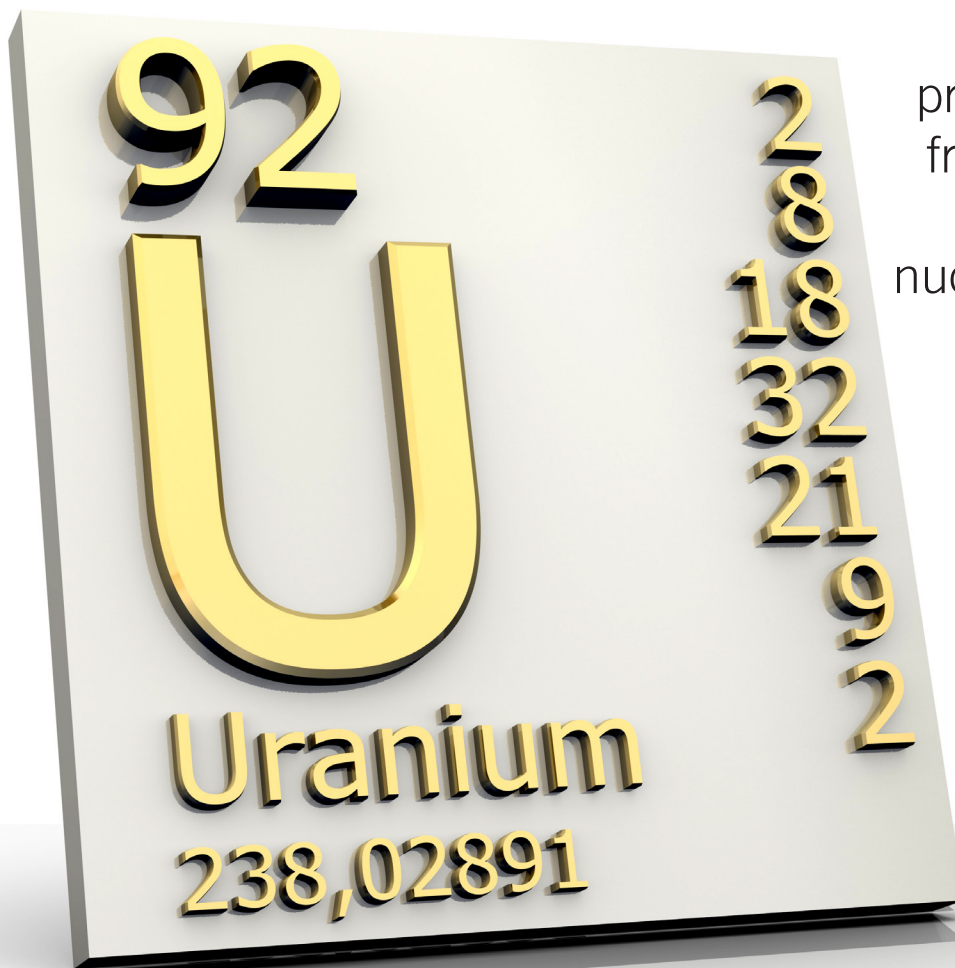


Legal framework for the **Nuclear Industry** in Great Britain

This factfile
presents the legal
framework which
applies to the
nuclear industry in
Great Britain



Summary

This Factfile presents the legal framework which applies to the nuclear industry in Great Britain and summarises the key aspects of the relevant Acts of Parliament.

Legal Framework for the Nuclear Industry in Great Britain

In Great Britain the principal Acts of Parliament concerning all nuclear installations are:

- Nuclear Installations Act 1965/69 as amended
- Radiological Protection Act 1970
- Health & Safety at Work Act 1974
- Ionising Radiations Regulations 1985
- Electricity Act 1989
- Environmental Protection Act 1990
- Radioactive Substances Act 1993
- Environment Act 1995
 - Radioactive Material (Road Transport) (Great Britain) Regulations 1996
 - Packaging, Labelling and Carriage of Radioactive Material by Rail Regulations 1996
- Environmental Impact Assessment for Decommissioning Regulations 1999
- Health Protection Agency Act 2004
- Energy Act 2004
- Energy Act 2013

These Acts cover the legal requirements which the nuclear industry must comply with, but in addition there are a number of international legal instruments including the Vienna Convention on Civil Liability (1963). Although GB is not a signatory of this Agreement, the Convention has been an aid in constructing the appropriate Statutes.

