

NRR-2005-A-0027

**ALLEGATION REVIEW BOARD BRIEFING
AND MEETING SUMMARY**

FACILITY:	Massachusetts Institute of Technology (MIT)
TAC NUMBER:	MC8388
RECEIVED:	September 16, 2005
150-DAY DATE:	February 13, 2006

TYPE OF ARB:	Followup ARB Meeting
PURPOSE OF ARB:	To discuss allegation resolution
DATE OF ARB:	October 27, 2005

CONCERN 1:

Individuals were allowed into the reactor building with unsearched backpacks.

CONCERN 2:

Individuals on a tour were not made to pass through a metal detector before entering the reactor room.

CONCERN 3:

An undetected 20-foot truck was allowed to park in close proximity to the research reactor containment.

CONCERN 4:

The research reactor's operating schedule was found on MIT's website.

CONCERN 5:

Individuals acquired detailed floor plans of the research reactor from MIT's library computers. These plans include guard locations, and were taken off the public website after 9/11/01.

CONCERN 6:

Individuals were permitted to keep their wallets during a reactor tour.

UPDATED INFORMATION SINCE LAST ARB IS HIGHLIGHTED

I. BACKGROUND:

An investigative ABC News team provided information to NRC's Office of Public Affairs regarding issues at several research reactor sites that ABC believed to reflect violations of security measures. The ABC staff identified specific 13 colleges where interns attempted to gain access to the university research reactor facilities. The individuals videotaped portions of their attempts (the NRC staff has asked ABC for any tape they have on these issues).

Staff viewed part of the ABC videotapes, and identified 13 allegations, one for each RTR. The generic issue is addressed in allegation NRR-2005-A-0019.

At MIT, ABC provided information that individuals were allowed into the reactor room with unsearched bags. The individuals did not pass through a metal detector. In addition, the individuals were able to park a 20-foot truck in proximity of the reactor. Individuals were also able to find the reactor's operating schedule, as well as floor plans of the reactor, on MIT library computers. Staff review of ABC's edited tape did not reveal any evidence of a violation at MIT.

Allegation NRR-2005-A-0019, initiated various actions, as guided by Senior Management, and the Commission. These actions include: 1) review of the security plans at MIT; 2) plans to send an RAIs to all RTR facilities with reactor fuel, including MIT. These RAIs will clarify the CALs, but do not impose any new requirements; and 3) plans to send a Response Letter to ABC. This letter will formally request more information from the broadcast company so that staff may followup on concerns for the 13 RTRs, including MIT.

On October 13, the day of the "Primetime" show, ABC published a public website listing all 25 RTRs that their interns visited. The ABC website identified the 25 colleges where interns attempted to gain access to the university research reactor facilities, and listed ABC's perceived security concerns. Staff opened allegations for the additional 12 RTRs. These are NRR-2005-A-0034 through NRR-2005-A-0045.

Staff identified one new concern at MIT.

II. REGULATORY REQUIREMENT(S):

NRC licensed research reactors are required to establish; maintain and follow an NRC-approved security plan and procedures for the protection of nuclear materials from threats and theft. Those measures include the ability to detect unauthorized access to the facility and delay the intruders until the designated response force is able to respond. Security requirements are based on a graded approach with increasing requirements for material that is more attractive for theft or diversion and for facilities that have a greater risk of radiological releases due to sabotage.

10 CFR 73.67, *Licensee fixed site and in-transit requirements for the physical protection of special nuclear material of moderate and low strategic significance*, states, in part, "...(d) *Fixed site requirements for special nuclear material of moderate strategic*

significance. Each licensee who possesses, stores, or uses quantities and types of special nuclear material of moderate strategic significance at a fixed site (...) shall (...)
6) Limit access to the controlled access areas to authorized or escorted individuals who require such access in order to perform their duties,
7) Assure that all visitors to the controlled access area are under the constant escort of an individual who has been authorized to access this area..."

