

April 14, 1982

Mr. H. R. Denton, Director Office of Nuclear Reactor Regulation U. S. NUCLEAR REGULATORY COMMISSION Washington, D. C. 20555

Attention: Mr. R. A. Clark, Chief Operating Reactors, Branch 3

Gentlemen:



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DOCKET NOS. 50-266 AND 50-301 ADDITIONAL INFORMATION ON INSERVICE INSPECTION PROGRAM - REACTOR COOLANT PUMPS POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2

In response to your request for additional information in your March 12, 1982 letter, the following information is provided:

1. Reactor Coolant Pump Stud and Nut Examinations

In accordance with inspection item B5.1, an in-place ultrasonic test (UT) of the studs is being performed such that 100% of the studs are examined over the ten-year interval. This exam is complete for Unit 1 and will be completed for Unit 2 during the spring 1982 refueling outage scheduled to begin on April 16, 1982. The UT is performed from the inside diameter of the stud heater hole.

The Unit 1 "B" reactor coolant pump (RCP) is the only RCP which was disassembled during the first ten-year inspection interval. The Unit 1 "B" RCP was disassembled during the fall 1981 refueling outage for the purpose of performing a volumetric examination of the casing welds. When the pump was disassembled, a magnetic particle and visual examination of 100% of the studs and nuts was performed in accordance with items B5.2 and B5.3 of the inservice inspection program.

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An ultrasonic examination of the Unit 1 "B" RCP studs was not performed when the studs were removed. Since the studs have heater holes, the UT examination procedure and examination volume is the same whether the exam is performed with the studs in place or removed. Twothirds of the studs were examined during the second 40-month inspection period and the remaining one-third were examined during the third 40-month period.

A visual examination of 100% of the ligaments was also performed in accordance with item B5.3 when the Unit 1 "B" RCP was disassembled.

The Unit 1 "B" RCP was disassembled for the sole purpose of performing the examination of the casing welds and internal surfaces. Based upon the fact that no problems have been experienced with the reactor coolant pumps and that an inspection of the disassembled Unit 1 "B" RCP showed that it was in excellent condition, it is very unlikely that we would normally disassemble a RCP for maintenance during a ten-year inspection period. Industry operating experience indicates that only a remote possibility exists of the need to disassemble a reactor coolant pump for maintenance, with leakage and shaft problems being the primary and secondary reasons for disassembly.

## Reactor Coolant Pumps - Pump Casing Welds 2.

In accordance with inspection items B5.6 and B5.7, radiographic examination of the Unit 1 "B" RCP casing welds and a visual examination of the pump inside pressure retaining surface using the miniature linear accelerator (MINAC) and manipulator was performed during the Unit 1 1981 refueling outage. Essentially, 100% of all the casing welds were examined. The only areas not radiographed were the areas under the pump support lugs and inaccessible portions of the discharge nozzle. The MINAC was first utilized at the Ginna plant. In addition to the MINAC examinations performed at Point Beach, Turkey Point, and Ginna, an examination is to be performed at H. B. Robinson during April 1982. No notable indications were found in any of the pumps examined.

The casing examination at Point Beach took about 25 days to perform, including the associated pump disassembly and reassembly, and resulted in a total accumulated

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radiation exposure of 36 man-rem and a cost on the order of \$700,000. Prior to performing the examination on one of the Unit 2 reactor coolant pumps, which are identical to those of Unit 1, an evaluation of the improvements in the inspection methods employed will be performed to determine if the total cost in outage time, exposure, and money can be reduced to a level more commensurate with the benefits of the examination. Current plans are to disassemble a Unit 2 RCP and perform the casing weld exam during the 1983 refueling outage or a waiver will be requested after the results from the H. B. Robinson examination are available.

If you require additional information, do not hesitate to write or phone Mr. Jim Schweitzer (414-755-2321), Inservice Inspection Engineer, at Point Beach Nuclear Plant.

Very truly yours,

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Assistant Vice President

C. W. Fay

Copies to NRC Resident Inspector D. A. Outlaw - Science Applications Inc.