

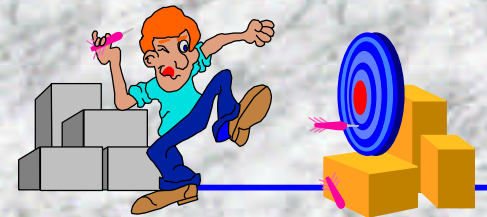


Y2K Contingency Planning

CRNA WORKSHOP

2/9/99

Jack Gibson/Jim Kaucher
PECO Energy



Y2K Contingency Planning

What are the Requirements ?



- NRC Generic Letter 98-01 (Complete by 7/1/99)
- NEI/NUSMG 97-07 (Program)
- NEI/NUSMG 98-07 (Contingency Planning)
- PA PUC Requirements (Complete by 3/31/98, for mission critical Remediations not completed)

Y2K Contingency Planning

What is External Risk ?



■ Remediation Risk

- Perform risk analysis of remediations in progress and determine the prudence of developing Contingency Plans

■ Internal Risk

- Evaluate the Y2K Ready/Compliant digital systems and software to determine which have severe consequences if a Y2K failure event were to occur

■ External risk

- Determine the risk and impact of external goods, services, activities and processes, not under the utility's direct control, which may cause or increase the severity of Y2K induced events. (phone services, delivery of critical supplies, emergency response etc.)

Y2K Contingency Planning

Where Does External Risk Stuff Come From?



■ External Risk Inputs

- Information gathered during Y2K initial activities
- LGS and PB Security Plans
- Fitness For Duty Program
- Licensing Commitment Database
- Environmental Monitoring Plan
- NRC Required Interfaces (ERDS, Region, Headquarters etc.)
- LGS/PB Technical Specifications
- Contracts for goods and services
- Letters of agreement between PECON and outside organizations
- Maintenance Rule database
- PECON Emergency Plan

Y2K Contingency Planning

What's The Approach ?



■ Define Bounding Conditions

- Systems Required for Safe Shutdown (Loss of GRID)
- Systems and support activities Required for Operational Assurance (Maintain Power Generation)
- Regulatory Requirements (E-plan, Environmental, Reporting, Staffing, Security Plan, etc.)

Y2K Contingency Planning

How Do I do it for Remediation?



■ **STAFF & PROCESS**

- Senior Reactor Operator
 - Determine which systems are mission critical
 - Determine which remediations will not be complete by 3/31/99
 - Determine which remediations are at risk of not completing by rollover
 - Prepare Contingency Plans

Y2K Contingency Planning

How Do I do it for Internal?



■ **STAFF & PROCESS**

- Senior Reactor Operator
 - Risk Rank Plant and IT systems
 - Evaluate digital/date sensitive components for H/M systems
 - Finalize Risk Ranking
 - Determine which systems require Contingency Plans

Y2K Contingency Planning

How Do I do it for External?



■ **STAFF & PROCESS**

- Emergency & Security Plan Coordinator
 - Scrub Security Plan
 - Scrub Emergency plan
 - Risk Rank Population
- Licensing Coordinator
 - Scrub Commitment Database
 - Scrub Technical Specifications
 - Risk Rank Population
- Goods & Services Coordinator
 - Build List of Critical Suppliers
 - Risk Rank List

Y2K Contingency Planning Risk Evaluation



■ Risk Determination

- Consequences of event (High, Medium or Low)
- Likelihood of event (high or Low)

■ Risk Ranking

- List events in order of risk priority (HH, MH, HL etc.)
- Decide which require a Contingency Plan



Y2K Contingency Planning Risk Consequence Determination



Determination of Consequence Factor

<u>RISK CATEGORY</u>	<u>CONSEQUENCE</u>		
	<u>HIGH</u>	<u>MEDIUM</u>	<u>LOW</u>
<u>Safety</u>	<u>Threat to Life or Health</u>		<u>No Threat to Life or Health</u>
<u>Regulatory and Other Legal Impact</u>	<u>Significant Regulatory or Legal Impact</u>	<u>Some Regulatory or Legal Impact</u>	<u>No Regulatory or Legal Impact</u>
<u>Environmental Impact</u>	<u>Any</u>		<u>No Impact</u>
<u>Business Impact</u>	<u>Immediate, major impact with no work-around</u>	<u>Major Business impact Within 8 Hours</u>	<u>Business Impact Within 1 Week</u>
<u>Financial Impact</u>	<u>Earnings Loss of \$500K/day or more; or Existing Alternate Remediation Costs More Than Projected Earnings Loss</u>	<u>Earnings Loss \$100K/day to \$500K/day</u>	<u>Earnings Loss Less than \$100K/day</u>
<u>Operational Impact</u>	<u>Failure will Cause Operations to cease in 2 Days or Less</u>	<u>Failure will Cause Operations to cease Between 2 to 7 Days</u>	<u>Failure will Cause Operations to cease in Greater than 7 Days; or Failure Has No Operational Impact</u>
<u>Adverse Public, Employee or Customer impact</u>	<u>Significant Impact</u>	<u>Some Impact</u>	<u>No Adverse Impact</u>
<u>Critical Business Activity Impact</u>	<u>Activity is Stopped at a Key Process Point</u>	<u>Activity is Slowed or Inconvenienced</u>	<u>No Impact or Stopped at a Low Level Point in the Process</u>

Y2K Contingency Planning Risk Likelihood Determination



Determination of Likelihood Factor

<u>Category</u>	<u>Likelihood</u>	
	<u>High</u>	<u>Low</u>
<u>Y2K Compliance Status</u>	<u>Not Compliant or Ready</u>	<u>Compliant or Ready</u>
<u>System Complexity</u>	<u>High: Integrated testing could not be performed; or System has Several External Interfaces which could not be thoroughly tested</u>	<u>Low: or Highly complex system but all interfaces have been successfully tested in the integrated system environment</u>
<u>Supply Chain</u>	<u>Low Confidence that the provider/supplier will continue to provide the service; or Weaknesses exist in the supply chain; or Complex supply chain that relies on multiple levels of suppliers</u>	<u>High confidence that the provider/supplier will continue to provide the service</u>

Determination of Overall Risk Factor

<u>Consequence</u>	<u>Likelihood</u>	<u>Overall Risk Factor Priority</u>
high	high	1
medium	high	2
high	low	3
medium	low	4
low	high	5
low	low	6

Y2K Contingency Planning Deliverables



- Matrices which identify population, evaluation attributes and risk evaluation
- Risk analysis worksheet for each member of the population
- Recommended list of required contingency plans
- Final list of required Contingency Plans
- Review of Activities by Site Owners
- Contingency Plan Strategies and Plans
- Training Packages
- Millennium Response Teams by name