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Zion Generating Station
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ComEd

ZRA97047
September 25, 1997

U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Document Control Desk

Subject: RESPONSE TO NOTICE OF VIOLATION
NRC Inspection Report No. 50-295/97020(DRS), 50-304/97020(DRS);
Zion Generating Station, Units 1 & 2;
NRC Docket Numbers 50-295 and 50-304

Reference: Letter to J. H. Mueller (ComEd) from G. E. Grant (USNRC), dated
August 26, 1997, transmitting "NRC Routine Radiation Protection
Inspection Report 50-295/97020(DRS), 50-304/97020(DRS) and
Notice of Violation"

Gentlemen:

By letter dated August 26, 1997, the NRC cited Commonwealth Edison (ComEd) as being in violation of regulatory requirements. This letter and its attachments constitute ComEd's reply to the referenced Notice of Violation in accordance with applicable regulations.

As stated in the above referenced Notice of Violation (page 2), violation item 1 (50-295(304)/97020-01) was adequately addressed in ComEd's July 11, 1997 letter from J. H. Mueller to the NRC, which responded to NRC Inspection Report No. 50-295(304)/97002 (DRP), and therefore, is not addressed in this response.

In regard to previous events that have included loss of High Radiation Area (HRA) access control, missed radiation monitor surveillances, and improper configuration control of radiation monitoring equipment, the ineffectiveness of corrective actions taken to date was primarily due to inadequate program controls, inadequate organizational accountability, ineffective root cause determinations, and acceptance of low standards of performance. //

In response, the Radiation Protection (RP) department has assigned a senior individual within that department to maintain single point accountability for HRA access control and strengthen management oversight. This includes limiting HRA key control issuance to qualified RP technicians and operators, and revising appropriate procedures (as necessary) to clearly define roles and responsibilities of individuals controlling HRA access. Additionally, RP has established clear guidelines and accountability for configuration control of radiation monitoring equipment. *Teer*

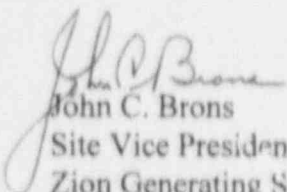
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Further, in order to improve root cause evaluations and raise RP department standards, the Radiation Protection Manager has placed on staff several persons trained in root cause evaluation techniques, and has instituted a self-assessment program for the department. Additionally, the RP Manager has created the new position of Corrective Action Coordinator within the department. This individual reports directly to the RP Manager, and is responsible for tracking and trending radiological performance, ensuring plant personnel awareness with previous events, and establishing station performance indicators for senior management review.

Should you have any questions concerning this response, please contact Robert Godley, Zion Station Regulatory Assurance Manager, at (847)746-2084, ext-2900.

Sincerely,


John C. Brons
Site Vice President
Zion Generating Station

Attachments

cc: Regional Administrator, USNRC - Region III
Senior Project Manager, USNRC - NRR Project Directorate III-2
NRC Senior Resident Inspector, Zion Generating Station
Office of Nuclear Facility Safety - IDNS

ATTACHMENT A
RESPONSE TO NOTICE OF VIOLATION IN
NRC INSPECTION REPORT 50-295/97020(DRS); 50-304/97020(DRS)

VIOLATION (50-295(304)/97020-03, -04):

Technical Specification 6.2.1 requires that written procedures be implemented covering the applicable procedures recommended in Appendix A of Regulatory Guide (RG) 1.33, Revision 2.

- a. *Appendix A of RG 1.33 recommends procedures covering contamination control be implemented.*

Procedure ZRP 5010-1, "Radiological Posting and Labeling Requirements," revision 4, requires that areas, which have removable beta-gamma contamination at levels greater than or equal to 1000 disintegrations per minute (dpm) per 100 cm², be posted "Caution, Contaminated Area."

Contrary to the above, on July 30, 1997, areas within the Units 1 and 2 containment spray pump rooms, which had removable beta-gamma contamination at levels of 1000 to 5000 dpm/100 cm², were not posted "Caution, Contaminated Area."

- b. *Appendix A of RG 1.33 recommends that procedures covering equipment control be implemented.*

Procedure ZAP 300-1, "Conduct of Operations," revision 4, provides instructions concerning equipment control and states that the operations department has the responsibility and authority over all plant systems and equipment, except as stated in Station Policy 2-11, "Configuration Control."

