

NUCLEAR TECHNOLOGY EDUCATION CONSORTIUM

N31 MANAGEMENT OF THE DECOMMISSIONING PROCESS

Summary

Before nuclear decommissioning and radioactive waste management programmes of work are allowed to proceed, it is essential for clear and concise business cases to be made. This module sets out the framework for the management of the decommissioning process, developing the programme with plans, making the most appropriate use of available funds and other resources, and arrangements for managing, monitoring and controlling the work.

On completion, students should be able to:

- Understand policy and business objectives of decommissioning
- Carry out basic project financial and economic appraisals.
- Understand the importance of hazard reduction, risk management, project prioritisation, and Tolerability of Risk (ALARP) arguments
- Be conversant with modern project planning processes including Work Breakdown Structures, Organisational Breakdown Structures, , Activity Schedules, Cost Controls, and Critical Path Analysis
- Understand Nuclear Safety Culture and Philosophy
- Be knowledgeable of waste classification and characterisation approaches
- Understand the documentation required to fulfill compliant and successful decommissioning processes.

Syllabus

- Nuclear site licence, regulatory and site infrastructure costs
- Programme formulation and importance of waste routes
- The difference between the financial case and the wider economic, regulatory, resource, etc., issues
- Hazard reduction (including hazard and risk)
- Project prioritisation
- The planning framework (definitive list of liabilities, the liabilities estimate, liabilities reduction, optioneering and strategy development, the business case, concept/scheme/ detailed design, project initiation and “Gateway” Reviews)
- Project management principles, planning, control and monitoring
- Contract Strategy selection
- Stakeholder Engagement and Management
- Financial and management accounting (including key accountancy concepts)
- Programme and Project Planning, Work Breakdown Structures and Earned Value Reporting

The module is underpinned with Case Studies, Worked Examples and Group Exercises.