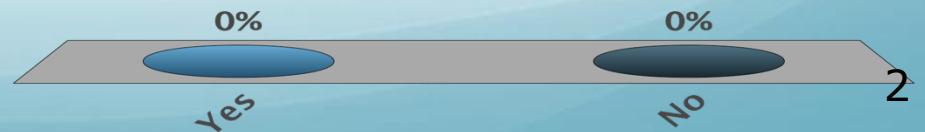


Insider Incidents – Case Studies

**Insider Threat Summit
September 7, 2015**

Are you familiar with other insider threat incidences in nuclear facilities?

- A. Yes
- B. No



Do you know of any insider threat incidents within your own facility?

- A. Yes
- B. No



Overview

- Examples and case studies are pulled from open sources
- Global Problem
- Common theme – “human element”
- **“...We usually lack good and unclassified information about the details of such nuclear incidents...”**

Sagan, Scott. (2014) When it Comes to Security at Nuclear Facilities, Danger Likely Lurks from Within. *Stanford Report*. news.stanford.edu/news/2014/april/nuclear-security-risks-042414.html

Dresden Nuclear Power Station

Morris, IL USA



- Senior Reactor Operator – Michael Buhrman
 - US Navy veteran
 - Exelon employee 2005
 - Recommended for leadership programs/internal awards
 - Influential and well-liked among peers at site
- Senior Reactor Operator – Landon Brittain
 - Studied engineering at Washington University in St. Louis
 - Friendly and social colleague
- **SRO Position is well compensated ~80,000-100,000 USD**



Dresden Nuclear Power Station (continued)

- Senior Reactor Operator – Michael Buhrman
 - Attempted to recruit additional staff, to form a “gang” for robberies and other criminal activities
 - Potential recruit was a senior equipment operator at the Dresden site
- Senior Reactor Operator – Landon Brittain
 - Complacent in criminal behavior



Dresden Nuclear Power Station (continued)

9 May 2012 – Steal car to be used in later crime

Arrested and flee to Venezuela after posting bail,
continue criminal activity

July 2013 Brittain arrested and extradited to USA

November 2013 Buhrman arrested and extradited

Buhrman – 40 years for aggravated vehicular
hijacking

Brittain – plea bargain, 3 years for obstruction of
justice/destruction of evidence



Dresden Nuclear Power Station (continued)



- Lessons Learned:
 - History of aggression, domestic violence, and use of controlled substances
 - Behavior observation program not monitored/taken seriously
 - Offsite actions/behavior do matter
 - Anonymous reporting not encouraged
 - “Culture of irresponsibility of selected staff” (other arrests)
- Exelon Sanctioned:
 - Criminal behavior violated NRC behavior observation Program, demonstrating inability to adhere to NRC requirements to “protect plant and public safety”
 - Technical staff member “willfully” failed to report the “aberrant behavior” under license

Dresden Nuclear Power Station (continued)



Exelon was required to:

- **Enhance the behavioral observation program procedure at all Exelon nuclear plants;**
- **Provide training to company staff on those revisions;**
- **Evaluate the effectiveness of the training; and**
- **Present "the facts and lessons learned from this incident" at industry forums**

“...We expect nuclear workers to be trustworthy and feel responsible for plant safety and security,” said NRC Region III Administrator Cynthia D. Pederson. “This includes alerting management should they encounter questionable behavior in other workers...”

San Onofre Nuclear Generating Station

San Clemente, CA USA



October 2012

- Incident of Sabotage
 - Staff member poured coolant in the diesel oil system
 - San Onofre Nuclear Generation Station (SONGS) Unit 2
 - Bitter contract disputes between union leaders/management
 - Staff morale at a very low level, much distrust among management and technical staff
 - Staff member: "...people can do crazy things when they are under extreme stress."

San Onofre Nuclear Generating Station (continued)

SONGS reported the most safety concerns to US NRC than any other nuclear power plant (2009-2012) and complained openly of retaliation from management...

Aligns with other sabotage events during contract negotiations/poor morale

Disgruntled employees influence safety and security measures



Y-12 National Security Complex

Oak Ridge, TN U.S.A.

- Final round of union negotiations not appearing favorable
- Union security guards (on possibly their last shift prior to going on strike) decided to ensure their presence would be missed by ensuring badges were hidden and disorganized
- Strike did occur
- Replacement staff significantly delayed in providing access to staff while searching for misplaced badges



Additional Insider Incidents

- Turkey Point Nuclear Generating Station
 - 1/8" hole drilled in stainless steel pipe connected to pressurizer of Unit 3; covered with insulation to hide; found during testing
- Byron Generating Station
 - Purchasing manager found ordering 3 times many of the materials actually required; would sell 2/3 of them on eBay; all were stamped with Exelon logo;
- Indian Point Energy Center
 - Supervisor falsified documentation on diesel fuel which was going into safety system; likely not intended to be malicious but covering himself for not doing his job; Individual was fired and prosecuted



A Worst Practices Guide to Insider Threat

- Lessons learned
 - Don't assume that serious insider threats are NIMO (not in my organization).
 - Don't assume that background checks will solve the insider problem.
 - Don't assume that red flags will be read properly.
 - Don't assume that insider conspiracies are impossible.
 - Don't assume that organizational culture and employee disgruntlement don't matter.
 - Don't forget that insiders may know about security measures and how to work around them.
 - Don't assume that security rules are followed.
 - Don't assume that only consciously malicious insider actions matter.
 - Don't focus only on prevention and miss opportunities for mitigation.

Summary

- The insider threat presents unique problems to both safety and security
- Proactive programs can help identify and deter potential insiders
- Continuous observation and employee awareness are critical mitigation elements
- Interaction and sharing lessons learned with the international community can aid in both prevention and protection against the insider threat.

Questions/Comments