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AEP
INDIANA
MICHIGAN
POWER

July 2, 2003

AEP:NRC:2201-01
10 CFR 2.201

Docket No.: 50-316

U. S. Nuclear Regulatory Commission,
ATTN: Document Control Desk
Mail Stop O-P1-17
Washington, DC 20555-0001

Donald C. Cook Nuclear Plant Unit 2
REVISED RESPONSE TO NOTICE OF VIOLATION EA-03-058

In a letter dated June 16, 2003, Indiana Michigan Power Company (I&M) provided a response to U. S. Nuclear Regulatory Commission's Notice of Violation (NOV) EA-03-058. This NOV cited an example of I&M's failure to meet the requirements of Donald C. Cook Nuclear Plant Technical Specification 6.11, "Radiation Protection Program," and procedure PMP-6010-RPP-001, "General Radiation Worker Instructions." Since that letter was issued, I&M has become aware that a clarification should be made concerning the corrective actions taken. Mr. Brian A. McIntyre of my staff discussed this clarification with Mr. H. Brent Clayton of Region III on June 23, 2003.

The attachment to this letter contains a revised detailed discussion of I&M's evaluation and corrective actions associated with the NOV.

No commitments are identified in this violation response.

If you have any questions or desire additional information, please contact Mr. Brian A. McIntyre, Manager of Regulatory Affairs, at (269) 697-5806.

Sincerely,

Joseph E. Pollock

Joseph E. Pollock
Site Vice President

JEN/jen

Attachment

IE01

c: H. B. Clayton – NRC Region III
K. D. Curry – AEP Ft. Wayne
J. E. Dyer – NRC Region III
J. T. King - MPSC
MDEQ - DW & RPD
NRC Resident Inspector
J. F. Stang, Jr. – NRC Washington DC

ATTACHMENT TO AEP:NRC:2201

Donald C. Cook Nuclear Plant Unit 2
REPLY TO NOTICE OF VIOLATION EA-03-058

Restatement of Violation 50-316/EA-03-058:

"D.C. Cook Technical Specification No. 6.11, "Radiation Protection Program," requires that procedures for personnel radiation protection be prepared consistent with the requirements of 10 CFR Part 20 and be approved, maintained and adhered to for all operations involving personnel radiation exposure.

D.C. Cook procedure PMP-6010-RPP-001, "General Radiation Worker Instructions," Revision 0, effective September 5, 2001, Implements Technical Specification 6.11. Section 3.1 of that procedure requires, in part, that radiation workers comply with the directions in a Radiation Work Permit (RWP) and the directives of radiation protection (RP) personnel, and promptly obey "stop work" and "evacuate" instructions by RP personnel. Section 3.2.12 of this procedure further requires that the worker leave the area immediately and notify RP personnel if the electronic dosimeter alarms for any reason.

Contrary to the above, on January 28, 2002, an employee of Framatome, a contractor at the D.C. Cook Nuclear Power Plant, failed to obey the instructions of a RP technician to stop work and evacuate the work area in Unit 2. Further the same employee failed to immediately leave the work area after the employee's assigned electronic dosimetry alarmed."

Admission/Denial of the Violation:

Indiana Michigan Power Company (I&M), the licensee for Donald C. Cook Nuclear Plant (CNP), acknowledges and accepts the violation as stated.

Reasons for the Violation:

The Framatome employee ("the Contractor") was on site as part of a team assigned to perform an accumulator check valve test scheduled for 0200 hours on January 28, 2002. As part of his in-processing, the Contractor received General Employee Training on January 16, 2002. This training includes CNP procedure PMP-6010-RPP-001, "General Radiation Worker Instructions." As noted by the NRC, Section 3.1 of this procedure requires, in part, that radiation workers comply with the directions in a Radiation Work Permit (RWP) and the directives of radiation protection personnel. Section 3.2 of this procedure further requires that the worker leave the area immediately and notify RP personnel if the electronic dosimeter alarms for any reason.

Following a pre-job briefing, the team members met with Radiation Protection (RP) personnel at the Radiation Protection Access Control Point (RPAC). RP informed the team that the dose rates

at the valves being worked had a higher than expected reading and he was going to raise their electronic dosimeter (ED) alarm setpoints from the original estimated limits specified on the RWP. The RP technicians reset the Contractor's ED dose rate alarm, but did not reset the ED's accumulated dose alarm.

The valve team entered lower containment and began setting up their test equipment at 1800 hours on January 28, 2002. However, set-up and testing delays occurred throughout the evening, extending the stay time in containment. Some time later, when Operations personnel were raising the accumulator pressure to begin the test, the contractor read his ED at 170 mR.

Shortly before the test was to begin, the Contractor read his ED at 190 mR. A discussion followed with the CNP test engineer regarding his dose. The Contractor was not initially concerned because he believed his total dose alarm setpoint had been increased at the RPAC and they were now in a low dose area. However, as part of this discussion, the Contractor checked the dose alarm setpoint on his ED and found the alarm was still set at 200 mR.

