



Together Against Sizewell C

C/o Wood Farm, Westward Ho, Leiston IP16 4HT

27th July 2023

To: Suffolk County Council & East Suffolk Council Planning Depts (by email only)

Cc Councillor Tom Daly, T-J Haworth-Culf, Richard Rout, Richard Smith, the Chief EP Officer and Michael Moll (Suffolk County Council), Dr Samaneh Nouraei (ONR)

[DC/23/2663/CCC | County Council Consultation - SCC/0051/23SC/DOR - Sizewell C Development Consent Order Discharge of Requirement 6 - Emergency Plan | Sizewell C And Associated Development Sites](#)

Together Against Sizewell C (TASC) strongly objects to the emergency planning proposals submitted by the developer to discharge requirement 6 of the Sizewell C (SZC) development consent order (DCO) on the basis that the Developer has not met the conditions stated in Requirement 6. The developer's application document at para 1.2 states, *"This site emergency plan describes the emergency management and response processes on the Sizewell C Site prior to construction. This will be an evolving plan..."* which makes it clear to TASC that this application is only to establish emergency planning for the SZC site for the period prior to construction. Therefore, it does not meet the conditions in Requirement 6. In other application documents (e.g. para 2.4.1 of document reference 01826171 under application DC/23/2730) the developer states: *"...It will be completed after **Development Consent Order (DCO) 'Commencement'**, which is expected to be Spring 2024."* Given the imminence of the anticipated commencement of construction, the emergency plan for the SZC site (as well as the emergency plan for Sizewell B (SZB)) should, in TASC's opinion, be set out now as one emergency plan for the Sizewell nuclear cluster covering the construction period of SZC and operation of SZC and SZB, to be ready before DCO commencement. This is imperative as the preliminary works are causing substantial damage to the AONB landscape as well as to designated wildlife sites and the wildlife that inhabit these areas. An emergency plan covering the early stages of the preliminary works on the SZC site may be found to be acceptable to Suffolk County Council (SCC)

but one covering construction of SZC alongside a working SZB may not be possible (likewise when SZB and SZC are operating at the same time). If the SZC project cannot proceed because there is no suitable emergency plan to deal with its construction, this would render all the environmental and landscape damage resulting from the preliminary works totally unnecessary.

The developer, whilst downplaying the significance of a nuclear emergency at SZB, has based their assumptions on the completely unworkable current emergency plan for SZB, which as an operating reactor should be based on Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPiR19) and Approved Codes of Practice (ACOP) guidance

<https://www.onr.org.uk/consultations/2019/reppir-2019/reppir-2019-consolidated-draft.pdf> .

TASC do not accept that the current SZB emergency plan is adequate because, despite Suffolk County Council having labelled the SZB Detailed Emergency Planning Zone (DEPZ) as 4kms, an inner 'Urgent Protective Action Area' (UPAA) of just 1.35kms has been set whereas the UPAA requirements should, at least, apply to the full 4km designated for the DEPZ. As such, TASC contend that the SZB emergency plan does not meet international standards for operating reactors. REPPiR guidance (see reference to REPPiR regulation 8 below) relies on the operator to set a realistic DEPZ but Suffolk County Council has the responsibility to determine the DEPZ. A guide to the REPPiR Regulations 2001 - Guidance on Regulations International standards are indicated at Page 22 of the International Atomic Energy Agency (IAEA) publication 'Actions to Protect the Public in an Emergency due to Severe Conditions at a Light Water Reactor' https://www-pub.iaea.org/MTCD/Publications/PDF/EPR-NPP_PPA_web.pdf. Table 3 on page 22 sets a 'Precautionary action zone' of 3 to 5 kms and an 'Urgent protective action planning zone' of 15 to 30 kms, far in excess of the zones applied for SZB.

