



**Consumers
Power
Company**

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

July 8, 1975

Regulatory

File Cy.

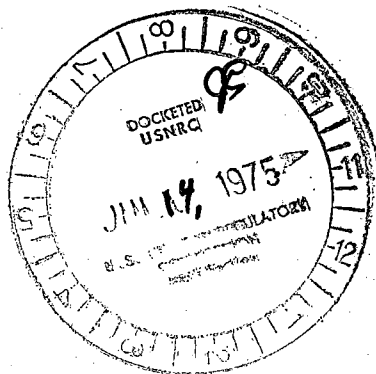
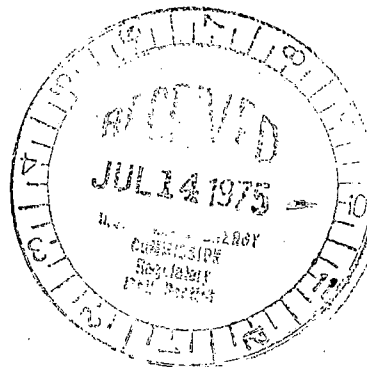
Division of Reactor Licensing
US Nuclear Regulatory Commission
Washington, DC 20555

DOCKET 50-255, LICENSE DPR-20,
PALISADES PLANT, UE-75-4

Attached is Unusual Event Report No 75-4 covering the explanation for the
9-inch deviation on control rod No 38.

Ralph B. Sewell
Nuclear Licensing Administrator

CC: JGKeppler, USNRC



7472

UNUSUAL EVENT REPORT
Palisades Nuclear Plant

1. Report Number: UE-75-4, Docket 50-255
 - 2a. Report Date: July 8, 1975
 - 2b. Occurrence Date: July 1, 1975
 3. Facility: Palisades Plant, Covert, Michigan
 4. Identification of Occurrence: 9-Inch Deviation on Control Rod No 38
 5. Conditions Prior to Occurrence: Plant operating at steady-state power of 20%.
 6. Description of Occurrence: On July 1, 1975 at 0300 hours, the control rods were operating in the automatic mode. The operator received a 3-inch deviation alarm. Control rod No 38 was found to be lower than the rest of the control rods in Group 4. Attempts at raising CR 38 to the level of the rest of the group resulted in its slipping to a lower level (due to the motor-capacitor failure) and caused the remainder of the rods in the group to automatically compensate for the change. The operator terminated this divergent action by returning the control to "Manual" and the 9-inch deviation was noted (CR 38 was at 115.8" and CR 40 was at 124.8").
 7. Designation of the Apparent Cause of the Occurrence: The apparent cause for CR 38 failure to withdraw resulted from a shorted phase shifting capacitor in the motor drive circuit.
 8. Analysis of Occurrence: PRC review of the incident concluded that plant operation could continue under Section 3.10.4.b of the Technical Specifications. The Technical Specifications state, "...if more than one control rod or part-length rod becomes misaligned or inoperable, the reactor shall be placed in the hot shutdown condition within 12 hours." The CR could still be tripped in this situation and only one CR was "inoperable."
- There were no adverse safety implications of this event because the CR was still capable of being tripped and power distributions were within specified limits.
9. Corrective Action: The phase shifting capacitor was replaced for CR 38 motor-drive circuit. The CR was then tested and found to operate satisfactorily.
 10. Failure Data:
 - Manufacturer - Aerovox Corp, New Bedford, MA
 - Model - RM0966
 - Part Number - P 150F435
 - Specs - 6 Microfarad 370 VAC

Previous Failure Data - Plant records indicate that a failure of these capacitors has not occurred before.