



# Together Against Sizewell C

SIZEWELL C PLANNING APPLICATION INQUIRY (IP no. 20026424)

## **ORAL REPRESENTATIONS & COMMENTS REGARDING ISH8 AIR QUALITY AND NOISE AND VIBRATION**

**3rd September 2021**

1. Given the scale of the planned SZC development, TASC are surprised by ESC's Mark Broomfield's statement that the justification for undertaking limited air quality monitoring is that the council does not expect there to be significant impacts on air quality. In fact, ESC appears to be saying that the monitoring they will do is a backstop to confirm that there are no air quality issues arising from a 12 – 15 year construction period involving the importation of 12 million tonnes of aggregates, a position TASC find to be unrealistic and unacceptable. TASC are concerned that PM2.5 will not be monitored, that monitoring will only be in limited locations and that there appears to be no clear plan, at the present time, as to the share of the monitoring responsibilities between the Applicant and the council. Indeed, it seems ESC are happy for the contractors to carry out their own monitoring. TASC are particularly concerned that baseline monitoring has not been carried out across the whole area affected by the SZC development.

### **Agenda item 2. The assessment of the noise and vibration impacts of the Proposed Development:**

**(i) Whether the potential noise and vibration impacts of the Proposed Development can be satisfactorily assessed from the information submitted by the Applicant?**

**(ii) If not, what additional information would be required?**

2. TASC note that during Mr Rhodes' response on this agenda item, regarding the adequacy of the requirement for the rail noise mitigation strategy, he advised that it was not an issue as there was a condition that the rail works could not start until the noise mitigation strategy is agreed with the local authority. TASC are concerned that some of the SZC development could proceed before the rail strategy is agreed and we therefore require confirmation that the condition states that the entire SZC development must not start before the rail noise mitigation strategy is in place, as in TASC's opinion, the Rail Strategy is an essential part of the overall Transport Strategy. Despite the importance of the Rail Strategy being confirmed by Mr Rhodes at a later point in the ISH, when he stated the Rail strategy had to be deliverable, as without it there is no Sizewell C, Mr Rhodes' statement does not give confidence or confirmation that the SZC project construction will only begin after a rail strategy has been finalised and agreed. TASC are mindful that Suffolk Coast and Heath AONB has already lost Coronation Wood prematurely and we are concerned that more degradation could occur in advance of any approval of the application or without the SZC project ever being completed.

3. During this agenda item Mr Kemp for ESC suggested that operational noise at SZC should be limited to 35db. Mr Brownstone for the Applicant tried to make the point that there should be no operational noise levels set, but if one was set, then the levels set at Hinkley would be acceptable to the Applicant. TASC say that the Applicant's position does not reflect the fact that Sizewell C is situated in a far more sensitive area than HPC so noise levels must be limited to avoid adverse impacts on wildlife as well as on recreational use of the beach, the AONB, RSPB Minsmere and the Coast Path.

**4. Whether the SOAEL, LOAEL levels for construction, traffic, rail noise and vibration are set at appropriate levels.**

TASC would also raise a query with regard to the need for the track relaying work on the East Suffolk Line. In the agenda above, Mr Rhodes suggested that this work was not necessarily deliverable but was desirable, although not essential, whereas Mr Kemp for East Suffolk Council said that the track relaying work must be done. The ISH did not explore the implications of these differing views, so TASC request those implications be explained to the IPs.

## **5. Whether higher standards of protection are appropriate in light of the potential length of the construction period.**

Chris Wilson for TASC made the following oral presentation: *Picking up from Mr Bedford's comments where he said we are seeking higher standards in some locations, and in part because of the sensitivity of those locations, and in part because of the duration of the construction period. TASC point out the need for higher standards at the main development site, because the Sizewell C main development site is in an AONB, which has been designated for its tranquillity as well as other special features. The main development site impacts on the Sizewell Marshes SSSI, borders RSPB Minsmere and other nationally and internationally designated wildlife sites. So presumably, we should be looking at the highest standards possible in recognition of those neighbouring areas. TASC draw attention to Mr. Brownstone's earlier statement, on behalf of the Applicant, where he seemed to be saying that for sound levels we should do no more than compare to the Hinkley Point C restrictions. However, HPC is not in an AONB and is not surrounded by wildlife-rich sensitive sites. Accordingly, for the Sizewell C development, TASC make a plea for the highest standards of noise and vibration limits and controls possible. Any adverse impacts should weigh heavily against the SZC project.*

Note: In response to the above comment, the Applicant said they thought Mr Wilson had confused operations with construction, but TASC's position is that the sensitivity of the Sizewell location needs to be considered under both construction and operation.