The workforce for SZC construction could potentially bring an additional 9,500 personnel to the area, which we believe would place the whole locality at an increased and intolerable risk in the event of an accident at SZB. This will be further compounded should this occur during the height of the tourist season. If the explanation for the exclusion of Leiston from the UPAA inner protection area is to allow for a quick evacuation of the immediate area around the SZB site, how can there be any justification to add thousands of SZC workers into the UPAA? A Nuclear Site Licence cannot be issued for SZC without an adequate emergency plan for SZB and it is surely reasonable to assume that the Office for Nuclear Regulation (ONR) should not issue a site licence for SZC without this matter being resolved (or failing this, the SZC project cancelled entirely). This matter is unique to the Sizewell nuclear cluster as at Hinkley Point C the construction site is immediately adjacent to the decommissioned

and fuel free Hinkley A. TASC has made this point to the regulatory authorities, countless times over many years.

The developer NNB Genco (SZC) Ltd, EDF Energy Holdings as owner/operator of SZB, and EDF France may wish to consider whether construction of SZC will present a significant hazard to the viability of SZB requiring early decommissioning of SZB. Indeed, it would seem quite likely that the construction of SZC cannot safely proceed at the same time as SZB remains operational. TASC has already raised with the ONR site safety concerns relating to the close proximity of SZB. These concerns include the proposal for **ground anchors needed for the SZC cut-off wall to be installed under the SZB site** (see the section relating to 'Civil Engineering – Cut-off Wall' within the attached slide show presentation from the ONR) as well as the substantial risk to the SZB site from construction equipment and increased flood risk due to the SZC sea defences. TASC believe that ESC and SCC should consult on this issue with the ONR.

Background.

TASC's records show that in October 2015, following a review of the DEPZ in 2014 by the ONR who at that time were directly responsible for setting key criteria, which included that the DEPZ would be 3-4kms, meaning Leiston would be incorporated. A letter from Suffolk Resilience Forum dated 19th October 2015 and the revised guidance for 'Sizewell Off Site Emergency Guidance' are attached. Government officers clearly supported this emergency plan. However, in 2019/2020 a TASC member attended a BEIS meeting with other NGOS, expressing alarm about changes to emergency planning. Clearly Government officers were then using new "guidance" to introduce the unrealistic and dangerous local 'inner DEPZ', which in Sizewell's case meant effectively reducing the DEPZ from 4kms to 1.35kms . This was under the new REPPiR 2019 which made SCC responsible for the implementation of the plan. REPPiR 2019 also gave SCC the responsibility to extend the DEPZ beyond that suggested by the operator: it states:-

"Regulation 8 Detailed emergency planning zones

*(1) The local authority must determine the detailed emergency planning zone on the basis of the operator's recommendation made under (paragraph 2) of Schedule 4 and **may extend that area in consideration of—***

(a) local geographic, demographic and practical implementation issues;

(b) the need to avoid, where practicable, the bisection of local communities; and

(c) the inclusion of vulnerable groups immediately adjacent to the area proposed by the operator."

It appears evident to TASC that there has been an attempt to weaken emergency planning in order to accommodate plans for SZC. We are aware that the ONR had expressed concern regarding the location of SZC's hostel/accommodation block in their response to the first 2014 EDF Stage 1 consultation and it is clear the presence of a large SZC construction workforce will compromise the ability to protect the full DEPZ population. The documents supplied with this discharge of requirements 6 downplay the significance of the need for an adequate emergency plan for the operating SZB ie the likelihood of an operating reactor (or fuel being loaded into one reactor) whilst alongside one still under construction. Ultimately, there will need to be an emergency plan to cover all phases of the Sizewell C project including finally having to consider an emergency plan covering operational SZC and SZB plus Sizewell A during decommissioning. It is obvious that in this scenario and unless a satisfactory emergency plan can be produced and demonstrated beyond a shadow of doubt, that the SZC project could not be completed until SZB is declared fuel free, or at minimum, fuel is out of the pond and stored in a dry cask under secure conditions.

