



Office for  
Nuclear Regulation

**Welcome**  
**ONR-NGO Forum meeting**  
**Mercure Hotel, Manchester**  
**28 March 2019**



Office for  
Nuclear Regulation

# **ONR-NGO Forum meeting 28 March 2019**

## **Chief Nuclear Inspector Update**

Mark Foy

## SSAC Update

- State System of Accountancy for and Control of Nuclear Material in the final stage of parallel-running with Euratom and first phase of the project completed to time and budget.
- Parallel-running testing the readiness of the SSAC operations in a 'like live' manner for start of operations on 30 March, should the UK leave the EU without a deal.

## Sellafield Hazard and Risk Reduction

- Further progress in recent months to enable waste retrieval in FGMSP.
- End of reprocessing at THORP – long term AGR spent fuel storage.
- Reduced NDA funding for 2019/20 – impact on hazard & risk reduction programme under discussion.

## **Dounreay Transport permissions**

- ONR has granted permission to enable transfer of special nuclear material from Dounreay to Sellafield.
- Will enable Sellafield to receive and store the majority of the remaining Dounreay cans; a significant achievement for the consolidation programme.

## **New site Licence**

- Winfrith – Tradebe Inutech – 37th licensed site.

## **Bradwell Care & Maintenance**

- First Magnox Generating station to enter C&M – substantial milestone.



## ONR Enforcement since previous NGO Forum

- 8 improvement notices issued this FY
- 2 relate to Heysham 1 steam valve failure
- 5 of these served on 2 transport dutyholders relating to Heathrow Incident in 2018 - *temporary storage of high activity sealed sources in a facility that was not suitable for high consequence radioactive material*

## New Build Update

- HPC nuclear island consent for Unit 1 in November 2018
- SMRs and ANTs: ongoing engagement with UK Government and upskilling regulatory capability in advanced nuclear technology
- Wylfa Newdd – Horizon project closure – regulatory staff redeployed
- China GDA Step 3 commenced in November 2018; detailed assessment underway, due to conclude December 2019
- ONR engaging with BEIS on Regulated Asset Base Model

## Other Matters

- IRRS Mission – October 2019.
- Self assessment ongoing since April 2018.
- Higher significance findings to be addressed in 2019/20 programme.
- Findings to be presented to IRRS Prep meeting in April.
- Update to External Hazards Technical Assessment Guide.
- Internationally recognised piece of work is now being used to help shape development of IAEA standards, in light of Fukushima.

# CNI Annual Report

- CNI Annual Report under preparation.
- Target publication 25th September 2019.
- Will incorporate events report and research statement.
- NGO webinar in September / October and presentation to planned NGO Forum 7th November.
- Response to NGO suggestions and comments on content of this report in briefing paper circulated today.



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**Thank you for listening**  
**Questions**



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# Overview of ONR's Operating Facilities Division

**Donald Urquhart**

Deputy Chief Nuclear Inspector, Director of  
Operating Facilities Division



# What is OFD and what does it do?

~ 90 inspectors and 10 support staff regulating



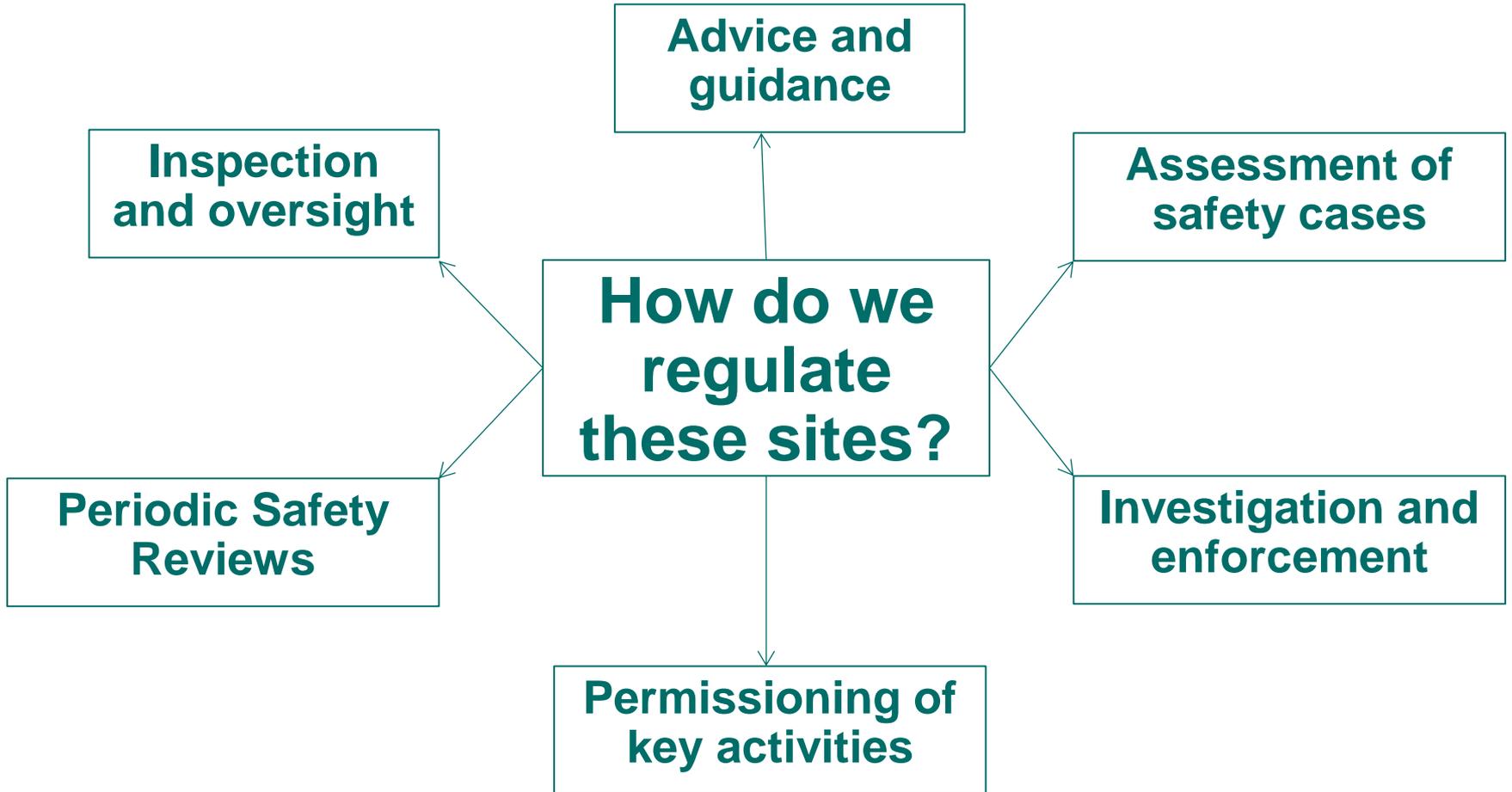
14 AGRs and  
1 PWR



Aldermaston and  
Burghfield Sites



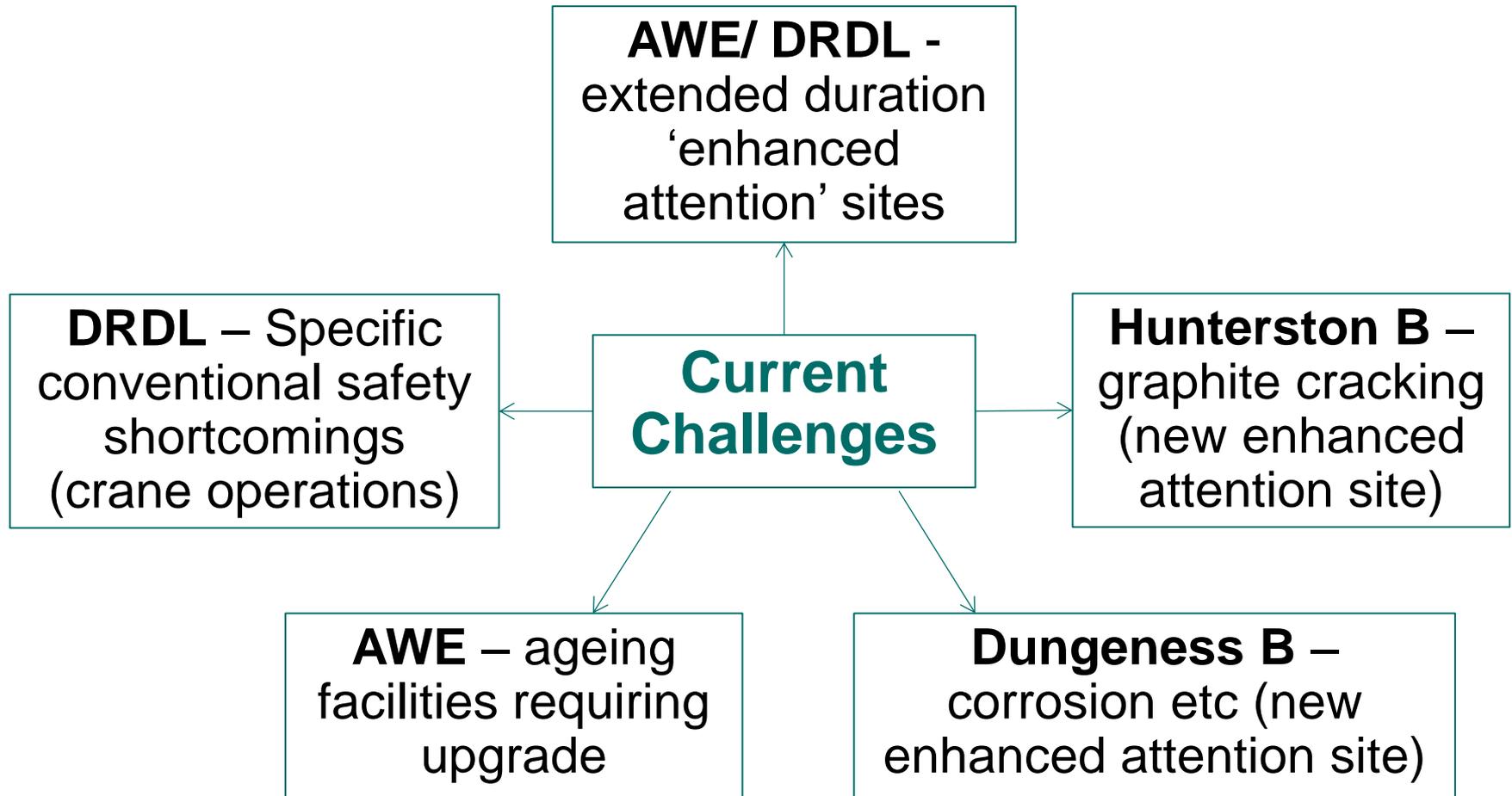
Devonport, Rosyth,  
Barrow, Derby etc.



