### U.S. NUCLEAR REGULATORY COMMISSION

#### **REGION III**

Docket Nos:

50-315; 50-316

License Nos:

DPR-58; DPR-74

Report Nos:

50-315/98013(DRS); 50-316/98013(DRS)

Licensee:

Indiana Michigan Power Company

Facility:

Donald C. Cook Nuclear Generating Plant

Location:

1 Cook Place

Bridgman, MI 49106

Dates:

June 1-2, 1998

Inspectors:

D. Nissen, Radiation Specialist

N. Shah, Radiation Specialist

Approved by:

Gary Shear, Chief, Plant Support Branch 2

**Division of Reactor Safety** 

w.

Ŧ

1

•

•

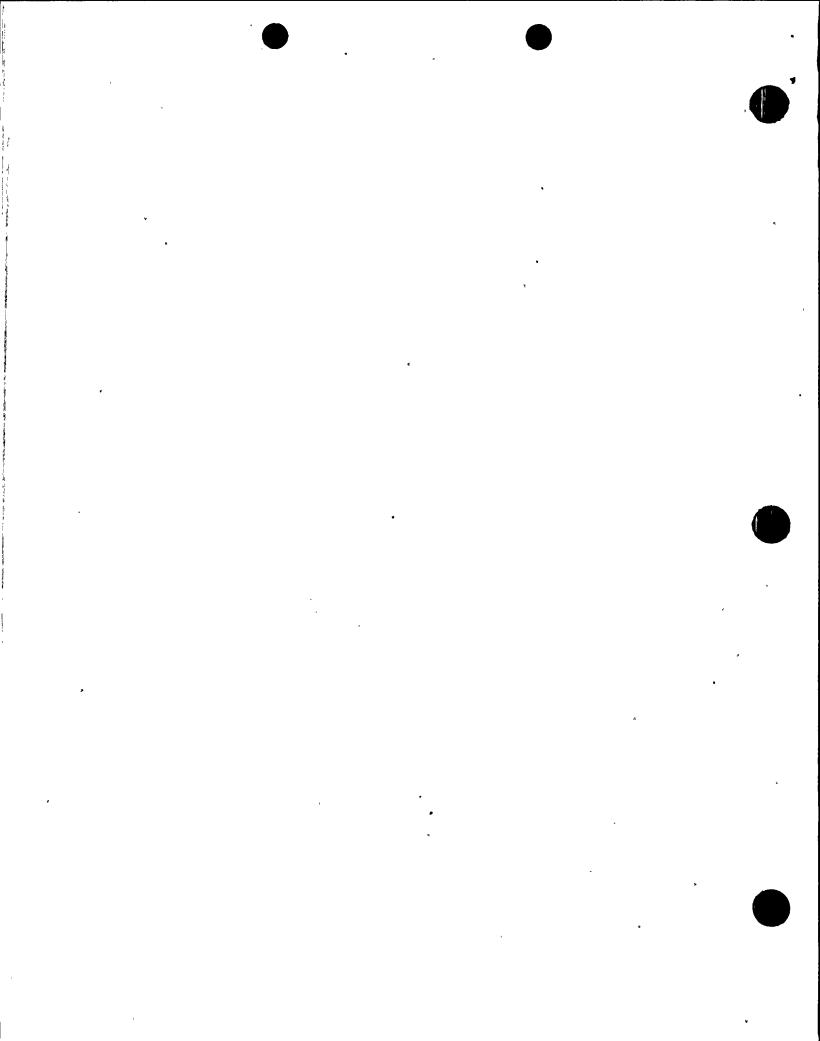
•

#### **EXECUTIVE SUMMARY**

D. C. Cook, Units 1 and 2 NRC Inspection Reports 50-315/98013; 50-316/98013

This was a special inspection to review the circumstances regarding a worker who entered containment, with an open wound, in violation of station procedures.

