



Deadline 7 Submission

Written Representation Regarding ISH 8 – Noise, Air Quality and Vibration

On behalf of Marlesford Parish Council

Regarding NNB Generation Company (SZC) Limited DCO Application

**Richard Cooper
Councillor
Marlesford Parish Council**

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Interested Party No.20025903

3rd September 2021

Written Representations Regarding Noise, Air Quality and Vibration

1.	<p>A12 Issues - Background:</p> <p>Marlesford and Little Glemham are two villages on the A12 north of Wickham Market. Both villages straddle the A12 which causes severance of the communities. Residential properties front the A12 in both villages, some within a matter of metres from the carriageway. At paragraph 17.33 in the joint Suffolk County Council and East Suffolk Council Local Impact Report [REP1-045] the Councils state <i>“Factors assessed by the Applicant in its sound tranquillity assessment that are relevant to the change submission are effects on severance, pedestrian delay, amenity, and fear and intimidation. The Change submission assessment considers that during the peak years amenity reduces as a result of the changes. Where it increases the impact on severance, mitigation is proposed in the form of a shared footway/cycleway thus reducing the effect on severance to not significant. The Councils will expect this mitigation to be incorporated in revised work plans. In Marlesford the effect on fear and intimidation increases, however the transport assessment addendum [AS-266] considers the overall effect to be minor adverse - not significant. The Councils do not agree with this assessment - as noted in the transport section (paragraph 15.103). Marlesford has been identified by the Councils as a location of particular concern with regard to increased severance, fear and anxiety of vulnerable road users and reduced amenity”</i>.</p> <p>We welcome this support from the Councils and are grateful for their recognition of the difficulties faced by Marlesford and Little Glemham, but as we have said in a number of submissions (most recently in our Deadline 6 submission [REP6-065]) the only sustainable solution that will address the general issue of long-term increasing traffic on the A12 and the Applicant’s traffic in particular, is a Four Village Bypass. We are continuing to argue this case with our local political representatives, but we would urge both Councils to redouble their efforts to deliver a full Four Village Bypass.</p> <p>Marlesford and Little Glemham Parish Councils note the fact that the proposed Two Village Bypass is recognised by the County and District Councils as providing relief from noise and vibration for the residents of Stratford St Andrew and Farnham (Table 20 in the LIR - Summary of impacts – Noise and vibration para. 20f) [REP1-045], and at para 36.53 in the same document the Councils say of Stratford St Andrew and Farnham, <i>“At present the villages are blighted by high volumes of traffic on the A12”</i>. We have no argument with the potential benefits being delivered to our neighbouring villages, but we feel that a grave injustice is being done to <u>our</u> two villages – the adverse impacts of Sizewell C traffic are recognised and it is inconsistent to argue on the one hand that Farnham and Stratford St Andrew are “blighted”, but not apply the same standards to Marlesford and Little Glemham. However well-intentioned the Applicant’s proposed mitigation measures are, they will only ever partially address the problem of increased HGV, LGV, bus and car traffic on the A12 through our two villages – the same volume of traffic that would go through Stratford St Andrew and Farnham if they were not bypassed. As a result of the inconsistency of treatment, Marlesford and Little Glemham will be severely disadvantaged and, if anything, as the Councils recognise in their LIR [REP1-045], matters</p>	
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	could get worse for Marlesford and Little Glemham – at Para 16.61 the Councils note, <i>“The completion of the Two Village Bypass is likely to induce further traffic on the A12, negatively impacting those communities where mitigation has not been provided”</i> . Furthermore, we ask the ExA not to lose sight of the cumulative impact effects from both SZC and the EA1-N and EA2 windfarm traffic.	
	As we have previously noted [RR-0758], those of our elderly residents who live adjacent to the A12 in our two communities will have to endure the additional noise, air quality (AQ) issues and vibration for the rest of their lives and may not see an end to the disruption within their lifetimes. Many of our retired residents spend more time in their homes and gardens than those of working age and are therefore more likely to be exposed for longer periods of time to adverse impacts of A12 traffic.	
	Issue	Comments
2.	A12	
2a.	Proposed A12 Mitigation Measures in Marlesford and Little Glemham	<p>Marlesford and Little Glemham have been working with the Applicant and Suffolk County Council to produce mitigations that will address some of the adverse impacts that will be experienced as a result of the Sizewell C traffic using the A12 which runs through the two villages. The impacts have been identified as noise, AQ, vibration, fear and intimidation, community severance and health and wellbeing. We have made some positive progress and commend the Applicant for engaging with us, but we believe that its commitments to mitigations need to go further and we will be having further discussions regarding issues that do not relate to noise, AQ or vibration.</p> <p>In relation to these three topics, it is an inescapable fact that the environment for Marlesford and Little Glemham residents living close to the A12 will further deteriorate – residents living close to the A12 already report intrusive noise and vibration from the road and no doubt there are AQ issues as well.</p> <ul style="list-style-type: none"> • In its mitigation proposals, the Applicant has committed to using a quiet road surfacing through both villages and we accept that this will help to reduce the impact of noise generated from tyre to road contact. However, it will do nothing to lessen the noise of engines and the vibration of lorry bodies particularly when empty. Neither will it do anything to lessen the impact of transmission of vibration through the ground. We expect the Applicant to use SHW CI942 level 3 TSCS quiet surfacing. • We welcome the progress made on proposals to reduce speed limits through the two villages and believe this will make a contribution towards noise and vibration reduction. • It is almost impossible to predict the actual effects of the increase in traffic as a result of SZC, particularly when it is not yet clear what the settled plans are for construction

