

# The Sizewell C Project

6.3 Volume 2 Main Development Site Chapter 11 Noise and Vibration Appendix 11H Noise Mitigation Scheme

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#### **Plates**

None provided.

# **Figures**

None provided.



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## 1. Noise Mitigation Scheme

#### 1.1 Introduction

- 1.1.1 This document sets out in draft the principles of a Noise Mitigation Scheme that would apply during the construction and operation of the SZC Project. It has been informed by the outcome of the noise assessments undertaken as part of the Environmental Statements for the main development site and the associated development sites and it includes mitigation for road, rail and construction noise, as well as operational noise. It also covers vibration effects. Once settled, the Noise Mitigation Scheme would form part of the Section 106 development consent obligations.
- 1.1.2 The application documents identify a range of measures that would contribute to limiting and mitigating noise and vibration effects particularly the controls over the construction process set out in the **Code of Construction Practice** and, for instance, the limits on HGV movements set out in the **Construction Traffic Management Plan**. This document does not duplicate those controls, instead it is concerned with the criteria that would be applied in determining whether the noise and vibration effects of the project qualify for noise mitigation or an offer of temporary rehousing.
- 1.1.3 The Noise Mitigation Scheme (NMS) would complement and be separate from the SZC Property Price Support Scheme (PPSS) which is a scheme launched by SZC Co. in November 2019 and which offers to make up the difference in value for properties sold within defined areas close to the DCO application boundary, based on the difference between the with and without Sizewell C valuations.

#### 1.2 Process

- 1.2.1 The Section 106 obligations would set out the process for determining which properties would be eligible for insulation or temporary rehousing, in terms that are legally enforceable. In short summary, the steps proposed are as follows:
  - whilst the Environmental Statement assesses the likely significant noise and vibration effects of the project, SZC Co. commit to base noise insulation and temporary housing offers on a refreshed noise assessment carried out post the grant of DCO and in advance of the noise generating activity so that the measures can be more accurately targeted at appropriate properties with the benefit of assessments that take account of detailed construction working methods, which will be worked up with contractors;



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- that assessment would be agreed with East Suffolk Council (ESC) and
  it would identify which properties would meet the stated criteria for
  insulation or temporary rehousing and at what stage in the
  construction programme that was expected to arise;
- SZC Co. would submit a draft provisional insulation offer for each eligible property for agreement with ESC;
- Once agreed, a provisional noise insulation offer would be submitted to each eligible property. The provisional offer would be conditional on the owner of the eligible property confirming that they wish to proceed in principle and agreeing to allow survey access to their property to enable the detail of the actual noise insulation offer and noise insulation payment to be defined and agreed;
- The actual noise insulation payment would then be offered to each eligible property and, once agreed, would be conditional on the owner committing to use the payment for the purposes of insulation;
- SZC Co. would establish and make available details of a supply chain of insulation providers;
- The works identified that give rise to the offer cannot be commenced until a period of 3 months following the completion of the process identified above; and
- Any payment provided for the installation of insulation that is not used for that purpose within 6 months of the payment shall be returned.
- 1.2.2 SZC Co. would work up the detail of this process within the DCO Section 106 obligations in discussion with ESC.
- 1.2.3 A similar process is proposed in relation to temporary rehousing where an agreed reassessment identifies that the criteria for eligible properties are forecast to be met. In those circumstances:
  - The relevant occupiers would be contacted at least 3 months before the activity giving rise to the offer is due to take place;
  - The nature of the offer would depend on the forecast duration of the activity and would take the form of funding for alternative property or hotel accommodation for the duration of the activity, including the costs of temporary placement of pets or other animals.



