



The Flood Risk of Hinkley Point Nuclear Site

Anybody who has walked along the footpath on the sea wall in front of the existing nuclear sites in Somerset can see the effects of stormy weather. There is clearly overtopping of the present sea wall with driftwood, seaweed and beach stones. No wonder an extra few metre high Gabion wall was added to protect the aging A and B stations. Walking further along the seashore one sees fragile, vulnerable cliffs suffering from storm damage and coastal erosion. Is this a sensible site for the Hinkley C nuclear power stations?

Hinkley on the Severn estuary is situated on the second highest tidal range in the world. With the latest climate change predictions of rising sea levels and increasing extreme weather patterns, it begs the question, “Is the vulnerable coastline of North Somerset a sensible place to build 2 of the world’s largest nuclear reactors?” Running these reactors will create a **permanent, high level radioactive waste store, on site.**

This high level nuclear waste store is less than 50 metres from the sea and will need to be protected from sea encroachment for thousands of years, around 80 lifetimes of Stone Henge!

In 1607 a tsunami/storm surge, swept up the Severn Estuary, flooding a vast area of Somerset killing thousands of people locally. If a nuclear waste store had been present at Hinkley it would have exposed people to radioactivity, spreading contamination, which would have made large areas bordering the Estuary, uninhabitable today.

The on-going disaster at Fukushima, pouring radioactivity into the Pacific Ocean, shows the problem of storing high level nuclear waste so close to the sea, a high risk, exposed to spontaneous weather events, beyond design safety limits of the plant.

When the government was looking for sites for new nuclear power stations, a report from the Environment Agency showed with rising sea levels most of the new sites were vulnerable to flooding and sea erosion, either at present, or within the nuclear site life time. This report said Hinkley is already vulnerable to flooding and within a hundred years coastal erosion will be a serious problem.

A recent Environment Agency report revealed the radioactive waste disposal site at Drigg in Cumbria would not now be approved so close to the sea following the latest climate change predictions. Within a hundred years coastal erosion at Drigg *will* cause dispersion of the nuclear waste into the Irish Sea. Aerial photographs as recent as the floods of 1981 at Hinkley show the original A and B stations virtually an island and flood water cutting through the access to the proposed Hinkley C site.

We are all too aware in Somerset how flood water can cause havoc, but thinking about the nuclear waste being washed by that flood water emphasizes the vulnerability of a long term nuclear waste store in the county. Have we not learned about the destructive powerful forces of the sea? Much better to put those forces to use as renewable tidal energy!

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Coastal vulnerability of Hinkley Point



- Easily eroded fragile cliffs form the North Somerset coastline
- Hinkley Site vulnerable to sea levels rising and extreme weather events, is on the 2nd highest tidal range estuary in the world
- Original inadequate sea wall was increased in height by several metres to protect A and B station
- High Level Radioactive Waste to be stored 50 metres from the sea for 160+ years if Hinkley C goes ahead
- Somerset Coast experienced devastating flooding from a Tsunami in 1607 the same could happen again. Severe flooding also documented in 1962, 1981, and 2014
- How quickly would Somerset be evacuated in times of emergency if the site was to flood seriously in future?
- How many times will the sea wall need to be increased in height to keep the reactors and radioactive waste storage safe, with climate change sea level rises?
- Will the future generations of our children be able to finance and manage the safety of the site from flooding?

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