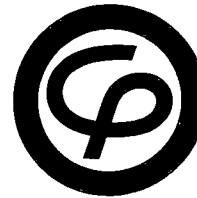


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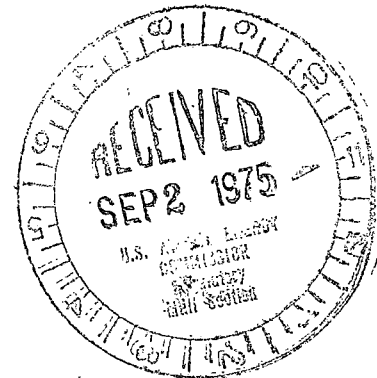
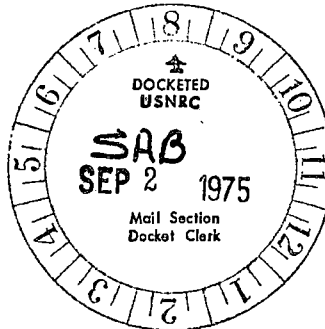
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**Consumers
Power
Company**

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

August 28, 1975



Mr. Robert A. Purple
Division of Reactor Licensing
US Nuclear Regulatory Commission
Washington, DC 20555

DOCKET 50-255, LICENSE DPR-20
PALISADES PLANT, AO-75-18

Attached is abnormal occurrence report No 75-18 covering dropped shutdown rod No 19. We have concluded that, while the dropping of a shutdown rod is reportable as an abnormal occurrence, plant operation may continue as provided in Technical Specification 3.10.4(b) and the Basis of 3.10, Page 3-63, which states that, "Continued operation with that rod (a 'dropped' control rod) fully inserted will only be permitted if the hot channel factors, shutdown margin and ejected rod worths are satisfied."

David A. Bixel
Assistant Nuclear License Administrator

CC: File

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ABNORMAL OCCURRENCE REPORT
Palisades Plant

1. Report No: AO-75-18
- 2a. Report Date: August 28, 1975
- 2b. Occurrence Date: August 17, 1975
3. Facility: Palisades Plant
4. Identification of Occurrence: Control Rod No 19 dropped into the core.

This incident was identified as an abnormal occurrence by Technical Specifications 3.10.6(c). The shutdown rods shall not be inserted below their exercise limit until all regulating rods are inserted.

5. Conditions Prior to Occurrence: The plant was operating at the steady state power level of 80%.
6. Description of Occurrence: At 0920 hours on August 17, 1975, Control Rod No 19 dropped into the core. Turbine runback reduced plant power to 70%. Plant power was further reduced to 50%. An attempt was made to retrieve the dropped rod but this attempt failed.
7. Designation of Apparent Cause of Occurrence: The apparent cause of the incident was a shorted clutch coil. When the clutch coil is energized, the upper and lower clutch jaws are held together, thereby maintaining rod position at the set location. When the clutch is de-energized, the lower portion of the jaw separates from the upper and the control rod is allowed to fall. The shorted clutch coil did not allow the rod to be retrieved.
8. Analysis of Occurrence: Control Rod No 19 was classified inoperable under Section 3.10.4(b) of the plant technical specifications. Plant operation can continue with one inoperable rod. Plant management, however, decided it would be prudent to shut down the plant due to an additional problem associated with Control Rod Drive Mechanism (CRDM) No 16 which was nearing an administrative limit for high seal leakoff temperature.

Core flux tilts were calculated and demonstrated to be within the limits of Technical Specification Section 3.10.3.
9. Corrective Action: The corrective action was to replace the clutch. In addition, the possibility of incorporating a preventative maintenance program to include insulation and component resistance measurements on CRDMs will be evaluated.

10. Failure Data:

- a. CRDM No 19 manufacturer is Combustion Engineering, Inc and the piece is J-2966-163-001.

The dual clutch assembly manufacturer is Combustion Engineering, Inc and the piece number is CND-SE-3998-1.

- b. This mode of failure on CRDM clutches has occurred in the past at the Palisades Plant. See AO-73-9 transmitted by letter dated August 20, 1973.