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Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Illinois Power Company Response to Notice of Violation
50/461-91023-04(DRP)

Dear Sir:

This letter provides the Illinois Power Company (IP) response to the Notice of Violation documented in NRC Inspection Report 50-461/91023(DRP). The Notice of Violation discussed the multiple occurrences of the drywell atmosphere particulate radioactivity monitoring system being inoperable without complying with the applicable Technical Specification action statement. Attachment 1 to this letter provides the response to the Notice of Violation.

As discussed in the response to Notice of Violation 50-461/91020-01(DRP), IP is conducting a review of the Corrective Action Program for enhancements. This review focuses on the following areas: the identification and trending of recurring issues in combination with the trending of hardware problems, determination of trending thresholds and monitoring of timeliness of corrective action completion. This review and establishment of an implementation plan and schedule for any programmatic enhancements will be completed by March 31, 1992. IP will notify the NRC of any planned enhancements to the Corrective Action Program identified as a result of these reviews.

In addition to this action, IP conducted a detailed causal factor analysis of the events surrounding the violations discussed in this Inspection Report and in Inspection Report 50-461/91020 to determine if a generic weakness was present. The analyses of these two conditions indicate that similar contributing factors were present. IP is evaluating the results of these analyses. Any corrective actions resulting from these analyses will be included in the plan discussed above.

In response to these violations, IP management has placed additional emphasis on long-standing material problems. To accomplish this, IP has established a list of items identifying the top ten long-standing material problems. The list will serve as a management tool to monitor

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and assure that actions are being taken, in a disciplined approach, to resolve these material problems in a more timely manner.

IP believes that this response addresses the concerns identified in the Notice of Violation and the Inspection Report.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "F. A. Spangenberg, III". The signature is fluid and cursive, with the last name "Spangenberg" being the most prominent part.

F. A. Spangenberg, III
Manager, Licensing and Safety

JVS/alh

cc: NRC Regional Administrator, Region III
NRC Clinton Project Manager
NRC Resident Office
Illinois Department of Nuclear Safety

IP Response to Notice of Violation 91-023-04

The Notice of Violation states in part:

"Contrary to the above, from February 16, 1988, to October 15, 1991, on multiple occasions the filter paper in the drywell atmosphere particulate radioactivity monitoring system was discovered to not be advancing, the monitor was not identified as being inoperable, and the Technical Specification action statement not entered."

Background

On October 15, 1991, Control & Instrumentation (C&I) technicians started to implement preventive maintenance (PM) task PCILDW001. This task is performed at two-week intervals for the purpose of replacing the used roll of filter paper with an unused roll of filter paper. The biweekly task frequency was established based on the length of the filter paper roll and the speed of the slow speed motor. Upon removal of the filter paper spool covers of panel 1E31-P002 by the C&I technicians on October 15, the technicians observed that the filter paper had not advanced since the previous PM task that was completed on October 3, 1991. The fission product particulate monitor (FPM) contains no external indication of filter paper movement. Therefore, based on the current configuration of this panel, it is necessary to remove the covers from the take-up and feed spools to verify paper movement. The technicians removed the previously installed roll of filter paper from 1E31-P002. Additionally, as required by corrective actions for Licensee Event Report (LER) 90-009, the drive mechanism was removed from the panel housing and inspected for loose gears or set screws. The Operations Shift Supervisor was notified of the failure of the filter paper to advance. Subsequently, the alternate grab sample requirement of Technical Specification 3.4.3.1 was initiated and the appropriate Limiting Condition for Operation was entered.

During the evaluation of the event described in IP LER 91-005 to evaluate the reliability of the FPM, numerous previously completed preventive maintenance tasks were reviewed. The specific preventive maintenance tasks reviewed were those that had been completed since April 27, 1990, the event date of a previous LER (90-009) that was written on the same subject. This evaluation concluded:

- Clinton Power Station (CPS) has had difficulty in maintaining operability of the fission product particulate sample panel. From April 27, 1990 to October 2, 1991, completed documentation of preventive maintenance task PCILDW001 indicates that on six different occasions the filter paper in the sample panel was not advancing or not in need of changing. This data was recorded in the preventive Maintenance Work Request packages performed July 11, 1990; July 31, 1990; April 22, 1991; June 25, 1991; August 26, 1991; and October 2, 1991.
- During performance of preventive maintenance task PCILDW001, the C&I technicians returned the sample panel to service by ensuring that the filter paper was advancing in both fast

and slow speeds. Preventive maintenance task PCILDW001 did not provide adequate direction as to the importance of ensuring that the filter paper had been advancing. No qualitative or quantitative criteria were provided to the C&I technicians nor did the technicians have knowledge that the failure of the filter paper to advance constituted an inoperable drywell atmosphere particulate radioactivity monitoring system. Additionally, Operations personnel failed to associate the absence of filter paper movement with an inoperable fission product particulate sample panel on certain occasions.

