

TASC IP No. 20026424

Deadline 10 Submission regarding communications with the ONR

TASC wish to appraise the ExA regarding TASC's recent communications with the ONR. TASC are aware that the ONR have advised PINS that they are not yet aware of any matters that may affect their ability to grant a nuclear site licence. While we appreciate that an ONR licencing decision for SZC is not anticipated to be made until the middle of next year, we were surprised that, at a recent virtual meeting with the ONR, there was a lot of information about the Applicant's SZC project that they do not have. TASC sent a letter (by email) to the ONR after the meeting expressing our concerns. TASC share the contents of our letter, which is replicated below, with the ExA for your information.



TASC Concerns about the ONR licencing process for a proposed Sizewell C. October 2021

To Jean Taylor, Shane Turner, Samaneh Nouraei.

Cc Katie Day.

Re Sizewell C ONR/EA Stakeholder Engagement meeting. 28th September 2021.

Dear All,

Following the meeting attended by TASC members and others we were very disappointed by the responses offered to our questions.

Those questions were carefully considered by us to allow ONR to update TASC members and the rest of the community members and to gain an understanding of the reasons for the confidence ONR have in a process which we recognise is highly complex and is continuing to be held in the most difficult circumstances of Covid 19. We recognise also that the site licencing process for Sizewell C (SZC) is almost unique in that the last major Site Licencing was for Hinkley C, which in itself is an ongoing process, with many challenges for ONR.

However the feedback from the meeting was that ONR comprehensively failed to satisfactorily address all of our questions.

Operator of SZC and policy

One of the difficulties faced by many organisations in responding to the DCO process is that the developer has continued to introduce changes (19 to date) to a planning process which was supposed to be fixed prior to the DCO Application. One major concern is that EDF, the original instigator, and SZC Co the current proposer of this project, clearly will not be the constructor should consent be granted by the Secretary of State. This situation is now further confirmed by EDF France in their report to shareholders 2020. https://labrador.cld.bz/EDF-2020-Universal-Registration-Document

What confidence is there that the SZC Co will take responsibility for any errors? For example there is clearly a lack of clarity of construction detail.

We agree and endorse the view of the ONR in the Planning Policy EN6 at C8.87 that there is a land requirement of 30-50 hectares per reactor. Yet the ONR confirms in FOI202108016 that the NSL area



proposed is only 32 ha, excluding the defence features. The absence of certain buildings, in some plans submitted to PIN, particularly the Dry Fuel stores, appears intended to confuse, even if those buildings are understood not to be required for 10 years. The close proximity of the planned SZC development to the Sizewell B operating reactor, a fact again not entirely recognised in EN6. All lead to the inevitable conclusion that the site is not big enough to construct and operate 2 EPR reactors. We consider that ONR's opinion on this fundamental issue must be articulated to PINS and to BEIS.

Potable Water

We now find belatedly that the site may have to be serviced by a desalination plant for potable water, possibly until final restoration post-removal of spent fuel. A fact identified in the 1993 Nuclear Electric Environmental Statement at 8.39. A situation which we consider needs far more consideration by ONR as to possible safety implications. Particularly for firefighting and other emergency needs. In addition we are unsure as to whether there is an Ultimate Heat Sink for the EPR reactor design which may require potable water.

Changes to plans

We note that the Hinkley C project required numerous changes to building sizes and locations and flood walls post granting of permission. The site was also later found to be unstable and required intervention at extra cost. All of which lead to the conclusion that the developer did not do sufficient engineering and characterisation of the site. We therefore conclude that the developer cannot have undertaken a full site characterisation report prior to DCO Application as a requirement of your site licencing. (ONR September 2019 Licencing Nuclear Installations).

We are anxious that the mistakes of HPC are not repeated at Sizewell C. While we understand the enormous political pressure on the ONR and other regulators, it is our view that they must be allowed to follow proper process and fulfil their duties to protect the public.

We do not believe the Regulators' Code should apply to ONR, a point we have made to BEIS/NGO forum.

Climate Change

I am conscious also, having responded to your TAG13 consultation on External Hazards and Climate Change, that there may be many further reasons why this site may not be suitable.

