

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report No. 50-329/79-11; 50-330/79-11

Docket No. 50-329; 50-330

License No. CPPR-81; CPPR-82

Licensee: Consumers Power Company
1945 West Parnall Road
Jackson, MI 49201

Facility Name: Midland, Units 1 and 2

Investigation At: Midland Site, Midland, MI

Investigation Conducted: May 7-8, 1979

Investigator: *J. R. Creed*
J. R. Creed

5/29/79

Approved By: *J. F. Donahue*
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Investigation Summary

Investigation on May 78, 1979 (Report No. 50-329/79-11; 50-330/79-11)

Area Investigated: Special, unannounced investigation regarding the report of damage done to wiring in the control room. The investigation involved 9 inspector-hours onsite by one NRC inspector.

Results: No items of noncompliance with NRC requirements were identified.

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INTRODUCTION

The Consumers Power Company (CPCO) Midland Nuclear Power Plant is located near Midland, Michigan. This is a two unit pressurized water reactor facility that is presently under construction and licensed by CPPR-81 and CPPR-82. The Babcock & Wilcox manufactured facility is being constructed by the Bechtel Power Corporation (BPCO) and is approximately 60% complete. Although there is no nuclear material at the facility, the licensee utilizes the services of a contract guard company (Burns International Security Services, Inc.) to provide industrial security for the site, which presently employs approximately 3,000 craft workers.

REASON FOR INVESTIGATION

On May 3, 1979, the licensee reported to the NRC Resident Inspector that damage to several electrical wires located in control room panels had been discovered. The information was phoned to RIII and PN-III-79-48, dated May 3, 1979 was issued. Because it appeared that some of the wires were intentionally cut, a NRC investigation was initiated.

SUMMARY OF FACTS

At approximately 0700 hours on May 3, 1979 a Bechtel electrical foreman discovered that several wires had been intentionally cut in panel 2C24 located in the plant control room. The Bechtel employee notified the Bechtel Quality Control Department of the incident who notified the CPCO onsite Quality Assurance Department, who in turn notified the NRC Resident Inspector. Subsequently, an inspection of other control room panels and wiring was conducted and showed that other wires had been cut. The additional damage was found in panels 2C24, 1C21, 1C23 and 1C14. Some wires were cut through and others were not cut completely. Additionally, the glass covering six relays was reported as being intentionally broken in panel 1C30. No other damage was discovered in the control room.

On May 7, 1979 a RIII inspector inspected the control room panels and verified the reported damage and observed no further damage.

Interviews with cognizant Bechtel and Consumers Power personnel showed that some of the wires that were cut related to safety related equipment, while others were non-safety related. Other than the fact that all the wires are located in control room panels, the licensee indicated that there appears to be no correlation regarding the cut wires and entire plant systems. At the time of the damage, some of the wires had not been finally terminated and none of them were energized.

Prior to this incident, there were no doors on the control room. There was unlimited access to the panels, although some may have been locked.

As result of these discoveries, the licensee and contractor initiated measures which should reduce the probability of further intentional damage. Doors were installed on the control room which are maintained secured during the hours that routine work is not being done. The keys to those doors are issued only to contractor employees who need entrance. Supervisors have been instructed to be aware of the personnel in the control room and to question any person who is not known by those supervisors. They have also been instructed to be watchful for other tampering damage or vandalism. Watchmen patrols of plant areas were also increased.

CONCLUSIONS

1. The wires located in the control room panels were intentionally cut; however, it appears that these actions were the result of an act of malicious vandalism and were not directed at specific plant systems.
2. Based on the described access control in effect at the time of the incident, it appears impossible to determine who committed the vandalism.
3. The licensee and contractor have taken immediate action to reduce the probability of further vandalism within the control room.
4. The licensee's testing, preoperational and functional testing programs as well as Quality Control programs should be capable of discovering any damage which is not known at this time.
5. No items of noncompliance with NRC requirements were observed.

