



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

June 9, 1980

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 NOS. 50-266 AND 50-301  
FURTHER RESPONSE TO IE BULLETIN 79-14  
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

IE Bulletin 79-14 requires licensees to verify that the as-built safety-related piping systems conform to the as-designed seismic analysis and acceptance criteria. This letter provides a progress report on our Bulletin compliance program. This report is our sixth submittal and supplements our previous responses.

Our March 7, 1980 submittal provided a four page table showing the status of the piping stress analysis and pipe support analysis that was in progress at that time. Since that submittal, the following significant portions of our program have been completed:

- a. As of May 23, 1980, the piping analysis has been completed for 84 of the 85 previously tabulated drawings. The evaluation of the pipe supports has also been completed for these 84 drawings.
- b. Inspections of the piping systems inside the Unit 2 containment structure were completed during the recent April 1980 refueling outage. The inspections started on April 14 and were essentially complete by April 25, 1980. The inspections required about 1700 manhours and included about 7100 feet of pipe and about 700 pipe hangers and supports. While variations from the design drawings were noted during these inspections, all engineering evaluations were completed by April 26 and all systems were judged to be capable of performing their function in the event of a seismic occurrence.
- c. Licensee Event Report Numbers 80-006 for Unit 1 and 80-004 for Unit 2 were issued on May 5, 1980. These reports describe an unacceptable piping connection on the component cooling water

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pipng for both units. Pipe supports have been installed to assure that this piping meets the acceptance criteria.

The original Point Beach Nuclear Plant acceptance criteria for the seismic stress analysis of pressure piping systems are specified in the PBNP FFDSAR, Appendix A, Table A.3-1, page 3. The stress limits are clear except for the faulted condition where Table A.3-1 references the design limit curves of WCAP-5890, Revision 1. These limit curves are shown in Figures 10 through 25 of WCAP-5890 and show various degrees of conservatism depending upon the conditions evaluated. Page seventeen of the WCAP, which is not referenced in the FFDSAR, identifies the piping faulted condition design stress limit as 1.8S.

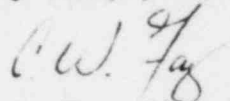
For our analysis program we have normally met the 1.8S faulted condition acceptance criteria. However there have been five instances where the stress acceptance criterion has been increased to 2.4S. We consider that the higher faulted condition acceptance criterion is justified, on a case-by-case basis, for the following reasons:

- a. Use of the original PBNP seismic response spectra utilized only 0.5% damping which is conservative. Current NRC regulatory guides allow higher damping factors.
- b. The current corresponding ASME Code stress acceptance criterion is 2.4S.

The completion of the piping inspections in the Unit 2 containment has added about 33 piping isometric drawings to our analytical program; thus, the total number of isometric drawings in the PBNP IE Bulletin 79-14 program is presently 118. In total, these drawings describe over 33,000 feet of pipe and more than 3000 pipe supports.

Attached hereto is an updated analytical schedule for the remaining portion of our program. This attachment supplements that contained in our March submittal and identifies only those drawings which were not fully completed as of May 23, 1980. The attached schedule indicates that all remaining piping stress and pipe support analyses will be completed by about September 30, 1980. Accordingly, we anticipate that our next report will be submitted in October 1980. If you require any additional information at this time, please contact us.

Very truly yours,



C. W. Fay, Director  
Nuclear Power Department

Attachment

Copies to: Office of Inspection and Enforcement  
Division of Reactor Operations Inspection

Mr. A. Schwencer, Chief  
Operating Reactors Branch 1

NRC Resident Inspector  
Point Beach Nuclear Plant

POINT BEACH NUCLEAR PLANT  
STATUS OF STRESS ANALYSIS & PIPE SUPPORT REVIEW  
FOR NRC IE BULLETIN 79-14  
(5/23/80 ISSUE)