## Important to us – Transparency !

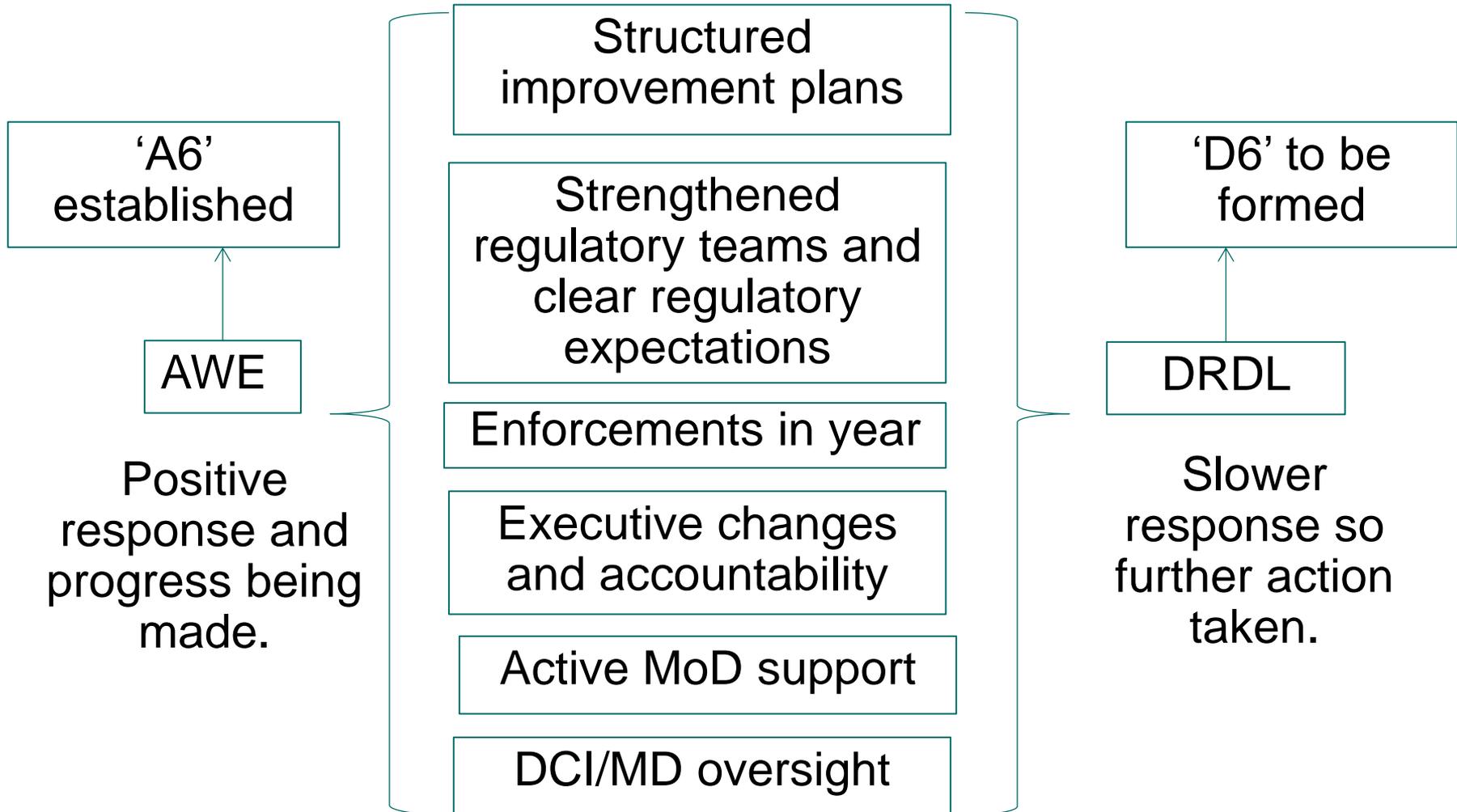
We

- Publish the basis for our regulatory decisions
- Publish the standards and guidance we apply
- Publish information about events that occur on sites
- Publish enforcement actions we take
- Attend and contribute to Site Stakeholder Groups / Local Liaison Committees
- Meet with stakeholders (including NGOs etc)
- Provide information when requested (where we can)





# (Extended Duration) Enhanced Attention Sites





## Other Enhanced attention sites

### Hunterston B

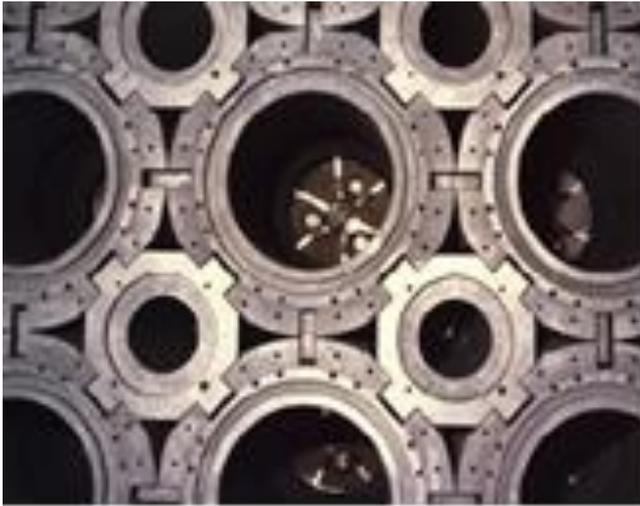
- Consequent to graphite cracking.
- Likely to remain in enhanced attention until end of life.

### Dungeness B

- Various issues, including poor corrosion management.
- 'Direction' issued.
- Likely to remain in enhanced attention in medium term.

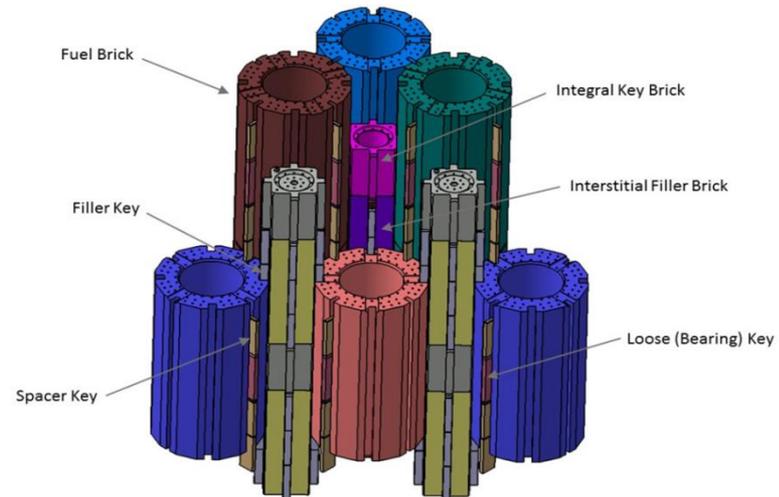


# Graphite Brick Cracking



- Hunterston B reactors 3 and 4 shut down for core inspections in March and October 2018 respectively.
- Reactor 3 –more extensive and complex cracking than predicted – operated outside (conservative) operational limit.

- Reactor 4 - similar but less advanced cracking, within operational limit.



## What does this mean?

- Graphite cracking is expected.
- But, cracking has appeared sooner and faster than predicted.
- “Induced cracking” was not anticipated
- Safety significance of potential for multiply cracked bricks is a key focus for ONR.
- EDF must demonstrate safety of reactors for any further period of operation.
- Reactors will remain shutdown until ONR is satisfied that they are safe to operate.
- If reactor(s) re-start, they will do so for a limited duration with regular core inspections.



## Current Situation

- Safety case for Reactor 4 received in November 2018 (for 4 months of operation).
- Submission did not make an adequate safety case in respect of multiply cracked bricks.
- Revised safety case for Reactor 4 received in March 2019.
- ONR is assessing it carefully, which will take as long as is necessary for ONR to be satisfied that re-start would (or would not) be safe.
- As of now, no safety case has been submitted for the re-start Reactor 3.



## Corrosion issues at Dungeness B

- Corrosion is expected so regular examination, inspection and maintenance of vulnerable pipework is important.
- Progress in inspecting concealed pipework at Dungeness B judged to be insufficient.
- Direction (to review, re-assess safety and report to ONR) issued.
- EDF responded positively, with its subsequent inspections identifying the need for significant pipework repair or replacement.
- This work is ongoing, and ONR is satisfied with rate of progress.



## AWE(B) Facility Upgrade



- Ageing facilities important to maintaining UK 'Continuous at Sea Deterrent' (CASD).
- Modern replacement facility under construction – not available until 2023/24.
- Outcome of ONR assessment of Periodic Review of Safety (March 2018) identified necessary upgrades to existing facilities and safety case.
- ONR expects these to be delivered by September 2019 – AWE has committed to this.
- We are monitoring AWE progress closely to ensure that necessary safety improvements are delivered.



