Newsletter January 2023

EDF's protestations that changes to Hinkley Point C Contract don't mean more delays fail to convince

Press Release 7 December

On 29th November, the *Daily Telegraph* reported that a new contract between the Government and EDF suggests Hinkley Point C (HPC) might not be ready until 2036 – 11 years later than originally planned. Whilst EDF insists that its latest finishing date of 2027 has not changed, concerns remain that there will be further delays, otherwise why change the contract. Delays and cost overruns at all of the other reactors of the same type being built elsewhere in the world provide a clue as to the likely outcome.

In October 2013, a price of £92.50 per MWh (at 2012 prices) was agreed as the 'strike price' for the Hinkley Point C (HPC) project, meaning the government will top up EDF's income to this level if wholesale prices are lower. EDF will have to pay money to the government if market prices are higher. At 2022 prices this is worth £129.09/MWh.

Provided HPC is completed by 2029, EDF will get the strike price for every MWh sold for 35-years. After 2029 the price is reduced in value up to what is called the long-stop date - after which it could be cancelled altogether. The long stop date was originally 1st November 2033, but the Low Carbon Contracts Company (LCCC), the government's counterparty in the contract, announced on 29th November this year that the long-stop date had been extended to 1st November 2036. There is no change to other targets in the subsidy contract, meaning that the length of time under which payments can be made may still be shortened if HPC does not start generating by May 2029.

The LCCC said: "The extension reflects LCCC's work with the HPC project over the last 20 months to understand the impacts of COVID-19, as well as the outcome of the Department for Business, Energy & Industrial Strategy's negotiations with CGN on the Sizewell C nuclear project".

HPC consists of two 1.63GW EPR reactors. The first one was originally scheduled to start generating electricity by the end of 2025. In January 2021 this was rescheduled to June 2026 and the estimated cost of the project was increased by half a billion to between £22 and 23 billion.

In May 2022 the start of electricity generation for the first reactor was rescheduled again to June 2027 with costs now estimated at £25 to £26 billion.

Stop Hinkley Spokesperson, Roy Pumfrey said: "This contract change means EDF could still be getting state support for these reactors even if they can't light a single light bulb until 2035. Given the failures of the rest of the world's EPR reactors this seems quite possible, despite EDF's claims. If it wasn't at least seen as a possibility, why did they change the contract? Electricity consumers are being fleeced to pay for these white elephants – it's time the Government turned its attention to a serious energy efficiency programme and speeded up renewable energy schemes instead of sniping at onshore wind and solar farms."

http://stophinkley.org/wp/wp-content/uploads/2023/01/PressRelease7thDec2022.pdf

Hinkley Point B Closure – The End of an Error

Press Release 27 July

Hinkley Point B (HPB) may be ending electricity generation on 1st August, but the UK will be left with its legacy of nuclear waste for thousands of years. Even after generating waste fo46 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 961m3 of low and intermediate level waste stored at HPB, but by around 2117 this is expected to increase to around 14,500m3 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 unreprocessed 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 1,650m3 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'."

http://stophinkley.org/wp/wp-content/uploads/2022/07/PressRelease27thJuly2022.pdf

First Hinkley Point C nuclear reactor ready for delivery

Hinkley Point C's first nuclear reactor is built and ready to be delivered. The reactor pressure vessel is the first to be built for a British power station for more than 30 years. It was built in France by nuclear engineering company Framatome and is due to arrive to the Bridgwater site at some point in 2023. The 13m tall, high-strength steel cylinder weighs in at 500 tonnes and will hold the nuclear fuel and house the chain reaction that generates heat. Once in use, its core will have an average temperature of 300C. The heat will be used to create high pressure steam that will power some of the world's largest turbines.

BBC 16th Dec 2022 https://www.bbc.co.uk/news/uk-england-somerset-64006027

New Civil Engineer 16th Dec 2022 https://www.newcivilengineer.com/latest/hinkley-point-cs-first-nuclear-reactor-ready-for-delivery-16-12-2022/

World Nuclear News 16th Dec 2022 https://www.world-nuclear-news.org/Articles/First-reactor-vessel-for-Hinkley-Point-C-completed

In this current time of energy crisis there is no certainty as to when, if ever, HPC will start to produce electricity. There is also no certainty that it will be provided to British customers. France is also in an energy crisis. Technically EDF, the only producer of electricity from UK nuclear reactors, can send the electricity it produces to France!

‘Very important step’ taken in Bristol net zero pursuit as council signs off £400million investment deal

The two-decade deal involves projects which will transform how Bristol generates, distributes, stores and uses energy

Bristol World, 7 December

A major deal has been approved paving the way for investment worth hundreds of millions into renewable energy in Bristol. City Hall chiefs signed off the City Leap deal between Bristol City Council and Ameresco, marking a “very important step” in the route to net zero emissions.

The two-decade deal involves projects which will transform how Bristol generates, distributes, stores and uses energy. Projects include new district heat networks, installing wind turbines and solar panels, retrofitting homes with insulation, and rolling out heat pumps.

The City Leap deal was signed off by the council’s cabinet on Tuesday, December 6, and was welcomed by Green councillors. At least £424 million will be invested into energy projects in the first five years of the deal, which will see a new joint venture firm created.

