



The Sizewell C Project

9.42 Written Summaries of Oral Submissions made at ISH2: Traffic and Transport Part 1 (7 July 2021)

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1 ISSUE SPECIFIC HEARING 2: TRAFFIC AND TRANSPORT (PART 1)

1.1 Introduction

1.1.1 This document contains the Applicant's written summaries of the oral submissions made at Issue Specific Hearing 2 (ISH2) on Traffic and Transport (Part 1) held on 7 July 2021.

1.1.2 In attendance at ISH2 on behalf of the Applicant was:

- Hugh Flanagan of Francis Taylor Building (Counsel);
- Kirsty McMullen of KMC Planning Ltd (Transport Planning Lead);
- John Rhodes of Quod (Planning Manager (Strategic));
- Richard Bull of SZC Co. (DCO Programme Manager);
- John Davies of Ideachain Ltd (Site Operations & Logistics Programme Lead);
- James Oliver of Laing O'Rourke (Principal Engineer, Delivery logistics and bulk materials);
- Sarah Williamson of SZC Co. (SZC Civil Programme Director).

1.1.3 Where further information was requested by the Examining Authority (ExA) at ISH2, this is contained separately in the Applicant's **Written Submissions Responding to Actions Arising from ISH2** (Doc Ref. 9.49).

1.2 Agenda Item 2: Freight Management Strategy

Capacity and delivery of movement of freight by rail

1.2.1 Mr Flanagan, Counsel for SZC Co., explained that the latest position was that the strategy would be for two trains per day initially, moving to four trains per day from March 2024, as indicated in **Plate 1.1** of the **Implementation Plan** [\[REP2-044\]](#). Mr Richard Bull explained that five trains per day were not proposed.

1.2.2 In respect of the delivery of those solutions, Mr Bull explained that proposals were being progressed, including enhancements to the branch line, including replacement of track and improved level crossings, and improvements to the functionality at the junction at Saxmundham. These

works were going through Network Rail's formal GRIP governance process. Stage 3 GRIP proposals have been submitted for review, there is good engagement from Network Rail and all is on target for delivery within the required timescales. As regards the East Suffolk Line (ESL), the Statement of Common Ground with Network Rail sets out the position. There is an increased risk arising at some level crossings, but matters have now progressed to a stage where it is clear what interventions are necessary to manage the risk, including some work to enhance functionality and introduction of miniature stop lights. Further work needs to be done with Network Rail in the coming months but there is no unresolved issue to facilitating trains in line with the programme for both two and four trains per day. Counsel for SZC Co. stated that an updated programme for rail delivery has been agreed with Network Rail and would be provided at Deadline 5, along it is hoped with an update on works agreed with Network Rail to level crossings. *[This is contained in the Applicant's **Written Submissions Responding to Actions Arising from ISH2** (Doc Ref. 9.49).]*

- 1.2.3 Mr Bull explained that the design of the bridge over the rail line for the Sizewell Link Road has progressed to Stage 3 preliminary design and delivery of the bridge would take place by November 2023.
- 1.2.4 The ExA asked why the nominal and theoretical rail capacity are different in the Applicant's answer to TT.1.6. Mr James Oliver explained that the theoretical maximum assumes use of the maximum number of rail deliveries every day across the entire construction project duration. In reality this would not be the case as the demand for materials is not spread in a linear way across the programme and there is a much greater demand for bulk material in the early years. In later years, beyond years five and six, the bulk materials reduce in favour of smaller deliveries for the mechanical and electrical plant systems and some other materials. These are not well suited to rail transport because of their origin points or because of the manner in which they are conveyed.
- 1.2.5 In response to a question from Felixstowe Town Council, Mr Bull explained that significant work had been done on pathing of trains both on the ESL and on the network beyond, working very closely with Network Rail. Pathing within the Anglia region is well advanced and solutions have been identified. Materials are being sourced more widely, including from south west and north west England and from north Wales, and whilst there are challenges particularly on the Great Western line, it has been established that there are four paths available. There are also opportunities to take alternative routes if required, for example through Birmingham rather than London. There do not appear to be any major constraints to delivery of the materials. Having done the work to identify capacity, it will feed into the timetable

bidding process to secure train paths with regards to the May 2022 timetable change. The aim will be to submit an electronic timetable file in Q4 of this year. The Applicant thanked Network Rail for the significant help which they are getting on this.