- The licensee's investigation of this event as documented in a letter to the NRC dated March 23, 1998 was reviewed. Several discrepancies in the sequence of events as well as the events themselves were noted between the licensee's findings and the workers recollection of events. Upon review during the inspection, the inspectors concluded that the licensee's investigation was thorough, however, the information had not been fully incorporated into the letter sent to the NRC.
- The inspection concluded that on January 4, 1998, a contract painter having an open wound entered containment in violation of station procedures. This violation was a result of poor communications between work groups which led to the radiation protection group not being notified of the open wound prior to entry, as required by procedures.



#### Report Details

#### **IV. Plant Support**

# R1 Radiological Protection and Chemistry (RP&C) Controls

#### R1.1 Worker In Containment With Open Wound

#### a. <u>Inspection Scope (IP 83750)</u>

The inspectors reviewed the circumstances and the licensee's investigation regarding an event where a worker entered containment with an open wound without notification of the wound to the radiation protection (RP) department. The inspection consisted of interviews with workers and a review of documents.

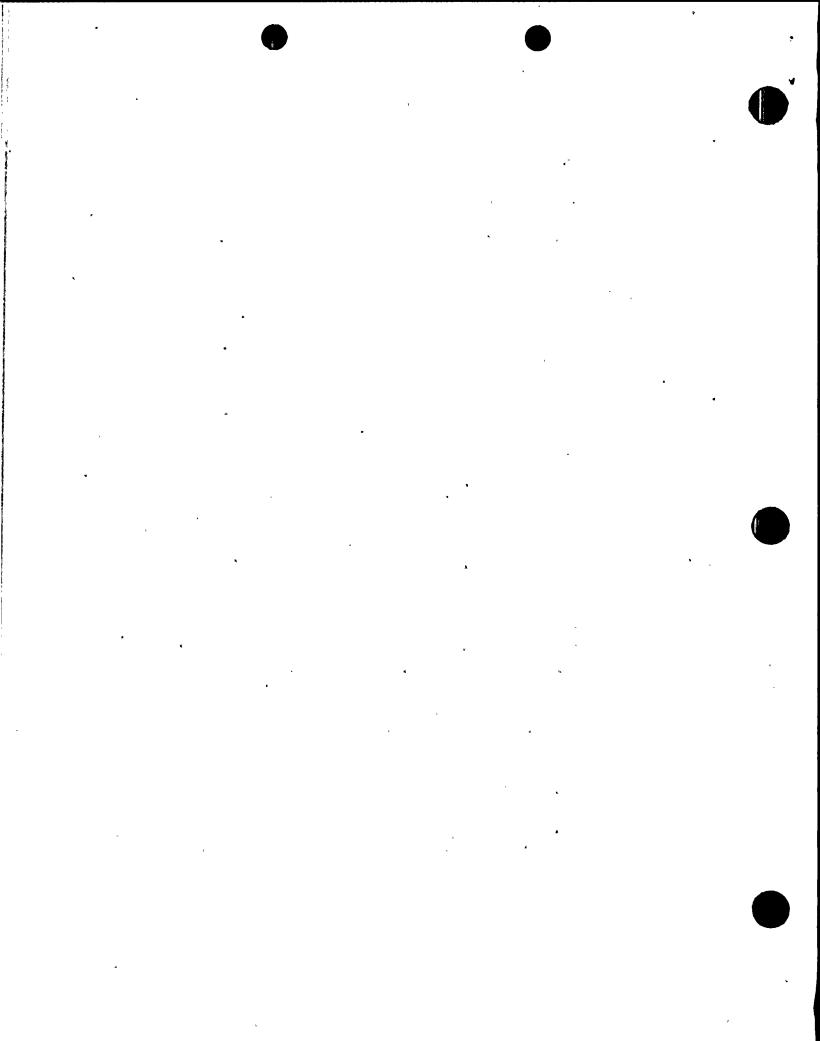
### b. Observations and Findings

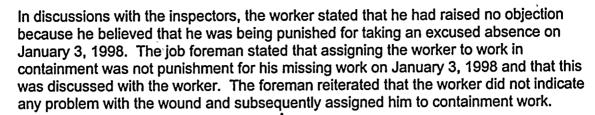
On January 4, 1998, a contract painter performed work in the containment building, a posted contaminated area, while having an open wound. The radiation protection group had not been contacted about the wound, prior to the worker entering containment, as required by station procedure no. PMI 6010 (rev. 11), "Radiation Protection Plan." Subsequently, the worker was released from further containment work and the licensee started an investigation.

