



GULF STATES UTILITIES COMPANY

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AREA CODE 504 835-8034 345 8951

October 8, 1993
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File Nos. G9.5, G15.4.1

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

Gentlemen:

River Bend Station - Unit I
Docket No. 50-458/93-24

Pursuant 10CFR2.201, this letter provides Gulf States Utilities Company's (GSU) response to the Notice of Violation 9324-02 from NRC Inspection Report 50-458/93-24 and is submitted at this time based on a discussion with Mr. Blaine Murray on September 30, 1993. The special inspection was conducted by Messrs. A. B. Earnest, T. W. Dexter, J. Niceley, M. Warren and other personnel from the U. S. Army Special Forces on July 26-30, 1993, of activities authorized by NRC Operating License NPF-47 for River Bend Station - Unit I. GSU's reply to the violation is provided in the attachment.

Should you have any questions, please contact Mr. D. N. Lorring of my staff at (504) 381-4157.

Sincerely,

James J. Fisicaro
Manager - Safety Assessment and
Quality Verification

Attachment

xc: U. S. Nuclear Regulatory Commission
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NRC Resident Inspector
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ATTACHMENT
Reply to Notice of Violation 50-458/9324-02
Level IV

REFERENCE

Notice of Violation from L. J. Callan to P. D. Graham dated August 31, 1993.

VIOLATION

10CFR73.55(c)(4) requires that detection of penetration or attempted penetration of the protected area shall assure that adequate response by the security organization can be initiated.

Contrary to the above, the inspectors determined on July 27, 1993, that four zones were defeated during testing of the protected area detection system.

REASON FOR THE VIOLATION

On July 27, 1993 at approximately 0915 hours, the U. S. Army Special Forces (ASF) personnel, as part of the inspection team, began inspecting the protected area perimeter intrusion detection system (IDS). Four of the 25 zones of the IDS were defeated, each in a different way.

The first IDS zone tested was the E-field installed on the primary access point (PAP) building where the E-field was extended vertically down the side of the building and horizontally 4-6 inches above and along the ground to span the gap between the PAP building and the nearest microwave head. The E-field was defeated by removing enough soil beneath the bottom strand of wire to allow passage under the E-field. The reason that the system could be defeated was that there was no design feature to prevent digging beneath the E-field.

The second IDS zone defeated was a microwave zone on the west side of the PAP building. The reason was determined to be that the microwave head was beginning to degrade.

The third IDS zone defeated was a microwave zone further west of the PAP building. The zone was defeated with the aid of conduits attached to a wall and a pipe stand to which the microwave was mounted. It was not recognized during a design modification that the conduit along the wall could be used in a manner which could aid an individual in crossing above the detection zone.

The fourth IDS zone defeated was also a microwave zone located on the east side of the perimeter near the services building. The zone was defeated through use of a metal stand on which the microwave heads were mounted. The metal stand was used as an aid (stepping stone) to jump over the zone and defeat the system.

The reason for the third and fourth zones being defeated was due to modifications performed on the microwave detection system during the 1991 - 1992 time frame. At that time the microwave zones were completely revamped; i.e., zones were shortened, microwave heads were relocated, added and stacked. The taller head support stands were added to accommodate the stacking of heads and to allow room for head movement and adjustment to get the best detection pattern. It was not recognized during the modification process that the microwave head stand could be used to defeat the detection system.

CORRECTIVE STEPS WHICH HAVE BEEN TAKEN AND THE RESULTS ACHIEVED

As each of the weaknesses was identified, compensatory measures were immediately put into place. Prior to the end of the shift on July 27, 1993, the day of discovery, the subject deficiencies were corrected except the third defeated zone involving the conduit. The conduit used for crossing above the detection zone was rendered unusable the following day when all supports were removed. Without the supports, the conduit would no longer support body weight. The conduit has since been relocated underground.

A concrete vehicle parking bumper weighing about 400 lbs. was placed under the lower E-field wire, preventing an adversary from digging below ground level and forcing him to move higher into the detection zone. After the concrete bumper was installed, Security's testing representative attempted to defeat the system in accordance with Security's test procedures and was unsuccessful in defeating the zone. Vehicle parking bumpers were also placed on a similar E-field zone on the other side of the PAP building.

As stated above on the second zone defeated, it was determined that a microwave head component was failing. The component was replaced and tested by security technicians in accordance with established security procedures. No failures occurred.

For the above described fourth zone that was defeated by using the microwave head support stand as a stepping stone, the excess metal stand was cut and removed. Following this, the zone was tested and the system was not defeated.

FURTHER STEPS WHICH WILL BE TAKEN TO AVOID FURTHER VIOLATIONS

Other IDS zones were examined for similar weaknesses and other microwave head support stands were identified as having the potential to be used as an aid in defeating the IDS system. Those stands identified as potentially usable were reduced to the minimum necessary to support the heads.

Security will evaluate strengthening its methods for reviewing modifications to ensure that there is no effect on Security Plan requirements. Modifications which are currently in progress but have not been implemented will be included in this evaluation. This evaluation will be completed by November 1, 1993.

Security has reviewed their testing program and have determined that no revision is required. Security will test the IDS in a manner consistent with Regulatory Guide 5.44, RBS Physical Security Plan and security test procedures, and within the guidelines of the corporate safety manual (Accident Control Manual). Additional actions taken and planned will further enhance the overall security program.

DATE WHEN CORRECTIVE ACTION WILL BE COMPLETED

The identified weaknesses were corrected and full compliance was achieved on July 28, 1993. Compensatory measures were removed at that time.