Consumers Power Company

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November 1, 1982

Dennis M Crutchfield, Chief
Operating Reactors Branch No 5
Nuclear Reactor Regulation
US Nuclear Regulatory Commission
Washington, DC 20555

DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT -
RESPONSE TO IE BULLETIN NO 82-02 ACTION ITEMS 2 AND 4.C

NRC IE Bulletin No. 82-02 dated June 2, 1982 discussed the degradation of threaded fasteners in the Reactor Coolant Pressure Boundary (RCPB) of Pressurized Water Reactors. Initial response to this bulletin was provided in Consumers Power Company submittal dated August 2, 1982. In the referenced response, Consumers Power Company committed to provide to the NRC a written report addressing the inspection and maintenance of any threaded fasteners of closure connections identified in IE Bulletin 82-02 within 60 days of such inspections as required by action items 2 & 4C.

This submittal provides the attached written report signed under oath or affirmation addressing actions taken during the Palisades Forced Outage which ended September 2, 1982.

David J VandeWalle
Nuclear Licensing Administrator

CC Administrator, Region III, USNRC
NRC Resident Inspector - Palisades

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CONSUMERS POWER COMPANY
Palisades Plant

IE BULLETIN 82-02
THREADED FASTENERS INSPECTION REPORT

During the Palisades forced outage, which ended September 2, 1982, 21 Control Rod Drive Mechanism (CRDM) autoclave gaskets were replaced due to increased leakage. In order to expedite gasket replacement, all 336 autoclave studs were removed and replaced with stainless steel studs. 144 of the orginal studs were stainless steel and all were found to be acceptable. The remaining 192 studs were carbon steel and all failed to meet the acceptance criteria due to boric acid attack in an unthreaded portion of the stud. Note that the design of the autoclave closure causes the studs to be in compression during normal operation. Failure of the studs would not cause degradation of the primary coolant boundary because the autoclave nut, which is threaded into the upper housing, is the primary closure device. The purpose of the studs is to prevent the autoclave nut from backing out.

During the same outage, gaskets were replaced on incore instrument flanges #3, 5 and 7 because of increased leakage from these flanges. All 24 studs were removed and inspected. Of these, 16 were found to be satisfactory and were reinstalled, and 8 were declared unuseable. The 8 studs were rejected because corrosion pitting was found in the unthreaded portion of the studs. The corrosion was not considered significant in terms of stud strength, because the pitting (.003" in depth) was not as deep as the minor diameter of the threads. Nevertheless, the 8 studs were replaced.

The acceptance standards used were ASME Section II Article SA-614.11 and SA-614.12, 1977 and 1978 edition for VT and MT.

CONSUMERS POWER COMPANY

Palisades Plant

Docket 50-255
License DPR-20

RESPONSE TO IE BULLITEN NO. 82-02 - ACTION ITEMS 2 & 4C

At the request of the Commission and pursuant to the Atomic Energy Act of 1954 and the Energy Reorganization Act of 1974, as amended, and the Commission's Rules and Regulations thereunder, Consumers Power Company submits our response to Action Items 2 & 4C of IE Bulletin 82-02, dated June 2, 1982.

CONSUMERS POWER COMPANY

BY R B DeWitt

R B DeWitt, Vice President
Nuclear Operations

Sworn and subscribed to before me this 1st day of November 1982.

Helen I. Dempski

Helen I Dempski, Notary Public
Jackson County, Michigan

My commission expires December 14, 1983.