## Conventional Safety – DRDL

- Poor history of crane operations and maintenance resulted in two improvement notices in August 2017.
- Both were closed out in December 2017.
- Two further events occurred in September 2018, one of which involved a dropped load.
- DRDL voluntarily suspended crane operations until safety improvements delivered, agreement not to re-start until ONR was satisfied with the safety of further operations.
- ONR satisfied that sufficient safety improvements delivered, permitted crane operation re-commencement in November 2018.
- A formal investigation undertaken by ONR to inform further enforcement action.



**Thank you for listening  
Questions**



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# Refreshment Break



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# **Update on Revised REPPiR Legislation and Approved Code of Practice**

**Dr Anthony Hart**

Deputy Chief Inspector, Director of Technical Division



## BSSD Implementation

- Euratom Basic Safety Standards Directive 2013 (BSSD) applies learning following the Fukushima Daiichi accident.
- It sets out updated safety requirements for the nuclear and radiological sector in relation to emergency preparedness and response (EP&R), medical exposures, public exposures, occupational exposures, and air and space crew where we need to ensure we are compliant.
- The deadline for transposition of these into UK law was 6 February 2018 – the only outstanding matters relate to EP&R, to be implemented through:
  - REPP19
  - CDG Amendments



## REPPIR19 - Update

- Policy Direction was the subject of a public consultation in Autumn 2017.
- REPPIR 19 was scheduled to be laid in Parliament on 26th March, but has been delayed due to Minister resignations.
- The regulations will contain transition arrangements for 12 months to allow both Operators and Local Authorities to comply within this period.
- During this transition phase the Approved Code of Practice (ACoP) and guidance will be published.

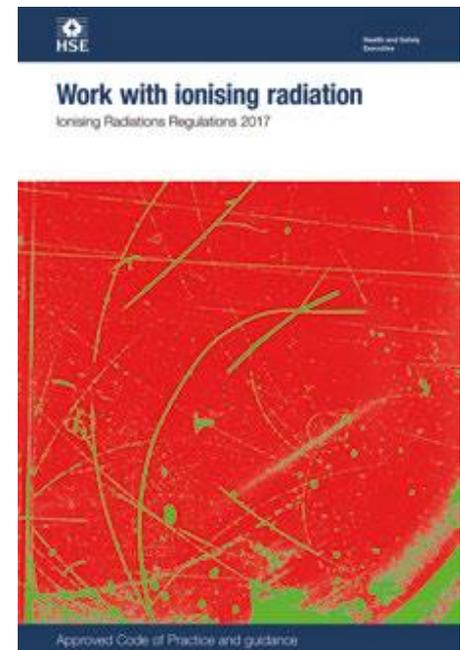


## REPPIR 19 - Approved Code of Practice (ACoP) & Guidance

- Approved Codes of Practice related to Health & Safety Regulations are approved by the HSE Board with the consent of the Secretary of State.
- ONR is drafting the ACoP & Guidance to support compliance with the REPPIR19.
- Working closely with government (BEIS), HSE and MOD to ensure that ACoP and Guidance is available to dutyholders as soon as possible after the new regulations come into force.

# REPPIR 2019 - Approved Code of Practice (ACoP) & Guidance

- The ACoP & Guidance will be a single document that sets out recommended methods for meeting the new Regulations, and associated Guidance will assist dutyholders to comply with the new Regulations.
- This is the model HSE published for the recent Ionising Radiations Regulations in L121 “Work with Ionising Radiation”
- [Link to L121 on HSE website](#)





## Regulation 12 Dose limitation

**Regulation** 12(1)

*(1) Subject to paragraph (2), every employer must ensure that its employees and other persons within a class specified in Schedule 3 are not exposed to ionising radiation to an extent that any dose limit specified in Part I of that Schedule for such class of person is exceeded in any calendar year.*

**ACOP** 12(1)

**210 Assessments of effective dose and equivalent dose from external radiation, for the purpose of comparison with the dose limits specified in Schedule 3 of the Regulations, should be made using the operational quantities defined in Appendix 2.**

**211 Assessments of committed effective dose, and committed equivalent dose following intakes of radionuclides into the body, should take account of the likely dose over 50 years following the intake (up to age 70 for children). They should also be attributed to the calendar year of the intake so they can be compared to dose limits.**

**Guidance** 12(1)

### **Responsibility for ensuring compliance with dose limits**

**212 The main requirement in these Regulations is set out in regulation 9. Employers must make sure that exposures arising from the work are kept as low as reasonably practicable. Complying with dose limits is an absolute requirement and in most cases during routine exposure it is unlikely that an individual's dose will**

# Approved Code of Practice: Public Consultation



- The ACoP was approved for consultation by the HSE Board on 13<sup>th</sup> March.  
[Link to Board papers incl. draft ACoP.](#)
- There will be a eight week public consultation on the ACoP .
- It will be a HSE consultation, but ONR will be leading the work.
- The consultation process will follow government consultation principles.
- The ACoP consultation was scheduled to begin in April 2019
  - dependent on parliamentary processes and election ‘purdah’.
  - awaiting advice now that REPP19 not laid on 26 March.
- Interested organisations and bodies will receive positive notification of the launch of the consultation – **this will include NGO’s**
- Work on drafting the guidance will continue in parallel.
- Aim is to publish the final version of the ACoP and guidance in Autumn 2019.

## Ensuring compliance with REPPiR19

- Complying with REPPiR19 ensures measures are taken to protect the health and safety of the public from radiation emergencies.
- In developing the ACoP, ONR has worked with key stakeholders to enact the policy into practical application:
  - Drafting Steering Group (all dutyholders)
  - Policy owners (BEIS, HSE, MOD)
  - National Groups (NEAF, LAWG, Blue Lights, PHE)
- REPPiR19 places duties on operators and local authorities to determine the risks from radiation emergencies and plan accordingly.
- ONR will regulate against REPPiR19 to ensure these duties are fulfilled, and have enforcement powers to deal with any non-compliance.



## Ensuring compliance with REPPiR19

- ONR currently has an inspection and assessment programme under REPPiR 2001 – this will continue under REPPiR19.
- ONR's enforcement powers remain unchanged.
- Enforcement decisions guided by the Enforcement Policy Statement (EPS) and Enforcement Management Model (EMM) and can be found on the [ONR Enforcement webpage](#).
- Actions available can range from Letters to Prosecution.
- We have identified only minor non-compliance to date.



# Questions



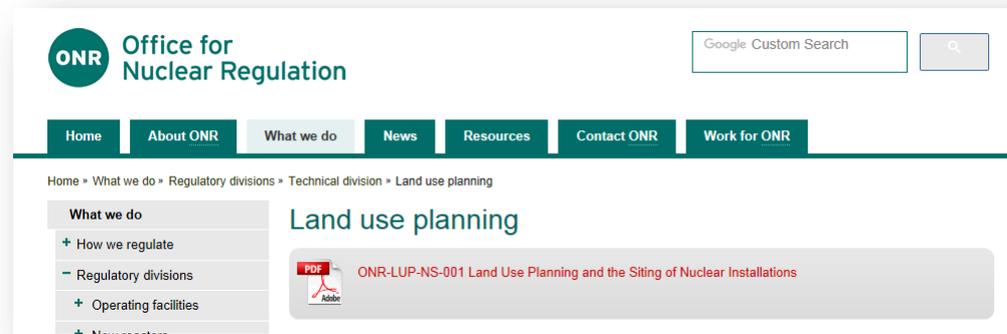
# ONR's Involvement in Land Use Planning

# ONR's Involvement in Land Use Planning

ONR advise:

- Local Planning Authorities (LPAs) on development around current nuclear sites.
- BEIS on proposals for new nuclear sites.

<http://www.onr.org.uk/land-use-planning.htm>



The screenshot shows the ONR website's 'Land use planning' page. At the top left is the ONR logo and the text 'Office for Nuclear Regulation'. To the right is a 'Google Custom Search' box. Below this is a navigation menu with links for Home, About ONR, What we do, News, Resources, Contact ONR, and Work for ONR. The main content area has a breadcrumb trail: Home » What we do » Regulatory divisions » Technical division » Land use planning. On the left, there is a 'What we do' sidebar with expandable sections: '+ How we regulate', '- Regulatory divisions', '+ Operating facilities', and '+ News stories'. The main content area is titled 'Land use planning' and features a prominent PDF download link: 'ONR-LUP-NS-001 Land Use Planning and the Siting of Nuclear Installations' with a PDF icon.



