

Y2K Emergency Preparedness and Precautionary Posture

Ontario Hydro Nuclear
Year 2000 Project

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Major Topics

- OHN Risk Management Framework
- Year 2000 risks
- Precautionary Posture
- Emergency Preparedness
- References

OHN Risk Management Framework

- Categories of Risk
- Risk Assessment
- Risk Control
- Risk Management Process

Categories of Risk

Risk Category:	External		Internal	
Source of Risk:	OH External	Other SBU	Non-Y2K Project	Y2K Project
Point of Failure:	Business Process		Digital Asset	

Risk Assessment

- Analyze business process and dependencies
- Identify criticalities
- Identify risks
- Analyze impact & likelihood of occurrence
- Set priorities for risk mitigation and contingency action

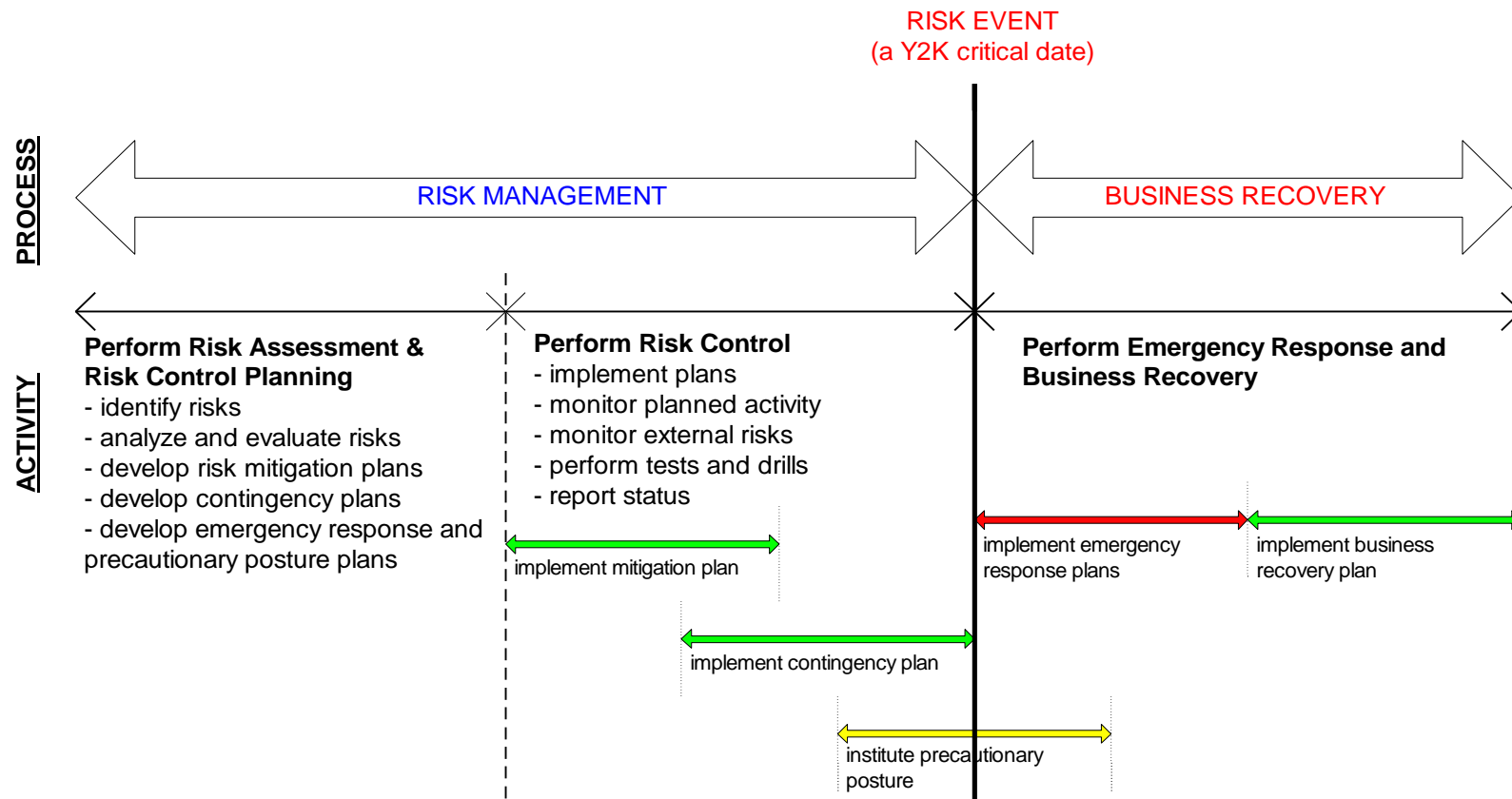
Risk Control

- Identify and evaluate risk mitigation and contingency options
- Develop plans and test strategies
- Execute risk mitigation plans
- Test and execute contingency plans
- Develop Y2K scenarios and modify emergency preparedness plans

Risk Control (cont.)

- Conduct emergency preparedness exercises & drills
- Develop & implement a Precautionary Posture

Risk Management Process



Year 2000 risks

- Internal operations
 - Systems and digital assets
- External operations
 - customers (power producers, MEUs, major directs)
 - suppliers (telecom, fuels, transportation, banks, other materials & services)
 - regulatory bodies and government
 - liability risks

Precautionary Posture

- Increased surveillance
- Equipment and procedure test
- Special operating procedures
- Special staffing arrangements
- Schedule outages outside the PP periods
- Spare generation & transmission capacity

Precautionary Posture (cont.)

- Coordination of operating plans
- Heightened alert for EROs
- Return to normal operations

Increased surveillance

- General vigilance
- Areas of internal risk
 - residual asset risk
 - fix may fail
 - overlooked assets
- High risk external stakeholders



Equipment and procedure test

- Continued correct operation & operational readiness
- Short procedure or list of observations on asset state
- Procedure for reporting and resolving variances
- Special staffing requirements



Special operating procedures

- Part of asset remediation strategy
- Develop procedures
- Run tests and drills
- Special staffing requirements



Special staffing arrangements

- Cancellation of all leave
- Augmented operations staff in place or ready
- Key maintenance staff ready
- Backup operations and maintenance staff on call
- Shift schedules prepared well in advance

Outages scheduled outside the PP periods

- prevent contention for human resources
- prevent contention for plant capacity

Additional generation and transmission capacity

- State of reserves
- Plan covering all generation capacity
- NERC coordination of BES

Heightened alert for EROs

- EROs in standby status
- Backup communications contingency plan
- EMOs on alert or in a precautionary status

Return to normal operations

- Develop procedures and conduct drills
- Disposition of incidents

Emergency Preparedness

- Identify existing authorities, plans, procedures, organizations
- Develop a set of Y2K risks and scenarios
- Update existing plans for each scenario
- Create new plans as necessary
- Develop tests, exercises and drills
- Include stakeholders

EP operational risks

- Power
- Communications

References

- Consolidated Ontario Hydro Nuclear Emergency Plan, N-PROG-RA-0001, April 14, 1998
- NERC Year 2000 Contingency Planning Guide Version 1.0, October 23, 1998
ftp://www.nerc.com/pub/sys/all_updl/docs/y2k/contingency.pdf
- Ontario Hydro Year 2000 Program, Risk Management Framework, Release 2.1, November 5, 1998
- Y2K Coordination Plan for the Electricity Production and Delivery Systems of North America,
<http://www.nerc.com/y2k/y2kplan.html>