

TOGETHER AGAINST SIZEWELL C

Meadow Cottage, Hubbard's Hill, Peasenhall, Saxmundham, Suffolk IP17 2JN

To: The Chair, Public Bills Committee, Houses of Parliament, Westminster, London

Dear Sir/Madam,

Re: Nuclear Energy (Financing) Bill [the Bill]

1. **Together Against Sizewell C (TASC)** is an NGO which has been actively campaigning, since 2013, to stop EDF's plans to build two EPR nuclear reactors on Suffolk's fragile Heritage Coast and to prevent Sizewell C (SZC) and all its supporting infrastructure from devastating hundreds of acres of wildlife-rich habitat within Suffolk Coast and Heaths AONB and its nationally and internationally-designated wildlife sites, as well as irreparably damaging [RSPB Minsmere](#) and [the marine environment](#).

Introduction

2. TASC have, since the concept of a nuclear Regulated Asset Base (RAB) was first mooted, felt it was mainly a mechanism to subsidise the construction of SZC and on listening to the debate of the Bill on 3rd November 2021 this view was confirmed by many of the speakers in that debate. Indeed, it would seem the heavy references to financing SZC undermines the objectivity of the DCO planning process that is running concurrently with consideration of this Bill by apparently prejudging the planning inspection process.
3. In October 2019, [TASC made a submission](#) in response to the BEIS consultation on RAB proposals and most of our observations from then remain valid, indeed the case against using RAB for new large scale nuclear projects like SZC has strengthened with the costs of renewables continuing to fall and the cost of large nuclear projects still rising, as demonstrated by the rising costs of HPC, Flamanville and Olkiluoto. It is also noteworthy that EDF have so far refused to advise of any update on their £20 billion cost estimate, despite major changes to the SZC plans during the DCO examination including: deeper/wider cut-off wall, higher/wider sea defences, desalination plant, additional jetty, a 30 kilometre water main, all of which have cost implications.

TASC's view of RAB

4. TASC's major observations regarding the Bill and the background information supplied to Parliament are:-
 - a) New nuclear build in the UK is not required to meet the UK's foreseeable carbon reduction targets, costs or supply needs and therefore a funding mechanism for the French designed EPR, for which it was predicted that no public subsidy would be required, is not necessary. Indeed, RAB seems to be a mechanism designed to support 83% French government owned EDF with the French group's financial predicament of having over €40 billion of balance sheet debt and a greater amount needed for its reactor upgrade programme and decommissioning costs for its aging reactors.
 - b) RAB is essentially a belated tax on the public purse and on electricity consumers to compensate for the dislike investment banks, pension funds and other potential private capital investors have for nuclear power: as has been regularly reported, all credible financial commentators have described the new nuclear plans as financial suicide.
 - c) By making all electricity consumers pay for RAB, it prevents individuals from exercising their right to elect for electricity generated solely from renewable or non-nuclear

sources. TASC say this is contrary to the right of individuals to exercise their discretion to opt for being supplied only by non-nuclear electricity providers.