## **6. Operational noise at the MDS and traffic noise from the new roads**

Mr Wilson made the following oral presentation for TASC: *I refer to the issue that I raised earlier with regard to the difference between Hinkley Point C and the Sizewell C site. This is to expand on the point mentioned by Mr. Percival from East Suffolk Council in relation to cumulative effects. TASC ask whether the Applicant has made any assessment of the noise levels during the recent Sizewell B outage, as we are aware that a number of residents have been very concerned over the last couple of weeks at the noise level during the outage, which was being heard as far away as Dunwich. One resident said that she had lived next to Sizewell B for 32 years, and during the last few weeks she had experienced the loudest and worst noise in that time, even considering the construction of Sizewell B. She had raised the issue with EDF, but did not receive any explanation as to why it was so noisy during this outage.*

*There are two reasons for raising this at this point. The first is whether there has been any noise assessments of the potential cumulative impacts in the event of overlapping outages at the Sizewell site, and the second is the anticipated impact due to the sensitive nature of the site and Sizewell C's close proximity to the Sizewell Marshes SSSI and RSPB Minsmere.*

Note: Mr Brownstone, on behalf of the Applicant, in acknowledgement of TASC's above comments, confirmed that the Applicant did not see any operational restrictive noise limits could be justified and that the Applicant would keep the level as low as possible: effectively saying SZC is a nuclear power station, and it will make whatever noise it does, and everyone would just have to accept it. TASC

consider this position unacceptable. Firstly, the Applicant, if it has not already done so, needs to disclose its assessment of anticipated noise levels from the operation of SZC's EPR reactors, including outages and traffic levels on the access road and the Goose Hill car park. TASC take the opportunity to remind the ExA of our comments in REP6-296 para 15d) where, in respect of the EN6 Vol II para C.8.69 assessment, we say, "The assessment expressly excluded consideration of the access road impact; indeed, it says: "there is no presumption that development will take place in the area of the access road." In TASC's opinion the ExA should place great weight on the adverse impacts that noise (and light) pollution from the power station and access road, will have on designated areas during both construction and operation.

## **7. Agenda Item 3. The implications of the traffic noise from the Proposed Development during construction and operation**

### **The early years**

TASC listened to the comments made by the Applicant in respect of its plans to mitigate the impacts of vehicle movements along the B1122 in the early years (two, three or four years) but what seems clear, is that if the Applicant is allowed to start building works on the main development site before the planned mitigation infrastructure is in place i.e. the SLR, the green rail route, the P&Rs and the BLFs. The result will be totally unacceptable adverse impacts on the residents along, and users of, the B1122 due to the high levels of noise and air pollution as well as vibration resulting from the massive increase in car, van, lorry and bus movements. This will inevitably breach noise level and air quality limits. TASC draw attention to a report that appeared in the [guardian newspaper](#) regarding breaches of noise and air pollution limits during the HPC build.

8. Overlapping building works relating to the SZC development will have adverse effects, as highlighted above but also in need of assessment is the cumulative impacts on the B1122 that would arise from other projects planned for the area, such as: construction of the East Anglia windfarms infrastructure, including the Friston sub-stations and cable laying; international electrical connectors; at the same time as the Applicant will be building the accommodation blocks, temporary flood protection, the SLR, the access road, the two P&R sites plus the potential for an additional 80 tankers a day carrying potable water, journeys to/from LEEIE regarding its 500 space carpark/ 400 caravan park accommodation, moving 100,000 tonnes of top soil, moving 100,000 tonnes of aggregate spoil from the associated developments, moving materials from the rail-head to site, all occurring while the normal road traffic from SZA /SZB workers plus outage workers for SZB, agricultural vehicles servicing the many farms in the area, residents going about their daily business, deliveries to/from Leiston, blue-light services etc. TASC remain concerned that the Applicant, if it is given approval to commence construction of SZC, will apply to increase HGV levels during the early years, such as they did at HPC according to a [BBC article](#).

9. All of this will happen along a single-track road where many of the dwellings are very close to the road with the prospect of congestion and tailbacks inevitably affecting the health of the inhabitants, some of whom are elderly and not in the best of health. The Applicant spoke of the mitigation strategy of providing insulation and double-glazing to certain properties. However, this is of no benefit to those people wanting to spend their time outdoors and needing/wanting to open windows and doors for ventilation. TASC repeat our previous statement that the above issues highlight that a development on the scale of SZC should not happen in such a rural area but if it does go ahead then works on the main development site should not commence until the SLR is in place.