# Development around current nuclear sites

ONR provides advice to LPAs on planning applications around nuclear sites with respect to two matters:



Whether the development would impact on local emergency planning arrangements to protect public from risks from site

Whether the proposed development presents an external hazard to the site





## Proposals for New Nuclear Sites

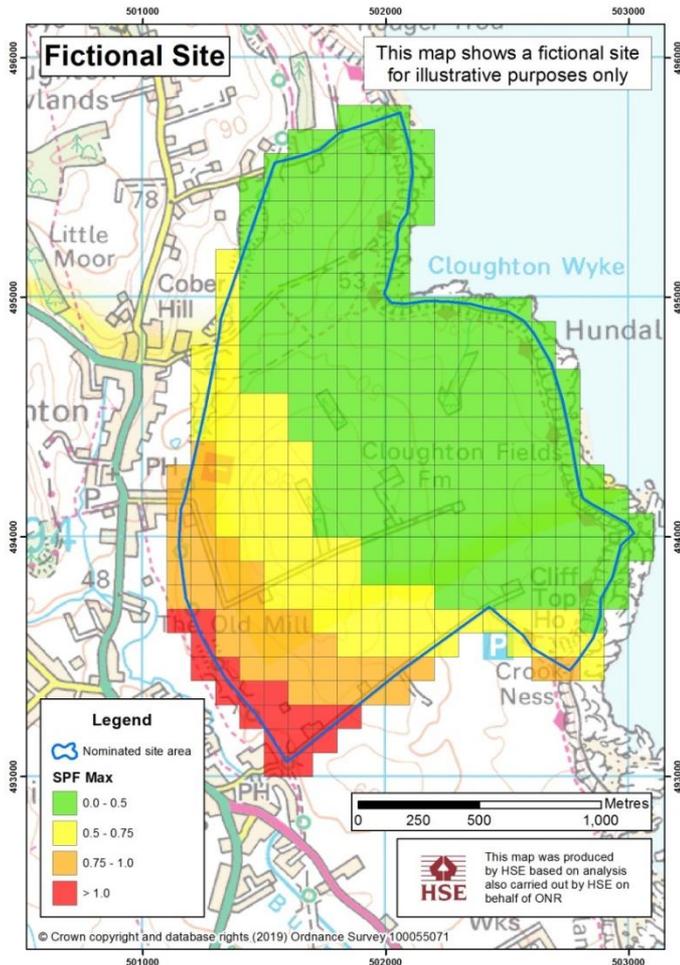
- Government (BEIS) leads on the policy for siting of new nuclear power stations and defines strategic siting criteria that are applied.
- ONR provide advice to government on demographic (exclusionary) and emergency planning (discretionary) criteria
- [ONR Guide 'NS-LUP-GD-001 Land Use Planning and the Siting of Nuclear Installations'](#) provides basis for demographic and emergency planning assessment



# Proposals for New Nuclear Sites

## Demographic Assessment

- Potential sites are divided into 100m x 100m grid squares
- Population densities are assessed
  - 30deg sectors (at 5deg rotations)
  - out to 30km from the center of each grid square
- Population density exceeds the 'Exclusionary' criteria if:
  - >1000 persons/km<sup>2</sup> (all around site)
  - >5000 persons/30deg sector
- Population growth factors (regional or national) are then considered.
- Sites that satisfy the 'Exclusionary' criteria may be taken forward as potential sites.





## Proposals for New Nuclear Sites

- If a proposed site satisfies the ‘Exclusionary’ criteria, the ‘Discretionary’ criteria is then applied.
- The ‘Discretionary’ criteria considers the risks associated with the proposed location including flooding, tsunami, ecological importance, and emergency planning implications.
- ONR LUP advise BEIS on the feasibility of the implementation and maintenance of adequate emergency planning arrangements as part of the discretionary assessment.
- BEIS take ONR’s advice into consideration when making decisions on proposed nuclear sites.



## Proposals for New Nuclear Sites

- There are detailed requirements covering the development and Licensing of new nuclear sites.
- These can be found in the ONR document [Licensing nuclear installations.](#)



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**Thank you for listening**  
**Questions**



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**Lunch**



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# ONR Strategic Plan 2020 to 2025

**Katie Day**

Director Policy & Communications

## Our Mission

“To provide efficient and effective regulation of the nuclear industry, holding it to account on behalf of the public.”

## Our Vision

“An exemplary regulator that inspires respect, trust and confidence”



# ONR Strategic Plan 2016-2020

1.

Influencing improvements in nuclear safety and security



2.

Inspiring a climate of stakeholder respect, trust and confidence



3.

Getting the best out of our people



4.

Developing a high-performing, sustainable organisation





## Strategic theme 2

### Inspiring a climate of stakeholder respect, trust and confidence

- Continue to place in the public domain as much information as possible about our regulatory and corporate activities, including the basis for regulatory decisions.
- Actively engage with, and seek feedback from, our key stakeholder groups so that their views can be placed at the heart of what ONR does.
- Develop a new engagement strategy that will identify ONR's priority stakeholder groups and the key relationships ONR has, or needs to have, with them.
- Implement a plan to create opportunities for stakeholders to provide views from their different perspectives.



# A changing operating environment

- Ageing reactor fleet
- Sellafield and decommissioning
- Geological Disposal Facility
- Security Assessment Principles
- New Build investment
- GDA for SMRs
- Safeguards
- Innovation



## Your views

1. What is working well that we should keep doing?
2. What do you think ONR's top regulatory priorities should be in the 2020s?
3. What needs further thought?



# Plenary and Feedback



# Thank you for listening

## Questions and next steps



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# Refreshment Break



# Environment Agency's Regulation of Nuclear Sites

Alan McGoff

Lead New Nuclear Build

ONR NGO Engagement Forum

Manchester Mercure Hotel

28 March 2019

# Outline

- Introduction to the Environment Agency
- What we regulate
- Permitting process
- GDA
- Permitting and planning interface - advising and influencing planning decisions
- Engagement
- EA and ONR working together

# The Environment Agency

- Created in 1996 by the Environment Act 1995
- Non-departmental public body
- England and, at time, Wales (now NRW)
- Accountable to Defra
- Around 10k staff
- Budget 17/18 £1.3Bn

Environmental  
Regulator



Environmental  
Advisor



Environmental  
Operator



# UK's environmental regulators



The  
“Defra  
Family”



# Our governance



**Michael  
Gove**

Secretary of State  
Department for the  
Environment, Food and  
Rural Affairs (Defra)



**Clare  
Moriarty**

Permanent Secretary  
Department for the  
Environment, Food and  
Rural Affairs (Defra)



