

# INDIANA & MICHIGAN ELECTRIC COMPANY

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November 8, 1985  
AEP:NRC:0954

Donald C. Cook Nuclear Plant Nos. 1 and 2  
Docket Nos. 50-315 and 50-316  
License Nos. DPR-58 and DPR-74  
NRC Report Nos. 50-315/85024 (DRS) and 50-316/85024 (DRS)


Mr. James G. Keppler  
U.S. Nuclear Regulatory Commission  
Region III  
799 Roosevelt Road  
Glen Ellyn, IL 60137

Dear Mr. Keppler:

This letter is in response to Mr. W. D. Shafer's letter dated October 2, 1985, which forwarded the subject inspection reports of the routine safety inspection conducted by your staff at the Donald C. Cook Nuclear Plant during the period September 3-13, 1985. The Notice of Violation attached to Mr. Shafer's letter identified three violations. Section 13 of the inspection report identified one weakness. The responses to these violations and the weakness are addressed in the attachment to this letter.

This document has been prepared following Corporate procedures which incorporate a reasonable set of controls to insure its accuracy and completeness prior to signature by the undersigned.

Very truly yours,

  
M. P. Alexich  
Vice President *pbk*  
11/8/85

Attachments

MPA/ad

cc: John E. Dolan  
W. G. Smith, Jr. - Bridgman  
R. C. Callen  
G. Charnoff  
NRC Resident Inspector - Bridgman  
G. Bruchmann

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NRC Item No. 1

"Technical Specification 6.8.1 requires establishment and adherence to the applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, November 1972. Appendix "A" includes procedures for replacing important strainers and filters and for limiting materials released to the environment.

- a. Contrary to the above, on July 19, 1985, the licensee transported a contaminated reactor coolant filter using a 33-gallon drum instead of the Atcor transfer cask specified by Procedure 12 MHP 5021.001.001, Filter Replacement By Transfer Cask. Additionally, no procedure was available to control the preparation and transfer of the reactor coolant filter to the 55-gallon shipping drum. This resulted in a worker exceeding the quarterly authorized dose.
- b. Contrary to the above, from June 20 through September 13, 1985, the Hydro Nuclear dry active waste segregation and volume reduction system was operated without an adequate established procedure for limiting materials released to the environment in that the system operators were not directed by procedure to follow manufacturer's instructions that specify the disposal as radioactive waste of any parcel of system processed waste which has generated a bag monitor high count alarm. During the above stated time period, operators routinely reprocessed the material in these parcels without treating it as detected radioactive waste."

Response to Item 1,aCorrective Actions Taken and Results Achieved

The worker's TLD was immediately pulled and sent in for early readout. The results showed that based on TLD, the administrative limit was not exceeded. In addition, interim instructions were issued on July 29, 1985, in the form of a Department Head Letter, communicating the conclusions reached during the post-job ALARA review and alerting maintenance personnel to the hazards associated with changing highly radioactive filters.

Corrective Action to be Taken to Avoid Further Violations

A procedure is being developed to control the replacement and transfer of the reactor coolant filters via a 33-gallon drum from the filter location to the waste storage. We anticipate having this procedure approved by February 1, 1986.

Date When Full Compliance Will be Achieved

Full compliance will be achieved on February 1, 1986 when the procedure to control the Filter Replacement and Transfer is approved.



Response to Item 1.b

It is our belief that we did have in place a procedure to follow manufacturer's instructions. The plant procedure, 12 THP 6010 ENV. 007 (DAW II Segregation/Volume Reduction Process Operations) was developed from the manufacturer's draft procedure, HNS-230. Step 6.5.6 of the plant procedure states that if a bag monitor alarm occurred, the box could be opened and reprocessed. This direction is consistent with the manufacturer's instructions. The manufacturer has agreed that the plant procedure follows the manufacturer's instructions, and thus, adequately limits material released to the environment.

Corrective Action Taken and Results Achieved

None required.

Corrective Action to be Taken to Avoid Further Violations

None required.

Date When Full Compliance Will be Achieved

For the reasons stated above, we believe operation of the DAW II was never in non-compliance with Technical Specification 6.8.1.

NRC Item No. 2

"10 CFR 20.201(b) states that each licensee shall make or cause to be made such surveys as (1) may be necessary for the licensee to comply with the regulations of this part, and (2) are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present.

As used in the regulations in this part, "survey" means an evaluation of the radiation hazards incident to the production, use, release, disposal, or presence of radioactive materials or other sources of radiation under a specific set of conditions. When appropriate, such evaluation includes a physical survey of the location of materials and equipment, and measurements of levels of radiation or concentrations of radioactive material present.

- a. Contrary to the above, on or before September 3, 1985, the licensee failed to adequately evaluate the removable contamination levels on equipment following attempted decontamination to ensure compliance with 10 CFR 20.101(a) and 10 CFR 20.103(a). A drop light contaminated to about 600,000 dpm/100 square centimeters had been returned to a storage area reserved for material that had been decontaminated to less than 500 dpm/100 square centimeters.