- 1.2.6 In response to queries from Mr Clive Lovelock, Counsel for SZC Co. explained that more information on the breakdown of materials would be provided at Deadline 5. *[This is contained in the Applicant's **Written Submissions Responding to Actions Arising from ISH2** (Doc Ref. 9.49).]*
- 1.2.7 In respect of Mr Lovelock's concern about the rail freight strategy compromising the Felixstowe line and capacity at Westerfield junction, Mr Bull explained that the Applicant considered it had agreement with Network Rail that there are paths available for the SZC trains to go through Westerfield junction without having any detrimental impact on the existing services from the port of Felixstowe. As to bringing the trains to site, the Applicant will have very specific timings of train paths to go up the ESL after the passenger services have been completed for the day. The Applicant would look to have appropriate holding points to ensure that those train paths are met and discussions are taking place to agree these.
- 1.2.8 In response to queries from Cllr Robin Sanders and Ms Josie Bassinette, Mr Bull said on behalf of the Applicant that there would be no impact on passenger services on the ESL. The Applicant's timetable also has additional contingency built into it.
- 1.2.9 In response to a question from Cllr Richard Smith, Mr Bull explained that a passing loop on the East Suffolk line as proposed in the rail-led strategy at Stage 3 consultation would require interventions at 45 level crossings, and having worked with Network Rail it was concluded that it was not a deliverable solution based on the timescales required for the project. This is set out more fully in the Statement of Common Ground with Network Rail.

Capacity and delivery of movement of freight by sea

- 1.2.10 In response to a question from the ExA regarding the precise use of the temporary beach landing facility (BLF) proposed, Mr John Davies on behalf of the Applicant explained that the principal use of the temporary BLF is for bulk materials only, using its conveyor belt, although the Applicant would look to identify any opportunities to bring in other materials by sea.
- 1.2.11 In response to a question from Mr Collins, Ms Kirsty McMullen on behalf of the Applicant explained that there is capacity for up to 400 landings at the permanent BLF over the course of the construction period, which would equate to approximately 600 abnormal indivisible loads (AILs). The number

would depend on how many could be achieved with each landing and the seasonality constraints. There are two types of AILs: permanent equipment and temporary construction equipment. The permanent BLF has been designed to cater for the heaviest and largest of the permanent equipment AILs and the programme has been scheduled for the facilities to be in place prior to the need for those to come in. However, there may still be a need for some of those heavy deliveries ahead of the BLF being in place. There is potential for AILs to use the B1122 before the Sizewell Link Road (SLR) is in place. However, the data in Table 3.2 of the **Construction Traffic Management Plan** (CTMP) [REP2-054] shows that the largest loads, namely Special Order and VR1 amount to only around 4% of the total.

- 1.2.12 In response to a question from the ExA and a request for the number of AILs on the B1122 prior to the delivery of the SLR, Ms McMullen explained that the best proxy for this was the HPC data, but that the Applicant would provide a written note on this subject. *[This is contained in the Applicant's **Written Submissions Responding to Actions Arising from ISH2** (Doc Ref. 9.49).]*
- 1.2.13 Ms McMullen also explained that the next version of the **CTMP** would contain a matrix regarding police escorting of AILs, which would show how there would be management of the AILs on the B1122 and elsewhere.
- 1.2.14 In response to SCC stating a desire that the marine form of transport be maximised, Sarah Williamson on behalf of the Applicant explained that the Applicant's objective has been to minimise road transport. Learning has been taken from HPC and the Applicant is aware that the 50% capacity utilisation of the temporary BLF that is planned is actually 50% of theoretical capacity, but will be close to the actual practical capacity of the temporary BLF. Mr James Oliver for the Applicant further explained that the seasonal and weather constraints of the temporary BLF are important, as the predominant types of bulk material need to be imported as a steady supply, which requires a balance of marine and rail modes. Counsel for SZC Co. added that SCC's desire for a binding commitment to maximise marine was an intrusion into the operational flexibility of the project – almost micromanagement – that was unwarranted. There was control against harm by the HGV limits. A binding commitment to maximise marine would unnecessarily cut down on operational flexibility and the important resilience that flexibility provides. It would also limit procurement options as those options may be dependent on whether rail or marine is used, which is again important for such a complex project. In short, the imposition of such an obligation would not pass the tests in paragraphs 4.1.7 and 4.1.8 of NPS EN-1.