Station Policy 2-11, "Configuration Control," dated April 7, 1997, states that plant equipment may be operated by personnel outside of their operational authority if (1) the work was part of a work request task or Out-Of-Service Request Principle or (2) the manipulation is controlled by an applicable procedure or work instruction that requires or provides a record of specified information including the licensed shift supervisor determination of the final position/state.

Contrary to the above, on July 14, 1997, a member of the radiation protection staff manipulated a radiation monitor (2RIA-PR40) without an applicable work request, out-of-service request, procedure, or work instruction which fulfilled the requirements of Station Policy 2-11.

This is a Severity Level IV violation (Supplement IV).

Admission or Denial of the Violation

ComEd admits the violation.

VIOLATION EXAMPLE A:

Reason for the Violation

The reason for this violation example is the failure of Health Physics personnel to aggressively identify potential sources of contamination. Further, Radiation Protection (RP) management failed to clearly communicate expectations to Health Physics personnel for identifying potential sources of contamination. Existing RP procedures provide adequate guidance for action when contamination is found or suspected. This issue was one of not aggressively seeking out potential sources of contamination.

Corrective Steps Taken and Results Achieved

The contaminated areas within the Units 1 and 2 containment spray pump rooms have been properly posted as a contaminated area. At the time this violation was identified, other areas of the Radiation Protection Area (RPA) were walked down by RP personnel in order to verify compliance with contaminated area posting requirements. The walkdown did not identify any other areas that were not in compliance with the contaminated area posting requirements. Further, Radiation Protection management has clearly communicated to RP personnel the expectations for identifying potential sources of contamination.

Corrective Steps That Will be Taken to Avoid Further Violations

Radiation Protection will develop supplemental expectations to enhance surveying and posting contaminated areas, with specific attention to identifying potential sources of contamination; e.g., boron encrusted valves/equipment, leaking pumps, seals, valves, etc. These supplemental written expectations will be developed, documented and issued by November 24, 1997.

Date When Full Compliance Will be Achieved

Zion Generating Station is currently in full compliance.

VIOLATION EXAMPLE B:

Reason for the Violation

The reason for this violation example was inadequate standards for configuration control with respect to troubleshooting radiation monitors. It has been an accepted practice for Radiation Protection personnel to troubleshoot radiation monitors under the direction of Operating personnel without benefit of procedural or work request controls, as these individuals were recognized as Subject Matter Experts (SME) on this system. This practice also contributed to the lack of a formal pre-job briefing for this work activity.

A contributing cause to this violation example is that Unit 1 operations personnel did not communicate to Unit 2 operations personnel that an alarm on Unit 2 would be received as a result of troubleshooting being performed on radiation monitor 2RIA-PR40. At the time of the event the Unit 1 System Particulate, Iodine, and Noble Gas (SPING) radiation monitor console was in control of the Unit 2 radiation monitor (2RIA-PR40). The Unit 1 Nuclear Station Operator (NSO) was aware of the fact that the Health Physicist was resetting the radiation monitor process computer by down-powering the SPING, and failed to effectively communicate this evolution to the Unit 2 NSO.

In addition, management expectations for component manipulation and the use of procedures, instructions and/or work requests to maintain control of plant configuration, have not been sufficiently formalized and effectively communicated to station personnel.

Corrective Steps Taken and Results Achieved

Operations Management has counseled the operations personnel involved in this event. In addition, the Operations Manager has stressed to each work group the importance of configuration control and adherence to Configuration Control Policy 2-11. Each work group confirmed to the Operations Manager that their people had all been instructed and understood the policy.

Radiation Protection (RP) has issued a policy which clearly defines roles, responsibilities, and standards for RP staff in regard to configuration control of radiation monitors. The Radiation Protection Manager (RPM) has distributed copies of this policy to members of the RP staff that could potentially manipulate station equipment. Additionally, the RPM discussed at department meetings the configuration control expectations for RP personnel manipulating plant equipment. Specifically, RP personnel were instructed not to manipulate plant equipment without having an approved procedure, on which they have been trained and are qualified to perform. In addition, this policy was reviewed with the Operations Manager.

Corrective Steps That Will be Taken to Avoid Further Violations

Zion Generating Station Configuration Control Policy 2-11 will be revised to include "Management Expectations for Configuration Control" of components during shutdown and other modes, including identifying which departments may manipulate valves or other components, and under what conditions. It will also identify the specific equipment that Radiation Protection personnel are trained and qualified to operate. This revision will be completed by November 14, 1997.