- b. Contrary to the above, on September 3 and 4, 1985, adequate surveys of numerous small radioactive material storage areas including the diving suit storage area had not been conducted to ensure compliance with 10 CFR 20.203(b). This resulted in improperly posted or unposted radiation areas."

Response to Item 2.a

Corrective Actions Taken and Results Achieved

The entire storage area was posted as a contaminated area.

Corrective Action to be Taken to Avoid Further Violations

The program to evaluate the removable contamination on equipment following decontamination to ensure compliance with 10 CFR 20.101(a) and 10 CFR 20.103(a) appears to be adequate. The area where the contaminated drop light was found is available to all plant personnel and it is likely that the noted material was placed in the area prior to decontamination.

A method to control the transport of radioactive material within the controlled areas will be established in order to prevent the unauthorized addition to or alteration of the configuration of material in these storage areas. This method will be established and functional by January 1986.

Date When Full Compliance Will be Achieved

Full compliance was achieved on September 3, 1985 when the storage area was posted as a contaminated area.

Response to Item 2.b

Corrective Action Taken and Results Achieved

The radioactive material storage areas were immediately resurveyed upon discovery and properly posted.

Corrective Actions Taken to Avoid Further Violations

See Response to Item 2 a.

Date When Full Compliance will be Achieved

Full compliance was achieved on September 4, 1985 when the areas were resurveyed and properly posted.

NRC Item No. 3

"Technical Specification 6.11 requires adherence to radiation protection procedures. Procedure 12 THP 6010.RAD.401, Access Control Facility and Controlled Area Entry and Exit, requires thorough frisking or decontamination following a portal monitor alarm.

Contrary to the above, on September 5, 1985, the inspectors observed two contractor employees violate this personal monitoring requirement. One of the workers left the main access control area without additional frisking or decontamination after receiving an alarm on the portal monitor. The second worker exited the controlled area through a less sensitive portal monitor at the contractor access control area without performing additional frisking or decontamination after receiving several alarms on the main access control portal monitor."

Response to Item 3Corrective Actions Taken and Results Achieved

All contractors will be notified by November 15, 1985 that any willful disregard of Plant safety rules or Plant regulations regarding radiation protection or monitoring will render the contractor and its employee(s) subject to disciplinary action.

Corrective Actions Taken to Avoid Further Violations

Initial and on-going training will be given to all site and contractor personnel to ensure they understand the importance of and their individual responsibility to the radiation protection program.

Date When Full Compliance Will be Achieved

Notification to contractors will be accomplished by November 15, 1985. Training will be on-going.

NRC Identified Weakness

"...the licensee should conduct a thorough evaluation to identify licensee commitments, technical problems, design and procedural solutions to identified problems, and a corrective action completion schedule for ESF and non-ESF filtration systems in a timely manner in the areas of (1) the potential for fire protection deluge system leakage or activation damaging charcoal adsorbers, (2) filter housing drain line configuration and valving, and (3) the potential for an incident similar to the one that occurred at the Hatch plant."

Response to Weakness

The first and third concerns discussed above will be rectified by RFC DC-12-2890. This RFC was written to change the charcoal filters fire protection deluge systems from automatic to manual. The D. C. Cook Plant has 19 filter units that are equipped with charcoal filters, and of these 19 units, 16 now have automatic Fire Protection Deluge Systems, one has a manual system, and two have no internal fire protection systems. Because of the low mass of combustibles in these three nonautomatic protected units, coupled with the low potential for charcoal ignition, automatic systems were not specified or installed in them. RFC DC-12-2890 addresses modifying 12 of these 16 units; the (4) recirculating units in the lower containments are not easily accessible during plant operation and therefore will remain automatic. The RFC has two parts to be performed. The first part of the RFC is to close the gate valve upstream of the three-way valve for 12 of the 16 systems. This would stop the leakage problem and prevent an inadvertent actuation of the system. The second part is to replace the carbon steel check valves on the deluge drain piping with stainless steel swing check valves for 11 of the 16 systems. (One of the twelve systems utilizes a deluge valve and not a three-way valve. There is no drain problem associated with this unit. The drains from the fire protection system serving the four filter units in the containment use gate valves in lieu of check valves. These valves have not been a problem.) Experience has shown that the carbon steel check valves are subject to the corrosive action of the water and do not properly function, therefore, they will be replaced by stainless steel check valves.

The second concern identified in the NRC weakness will be corrected by Revision 2 of RFC DC-12-1316. This revision and an addendum will modify the drain systems of the charcoal and/or HEPA filter units to preclude any air bypass. The D. C. Cook Plant has 27 filter units that are equipped with charcoal and/or HEPA filter sections; however, only 24 of these units have drains. The three filter units that do not have drains are the aforementioned units which have charcoal filters without an automatic fire protection system. RFC DC-12-1316, Revision 2, has been written to modify 19 filter units to contain gate valves or plugs in each individual drain line or drain, respectively. Gate valves will be used instead of check valves to prevent water from backing up into the units. The (4) recirculating units in the lower containments will not have their drains modified since these units function using total recirculation to clean the lower containments' atmosphere. The TSC filtration unit is already properly isolated.

All of the work covered by the two afore-mentioned RFC's will be completed by the end of 1986.



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