Licensee have detailed plans and procedures specifying how to meet these requirements, including specific guidance as to the criteria for searching packages and for allowing escorted access.

III. SAFETY SIGNIFICANCE AND BASIS: Low

Allowing unauthorized access to the facility will allow an increased possibility of sabotage to the reactor or theft of special nuclear material. However, there is no evidence that unauthorized access was granted at MIT. The generic issue is a significant safety issue, and is addressed in NRR-2005-A-0019.

There is no evidence that the University violated NRC approved security procedures, plans or measures. NRC has evaluated security plans, procedures and systems and has verified that appropriate security measures are in place to protect the public health and safety from the potential radiological effects of postulated theft or sabotage. Therefore, the safety significance is low.

IV. TECHNICAL REVIEW PRIORITY AND BASIS: Low

Based on the above safety significance.

V. ACTIONS:

A. PROPOSED INVESTIGATIONS, PRIORITY LEVEL: No

The issues identified did not appear to violate NRC requirements for security at research reactors.

B. REFERRAL: No

C. PROPOSED INSPECTIONS AND DUE DATES: No

D. OTHER ACTIONS: Yes

As a result of allegation NRR-2005-A-0019, the Research and Test Reactor Section (RTRS) coordinated their proposed actions with OI, DIPM, OPA and OGC. For MIT, RTRS performed a review of security plans, and relevant documents. Their review did not identify any violations of the approved security plan. Due Date: Completed.

For the five concerns, RTRS assessment states:

Concern 1: The licensee states that backpacks were brought into building NW12 which is separate building from the CAA. The backpacks were left in NW12 and were not brought into the CAA.

Concern 2: Metal Detectors are not required by the security plan or the compensatory measures.

Concern 3: There are no security plan or compensatory measures requirements that limit access to the dirt road behind facility next to the railroad tracks.

Concern 4: MIT maintains their operating on their website to assist researchers. Although not prohibited by the security plan or compensatory measures, NRC staff has discussed this issue with MIT. Licensee believes that this information is of very limited use to adversaries.

Concern 5: The licensee states that ABC must have gone to a web site that stores past versions of web sites. MIT floor plan have not shown guard locations because such information does not exist. The licensee is looking for web sites that store past versions of web sites to remove certain information, if present.

Staff plans to review the ABC show to determine if additional issues are identified. Any new issues will be brought to the ARB.

Further, the staff will request complete unedited tapes of the interns' visits to MIT from ABC. ABC has verbally agreed to release the tapes following airing of the show. If the tapes identify new issues, staff will return to the ARB.

If the show and unedited tapes do not identify any further information, the staff will close the allegation.

RTRS identified one new concern, and based on their review of the University's Physical Security Plan and Compensatory Measures did not identify any violations. Their assessment for the new concern states:

Concern 6: There is no requirement in the Physical Security Plan requirement regarding visitors' wallets. The staff did not identify any violations.

Staff reviewed the ABC "Primetime" show, and did not identify any new relevant information. Staff plans to request complete unedited tapes from ABC to determine if additional issues are identified. Any new issues indicating a possible violation of NRC regulations will be brought to the ARB.

Based on RTRS review, the staff plans to close this allegation. If additional information is received indicating a possible violation of NRC regulations (i.e. from ABC's unedited tapes) then staff will re-open the allegation. Due Date: December 31, 2005.

VI. NON-NRR ISSUES (OGC, OE, NMSS, REGION, ETC.): None

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ALLEGATION REVIEW BOARD SECTION

ARB DECISION (and comments):

The ARB agreed with the safety significance, technical review priority, and proposed resolution plan.

ARB CHAIRMAN:	M. Case
ARB MEMBER:	H. Berkow
ALLEGATION COORDINATOR:	G. Cwalina
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OE REPRESENTATIVE:	N/A
OGC REPRESENTATIVE:	G. Longo
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