		materials traffic. This is why we call for a full suite of baseline data to be assembled – see below under 2c.	
2b.	Draft Noise Monitoring and Management Plan	We note that the Applicant has produced a Draft Noise Monitoring and Management Plan - Main Development Site [REP6-029]. We question whether such a structured plan has been created for the monitoring of noise (and other adverse impacts) on the East Suffolk road network. We ask for ongoing monitoring of noise, AQ and vibration as set out in 2c. below.	
2c.	The Need for Baseline Noise, Air Quality and Vibration Data	<p>We have been trying to establish what baseline data the Applicant has assembled for noise, AQ and vibration and find that the information is either not available or highly fragmented. We ask that a full suite of baseline information data is prepared for Marlesford and Little Glemham well in advance of the start of construction in order that the current situation can be assessed on these issues. We ask that the data is presented in a form that is understandable to local residents.</p> <p>Having established the principle of the baseline data, a comprehensive programme of monitoring for noise, AQ and vibration will be required throughout the build period.</p> <p>We expect the Applicant to provide appropriate additional glazing to properties close to the A12 if this proves necessary as a result of noise monitoring.</p> <p>We also ask for full structural surveys to be done on all properties within 100m of the A12 carriageway in Marlesford and Little Glemham. This is to establish the current structural integrity of the buildings. We are requesting this on the basis that we believe that vibration caused by HGV movements could compromise the structural integrity of buildings. Clearly, only by looking at this issue prior to the start of SZC traffic flows will it be possible to determine whether damage occurs to properties from the increase in traffic.</p>	
2d.	Impact on Health and Wellbeing	Marlesford and Little Glemham residents living close to the A12 are already adversely affected by noise, AQ, vibration, community severance, and fear and intimidation and this will be compounded by the additional traffic associated with the development of SZC. The County and District Councils are right to identify (as they do at para. 30.36 of the LIR [REP1-045]) that <i>“the quality of life and wellbeing impacts cannot be directly mitigated in full – this is partly a result of individual perception of personal impact that plays an important role in self-defining quality of life and wellbeing”</i> . It is difficult to quantify mental health issues caused by road traffic, but prolonged periods of elevated noise and vibration levels are thought to have adverse impacts on mental	

