



# Assessing new nuclear power station designs

Information for communities

September 2014

**Why and how we are assessing designs of new nuclear power stations and how to get involved.**

## New nuclear power stations

The UK needs new and replacement energy infrastructure that can provide secure, reliable, low carbon electricity. UK Government's energy policy identifies that nuclear power could play a vital role, alongside renewable energy sources, such as wind and solar power, in making sure that the UK has enough low-carbon electricity in the future.

## Regulating new power stations

As regulators of the nuclear industry, we, the Office for Nuclear Regulation (ONR), the Environment Agency (EA) and Natural Resources Wales (NRW), are working together to ensure that any new nuclear power stations built in the UK meet high standards of safety, security, environmental protection and waste management.

ONR and EA have developed an assessment process - 'Generic Design Assessment' (GDA) - which enables us to scrutinise new nuclear power station designs before they are built. It means we can identify any potential design or technical issues early and ask the reactor designer to address them.

While GDA's technical assessments are primarily carried out by ONR and EA, the EA and NRW work as partners on environmental aspects of GDA.

Any company that wants to operate a nuclear power station has to show that it can build, operate and decommission it safely, protect the environment and manage radioactive waste.



It must obtain a number of site specific permissions from regulators and government. These include a nuclear site licence and relevant consents from ONR and environmental permits from the EA or NRW. The company will also have to obtain planning consent and other approvals from the Department of Energy & Climate Change's Secretary of State.

If we, ONR and EA or NRW, receive applications for development of new nuclear power stations at specific sites we will carefully consider those proposals and take into account the work we have done on GDA when making decisions about whether the proposals are acceptable. We won't issue a site licence or environmental permits unless we are satisfied that site specific proposals and the proposed operating company meet our high standards.

## About GDA

- A GDA of a nuclear power station will take around four years to complete.
- GDA is carried out in a number of steps of increasing detailed scrutiny.
- We'll publish reports giving our views on the main issues identified by our assessments at the end of each step.

- We'll publish quarterly update reports on our website throughout the assessment.
- After the assessment we'll say if a design is acceptable or not. Where applicable, this can include identifying a number of matters, 'GDA Issues', to be resolved to our satisfaction before we would be able to say that a design is acceptable.

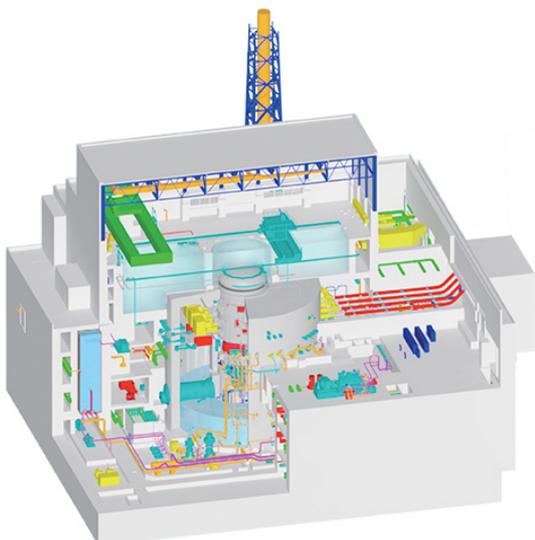
## GDA - progress

In December 2012 we completed our GDA of EDF/Areva's UK EPR™ nuclear power station design that EDF Energy propose to construct at Hinkley Point and Sizewell. We concluded that the design would be acceptable if built in the UK.

We paused GDA of Westinghouse Electric Company's AP1000™ in 2011, at the company's request, after we had completed our planned assessments and identified 51 GDA Issues to be resolved. GDA has now recommenced and Westinghouse is addressing these issues. NuGen propose to construct AP1000 reactors at Moorside.



We began GDA assessments of Hitachi-GE's UK ABWR design in January 2014. Horizon Nuclear Power propose to construct UK ABWRs at Wylfa and Oldbury.



## Getting involved

We've set out our GDA process to be open and transparent and there are a number of ways you can get involved.

## The comments process

Any nuclear power station design company going through GDA is required to set up a website, publish information about the design and invite comments and questions about it. You can make a comment or ask a question and the design company will respond to you. As regulators, we will see the comments and questions submitted and the responses provided and can use these to help inform our work. The comments process stays open throughout GDA until about four months before we make our decisions about the reactor.

## Consultation

The Environment Agency in England and Natural Resources Wales in Wales will consult on their preliminary findings from detailed assessment during the GDA process. All of the comments made will be carefully considered and can help inform assessments and decisions about the nuclear power station designs.

## Meetings and events

You can talk to us at Site Stakeholder Groups, Local Community Liaison Councils and public events.

## More information

We want you to understand what we are doing and why it is important. We regularly publish updates, reports and guidance on our joint website.

- Visit our joint website: <http://www.onr.org.uk/new-reactors/index.htm>
- Email us at: [new.reactor.build@onr.uk](mailto:new.reactor.build@onr.uk) or [gda@environment-agency.gov.uk](mailto:gda@environment-agency.gov.uk)
- Write to: Joint Programme Office, Office for Nuclear Regulation, Redgrave Court, Merton Road, Bootle, Merseyside L20 7HS.
- Sign up for our e-bulletin at <http://www.onr.org.uk/new-reactors/index.htm>
- Further information about nuclear regulation is available on <https://www.gov.uk/guidance-for-operators-of-new-nuclear-power-stations#generic-design-assessment>
- If you are interested in GDA in Wales, or to speak in Welsh contact NRW on 01248 484013