

been found impossible to find companies willing to invest in such projects. The last white hope was a Chinese State Company, but its contracted large involvement has been vetoed for political reasons.

There is not even an agreed reactor design to be used. The European Pressurised Reactor design currently being built at Hinkley and due to be built at Sizewell C has proved a great failure in the few places that building it has been attempted. A failure both in terms of vast overruns of predicted construction time as well as cost. It is currently estimated that Sizewell C will cost £23bn.

It is also to be noted that Electricité de France announced firm plans for Sizewell C as long ago as 2012 while actual construction is yet to begin.

Anyway, this is all complete nonsense. Onshore wind turbines are very, very much cheaper to build and can be up and running in a year. If the sight of onshore wind turbines offends you (and a poll carried out in October last year on behalf of Renewables UK found that 70% were in favour of building onshore wind turbines) then offshore wind turbines, though longer and more expensive to build than onshore wind turbines, are still much faster and cheaper to build than nuclear power stations. Solar generation is also cheaper and faster to build than nuclear.

## SMALL MODULAR REACTORS (smrs)

Are these a better bet?

On April 19<sup>th</sup> the Rolls-Royce SMR chair was reported as saying that the company is to start building parts for small modular nuclear reactors in anticipation of receiving regulatory approval from the British government by 2024 and he hoped the reactors would provide power to the UK's national grid by 2029. The generic design assessment for the Rolls-Royce SMR design has already begun.

It is claimed that since SMRs can be built in factories, building them will be cheaper and quicker designs. This of course has to be proved.

Rolls-Royce SMR was set up with BNF resources and Exelon Generation with a joint £195m investment to fund the project over the next three years, and Rolls-Royce has announced a £50m investment in second phase from 2025. The UK government has promised £210m. Isn't this investment, amounting to £555m, rather small beer in terms of the massive investment needed in such a project?

Rolls-Royce are reportedly initially planning to build 10 to 12 SMRs, costing about £2bn each with a generation capacity of 470 MWe

(about one-seventh of the 3,220 MWe claimed for Sizewell C). This was claimed to be enough to power 1.3 m homes, and cost about £2.2bn per reactor, dropping to £1.8bn after five had been completed.

The e-journal *Neutron Bytes* says that the "Best estimate for the first commercial unit being in revenue service would be the early 2030s." Again, we will have to wait and see...

## WHERE TO PUT IT?

Meanwhile, the problem of how to dispose of the vast amount of radioactive waste already generated by the nuclear industry in its 66-year history has still not been solved.

The *Guardian* reported on 28<sup>th</sup> March that this legacy now amounts to 700,000 cubic metres of toxic waste "roughly the volume of 6,000 double-decker buses", much of it stored at Sellafield "which the Office for Nuclear Regulation says is one of the most complex and hazardous nuclear sites in the world".

It was nearly 50 years ago that the solution of a deep geological facility (DPR) was put forward, yet still the UK is no nearer building one, not even a site has been agreed.

Proposed new nuclear reactors are only going to add to the problem. The Nuclear Decommissioning Authority (NDA) has found that spent fuel from proposed new nuclear reactors would be of such a high temperature that it would need to stay on-site for 140 years before it could be moved to a DPR.

The NDA also found that the cost of decommissioning and disposing of already shut-down nuclear reactors has risen to £131bn and the costs of building a GDF for it was £53bn. Professor Claire Corkhill, a member of NDA, said that they are considering building an underground chamber about 12 miles long at the depth of at least 200 metres just for the existing waste.

Professor of energy policy Steve Thomas commented, "...we are still, at best, decades away from having facilities to safely dispose of the waste. Until we know this can be done it's premature to [start] a new programme of power plants."

## "SAME OLD NOT NEW NOT ZERO NUCLEAR"

This is the title of a briefing paper that Rising Tide UK produced in response to request from the COP26 Coalition, that points out all that is wrong with investing in nuclear power

I've been asked to publicise its existence in this newsletter, which I'm very happy to do. Find it at <https://www.risingtide.org.uk/node/581>

## BUNNY EASTON

23<sup>rd</sup> July 1930-14<sup>th</sup> February 2022



Bunny writing

I got to know Bunny during Kick Nuclear's "Remember Fukushima; No to Nuclear Power in the UK" weekly Friday vigils outside the Japanese Embassy which began in August 2012. (They are now twice-monthly.)

Bunny was a regular participant in this vigil from 2013 to 2021. He sat on a chair by the embassy entrance in all

weathers giving leaflets to Embassy visitors and passers-by. Towards the end of 2021 he decided the winter weather was getting too much for him but said he would return in the spring; death at 91 sadly intervened.

He had been a great asset to the vigil, charming passers-by who stopped to talk, speaking clearly and quietly in a beautiful West Country accent. He also charmed the two Senegalese guards at the Embassy, who were sufficiently concerned about him to enquire whether he was alright when he didn't turn up at the vigil. He also brought along chocolate to share and the odd simple but effective political poem, a couple of which I've published in this newsletter.

I knew very little about his previous life, though he did mention his participation in Brian Haw's nine-year continuous vigil for peace and against war in Parliament Square. He had supported the vigil from 2005, going twice weekly to look after the striking display of posters and banners that Brian had set up in the Square, to give Brian time to rest.

I've also learnt about Brian since his death that he was indeed born in Somerset, and that he refused to do his national service when called up in 1949 on grounds of conscience.

A life-long socialist, one of his first marches was a 1950 protest at council rent rises. He joined the Communist Party and canvassed for it at the 1955 general election, later selling its paper, *The Daily Worker*.

He went on many protests over the years including protests against the UK seizure of the Suez Canal in 1956 charged by mounted police and a rally in Trafalgar Square at the height of the Cuban missile crisis.

His wife, Catherine Easton, also a writer, died before him. He is survived by daughters Martha, who helped with this obituary, and Susan.

David Polden.

## KICK NUCLEAR

April 2022

The monthly newsletter of Kick Nuclear and the Nuclear Trains Action Group (NTAG)

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We hold **"Remember Fukushima – End Nuclear Power"** vigils in London **on the 2<sup>nd</sup> and last Fridays of each month**, from 11am to 12.30pm outside the Japanese Embassy at 101-104 Piccadilly, followed by from 1 to 1.30pm outside the offices of the Tokyo Electric Power Company at Marlborough Court, 14-18 Holborn.

All anti-nuclear people are invited to join us.

## IS HE SERIOUS?

On 4<sup>th</sup> April, speaking at the site of Hinkley Point C, the UK's only nuclear power station to have begun construction since 1987, Boris Johnson announced that the government's new energy strategy, which includes the target of 25% of the UK's electricity being produced through nuclear power. This involves the construction of eight new large nuclear reactors being built as well as investment in development of small modular nuclear reactors and possibly nuclear fission reactors.

The first thing to be said about this policy is that it does nothing to solve the major problem facing us today: replacing the energy shortage that is facing us partly as a consequence of the war in Ukraine and the consequent escalation of the cost of energy and the cost of living crisis.

All current civil nuclear power reactors, bar one, are due to shut down by 2030 and Hinkley C itself is not due to be joined to the national grid till 2027, having originally been planned to open in 2017; with every possibility its opening will be delayed further.

And if all eight reactors start building today they are unlikely to open before 2032 - such large reactors usually take 10 years or more to build.

But the situation is much worse than that. Apart from Sizewell C, which it is currently claimed will start construction before 2024 and take 9-12 years to construct, there no existing plans for building any new civil nuclear power reactors in the UK. Additionally, for some years it has