TASC note that the letter of 19th October 2015 from the Suffolk Resilience Forum states *“Detailed emergency arrangements for any Sizewell nuclear incident are focused within the Detailed Emergency Planning Zone and are based upon the reduced risk from the Sizewell B power station following the cessation of nuclear power generation at the Sizewell A station.”* TASC believe the converse must now be true insofar as there is an increased risk from the SZC construction activities and subsequently from SZC's operation - this increased risk has not been recognised in the proposals under consideration and, in TASC's opinion, this has been a deliberate action to allow the developer to forge ahead with its intention to clear the SZC site.

TASC members over many years have called for a fair and workable emergency plan (including being widened to include up to 30kms OPZ) for SZB based on international standards. This is not resolved and has most recently been raised at the local ONR engagement 25th May 2023 with an outstanding question on demographics. The ONR oversight of REPIR 19 was also criticised. An answer to these concerns is awaited from the ONR. TASC understand that the demographics for assessing nuclear power stations is based on not exceeding a level equivalent to 5,000 people per square kilometre (see sections 3 and 4 in attached ONR guidance 'LAND USE PLANNING AND THE SITING OF NUCLEAR INSTALLATIONS') – it is probable that the number of people made up from the maximum SZC construction workforce, plus SZB on outage, plus SZA decommissioning, plus local residents, plus other infrastructure projects, plus tourists will exceed this level.

Further history of TASC involvement in Emergency Planning

TASC made representation to the ONR following an EA/ONR meeting held October 2021 including this submission :-

“ Emergency Planning

We are concerned that on the subject of Emergency Planning the 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) ie 3-4kms [inner protection zone] 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. And we suspect this may be the case with a recently announced plan for 250 bed Cockfield Hall development at Yoxford. <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 having three operating reactors at Sizewell would require a realistic emergency planning regime based on international standards ie at minimum 3-4kms DEPZ. The fact that the current Sizewell B DEPZ does not conform to even the most basic IAEA standards for the inner protection zone should surely be a cause for concern by East Suffolk Council, SCC and the ONR, particularly as the SZB power plant is now over 25 years old and susceptible to typical PWR faults such as corrosion and failure of components, however well managed it may be.

Emergency arrangements for construction of SZC will also have to cover the hostels/accommodation blocks/caravan accommodation and of course any other workers on windfarms or those at Sizewell A for decommissioning and should also cover the many tourists that are likely to be in the vicinity of Sizewell.

Please see below a TASC member's report on the September 2019 consultation:-

"Emergency Planning update Sept. 2019."

The Ongoing fiasco of the emergency plan for Sizewell is captured in the "consultation" which took place on the 26th September 2019 at Sizewell Stakeholder Group. Attendees were presented with a proposed document including the 1km (now 1.35 km) area around Sizewell B. This bears no resemblance to any standards which originate from international standards published in 2013 post Fukushima https://www-pub.iaea.org/MTCD/Publications/PDF/EPR-NPP_PPA_web.pdf

Page 21 describes the Emergency zones and page 22 describes the distances, which conform entirely to that explained to NGOs (including TASC) attending Government Business Energy and Industrial Strategy BEIS/NGO forum meetings over many months. Head of Nuclear Resilience H.S-Q and officer GW confirmed the wish for 3-5 kms DEPZ [inner protection zone] and up to 30kms OPZ with mini DEPZ for vulnerable groups. Pre-distribution of K Iodate tablets was also being considered.

SCC EM planner appears not to be moveable on this 1.35 km zone which is [based] an EDF hazard assessment. He was reminded that the EM planning is driven by two EU directives 2014/87 and 2013/59 which require planning for unforeseen, multiple failures, beyond design basis ie a catastrophic failure. NGOs recognise that SZB has Emergency back-up for most failures through the Emergency Response Centre and further back up from Barnwood.

Why then is there a [unjustifiable, in TASC's opinion] 1.35km zone, is it that the prospect of admitting that the historic pre-Fukushima emergency planning zones for Sizewell A and B were wholly inadequate, means that the perfectly laudable 3-5kms which could also include Thorpeness, RSPB Minsmere, Eastbridge, Theberton and probably Knodishall are not being addressed? Or is it that the prospect of new build is frightening them off? Regardless of this, ONR will have to be convinced that

an emergency plan is possible for SZC when they assess an operational site licence which is understood to be in parallel with a DCO.

