

Indiana Michigan
Power Company
P.O. Box 16631
Columbus, OH 43216



AEP:NRC:1060H

Donald C. Cook Nuclear Plant Units 1 and 2
Docket Nos. 50-315 and 50-316
License Nos. DPR-58 and DPR-74
INSPECTION REPORTS 50-315/88022 (DRSS) AND 50-316/88025 (DRSS);
RESPONSE TO EMERGENCY PREPAREDNESS EXERCISE WEAKNESS

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Attn: A. B. Davis

October 28, 1988

Dear Mr. Davis:

This letter is in response to Mr. W. D. Shafer's letter of September 12, 1988, that forwarded the report on the routine safety inspection conducted by members of your staff on the Cook Nuclear Plant annual emergency preparedness exercise. This inspection was conducted from August 22-26, 1988. The inspection report attached to Mr. Shafer's letter identified one weakness to which a response is required. Our response is contained in the attachment to this letter.

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

Sincerely,

M. P. Alexich
Vice President

MPA/eh

Attachment

cc: D. H. Williams, Jr.
W. G. Smith, Jr. - Bridgman
R. C. Callen
G. Charnoff
G. Bruchmann
A. B. Davis - Region III
NRC Resident Inspector - Bridgman

8811030254 881028
PDR ADDCK 05000315
Q PNU

IE35
1/1



ATTACHMENT TO AEP:NRC:1060H

RESPONSE TO EMERGENCY PREPAREDNESS EXERCISE WEAKNESS

Exercise Weakness

"The first dose projection calculations performed resulted in erroneously high thyroid doses due to a personnel failure to convert monitor readings to the correct values for input to the dose assessment computer. Evaluation and review personnel did not recognize that the thyroid doses and source term did not correlate. These erroneous values resulted in excessively conservative Protective Action Recommendations (PARs) to the States."

Response

The incorrect thyroid doses resulted from personnel error in that the iodine data normalization called for in the emergency plan procedures was not performed. This oversight resulted in the use of an artificially high iodine concentration as an input parameter to the computer program used to calculate offsite thyroid doses. Consequently, the calculated thyroid doses were erroneously high, and as part of the emergency drill a protective action recommendation was made to the Michigan Department of Public Health to initiate evacuation actions. The error was discovered approximately twenty minutes later by the personnel performing the offsite dose calculations. For the remainder of the drill, the iodine data were correctly normalized in accordance with the emergency plan procedures and thyroid doses were calculated properly.

Emergency response personnel responsible for performing offsite dose assessments have received supplementary training on the use of the Radiation Data Display System since the completion of the 1988 emergency preparedness exercise. This supplementary training emphasized the proper use and normalization of data used for dose assessment. Procedural changes are also being made to provide verification of manual data processing steps and to better highlight key calculational steps.

In addition to the above actions, we are modifying our computer program used for dose assessment to run on a personal computer rather than its present mainframe computer application. As part of this modification normalization of iodine values will be added so that the user will be prompted for iodine monitor readings, the computer program will automatically calculate the normalized values, and the program will then use these normalized values in the subsequent dose assessment calculations. When these software changes have been finalized, dose assessment personnel will receive training on the new dose assessment program hardware and software.

The modification of the dose assessment program, along with appropriate procedure changes and training, will be completed by December 31, 1988. Completion of these activities will ensure that an error of the type identified in the emergency preparedness exercise weakness does not recur.

