



We are the Environment Agency. It's our job to look after your environment and make it a better place - for you and for future generations.

Your environment is the air you breathe, the water you drink and the ground you walk on. Working with business, Government and society as a whole, we are making your environment cleaner and healthier.

The Environment Agency. Out there, making your environment a better place.



"Our mission is to prevent death, injury and ill health in Great Britain's workplaces."

We do this through research, information and advice, promoting training, new or revised regulations and codes of practice, inspection, investigation and enforcement.

HSE's Nuclear Directorate's mission is to protect people and society from the hazards of the nuclear industry.

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New nuclear power stations

This leaflet explains how the assessment process works, what is happening now, who is doing it, and how you can get involved.

The Health and Safety Executive (HSE) and the Environment Agency are working together to make sure that any new nuclear power stations built in the UK will meet high standards of safety, security, environmental protection and waste management.

We have developed a new process to assess designs for nuclear power stations, called generic design assessment ('GDA'). It is a structured process which has four steps, spread over several years. It allows us assess the safety, security and environmental implications of new designs before an application is made to build a nuclear power station at a specific site.

Through its Nuclear Directorate, HSE regulates the safety and security aspects of nuclear power stations throughout their design, construction, operation and decommissioning. The Nuclear Directorate includes the Nuclear Installations Inspectorate, which is responsible for overseeing the safety of nuclear sites. It also includes the Office for Civil Nuclear Security, which enforces security arrangements at civil nuclear sites.

The Environment Agency regulates (in England and Wales) key environment protection aspects of nuclear power stations throughout their design, construction, operation and decommissioning. These include disposals and discharges of radioactive wastes, abstraction and discharge of cooling waters, and the disposal of non-radioactive wastes. In Scotland, the Scottish Environment Protection Agency (SEPA) has similar

responsibilities. SEPA is not taking part in the generic design assessment process.

What happens after generic design assessment?

We aim to complete generic design assessment in 2011. Once completed we will say if a design is acceptable or not. This will include whether it can operate safely and securely, and that people and the environment are properly protected.

The process for selecting individual sites is separate from the design assessment process. Potential operators will need to find a suitable site, deal with any site-specific issues and demonstrate their capability to build and operate the design safely. They must take on the responsibility of a nuclear site licensee and apply to us for permission to start construction. We anticipate that the site-specific approvals process will take about a year.

Before they can start to build, a potential site operator will need other legal permits in addition to the agreement of the nuclear regulators, such as planning permission and an approved decommissioning and waste management programme. Once any construction has started, we will work closely with the site operators to make sure that they comply with all the requirements and conditions that we apply.

What stage is the assessment at?

We started the generic design assessment process in August 2007, by carrying out preliminary assessments of four nuclear power station designs:

- Atomic Energy of Canada Limited's (AECL) ACR-1000
- AREVA and Electricité de France's (EDF) UK EPR
- GE-Hitachi Nuclear Energy's ESBWR
- Westinghouse Electric Company's AP1000

We completed initial assessments of the four designs in March 2008. We concluded that we could not see any shortfalls at that stage – in terms of safety, security or the environment – which would prevent any of the designs from being built in the UK. We published reports of our initial assessment on our joint web site.

Subsequently, two design companies (AECL and GE-Hitachi) indicated they did not wish to proceed further with the assessment process. We are taking the two remaining designs – Areva/EDF's UK EPR and Westinghouse's AP1000 – through more detailed assessments. We are currently scrutinising the cases made by the design companies and will publish another set of assessment reports for these in November 2009.

How you can get involved

We are keen to ensure our assessment process is open and transparent. You will be able to see the safety, security and environmental reports that each design company submits to us, except where it could compromise security or commercial interests, on the design companies' websites. You can comment on the designs via these websites, or in writing. The companies will respond to your comments and questions about their designs. They will not respond to comments on more general issues, such as whether the UK needs nuclear power.

At the end of each stage of the assessment process, we will publish our views on the main issues and the responses made. The Environment Agency will carry out a separate public consultation in 2010 about the reactor designs. We will consider the comments we receive and use the issues raised to help inform our decisions about the acceptability of the designs.

Would you like to find out more?

[visit](#)

www.hse.gov.uk/newreactors/reactordesigns.htm

[htm](#)

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Further information

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Assessing new nuclear power stations

Public involvement



Working in partnership

The Environment Agency and the Health and Safety Executive