- 1.2.15 The parameter limits for the main site stockpiles also meant that more bulk material could not practically be delivered by sea, as there would be nowhere to store it.
- 1.2.16 In response to a question from Felixstowe Town Council, Mr Davies explained that containerisation had been considered, but the temporary BLF is designed to receive bulk materials and would be insufficiently robust to receive container goods. The ability to build a more robust structure as would be required has been ruled out on environmental grounds.
- 1.2.17 In response to a question from Mr Collins, Mr Oliver and counsel for SZC Co. explained that the height of stockpiles would vary in between being depleted and then replenished but could not exceed the 35m limit. They would only be up at that level for a relatively short period and their overall height is controlled by the parameter plans.

Capacity and delivery of movement of freight by road

- 1.2.18 In response to a question from the ExA regarding ExQ1 TT.1.18 [[REP2-100](#)] and whether 18.5 tonnes represents a conservative estimate of the carrying capacity of a typical HGV, Mr Oliver on behalf of the Applicant explained that a road wagon has a carrying capacity of 18.5 tonnes. However, engagement with the supply chain has indicated that larger vehicles are available, and the Applicant is looking to use those larger vehicles further to reduce the impact on road, although this is only really during the early years before the bulk transport capacity of the rail and marine infrastructure become available. There is a small proportion of bulk material that needs to be imported by road before that time.
- 1.2.19 The ExA further asked, based on the Applicant's response to ExQ1 TT.1.11 [[REP2-100](#)], whether, with theoretical capacity of the HGVs of 14.46Mt plus the capacity of the rail and marine infrastructure, the total freight carrying capacity was just over 34.5Mt, but the stated freight requirement of the main construction site was 12.1Mt, such that the theoretical capacity was almost three times the capacity required for the main construction site. Mr Oliver explained that the answer to TT.1.11 dealt with the theoretical maximum capacity over the entire duration of the project. However, demand for bulk materials is not linear and the project requires a much greater proportion of fill in the early years. The infrastructure has to be designed to meet this peak in demand. So, a theoretical capacity of 30 plus million tonnes could only be achieved if the import of all of those materials was spread consistently and steadily over the duration of the project. That is not the demand profile of the project.

- 1.2.20 The ExA also asked on this subject about why (having regard to the 40% by HGV proportion leading to an expected tonnage of 4.8Mt and equating to 261,620 vehicles which results in an average of 87 HGVs per day) the HGV caps were significantly higher. Mr Oliver replied that the HGV classification adopted is anything over 3.5 tonnes, rather than all being 18.5 tonnes. In the early years large numbers of larger vehicles will be used, but in later years a lot of smaller vehicles will be used for materials, as well as the ancillary support provided by smaller vehicles. Mr Oliver drew attention to Plate 4.2 in the **Freight Management Strategy** [AS-280] showing the revised HGV profile. Mr Oliver offered to provide a more detailed composition of the size of vehicles within the HGV profile numbers in writing. *[This is contained in the Applicant's **Written Submissions Responding to Actions Arising from ISH2** (Doc Ref. 9.49).]*
- 1.2.21 As to the Associated Development (AD) sites, Mr Oliver explained that AD traffic is generally excluded from the profile, because a lot of those deliveries will be across the wider network and will not travel down the more sensitive B1122. As to the SLR, the initial phases of its construction would involve a relatively small level of traffic travelling down the B1122, but subsequently the construction could take place from west to east without putting large volumes of construction traffic down the B1122. The movements down the B1122 are controlled within the cap of 300 in the early years and the profile takes account of the movements down the B1122. Even if it became expedient to construct the SLR from both ends, the cap would control movements on the B1122.
- 1.2.22 Mr Oliver also observed that rail and marine are a more efficient form of transport for operational reasons which creates an incentive for the project to deliver those modes as planned in a timely manner.
- 1.2.23 In response to submissions from Mr Bedford for SCC, Mr Oliver noted that the profile in Plate 4.2 exceeded the cap at points because it represented the unmitigated profile; exceedances would be smoothed out and avoided by the delivery management system (DMS).
- 1.2.24 As to a question from Mr Scott, Mr Oliver explained that return journeys are within the cap as the caps control two-way movements, to be tracked by GPS.
- 1.2.25 In response to a question from Mr Fortmann, Ms McMullen for the Applicant explained that a hierarchical approach to traffic modelling had been undertaken, with a strategic model and a number of other models sitting below that, including junction models and two VISSIM micro-simulation models. The A12 VISSIM model has been done on a worst case basis using vehicles at the larger end of the spectrum of HGVs. HGV routes would be

