

## **Nuclear Power in the UK – Fact sheet for the UK-Canada nuclear skills workshop**

The UK Government's policy on new nuclear build was set out in the 2003 Energy White Paper: **there are no proposals to build new nuclear power stations but the UK is keeping the option open.** The Energy Review, [www.dti.gov.uk/energy/review/](http://www.dti.gov.uk/energy/review/) which was launched by the Prime Minister on 29<sup>th</sup> November 2005, will review all the options including nuclear power, conventional fossil fuelled generation and renewable energy technologies.

Nuclear power currently provides about 20% of UK electricity needs. There are 23 reactors on twelve sites, eleven of which are currently expected to close in the next 20 years. If there is no new build, and no extension to the operational lifetimes of existing plants, it is expected that the contribution of nuclear power to the UK energy mix will fall to 17% by 2010 and 7% by 2020. The UK civil nuclear industry employs about 54,000 people directly, plus about 54,000 to 106,000 indirectly.

The UK is part of **ITER**, [www.iter.org](http://www.iter.org) the International Thermonuclear Experimental Reactor, the fusion research reactor being developed by the EU, China, Japan, Korea, Russia and the USA to be built in Cadarache, France.

The **Nuclear Decommissioning Authority** (NDA) [www.nda.gov.uk](http://www.nda.gov.uk) was set up in April 2005 to take responsibility for the UK's civil nuclear legacy and ensure that the 20 sites under their ownership are decommissioned and cleaned up safely. These sites, representing about 85% of the UK's civil nuclear liabilities, were previously operated by BNFL and UKAEA (UK Atomic Energy Authority) (British Energy owns the other power stations). The NDA estimates £56 billion will need to be spent cleaning up the sites over 25 years.

The **Committee on Radioactive Waste Management** (CoWRM) [www.cowrm.org.uk](http://www.cowrm.org.uk) was appointed by government in March 2003 to review the options for managing radioactive waste for which there is no agreed long-term solution. They are due to report by Summer 2006.

### Major UK nuclear skills initiatives

- The **Dalton Nuclear Institute** [www.eps.manchester.ac.uk/dalton/](http://www.eps.manchester.ac.uk/dalton/) at the University of Manchester was launched in July 2005. It aims to lead in co-ordinating nuclear science and engineering research across the UK.
- **Keeping the Nuclear Option Open** (KNOO), a £6.5 million initiative by EPSRC (Engineering and Physical Sciences Research Council) [www.epsrc.ac.uk](http://www.epsrc.ac.uk), BNFL (British Nuclear Fuels plc) [www.bnfl.com](http://www.bnfl.com) and partners for research and education in nuclear engineering. Roger Grimes at Imperial College is Principal Investigator for KNOO.
- **Cogent Skills Sector Council** [www.cogent-ssc.com](http://www.cogent-ssc.com) is tasked with ensuring education and training meets nuclear employers current and future needs.
- UK is participating in the **Generation IV International Forum** to develop the next generation of fission reactors. £5 million per year funding from DTI covering years 2006/7 and 2007/8. <http://www.gen-4.org/index.html>