**Emma  
Howard Boyd**

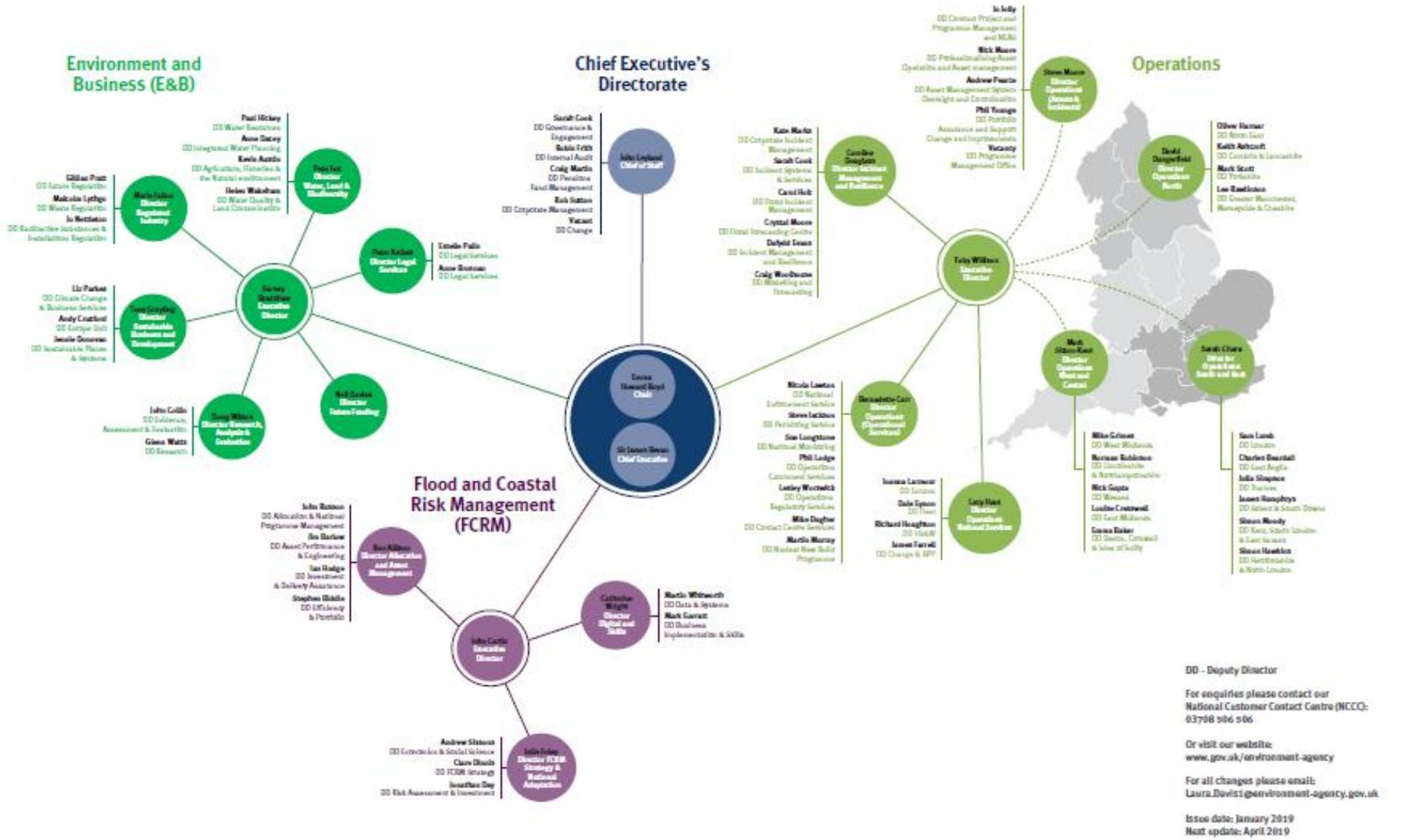
Chair  
Environment Agency



**James  
Bevan**

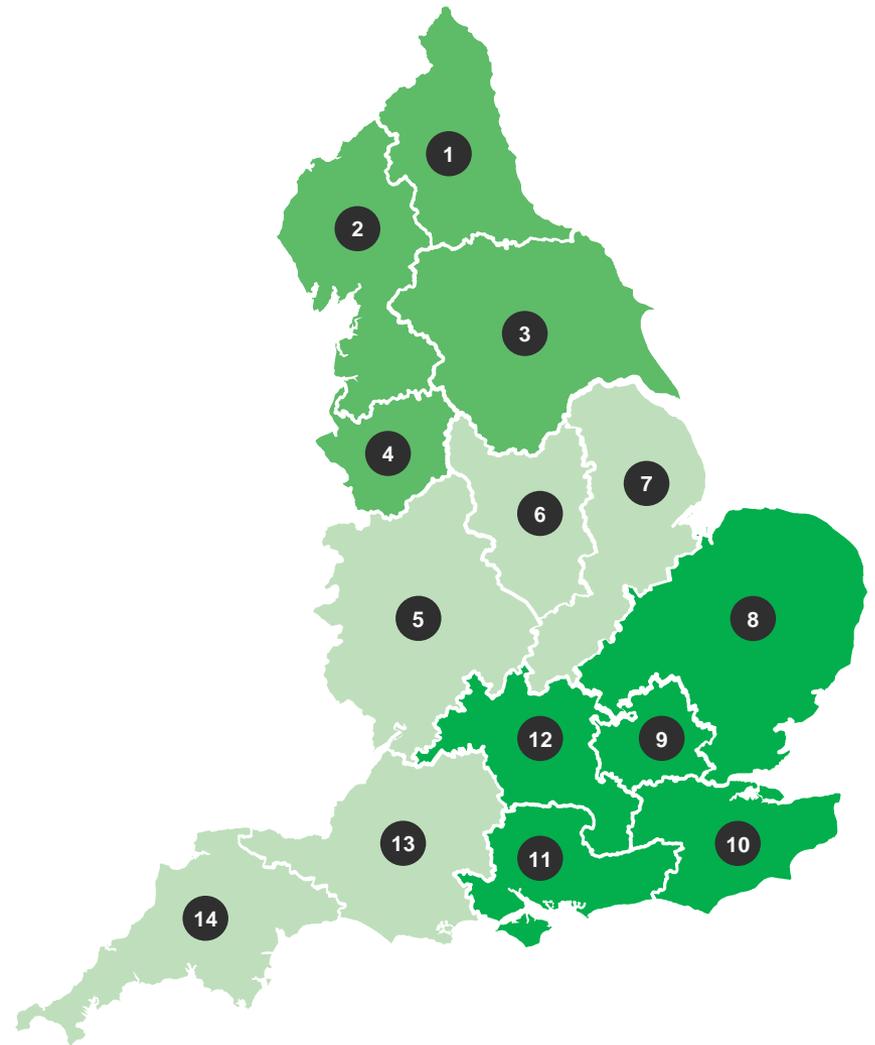
Chief Executive  
Environment Agency

# Our structure



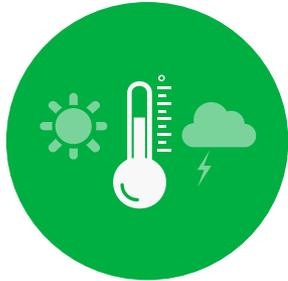
# Our areas

- 1 North East
- 2 Cumbria and Lancashire
- 3 Yorkshire
- 4 Greater Manchester Merseyside and Cheshire
- 5 West Midlands
- 6 East Midlands
- 7 Lincolnshire and Northamptonshire
- 8 East Anglia
- 9 Hertfordshire and North London
- 10 Kent, South London and East Sussex
- 11 Solent and South Downs
- 12 Thames
- 13 Wessex
- 14 Devon Cornwall and the Isles of Scilly

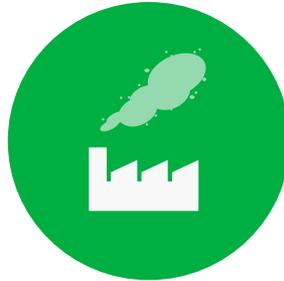


# What we do

We protect and improve the environment



We help people and wildlife adapt to climate change and reduce its impacts.



We improve the quality of our water, land and air by tackling pollution.



We work as part of the Defra group to create a better place for people and wildlife.

# Environment Agency – what we do

- a cleaner, healthier environment which benefits people and the economy
- a nation better protected against natural threats and hazards, with strong response and recovery capabilities

A green  
future...



# Environment Agency – nuclear site regulation



# EA's nuclear regulatory role

 - Environmental Permitting Regulations 2016



Conventional (PPC) Plant Operation

Radioactive Waste and Discharges

Flood Defence

Abstraction from Controlled Waters

Discharges to Controlled Waters

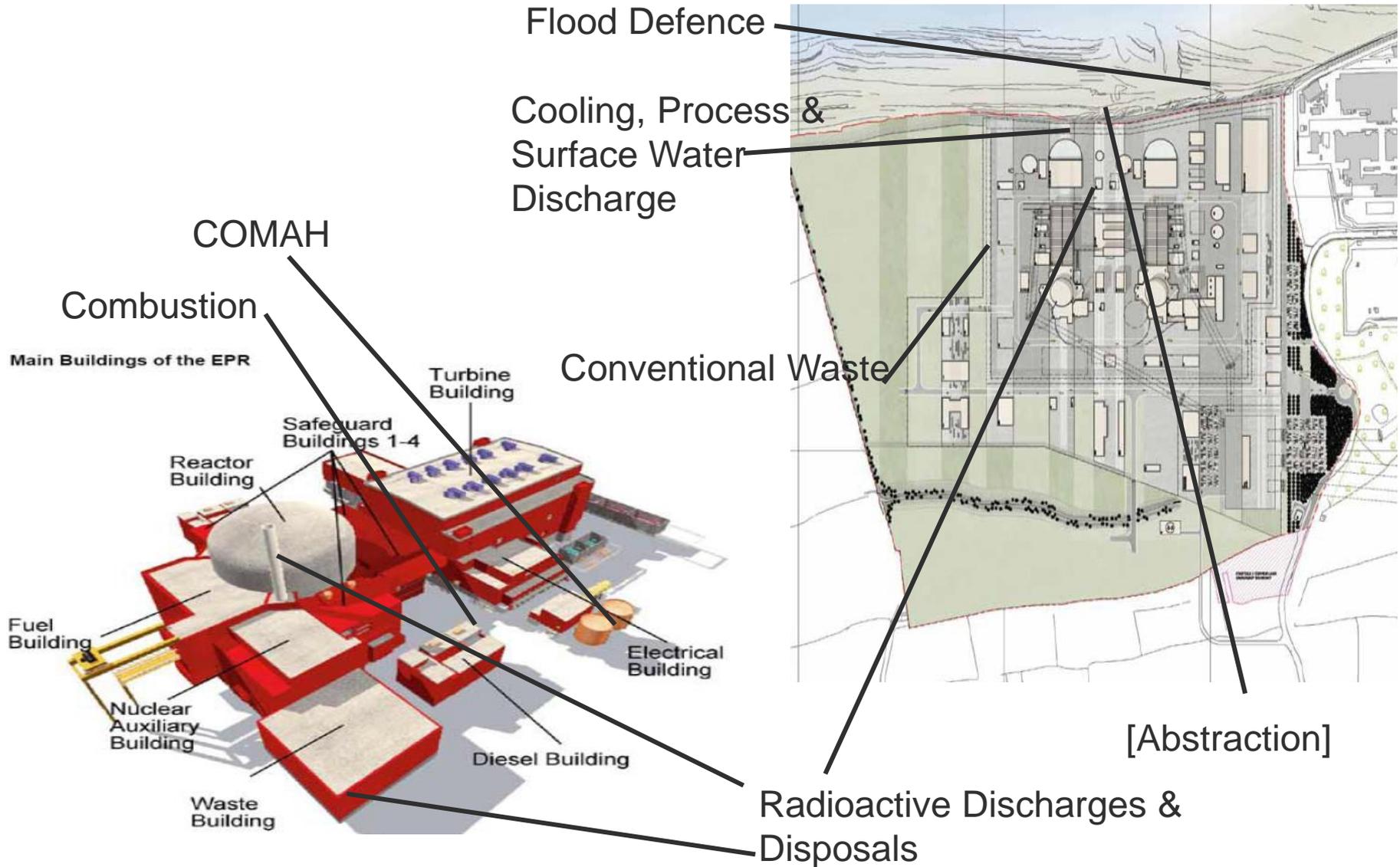
COMAH

Conventional Waste Disposal

Generic Design Assessment

Contaminated Land Remediation

# What we regulate – at Hinkley Point C

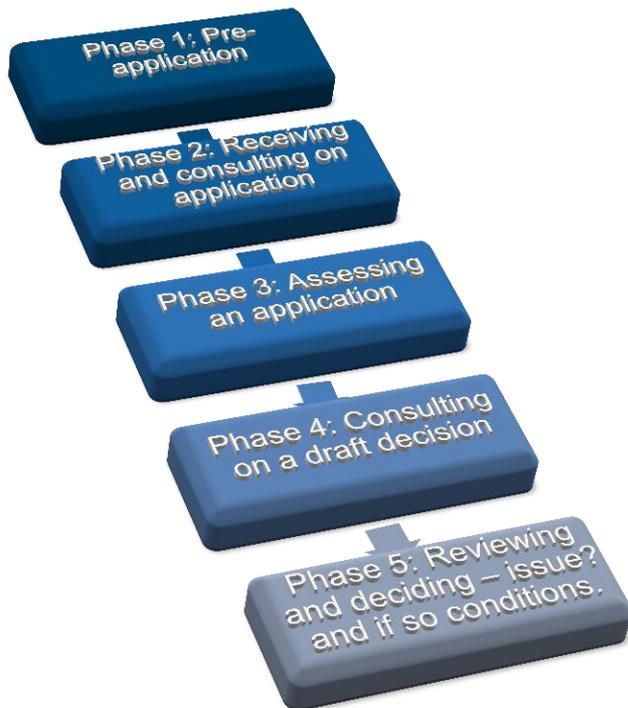


# What are we trying to achieve (for r/a waste disposals)?

- Protection of the public and wider environment from radiation, particularly from radioactive discharges and disposals
- Enabling the continued responsible use of radioactive substances, supporting UK growth
- In line with internationally agreed principles for radiological protection:
  - **Justification** (net benefit to use)
  - **Optimisation** (minimise impacts)
  - **Limitation** (limits on exposure)

# Environmental permitting

Environmental Permitting Regulations 2016 (and other legislation): prohibits carrying out specified activities without a permit.