prescribed and controlled by GPS to stay on the A12 (and the B1122 in the early years, followed by the SLR thereafter) not the side roads referred to by Mr Fortmann. There should be no non-compliance and any non-compliance would be reported to the Transport Review Group (TRG). This system has been successfully implemented at HPC. The impact of up to 1000 HGVs have been assessed under the integrated strategy, although less are now proposed under the preferred strategy.

Capacity and delivery of movement of freight by Abnormal Indivisible Load (AIL)

- 1.2.26 Ms McMullen explained for the Applicant that AILs would arrive at site in a number of ways, depending on considerations including their origin (which would vary) and their size. Use would be made of Highways England's Heavy Route 100 from the north, and there would be some AILs from the south on the A12, and the permanent BLF is being constructed to bring in the heaviest and largest AILs by sea and to comply with Highways England's water preferred policy. That policy seeks marine transport for VR1 and Special Order loads. It is also important to note that there is significant variation in the size of AILs and the significant majority of AILs are at the smaller end of the scale, as indicated in Table 3.1 and 3.2 of the CTMP. Many may look not much wider than a normal HGV to the travelling public.
- 1.2.27 As to a question from the ExA as to the peak daily flow of AILs, Ms McMullen pointed to Table 3.3 of the **CTMP** [REP2-054] which contains HPC data and she explained was the best proxy for the SZC construction project. There would be a greater number of the AILs in the early years than later on.
- 1.2.28 Regarding the duration it would take for an AIL to move from the A12 to the site, it would depend very much on the size of the AIL, with the higher end of the size scale taking considerably longer than the smaller end. It is intended that anything over 2.9m would be police escorted, which would have benefits in terms of journey time for their movement and safety. The smaller AILs, which comprise the vast majority, would not be travelling significantly slower than a typical HGV. The Applicant understood Mr Merry for SCC to say that two of the STGO category AILs are limited to a speed of 30mph and that it could take half an hour for an AIL to travel five miles along the B1122 for these categories. Ms McMullen offered to provide further detail on the potential time taken for AILs to route along the B1122 based on their category. *[This is contained in the Applicant's **Written Submissions Responding to Actions Arising from ISH2** (Doc Ref. 9.49).]*

