

# Our decisions to issue interim Statements of Design Acceptability for two new reactor designs

### What is the Environment Agency's role?

As the leading organisation working to protect the environment, it our job is to regulate discharges and waste disposals from nuclear power stations in England and Wales and ensure their impact on people and the environment is minimised and acceptable.

The Office for Nuclear Regulation's (ONR) role is to regulate safety and security at nuclear power stations.

Together we are responsible for making sure that any new nuclear power stations meet high standards of safety, security, environmental protection and waste management.

### How are you doing this?

In 2007 we and the Office for Nuclear Regulation started working together on a new process that we developed for assessing nuclear power station designs called 'Generic Design Assessment' (GDA). We've assessed two designs - EDF/AREVA's UK EPR<sup>TM</sup> and the AP1000® designed by Westinghouse Electric Company.

### What is Generic Design Assessment?

Generic Design Assessment (GDA) allows us to get involved at an early stage where we can have most influence, when we can begin assessing the environmental, safety and security aspects of reactor designs before any applications to build a nuclear power station are made.

We provide advice to the designers about any problems we identify so that these can also be solved effectively and efficiently. This also helps potential developers of new nuclear power stations because it increases their confidence that if they make site specific proposals using the GDA designs these are more likely to be acceptable to the nuclear regulators because of the work already undertaken.

We will use our GDA work to help inform our decisions on any site specific applications we receive for new nuclear power stations. Developers must obtain all relevant site specific permissions from us and other regulators and bodies before a new nuclear power station could be operated.

We have received a number of applications for environmental permits for NNB Generation Company's proposed new nuclear power station at Hinkley Point C in Somerset. We will not issue permits for new nuclear power stations unless the design and its potential operators meet the high safety, security, environmental and waste management standards that we require.

GDA improves efficiency and effectiveness for us and the nuclear industry, and delivers greater protection for both people and the environment.

### What impact did the incident at Japan's Fukushima nuclear power station have on GDA?

We extended our assessment to allow us to take account of the Chief Inspector of Nuclear Installations' report on the implications of Fukushima for the UK and didn't come to decisions about the designs in June 2011 as originally targeted.

### What is happening now?

We have completed the assessments that we and ONR set out to do. We are publishing our decisions and detailed assessment reports on whether the nuclear power station designs are acceptable or not. We are content with the environmental aspects of both designs that we have assessed and are issuing interim Statements of Design Acceptability.

We have specified two "GDA Issues" for the companies to address before we would be prepared to consider issuing a final Statement of Design Acceptability and agree that construction of the nuclear reactor should begin.

#### Did you consult on your assessments?

Yes. We consulted for 16 weeks from 28th June 2010 to 18th October 2010. We have carefully considered the comments and issues raised and they have helped inform our decisions about whether the designs are acceptable.



### What are you saying about the UK EPR™ and the AP1000® nuclear power plant designs?

We are content with relevant environmental aspects of the designs and that they should meet the high standards that we expect.

We are issuing interim Statements of Design Acceptability (iSODA) for both designs. We have considered all the responses to our consultation and ONR's assessment before coming to a final decision on the acceptability of the UK  $EPR^{TM}$  and the AP1000®.

Our decisions are subject to two "GDA Issues" on each design, both joint with ONR. ONR has also identified a number of other GDA Issues for each design. The design companies, Westinghouse and EDF/AREVA have proposed Resolution Plans to address their GDA Issues. With ONR, we have reviewed their plans, and consider them credible. With ONR, we need the companies to resolve all the GDA Issues before we would agree to

construction beginning of the nuclear island of a new nuclear power station.

### Is GDA over? What happens next?

We have completed the assessments we intended to carry out but GDA is not yet complete because we've issued interim statements of design acceptability (iSODA).

This means we've identified some areas where the reactor designers need to carry out further work, providing us with further information and resolving certain technical issues. When these issues have been addressed to our satisfaction, we'll review the 'interim status' and, if appropriate, issue a final Statement of Design Acceptability (SoDA). Our and ONR's approach to GDA is aligned and similarly it has issued an interim "Design Acceptance Confirmation". Only once all GDA Issues are resolved will we jointly be content for construction of the reactor to begin.



### Where can I see your decision documents?

They are available on our website on our consultation page https://consult.environment-agency.gov.uk/portal/ho/nuclear/gda or search in our publications catalogue for 'gda' http://publications.environment-agency.gov.uk

## Where can I find out more about your role and 'generic design assessment'?

Information about our work is on our joint website www.hse.gov.uk/newreactors and our website www.environment-agency.gov.uk/nuclear or www.environment-agency.gov.uk/hinkleypoint

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