		health, particularly in the elderly and those who are more vulnerable and it is believed that at a sub-clinical level, road traffic noise can contribute to stress ¹ . Anecdotally we would expect this to be the case and we would want the Applicant to use all reasonable measures to reduce the impact of SZC traffic on physical and mental health and wellbeing.	
2e.	Air Quality Management – Use of Euro VI Compliant HGVs	Marlesford and Little Glemham have grave concerns over the effects of the SZC HGV traffic on AQ issues in the two villages. We do not agree with the Councils that the Applicant should be able to operate any non-Euro VI compliant HGVs (they suggest a cap could be imposed on such vehicles). We believe that there should be an absolute obligation that the Applicant uses 100% Euro VI compliant HGVs and that this should be enshrined in the agreements that form part of the consent documents. We are worried about the polluting effects of NO2, PM10 and PM2.5 and we believe that maximising the proportion of Euro VI vehicles will contribute to lower emissions of NOx and particulates.	
2f.	Caps on HGV Movements	We have noted in various SCC and ESC submissions that there are concerns that whilst overall SZC HGV movements may conform with average annual predictions, there is currently considerable scope for HGV movements to “bunch” within any given hourly or daily period. This potential is a great concern to Marlesford and Little Glemham residents and we support the efforts of the Councils to secure robust hourly and daily caps in order to properly control HGV movements and mitigate unreasonable adverse impacts of noise, AQ and vibration.	
2g.	Electric busses	As a contribution towards noise and AQ mitigation and achieving sustainable operation of the bus fleet, we ask that the ExA requires the Applicant to use electric buses for <u>all</u> journeys to and from both the Northern and Southern Park and Ride facilities.	
3.	Southern Park and Ride		
3a.	Noise Receptors	We believe that two additional noise receptors should have been included by the Applicant in their ES section on the Southern Park and Ride. The two receptors are: The Ford Gatehouse IP13 0AS (OS Ref.322 581) Marlesford Hall IP13 0AU (OS Ref. 323 586) <u>Background.</u>	

		<p>The Applicant has included what is technically the closest Marlesford property to the proposed Southern Park and Ride (SP&R) site (Receptor C on Figure 4.1 in Bk 6.5 Revision: 1.0, Volume 4 Southern Park and Ride, Chapter 4 Noise and Vibration Figs. 4.1-4.7). However, we argue that the assessed impact of noise from the Southern Park and Ride construction, operation and removal and reinstatement at Receptor C is overly influenced by noise from traffic on the A12. Receptor C is a dwelling adjacent to the A12 and therefore the reported effects underestimate the impact on other receptors in Marlesford, particularly those to the northwest of the A12.</p> <p><u>Reason for Requiring Assessments at Additional Receptors.</u></p> <p>The Ford Gatehouse IP13 OAS – only marginally further from the SP&R site than Receptor C, but away from the direct influence of noise from the A12, the impacts of noise from the SP&R site are therefore more likely to be intrusive on this property. The prevailing winds are from the south west which puts this property in the direct line of those winds. We note in Document 9.10.12 “Initial Statement of Common Ground – East Suffolk Council and Suffolk County Council” [REP2-076] the statement is included at NV44 iii) “<i>ESC does not consider Receptor C at the Southern Park and Ride site to be representative of the nearest property in the settlement of Marlesford to the east and have requested clarification on this matter (RFI 29). There is a closer property on Ford Road in Marlesford, which is further from the A12 and is therefore likely to be more at risk of adverse noise effects</i>”. We agree with that statement and ask the ExA to take our comments into account when considering Southern Park and Ride noise issues.</p> <p>Marlesford Hall IP13 OAU – Further distant from the SP&R site than The Ford Gatehouse, but in an elevated position on the northeast side of the River Ore valley. Its elevated position puts Marlesford Hall (Grade 2* Listed) in a direct line with the SP&R site and it is believed that noise from the site will readily carry across the valley on the prevailing south westerly wind and be intrusive to the residents of Marlesford Hall.</p> <p>For these reasons, we request that the ExA require the Applicant to carry out further noise assessments for these receptors and, if appropriate, incorporate further mitigation to the construction, operation and reinstatement of the site, particularly its eastern boundaries. We ask the ExA to note that in addition to the two properties referred to above, other properties in Marlesford in close proximity to the SP&R will be affected by noise from it. They are, The Hedges, Lime Cottage, Lime Tree Barn and Lime Tree Farm.</p>	
3b.	Noise Monitoring and Management Plan	We note in the Applicant’s DCO application for the Southern Park and Ride [APP-384] that most effects of the construction, operational and removal and restoration phases are minor adverse or	