- d) It is unfair to force the RAB on Scottish electricity consumers when Scotland have elected to have no new nuclear power sources.
- e) There is no justification for Northern Ireland to be excluded from RAB as they would share the electricity generated, directly via the 'Moyle Interconnector' and indirectly via the 'East-West Interconnector' and the interconnectors linking Eire with Northern Ireland.
- f) The RAB, by only applying to nuclear projects, gives an unfair competitive advantage over other sources of electricity production, including low-carbon, quicker to deploy wind and solar.
- g) The UK is heavily invested in, and reliant on, interconnectors situated in the European Union (EU). Therefore, because of the matters outlined in f) above, it is quite likely that the EU will deem the RAB funding model as State-aid, possibly compromising the UK's ability to sell electricity to Europe.
- h) The nuclear RAB exposes UK electricity consumers and the UK taxpayers to the risk of time delays and the resulting cost overruns experienced by large nuclear projects.
- i) As the RAB Bill does not provide for any penalties for inevitable "completion delays" there will be no incentive to ever finish a RAB funded project. In SZC's case given the geological unsuitability of the site, total inadequacy of 200-300 mile supply routes ending in a rural setting of miles of single track roads and a twenty mile rail branch line plus a skeletal North Sea jetty that cannot be used for several months a year, and which will probably be wiped out by the first big storm, then extensive overruns of several years or, in the worst case, a cancellation of the entire project is a distinct possibility.
- j) RAB payments during construction will create an additional cost burden for electricity providers who will be faced with the decision on how much to pass on to consumers, at a time when many providers are struggling to survive.
- k) RAB payments will create an additional cost structure with the creation of the 'revenue collection counterparty' and layers of cost within Ofgem and the Gas and Electricity Markets Authority, placing an unfair resultant financial burden on lower income families and greater costs for struggling electricity providers.
- l) TASC believe that the RAB funding model represents the 'thin end of the wedge' in that, as the costs associated with nuclear projects increase – as they inevitably will – the amount of money demanded from consumers will likewise inevitably increase. It amounts to an additional and unwelcome financial burden on thousands of less well-off families who are already struggling to make ends meet particularly after the removal of the £20 universal credit top up and with the rising cost of living.
- m) If the RAB contract is not capped with a firm figure on the amount that can be charged to electricity providers, then the generating company has no limit to the amount that can be charged, even if the amounts are materially in excess of figures used in the value for money assessment or are materially in excess of market rates.
- n) Any large nuclear plant financed via a new RAB funding mechanism is not likely to be operational before 2035 and will therefore hinder (with its large carbon footprint from construction and fuelling) rather than help meet the UK's stated aim of decarbonising electricity production by 2035.
- o) Any large nuclear plant funded via a new RAB funding mechanism will not replace any of the 12 old AGR/Magnox reactors that will all be taken offline by 2030. Government is not forecasting that the UK will run out of electricity by 2030, demonstrating that new

large nuclear plants beyond HPC are not an imperative and will be too late to meet the urgent need to decarbonise.

- p) The proposed RAB funding model removes any pretence that the government has in claiming that sources of electricity supply will be left to market forces. This creates the risk that, because RAB masks the true market cost of large nuclear power plants, in a decade or two when the cost of renewables has fallen even further and the UK has developed an adequate energy storage network, nuclear will be priced out of the market. If this happens, who will bear the cost of decommissioning?
- q) As set out on page 19 of the background document, the Government's Net Zero Strategy sets out four key underpinning principles:
 - "1. We will work with the grain of consumer choice: no one will be required to rip out their existing boiler or scrap their current car.
 - 2. We will ensure the biggest polluters pay the most for the transition through fair carbon pricing.
 - 3. We will ensure that the most vulnerable are protected through Government support in the form of energy bill discounts, energy efficiency upgrades, and more.
 - 4. We will work with businesses to continue delivering deep cost reductions in low carbon tech through support for the latest state of the art kit to bring down costs for consumers and deliver benefits for businesses."

TASC consider that the RAB model, as the enabler for large new nuclear projects, will not meet any of these principles:

- 1. It will take consumer choice away from those wanting to pay for nuclear free electricity only;
- 2. Carbon is not the only type of environmental pollution or social consequence generated by nuclear power: large nuclear will pollute our air, land and seas with radionuclides, chemicals, tonnes of dead/dying fish and other marine biota dumped in our seas via the cooling water system, as well as making demands on scarce potable water resources which compromise the availability of drinking water to the domestic sector;
- 3. There are no provisions within the RAB Bill to protect the less well-off;
- 4. Having been originally designed over a decade ago, the EPR reactor design cannot be called state of the art and has not been proven to work when built to European regulatory standards and therefore does not warrant the burden it creates on bill paying customers.

5. Risks associated with projects such as Sizewell C

- i) The EPR design, itself, is a major financial risk, as evidenced by the delays and cost overruns at the Olkiluoto and Flamanville projects. Indeed, the French have decided not to build any more of the EPR design destined for HPC and SZC in their own country.
- ii) The EPR design has inherent safety risks such as the vibration problem identified in the EPR's primary water circuit and further problems, yet to be explained, that resulted in the current shutdown of the Taishan 1 EPR reactor in China (one of only 2 reactors based on the EPR design operating anywhere in the world).
- iii) Reliance on companies owned/controlled by foreign states to build the project.