The evaluation also indicated that the implementation of preventive maintenance task PCILDW001 was not always accomplished within established frequencies and within the limitations of the FPM. Based on the speed of the filter paper advancement (approximately one and one-half inch per hour in slow speed) and the length of the roll of filter paper (approximately 60 feet), the filter paper at normal operation would be exhausted in approximately 20 days. On March 1, 1991, preventive maintenance task PCILDW001 was performed and a new roll of filter paper was installed. The next preventive maintenance task performed to replace the filter paper was not accomplished until April 22, 1991. On April 22, the technicians, upon removal of the spool covers of the FPM, noted that the paper drive had not been turning and that the new filter paper had not been used. However, had the FPM been operating correctly, the filter paper supply would have been exhausted long before the filter paper roll would have been replaced. This condition would have resulted in an inoperable FPM.

Additionally, on December 30, 1991, IP Maintenance personnel identified that the PM task to change the filter paper on the FPM had not been performed prior to the monitor exhausting the roll of filter paper. It was estimated that the paper supply was exhausted on or about December 28, 1991. Although a Technical Specification (TS) violation did not occur because the action statement of TS 3.4.3.1 was being adhered to, the condition was of concern because of the recent emphasis on the FPM operability.

Reason for the Violation

The primary cause of this violation is the inadequate design of the fission product monitor. This cause and other causal factors that were identified are summarized below:

1. The design of the fission product monitor does not provide indication (external to the monitor) for movement of the filter paper drive mechanism. This design is also inadequate in providing the continuous operation of the monitor as required by CPS Technical Specifications, since, on numerous occasions after December 1989, preventive maintenance (PCILDW001) identified the as-found condition of the paper drive as not functioning.
2. The preventive maintenance program for the filter paper drive mechanism was not established until November 1989. The lack of a regularly scheduled PM prior to this time left replacement and

verification of the filter paper to personal discretion. Without regular replacement of the paper via a controlled mechanism, failure of the equipment was not apparent to Operations or Maintenance personnel.

3. The preventive maintenance task developed in November 1989 did not include guidelines for operability concerns associated with the monitor.
4. Performance of the preventive maintenance task has been inconsistent and, as a result, did not ensure operability of the FPM. PM tasks performed at a greater-than-monthly frequency are scheduled and tracked by the group responsible for their performance. This program did not ensure that these tasks were performed at the required frequency.

Corrective Actions Taken and Results Achieved

The drywell atmosphere will continue to be manually sampled and analyzed at least once every twenty-four hours (when operating in modes 1, 2 or 3) until the FPM can be modified to allow verification of filter paper movement or until reliability of the sample panel can be demonstrated.

Applicable Maintenance personnel, Maintenance supervisors and Operations shift personnel have been briefed on the events surrounding this violation in an effort to enhance their understanding of the equipment's operation and function.

Corrective Steps Taken to Avoid Further Violations

Temporary modification 92-18 has been approved and implemented which installed a clear window on the front of the FPM in accordance with Maintenance Work Request D27365. This window is expected to allow Operations personnel to periodically verify that the filter paper is advancing. Operations personnel are evaluating the installation to determine the appropriate method of filter paper movement verification. This evaluation will be completed prior to the startup from the third refueling outage.

Additionally, Nuclear Station Engineering Department (NSED) is currently evaluating two new fission product monitors for potential replacement of the existing monitor. A recommendation for a replacement monitor is expected by May 4, 1992. As requested in the cover letter to this Notice of Violation, IP will provide the results of this evaluation to the NRC by June 1, 1992.

Since proper operation of the filter paper drive mechanism is necessary for operability, the replacement of the filter paper has been incorporated into CPS procedure 8643.03, "Air Particulate Monitor 1E31-P002 Filter Paper Replacement" and its completion is tracked in accordance with the CPS Surveillance Tracking program which maintains stricter controls for completion of frequent activities. CPS Procedure 8643.03 requires that the Operations Shift/Assistant Shift Supervisor be notified if the filter paper is not advancing when the monitor is opened

for replacement. PM PCILDW001 is no longer used to track the filter paper changeout.

Finally, as discussed in the response to Notice of Violation 50-461/91020-01, in an effort to improve the investigation of problems and timeliness of corrective actions, IP is reviewing the Corrective Action Program for enhancements. This review focuses on the following areas: the identification and trending of recurring issues in combination with the trending of hardware problems, determination of trending thresholds, and monitoring of corrective action completion. This review and establishment of an implementation plan and schedule for any programmatic enhancements will be completed by March 31, 1992. IP will notify the NRC of the results of this review by April 30, 1992.

In addition to this plan, IP management (with input from CPS departments), has established a list of items identifying the top ten long-standing material problems. The list will serve as a management tool to monitor and assure that actions are being taken, in a disciplined approach, to resolve these material problems in a more timely manner. A sponsor and co-sponsor have been assigned to each item, whose role is to manage the long-term solutions and provide management with periodic status reports. The sponsors will select an individual for each item who will assume responsibility for leading team efforts in problem resolution.

Date When Full Compliance Will Be Achieved

IP will be in full compliance by May 10, 1992.