

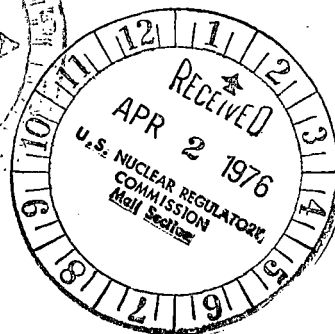
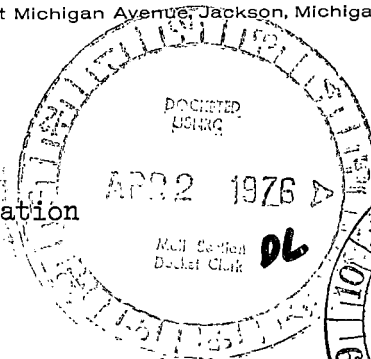


**Consumers
Power
Company**

General Offices: 212 West Michigan Avenue, Jackson, Michigan 49201 • Area Code 517 788-0550

March 26, 1976

Director of Nuclear Reactor Regulation
Att: Mr Robert A. Purple, Chief
Operating Reactor Branch No 1
US Nuclear Regulatory Commission
Washington, DC 20555



DOCKET 50-255, LICENSE DPR-20
PALISADES PLANT CONTAINMENT BUILDING
TENDON SURVEILLANCE REPORT

Attached is a copy of a report entitled "Containment Building Tendon Surveillance - Five-Year Surveillance Palisades Nuclear Plant," dated March 1976. This report prepared by our architect-engineer describes the surveillance of the containment building post tensioning system.

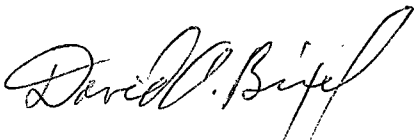
The report has been overviewed by Consumers Power Company's Task Group. In addition, site inspections were conducted both by the Task Group and Plant Staff personnel while the testing was in progress.

As indicated in our previous letter concerning Containment Building Tendon Surveillance, dated April 29, 1974, a study was conducted for determining the measurement technique that would be used for measuring the lift-off force in the five-year surveillance program. From this study, the "All Shims Loose" method was developed and successfully incorporated into our surveillance program. Every tendon that was tested (vertical, horizontal and dome) in 1975 had a measured lift-off force within the acceptance limits prescribed in the Technical Specifications. In addition, all these tendons were retensioned to within $\pm 3\%$ of the lift-off force measured during detensioning, indicating that each tendon is sound and capable of sharing its design load.

As indicated in Appendix I, Section VI, of the report, a discontinuous wire was found protruding $3/4$ " from the end of the stressing washer in Tendon 59BD. After reviewing this condition with the architect-engineer, it was concluded that the wire could have failed during the initial tensioning work and gone undetected; however, no reason could be found for the visual passover. Further, it is not believed that the wire moved since installation. This wire and four other discontinuous wires were examined to determine the cause of failure in accordance with our procedure TSF-2, even though they are not considered as surveillance wires. It was found that four wires had been initially damaged in the field. The other wire in Tendon 59BD failed in tensile testing significantly below the minimum acceptance limit of 11.78 kips (for surveillance wires). It failed 5% below this value and was attributed to a manufacturing defect.

The anchorage and sheathing filter inspection revealed some minor discrepancies, none of which were significant in nature nor would indicate degradation adversely affecting the post tensioning system. Corrosion on the surface of surveillance wires was found to be insignificant and no more severe than found during earlier testing.

From the above, we conclude that the surveillance testing performed meets the requirements of the five-year tendon surveillance cycle as specified in Paragraph 4.5.4, Amendment No 14 (April 24, 1975) to Provisional Operating License No DPR-20, and that the "All Shims Loose" measuring technique will insure the repeatability of data for the next five-year test interval and thereafter.



David A. Bixel
Assistant Nuclear Licensing Administrator

CC: JGKepler, USNRC