STRESS ISO. DWG. NO.	INSP. PKG. NO.	PIPING SYSTEM LINE NO.	LOCATION		STATUS OF STRESS ANALYSIS OR DATE	STATUS OF PIPE SUPPORT REVIEW OR DATE <sup>1</sup> (AL) BEC)	ANALYSIS BY	APPROXIMATE MODIFICATIONS REQUIRED
			UNIT 1	UNIT 2				
A. <u>Drawings Also Tabulated in 3/7/80 Submittal</u>								
P-105	7-2	WD-151R-8	0		Done	Done	W/BEC	10
	7A	WD-151R-8	I	I	EMBEDDED	----	----	0
	105	WD-151R-8		0	6/13/80	6/27/80	BEC	
P-113	1-2	HB-19	0		6/3/80	6/6/80	BEC-JB	
P-215	1-5	HB-19		0	Done	Done	BEC-JB	3
	215	HB-19		I	6/20/80	7/11/80	BEC	
P-216	1-5	HB-19		0	Done	Done	BEC-JB	1
	216	HB-19		I	6/20/80	7/11/80	BEC	
P-219	25	SI-1501R-1 & -3		0	Done	Done	W	4
	219	(Same)		I	7/18/80	8/8/80	BEC	
P-220	25	SI-1501R-1		0	Done	Done	W	(See P-219)
	220	(Same)		I	7/18/80	3/8/80	BEC	
P-232	30	AC-601R-1, -2, -3		0	Done	Done	W	6
	232	SI-151R-X		I	7/7/80	8/1/80	BEC	
B. <u>New Listings</u>								
To Be Assigned	38	CH-601R	0		Not required; 0 variations		----	0
P-159	4	JG-4 (non-seismic)	Common		Done	Done	BEC-JB	5
P-163	163	HB-19 in Pumphouse	Common		7/18/80	8/8/80	BEC	
P-165	165	SFC 4, -5, -6, -7, & 11 (Pumps to Pool)	Common		8/22/80	9/19/80	BEC	

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STRESS ISO. DWG. NO.	INSP. PKG. NO.	PIPING SYSTEM LINE NO.	LOCATION		STATUS OF STRESS ANALYSIS OR DATE	STATUS OF PIPE SUPPORT REVIEW OR DATE <sup>1</sup> (ALL BEC)	ANALYSIS BY	APPROXIMATE MODIFICATIONS REQUIRED
			UNIT 1	UNIT 2				
P-166	166	SFC-1, -2, & -3	Common		8/22/80	9/19/80	BEC	
P-167	167	Steam to Evap. (SA-601)	Common		8/22/80	9/19/80	BEC	
P-168	168	SWP-4, -5, -6, & -7 (From HXs to JB-2)	Common		8/22/80	9/19/80	BEC	
P-169	169	SWP-1, -2, & & -3, (From HB-19 to HXs)	Common		8/29/80	9/26/80	BEC	
P-170	170	Gas Stripper CH-19-152Q	Common		8/29/80	9/26/80	BEC	
P-171	171	Gas Stripper CH-18-152Q	Common		8/29/80	9/26/80	BEC	
P-208	208	EB-1		I	7/18/80	8/18/80	BEC	
P-212	212	EB-9		I	6/27/80	7/18/80	BEC	
P-218	218	SI-2501R-4 RC-2501R-5		I	6/20/80	7/11/80	BEC	
P-226	226	SI-301R-1		I	7/25/80	8/15/80	BEC	
P-229	229	SI-301R-1		I	8/8/80	8/29/80	BEC	
P-230	230	AC-152N-4		I	6/27/80	7/18/80	BEC	
P-236	236	SI-601R-2 SI-2501R-5 RC-2501R-5		I	7/25/80	8/15/80	BEC	
P-237	237	SI-902R-1 SI-2501R-1 SI-2501R-2 RC-2501R-7		I	7/25/80	8/29/80	BEC	
P-238	238	HB-19		I	7/7/80	8/1/80	BEC	
P-239	239	EB-10		I	6/20/80	7/18/80	BEC	

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			UNIT 1	UNIT 2				
P-242	242	EB-10		I	6/20/80	7/18/80	BEC	
P-243	423	RC-2501R-1		I	7/7/80	8/8/80	BEC	
P-244	244	RC-2501R-2		I	7/7/80	8/8/80	BEC	
P-245	245	RC-2501R-Z		I	7/7/80	8/8/80	BEC	
P-246	246	RC-2501R Connections		I	8/8/80	8/29/80	BEC	
P-247	247	CH-601R-1		I	6/20/80	7/11/80	BEC	
P-248	248	AC-601R-2 AC-601R-6 AC-2501R-1		I	6/20/80	8/29/80	BEC	
P-250	250	AC-152N-4		I	6/20/80	7/18/80	BEC	
P-251	251	AC-152N-4		I	8/18/80	9/2/80	BEC	
P-254	254	CH-2501R-4		I	8/8/80	9/2/80	BEC	
P-257	257	PA-151R-1		I	8/8/80	9/2/80	BEC	
P-258	258	Main Coolant		I	Not required; 0 variations		---	0
P-262	262	RC-601R-2 (non-seismic)		I	7/15/80	8/8/80	BEC	

DEFINITIONS:

I - Inside Containment                      W - Westinghouse Electric Corporation  
O - Outside Containment                    JB - Subcontractor to Bechtel  
BEC - Bechtel Power Corporation

1. The completion of the pipe support review means that the number and type of modifications, if required, are known but drawings for construction are not yet available.