DETAILS

1. Persons Contacted

- *D. Miller, Site Manager, Consumers Power Company (CPCO)
- *C. Dechow, Construction Security Supervisor, CPCO
 - E. Jones, Quality Assurance, CPCO
- *P. Kyner, Quality Assurance Supervisor, CPCO
- *B. Peck, Construction Superintendent, CPCO
 - A. Lobrovick, Electrical Quality Control, Bechtel Power Corporation (BPCO)
 - B. Bane, Electrical Supervisor, BPCO
 - B. Clements, Electrical Foreman, BPCO
- *R. Hollan, Quality Assurance Engineer, BPCO
- *L. Dreisbach, Quality Assurance Engineer, BPCO
- *R. Weatfeired, Labor Relations, BPCO
- *J. Newger, Site Manager, BPCO
- *R. Cook, Resident Inspector, USNRC

*Denotes those present at the exit interview that was held at the conclusion of the investigation on May 8, 1979.

2. Description of Incident

While observing the work of one of his electricians, a Bechtel (BPCO) Electrical Foreman observed some cut wires in the Control Room panel 2C24. After notifying the BPCO and CPCO Quality Assurance Departments, a further inspection of control panel wiring was conducted. The results of that inspection showed that wiring had been cut/tampered with at the following locations, all within the control room:

Control Panel 2C24: (a) Circuit 2AB2327C, three wires were cut and one was damaged (insulation partially cut). This circuit apparently leads from Motor Control Center 2B23 which may line up valves in the containment spray and the DK heat removal system. This is safety related equipment: (b) Circuit 2AB2336E, two wires were cut. This circuit leads from a Component Cooling Water Loop Isolation valve. This is safety related equipment: (c) Circuit 2AB5521, wire insulation partially cut on four wires.

Control Panel 1C21: a bundle of eight wires was cut on the Turbine Supervision Instrument and Turbine Generator Auxiliary Vertical Panel. This is a monitor for Turbine steam temperature. This is not safety related equipment.

Control Panel 1C23: a bundle of five wires cut which lead to a Recorder on the Balance of Reactor Monitoring Vertical Panel. This is not safety related equipment.

Control Panel 1C14: one wire tampered with, which relates to the Engineered Safety Control Board. The investigator did not observe the damage to this wire, because a routine wiring modification had been completed, and the wire had been replaced. The wire was described as being partially cut.

Control Panel 1C30: The glass windows on six electrical relay boxes were broken. These relays are located in the Safety Related Auxiliary Relay Cabinet. No other damage was observed. The damage had been noticed 2-3 weeks previously, but had not been reported to CPCO.

The cuts and tamper marks on the above listed wires were probably made with an electrician's hand tool known as a "side cutter". The tool has a flat jaw, in addition to a side cutting edge. The marks made on several of the damaged wires were verified by several electricians and supervisors as being made with a side cutter. They estimated that there are several hundred "side cutters" onsite. A review of the cut and damaged wires by the Resident Inspector showed that although some wires were safety related and some were not there appears to be no correlation among them. They involve disassociated systems.

Further investigation showed that some of the damaged wires were scheduled to be modified (and one in fact was). Some of the wires which were cut did not represent finally installed equipment. It should also be noted that the location of the cuts were relatively close to the termination end of the wires, which should allow for easy repairs. All of the damage was done in locations which were easily accessible. There are no significant labor problems at the site.

3. Licensee Action

- a. Upon discovery of the initial vandalism, the licensee conducted an inspection of the other control panel wiring with the above stated results.
- b. The site Construction Security Supervisor conducted an investigation which included interviewing several electricians working in the control room. No suspects were identified.

- c. On May 5, 1979, the installation of doors on the control room was completed. These doors are maintained locked during time when work is not actually taking place in the control room. Keys are controlled by BPCO. (Note: Immediately prior to this incident, there were no doors on the control room and access was not limited. The control room and cabinets were accessible to anyone onsite, approximately 3,000 people.)
- d. BPCO supervisors and electricians as well as the Quality Control and Assurance Departments for both BPCO and CPCO have been instructed to be especially observant of work in order to discover any acts of vandalism. They have been instructed to report all vandalism in accordance with established procedures. Site management will review any reported information to see if a trend develops.
- e. The testing program, which will be conducted over approximately the next 30 months should uncover any anomalies caused by intentional damage well in advance of plant operation.

4. Exit Interview

At the conclusion of the investigation on May 8, 1979, the inspector met with representatives of both the licensee and the contractor, as indicated in Paragraph 1. The scope and findings of the investigation as well as the licensee's corrective action were reviewed at length. The licensee was notified that no items of noncompliance were identified.