

Health and Safety
Executive



KEEPING THE NUCLEAR OPTION OPEN; WE'VE DONE THAT, SO WHAT NEXT?

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EPSRC University Funding

- KNOO Programme (2005)
- Sustainability of Nuclear Power (2006)
- Nuclear Waste Management (2007/08)
- Engineering Doctorate Programme
- Defining Programmes for 2009 onwards



Status of Research in UK

- Loss of national infrastructure and Government funding
- Reliance on research overseas
- No single body responsible for research
- CEGB and UKAEA disappeared
- UK skills, knowledge and research capability in contractors and universities
- Market forces and competition for skills
- No coordination or sustainable funding



Industry Support of Universities

- NDA University Research Alliances
- BE Research Alliances
- MOD Propulsion Programme
- AWE
- HSE Nuclear Directorate
- EngD Programme
- NTEC, Birmingham PTNR, Tailor-made Courses for Nuclear Industry



Industry Group (EngD Programme Letter)

- Bob Ainsworth, BE
- Graham Fairhall, Nexia Solutions
- Neil Smart, NDA
- Ian Giles, MOD Propulsion Programme
- Mark Cheeseman, Tony Donaldson and John Shoesmith, Rolls-Royce
- Peter Storey and Keith Moodie, HSE



Rationale for University Research

- Sustainable programmes to develop skills
- Long term focus to provide basic research
- Develop range of skills to deploy in the industry to meet UK's nuclear agenda
- Research to underpin involvement in international research eg. EC, GNEP
- Application of research and skills across civil and defence programmes
- Link to Technology Strategy Board



Vision Statement (Nuclear Platform)

A University Programme coordinated between the nuclear industry and Research Funding Councils to be a vehicle for developing the next generation of scientists and engineers to support civil and defence nuclear programmes. A programme that would have a timescale of the next 10 years and would aim to serve the nuclear industry over the next 40-50 years.



Possible Outline Proposal to EPSRC

- Rolling programme of EPSRC calls
- Series of staged priorities to meet industry needs
- Matching industry funding
- Governance through an industry advisory board
- Development of Centres of Competence and/or Networks of Excellence
- International Networking and funding of collaborative research through EC programme
- Align with other inputs eg. C-NET, NEWCLERE

Provisional Core Areas (Networks)

- Build upon existing EPSRC programmes
- Technical challenges of current (Gen II and III) reactors
- new build (GEN III+) reactors and innovative reactors (Gen IV) fuel-cycle
- Waste management aligned with separations and disposal
- Nuclear materials and structures
- Nuclear power for heat generation



What are your views?

- Value of EPSRC/Industry programme
- University expectations
- Areas for research
- Shifting priorities
- Industry buy-in
- Synergies with other industries

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