- 1.2.29 As to AILs and oncoming HGVs on the B1122, the B1122 is a recognised constraint but this can be managed by liaison with the delivery managers at the Plaza, so that there can be coordination on this final stretch to the site including so as to hold back HGVs as the AIL is coming through if necessary. Escorting of AILs by the police will also assist with any potential conflict, by being able to stop and direct traffic. In October last year a 4.4m wide load was successfully taken down the B1122.
- 1.2.30 Ms McMullen explained that the Applicant is in discussion with the Suffolk Constabulary, SCC and Network Rail about the management of AILs. Weekly discussions are taking place and the Applicant has had very positive engagement, including from the Constabulary. Ms McMullen agreed with the oral comments from the Constabulary that the Applicant is close to agreeing arrangements for AIL management, which will include a dedicated police resource to be funded by the Applicant. This is envisaged to include a layby in the south for the police to pick up the AIL from for escorting, at Wickham Market, and potentially at Darsham in the north. The protocol with the police is also envisaged to manage the situation at the Darsham and B1122 level crossings to minimise waiting of AILs. It is intended to include the output of those discussions in the next version of the **CTMP**. There would not be an AIL cap because it is not necessary, but there would be forward planning as part of the arrangements with the police to seek to smooth the AIL profile where possible, and this is on top of the statutory notification periods for AILs.
- 1.2.31 In response to a question from Mr Lovelock, Ms McMullen explained that there was no need to restrict AILs to outside railway operation hours, because there are already measures in place to minimise risk over level crossings including Darsham level crossing. There are laybys either side of Darsham level crossing which form part of Heavy Route 100. After the AIL has parked up, they make a phone call and await permission to cross, and make another phone call once they have done so.
- 1.2.32 In response to a question from Mr Fortmann, Ms McMullen explained that the Applicant has had confirmation that Belvedere Yard is in the ownership of Lowestoft Port and can be utilised for AILs. Ms McMullen further explained that the structural team at SCC have confirmed that the existing structures on the A12 are capable of carrying all AILs other than VR1 and Special Order AILs, such that it is only those two categories that would require structural surveys and potential improvements. The BLF can be also used for those AILs. Further, given the ability to use Belvedere Yard, there is no need for these larger AILs to come over the bridge at Marlesford in the south.

1.2.33 In response to a question from Mr Collins, Ms McMullen confirmed that once the SLR is in place, the Applicant envisages that Heavy Route 100 would be reassigned to the Middleton Moor Link and the SLR, although that is a matter for Highways England.

1.2.34 In response to a question from Mr Streeten for the Heveningham Hall Estate, Mr Bull stated that the Yoxford roundabout had been designed to standards to deal with the necessary vehicle flows through that roundabout, but that his query about the design of the Yoxford roundabout would be taken away and a response provided in writing at Deadline 5. *[This is contained in the Applicant's **Written Submissions Responding to Actions Arising from ISH2** (Doc Ref. 9.49).]*

1.3 Agenda Item 3: Transport Strategy relating to Associated Development Sites

Freight Management Facility – alternatives and access arrangements

1.3.1 Ms McMullen on behalf of the Applicant responded to a question from the ExA about whether the Freight Management Facility (FMF) was correctly located. Ms McMullen stated that it is necessary to recognise the primary and secondary functions of the FMF. The primary function is to provide a physical and operational control to ensure compliance with the **CTMP**, including vehicle caps, HGV arrival times at the MDS and routing. Part of the operational control would be day to day functions of induction of drivers, compliance checks to ensure the delivery is in accordance with the DMS, and provision of welfare facilities to reduce impacts on lorry parks and laybys on HGV routes. This primary function would be supplemented by the DMS.

1.3.2 The secondary function is to hold HGVs back when there is an incident on the network. Potential incidents include ones on the Orwell Bridge, although that is not the only type.

1.3.3 Having regard to the primary function, the FMF needs to be located so that it is able to intercept HGVs before they get to the part of the network over which control is sought. The relevant part of the network from this point of view is the A12 corridor from Seven Hills to the A1152. The FMF also needs to be at a distance from the main site that allows certainty of arrival at the Plaza from an operational perspective. If it is too far away, that control is lost. It also needs to function effectively with reference to the origin of the HGVs, and significant diversion from origin to site would be of concern to the highways authorities because it would add more mileage on the network.

