Technology and Policy Issues Relating to Future Developments in Research and Radioisotope Production Reactors

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Abstract

The paper describes the historical roles and the scale of research reactor technology. The various types and uses of a research reactor are described. The paper compares the policy issues of research reactors with those associated with civil nuclear power stations and posits that some issues of concern, such as nuclear security and non-proliferation are greater for research reactors. The benefits of research reactors are described especially the medical benefits arising from radiopharmaceutical production. The need for a new generation of research reactors is described and recent and current developments are summarised. The paper closes with a description of the role the UK might play in research reactor development for local national needs and to serve wider global demand.

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