

## **Open Floor Hearing Presentation SZC**

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*(5 + Minutes: original script, not as or all delivered, refs inserted, 24.5.2021)*

### **Policy & Change**

Why does EDF claim there are “no changed circumstances” since National Energy Policy Statements of 2011, and how can they claim a “tilted balance” in planning for these *out of date* policies ?

We have been looking at these fundamental arguments on the status of the NPSs of 2011 and the planning “substantial weight” and “considerable weight” and “significant weight” claim, which we know as the tilted balance, in the Statement of Reasons (*App 4.1, e.g. Chapter 3 para 2.22*) and the Planning Statement (*App 8.4, e.g. Chapter 3, para 6.17*).

Consideration of “changed circumstances” was required in a Ministerial Statement in December 2017 (*Chapter: Applicability of NPS6, para 3*). EDF deny that there are any “changed circumstances” (*App 8.4 Planning Statement, Planning Framework, Executive Summary, final para p5 and App 4.1 Statement of Reasons, para 3.2.22*).

### **New Government Policy**

This policy interpretation is substantially out of keeping with the realities of government policy, especially on climate change and renewable energy developments. We briefly describe these here and will detail them in our WR based on a recent detailed S.A.G.E. Briefing on “New Developments”.

The policy facts are clear: we now have a decade of policy and circumstance to help understand EDF’s SZC project. A strategic “New Direction for UK Energy Policy” was first announced in November 2015 in a Ministerial Statement (*Amber Rudd, 18.11.15 DECC*). It involved a review of nuclear siting policy and need (NPS EN6) based on changes in policy and law and to be freestanding of the energy policy in NPS1 (*NPS6 Review, 7.12.17, para 3 Executive Summary: “Strategic siting criteria to be updated” (from 2009) “to be consistent with current law and policy” and to “standalone and sit outside the 2011 energy suite”, adding passim “competitive price” and new flooding/safety/site size criteria*).

Today, as of late 2020, there have been important changes under the urgent imperative of climate change and energy policy. Law changes have taken place (e.g. *IROPI codification by Jackson JL, usefully presented in case study CS10, 2016 EWHC ( 2581(admin)) & Appeal Court, Mynnydd Y Gwynt v SoS, in Humphries -- National Infrastructure Planning Handbook, 2018*).

Together they culminate in a comprehensive cluster of energy policies – and law - now in operation. Policy change consists in a long-awaited Energy White Paper- the previous was 2008, the Prime Minister’s Ten Points of green transition, its allocation of all domestic energy supply to renewables, the adoption of the Climate Change Committee’s 6<sup>th</sup> carbon budget requiring a carbon neutral electricity industry by 2030, new UK energy price controls and a role for new nuclear industry, but with a newly defined “new”. This turns out to be funding for nuclear SMRs (*small & medium reactors*), nuclear research and skilling. These develop alongside natural gas as a transition technology with Carbon Capture & Storage technology (*CCS or CCUS*) and an expanded offshore wind development. SZC’s big EPRs, in this new policy platform, can be seen as “old”, not new nuclear. We develop this point in our main WR.

### **New energy world circumstances**

In the real world, reflected in the policy world, there are profoundly changed circumstances, characterised by a triple revolution of market liberalisation (30 years), decarbonisation and renewables development (15 years) and digitalisation (5 years) - (*International Energy Authority, Paris*). The SZC EPRs are expensive and uncompetitive for open markets, inflexible, slow to build and have a highly disputed carbon footprint, and serious delivery problems. They have so far shown to be not well designed for the new world. Aside from our recent SAGE Briefing, we have previous interest. We contributed in 2014 to the Brussels investigation of subsidies, winning a gain-share clause and challenges about a consumer levy approach to Hinkley Point C funding.

### **Planning Act 2000 duties**

To understand the role of changed circumstances in the evolution of policy, we have been looking at the statutory basis of NPSs in the 2008 Planning Act.

In Chapter 2 on NPSs, (*Clause 10, (1), (2) and (3)*) there is a very strong “must” duty on Government plus a duty to “contribute” to sustainable development in two designated areas: these are “climate change mitigation” and “good design” for infrastructure projects. These imperatives look in principle to be

drafted as equal and connected duties, that is, the design must be fit for, good for, climate change purposes. We have been exploring both.