The **Health and Safety at Work etc Act 1974** (HSW Act) applies to nuclear facilities in Great Britain. It places duties on employers to ensure the health, safety and welfare of their employees. It also places duties on an employer to conduct their undertaking in such a way to ensure, so far as is reasonably practicable, that persons not in their employ are not exposed to health and safety risks. The HSW Act requires that health and safety risks be reduced so far as is reasonably practicable to protect people.

The **Energy Act 2013** established the Office for Nuclear Regulation (ONR) as a statutory corporation (effective from 1st April 2014). The ONR was formed by the merger of the: Health and Safety Executive's (HSE) Nuclear Directorate; Office for Civil Nuclear Security (OCNS); UK Safeguards Office; and the Department for Transport's Radioactive Materials Transport Team (RMTT). The Act included the legislation to establish the ONR, define its regulatory role with regard to nuclear safety, nuclear site health and safety, nuclear security, nuclear safeguards and transport. The Act gives ONR the responsibility to enforce the relevant provisions in the Nuclear Installations Act 1965, the Nuclear Industries Security Regulations 2003 (NISR) and the Carriage of Dangerous Goods (CDG) 2009 as they apply to the carriage of radioactive material for civil purposes.

The **Nuclear Installations Act 1965 (NIA 1965)** establishes three main elements with regard to nuclear installations: the requirement to be licensed, the exercise of control through the issue of permit over certain processes, and the provision of a legal regime regarding the liabilities of the licensee to third parties.

Nuclear Site Licence

The ONR is the responsible body which licences sites for nuclear installations. Before issuing a licence ONR assesses: whether the applicant's organisation is capable and has sufficient resources for the nature of the proposed installation, and the nature and location of the site. The Licence is unique to the particular site and is issued only when ONR are completely satisfied each and every licensing issue has been addressed.

All nuclear installations must have a Site Licence before any nuclear related activities commence. ONR attaches a set of thirty six standard licence conditions to the Site Licence that place specific requirements on the Licensee. The licence and the attached conditions apply at all times throughout the life of the licensed site and includes design, construction, commissioning, operations, maintenance, modification, waste management and decommissioning. The licence conditions are the main basis for ONR's regulation and the licensee's management system provides the arrangements to meet the licence conditions. For example, the licensee needs to control modifications and to provide

safety information to ONR about modifications. ONR can specify at which stages the licensee needs to seek its permission to proceed.

When the installation is finally closed down, the nuclear decommissioning processes have to be approved formally by the ONR. The Government's policy is that all decommissioning of nuclear installations should be carried out as soon as it is practicable to do so. After decommissioning, the ONR will not give notice of any termination of responsibility (delicensing) until they have been completely satisfied that the site location has been fully decommissioned, dismantled and there is no longer a danger from ionising radiation.

In addition to fulfilling all the licensing requirements demanded by the ONR, licence applicants must at the same time comply with planning requirements and provisions in the **Electricity Act 1989**. In this Act there is a requirement to obtain Consent to construct any type of power station whose capacity is to be more than 50 MW. Following such Consent for the construction and use of the site, a licence under the Nuclear Installations Act 1965 as amended, will be necessary.



Transport of Nuclear Waste by kind permission of the World Nuclear Transport Institute

An important aspect of all nuclear operations including decommissioning is the creation of wastes. For licensed nuclear sites, disposal of these wastes are regulated under the **Radioactive Substances Act of 1993**. The **Environment Agency (EA)** is the principal regulator under the Radioactive Substances Act for England and Wales. In Scotland, a separate agency, the **Scottish Environment Protection Agency (SEPA)**, has this role. The EA regulates the disposal of all radioactive wastes from licensed nuclear sites including nuclear power stations and reprocessing sites. In particular, the EA grants authorisation for disposals and discharges of gaseous, liquid and solid radioactive wastes. These are subject to strict limits, conditions and monitoring.