Councillor Kye Dudd, cabinet member for climate, said: “The historic pace of delivery that we’ve been doing over the past five years has been pretty good, probably the best in the country. We’ve invested about £100 million in decarbonisation and energy efficiency of our energy system in the city. But we need a change in scale to match the problem we face.

“We don’t have the money as a council and the government isn’t stepping up to the scale of the challenge, so we thought four years ago, why don’t we get some alternative investment from the private sector. This is a ground-breaking approach to scale up investment into energy decarbonisation. This is possibly a blueprint for other cities in the UK and Europe.”

The idea for City Leap began four years ago when the council declared a “climate emergency”, pledging to cut Bristol’s carbon emissions in a bid to tackle climate change. The problem is the council does not have the necessary funding to get the city to net zero emissions, and the current government is not providing the cash to local councils either.

Council chiefs sent out a prospectus in 2018 searching for potential companies to stump up the money needed to decarbonise Bristol’s energy network. More than 100 firms showed interest, and in April this year the council announced the winning bidders — American firm Ameresco will lead the majority of the work, and Swedish firm Vattenfall will build heat networks.

Cllr Carla Denyer, co-leader of the Green party, said: “This is a very important step in Bristol’s decarbonisation journey and I’m really pleased to see it happen. This will lead to hundreds of millions of pounds investment with a potential to that increasing to £1 billion in the longer term, which is great, however estimates show we’ll need 10 times that to meet carbon neutrality.

“I have a healthy scepticism about public-private partnerships. I think history has shown that putting essential public infrastructure into private or semi-private hands can often have undesirable outcomes. So in an ideal world I would have liked to have seen more local and national government investment directly.

“However, I recognise the extremely difficult situation the Conservative government has created for us here,so I welcome this. It’s not the whole story. It’s necessary, but not sufficient — but it’s a great step.”

Over the next five years, Ameresco has promised to save 140,000 tonnes of carbon dioxide, install 180 megawatts of renewable energy generation, and invest £22 million in energy efficiency. The company is also promising to subcontract some projects to local firms and create 410 new jobs in Bristol.

Raymond Briggs CBE (1934 –2022)

We were sorry to hear the news that Raymond Briggs had passed away in August. He had been a patron of Stop Hinkley from the early days. He was best known for ‘The Snowman’ but he also wrote ‘When the Wind Blows’, a graphic novel that shows a nuclear attack on Britain published in 1982.

Our thoughts are with his family.

Dame Vivienne Westwood (1941 – 2022)

Vivienne Westwood sadly passed away 29 December aged 81. She had been a patron since 2016. She was a fashion designer, largely responsible for bringing modern punk and new wave fashions into the mainstream, as well as an active climate campaigner.

Our sympathies are with her family.

Hiroshima-Nagasaki Peace Gathering

In August we took part in this four day event in Bristol. Several Stop Hinkley supporters wore the 'waste barrels' which drew all sorts of interest from nuclear waste researchers to ladies on a hen celebration who borrowed some barrels and wore them around Bristol with much hilarity.

Our own Allan Jefffery gave a very informative talk which was appreciated by the audience and triggered lots of associated discussion

Make a note for your diary as this event, in it's 4th year, will again be at Castle Park in Bristol on August 6th to 9th.

NO 2 NUCLEAR POWER
news and information about the UK nuclear industry

No2NuclearPower is an invaluable resource for news and information. You can sign up for a daily update but he is now offering a weekly option - for folk that don't want to get news every day.

Sign up here:
https://www.no2nuclearpower.org.uk/mailing-lists/

Renewal Reminders

The subscription reminders may be sent out with this newsletter. If you haven't received one or would like to join, please go to our website http://stophinkley.org/support-us/ where you can pay by PayPal, download a standing order form or find out how to send a cheque.

Happy New Year!

www.stophinkley.org

Apologies and Appeal

We must apologise for the lack of newsletters over the last year. The team have been very busy in 2022 with various issues, including:

- Meeting the Office for Nuclear Regulation and responding to their strategy document
- Meeting the Department for Business Energy and Industrial Strategy and responding to their independent review of the government's approach to delivering its nett zero target.
- Meeting the Environment Agency
- Attending Site Stakeholder and Community Forum meetings
- Taking mud samples from the Severn Estuary for analysis.
- Working on the Acoustic Fish Deterrent decision.
- Administering membership and accounts
- Updating website, Facebook and other media

It has been very difficult for us all to deal with this alongside personal, family and health issues. We are therefore taking steps to bring in new supporters who are able to help take on various responsibilities and move Stop Hinkley into the next chapter.

If you feel able to help in any way, please get in touch admin@stophinkley.org

Events

Stop Hinkley meetings

Our monthly campaign meetings are being held via Zoom for the time being. Please get in touch if you would like to be involved.

Meetings are usually held on the second Monday of the month. All members and non-members are very welcome to attend, though only members have voting rights.

Contact: admin@stophinkley.org

Contacts

Press & Spokespersons: Pete Roche:
pete@stophinkley.org
01749 860767 or 07821 378 210

Local Information: Allan Jeffery
ajjeffery@talktalk.net 01278 425451

Street Stalls & Events: Jo Smoldon:
jo.smoldon@gmail.com 01278 459 099

Membership/Treasurer/Website: Val Davey:
val@stophinkley.org