



Millennium Challenge: The Canadian Regulatory Strategy

**The Atomic Energy Control Board of Canada
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Commission de contrôle
de l'énergie atomique

Atomic Energy
Control Board

Canada

Object of the AECB:

- To regulate the development, production and use of nuclear energy to prevent unreasonable risk to the environment.



AECB's Position wrt Y2K:



The Year 2000 and its impact dates shall not result in undue risk to health, safety, security and the environment, and shall not:

- not result in any safety related transients**
- invalidate the requirements of the act and regulations**
- violate any license condition or assumptions made in the licensing basis**



Why Y2K Merits Concern

- Common Mode Failure
- Probability = 1
- Potential to Impact All Plants
- High Profile



Requirements of the Program

Development of a comprehensive review criteria that includes:

- Planning & Resources
- Inventory of Y2K Dependent Digital Assets
- Impact Assessment
- Remediation Actions
- Contingency Plans





First Milestone:

By October 1, 1998, that all special safety systems have been examined, corrected, tested and declared as Year 2000 ready.



Second Milestone:

By December 31, 1998, all reviews and corrective actions are in place for systems which could challenge the special safety systems.



Third Milestone:

By June 30, 1999, all reviews and corrective actions are in place for all other safety related and peripheral systems.



Demonstration Process



- **Selection of Representative Systems and Components**
- **Detailed Demonstrations and Guided Inspections**



Documentation

- Program Plan
- List of Digital Assets
- Assessment Results
- Certification



Difficulties

- Definitions and Terminology
- Quantity of Data



Effort Remaining



- **Contingency Planning for External Risks**
- **Review Suppliers Y2k Compliance Process**
- **Communicate with Industries Outside of Nuclear**



Conclusions

After completion of the first two milestones, few components found not compliant:

- Maintenance/calibration tool.**
- Two digit year counter in programmable controller.**