The licensee's investigation dated March 23, 1998, was reviewed by the inspectors. Several discrepancies in the sequence of events as well as the events themselves were noted between the licensee's findings and the workers recollection of events. Upon review during the inspection, the licensee's investigation was determined to be thorough, however, the information had not been fully incorporated in the letter sent to the NRC.

The inspectors determined that the worker had sustained the injury while working in the lower elevation of containment on December 17, 1997. After notifying his safety supervisor, he was taken to a doctor for examination and placed on light duty outside the Radiological Controlled Area (RCA) until January 4, 1998. Subsequent doctor visits were made on December 22 and 29, 1997. During the December 29, 1997 visit, the doctor restricted the worker to non-containment work until the wound healed (estimated January 12, 1998). The safety supervisor was aware of this restriction, but did not communicate it to the worker's foreman.

Neither the safety supervisor nor the foreman observed the wound on January 4, 1998, however, the foreman indicated that he had seen the wound a few days earlier and that it was red and puffy but not an open wound at that time. The foreman and safety supervisor assumed that it had sufficiently healed to allow work in containment by January 4, 1998. In addition, the foreman stated that he asked the worker about his condition and no objection was raised by the worker regarding the entry, including no mention of the doctors note.





Although the safety supervisor and the job foreman stated that they were aware of the procedural requirement to notify RP of the wound, based on the observations made by the foreman, the workers assertions that he was fine, and that the wound had originally occurred 17 days before, they determined that there was no need to notify RP as the wound must have healed. The worker stated that he was unaware of this requirement. The inspectors verified that the procedural requirement was discussed in nuclear general employee training, but determined that the worker had not been tested on this requirement.

Technical Specification 6.8.1.a requires, in part, that procedures be implemented for activities recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. Paragraph 7.e(4), of this regulatory guide requires that procedures for contamination controls be established. As stated above, station procedure no. PMI 6010, step 20.2, requires that RP be contacted prior to entering a restricted area with an open wound. The failure to comply with this requirement is considered a violation (VIO 50-315/98013-01 and 50-316/98013-01).

The inspectors' review identified weaknesses with communication and understanding of plant expectations with this event. Specifically:

- Neither the worker, the job foreman or the safety supervisor contacted the RP group regarding the worker's wound. The procedure does not clearly state who (i.e., worker or supervisor) bears this responsibility and indicates that both parties should have told RP. Both the worker and the job foreman assumed that the other would contact RP; and
- The safety supervisor did not inform the job foreman of the work restrictions imposed by the doctor on December 29, 1997.

Corrective actions included discussing this event with workers and supervisors and requiring that all medically imposed work restrictions be communicated to the job foreman. RP management indicated that the procedure will be reviewed to clarify who has the responsibility to notify RP.

#### c. <u>Conclusions</u>

Communications weaknesses contributed to RP not being notified of a workers open wound prior to containment entry. The failure to notify RP resulted in a violation of station procedures.

