CND BRIEFING

# Vote against the Nuclear Energy (Finance) Bill

This briefing complements the written evidence of 'No to Sizewell C Campaign', which is available at https://bills.parliament.uk/publications/44010/documents/1053

**Bad for fuel poverty, bad for climate action**

The Nuclear Energy (Financing) Bill has its final reading in Parliament on Monday 10 January. If passed, it will change the way the nuclear power industry is financed, transferring billions of pounds onto individual consumers, whilst affording them no protection from spiralling costs. This will force thousands more families into fuel poverty.

Both nuclear construction costs and nuclear generation costs are far greater than those of renewables. For example, nuclear electricity generation costs are twice that of renewables. Yet this Bill will force consumers to bankroll nuclear power.

Nuclear is hampered by generic design flaws, long delays and safety risks. It is dangerous to people and the planet, producing millions of tons of toxic radioactive wastes each year, especially from uranium mining. To meet Britain's 2050 net zero goals – rather than forcing consumers to shoulder the financial burden of nuclear – the government should be investing more in renewables.

**CND urges all Members of Parliament to vote against this legislation.**

## BACKGROUND & KEY ARGUMENTS

### Why is the government changing the financing of nuclear power?

All 15 of Britain's nuclear power reactors, which currently account for 16.1% of the UK electricity supply mix, (with renewables at 40.3%)[1], are scheduled to close by 2030. Following the privatisation of the industry in 1996, the company, British Energy, collapsed in 2002 and all 15 of British Energy's reactors were sold to the French, government-owned nuclear company – EDF, Électricité de France.

Despite plans to build eight new stations, only one plant is under construction, at Hinkley Point C, which is running ten years late and, at £23 billion, £4.5 billion over budget. Experts expect yet more delays and even higher costs to come. Indeed, many calls have been made for Hinkley C to be abandoned.

Private finance for the other seven plants has collapsed. This is because, along with fundamental design flaws and safety risks, the over-runs and overspends, any investment is a very high financial risk. And, investors won't see any profits until the plant is completed, if it is completed!

The government is presenting the Bill as a money saver for consumers, but this is untrue and misleading. Instead the Bill would pass serious financial risks on to all electricity bill payers, in order to allow EDF to start making profits before it starts generating electricity. This Bill is about trying to make investment in nuclear power attractive in order to keep this out-dated and dangerous industry afloat. This is despite the fact that nuclear is in decline all over the world, and that in 2019 both Hitachi and Toshiba pulled out of their proposed nuclear investments in Britain. The reality is that few investors will come forward.

### Regulated asset base (RAB) funding model

The Bill allows the Secretary of State 'to designate a company to benefit from a RAB model, provided that it satisfies certain criteria. This will empower the Secretary of State to insert new conditions into the company's electricity generation licence to permit the company to receive a regulated revenue in respect of the design, construction, commissioning and operation of a nuclear project. A RAB model would allow a company to charge consumers to construct and operate new infrastructure projects'. The government states RAB 'would allow the company's investors to share … the project's construction and operating risks with consumers…'[2] At present, consumers don't have to do this and they can choose electricity companies that do not invest in nuclear.

### RAB encourages over-spend

With consumers always footing the bill, developers would have less incentive to meet budgets. As energy lawyers Slaughter & May, note '… under the RAB model, risk is passed onto the end consumer during the construction phase and in a manner that may not best incentivise developers to minimise the risk of cost overruns.'[3]

This is borne out by projects like Plant Vogtle in the US state of Georgia, where consumers are being forced to pay at least $2.1bn of cost over-runs.[4]

### Bill provides no protections for consumers

Richard Hall, Chief Energy Economist at Citizens Advice, who gave evidence to the parliamentary Committee examining the Bill, stated '…consumers are not simply exposed to the cost of capital; they are also exposed to the volume of capital. That is relevant … because nuclear projects have a track record of coming in over budget and behind schedule.' He goes on to point out that '…consumers do not have any control over the risk. Essentially, they are the passive recipient of the risks.'[5]

Evidence shows that, under this RAB-style funding model, costs for nuclear power stations that were abandoned during construction are still passed onto consumers.[6] For example, ratepayers in South Carolina are having to pay $2.3bn for a cancelled nuclear plant, which will take them decades to pay off. The government is now proposing under the Bill to make UK bill payers liable for these cost overruns and cancellations.

