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# EDF Energy, British Energy and new nuclear build in the UK

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## Agenda

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- > 1. British Energy
- > 2. EdF Energy
- > 3. New nuclear build
- > 4. What happens next

A new chapter begins

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**British Energy**  
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- > British Energy became part of EDF Energy on 5 January 2009
- > Brings together two organisations committed to new nuclear build in the UK
- > Combined nuclear expertise creates a powerful grouping

## About EDF Energy

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**British Energy**  
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- > UK's biggest electricity generator
  - > Coal
  - > Gas
  - > Wind
  - > Combined heat and power
  - > Nuclear
- > Largest UK electricity network operator
- > Gas and electricity supplier to 5 million customers



- > **“Nuclear is crucial to our low carbon future. It is crucial to our energy security and at the same time it represents a massive opportunity for the UK economy”**
  - > **Gordon Brown, Prime Minister**  
**(Daily Telegraph, 24 January 2009)**

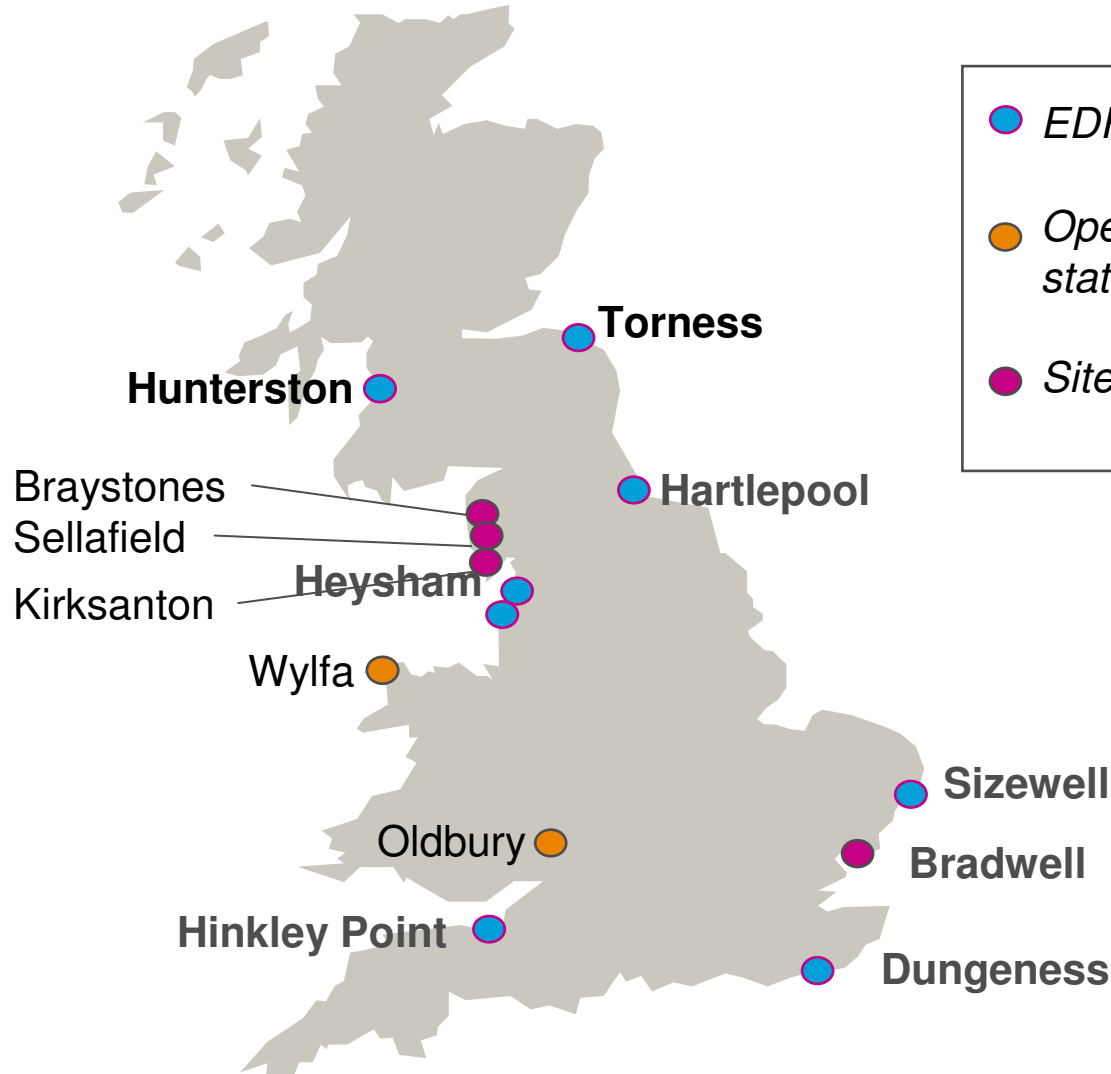
## Reasons for new build



- > The country faces an energy gap around 2020 when coal and nuclear power stations accounting for about 30-35 GWe - about one third of generation capacity (of around 100GW) - must retire.
- > A target of reducing UK greenhouse gas emissions by 80% by 2050 was announced by the government in 2008.
- > Government ministers and advisers have canvassed 40% nuclear supply as realistic and desirable. This would require about 30 GWe of nuclear capacity. New proposals include

