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## Issue 177: Vehicle Intrusion at TMI

### DESCRIPTION

#### *Historical Background*

At 6:53 a.m. on February 7, 1993, an intruder drove into the TMI site owner-controlled area, through a gate into the protected area of Unit 1, and crashed through a roll-up door on the turbine building. TMI security reported this event to the NRC operations officer and declared a Security Emergency upon determining that the protected area of the plant had been comprised. At 7:23 a.m., the TMI-1 shift supervisor officially notified the NRC Headquarters operations officer that he had declared a Site Area Emergency effective at 7:05 a.m. At 10:57 a.m., TMI security personnel discovered and apprehended the intruder at the bottom of the turbine building. The intruder challenged security barriers and programs, disrupted normal site operations, and was

not apprehended for 4 hours. However, the intruder was unarmed, entered only the protected area, and did not breach a vital area boundary. This issue was identified in an NRR memorandum<sup>1</sup> to RES in February 1996.

#### *Safety Significance*

Although the event resulted in no actual adverse reactor safety consequences and was of minimal safety significance, some significant issues were raised. The IIT report<sup>2</sup> highlighted the fact that: (1) the performance objectives of 10 CFR 73 for establishing and maintaining a physical protection system did not effectively address the use of a vehicle for entering the protected area in a manner similar to the TMI event; (2) the method of

entry into the protected area significantly affected the security program response strategy toward protecting the vital areas and protecting against radiological sabotage; and (3) the NRC had not effectively defined and

communicated its expectations for the licensee's security program performance in response to vehicle intrusions. The IIT report also raised concerns related to the emergency response of TMI, the NRC, and other organizations and the NRC security inspection program.

#### *Solution*

An action plan<sup>3</sup> was developed by AEOD and included 8 issues that arose from NUREG-1485,<sup>4</sup> the report on the event by the incident investigation team (IIT). Resolution of these issues was assigned to NRR, NMSS,

AEOD, and Region I with responsibilities for each Office delineated by the EDO.<sup>5</sup>

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<sup>1</sup> Memorandum for C. Serpan from A. Chaffee, "Nuclear Reactor Regulation (NRR) Input Into Research NUREG-0933 (WITS Item 9400213)," February 13, 1996. [9602260124]

<sup>2</sup> NUREG-1485, "Unauthorized Forced Entry Into the Protected Area at Three Mile Island Unit 1 on February 7, 1993," U.S. Nuclear Regulatory Commission, April 1993.

<sup>3</sup> Memorandum for E. Jordan et al. from J. Taylor, "Unauthorized Forced Entry Into the Protected Area at Three Mile Island Unit 1 on February 7, 1993 (NUREG-1485)," June 18, 1993. [9308110317]

<sup>4</sup> NUREG-1485, "Unauthorized Forced Entry Into the Protected Area at Three Mile Island Unit 1 on February 7, 1993," U.S. Nuclear Regulatory Commission, April 1993.

<sup>5</sup> Memorandum for E. Jordan et al. from J. Taylor, "Unauthorized Forced Entry Into the Protected Area at Three Mile Island Unit 1 on February 7, 1993 (NUREG-1485)," June 18, 1993. [9308110317]

## CONCLUSION

Between February 10 and March 10, 1993, the staff tested the Emergency Response Data System (ERDS) link with all reactor units that had not been linked to ERDS since October 1992. During these tests, the staff found deficiencies in the performance of some links; these deficiencies were corrected and the links were retested.

Generic Letter 93-01<sup>6</sup> was issued to implement an ERDS quarterly testing program.

The staff held an enforcement conference at Region I headquarters with GPU Nuclear on August 24, 1993 to discuss a violation regarding the delay in calling emergency response personnel. Region 1 issued a Severity Level III notice of violation (with no civil penalty) to the licensee on October 20, 1993. The licensee responded with appropriate corrective actions on November 19, 1993.

In September 1993, the NRC staff meet with the FBI to discuss concerns raised as a result of the TMI intrusion. The FBI updated its contingency plans maintained at the field office level for responding to nuclear-related incidents.

Information Notice 93-94<sup>7</sup> was issued to alert other licensees of the event and to inform them of NRC concerns related to protected area barriers and intrusion assessment systems, the interface between operations, emergency response, and physical security response activities, the effect of security on licensee emergency response, the process for implementing 10 CFR 50.54(x) and (y) provisions, and communications systems.

The core inspection procedure for physical security was revised on April 15, 1994, to provide periodic in-depth performance-oriented review of the site security forces.

A final Rule was published on August 1, 1994, to modify the design basis threat for radiological sabotage to include: (1) use of a land vehicle by adversaries for transporting personnel and their hand equipment to the proximity of vital areas; and (2) a land vehicle bomb (in response to the bombing of the World Trade Center later in February, 1993). This Rule also required licensees to install vehicle control measures, including vehicle barrier systems, to protect against the malevolent use of a land vehicle.

From September 21 to October 3, 1995, letters were sent to all licensees regarding lessons learned from the TMI event and the NRC operational safeguards response evaluations. These letters transmitted safeguards information that could assist licensees in their efforts to protect against a determined, violent, external assault on a plant. Based on the actions described above, this issue was RESOLVED and new requirements were

established.<sup>8</sup>

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<sup>6</sup> Letter to All Holders of Operating Licenses or Construction or Construction Permits for Nuclear Power Reactors, Except for Big Rock Point and Facilities Permanently or Indefinitely Shut Down, from U.S. Nuclear Regulatory Commission, "Emergency Response Data System Test Program (Generic Letter 93-01)," March 3, 1993. [ML031070216]

<sup>7</sup> Information Notice 93-94, "Unauthorized Forced Entry Into the Protected Area at Three Mile Island Unit 1 on February 7, 1993," U.S. Nuclear Regulatory Commission, December 9, 1993. [ML031070160]

<sup>8</sup> Memorandum for W. Russell from D. Morrison, "Prioritization of the NRR Action Plans Submitted to RES on February 13, 1996," June 24, 1996. [9606260260]