Adequacy of drawings. You referred to FOI 202102068 which was personal to the author of this document, which not all participants were aware of. I had initially referred to a Planning consent for Sizewell B which clearly shows a planning line on the east of the site. In the SZC RSR document at page 41 there was an indicated site plan which clearly had been squeezed in the east/west plane. In the FOI you acknowledge that you did not have all the information at 9th April 2021. You also kindly supplied a map of the site NNB Genco (SZC)Co 100004, but this did not include OS gridlines, hence our question on OS gridlines. Why regulators had not insisted on this OS grid line issue being



corrected despite a request from PINS and despite that drawing not appearing to fulfil the ONR Site licence condition Annex 3 i.e. Condition 2 point 2 is something we would like answered. We also have historic evidence of the inaccuracy of previous drawings with incorrect grid lines and location of buildings, particularly in the east/west plane. We are also extremely concerned that the proposed site boundary does not conform to point 1 in your guidance, in that the sea defence wall is not part of the site licence area, leading to increased coastal squeeze. We believe that failure to include the sea defence will not allow BEIS to clearly define the licenced nuclear site, part of its duties under NIA 65 section 6 Annex 3 part 4.

Site geology and engineering

Our understanding of SZC Co plans both from your FOI response and the latest drawings from SZC Co, still indicate that the **site geology and characterisation** is not complete and subject to change. The implications of failure to understand the site are enormous, particularly the extreme sensitivity of the SSSI Sizewell marshes and the implications of taking yet more of the rare fen meadow part of the SSSI. We understand this would negate all the developer's claims for Biodiversity net gain from the project. Whilst we recognise that Biodiversity Net gain is not an ONR matter, none the less the impact of buildings and hard defence features within the Suffolk Coast and Heaths AONB is of major importance. A failure of the sea defences, which must be in place to protect this site, spent fuel stores at Sizewell C and B, and Sizewell A reactor building until possibly 2190 cannot be contemplated.

This situation prompts our questions on the drainage scheme and position of the curtain wall. Your answers seem to imply that you do not have all the details. This could affect flood risk particularly to Leiston town and impact emergency planning routes.

Emergency Planning

We are concerned that on the subject of **Emergency Planning** ONR seem to have given up any oversight of Emergency Planning. Previous Detailed Emergency Planning Zones (DEPZ) produced by ONR had previously agreed with that recommended by BEIS officers (endorsed at BEIS/NGO forum) i.e. 3-4kms and based on IAEA standards. In addition, neither Suffolk County Council which is responsible for Emergency Planning, nor East Suffolk Council which is responsible for housing and planning, have recognised the need for a 30kms Outer Planning Zone (OPZ) and the need which we assume still exists to restrict development in the vicinity of Nuclear Power Plants and other nuclear facilities. We noted a recent court case in Berkshire involving housing developments within an extended DEPZ. https://www.nuclearinfo.org/article/developer-challenge-to-burghfield-emergency-zone-fails/

We further evidence this by this Extract from your own ACOP Guidance which you supplied to the author of this document. Consequence Assessment. 5.

http://www.onr.org.uk/consultations/2019/reppir-2019/guidance.htm



"149 In the case of an operating light-water reactor, faults associated with containment by-pass, such as steam generator tube rupture (SGTR) faults, secondary side depressurisation faults with consequential SGTR, or loss of coolant accidents with leakage from containment may need to be considered as well as very low probability radiation emergencies such as complete core melt with late containment failure. It is recognised that modern light-water reactors are designed with the intention of eliminating radioactive releases within the design basis. Nevertheless, given the large hazard potential associated with operating power reactors (LWR, AGR, etc.) there is the expectation that a minimum geographical extent for detailed emergency planning will be nominated by the operator consistent with international standards and guidance produced by the IAEA [25], [23], [26]. This point is generally true across all sectors that for installations with the highest hazards which can result in releases in the significant and catastrophic regions of the REPPIR risk framework there is the expectation that a nominal geographical extent for detailed emergency planning will be recommended even if the analysis indicates this may not be necessary."

It seems obvious that ultimately 3 operating reactors at Sizewell would require a realistic emergency planning regime based on international standards i.e. at minimum 3-4kms DEPZ. The fact that the current Sizewell B DEPZ does not conform to even the most basic IAEA standards should surely be a cause for concern by ONR, particularly as the SZB power plant is now over 25 years old and susceptible to typical PWR faults like corrosion and failure of components, however well managed it may be. We await a verbal report to the next Sizewell SSG on the thermal sleeve incident from ONR and EDF. https://www.onr.org.uk/pars/2021/sizewell-b-21-006.pdf

Why have ONR not taken up this matter of emergency planning?

We also note at Hunterston AGR that ONR had apparently failed to help address community concerns and have allowed PHE to dictate emergency plans, resulting in a less than favourable outcome for the local community, again appearing to ignore IAEA standards.

To conclude we are disappointed in ONR's response to the Community Engagement Meeting and are consequently copying this to PINS and BEIS for information.

We look forward to your comments, which we assure you are based on many years of understanding of the nuclear industry and the many construction difficulties associated with Sizewell B.

Yours sincerely

Mike Taylor for TASC 9th October 2021.