



Health and Safety  
Executive



Environment  
Agency

# Radioactive Discharges

NGO Seminar - 25 June 2009

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Executive



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[www.defra.gov.uk](http://www.defra.gov.uk)

## Consultation on the Statutory Guidance to the Environment Agency concerning the regulation of radioactive discharges into the environment

June 2008



Llywodraeth Cynullid Cymru  
Welsh Assembly Government



Department for Environment  
Food and Rural Affairs

## Draft Statutory Guidance (1)

- ***Matters in relation to BAT***

15. The Environment Agency should set discharge limits based on the use of BAT by holders of authorisations under the RSA93.
- 16 Limits should be set at the minimum necessary levels to permit “normal” operation or decommissioning of a facility.

## Draft Statutory Guidance (2)

- *Matters in relation to BAT*

17. In regulating the normal operation or decommissioning of a facility the Environment Agency should **take into account the relevant operational fluctuations, trends and events that are expected to occur over the likely lifetime of the facility.** Flexibility in setting discharge limits may also be necessary in those cases where other key Government objectives need to be met, for example ..... security of energy supply.....

## Draft Statutory Guidance (3)

21. Where the prospective dose to the most exposed group of members of the public is below  $10 \mu\text{Sv}/\text{yr}$  from the overall discharges of an authorised site under the Radioactive Substances Act 1993 the Environment Agency should not seek to reduce further the discharge limits that are in place, **provided that the holder of the authorisation applies and continues to apply BAT.**

## Draft Statutory Guidance (4) + Nuclear White Paper

22. In relation to any designs for new nuclear power stations, the Environment Agency should ensure that BAT are applied so that the design is capable of meeting high environmental standards. This requirement should be **imposed at an early stage** so that the most modern technology can be incorporated into the design of the stations. The application of BAT should ensure that radioactive wastes and discharges from any new nuclear power stations in England and Wales are minimised and do not exceed those of comparable stations across the world.

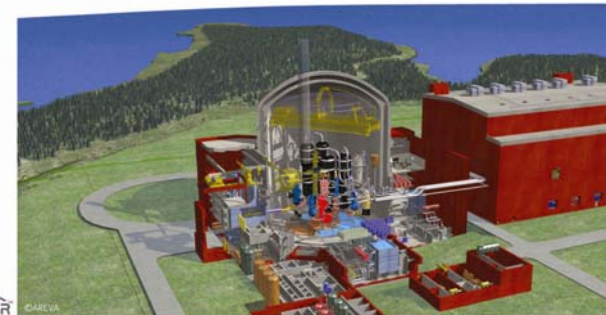


## Preliminary Assessment Findings – UK EPR

- dose from discharges to sea  
= 45  $\mu\text{Sv}/\text{year}$ ;
- dose from discharges to air  
= 11  $\mu\text{Sv}/\text{year}$ .
- dose from direct radiation  
= 10  $\mu\text{Sv}/\text{year}$ .
- Total = 66  $\mu\text{Sv}/\text{year}$ .

### Generic design assessment of new nuclear power plant designs

Statement of findings following  
preliminary assessment of the  
submission by:  
AREVA NP SAS and Electricité  
de France SA for their  
UK EPR design



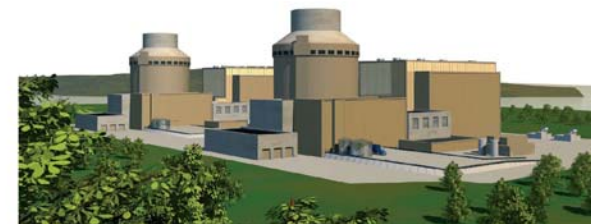
## Preliminary Assessment Findings – AP1000

- dose from discharges to sea  
= 1.3  $\mu\text{Sv}/\text{year}$ ;
- dose from discharges to air  
= 30  $\mu\text{Sv}/\text{year}$ .
- dose from direct radiation  
= 10  $\mu\text{Sv}/\text{year}$ .
- Total = 41.3  $\mu\text{Sv}/\text{year}$ .

### Generic design assessment of new nuclear power plant designs

Statement of findings following  
preliminary assessment of the  
submission by:

Westinghouse Electric  
Company LLC for their  
AP1000 design



## **GDA - Detailed Assessment**

- Verify Requesting Parties' (RPs) assessments.
- Undertake independent assessment using RPs' data.

## **Phase II – Site Specific Applications**

- Applications to include more data on specific receptors and pathways.
- Assessment by Environment Agency and Food Standards Agency
- Consultation on our proposals