By the time the test was to begin, the Contractor's ED had reached 195 mR. Therefore, the Contractor and the test engineer asked a valve technician in the area to go find an RP technician. Their intent was to see if any latitude (dose extension or direct RP monitoring) was available to complete the testing without the Contractor having to exit containment.

The RP technician arrived a few minutes later and inquired as to the Contractor's current ED reading. When the Contractor reported that the ED was reading 198 mR, the RP technician told the Contractor that he needed to leave containment. The Contractor responded that the job on which he was working was critical path and that he needed a dose extension or assistance from the RP technician so the job could be completed. The RP technician said that was not possible, and again instructed the Contractor to leave. The Contractor asked if the RP technician could verify with CNP supervision to see if there was a way to grant an alarm extension or for him to stay in containment until the test was complete.

When the RP technician met with the RP supervisor, she did not ask the supervisor for any discretion or extension for the Contractor, but rather told the supervisor that there was a worker in lower containment whose ED was reading 198 mR with an alarm setpoint of 200 mR, and that the worker was refusing to leave containment. The supervisor directed the RP technician to return to lower containment and have the worker leave immediately.

By the time the RP technician returned to lower containment, the test was nearly complete and the Contractor's ED was alarming. The RP technician directed the Contractor to immediately leave the area. The Contractor acknowledged the RP's direction and did not leave, but instead began to place his equipment in a "safe condition" before leaving the area. At this point, the CNP test engineer, who had been some distance away, came over and received instructions on how to store the equipment from the Contractor. The Contractor left containment when the data download was complete and the equipment was put into a safe condition.

After exiting lower containment, the Contractor's ED read 201 mR, 1 mR above the 200 mR setpoint.

Upon exiting the Radiologically Controlled Area (RCA), the Contractor was barred from re-entry to the RCA. The Contractor was counseled by on-shift RP supervision and the Shift Outage Director on the requirement to follow RP direction and immediately stop work and exit a radiological area when directed by an RP technician. When the Contractor acknowledged that he understood the requirements and would follow them in the future, he was allowed to return to containment to complete his work. Condition Report (CR) 02029016 was initiated to ensure the event was evaluated by the Corrective Action Program.

The following morning, CNP RP management reviewed the CR and again suspended the Contractor's access to the RCA. The Site Vice President counseled the Shift Outage Director for allowing the individual back into the RCA. The Site Vice President also contacted Corporate Officers at Framatome and discussed the seriousness of the issue and that the individual involved would not be allowed on site in the future. In April 2002, the Contractor provided training to maintenance personnel on diagnostic testing for check valves. The Contractor did not enter the protected area or RCA during that time.

Corrective Actions that Have Been Taken and Results Achieved:

The circumstances surrounding this event, its significance, and the requirement to follow an RP technician's instructions were reinforced to site personnel on several occasions. First, the Site Vice President personally reinforced to all in attendance at the turnover meeting in the morning and evening of January 28, 2002, that there is a zero tolerance for not following RP instructions. This event was discussed in an article in The PlanIt on January 31, 2002. The PlanIt is a CNP newsletter that is distributed at both CNP and the Buchanan Engineering facility. A "Maintenance FYI" on Radiological Work Practices was issued on April 24, 2002. A "Maintenance FYI" is a topical newsletter that is published on the Maintenance Department's website. They are also distributed to the Maintenance Managers for discussion with their employees during their group meetings. Finally, a Maintenance Lessons Learned was entered in the Plant Operating Experience database on June 1, 2002.

The CNP test engineer responsible for contractor oversight, and who was present with the contractor during the test, was counseled on the requirement to follow an RP technician's instructions, for both himself and contractors under his control.

CNP procedure PMP-6010-RPP-001 was revised to clarify that radiation workers are to monitor their ED readings and exit the area prior to receiving a dose alarm.

The General Employee Training Study Guide was revised to instruct workers to exit a radiological area prior to receiving an ED dose alarm.

General Employee Training Lesson Plans GE-C-2200, "Radiation Worker Requalification," and GE-C-1000, "Radiation Worker Training," were revised to instruct workers to exit a radiological area prior to receiving an ED dose alarm.

CR 02134057 was initiated to determine whether an adverse trend in human performance existed regarding employees failing to leave containment prior to the ED alarms. No adverse human performance trend was identified.

Corrective Actions that Will Be Taken to Avoid Further Violations:

The above corrective actions have been reviewed and should be adequate to prevent recurrence.

Date Full Compliance Will Be Achieved:

With respect to the identified violation, CNP is in full compliance with Technical Specification 6.11, "Radiation Protection Program," and procedure PMP-6010-RPP-001, "General Radiation Worker Instructions."