- 1.3.4 As to fulfilling the secondary function, the FMF needs to be located so as to be effective in holding HGVs and minimising the effect of HGVs in the event of an incident. The main issue raised by interested parties is whether it should be located to the east or west of the Orwell bridge. At site selection stage, four sites were considered on the east side of the bridge and two on the west side that were put forward by the Councils. The west sites are some distance from the relevant section of the A12, such that control is reduced. Further they are 35 to 45 miles away from the main site so from an operational point of view and that of the delivery team at the main site, those sites are quite disconnected. Lots can happen in that time and certainty as to delivery is lost.
- 1.3.5 In terms of diversion, the two sites west of the Orwell Bridge suggested were at Stowmarket and at Sproughton at Junction 54 on the A14. For both, it would only be HGVs on the A14 that would be pass-by trips, whereas HGVs would be coming not just along the A14 but also on the A12 from the south and from Felixstowe. HGVs coming from the south would have to divert through the Copdock interchange to get to Stowmarket or Junction 54, which is a key consideration from Highways England's point of view, and then come back along the A14 and the A12 to site. By contrast, all HGVs would route via Seven Hills regardless of origin.
- 1.3.6 The only function that the western sites perform better is in the event that there is a closure of the Orwell bridge such that HGVs arriving from the west could not be held at the proposed FMF at Seven Hills. If there is an incident anywhere else on the network then the Seven Hills site would be effective at holding HGVs. Further Highways England have recently provided additional mitigation through management measures which reduce the risk of bridge closure which have been successfully implemented. The DMS would also allow rescheduling of HGVs not already on the network in the event of a prolonged closure. The FMF would, of course, be effective at holding vehicles travelling in the opposite direction in the event of a problem on the bridge.
- 1.3.7 As to Operation Stack, provision could be made in the **Traffic Incident Management Plan (TIMP)** [\[REP2-053\]](#) as observed by the Councils that if Operation Stack is activated then HGVs could be routed direct to site to avoid the impact on Felixstowe Road and Seven Hills. In any event, the current position is that Felixstowe Port has improved its delivery management system such that Operation Stack is implemented far less frequently now.
- 1.3.8 In response to a question from Mr Smith on behalf of Felixstowe Town Council, Ms McMullen explained that the Applicant's very detailed microsimulation model looked at all traffic including HGVs through the

Seven Hills junction and Highways England have accepted that modelling and that no highway improvements are required to Seven Hills. On that basis the Applicant is satisfied that the impacts are acceptable and no alternative access arrangement as referred to by Mr Smith is required. Nevertheless, as requested by the ExA, Ms McMullen agreed that the Applicant would take away Mr Smith's point and consider whether that alternative would produce a lesser impact on Seven Hills. *[This is contained in the Applicant's **Written Submissions Responding to Actions Arising from ISH2** (Doc Ref. 9.49).]*

- 1.3.9 Counsel for SZC Co. added that when considering alternatives it was important to keep in mind the policy framework in NPS EN-1, in particular 4.4.1 – 4.4.3. That provides that “*alternatives not amongst the main alternatives considered by the applicant (as reflected in the ES) should only be considered to the extent that the [ExA] consider that they are important and relevant to its decision*”; and further that “*alternative proposals which are vague or inchoate can be excluded on the grounds that they are not important and relevant to the IPC's decision*”.

- 1.3.10 In response to a question from Mr Scott, Ms McMullen confirmed that there were no capacity issues concerning the Orwell bridge of which she was aware, having looked at matters in detail.

Sizewell Link Road - transport consideration of alternative routes, timing of delivery and legacy benefits

- 1.3.11 Mr Bull on behalf of the Applicant confirmed that paragraph 2.1.3 of the **Sizewell Link Road – Principle and Route Selection Response Paper [REP2-108]** provided a fair summary of the nature of the B1122. Mr Bull referred to Ms McMullen's discussion earlier in the ISH for the B1122's capacity to accommodate AILs. As to HGVs, Mr Bull did not concur that the route was unsuitable for HGVs and, in response to a question posed by the ExA, was not aware that it was correct that it was unsuitable for two HGVs to pass each other in places.

- 1.3.12 Ms McMullen explained in response to a question from Mr Humphrey that any SZC HGV traffic going down the B1122 would be included in the 600 movements early year cap and that it might assist to make that clearer in the **CTMP**. The Applicant would take that away as an action. Further, there may be a short amount of time, after completion of the Northern and/or Southern Park and Rides but prior to the completion of the SLR when there could be some Park and Ride buses routing along the B1122. Based on the **Implementation Plan [REP2-044]** that would be a few months prior to the SLR being operational.

