GPU Nuclear

GPU Nuclear
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May 4, 1982
5211-82-098

Office of Inspection and Enforcement
Attn: R. C. Haynes
Region I, Regional Administrator
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Sir:

Three Mile Island Nuclear Station, Unit 1 (TMI-1)
Operating License No. DPR-50
Docket No. 50-289
Response to Inspection Report 50-289/82-01

This letter is submitted in response to the subject report, Notice of Violation, dated March 17, 1982. Attachment 1 contains our comments and specific corrective action in accordance with your request. Attachment 2 identifies additional actions we are taking as a result of an internal evaluation of practices related to the subject area of this inspection.

Our revised response date of May 4, 1982 was agreed to between Mr. William Miller of my staff and Messers. D. Haverkamp and V. Currey of the NRC, Region I.

Sincerely,

H. D. Hukill
Director, TMI-1

HDH:WJM:vjf
Attachment
cc: Mr. D. Haverkamp

Sworn and subscribed to before me this 4th day of May, 1982.

Pamela Joy Lubrecht
Notary Public

PAMELA JOY LUBRECHT, Notary Public
Middletown, Dauphin County, Pa.
My Commission Expires August 29, 1983

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Attachment I

Response to Inspection Report 50-289/82-01
Notice of Violation
(Comments and Specific Corrective Action)

NRC Item A

Technical Specifications (TS) 6.13.1 requires, in part, that each High Radiation area (100 mrem/hr or greater) in which the intensity of radiation is 1000 mrem/hr or less shall be barricaded and conspicuously posted as a high radiation area, and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit. Any individual or group of individuals permitted to enter such areas shall be provided with a radiation monitoring device which continuously indicates the radiation dose rate in the area. Each High Radiation Area in which the intensity of radiation is greater than 1000 mrem/hr shall be subject to the above provisions and in addition locked doors shall be provided to prevent unauthorized entry into such areas and the keys shall be maintained under the administrative control of the Radiation Protection Supervisor/Foreman or the Shift Foreman on duty.

Contrary to these requirements:

1. During the period January 22 through February 3, 1982, a High Radiation Area (greater than 1000 mrem/hr) door in the Reactor Building (RB) at the top of the "D" ring area was not locked such as to prevent unauthorized entry into the area. The door was opened by the inspector without a key by reaching around the other side and turning the doorknob.

2. On January 22, 1982, the key to a High Radiation Area (greater than 1000 mrem/hr) door located in the RB which allows access to the "D" ring was not maintained under the administrative control of the Radiation Protection Supervisor/Foreman or the Shift Foreman on duty. The key was found unattended near the RB personnel hatch and was available for possible use by unauthorized personnel.

3. On February 1, 1982, a contractor supervisor opened and walked through the High Radiation Area door (described in item A.1) without using appropriate means for access. The individual opened the door without a key by reaching around the other side and turning the doorknob.

4. On February 1, 1982, a contractor supervisor entered the High Radiation Area (described in item A.1) without being provided with a radiation monitoring device which continuously indicates the radiation dose rate in the area.

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

Response to Item A.1

Comments

On January 28, 1982 the NRC notified GPU Radiological Controls Management of their concern related to the adequacy of a locked high radiation door at the top of the TMI-1 "D" ring inside containment. Although GPU did not agree that the door in question constituted a violation of Technical Specification 6.13.1, actions were initiated to evaluate the NRC concerns. These actions are identified below.

(1) Corrective Steps taken and results achieved

An evaluation was promptly initiated by Radiological Controls Engineering to evaluate all TMI-1 high radiation doors for integrity.

Two working days following NRC notification of Radiation Controls Management, during the evaluation, (as noted in item A.4), the door identified by NRC was utilized by a Licensee contractor without using appropriate means for access. The subject door was modified immediately to provide additional controls and modified within three additional days to provide wings to prevent "reaching around".

The evaluation initiated on January 28, 1981, identified two additional potential problem areas. The first involved a gate that could be shaken open and the second, a penetration that could be used to reach through and unlock a door. Both locations have been repaired to remove the unauthorized access path.

(2) and (3) Future Corrective Action and Date Full Compliance will be Achieved

The hardware modifications and repairs identified above have been completed. See Attachment 2 for related information as well.

Response to Item A.2

(1) Corrective Steps Taken and Results Achieved

The keys in question were retrieved and returned to the Rad Con Foreman's control. The technician responsible for the key control was counselled by the Deputy Manager and Field Operations Manager.

To preclude further incidents, all Rad Con Foremen were instructed to reinstruct their crews on high rad area control and initial log when complete. (Reinstruction complete March 1, 1982)

(2) and (3) Future Corrective Action and Date full Compliance will be Achieved

The instructional guidance identified under item (1) has been completed. See attachment 2 for related information as well.

Response to Item A.3

(1) Corrective Steps Taken and Results Achieved

The supervisor was caused to leave the Reactor Building immediately and a critique of the incident was held. (See RIR 82-002).