Date When Full Compliance Will be Achieved

Zion Generating Station is currently in full compliance.

VIOLATION (50-295(304)/97020-05):

Technical Specification 3.14 requires that radiation monitoring equipment shown in Table 3.14-1 be operable and, with one or more of the channels inoperable, that the action shown in Table 3.14-1 be implemented.

Table 3.14-1 requires that area surveys be performed at least once per 24 hours when ORE-0006 has less than one channel operable.

Contrary to the above, between 0450 hours on April 4, 1997, and 0552 hours on April 6, 1997, area radiation surveys were not performed every 24 hours when monitor ORE-0006 was inoperable.

This is a Severity Level IV violation (Supplement IV).

Admission or Denial of the Violation

ComEd admits the violation.

Reason for the Violation

The reasons for this violation are: (1) a cognitive error by the Unit Supervisor (US) in his review of the Technical Specifications (TS) in that he failed to adequately review the TS to determine and implement the correct surveillance requirements for monitor ORE-0006; (2) no confirming review required or performed by either the Shift Manager (SM) or Nuclear Station Operator (NSO) of the monitor surveillance requirements incorrectly determined by the US; and (3) less than an adequate questioning attitude by any subsequent reviewers of the NSO/US/SE turnover sheets, PT-0 ("Surveillance Check Lists and Periodic Tests"), Appendix N, or PT-14 ("Inoperable Equipment Surveillance Tests").

A contributing cause to this event was an error in step 3 of RP procedure ZRP 5820-12 ("Surveillance Requirements for Inoperable Radiation Monitors"), that inappropriately listed ORE-0006 as not requiring a routine surveillance when inoperable.

Corrective Steps Taken and Results Achieved

The Nuclear Station Operator, Unit Supervisor, and Shift Manager were counseled by Operations Management to reinforce expectations for thorough independent reviews of surveillance requirements for out-of-service equipment.

The Unit Supervisor has presented this event at a Licensed Shift Supervisor meeting in order to ensure operator awareness and emphasize lessons learned.

ZRP 5820-12 ("Surveillance Requirements for Inoperable Radiation Monitors") has been revised so that ORE-0006 has been deleted from monitors not requiring routine surveillance in step 3.

A comprehensive review was performed on all radiation monitors in order to verify that the inoperability action requirements of Technical Specifications, Offsite Dose Calculation Manual (ODCM), and Updated Final Safety Analysis Report (UFSAR) were addressed and captured in ZRP 5820-12. This review led to the discovery of the inadequate compensatory actions being taken when radiation monitors that provide input to radiation monitor 1(2)RT-PR15 are declared inoperable, as discussed in LER 97-014 (docket no. 50-295). The surveillance requirements, as implemented by procedure ZRP 5820-12, non-conservatively required a grab sample selectively, such that grab samples would be taken only for certain input failures (radiation monitors), instead of any radiation monitor input failure.

Appendix A to PT-14 has been revised to include a second verification of the required actions for inoperable/degraded equipment. PT-14 ("Inoperable Equipment Surveillance Tests") and PT-14E ("Degraded Equipment Status") have been combined into one PT-14 ("Inoperable/Degraded Equipment Surveillance Tests").

Corrective Steps That Will be Taken to Avoid Further Violations

No additional actions required.

Date When Full Compliance Will be Achieved

Zion Generating Station is currently in full compliance.

ATTACHMENT B
COMMITMENTS IDENTIFIED IN THIS
RESPONSE TO NOTICE OF VIOLATION

The following table identifies those actions committed to by ComEd in this document. Any other actions discussed in this submittal represent intended or planned actions by ComEd. They are included here for the NRC's information only, and are not regulatory commitments. Please contact Mr. Robert Godley, Zion Generating Station Regulatory Assurance Manager, if there are any questions regarding this document or any associated regulatory commitments.

Commitment:	Committed Date (or Outage):
The Radiation Protection will develop supplemental expectations to enhance surveying and posting contaminated areas, with specific attention to identifying potential sources of contamination; e.g., boron encrusted valves/equipment, leaking pumps, seals, valves, etc.	Nov. 24, 1997
Zion Generating Station Configuration Control Policy 2-11 will be revised to include "Management Expectations for Configuration Control" of components during shutdown and other modes, including identifying which departments may manipulate valves or other components, and under what conditions. It will also identify the specific equipment that Radiation Protection personnel are trained and qualified to operate.	Nov. 14, 1997