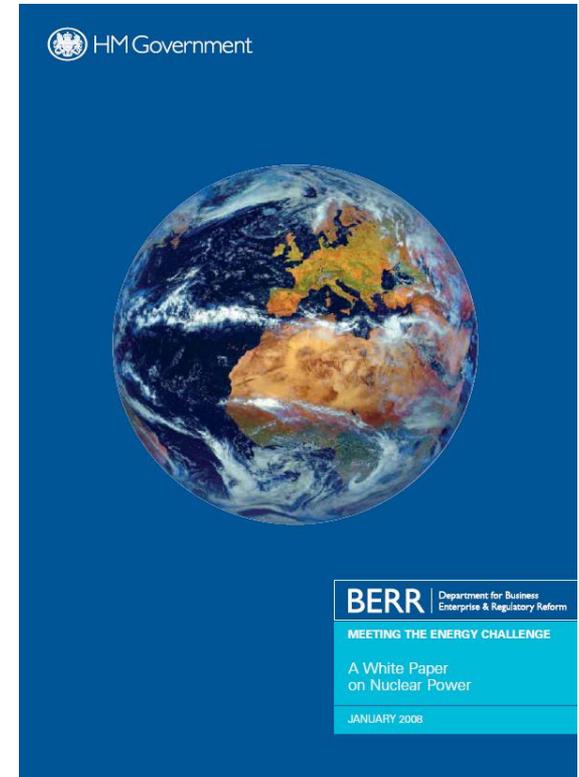
Permits specify conditions that must be complied with including on:

- resources, company structure,
- management systems,
- use of best available techniques,
- maintenance,
- disposal routes
- relevant limits,
- monitoring
- reporting, etc.

# Government expectations and policy

## Nuclear White Paper 2008:

- Best Available Techniques to meet high environmental standards
- Wastes created and discharges from any new UK nuclear power stations minimised and do not exceed those of comparable stations across the world



# Government expectations and policy

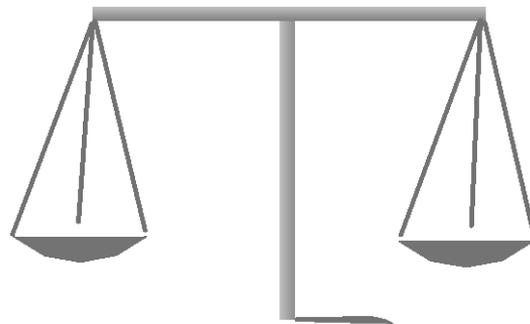
- Statutory Guidance on discharges (OSPAR & national strategy):
  - use of **Best Available Techniques (BAT)** to achieve optimised outcome
  - 'concentrate and contain' preferred over 'dilute and disperse'
  - limits based on BAT
  - short-term increases for decommissioning & legacy wastes allowed if BAT
- Low Level Waste (LLW) Policy:
  - waste hierarchy (**p**revent, **m**inimise, **r**e-use, **r**ecycle, **d**ispose)
  - waste management plan (options assessment)
  - proximity principle
  - use of conventional landfill sites for VLLW and some LLW from nuclear sites

# Use of best available techniques (BAT)

- BSSD requires that public doses must comply with limits and constraints and must be **ALARA** (**A**s **L**ow **A**s **R**easonably **A**chievable)
- Operators use “best available techniques” to reduce discharges and impact to ALARA
- Use of BAT to:
  - Prevent the unnecessary creation of wastes or discharges
  - Minimise waste generation
  - Minimise the radiological impact of discharges on people and the environment
- Systematic and proportionate examination of waste management options
- Use of **Relevant Good Practice (RGP)**

# BAT means

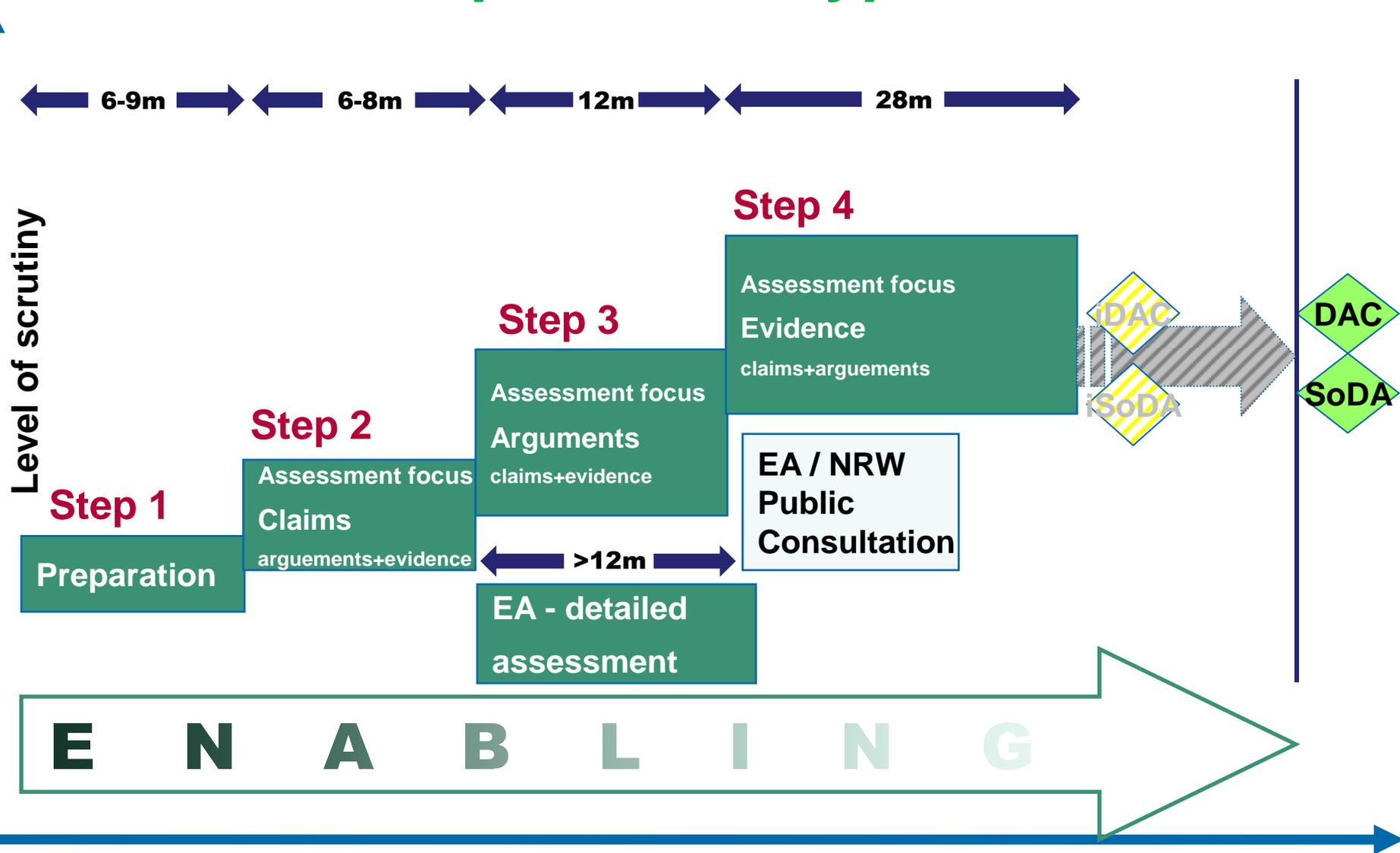
- “**Techniques**” includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned
- “**Available**” means that the technique must be technically and economically viable taking into consideration the costs and benefits
- “**Best**” means most effective in achieving a high general level of protection of the environment as a whole”



# Regulators' strategy for new build

Generic Design Assessment (GDA)	Nuclear Site Licensing & Permitting	Construction
<p>EDF/Areva's UK EPR™</p>  <p>Westinghouse's AP1000®</p>  <p>Hitachi-GE's UK ABWR</p>  <p>General Nuclear System's UK HPR1000</p> 	<p>HPC EDF ENERGY CGN</p> <p>SZC EDF ENERGY CGN</p> <p>NU'GEN</p> <p>HORIZON NUCLEAR POWER</p> <p>BRB CGN EDF ENERGY</p>	<p>Hinkley Point C</p>  <p>Sizewell C</p>  <p>Moorside</p>  <p>Wylfa Newydd</p>  <p>Oldbury</p>  <p>Bradwell B</p> 