In addition to modification of the door to prevent future incidents, the Deputy Manager Rad Con attended a following Catalytic Supervisors/ Foremen weekly meeting to reemphasize high rad area control.

(2) and (3) Future Corrective Action and Date full Compliance will be Achieved

The instructional guidance identified under item (1) has been completed. See atachment 2 for related information as well.

Response to Item A.4

(1) Corrective Steps Taken and Results Achieved

The Technician/Foremen reinstruction included the requirements to issue a dose rate instrument. In addition, to prevent similar incidents involving polar crane operation, the high rad gate was relocated to allow access to the polar crane without entering a high radiation area.

(2) and (3) Future Corrective Action and Date full Compliance will be Achieved

The instructional guidance identifed under item (1) has been completed. See attachment 2 for related information as well.

NRC Item B

Section 8.0 of the TMI-1 Operational Quality Assurance (QA) Plan, Revision 9, dated May 28, 1981, addresses the requirements of 10 CFR 50, Appendix B, Criterion XVI. Section 8.1 of the QA Plan states, in part, that measures shall be established which insure that conditions adverse to quality such as deficiencies and nonconformances be promptly identified and corrected. Section 6 of the QA Plan designates radiation control activites as important to safety, and states that such activities be controlled to an extent consistent with their importance to safety.

Contrary to these requirements, as of February 3, 1982, no prompt corrective action was taken to assure that the High Radiation Area door (described in item A.1) was adequately locked. This item was identified by a NRC inspector and brought to the licensee's attention on January 22, 1982, and again on January 28, 1982. Lack of prompt corrective action permitted an unauthorized entry by an individual on February 1, 1982 (described in item A.3).

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

Response to Item B

(1) (2) and (3) Comment and Corrective Action

NRC notified the licensee by contacting a Radiological Controls Foreman on January 22, 1981.That Foreman did not consider the notification to be an NRC violation requiring GPU action by virtue of the character of the conversation and as a result did not pass the item up to the Radiological Controls Management. Radiological Controls Foreman have since been instructed to report conversations with NRC to Radiological Control Management to avoid future misunderstandings.

On January 28, NRC notified Radiological Controls Management of its concern regarding the adequacy of the door in question. Radiological Controls Management considered the barrier adequate but initiated an engineering evaluation to determine the validity and extent of the door problems in the context of the NRC inspector's criticisms. Intervening events (during the evaluation) caused Radiological Controls Management to proceed with immediate door modification as described in A-1. Independent of the site investigations and corrective actions, GPU formed an investigating committee to evaluated high radiation area control. That investigation is complete and corrective actions generated are due July 1, 1982. Attachment II summarizes these actions.

The three issues raised in this item involve the level of GPU management that constitute "notified" when advised of an NRC concern, the effectiveness of communication between NRC and GPU, and, what constitutes acceptable timely corrective action. On the first point, we have instructed our personnel that NRC concerns are to be promptly made known to management. We have also requested that NRC ensure that such communications occur at a level with GPU authorized and responsible for corrective action. We believe both of these actions are necessary to avoid future communication problems. Secondly, we believe this incident has reinforced to both NRC and GPU the need for effective communications.

On the third issue, our judgment to evaluate as apposed to immediately initiating door modification was due, in part, to the need to avoid improper action. These are many aspects of NRC regulation, fire protection for example, that preclude certain access and egress options. Further, the door in question has not been a new design feature, but rather one that has existed for a period of time. We note here, in passing, a general lack of specific NRC guidance on acceptable design provisions to prevent unauthorized entry. The heights, thickness, and strength of doors are all parameters that determine a doors resistence to being defeated by a determined individual. Although we agree in the instant case that modification was warranted, we suggest that NRC consider guidance to licensee's on this matter to lessen future controversy and subjective evaluation.

ATTACHMENT II

Corrective Actions related to Inspection Report 50-289/82-01

The following actions have been or are being taken to minimize future radiological control problems.

1) Executive and senior level guidance letters have been issued to the plant staff, construction and contractors, to reemphasize their personal responsibility for compliance with Radiological Control procedures and good practices.

2) A short, concise document and Rad Con Practices Guide has been prepared and distributed that outlines the responsibilities of Radiation Workers.

3) Supervisory personnel have received reemphasis on increasing time they spend in the plant observing housekeeping and radiological conditions.

4) Licensee's program of managers conducting off-shift tours and following up on deficiencies is being strengthened. This program will continue as long as deemed necessary by GPU management.

5) Monitoring of frisking procedures, cleanliness and radioactive waste activities at radiological control points during shift changes by management has been instituted and will be continued as long as deemed necessary.

6) Critiques of violations of radiological control incidents have been strengthened.

7) An evaluation is being performed to minimize the boundaries of locked high radiation areas. The evaluation and modifications are expected to be complete in July, 1982.

8) Reemphasis has been placed on ALARA concepts to all foreman and job planners.