### **Good Design – for climate change mitigation**

The good design duty can be applied to many essential features of this project. We note the importance of this imperative (duty) in the recent Horizon Wylfa Examination Report.

Economic and financing issues are obvious and established in the public narrative and in the SZC draft DCO “Order” document providing for licence assignment from not just NNB to EDF UK, but to other owners. EDF state that these issues are already dealt with by the ONR. We contest this view. EDF have chosen, on the invitation of Government, the RAB (*regulated asset base*) consumer levy model to pay for the construction of SZC. This affects all of us, and it is a consulted public issue. Secondly, EDF have raised what is surely an area of public concern: they have agreed with Government a massive 20% cut in their construction costs. They have contracted Atkins Engineering Company to advise on how SZC’s £20 bn cost can be cut in comparison to Hinkley Point C (*Construction News, 25.7.2019*). HPC’s costs have gone from an original £18.6bn to around £23bn in three years or so. Questions arise: on which figure is the 20% reduction? Where and how might such a major cost cut fall on SZC? Can this be an exclusive ONR matter?

Good design tests also look necessary for energy markets, for life after Brexit, for EIA mitigations and alternatives, and obviously for many physical design matters. The new site size requirements in the EN6 review specify “approximately 30 hectares for one unit ... required to provide the effective defence in depth for the key operational elements..” (*Government Response: Consultation on the Siting Criteria and Process for a New NPS, July 2018, Appendix 1, para 1.100*). SZC would have two very large units on only a little over 30 hectares. Sizewell B with about 30 hectares was short of space for a waste storage facility. There are 22 other specific “Finalised Siting Criteria”.

### **Contributing to climate change mitigation**

The statutory duty is for climate mitigation to be contributed to, not just “taken into account” etc. This positivity reflects the overriding legal base for what we now know as NetZero 2050 policy. So we have looked closely at the limited carbon footprint data provided by EDF in the Planning Statement (*App 8.4, pp 151/2, An Urgent Need for Nuclear Power, para 7.2.9 and 7.2.11-13*).

We will submit a detailed and documented assessment of EDF's headline claims in our WR.

We will examine other documentation in our main WR, but for the moment expressed in tonnes of CO<sub>2</sub>e created by construction per year, this carbon deficit is claimed to be payable in just under 6 years by "low carbon" production. This carbon deficit figure is controversial, but welcome in its clarity. Even if the figures are accepted, the EPRs' 60 year operating life will see only a very few years of low carbon contribution to NetZero 2050. SZC would therefore still be creating a carbon deficit running up to the new UK Government 2035 threshold of a 78% reduction (*BEIS 20.4.1*).

There are alternatives to reach that goal. And there are many carbon footprint questions: about comparators' carbon deficits by quantity, not CO<sub>2</sub>e/kWh ? By number of years, and speed to operate. Are EDF's figures inclusive of carbon credits granted by Government. On deficit calculations, natural gas with CC(U)S, offshore wind and solar are claimed by EDF's own figures to be at very similar low carbon levels to the EPR figure (*Planning Statement Chapter 7, para 2.9*). But they build differently, with few impacts, quickly, and operate without problems and indelible waste. The costs of alternative technologies look much lower as the carbon capital measure required by the UK Treasury. Are heavy transport and workforce carbon footprints included in the deficit count, alongside the obvious 12 million tonnes of concrete and steel, and the various economic multipliers – including the supply chain - claimed as a general economic benefit.

There is a reasonable expectation of transparency. EDF have the expertise with their support service for their commercial clients on carbon footprints, and a large carbon trading facility. But they seem unable to disclose openly the computational basis of their controversial "low" carbon claims. Finally we note that peer reviewed academic work disputes nuclear low carbon claims, and the Government's own benchmark figure from the 2008 Nuclear Power White Paper, at 7-22 gmsCO<sub>2</sub>e/kWh, reflected an OECD report. EDF's claim for the EPR is 4.5.

**Asks** We have two:

- **that we can make an ISH presentation on Policy, Need and Design**
- **that the Atkins Report is made available as soon as possible.**