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## 1.3 Criteria

1.3.1 The criteria for eligibility for insulation or temporary rehousing are set out in **Table 1.1.** 

Table 1.1 Criteria for elegibility for insulation or temporary rehousing

Category	Eligibility
Road traffic noise	For properties within 300m of a new or altered highway:
	means all of the following, when measured 1m from the external façade of any Eligible Room:
	(i)(a) the Future (Road) Noise Levels exceed façade noise levels of 68dB L <sub>A10,18hrs</sub> during the hours of 06:00 to 24:00 or 58dB L <sub>Aeq,8hrs</sub> during the hours of 23:00 to 07:00;
	(b) the Future (Road) Noise Levels are at least 1dB higher than the Existing (Road) Noise Levels as a result of the use of the new or amended road associated with the Development; and
	(c) the contribution from the new or amended road associated with the Development to the Future (Road) Noise Levels at the façade is at least 1dB.
	The same criteria would also apply to the impact of construction or operational traffic on existing roads.
Rail noise	means one of the following, when measured 1m from the external façade of any Eligible Room:
	Two qualifying criteria:
	A. an offer for noise insulation based on averaging rail noise over the day and night time periods, which is consistent with the national Rail Noise Regulations.
	(i)(a) the Future (Rail) Noise Levels exceed façade noise levels of 69dB L <sub>Aeq,16hrs</sub> during the hours of 07:00 to 23:00 or 58dB L <sub>Aeq,8hrs</sub> during the hours of 23:00 to 07:00;
	(b) the Future (Rail) Noise Levels are at least 1dB higher than the Existing (Rail) Noise Levels as a result of the use of the new or amended railway line associated with the Development; and
	(c) the contribution from the new or amended railway line associated with the Development to the Future (Rail) Noise Levels at the façade is at least 1dB; or
	B. an offer for noise insulation based on the max noise level created at night:
	(ii) maximum sound level L <sub>AFmax</sub> 80dB between 23:00 and 07:00 hours.
	The same criteria would also apply to the impact of construction



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Category	Eligibility		
	rail traffic on existing lines.		
Construction noise - insulation	means a property which		
	is predicted to experience a construction noise level which exceeds either:		
	(a) the noise insulation trigger levels set out in Annex 1 for the corresponding times of the day; or		
	(b) the existing Baseline Ambient Sound Level for the corresponding times of the day;		
	whichever is the higher;		
	any exceedance of (1) is predicted to last for a period of 10 or more days of working in any 15 consecutive days or for a total number of days exceeding 40 in any 6 consecutive months.		
Construction noise  - temporary	means a property which		
rehousing	is predicted to experience a construction noise level which exceeds either:		
	a level 10dB higher than the noise insulation trigger levels set out in d) below for the corresponding times of the day; or		
	the existing Baseline Ambient Sound Level by 10dB for the corresponding times of the day;		
	whichever is the higher; and		
	(2) any exceedance of (1) is predicted to last for a period of 10 or more days of working in any 15 consecutive days or for a total number of days exceeding 40 in any 6 consecutive months.		
Construction	means a property which:		
vibration – temporary	(1) is predicted to experience a construction vibration level of 10mm/s or more;		
rehousing	(2) any exceedance of (1) is predicted to last for a period of more than one day.		
Operational plant	means an offer for insulation based on total noise from fixed plant or machinery associated with the Development and/or its Associated Development Sites that exceeds any of the following levels, when measured 1m from the external façade of any Eligible		

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Category	Eligibility		
	Room:		
	(i) 63dB L <sub>Aeq,16hrs</sub> between 07:00 and 23:00 hours; or		
	(ii) 58dB L <sub>Aeq,8hrs</sub> between 23:00 and 07:00 hours.		
Operational activity	means an offer for insulation based on total noise from operational activities at the Development and/or at its Associated Development Sites excluding fixed plant or machinery that exceeds any of the following levels, when measured 1m from the external façade of any Eligible Room:  (i) 63dB L <sub>Aeq,16hrs</sub> between 07:00 and 23:00 hours; or  (ii) 58dB L <sub>Aeq,8hrs</sub> between 23:00 and 07:00 hours; or  (iii) maximum sound level L <sub>AFmax</sub> 70dB between 23:00 and 07:00 hours; and.		
	2) any exceedance of (1) is predicted to occur for at least 10 or more days or nights in any 15 consecutive days or nights, or for a total number of days/nights exceeding 40 in any 6 consecutive months.		

#### 1.4 Construction Phase Thresholds

1.4.1 Assessment of construction noise levels to follow the guidance set out in British Standard 5228: Part 1: 2009+A1: 2014 (refer to **Table 1.2**).

**Table 1.2 Construction noise insulation trigger values** 

Day	Time	Averaging Period, T	Noise Insulation Trigger Value dB L <sub>Aeq,T</sub>
Monday to Friday	07:00 to 08:00	1 hr	70
	08:00 to 18:00	10 hr	75
	18:00 to 19:00	1 hr	70
	19:00 to 23:00	4 hr	65
	23:00 to 07:00	1 hr	55
Saturday	07:00 to 08:00	1 hr	70
	08:00 to 13:00	5 hr	75
	13:00 to 14:00	1 hr	70
	14:00 to 23:00	1 hr	65
	23:00 to 07:00	1 hr	55
Sunday and	07:00 to 23:00	1 hr	65
Public Holidays	23:00 to 07:00	1 hr	55