Year 2000: Regulating the UK Nuclear Industry

by

Peter Hughes
HM Nuclear Installations Inspectorate
Nuclear Safety Directorate
Health and Safety Executive

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Objective

- Nuclear Operator's Actions
- Regulator's Actions
- Review of activities in 1997 and 1998
- Lessons learned
- Look ahead to 1999 and 2000
- International collaboration
- Conclusion
Nuclear Operator's Actions

- Identify all software based systems
- Review all systems important to safety

- Inventory
- Prioritise
- Inspect/Test for date sensitivity
- Provide solution
- Safe working under existing arrangements
Regulator's Actions

- Are licensee's aware of the problem?
- Do they have strategy and action plan?
- Monitor implementation of the plan
- Review safety submissions
- Oversee arrangements for critical dates

- Prepare own organisation's emergency arrangements and equipment
Review of 1997 and 1998

- Spring 1997 formally confirmed licensees aware of the Y2k issue
- NII Project team established
- September 1998 Generic Letter
  - Justification for Continued Operation
  - Y2K Assessment Principles
  - Enforcement strategy
Review of 1997 and 1998

- NII’s inspection programme looks at
  - inventory (bottom-up and top-down
  - analysis to determine date awareness
  - testing performed to agreed arrangements
  - problems found, fixes being implemented and work-arounds demonstrably safe
  - residual risk-contingencies
Review of 1997 and 1998

- Justification for first critical date 1/1/1999
  - Mid November submission date
  - Nearly all on time
  - One late submission, led to specific successful testing being mandated

- Some "failures" reported
  - one or two related to year change
  - leap second insertion
  - not millennium related
Lessons Learned

- Useful trial run for licensess and regulator
- Need for NI to provide more guidance on the justification documentation for the next critical dates
Looking ahead to 1999 and 2000

- Complete inspection of licensee’s strategy implementation - mid 1999
- Inspect “solutions” implementation
- Work-arounds/Contingencies inspect viability, resourcing, training
- Next JfCO for 9/9/99 due mid July
- Millennium JfCO due mid November
International Collaboration

- World-wide potential to affect nuclear power
- NII contributed to IAEA guidance on Y2k
- NII contributed to IAEA guidance on applying Y2k in radioactive waste management
- NII Chief Inspector Mr Laurence Williams spoke at the IAEA Senior Regulators meeting Autumn 1998
Conclusion

- Year 2000 problems are real
- Address situation systematically
- Ensure licensees are pursing action plan to identify problems
- Need to justify safe operation
- Need for appropriate contingency plans for residual risks