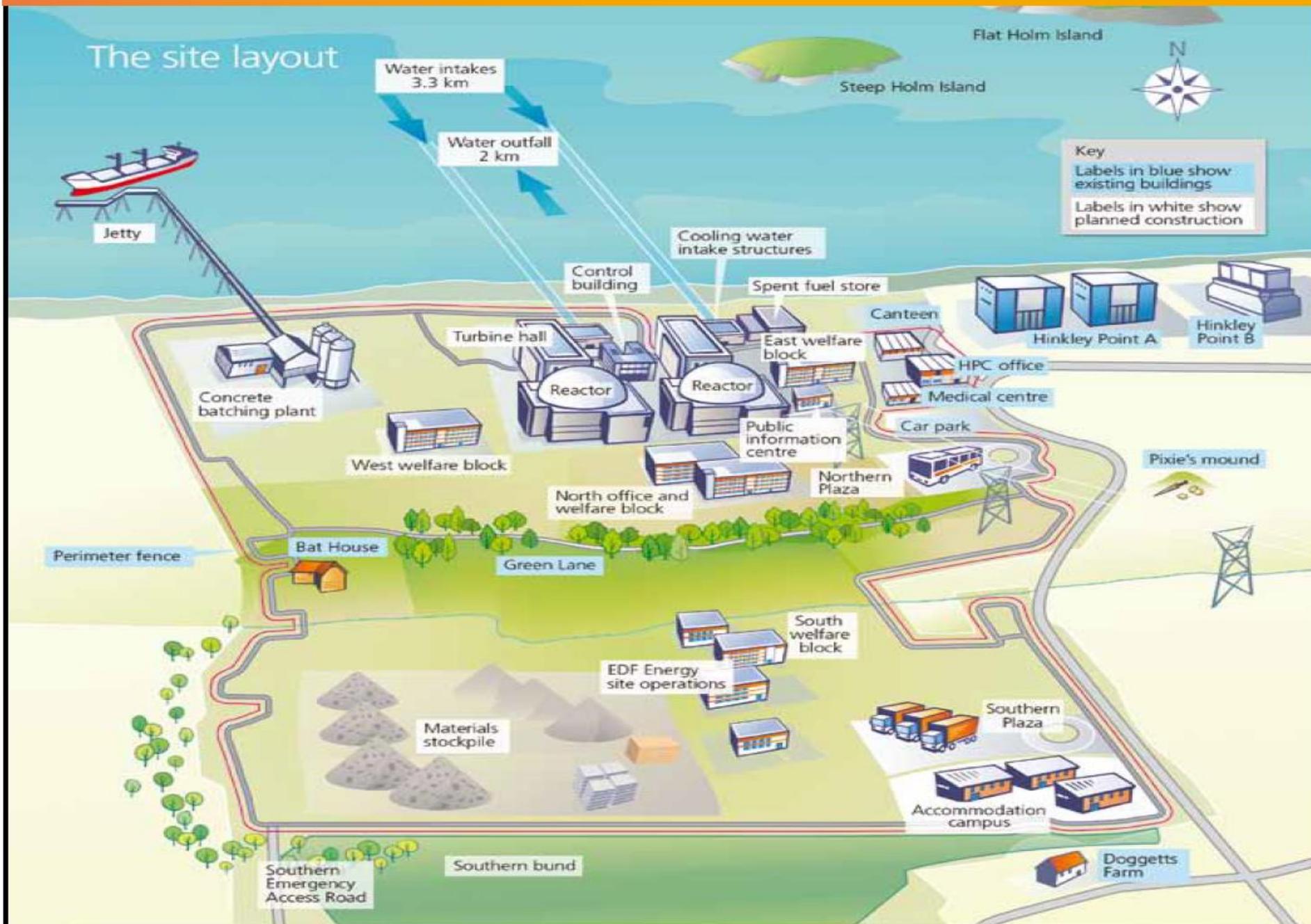
# Current GDA process & typical timescales



# Permitting and Planning Interface - advising the infrastructure planning Development Consent Order(DCO) process

- Includes:
  - Flood risk management
  - Coastal geomorphology
  - Water resources
  - Waste, soil and materials management
  - Protecting fish and eels
  - Ecology impacts

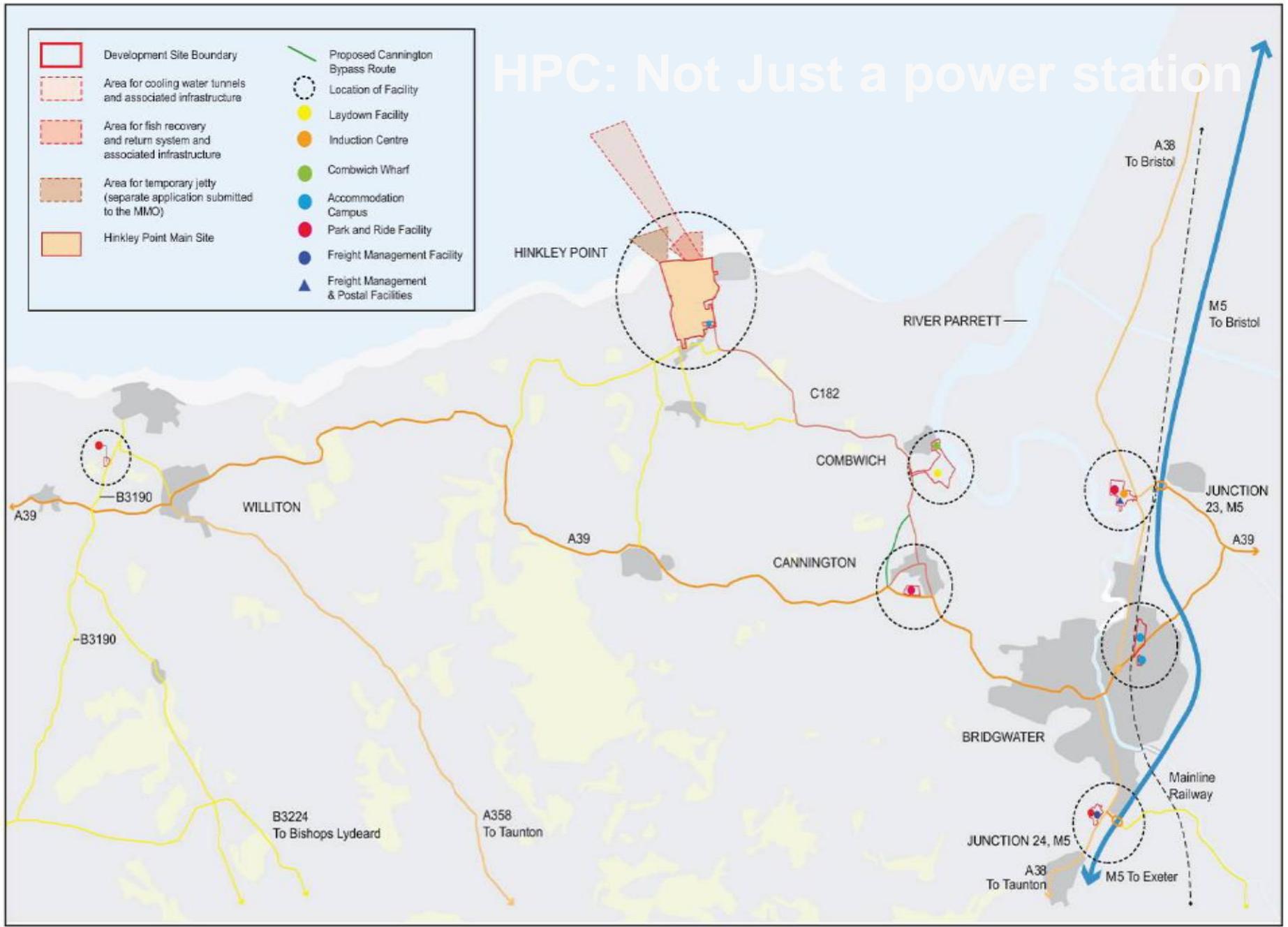
## The site layout



**Key**  
Labels in blue show existing buildings  
Labels in white show planned construction

# HPC: Not Just a power station

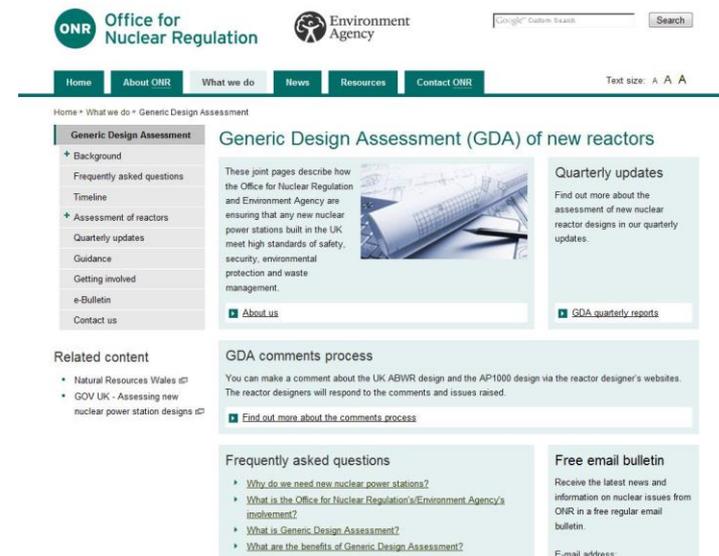
- Development Site Boundary
- Area for cooling water tunnels and associated infrastructure
- Area for fish recovery and return system and associated infrastructure
- Area for temporary jetty (separate application submitted to the MMO)
- Hinkley Point Main Site
- Proposed Cannington Bypass Route
- Location of Facility
- Laydown Facility
- Induction Centre
- Combwich Wharf
- Accommodation Campus
- Park and Ride Facility
- Freight Management Facility
- Freight Management & Postal Facilities





# Openness and transparency

- **Openness:**
  - Requesting Parties' websites with safety and environmental reports
  - Regulators' new build website and .gov.uk,
  - Regulators' guidance published
- **Transparency:**
  - Regulatory Observations (RO) and Regulatory Issues (RI) published
  - Regulators' assessment reports published
  - Quarterly progress reports (<http://www.onr.org.uk/new-reactors/quarterly-updates.htm>)



# Communications and engagement

- **Communications and engagement:**
  - Regulators' joint website and Environment Agency pages on GOV.UK
  - Comments process
  - We publish our **engagement plan**
  - Environment Agency and Natural Resources Wales consultation, including e-consultation
  - News stories in media
  - Social media activity
  - E-bulletin, Infograohics
  - Seminars and conferences
  - Public meetings
  - Sciencewise public dialogue project

The screenshot shows a GOV.UK page for 'Assessing new nuclear power station designs'. The header includes the GOV.UK logo, a search bar, and navigation links for Departments, Worldwide, How government works, Get involved, Policies, Publications, Consultations, Statistics, and Announcements. The main content area is titled 'Environmental management – collection' and 'Assessing new nuclear power station designs'. It includes a 'From:' field (Environment Agency and Office for Nuclear Regulation), a 'First published:' date (3 October 2014), and a 'Part of:' field (Nuclear regulation, Environmental management and Climate change and energy). A paragraph describes documents explaining why and how regulators are assessing designs of new nuclear power stations and how to get involved. There are sections for 'Contents' (listing 4 items) and 'Contacts' (listing 3 email addresses and a sign-up link). The footer contains logos for the Office for Nuclear Regulation and the Environment Agency, along with a 'Quarterly report for January to March 2015' section. This section includes a brief description of the report, a bulleted list of key updates (UK ABWR and AP1000), a paragraph about performance metrics, a 'Post Quarterly Report note' regarding reactor chemistry concerns, a 'Get involved' link, and a 'More information on GDA' link. A dark footer bar contains 'Further information' links for both the Office for Nuclear Regulation and the Environment Agency.

