

## Demonstration/Exercises

### **NPP Spent Fuel Pool**

Topic: Sabotage – Water contamination opportunity in the SNF pool

Location: Gamma Irradiating Facility (GIF) pool (mock spent fuel pool)

Overview: A demonstration was held at the GIF pool standing in as a hypothetical spent fuel pool at any commercial nuclear facility to illustrate that as part of good ITM practices, only technically qualified personnel with equal knowledge of an operation should be allowed to perform certain duties. Employee qualifications should be checked before each operation and their access should be specifically authorized. Operational procedures should be specifically followed, and operations should be postponed until all measures related to ITM are able to be properly implemented.

#### **Good Practices for Discussion:**

- I. Access Control:*
  - A. Workers require official badge to enter area, which demonstrates:
    1. Employee is technically qualified to be in area.
      - a. Trained on operational procedures.
      - b. Safety and security training complete.
    2. Preventive measures (Trustworthiness and Reliability) have been implemented.
    3. Access is authorized to nuclear material, equipment, and data.
  - B. Plan of the day (POD) Meeting
    - a. Supervisor checks that workers are authorized to perform job functions.
    - b. Job scope is approved.
    - c. Safety and security procedures are reviewed.
  - C. Access control procedure are implemented, and records updated.
  - D. Inspection of any equipment or materials brought into the vital area.
- II. Insider Threat Mitigation*
  - A. Two-person rule is followed; both people are qualified for the duty at hand.
  - B. Control measures are followed:
    - a. Formal paperwork accompanies the addition of an additive to the pool; second person's signature needed to acknowledge the addition of the additive.
- III. Physical Security Measures:*
  - a. Work is performed in a secured and controlled area designated for associated work.
  - b. Reinforced concrete building walls, barriers, locked and alarmed doors, guards, cameras