National Nuclear Security Administration

United States
Department of Energy
National Nuclear Security Administration

International Nuclear Security

M8: Workshop Summary and Conclusions

Research Reactor Sabotage Protection Workshop

SAND2025-02023O

INS International Nuclear Security
Reducing Risk of Nuclear Terrorism

Learning Objectives

Objectives:

- Become familiar with the concepts of Unacceptable Radiological Consequences (URC) sabotage and protection target identification
- Understand approaches to designing and implementing a PPS at a research reactor facility, including the development of a strategy to protect both theft and sabotage targets
- Develop skills required to analyze and evaluate a research reactor PPS at a concept level
- Understand the concept of integrated response

What Did We Do?

- We discussed the concepts of URC/HRC and sabotage and theft targets at a research reactor facility
  - As an example, we used a large hypothetical material test research reactor – MTRF facility
- We discussed the fundamentals of PPS for a research reactor facility, including detection, delay, and response
  - Through discussions and exercises, we developed a concept-level PPS for MTRF
- We discussed the methods for evaluating PPS with a focus on protective strategy TTX exercises
- We considered the concept of integrated response, including on-site security response, national response, and emergency response
  - We conducted a discussion based-exercise addressing an integrated response scenario

In Conclusion

- We hope you found the class useful
- Continue to practice your TTX skills
- Consider the workshop concepts in designing and implementing a PPS
  - Ensure your approaches reflect the site-specific conditions and policies
- Continue to improve integrated response programs and capabilities
- NNSA/INS remains committed to working with its partners to enhance nuclear security

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Questions, Comments, Concerns?

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