## **10. Agenda Item 4. Night Time Rail Noise**

## **Whether the operation of the rail freight as proposed is an appropriate mechanism for delivery of the proposed development**

11. Oral comments made by TASC's Chris Wilson: "I was just looking for clarification with regard to the train noise in the Applicant's Consolidated Transport Assessment section 11 in document REP4-005. Paragraph 11.3.6 of that document relates to the early years of rail operation and it basically says that at the waiting positions, the driver would remain on board. The train has no trackside facilities, so does this mean the locomotives will not be shut down so that the heating and lighting can be maintained in the drivers cab? Obviously, that has a noise implication. In paragraph 11.3.17 it refers to the three trains a day situation. Table 11.2 shows the first outbound train arriving at Saxmundham junction at 10 o'clock in the evening. That train can't proceed until the last passenger train has arrived at Saxmundham station which we understand is 10.54 in the evening. So, will the train stand on the branch at this time or will it stand at signal ES2028 at Saxmundham station. Again, if the engine is not shut down, this would have obvious noise implications."

12. Oral comments made by TASC's Emma Bateman : "I just wanted to ask about the night-time rail and what impact that would have in terms of noise on the Aldhurst farm estate. The old farmland at Aldhurst Farm is mitigation, you know, for the other land take. So, it seems a bit odd that you would have land taken from the AONB, designated in part because of the tranquillity it affords, the loss of which is supposedly mitigated by the Aldhurst Farm site, which is itself then going to be impacted by noise from the railway line. TASC request details of the assessment of noise impacts from the railway line on Aldhurst Farm."

13. The Applicant's assessment shows minimal impact from train noise on Aldhurst Farm. However, we contend that the assessment of impacts on Aldhurst Farm need to take into account the cumulative impacts including the activity at the LEEIE, both during the night (including night buses, car parking and caravan park activity) and daytime (including buses, trains, transfer of materials, car parking etc). TASC believe that such cumulative impact on Aldhurst Farm will undermine its purpose, which is to mitigate for lost wildlife habitat.

14. **Agenda Item 5. Mitigation and controls; N/A**

15. **Agenda Item 6. Air Quality**

### **Methodology of assessment and whether methods used are appropriate to ensure that the Proposed Development will meet the highest environmental standards both during construction and operation.**

TASC's Emma Bateman made the following oral presentation at ISH8 25-08-21:

16. TASC were alarmed to discover that one of the papers that was commissioned by us from Air Pollution Services and submitted on 02-06-21 was not in the examination library. The examining authority was notified and the problem rectified however it is concerning that this error was made, as it undermines confidence in the process particularly when, as has happened on occasion, the Examining Authority appears to be unaware of certain facts and arguments that have been submitted at previous deadlines.

17. We are concerned that East Suffolk Council suggested they regard monitoring of air quality as a 'back stop', and that there is not going to be comprehensive baseline monitoring. We have

highlighted in a previous submission the dubious quality of the applicant's monitoring regime and we do not find it reassuring that East Suffolk Council appears to be allowing the applicant to determine when, where and how the monitoring should be carried out.

18. Air pollution is still the largest environmental risk to public health and contributes to shortening and reducing the quality of life for thousands, and fine particulate matter (PM2.5) is widely understood to be the pollutant that is the most damaging to health.

19. The Environment Bill due to be brought in next year will bring in set levels for PM10 and 2.5 which are expected to be lower than current levels and the World Health Organisation Air Quality Guidelines recommend a considerably lower level for annual mean PM2.5 than the legal limit in the UK and across Europe.

20. Mark Broomfield set out East Suffolk Council's reasons for using PM10 measurements as a proxy for PM2.5 when monitoring the construction site. However, if measurements of PM2.5 are extrapolated from measurements of PM10, then it would be more appropriate to gauge them in line with the World Health Organisations standard of 10ug/m3. The report drawn up for TASC by Air Pollution Services suggests that *"The construction impact assessment has not considered PM2.5. This is because the IAQM guidance (Institute of Air Quality Management, 2016) does not explicitly include PM2.5 due to the lack of good data on the impact of construction activities on the emission of this pollutant. Whilst the ES is correct that PM2.5 is a subset of PM10; if PM2.5 was to be explicitly assessed it should be assessed against its more stringent air quality objective (AQO) or if health is the primary concern, then the World Health Organization (WHO) guideline."*<sup>1</sup>

21. The oral submission made by Mr Lawrence Moss at ISH 8 discussed the high levels of PM2.5 near to the school at Yoxford. It is understood that particulates can have a debilitating chronic effect on the health of children, and TASC consider that it is appropriate to use the current WHO guidelines to measure the effect of PM 2.5 at sites where the elevated levels of pollution may prove especially detrimental to health. The application of the more stringent WHO guideline levels were relevant in a recent landmark ruling, where a coroner concluded that air pollution was a significant contributory factor to the death of a child. He based his assessment on WHO guidelines rather than the Air Quality Objectives.<sup>2</sup>

22. The UK has consistently breached EU obligations on Air Quality, which does not inspire confidence, especially as Data provided in 2019 by Sedgemoor district council down at Hinkley showed that PM10 has exceeded safe limits on some of the roads 16 times in 8 months.