In France according to ASN French regulator, areas around 19 NPS and 2.2 million people (ie the same or similar reactors and same company, EDF SA) have recently mailed out to all residents within new 20kms zones advising them of new arrangements and further to give advice and a free voucher for pre-distribution of K Iodate under the tag line of alerte nucleaire, je sais quoi faire (Nuclear Emergency? I know what to do.)”

Vectos Report for Suffolk County Council 8th December 2020

It is unclear from the discharge application whether the findings of the Vectos study ‘Sizewell Nuclear Power Station – Evacuation Arrangement Update’ have been considered in the current emergency plans. However, the Vectos study itself needs updating:-

- For additional accommodation now being proposed at the LEEIE
- To cover the whole of Leiston’s population – the Vectos report currently only identifies 1,671 people in Leiston who will be impacted by an emergency
- For the Increase in the size of the SZC workforce, as evidenced by the situation at Hinkley Point C
- To include tourists in the area, such as those at RSPB Minsmere, Dunwich Heath and those staying at the Sizewell and Dunwich caravan parks
- The 2021 Census data

TASC also note that these application documents:-

- Provide no details of where the SZC workforce will seek shelter in the event of an emergency,
- Do not refer to worker numbers on the SZC site and therefore do not identify ‘tipping points’ in numbers
- Do not cover the full construction period and therefore do not address separate procedures required in certain specific areas, such as the coastal and marine activities
- Place too much reliance on the contractors’ responsibilities for actions required in an emergency, seemingly in an attempt to reduce the developer’s responsibilities,
- Do not make it clear that contracts already agreed with contractors cover adequate reference to emergency arrangements

Conclusion

TASC consider that the developer's proposals to meet Requirement 6 are not sufficiently robust to guarantee safety of those in East Suffolk, are incomplete, do not cover a sufficiently wide geographical area and should be refused. They rely on an inadequate emergency plan that currently exists for SZB. As set out in paragraph 1.2 ('Scope') of the main application document, the current proposals are only for the period prior to construction, but this is inadequate as the developer has said in recent discharge of requirement submissions that they are anticipating commencement of the DCO as early as April 2024. Therefore, the Sizewell emergency plan covering SZC, SZB and SZA should be submitted now to incorporate the period up to the commencement of construction period, the construction period including the maximum SZC workforce and then the period of operation. It is this plan that would then be subject to variation as the development (should it ever start) evolves. Without a full emergency plan from the start, there can be no certainty that a suitable emergency plan can ever be put in place for the full lifetime of the SZC site. The developer's approach whereby the emergency plan evolves over the whole period of the project is an unacceptable piecemeal approach akin to 'salami slicing' the impacts of the complete project so they are not assessed as a whole.

The SZC DCO Requirement 6 includes the statement :-

(2) The construction emergency plan must include: (i) details of the undertaker's construction site emergency arrangement for the SZC construction works; and (ii) details of the undertaker's arrangements for interfacing with Sizewell B in an emergency.

As TASC set out above, the current proposals go nowhere near satisfying the requirement for a construction emergency plan for the [entire] SZC construction works.

TASC remind the local authorities that they have a statutory duty to protect the Suffolk Coast and Heaths Area of Outstanding Natural Beauty, so to facilitate activities that could irreversibly damage the landscape and wildlife that inhabits the AONB, for a project that may never proceed because a suitable emergency plan is not achievable, would be contrary to that duty.

Jenny Kirtley, for

Together Against Sizewell C

Attachments:

Letter from Suffolk Resilience Forum dated 19th October 2015

The revised leaflet for 'Sizewell Off Site Emergency Guidance'

ONR slide show presentation including, 'Civil Engineering – Cut-off Wall'

ONR Guidance Land use planning and the siting of nuclear installations