

The UK's National Nuclear Laboratory provides the experts and technologies to ensure the UK nuclear industry operates safely and cost-effectively today and for the future.

We deliver the right amount of innovation to meet our customers' needs. This can range from simply drilling a hole to analyse underground wastes with our integrated microdrilling technology to the development of state-of-the-art power systems for spacecraft, based on radioactive materials.

Key Facts and Figures

Revenue	£85.4 million
Profit	£8.1 million
Employees	Around 800 (including 450 scientists)
Locations	6 throughout the UK

Key Facilities

Central and Windscale Laboratories

- High, active, alpha, beta and gamma cells
- Plutonium and MOX facilities
- Active/non-active laboratories
- Full scale test facilities
- Large flexible shielded facility for post irradiation examination

Workington

- Non-active test rig facility

Preston

- Active laboratories capable of handling uranic materials up to production scale
- Engineering facilities for large scale testing



Above: MOX facilities at the Central Laboratory

Below: Large scale inspection facilities at Windscale





NNL offers products and technical services across the whole range of nuclear industry sectors.

Measurement and Analysis

- Chemical, fingerprint, ILW and Low Level analysis
- Online wet chemical analysis
- Plant instrumentation
- Transport QA and safety
- Detection and measurement

Waste Management Technology

- Immobilisation technologies
- Chemical and process development
- Waste behaviour and materials
- Vitrification

Safety Management

- Chemotoxic and asphyxiation assessment
- DSEAR
- Training
- Criticality safety
- Regulatory support
- Peer review
- Hazard identification
- Radiological assessment

Asset Care

- Impact and structural modelling
- Remote engineering
- Technical consultancy
- Thermo fluids

Waste Residues and Processes

- Decommissioning residues
- Waste residues assessment, characterisation and processing
- Organic wastes and residues
- Post irradiation examination

Spent Fuel Technology

- Actinide chemistry
- Chemical and process modelling
- Radioisotope separations
- University contracts
- Engineering design

Security

- Security and safeguards
- Nuclear security and vulnerability assessment

Environmental Services

- Geochemistry and hydrology
- Sampling, monitoring and in-situ analysis
- Contaminated land assessment
- Waste and inventory assessment
- Effluents and environmental chemistry

Fuel and Radioisotope Technology

- Fuel cycle assessment
- Design and performance (inc. reactors)
- Product development and QA (inc. codes)
- Nuclear physics