Contribution ID: 122

Type: Poster

Pilot of the International Atomic Energy Agency's Advanced, Practitioner-Level Training Course on Preventive and Protective Measures Against Insider Threats

The "Joint Statement on Mitigating Insider Threats" circulated by the International Atomic Energy Agency (IAEA) as Information Circular (INFCIRC) 908 emphasizes the elevated threat to nuclear and radioactive materials and facilities posed by insiders. To support States in mitigating this threat, INFCIRC 908 includes a commitment by the subscribers to support the IAEA in developing and implementing an advanced, practitioner-level training course on preventive and protective measures against insider threats. Subscriber States have fulfilled this commitment through developing the course materials and piloting the course 15-19 July 2019 at Sandia National Laboratories in Albuquerque, New Mexico, United States of America. This course reflects a strong international collaboration with course development and subject matter expert contributions from nine Member States and Interpol.

The course goals include that participants will leave the course with the following: (1) an outline of key elements of an insider threat mitigation program to take home and use as a roadmap for improvements, (2) international examples of how these elements can be successfully implemented in a variety of nuclear facility types, (3) new knowledge and skills to assist in assessing the effectiveness of their own programs, (4) knowledge of current research and forward leaning topics related to insider threats, and (5) an understanding of the importance of validating measures and procedures as defined on paper with real implementation and operational information.

This advanced course builds on the existing IAEA Nuclear Security Series No. 8 (Implementing Guide titled Preventive and Protective Measures against Insider Threats), e-learning, and classroom-based training courses by incorporating hands-on activities in a mock facility, allowing course participants to apply skills in a realistic environment. The opportunity to use the mock facility enables this course to address the course goal that participants appreciate the importance of understanding not only how insider threat mitigation measures and procedures are designed and documented, but also how they are truly implemented in a specific facility. Mock facility activities highlight common implementation issues, as identified by the international team of subject matter experts developing the course.

Course lectures and panel discussions allow current practitioners to present their experience with key areas of insider threat mitigation, including threat characterization and assessment, personnel characterization and vetting, computer security measures to prevent insider threats, and prescriptive, performance-based, and combined approaches to system evaluation for insider threats. These lectures and panel discussions provide participants with examples of currently implemented good practices at a variety of nuclear facilities around the world that they could potentially apply to their own facilities to improve their insider mitigation programs.

In addition to lectures and panels from international practitioners, the course includes presentations on current research areas and forward-leaning topics addressing significant challenges to insider threat mitigation, including coercion, collusion, and supply chain impacts.

This paper will describe the course, outcomes of the course, and opportunities to extend the reach of this course in the future.

State

United States

Gender

Female

Author: Dr ASKIN, Amanda (Lawrence Livermore National Laboratory)

Co-authors: Ms BROWNELL, Lorilee (U.S. Department of Energy, National Nuclear Security Administration); Mr LARSEN, Robert (International Atomic Energy Agency)

Presenter: Dr ASKIN, Amanda (Lawrence Livermore National Laboratory)

Track Classification: PP: Insider threats