For these reasons, Citizens Advice has proposed that an independent third-party impact assessment be made 'of the key terms of any deal that is agreed under this Bill, and published before that agreement becomes legally binding'. This assessment could be scrutinised by parliament. Hall argues that this is vital given the scale of the costs – tens of billions of pounds, recovered from consumers for potentially 50 or 60 years.'

Yet the government rejected this proposal along with amendments to offer financial transparency and accountability. For instance, 'strike rates' written into nuclear licensee's contracts – that consumers will be forced to pay whether they agree or not – will not be made public. And whilst some decommissioning costs are included in the overall construction costs of new nuclear power plants, there is nothing to protect the consumer from decommissioning costs should a company walk away from a contract.

### Bill drives nuclear proliferation

The RAB funding model could be used to finance the mass manufacture of small 'modular' nuclear reactors (SMRs), such as those proposed by Rolls-Royce in Derby. Their manufacture and distribution would drive nuclear proliferation and still involve the same inherent safety risks and toxic radioactive waste. In fact, these small reactors are even dirtier than large-scale ones, producing more nuclear waste than conventional reactors per unit of electricity.[7]

### RAB drives fuel poverty

In Britain over three million households are estimated to be living in fuel poverty. The lifting of the energy price cap this autumn, combined with the cuts to Universal Credit and end of the Furlough scheme is creating 'a perfect storm' according to Citizens Advice, who submitted evidence to the Nuclear Energy (Finance) Bill Committee. Their research shows that fuel debt was the major debt problem in 2021 and that 22% of the population, equivalent to nearly 6 million households, already say they are worried about paying their energy bills.[8]

Richard Hall, from Citizens Advice, argues 'making our homes energy-efficient so that we stop spending so much on energy and reduce emissions should be tackled as a priority'.

## NUCLEAR IS NOT THE ANSWER

### Nuclear reactor design is defective, unreliable and dangerous

Design faults with EDF's European Pressurised Reactor (EPR) planned for both Hinkley C and Sizewell C plants have been reported in Finland, France and China.[9] Dr Paul Dorfman from the University of Sussex noted '…it's beginning to look like there's a potential generic fault with the key safety mechanism of the EPR reactor design itself.'[10]

Given these safety risks, the government should instead be focussing on the safe decommissioning of existing plants, not attempting to build new ones and forcing consumers to shoulder the costs of more delays and the risks of further accidents.

### Nuclear power is much more expensive than renewables

The government has agreed a 'strike price' with EDF for Hinkley C electricity generation, linked to 2012 prices. This is now £106 Megawatts per hour, more than double the current wholesale market price. Recent bids for offshore wind are £36.95/MWh. Nuclear power forces up consumers' bills even higher than current market rates, and the government's Bill would force people to buy this pricey nuclear electricity.

Pound for pound, nuclear creates less jobs than renewables. According to the UCL Institute for Sustainable Resources '[i]ncreasing renewable electricity can stimulate six times higher long-term employment impact than an equally sized increase in nuclear electricity.'[11]

### Nuclear power can't solve climate crisis

The UK government plans to reduce emissions by 78% by 2035 – just 13 years away. Yet planned completion of Hinkley C is not until 2028, and should Sizewell C go ahead, it is unlikely the plant would even be completed by 2035.

In fact, last year the UK produced more electricity from renewables than from nuclear and from fossil fuels, with experts predicting the trend would continue.

Yet, instead of directing investment into cheaper, cleaner and quicker renewables like solar, wind and tidal power, that can genuinely help reach its 2050 net zero goals, the government is introducing legislation so that consumers are forced to bankroll electricity generation which will keep our energy bills rising not falling. This is not only against consumers' interests, but undermines Britain's action to tackle the most serious security risk we face – from the climate emergency.

**Therefore CND urges all Members of Parliament to vote against this legislation.**

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1 https://risingtide.org.uk/node/581
2 https://hansard.parliament.uk/Commons/2021-11-03/debates/B5FFA487-74CE-4197-B8AB-3DA3803F3946/NuclearEnergy(Financing)Bill
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6 'South Carolina Wasted $9 Billion on a Failed Nuclear Project'. https://theintercept.com/2019/02/06/south-caroline-green-new-deal-south-carolina-nuclear-energy/
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