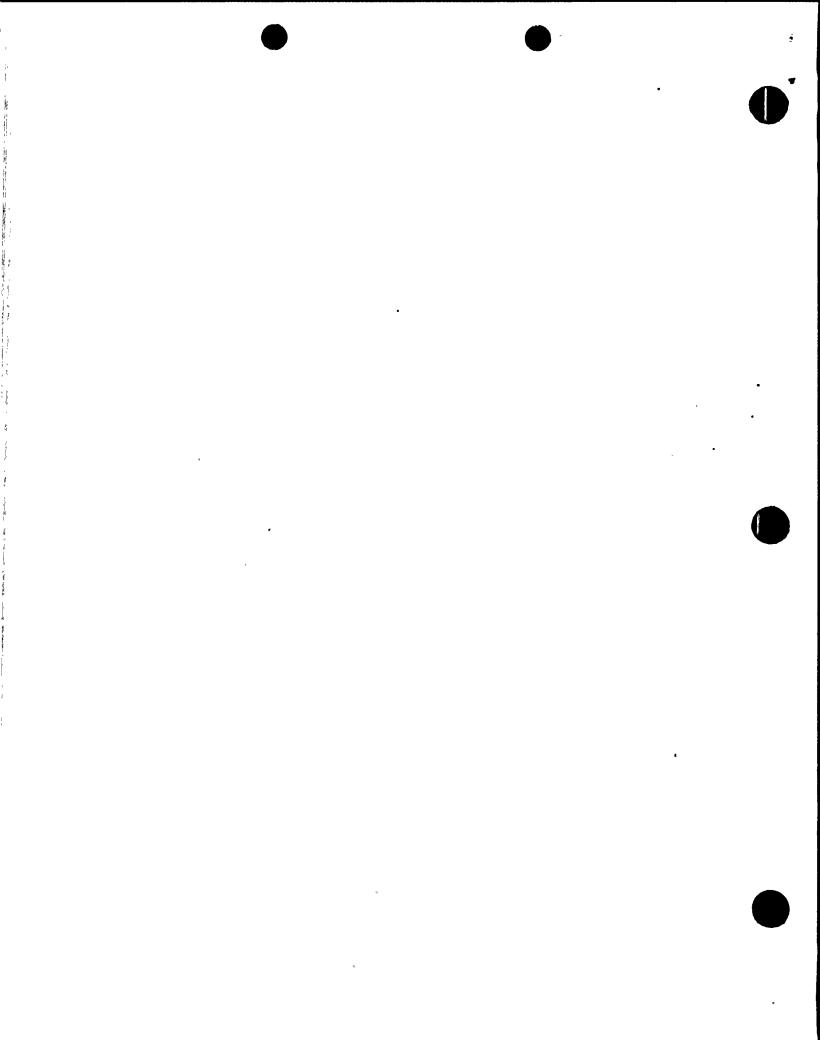
•

#### V. Management Meetings

# X1 Exit Meeting Summary

On June 2, 1998, the inspectors presented the inspection results to licensee management. The licensee acknowledged the findings presented.

The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.



#### PARTIAL LIST OF PERSONS CONTACTED

- D. Nitz, Safety Supervisor
- D. Noble, Radiation Protection Superintendent
- M. Pope, Painter Foreman
- D. Walton, Senior Auditor
- D. Willeman, Technical Training Supervisor
- E. Young, Installation Services Section Head

#### **INSPECTION PROCEDURES USED**

IP 83750

Occupational Radiation Exposure

### ITEMS OPENED, CLOSED, OR DISCUSSED

Opened

50-315/316-98013-01

VIO

Failure to notify RP of open wound prior to entry to RCA

Closed

None

, . •

# LIST OF ACRONYMS USED

CFR Code of Federal Regulations

CR Condition Report

PDR Public Document Room

RCA Radiologically Controlled Area

RP Radiation Protection

RPT Radiation Protection Technician
RP&C Radiation Protection and Chemistry

TS Technical Specifications

VIO Violation

• . . • • . .

# LIST OF DOCUMENTS REVIEWED

Station Procedure PMI 6010, Revision 11, "Radiation Protection Plan"

Licensee response to NRC dated March 23, 1998 "Response to Notice of Allegation Related to Containment Entry"

Condition Report 98-0071

Attending Physicians Statement Dated 12/18/97, 12/22/97, 12/29/97, 1/5/98, 1/6/98

Plant Access Logs for 12/13/97-1/4/98

Licensee Investigation Notes Documented By D. Walton

