



**For Immediate Release  
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### **Hinkley Point B Closure – The End of an Error**

Hinkley Point B (HPB) may be ending electricity generation on 1<sup>st</sup> August, but the UK will be left with its legacy of nuclear waste for thousands of years. Even after generating waste for 46 years, we are still not sure what will happen to it other than a vague promise that it will be buried underground in a Geological Disposal Facility – a site for which has still not been found.

After closure, EDF's first task will be to agree the safety case with the Office for Nuclear Regulation (ONR), for fuel handling and defueling. This should take around 3 months. Then around 300 fuel channels in each of HPB's two reactors will have to be emptied and the spent fuel transferred to the cooling pond where it will have to remain for at least 90 days.

Once cooled, the spent fuel will be transferred to a transport flask and taken by lorry over 10 miles, along country roads, to the railway siding next to Bridgwater station mainline. There it will be loaded onto a train about 100 metres from Eastover Junior School. Over the next three and a half years, the frequency of these transfers could increase to 3 or 4 flasks per week. Between now and 2026 around 350 spent fuel flasks will travel by train from Bridgwater to Sellafield.

Reprocessing at Sellafield has now ended, so the spent fuel will be dumped in a temporary store awaiting the time it can be placed in an underground Geological Disposal Facility (GDF). The location for this and the timescale for building it are still anybody's guess.

When defueling is complete, in 2026 if all goes according to plan, ownership of HPB will transfer to the Nuclear Decommissioning Authority (NDA). The NDA will take around 5 or 6 years to prepare the reactors for a period of care and maintenance. Final dismantling is not currently expected to begin until around 2070.

The UK Radioactive Waste Inventory as of 1st April 2019 shows a total of 961m<sup>3</sup> of low and intermediate level waste stored at HPB, but by around 2117 this is expected to increase to around 14,500m<sup>3</sup> with the majority of the waste arising from decommissioning the reactors.

The NDA estimates that the total amount of spent AGR fuel which will remain un-reprocessed and require 'disposal' will be 4,830 tonnes. We can estimate, roughly, that HPB

will be responsible for around one seventh of that, or 690 tonnes. According to the NDA's 2021 Strategy, the GDF won't be able to start receiving spent fuel for over 50 years - by 2075. But the NDA isn't expecting all AGR (and Sizewell B) spent fuel to be buried until 50 years later in 2125

But to get a true picture of the waste generated by HPB, we also need to consider the spent fuel which has previously been reprocessed at Sellafield. This is a process which will have produced solid Intermediate Level Waste and Highly Radioactive Liquid Waste which will have to be constantly cooled and solidified into glass blocks in a process called vitrification. Reprocessing also separates out from the spent fuel weapons-useable plutonium, for which the UK has no use and which will probably have to be processed and then placed in a GDF.

According to the NDA, a total of 1,650m<sup>3</sup> of High Level Waste will be produced from reprocessing spent fuel from Magnox reactors, like Hinkley Point A, and the AGRs like Hinkley Point B. This will be packaged and in interim storage, hopefully by 2030. The NDA currently expects to place this in a GDF by 2104.

An estimated stockpile of 141 tonnes of plutonium should be packaged and in interim storage at Sellafield by 2060. The NDA says this will be re-used or placed in a GDF by 2120.

**Stop Hinkley Spokesperson Roy Pumfrey said:**

*“Some of these timescales for managing the legacy of waste left over by HPB are truly staggering. EDF's planned jamboree on Monday (1st August) at HPB conveniently ignores the nuclear waste which has been generated over the past 46 years. Under current plans it will be at least another 100 years before all this dangerous waste is under the ground.”*

*“And the costs are staggering too. EDF's most recent estimate for decommissioning AGRs like HPB (£23.5bn) suggests it could cost around £3 or £4bn to decommission HPB. The Taxpayer has been asked to top up the decommissioning fund by over £10bn. Past experience suggests these costs will continue rising.”*

*“Monday should not be a day to celebrate the life of HPB. Rather, it's a day to mourn the production of radioactive waste that is going to have to be carefully and expensively managed and monitored for many generations to come. The good news is - it will be 'the end of an error'.”*

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## **Annexe: The Century Long Decommissioning Timetable**

**8th July 2022:** end of electricity generation at HPB Reactor 4.

**1st August 2022:** end of electricity generation at HPB Reactor 3.

**November/December 2022:** after approval of the safety cases by ONR defueling begins.

**2022–26** Around 350 spent fuel flasks sent by road to Bridgwater and then rail to Sellafield.

**2026:** Fuel Free Verification expected.

**2026-2032** HPB prepared for a period of care and maintenance.

**2030:** All High Level Waste (HLW) (not spent fuel) expected to be vitrified and in interim storage at Sellafield.

**2060:** All plutonium should be in interim storage at Sellafield.

**2100-2110** Reactor Dismantling begins.

**2104:** Pending the availability of a Geological Disposal Facility, NDA expects all HLW to be buried.

**2120:** Dismantling complete.

**2120:** Pending the availability of a Geological Disposal Facility, NDA expects all plutonium to be re-used or buried.

**2125:** Pending the availability of a Geological Disposal Facility, NDA expects all intermediate level waste to be buried.

**2125:** Pending the availability of a Geological Disposal Facility, NDA expects all un-reprocessed spent fuel to be buried.

### **Notes**

NDA Mission Progress Report 2021. 4th Nov 2021

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1031213/NDA\\_Mission\\_Progress\\_Report\\_2021.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1031213/NDA_Mission_Progress_Report_2021.pdf)

NDA Strategy Effective from March 2021

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