

## **NUCLEAR TECHNOLOGY EDUCATION CONSORTIUM**

### **N24 ENVIRONMENTAL DECISION MAKING APPLIED TO DECOMMISSIONING**

#### **Summary**

This module introduces the important role that public perception, attitudes, values and beliefs play in environmental decision making. In it, we show how industry and regulators can use this information in environmental decision making approaches and techniques. Focusing upon nuclear facility siting and unsiting, this module is grounded in applied policy science and explores how scientific solutions may not meet public and policy expectations or requirements.

On completion, students should have obtained:

- Familiarity with a number of methods used by Social Scientists to determine public attitudes, beliefs and values and how this knowledge may be used to improve environmental decision making.
- Understanding of the quantitative methods used in environmental decision making.
- Understanding of environmental legislation and the setting of target levels in a decision making process.

#### **Syllabus**

This module consists of a taught part (lectures) and an applied part. The taught part comprises:

- Scientific basis of risk assessment
- Perception of risk in modern society
- The best practicable environmental option (BPEO)
- Basis of public opinion - Attitudes, beliefs and values
- Taking socio-economic factors into account - Stakeholder management
- Regulatory criteria for environmental protection
- Public attitudes towards the natural environment
- Attitudes towards environmentally-sensitive industries
- Multi-Attribute Utility Analysis (MAUA)

For the applied part the student undertakes independent study, drawing upon and applying knowledge and understanding from rest of the course, based around an "Optioneering exercise" relating to the storage of low and intermediate level nuclear waste.