**GOV.UK**

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Environmental management – collection

## Assessing new nuclear power station designs

From: Environment Agency and Office for Nuclear Regulation  
First published: 3 October 2014  
Part of: Nuclear regulation, Environmental management and Climate change and energy

Documents explaining why and how regulators are assessing designs of new nuclear power stations and how to get involved.

Contents

1. About Generic Design Assessment (GDA)
2. Generic Design Assessments: EDF/Areva's UK EPR™
3. Generic Design Assessments: Hitachi-GE's UK ABWR
4. Generic Design Assessments: Westinghouse Electric Company's AP1000

Contacts

- Email Environment Agency [gda@environment-agency.gov.uk](mailto:gda@environment-agency.gov.uk)
- Email Office for Nuclear Regulation [new.reactor.build@onr.uk](mailto:new.reactor.build@onr.uk)
- [Sign up for the GDA e-bulletin](#)

**ONR** Office for Nuclear Regulation

Environment Agency

### Quarterly report for January to March 2015

This [report](#) provides an update on Hitachi-GE's progress with Step 3 for GDA of the UK Advanced Boiling Water Reactor (UK ABWR), and the progress of Westinghouse's AP1000 reactor design.

- **UK ABWR** – Step 3 remains on schedule for completion at the end of August, although there have been some challenges in the reactor chemistry topic area.
- **AP1000** – the project has moved from the mobilisation phases into the technical assessment phase and all resolution plans for the 51 issues were published in March.

The [report](#) also includes the performance metrics for both UK ABWR and AP1000 projects, which provide a clear overview of the status of the project in all of the technical areas.

**Post Quarterly Report note** – The Quarterly Report references our concerns noted in the reactor chemistry topic area for the UK ABWR. In the coming weeks, the regulators will issue a Regulatory Issue to Hitachi-GE who will need to address the shortfall before Design Acceptance Confirmation and a Statement of Design Acceptability can be granted.

[Get involved](#) - We want you to understand what we are doing and why it is important. You can also make comments on the designs of both reactors.

More information on GDA is available on the [joint regulators' website](#).

**Further information**

More information on the work of the Office for Nuclear Regulation is available at [onr.onr.uk](http://onr.onr.uk)

Visit the [Generic Design Assessment website](#)

Visit the [Environment Agency](#) at

# Reducing barriers to public engagement



The language  
– GDA I'm  
gone, I've  
already lost  
interest.

The pressure  
cooker concept  
was easy to  
understand

Use people who  
are engaged to  
encourage  
others to get  
involved

We would believe Hitachi a bit  
more if we saw a 'regulated  
by.....'

Use a range of  
methods and  
innovate

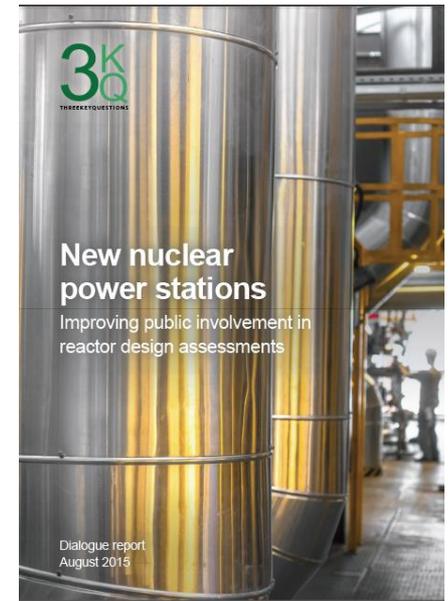
Be aware of local  
historical context and  
preconceptions

Ensure  
accessibility and  
visibility of online  
information

# Learning points

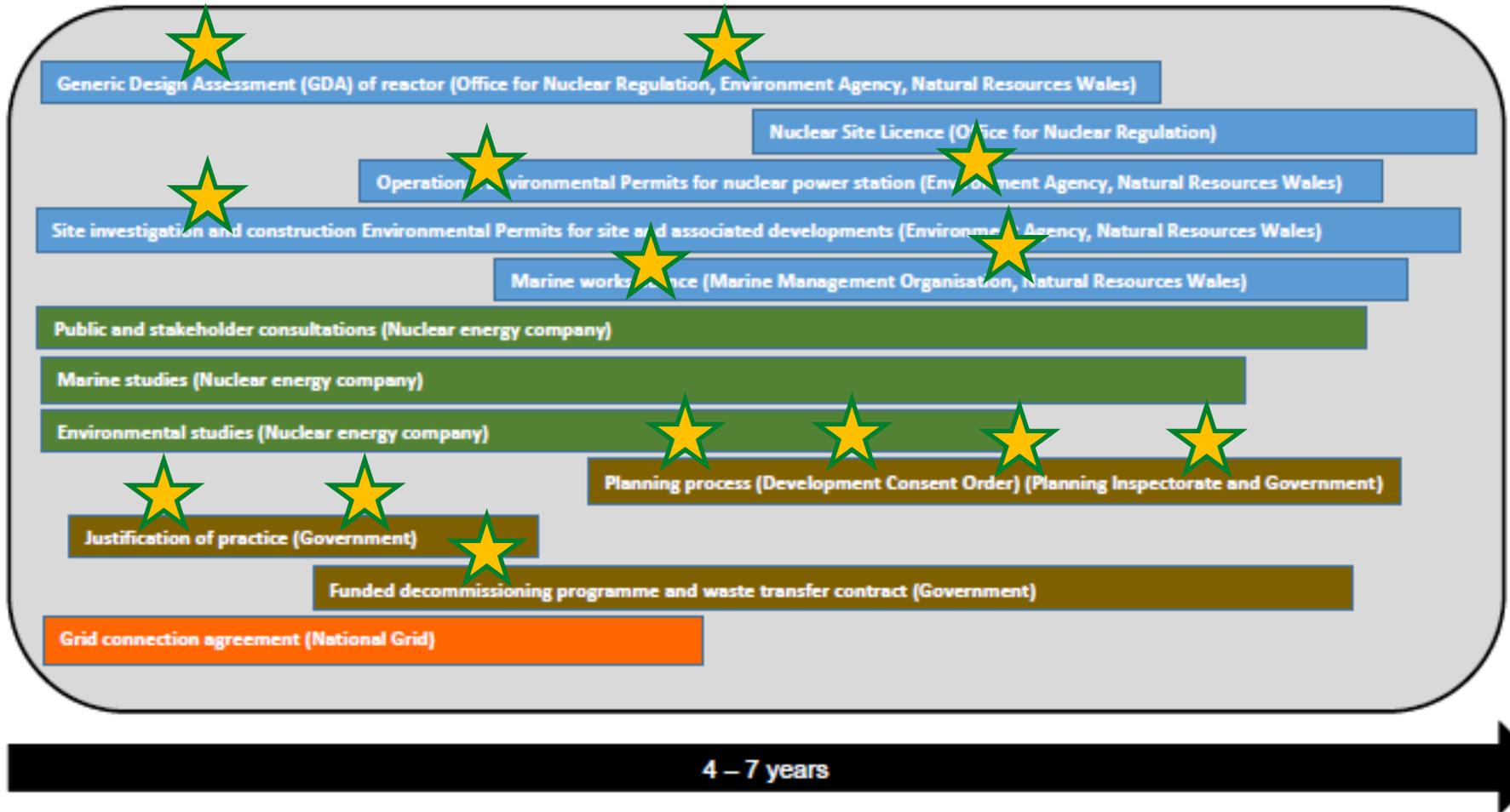


- Be clear why we are engaging and what input we are asking for
- Work with others to better explain the wider context
- Review our GDA information aimed at the public (enable understanding, graphics, language, tone)
- Recognise the importance of face to face where resources allow



# ★ Opportunities for engagement ★

## Nuclear New Build – Pre construction activities



# EA and ONR working together

- Memorandum of Understanding and Working Together Agreement
- anything impacting on arisings & disposals of radioactive waste
- higher activity wastes
- decommissioning
- contaminated land
- GDA – JPO
- NNB licensing and permitting programme management

# **As the Nuclear Regulators, we are**

- Independent of Government and Industry**
- Injecting robust, independent, technical expert assessment**
- Acting in an open and transparent way**
- Holding the industry to account on behalf of the public**
- Ensuring people and the environment are properly protected**
- Enabling but it must be safe, secure and environmentally acceptable against UK regulatory expectations.**



Office for  
Nuclear Regulation

# Summary & Close