Sizewell C and Bradwell B and the likely effects of climate change

Prof. Andrew Blowers, BANNG
‘It was now that wind and sea in concert leaped forward to their triumph’

Hilda Grieve, *The Great Tide*, 1959
Why Bradwell B?

‘Bradwell B would make a vital contribution to meeting the UK’s future needs for low carbon, secure and affordable energy and achieving the UK’s legally binding target of net zero carbon by 2050. A valuable – and necessary – part of our electricity mix, nuclear power ensures there is reliable and affordable electricity, including when limited wind and solar power is produced.’

Alan Raymant, CEO, Bradwell B
National Infrastructure Commission

‘New nuclear power stations are unlikely to be an additional source of electricity in the 2020s, with the possible exception of Hinkley Point C’. ‘Making decisions now such as committing to a fleet of nuclear power plants, rules out a more diverse future generation mix and the potential this has to reduce costs to consumers’.
Siting policy - 2011

‘it is reasonable to conclude that a nuclear power station within the site could potentially be protected against flood risk throughout its lifetime, including the potential effects of climate change, storm surge and tsunami, taking into account possible countermeasures’

(National Policy Statement for Nuclear Power Generation, 2011)
Siting Policy - 2017

‘to confirm they can protect the site against flood-risk throughout its lifetime, including the potential effects of climate change’.

‘to demonstrate that they could achieve further measures for flood management at the site in future, if future climate change predictions show they are necessary’.

(Consultation on the Siting Criteria for a New National Policy Statement, 2017)
LAND PROJECTED TO BE BELOW ANNUAL FLOOD LEVEL IN 2100

The evening breeze has come, and the tide still rises. Soon it will be over the saltings. The breeze is strengthening. Night and wind and tide are moving in together. A primrose sky has flowered beyond the western trees; to the east there is a narrow band of purple above the grey line of the sea.

(On the Essex Coast, by J.A.Baker)
LAND PROJECTED TO BE BELOW ANNUAL FLOOD LEVEL IN 2100
Radioactive Waste Policy Statements

‘There should be no further commitment to nuclear energy unless it can be demonstrated ‘beyond reasonable doubt that a method exists to ensure the safe containment of long-lived highly radioactive waste for the indefinite future.’


‘the Government is satisfied that effective arrangements will exist to manage and dispose of the waste that will be produced from new nuclear power stations.’

(NPS for Nuclear Power Generation, 2011)
Memory of the Great Tide

‘will grow dim as the years pass. But the sea will not be tamed. From time to time, urged on by its only master, the wind, to break the order of its course, it will rise again to strike the land.’

(Hilda Grieve)