DC Cook

Simulator Security
Simulator Security

- Exam items (2 major categories)
  - People control; area boundaries/doors
  - Data control; access to exam information
Simulator Security

• Data control (history)
  – PPC history
  – RMS history
  – Triconex history
  – Recorder history
  – Instructor station history
  – NRC data collection
Simulator Security

• Data control (during exam)
  – Network isolation
  – Phone systems
  – PA system
Simulator Security

• People control
  – Unit specific doors
  – General area access
  – Computer room
  – Exam room
Simulator Security

• Complexities of dual unit simulation
  – Phones/PA System
  – PPC history
  – Hot standby panel
  – Multiple entry doors and area control
Simulator Security

- 5 zones of security
- General area
- Exam Room
- Computer room
- Unit 1
- Unit 2
Simulator Security

• Exam Development Room
  – Independent electronic lock controlled through hand geometry reader
  – Battery backup for loss of power event
  – Operating Experience
    • Primary power supply breaker was opened to perform maintenance on the simulator
    • Backup battery discharged
    • Lost Exam Room door security
Simulator Security

- January 2016.
  - Concurrently run NRC validation of the ILT exam while conducting ILT audit exams. Problem is both exams used both units.
Simulator Security

• Area separation
  – Independent software from the exam room security using plant access badges
  – Apollo security card readers and system
  – Door locks are set up in four zones with a custom program that accesses each card reader ‘exception’ list
  – Enables access flexibility
Simulator Security

• Pre-existing groups for developing access rights (Ops, E-Plan, Training, ILT, LOR)

• Select personnel from the database for the applicable group

• Determine doors to secure

• Set the security using the desired group
  – Selected doors are now only accessible by cardholders on the selected list
<table>
<thead>
<tr>
<th>Badge</th>
<th>Last Name</th>
<th>First Name</th>
<th>FID</th>
<th>Training</th>
<th>Operations</th>
<th>EP</th>
<th>ILT NRC Security Agreement</th>
<th>RQ NRC Security Agreement</th>
<th>General Area Access</th>
<th>Unit 1 Simulator Access</th>
<th>Unit 2 Simulator Access</th>
<th>Computer Room Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>5656</td>
<td>Bilencio</td>
<td>Ira</td>
<td>604</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>8591</td>
<td>Conrad</td>
<td>Ted</td>
<td>3</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2179</td>
<td>Garrison</td>
<td>Tim</td>
<td>4</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>17861</td>
<td>Johansen</td>
<td>Tim</td>
<td>594</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>4073</td>
<td>Kelley</td>
<td>Christoph</td>
<td>583</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>12595</td>
<td>Mierau</td>
<td>Mike</td>
<td>360</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>5137</td>
<td>Ott</td>
<td>Tonya</td>
<td>7</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>12762</td>
<td>Pettinger</td>
<td>Steva</td>
<td>539</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>17394</td>
<td>Russo</td>
<td>Shane</td>
<td>319</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>7451</td>
<td>Salvati</td>
<td>Keith</td>
<td>1</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>16935</td>
<td>Valley</td>
<td>Todd</td>
<td>36</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>6484</td>
<td>Vince</td>
<td>Scott</td>
<td>6</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>2074</td>
<td>Viereme</td>
<td>Tim</td>
<td>422</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Set ILT NRC Security
Set RQ NRC Security
Update Badge List
Reset Security
Apply

Record 2 of 13 (Filtered)
Simulator Security

- Simulator Data Security
  - Host computers are isolated from network access
  - Isolate data transmitted to off-site facilities to support E-Plan drills (software)
  - Isolate phone, PA, and radio communications (hardware)
  - Select stand alone data collection server used for SBT data collection (software)
  - Clear previous history files from host computer (software)
Simulator Security

• Master Clear (post exam)
  – DCS History
  – Triconex history
  – Backtrack / Instructor Station Files
  – RMS History
  – Recorder History
  – PPC History
Simulator Security

• Operating Experience
  – Support of an off-site facility Self-Assessment determined that some Yokagowa recorders retain history