

A circular postmark from the U.S. Atomic Energy Commission Regulatory Mail Section. The outer ring contains the text "U.S. ATOMIC ENERGY COMMISSION" at the top and "REGULATORY MAIL SECTION" at the bottom. The center of the stamp features the word "RECEIVED" in a large, bold, sans-serif font, followed by the date "SEP 27 1972" in a slightly smaller font. Below the date, the text "U.S. ATOMIC ENERGY COMMISSION" and "REGULATORY MAIL SECTION" is repeated in a smaller font. The entire stamp is set against a background of a grid of small squares.



**Consumers  
Power  
Company**

General Offices: 242 West Michigan Avenue, Jackson, Michigan 49201 • Area Code 517 788-0550

September 26, 1972

Mr. John F. O'Leary, Director  
Directorate of Licensing  
US Atomic Energy Commission  
Washington, DC 20545

Re: Docket No 50-255  
License No DPR-20

Dear Mr. O'Leary:

Our letter of September 8, 1972, informed you of difficulties encountered on August 29 and 30, 1972, at the Palisades Plant with four control rod drive mechanisms (CRDM) during trip testing, corrective action taken and additional testing programs implemented to verify clutch operability. During a recent outage, additional work was performed on the CRDM clutches. This letter is written to inform you of that work and to describe our present CRDM testing program.

During the outage for modification of the main steam safety valve system, all CRDM clutch splines were relubricated. This relubrication involved removal of the original baked-on lubricant from the clutch splines by vapor blasting and then recoating the spline and rebaking on molybdenum disulfide lubricant to the original specifications. In addition, a very thin coat of dry molybdenum disulfide powder lubricant was applied (similar to additional lubrication provided following the difficulties encountered with the four CRDMs). The relubrication was performed because of the previous operating history with the baked-on lubricant. The clutch splines were all refurbished with baked-on lubricant during late October 1971. The clutches performed with no failures until early June 1972 (refer to our letter dated June 12, 1972).

Following reinstallation of the CRDM clutches, all CRDMs were trip-tested eight times. The results of these trip tests were satisfactory. The failures that occurred on June 2 and August 29 and 30, 1972, were attributed to a slight breakdown of the lubricant.

The Palisades Safety Audit and Review Board (SARB) has reviewed the relubrication of the clutch splines, the progress on the development of a modification that will provide a more positive means of separating the clutch halves and the testing program. Based on the relubrication performed and the previous operating history, the Board concluded that a high degree of reliability be ascribed to the CRDMs for a period of operation of about six months. The Board established a new testing program, which consists of:

5325

50-253  
resigning

8307080073 721120  
PDR ADCK 05000255  
S PDR

COPY SENT REGION

Mr. John F. O'Leary  
Docket No 50-255  
License No DPR-20  
September 26, 1972

2

1. Trip test one peripheral CRDM on an alternating basis per day during plant operation.

2. Trip test all CRDMs prior to returning the plant to service following a cold shutdown.

Again, this solution and testing program is temporary. It will remain in effect until a modification can be developed and tested which provides a more positive means of separating the clutch halves. Based on the progress to date and system requirements, the tentative schedule for completion of development, testing and installation at the plant is approximately four months.

We will keep both Directorate of Licensing and Directorate of Regulatory Operations representatives informed as to the progress with respect to proposed modifications. These modifications will be reviewed prior to installation at the plant and reported in accordance with the provisions of 10 CFR 50.59 and the Technical Specifications.

Yours very truly,

Ralph B. Sewell (Signed)

RBS/map

Ralph B. Sewell  
Nuclear Licensing Administrator

CC: BHGrier,  
USAEC