23. We draw attention to the fact that the threshold levels for dust deposition in the Environmental statement which are either possible, or likely, to trigger complaints are given as 200 mg/m2/day and 260 mg/m2/day respectively. ( Table 1.1 of Volume 2 Appendix 12A) These are based on levels applicable to urban town centres. The criteria for rural settings at which complaints are possible or likely is much lower at 100 mg/m2/day and 140 mg/m2/day, respectively. This level provides a more appropriate guide in relation to the Sizewell C plans.

24. East Suffolk Council maintained that the council followed the guidance given by the Institute of Air Quality Management in deciding what particulates to measure, and that they focused on PM10's because these are the dust particles commonly generated by demolition and construction.

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<sup>1</sup>Sizewell C: Review of the Planning Inspector's Questions on Air Quality 26 May 2021 para 2.19

<sup>2</sup>mnizari\_16-12-2020\_10-28-00.pdf

This focus on PM10's downplays the significance of the PM2.5 generated from the brake, tyre and road wear from the increase in the volume of traffic.

25. It is concerning that East Suffolk Council suggested that they would only monitor PM2.5's from these sources if the applicant is willing to fund this work. Quantitative data on the magnitude of non-exhaust emissions is sparse and highly uncertain, and it should not be up to applicant to decide whether such monitoring is necessary.

26. The quality of equipment and difficulty in calibrating measuring devices was discussed by East Suffolk Council, and it was suggested that even expensive equipment could be unreliable if it is not set up correctly. This admission serves to strengthen the impression that the applicant is trying to cut corners and skimp on elements of the application that would be beneficial to the health of the local community. The local population is required to sacrifice a great deal with regard to their wellbeing, and in the overall scheme of things, the cost of these instruments which provide vital data is not huge, The implication that the applicant and or council are unable to provide adequate training on the use of the monitoring equipment does not instil confidence in the applicant.

27. When considering the sampling done by the applicant, it appears that there have been frequent problems with collecting accurate data. In Volume 2 Appendix 12E Baseline Monitoring Report it appears that some of the samples were discontinued and many of them could not be included because the particle trap was blown off the equipment. In one table for example it appears that 13 out of 29 samples that were taken are invalid.

28. TASC believe that insufficient information on the monitoring of PM is provided in the outline Dust Management Plan. A monthly mean dust deposition will be used as the site action level, but by the time the deposited dust has been collected and analysed, and the data sent to the site management, it could be many weeks after the dust event occurred, and the monthly mean disguises occurrences of high concentrations in specific areas due to environmental conditions or intensive works.

29. With regard to the monitoring of the emissions from diesel generators, TASC notes that the applicant has the aspiration to keep the use of diesel generators to a minimum, and to have a minimum level for the proportion of non-road mobile machinery that complies with higher standards in relation to emissions. We believe that aspirations are not sufficient, and would like to see enforceable binding agreements concerning the use of generators.

30. EDF state that, 'The use of mobile power plant including diesel or petrol powered plant would be avoided where practicable and then limited to temporary functions (less than six months).' We would like to know whether the term of 'less than 6 months' is guaranteed even during operation overruns, and does it mean that the whole site will stop running machines after 6 months or that they will stop for a couple of days each after 6 months? We would also like to know how, 'Where practicable' is quantified – what are the indices and who decides on them?

31. The applicant has recently proposed building a desalination plant that will be run on diesel generators that will be run for much longer than 6 months, and yet the applicant has suggested that this will have little effect on air quality. We don't understand how that conclusion has been reached.

32. The applicant and council have agreed that a proportion of the HGV's employed during construction will be required to comply with euro six standards for emissions and it is suggested that this measure will ensure that emissions from the vehicles is reduced. However, in practice it appears that this may have little effect on the levels of emissions. In 2016 Dr Claire Holman, a former chair of

the Institute of Air Quality Management, stated that *“To date, Euro standards have failed to have the hoped-for real world effect on reducing pollution from diesel vehicles. The failure of successive Euro standards to deliver expected emissions reductions has been well established for several years...”*

33. And that the *"imposition of Euro standards have failed to deliver reductions in NOx emissions from diesel vehicles in real-world driving conditions in the last 20 years... the emission limit is currently based purely on laboratory testing. Various real-world tests carried out on Euro 6 cars have shown that they exceed the emission limit by a very large margin."*<sup>3</sup>

34. It would appear that the applicant is reliant on theoretical standards that in practice may have little effect on the actual level of emission. As it appears that there is not going to be a comprehensive monitoring system to ensure that the real world emissions are in line with the level forecast, we are not reassured that accurate data on the levels of the pollution will be recorded or mitigated for.

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<sup>3</sup>ClientEarth (No.2) v Secretary of State for the Environment, Food and Rural Affairs [2016] EWHC 2740 (Admin) (02 November 2016) (bailii.org)