

July 6, 1979

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

Dear Mr. Keppler:

PEEDWATER PIPING EXAMINATION UNIT 2 POINT BEACH NUCLEAR PLANT

This letter constitutes our 24-hour notification concerning feedwater system piping examinations in accordance with IE Bulletin 79-13, and confirms a telephone call from Mr. G. A. Reed to Mr. J. D. Smith earlier today.

On June 30, 1979, Unit 2 at Point Beach was taken off line to perform volumetric examinations of steam generator feed line piping welds in accordance with IE Bulletin 79-13. Radiographic and ultrasonic testing performed on July 1 and 2 on the "B" feedwater line revealed indications of possible 18" welds of the feedwater pipe to steam generator nozzle reducer connections. Radiographic examination on the "A" feed line gave similar indications for the 16" weld, but a more specific crack-like indication was found for the 18" weld.

It was determined to cut out both feed line reducers rather than to perform additional non-destructive examinations in order to avoid any ambiguity and to provide opportunity to correlate NDT observations with physical examinations. Accordingly, both feed line 18" x 16" reducers were cut out on July 3, and are presently being replaced.

Visual examination was made of the removed reducers at the plant on July 4 by representatives of Phillips-Getschow and Company, Southwest Research Institute, and members of our own staff. The indication shown by the radiography of the 18" weld in the "A" reducer could not be found. It now appears

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that this crack-like observation is in reality the internal counterbore, weld-end contour. The 18" end of the "B" reducer, however, revealed an apparent circumferential crack on the inside surface approximately 4" long and about 3/4" from the centerline of the weld. This area was ground out and a maximum crack depth of 0.030" was measured. This type of crack is considered to have no safety significance.

Further examinations were made of other feed line weld areas from the steam generator nozzles back to the first support using ultrasonic, radiographic, and dye penetrant means. Some indications of shallow pitting were found on the internal surfaces of the steam generator nozzles. These have been ground out and repaired. An apparent crack approximately 4" long and less than 0.077" in depth was ground out in the 16" weld of the "A" pipeto-elbow joint.

Additionally, one 3" x 16" auxiliary feed line tee connection was visually observed to have significant lack of weld penetration. The second similar connection was found to contain a 1/4" deep gouge. Both these 3" connections have been cut out, and are being rewelded. Other minor spots observed on the pipe of nozzle internal surfaces have been polished out.

The 16" pipe-to-elbow indications and the 3" auxiliary feed connection observations are believed to date to the original fabrication. There is no indication of in-service deterioration of these areas.

On July 4, the 18" x 16" reducer from the "A" feed line was taken to the laboratories of Southwest Research Institute in San Antonio, Texas for detailed physical examination and analysis. Preliminary metallurgical examination reveals numerous surface cracks of short circumferential length and of varying depth, but none exceeding 0.040". It appears that these surface cracks are not of recent origin, but the preliminary data available at this time is insufficient to make further conclusion.

These indications were reported to us by Southwest Research Institute on the morning of July 6. This is the basis of this 24-hour notification to you.

These several activities at the plant site were reviewed by Messrs. Ward and Harrison of your office, who have been resident at the site during the week of July 2. They have made personal observations of the several examinations, including the radiographs and the ultrasonic data obtained. They have also reviewed the details of the physical work and the procedures covering the repair and re-examination.

From all evidence available to us at the moment, we believe the several examinations reveal some surface defects and some shallow cracks, none of which appear to have any significant safety potential. On this basis, we are presently scheduled to make examination of Unit 1 at its next scheduled refueling outage at the end of September.

In accordance with our telephone discussion with Mr. D. C. Boyd of your office, and further to your letter of July 5, we are meeting with members of the NRC in Washington this afternoon. We plan to review all pertinent information currently available and to outline the replacement activities now under way at the site. An outline of the tentative agenda and a list of our participants at this meeting is attached.

During the interval between now and the Unit 1 inspection, we will, of course, continue our investigation of the evidence obtained to date. We plan also to attempt to refine the non-destructive testing procedures to be employed in the future so that examination of the Unit 1 and other parts of these systems at Point Beach will yield meaningful and dependable testing information without requiring component removal merely for verification.

We will, of course, continue to keep you informed in regard to our investigation and activities in this matter.

Very truly yours,

Executive Vice President

Sol Burstein

Attachment

Agenda for Wisconsin Electric/NRC Meeting of July 6, 1979

NRC TE BULLETIN 79-13 FEEDWATER SYSTEM PIPING WELDS POINT BEACH NUCLEAR PLANT

- 1. Original Piping System Layout and Stress Analysis/Wisconsin Electric and Bechtel
- 2. Operating History/Wisconsin Electric
- 3. Results of Recent Inspection/SwRI
- 4. Preliminary Metallurgical Examination Results/SwRI
- Wisconsin Electric's Response to Bulletin 79-13/ Wisconsin Electric
- 6. Discussion/All

Attendees:

Wisconsin Electric

NRC

Mr. C.W. (Bud) Fay Mr. Bruce Churchill Mr. Douglas Dill

Bechtel

Mr. Suresh Chitnis Mr. Paul Herbert

Southwest Research Institute

Dr. Arthur J. Bursle Mr. Samuel A. Wenk Mr. Andy Pickett