

10GW to the UK electricity mix, which is about 15% of the total UK requirement, down from a peak of 26% in 1997. Following an announcement early in 2008 by the government, with support from the main opposition party, it is expected that new nuclear plants will be built in the UK as soon as possible. Two new designs, the Westinghouse AP1000 and the Areva EPR, are currently undergoing a Generic Design Assessment by the UK regulator, the Nuclear Installations Inspectorate. A review by the Office of Nuclear Regulation following the events at Fukushima, published in October 2011, stated that the accident provided no reason to restrict UK nuclear reactors or stop building new ones.

Decommissioning of the Magnox NPPs is the responsibility of the Nuclear Decommissioning Authority (NDA). They also own the liability of Capenhurst Fuel Enrichment Plant, the research reactor sites at Harwell and Winfrith, the fusion research centre at Culham, the Fast Reactor research centre at Dounreay and Sellafield. Westinghouse own and operate the fuels fabrication plant at Springfields, Preston.

Privatisation of the Central Electricity Generating Board (CEGB) and the United Kingdom Atomic Energy Agency (UKAEA) and the subsequent closure of many national laboratories, together with the transfer of the liability for the decommissioning of the Magnox sites from BNFL to the NDA resulted in the reorganisation of British Nuclear Fuels Ltd (BNFL). The BNFL Research and Technology division was rebranded as Nexia Solutions which in 2008 became the National Nuclear Laboratory. From April 2011 BNFL no longer exists

Reorganisation has also taken place within government. The Office for Nuclear Development was established in early 2008 with a remit to facilitate new nuclear investment in the UK and advise the Secretary of State on the exercise of his regulatory and policy functions in relation to the nuclear industry. In October 2008 the Department of Energy and Climate Change was created bringing together energy policy (previously with BERR – the Department from Business, Enterprise and Regulatory Reform, subsequently BIS – the Department for Business, Innovation and Skills) with climate change mitigation policy (previously with Defra – the Department for Environment, Food and Rural Affairs). The Nuclear Installations Inspectorate was replaced by the Office of Nuclear Regulation in 2011.

The UK has also had a long involvement with nuclear fusion based at the Culham site in Oxfordshire. Currently operational are the Joint European Torus (JET) and the Mega Amp Spherical Tokamak (MAST). JET is run as a collaboration between all European fusion organisations and the participation of scientists from around the globe. MAST is a collaboration between EURATOM and the UKAEA Fusion Association. The UK is also involved in the ITER project which builds on much of the work accomplished with JET which is currently the world's largest tokamak.