U-601618 142-90(03-19)-LP 4F.190

### ILLINOIS POWER COMPANY



CLINTON POWER STATION, P.O. BOX 678, CLINTON, ILLINOIS 61727

March 19, 1990

Docket No. 50-461

Mr. A. B. Davis Regional Administrator Region III U.S. Nuclear Regulatory Commission 799 Roosevelt Road Glen Ellyn, Illinois 60137

Subject: Response to the Notice of Violation in Inspection

Report 50-461/89038 dated February 16, 1990

Dear Mr. Davis:

This letter provides the Illinois Power Company (IP) response to the Notice of Violation in the Nuclear Regulatory Commission Inspection Report 50-461/89038. The Notice of Violation concerns two examples of failure to document internal cleanliness of a piping system. The attachment to this letter discusses the actions specified to resolve this issue.

IP believes that the information contained in the attachment to this letter adequately resolves this issue.

Sincerely yours,

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

JAB/krm

Attachment

NRC Clinton Licensing Project Manager cc:

NRC Resident Office

Illinois Department of Nuclear Safety

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## Attachment to U-601618 Response to the Notice of Violation in Inspection Report 50-461/89038

The Notice of Violation states in part:

"On January 18, 1990, the Division I, 16 cylinder diesel's heat exchanger was opened for maintenance and the "as found" condition was not documented nor attached to the work documents.

On January 31, 1990 [sic], valve 1SX005C in the shutdown service water system was replaced during maintenance and the results of a visual inspection performed before final closure of the system were not documented nor attached to the work documents."

#### I. Background and Cause of the Violation

While performing Maintenance Work Request (MWR) D07323 to clean heat exchanger (HX) tubes on the Division I Diesel Generator Heat Exchanger (DG HX) in support of eddy-current testing, maintenance personnel did not document the "as found" cleanliness. MWR D07323 referenced CPS 1019.02, System Cleanliness, but did not include a job step to document "as found" cleanliness as required by the procedure. As a result, maintenance failed to document the "as found" cleanliness. The NRC resident staff discussed this procedural violation with the Director-Maintenance. Following inis discussion, maintenance issued Condition Report (CR) 1-90-01-059 on January 19, 1990, for failure to document the "as found" condition of the HX.

On January 30, 1990, valve 1SX005C was removed and replaced (MWR D08216), and the Division III DG HX was opened for inspection. The valve replacement was performed using a freeze seal to isolate the valve. Upon removal of 1SX005C, maintenance personnel documented on the MWR that the "as found" condition of the pipe was unacceptable. However, a determination was made to not clean the pipe because of the risk associated with the freeze seal. Valve 1SX005C was replaced and the freeze seal released. CR 1-90-01-090 was issued on January 30, 1990, to document the failure of the piping to meet system cleanliness requirements upon system breech ("as found"). In addition, maintenance personnel who inspected the DG HX documented the unacceptable, "as found" condition of the HX and the inlet/outlet piping of the HX on the MWR. CR 1-90-01-087 was issued on January 30, 1990, to document the failure of the HX to meet system cleanliness requirements upon system breech ("as found"). While maintenance documented system cleanliness upon system breech ("as found"), they did not document a closeout inspection ("as left") when the valve was installed and when the end flanges were replaced on the HX.

During management discussions with the NRC resident staff it became evident that maintenance had not understood the full requirements of CPS 1019.02.

Maintenance reviewed these MWRs and identified that maintenance personnel clearly understood the requirement to perform inspections of the "as found" cleanliness (required by CPS 1019.02 paragraph 8.2.1) but not the requirement to document the inspection results. In the first instance on January 18, 1990, maintenance personnel performed the

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inspection but failed to document the results because the MWR did not include a job step requiring them to do so. In the second instance, maintenance personnel documented the "as found" conditions. However, they did not document the "as left" conditions because the MWR did not include a job step requiring them to do so.

This review also indicated that maintenance personnel were aware of CPS 1019.02 paragraph 9.1, "Acceptance Criteria for Maintenance and Operational Evolutions", which requires: "Before final closure of a system after opening for maintenance or operational evolution, a visual inspection shall be performed," and of paragraph 9.2, "Acceptance Criteria for Modifications" which requires: "Immediately prior to final closure of a system after opening for modification, a visual inspection shall be performed." However, they overlooked paragraph 9.3 which requires the "as left" cleanliness conditions of paragraphs 9.1 and 9.2 to be documented, as it did not have a separate title and appeared to be part of paragraph 9.2. This oversight resulted in the requirements of paragraph 9.3 being missed because the work being performed was not related to a modification and therefore paragraph 9.2 did not apply. This caused confusion on the requirement to document the "as left" condition.

#### II. Corrective Actions Taken and Results Achieved

Maintenance supervision added "critical points" to existing MWRs and Preventive Maintenance activities (PMs) currently in the field for work to ensure supervisors are directly involved in verifying and documenting system cleanliness. Maintenance has revised CR 1-90-01-059 to include the failure to document "as left" cleanliness. Maintenance personnel were briefed on verifying and documenting system cleanliness. CRs 1-90-01-059, 1-90-01-087 and 1-90-01-090 are to be dispositioned to include appropriate corrective actions to correct the specific conditions identified.

#### III. Corrective Actions Taken to Preclude Recurrence

Maintenance planners were instructed to add job steps which require documentation of system cleanliness verifications for both system breech ("as found") and system closure ("as left") in MWRs and PMs which require the opening of a system that is listed in CPS 1019.02. CPS 1019.02 will be revised to clarify procedural requirements for documenting cleanliness to minimize or prevent human performance errors. This procedure revision is scheduled for completion by June 1, 1990.

The training program for maintenance personnel will be updated to incorporate the revised CPS 1019.02 and emphasize the purpose of system cleanliness and the proper methods for maintaining, verifying and documenting system cleanliness. This training is scheduled for completion by July 15, 1990.

Additionally, Maintenance personnel will be briefed annually on the importance of maintaining, verifying and documenting system cleanliness.

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The Plant Manager has counselled the Director-Maintenance on the importance of understanding NRC concerns and ensuring an adequate solution is implemented.

### IV. Date When Full Compliance Will Be Achieved

Illinois Power Company will be in full compliance upon the completion of Maintenance personnel training on July 15, 1990.