Following the introduction of the **Environmental Impact Assessment for Decommissioning Regulations 1999**, consent from the ONR is required before decommissioning of a reactor site can commence and for any changes likely to pose any adverse environmental effects.

The **Radiological Protection Act 1970** provides protection for occupational workers and the general public against radiological hazards. This Act created a public authority, the National Radiological Protection Board, (NRPB). Its

functions were to advance the acquisition of knowledge for the protection of the public from radiological hazards, by research, and to provide information and advice to government bodies and the public on radiation issues.

Under the provisions of the **Health Protection Agency Act 2004**, the National Radiological Protection Board merged with the Health Protection Agency. This led to the formation of the Radiation Protection Division on 1 April 2005 with responsibility for work on ionising and non-ionising radiation.

The **Ionising Radiations Regulations of 1985** were made under the Health and Safety at Work Act, 1974. These are UK wide regulations and deal specifically with radiological protection and take forward the implementation of many of the Euratom basic standards. The belief is that radiological protection is best provided by the recommendations made by the International Commission for Radiological Protection (ICRP) as incorporated under the Euratom Treaty. These are fully accepted as the correct means of safeguarding the health of the nation and its environment.

In Great Britain the controls regulating the transport of radioactive waste are dependent



Intermediate level waste kind permission of Sellafield Ltd

on the mode of transport used. Either the **Radioactive Material (Road Transport) (Great Britain) Regulations 1996** or the **Packaging, Labelling and Carriage of Radioactive Material by Rail Regulations 1996**, is applied as appropriate.

The **Energy Act 2004** established the Nuclear Decommissioning Authority with responsibility for the decommissioning and clean-up of 20 civil public sector nuclear sites, including all Magnox nuclear power stations and Capenhurst, Dounreay, Harwell, Sellafield, Springfields, Windscale AGR and Winfrith. Also under the Energy Act, the Government has nominated the **Nuclear Decommissioning Authority (NDA)** to oversee British Energy's planning for and decommissioning of its nuclear power plants and for reviewing its strategies and budgets for this decommissioning.

Currently the Planning Reform Bill is going through Parliament. If this is made law it will need an addition to this factfile because it will have a significant impact on nuclear power station planning.

Further Information

IET Energy related factfiles

<http://www.theiet.org/factfiles/energy/index.cfm>

IET nuclear factfile series

The principles of nuclear power

<http://www.theiet.org/factfiles/energy/nuc-prin-page.cfm>

Nuclear reactor types

<http://www.theiet.org/factfiles/energy/nuc-reac-page.cfm>

Nuclear safety

<http://www.theiet.org/factfiles/energy/nuc-safety-page.cfm>

Legal framework of nuclear power in the UK

<http://www.theiet.org/factfiles/energy/legal-frame-nuc-page.cfm>

Nuclear decommissioning

<http://www.theiet.org/factfiles/energy/nuc-dec-page.cfm>

Nuclear waste disposal and transport of spent fuel

<http://www.theiet.org/factfiles/energy/nuc-waste-page.cfm>

The nuclear fuel cycle

<http://www.theiet.org/factfiles/energy/nuc-fuel-page.cfm>

The radioactive decay of uranium238

<http://www.theiet.org/factfiles/energy/uranium238-page.cfm>

Glossary of nuclear terms

<http://www.theiet.org/factfiles/energy/nuc-terms-page.cfm>

Further Reading

- Wood, J. Nuclear Power (IET Power and Energy Series 52); Institution of Engineering and Technology (2007) ISBN 0863416683
- ONR, Licensing Nuclear Installations, 4th edition: January 2015



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