RSK has a long-established track record of providing high-quality technical support services to power-generating organisations, gas and electricity distributors and industries associated with the planning or decommissioning of new and existing nuclear facilities, and the storage and/or disposal of nuclear waste.

Geophysical surveying can play an important role in the nuclear industry and in electricity and gas distribution, including pipeline projects. Geophysical surveying techniques are uniquely beneficial because they are non-invasive and thus have a lower impact on the environment than conventional drilling survey methods. RSK is licensed by OfCom for the use of ground-penetrating radar.

We work on existing structures to detect flaws that might have a deleterious effect on safety and on large areas of land to map geological layers and hazards. We detect hidden buried services and obstructions, underground storage tanks and other buried infrastructure before the development or decommissioning of a site.

In addition to designing and undertaking geophysical surveys, our in-house teams have wide-ranging expertise in geotechnical engineering and design, including risk assessments for earthquakes and other geohazards.

Key benefits of a geophysical survey
- Environmental – non-invasive with minimal disturbance to ground
- Economic – rapid, accurate data acquisition and quick coverage of large sites
- Cost and safety – early identification of otherwise unforeseen ground conditions to potentially reduce engineering costs and risk

Applications
- Mapping buried utility infrastructure
- Detecting underground storage tanks and unexploded ordnance
- 3D geological mapping
- Locating natural voids and faults
- Archaeological surveying
- Monitoring seismic vibrations and noise
- Characterising ground stiffness and the seismicity of geological layers
- Assessing ground conditions for the selection of pipeline route corridors and alignment design
- Structural surveying

Key nuclear projects
Product residues store, Sellafield, UK
Non-destructive testing using high-resolution, ground-penetrating radar and impact-echo techniques to detect defects in the internal walls of the targeted buildings

Low-level waste repository, LLW Repository, UK
A mapping survey using ground-penetrating radar, resistivity and seismic methods to improve understanding of the site’s geology.

Key non-nuclear projects
Brecon to Tirley pipeline, Murphy Pipelines, UK
Multi-technique surveying to measure parameters such as depth to bedrock and ground stiffness along the entire route of a 110-km pipeline

Power station, Stockton Drilling/AMEC, Isle of Grain, UK
A multi-technique investigation using electromagnetic, ground-penetrating radar and seismic methods to locate buried foundations, services and unexploded ordnance along the new pipeline routes for a new £500 million gas-fired, power-station development

For further information, visit us at www.rsk.co.uk or contact:
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RSK Group plc has achieved certification to the ISO 9001, ISO 14001 and OHSAS 18001 standards for quality, environmental and health and safety management.

Seismic data acquisition.