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Walter G. MacFarland IV Senior Vice President and Chief Nuclear Officer

> U-603037 4F.190

June 29, 1998

Docket No. 50-461

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

Subject: Reply to Notice of Violation Contained in Inspection Report 50-461/98010 (DRS)

Dear Madam or Sir:

The purpose of this letter is to provide the Illinois Power (IP) response to the Notice of Violation documented in NRC Inspection Report 50-461/98010 (DRS). IP admits that this violation occurred.

The Notice of Violation identifies the failure to post a radiation area with a conspicuous sign or signs bearing the radiation symbol and the words "CAUTION, RADIATION AREA." The response to this Notice of Violation is contained in Attachment 1 of this letter.

The response to the above Notice of Violation contains the following commitments:

- A "Radiological Survey Expectations" seminar will be given to Radiological Operations personnel. This seminar will focus on the basic principals behind survey activities and the proper mind-set to have when conducting and reviewing surveys. An effectiveness review of the "Radiological Survey Expectations" seminar will be done to ensure that the results of this action are adequate to prevent further errors of this type.
- To ensure that new Radiological Operations personnel are addressed, Radiation Protection (RP) Lesson Plan "RP Orientation" will be revised to include the survey expectations seminar material and to include scenario discussions that will challenge the Radiation Protection Technician to identify this type of error.

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IP believes that the actions described in the attached response address the concern identified in this Notice of Violation.

Sincerely yours,

Walter G. MacFarland IV Senior Vice President and Chief Nuclear Officer

JRF/mlh

Attachment

cc: NRC Clinton Project Manager Branch Chief, Region III, USNRC NRC Resident Office, V-690 Regional Administrator, Region III, USNRC Illinois Department of Nuclear Safety

Attachment 1 to U-603010 Page 1 of 2

Response to notice of violation 50-461/98010-04

The violation states in part:

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10 CFR 20.1901(a) requires that the licensee post each radiation area with a conspicuous sign or signs bearing the radiation symbol and the words "CAUTION, RADIATION AREA." As defined in 10 CFR Part 20, a radiation area is an area, accessible to individuals, in which radiation levels could result in an individual receiving a dose equivalent in excess of 5 millirem in 1 hour at 30 cm from the radiation source or from any surface that the radiation penetrates. The failure to post the CRD filter area with a sign bearing the radiation symbol and the words "CAUTION, RADIATION AREA" is a violation of 10 CFR 20.1901 (b) [sic].

Background and Reason for the Violation

The area surrounding the Control Rod Drive (CRD) suction filters on the 712' elevation of the Turbine Building (TB) is normally posted as a Radiation Area (RA) due to radiation dose rate levels from the CRD suction filter housings exceeding 5 millirem / hour (mr/hr) at 30 centimeters (cm). On or about April 26, 1998, a Contamination Area (CA) was established around the CRD suction filter housings to support changing out the CRD suction filters. CA postings were added to the RA signs already surrounding the area. On April 28, 1998, after successfully changing the CRD suction filters, a survey was performed in preparation for decontaminating the area. On April 29, 1998, after decontamination efforts, the Radiation Area postings were inadvertently removed when the Contamination Area postings were removed. Survey results determined that loose surface contamination levels were less than 1000 disintegration per minute (dpm) / 100 cm2. No radiation dose rates were taken in the area during this survey. Two subsequent, weekly, reference point surveys, performed in the CRD suction filter area, identified radiation dose rates of 6 mr/hr and 8 mr/hr on May 6, 1998 and May 13, 1998, respectively. On May 13, 1998, at approximately 1030 hours, a Radiation Protection Technician (RPT) was touring the 712' elevation of the TB and noticed the CRD suction filter area was not posted as a Radiation Area. The RPT found this to be unusual and performed a radiation survey of the area. He discovered radiation dose rates up to 8 mr/hr at 30 cm from a CRD suction filter housing. The RPT then posted the area as a Radiation Area and notified the Radiation Protection Shift Supervisor.

During the investigation into this event it was determined that the CRD suction filter area was inadvertently deposted from a Radiation Area on April 29, 1998, following area decontamination efforts. Additionally, the weekly reference point surveys performed in the area on May 6, 1998, and May 13, 1998, failed to identify the inadequate postings. Finally, these errors were compounded by the Radiation Protection Shift Supervisors who

reviewed the weekly reference point surveys done on May 6, 1998, and May 13, 1998, and did not identify the deficient RA posting.

This event was a violation of 10 CFR 20.1901 (a). Clinton Power Station failed to post an area accessible to individuals, in which radiation levels could result in an individual receiving a dose equivalent in excess of 5 millirem in 1 hour at 30 cm from a radiation source or from a surface that the radiation penetrates.

The cause for this violation was the failure to reinforce the basic standards and principles behind survey activities. The lack of challenging conditions experienced in routine surveys coupled with a lack of management re-enforcement of basic survey principles has allowed survey activities by some Radiation Protection Technicians to degrade. Surveys have become a simple measurement of conditions instead of an evaluation of radiological conditions and potential hazards.

Corrective Steps Taken and Results Achieved

The area surrounding the CRD suction filters was posted as a Radiation Area on May 13, 1998.

Other reference point surveys were checked for similar conditions and no discrepancies were found.

Corrective Steps to Avoid Further Violations

All individuals involved with this incident were counseled by the Supervisor - Radiological Operations on the expectations for job performance and error reduction techniques.

A "Radiological Survey Expectations" seminar will be given to Radiological Operations personnel. This seminar will focus on the basic principals behind survey activities and the proper mind-set to have when conducting and reviewing surveys. An effectiveness review of the "Radiological Survey Expectations" seminar will be done to ensure that the results of this action are adequate to prevent further errors of this type.

To ensure that new Radiological Operations personnel are addressed, Radiation Protection (RP) Lesson Plan "RP Orientation" will be revised to include the survey expectations seminar material and to include scenario discussions that will challenge the RPT to identify this type of error.

Date When Full Compliance Will Be Achieved

Clinton Power Station is currently in full compliance with 10 CFR 20.1901 (a).

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