		<p>negligible. This may be technically correct, but we believe that noise from the Southern Park and Ride site will be intrusive to people in Marlesford as the village lies to the northeast of the site and noise will be carried on the prevailing winds from the south west. In an area of generally low ambient noise and vibration, any increase as a result of the construction, operation or removal of the Southern Park and Ride site will be perceived by residents as being intrusive.</p> <p>The Applicant has published its Draft Noise Monitoring and Management Plan [REP6-029] and at para. 1.1.6 it states that “<i>A separate NMMP will be prepared for each of the Associated Development Sites, pursuant to paragraph 3.1.3 in Part C of the CoCP</i>”. We are unaware that such a plan has been prepared for the Southern Park and Ride and would ask the Applicant to ensure that such a plan is produced <u>before the end of the Examination</u>.</p> <p>We note that in Document 9.10.12 “Initial Statement of Common Ground – East Suffolk Council and Suffolk County Council” [REP2-076] ESC at various points in Items NV39 – NV45 raise concerns about methodologies and assumptions used by the Applicant and are seeking clarification on noise issues to do with the Southern Park and Ride. We support those attempts to further clarify the likely noise impacts on local residents</p>	
3c.	Night-time movements – reversing alarms	Reversing alarms are by their nature designed to be highly audible and we accept that there must be safe working practices on the SP&R throughout its construction, operation and removal and reinstatement phases, however, we believe that the use of reversing alarms will be intrusive and ask the ExA to challenge the Applicant to find ways to maintain safety but mitigate intrusive noise from reversing alarms. An alternative might be moderated alarms coupled with flashing warning lights.	
3d.	Extensions to Working Hours	Volume 4 Southern Park and Ride, Chapter 2 Description of the Southern Park and Ride at para 2.4.2 says “ <i>The construction arrangements described in this section provide the basis for the assessment presented in this volume. The details of construction are necessarily broad and may be subject to modification during the detailed design stage, and/or once a contractor has been appointed.</i> ” And at para 2.4.3 the Applicant goes on to say “ <i>Construction work would take place during Monday to Saturday 07:00 to 19:00 hours, with no working on Sundays or bank holidays. However, some activities may require working outside of these hours. Where this is the case, East Suffolk Council (ESC) would be notified in advance.</i> ” We believe both paras 2.4.2 and 2.4.3 allow the Applicant too much latitude in choosing extensions to their working hours in the construction	

		phase and we urge the ExA to put limits on how far the Applicant can seek extensions to the proposed working hours.	
3e.	Dust	We understand that the Applicant has a construction management plan and we would expect control of dust to be rigorously managed. As with noise from the site, dust will be carried on the prevailing south westerly winds towards Marlesford.	
3f.	Air Quality at Fiveways Roundabout	We are not aware of any work having been done by the Applicant on predicted air quality at the Fiveways roundabout. This junction with the B1078 and the B1116 will see very significant increases in traffic, not only from vehicles going to and from the Southern Park and Ride, but also an increased flow to and from Framlingham as a result of the residential development in the town. The Fiveways roundabout is a pickup/drop-off point for school buses and we have serious concerns that there will be a deterioration in air quality in this area as a result of traffic increases in the immediate area of the roundabout, and from the increased traffic on the A12. We believe the Applicant should carry out further analysis of the likely air quality impacts around the Fiveways Roundabout.	
3g.	Electric buses	As a contribution towards both noise mitigation and achieving sustainable operation, we ask that the ExA requires the Applicant to use electric buses for all journeys to and from both the Northern and Southern Park and Ride facilities. Also see 2g. above.	
4.	Conclusion	We believe that Marlesford and its neighbouring villages will inevitably suffer from the adverse impacts of noise and vibration and impairments to air quality as a result of the Applicants proposals. We accept that some mitigation will be put in place, but have highlighted above where we believe that it will be inadequate. If adverse impacts become an intolerable annoyance to local communities, it is not clear to us what recourse we will have to force the Applicant to deal with them in a timely and proper way. We believe that a clear policy should be set out (in the way that we believe will happen for transport through the Transport Review Group) for the issues around noise, air quality and vibration – particularly emanating from the Southern Park and Ride.	

¹The Adverse Effects of Environmental Noise Exposure on Oxidative Stress and Cardiovascular Risk

Thomas Münzel, Mette Sørensen, Frank Schmidt, Erwin Schmidt, Sebastian Steven, Swenja Kröller-Schön, Andreas Daiber
Antioxid Redox Signal. 2018 Mar 20; 28(9): 873–908. Published online 2018 Mar 20. doi: 10.1089/ars.2017.7118

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