These plugs inserted during previous outages.)

R22C41
R23C31
23C50
21C26