

DETAILS OF JULY 16, 2013 NIST MEETING ON PHYSICAL PROTECTION FOR CAT III

During discussions between the U.S. Nuclear Regulatory Commission (NRC) and the National Institute of Standard and Technology (NIST) staff at 10:00am on July 16, 2013, the following details were captured. The discussion were conducted at the NIST Gaithersburg, Maryland campus located at 100 Bureau Drive, in Building 245. The request for additional information (RAI) numbers correspond to the NIST response dated June 5, 2013 (Enclosure 1).

RAI 1: The NIST staff had developed a security plan for the Category (Cat) III special nuclear material (SNM) it had been licensed to possess. The plan was titled "Gaithersburg Radiation Safety Division (GRSD) Security Plan, Rev 2.," was dated 6/5/13 and was stored in Building 245, Room 131. The infrastructure of the NIST physical protection system for their Cat III SNM was outlined in the GRSD security plan and the plan referenced the following sub-element documents:

- N1 SOP - Procedures For Control Of Access To Nuclear Fuel Stored In Building 235, dated 6/5/13
- N2 SOP - Response To Coercive Attempts To Enter The Material Access Area (MAA), dated 6/5/13
- N3 SOP - Response to a Controlled Access Area (CAA) alarm, dated 6/5/13
- N4 SOP - Testing of Controlled Access Area (CAA) alarms, dated 6/5/13
- N5 SOP - Alarm Failure - Reactor Controlled Access Area (CAA), dated 6/5/13
- N6 SOP - Emergency Response (fire and injury) at Building 235, dated 6/5/13
- N7 SOP - Security For Building 235 When The Reactor Is Shut Down, dated 6/5/13
- N8 SOP - Security at the B-1 level of Building 235, dated 6/5/13
- N9 SOP - Response To A Specific Attack On Building 235, dated 6/5/13
- N10 SOP - Procedures For Control Of Access To IC Areas In Building 245, dated 6/5/13
- N11 SOP - Response To Unauthorized Attempts To Enter The IC Areas In Building 245, dated 6/5/13
- NIST PSG SOP - "Security Post Orders" (Section 5.1), dated 1/24/2011

All sub-element documents were stored in the NIST administration Building 101.

RAI 2: Trustworthiness and reliability was a method of access authorization exercised by NIST and detailed in the "Intradivisional Procedure (IP) 1-2, Increased Controls Security Program" dated 1/18/12. The procedure that described the administrative controls for allowing correctly access authorized personnel into the Cat III storage area was the N10 SOP. The barriers that were in place at the Cat III storage area were described in the GRSD security plan in Section "B. Fixed Site," subsection "2. Use and Storage at a Fixed Site," sub-subsection "a. Permanently Established CAAs." In addition, the barriers were also described in figures inside the GRSD security plan's Appendices A, B and C. The intrusion detection system for the Cat III storage area was described in the GRSD security plan section "b. Fixed Site," subsection "3. Detection Devices and Procedures at a Fixed Site." Furthermore, timely response provisions were described in the GRSD security plan Section "b. Fixed Site," subsection "4. Security Response at a Fixed Site" and procedure N11.

RAI 3: Early detection capability was described in the GRSD security plan in Section “b. Fixed Site,” subsection “3. Detection Devices and Procedures at a Fixed Site.” Coordinated response measures were described in the GRSD security plan Section “b. Fixed Site,” subsection “4. Security Response at a Fixed Site,” in procedure N10 and in procedure N11.

RAI 4: Intrusion detection and assessment was described in the GRSD security plan in Section “b. Fixed Site,” subsection “3. Detection Devices and Procedures at a Fixed Site.” The NIST has on-site police response force and response to alarms were described in procedures N10 and N11.

RAI 5: The Cat III SNM storage area was clearly demarcated and described in the GRSD security plan in section “B. Fixed Site,” subsection “2. Use and Storage at a Fixed Site,” sub-subsection “a. Permanently Established CAAs.” In addition, the barriers were also described in the GRSD security plan’s figures contained in Appendices A, B and C. The intrusion detection system for the Cat III storage area was described in the GRSD security plan Section “b. Fixed Site,” subsection “3. Detection Devices and Procedures at a Fixed Site.” Access control provisions to the Cat III storage area were described in procedure N10.

RAI 6: Early detection capability was described in the GRSD security plan Section “b. Fixed Site,” subsection “3. Detection Devices and Procedures at a Fixed Site.” In addition, timely response provisions were described in the procedure N11 and in the GRSD security plan Section “b. Fixed Site,” subsection “4. Security Response at a Fixed Site.”

RAI 7: Proper placement and custody of nuclear material was described in a procedure titled “Radiation Safety Instruction (RSI) 4-4 Radioactive Material Acquisition and Usage Control,” dated 6/4/13. The procedure was stored in the Radiation Safety Officer’s room in building 245.

RAI 8: Notification to response forces concerning the unauthorized removal of SNM was described in procedures N10 and N11. In addition, the the GRSD security plan Section “b. Fixed Site,” subsection “4. Security Response at a Fixed Site” described the notification measures to alert response forces.

RAI 9: The intrusion detection system for the Cat III storage area was described in the GRSD security plan Sections “b. Fixed Site,” subsection “3. Detection at a Fixed Site” and Appendix A as a schematic diagram. Access control provisions to the Cat III storage area were described in procedure N10.

RAI 10: Response was a capability presented by the NIST staff. NIST had a cadre of sworn Federal police officers on site that could respond as described in procedure N10 and N11. An agreement to have offsite police force response was established between Montgomery County police and NIST. In addition, response protocols were outlined in the police procedures “Security Post Orders” (i.e., Section 5.1 thereof). Response was also described in the GRSD security plan Section “b. Fixed Site,” subsection “4. Security Response at a Fixed Site.”

RAI 11: The NIST established and maintained response procedures as described in procedures N10 and N11. In addition, the GRSD security plan in section “b. Fixed Site,” subsection “5. Response procedures at a Fixed Site” also described the establishment and maintenance of response procedures.

RAI12: The notification process for the NRC for theft of SNM was described in the GRSD security plan in Appendix D and in section "b. Fixed Site," subsection "4. Security Response at a Fixed Site."

RAI13-25: The NIST staff noticed an error in their June 5, 2013, submittal concerning the SNM of moderate significance and the license condition. Therefore, transportation requirements were all addressed as described immediately below.

The NIST staff described how they established the procedural infrastructure for transportation security of Cat III SNM. First they indicated that "RSI 4-13 Shipping Radioactive Material" and "RSI 4-4 Radioactive Material Acquisition and Usage Control," both dated 6/4/13, guided a reader to the GRSD security plan Section "C. Radioactive Material Transportation and Security Plan." What the NIST procedural infrastructure accomplished was to point out to a NIST staff member who desired to either receive or transport Cat III SNM that a transportation security plan would need to be developed that met the 10CFR73.67(g) provisions of (1) through (5).

At the end of the meeting it was discussed that details of dates and locations of certain procedures were to be transmitted to the NRC by Mr. Claassen by the end of the week (i.e., July 19, 2013). In addition, it was discussed that Mr. Claassen was to be given the opportunity to review the meeting summary for accuracy before the end of the work-week (i.e., July 19, 2013). Mr. Claassen verified the accuracy of the above information during a NIST site visit conducted by NRC staff on July 19, 2013 at 9:00am.

Meeting was adjourned at 11:15am.