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

August 27, 1979

Mr. B. G. Keppler, 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
RESPONSE TO IE BULLETIN 79-17
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

Your letter dated July 26, 1979, forwarded to us IE Bulletin No. 79-17, which described incidents of cracking in stainless steel piping containing stagnant oxygenated borated water. Attached to Bulletin No. 79-17 was IE Circular 76-06. IE Bulletin 79-17 requested information concerning the safety related stainless steel piping containing stagnant oxygenated borated water at the Point Beach Nuclear Plant and required that certain visual and volumetric examinations be performed. Attached to this letter is the information requested by IE Bulletin 79-17. It is our intention to perform the required visual and volumetric examinations on the applicable piping welds prior to October 24, 1979.

We believe the information supplied in the attachment is responsive to the requests made in IE Bulletin 79-17. Please advise us if you require further information.

Very truly yours,

C. W. Fay, Director
Nuclear Power Department

Attachments

Copy to: Director
Division of Reactor Operations Inspection
Office of Inspection and Enforcement

Mr. A. Schwencer, Chief
Operating Reactor Branch 1

Blind Copy to Messrs. C. S. McNeer, Sol Burstein, R. H. Gorske/A. W. Finke, D. K. Porter, G. A. Reed, Gerald Charnoff
(All with Enclosures)

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AUG 29 1979

ATTACHMENT

DOCKET NOS. 50-266 AND 50-301
RESPONSE TO IE BULLETIN 79-17
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

1. Conduct a review of safety related stainless steel piping systems within 30 days of the date of this Bulletin to identify systems and portions of systems which contain stagnant oxygenated borated water. These systems typically include ECCS, decay/residual heat removal, spent fuel pool cooling, containment spray and borated water storage tank (BWST-RWST) piping.

   (a) Provide the extent and dates of the hydrotests, visual and volumetric examinations performed per 10 CFR 50.55a(g) (Re: IE Circular 76-06 enclosed) of identified systems. Include a description of the non-descriptive examination procedures, procedure qualifications and acceptance criteria, the sampling plan, results of the examinations and any related corrective actions taken.

RESPONSE:

The safety-related stainless steel piping systems at the Point Beach Nuclear Plant have been reviewed and those portions of the systems that contain stagnant oxygenated borated water have been identified. The piping runs considered stagnant for this purpose are those in which the water is flushed or circulated at a nominal interval greater than one month. As required by IE Bulletin 79-17, we are planning to ultrasonically inspect approximately ten percent of the normally accessible welds in the piping runs so identified if they have not been previously ultrasonically inspected.

Prior to issuance of IE Circular 76-06, but with knowledge of the events which occurred at the R. E. Ginna Nuclear Plant, several representative welds in the Point Beach Emergency Core Cooling System containing stagnant borated water were inspected. The examinations were performed by Southwest Research Institute personnel using Southwest Research Institute procedure SwRI-NDT-800-36, "Manual Ultrasonic Examination of Thin Wall Piping Welds". No cracks or other defect indications were found and no corrective action was necessary. A copy of our reply to IE Circular 76-06 showing the welds examined, the results of the examinations and the calibration standard used

1.(a). Continued . . .

is attached for your information. All of the safety-related piping considered will be subjected to hydrostatic testing and visual examination as part of our normal inservice inspection performed in accordance with the 1974 Edition of Section XI of the ASME Boiler and Pressure Vessel Code with Addenda through Summer 1975.

1.(b) Provide a description of water chemistry controls, summary of chemistry data, any design changes and/or actions taken, such as periodic flushing or recirculation procedures to maintain required water chemistry with respect to pH, B, CL, F, O_2.

RESPONSE:

The chemistry of the water in these piping systems is controlled by controlling and sampling the water in the sources of water to these systems. The two possible sources of water to the safety-related piping containing borated water are the Refueling Water Storage Tank and the Boric Acid Storage Tanks. The normal source is the Refueling Water Storage Tank.

The Refueling Water Storage Tank is normally sampled once each week for chlorides, fluorides, and boron. The chlorides and fluorides are each administratively controlled to less than 0.15 parts per million. Analyses of the samples have consistently shown chlorides and fluorides as less than 0.15 parts per million. The boron concentration in the Refueling Water Storage Tank is controlled to a minimum value of 2000 parts per million. Every two weeks, a small portion of the water in the Refueling Water Storage Tank is recirculated through the tank using the Refueling Water Circulating Pump for the primary purpose of flushing the outlet piping in order to obtain representative samples for analysis. Water is also recirculated through the Refueling Water Storage Tank and the piping associated with the respective pumps during the periodic testing of the Spray Pumps and the Safety Injection Pumps. Each of these pumps is tested monthly with the tests being performed on a staggered basis.

The Boric Acid Tanks are sampled twice a week for boron which is controlled to greater than 11.5%. They are sampled once per week for chlorides and fluorides. The chlorides have been measured from less than 0.15 parts per

1.(b). Continued . . .

million to a maximum of 0.3 parts per million. The fluorides have consistently been measured as less than 0.15 parts per million.

In addition to sampling all sources of water to these piping systems, water is sampled from two of the piping runs containing stagnant water. The sample point is located just outside containment of each unit such that water samples can be drawn from either of the two lines between containment sump B to the Residual Heat Removal Pumps. Samples are taken quarterly and analyzed for chlorides, fluorides and general appearance. The chlorides and fluorides have each beer consistently measured as less than 0.15 parts per million and the appearance of the water has been clear.

1.(c). Describe the preservice NDE performed on the weld joints of identified systems. The description is to include the applicable ASME Code sections and supplements (addenda) that were followed, and the acceptance criterion.

RESPONSE:

Preservice ultrasonic examination of the welds in the Class 1 portions of these piping systems were performed in accordance with Appendix IX, Section III 1968 Edition of the ASME Code.

1.(d) Facilities having previously experienced cracking in identified systems, Item 1, are requested to identify (list) the new materials utilized in repair or replacement on a system-by-system basis. If a report of this information and that requested above has been previously submitted to the NRC, please reference the specific report(s) in response to this Bulletin.

RESPONSE:

No cracking has been experienced in identified systems at the Point Beach Nuclear Plant.