- iv) Reliance on uranium as fuel that has to be supplied from overseas, means the UK has no security of supply.
- v) Nuclear's much-trumpeted 'low carbon' electricity and the contribution nuclear will make to driving down greenhouse gases will be entirely nullified in that by 2035, when SZC is predicted to be operational, should it be granted planning permission, the electricity sector will, according to the Prime Ministerial statement on the subject, be carbon free, leaving no opportunity for carbon off-set from low carbon sources. Instead, SZC will leave a carbon debt of millions of tonnes, making its hitherto most important justification a hollow and empty claim.
- vi) The unsustainable use of drinking water, which will become an area of increasing concern due to water shortages expected as a result of climate change. In SZC's case EDF have yet to show they have a guaranteed source of potable water for any of its 60 years of operation so there is the possibility that SZC could be built but not have an operational water supply-[see TASC's Deadline 10 DCO submission re ISH 11](#) (particularly reference on pages 19).
- vii) The SZC project anticipates the use of adaptive management, in particular with regard to the expected future increase in the height and scale of the sea defences, leading to even greater concerns over consumers being faced with future costs that have not been factored into the assessment of the impact of a RAB scheme for SZC.
- viii) If proper monitoring of fatalities of fish and other marine biota is carried out at SZC once it starts operating, this may result in the adverse catastrophic impact on the marine environment being identified, leading to the plant having to close-see the [report by marine ecologist Dr Peter Henderson](#).
- ix) Experience of a financing model similar to RAB used in the U.S.A. to fund new nuclear plants, has resulted in American consumers paying billions of dollars for nuclear power plants that [have not](#) and [may never become operational](#).
- x) With large nuclear power stations being situated on the coast for cooling purposes, the unpredictability of the impacts of climate change (see [DCO submission by Prof Andrew Blowers](#)) and the speed with which those impacts will be felt, especially on an already eroding coast at Sizewell, mean there is a very real prospect that flooding could result in early closure of new plants. This would further undermine what is already a very weak economic case for large new nuclear plants and would also pose a risk to human life and the environment. In TASC's opinion, EDF have grossly under-assessed the flood risk at Sizewell – [see our DCO submission](#)
- xi) TASC are of the opinion that the comparison to the use of the Thames Tideway project is misleading due to the different nature of the projects particularly in respect of the total cost, the complexity of the technology involved and the length of project duration. One area where they do appear similar is with the total lack of transparency of the figures involved. It is however clear, that even with a less complex project like the Thames Tideway, substantial cost increases can be passed on the unprotected consumers.
- xii) It would appear that the Sec of State has too great an involvement in the operation of the RAB, which runs the risk of politicising a project that could be live for decades.

6. The Bill's second reading 3rd November 2021

TASC have grave concerns about the quality of the debate on the Bill with so few MPs present and little to no examination of legitimate concerns raised by the SNP's Alan Brown and others. TASC concerns about the debate are too numerous to mention but

we were surprised to hear a BEIS Minister quoting a statement by ex- Extinction Rebellion member Zion Lights, who we understand has links with nuclear lobbyist Michael Shellenberger, as a justification for new nuclear. Also, one MP supporting the Bill made light of the impacts that the Fukushima and Chernobyl disasters had on residents and the environment, a contribution which we found insensitive and ill-informed.

7. Suggested actions by the Public Bills Committee

TASC are of the opinion that the UK has no need for new nuclear power stations and that the RAB model, for the reasons set out above, is not in any event a suitable mechanism for financing such a high value and long-term project as SZC. With this proviso in mind and purely on the basis that Government is still minded to pursue the Bill, we would comment as follows:-

- (i) The use of the RAB model should exclude projects where more than 50% of the project will be owned by or is being developed by entities controlled by foreign states.
- (ii) To limit the exposure of UK electricity customers and UK taxpayers to the finance risks posed by such large projects, there should be a finite cap, based on the figures used in the value for money assessment, that restricts the amount that can be charged through the RAB model.
- (iii) Those that have chosen a non-nuclear or renewables-only electricity tariff should be excluded.
- (iv) That Scotland be excluded from the RAB financing.
- (v) That Northern Ireland be included in the RAB financing (unless they have declared a non-nuclear stance).
- (vi) The Value for Money assessment to be made available to the public for scrutiny and comment before a project can be accepted for RAB.

Christopher Wilson

On behalf of TASC 12th November 2021

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