Utility	Type	MWe	Proposed start up
EdF / BE	EPR x 4	6400	2017
RWE – Eon	EPR	1600	2020
RWE – Eon	AP1000 x 6	7200	2020

# UK nuclear sites



- EDF/BE nuclear power stations
- Operational Magnox power station (NDA)
- Sites nominated for new build

# EDF is committed to new nuclear in the UK



- > EDF Energy intends to build four nuclear units in the UK by 2025
- > EDF Energy's target for completion of first new nuclear power station in the UK is 2017
- > Preferred sites are in the south of England – but other sites may be needed
- > Potential sale of EDF Energy land at Dungeness or Heysham in Lancashire



# The Technology



- > European Pressurised Water Reactor (EPR)
- > Based on power station being built by EDF in Normandy
- > Joint application with AREVA for a Generic Design Assessment (GDA) by the regulatory bodies
- > EPR uses 17% less uranium and produces less waste

## Government's strategic siting assessment: Nuclear safety criteria

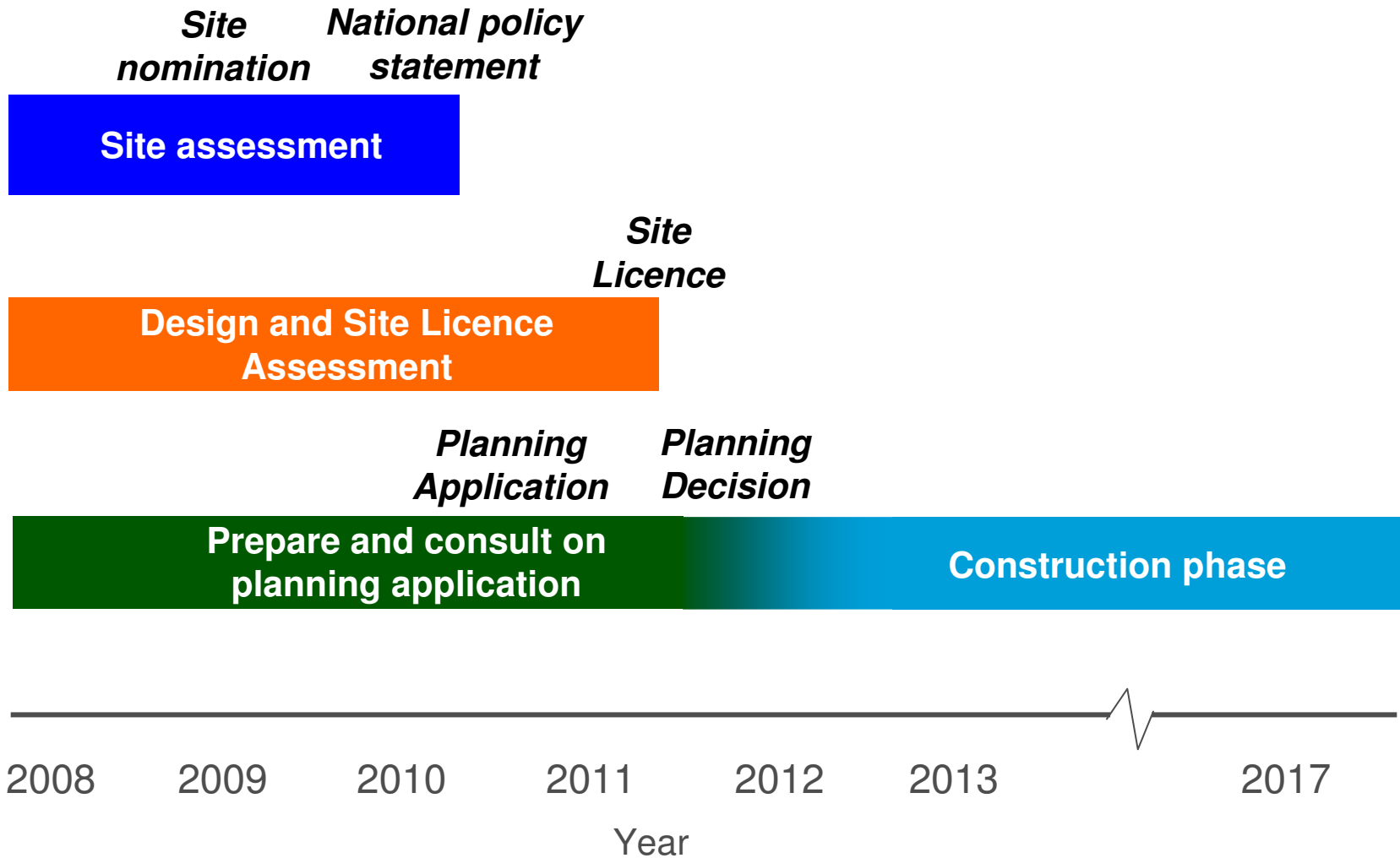
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- > Flooding, tsunami and storm surge
- > Coastal erosion and landscape change
- > Proximity to other activities:
  - > centres of population
  - > hazardous industrial facilities and operations
  - > civil aircraft movements
  - > military activities



# Indicative Timetable



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Any Questions?



 Powering the low carbon generation

> BE/FOF