- 1.3.13 In response to the ExA's suggestion that this could be 152 buses daily on top of the 300 cap, Ms McMullen explained that would not be the case because buses are based on the workforce profile. The Applicant has sought to assess effectively a worst day of peak construction, with the peak workforce coinciding with the busiest day of HGVs. Whereas at the snapshot in time being referred to by the ExA, the workforce is a lot lower than at peak construction. Nobody wants to run empty buses. The level of buses to cater for the 7900 workforce at peak would not be the same level of buses needed to cater for the 1500 workforce at this point.
- 1.3.14 In response to a question from the ExA as to where the policy expectation of deployment by 2035 came from, Mr Rhodes said that the policy position set out in NPS EN-1 is an expression of urgency for energy generating projects. In the Planning Statement Update submitted at Deadline 2, the Applicant has brought the policy position up to date, identifying the policy set out in the Energy White Paper, which confirms that the need assessment and urgency expressed in the NPS remain valid. The Government has as a result set out in the Energy White Paper a commitment to bring forward one large scale new nuclear project to final investment decision within this Parliament. The Government at the same time published a press release to explain that it was negotiating with EDF regarding the financing arrangements for Sizewell C.
- 1.3.15 The 2035 date is set out in the Energy White Paper as a benchmark for the trajectory to net zero and made public with the White Paper was the base modelling of the trajectory that was necessary to get to net carbon zero by 2050. That included a trajectory to 2035 which was just as important as their trajectory to 2050. The BEIS modelling identified two principal alternative scenarios, both of which require 8GW of new nuclear generation by 2035 (two new large scale nuclear projects). One of those is Hinkley Point C. It is considered that the other one has to be this project. That modelling is directly consistent with the Climate Change Committee's sixth carbon budget, which confirms the same thing, namely the need for effectively 10GW of nuclear generation by 2035 in order to meet that trajectory on the way to net zero by 2050. So that is why the urgency is expressed in the way that it is in the Energy White Paper and the NPS. All of the work done since the NPS in 2011 identifies the requirement for increased electricity generation and particularly an increase in low carbon energy generation. The timing comes from the modelling that underpins the policy.
- 1.3.16 Mr Rhodes further explained that the 2035 date would not be met if the SLR was to be built first, leading to a delay of over two years in commencement of the project as is apparent from the **Implementation Plan** [\[REP2-044\]](#). This is quite apart from the difficulty of building the SLR without having the

MDS available at the same time. Further, even without that precise date, the policy imperative is urgency. It is probably no exaggeration that there is no planning objective which is more important than to achieve net zero. So it is a balance, and a judgment has to be made as to whether the short term impact on the B1122 is acceptable in light of the fact that we are dealing with something of extreme importance from a national perspective. The fact that the Applicant is working as quickly as it can to deliver the SLR and that there will be long term legacy benefits to the B1122 must also feature in that balance.

- 1.3.17 Counsel for SZC Co. further observed on this issue that neither SCC nor ESC have sought a Grampian style requirement to prevent commencement until the SLR is in place, notwithstanding the opportunity to do so. That recognises that the balance must come down in favour of allowing construction to commence without the SLR, and that the SLR can come onstream after that.
- 1.3.18 Ms Sarah Williamson on behalf of the Applicant confirmed that the overarching programme works backward from the milestone of 2035 to ensure by that date the power station is switched on and would be providing electricity. To get to 2035 means that by 2027 the Applicant has started on the main power plant structures, which is not a long way away. There is also an operational driver for the timing of the SLR in that at the start it acts as a haul road and enables the Applicant to take material not just from the SLR footprint but also the Two Village Bypass (TVBP) and the Yoxford roundabout and to move that to the MDS and to store it there for later use as fill. The mass balance of this spoil removed to the MDS is the equivalent of a very significant number of vehicle movements.
- 1.3.19 Therefore, there is a need to be working on the MDS at the same time as on the AD sites. The SLR is part of that whole piece. It shows that to get the whole thing to work together, there is need to be working on a number of fronts at the same time. Delaying to wait for the SLR would force the Applicant to delay and have to adjust its entire delivery schedule.
- 1.3.20 Turning to the route of the SLR, in response to a question from the ExA Mr Bull agreed that the 2014 AECOM study did spend some time focusing on the shorter individual bypass route alternatives rather than a route all the way to the A12, but the Applicant considered that to be in the context of a broader discussion about what mitigation should take place from the A12 to the Sizewell area. This was why the Applicant considered it relevant in paragraph 3.18 of its **Sizewell Link Road – Principle and Route Selection Response Paper** [[REP2-108](#)].

- 1.3.21 As to a question from the ExA on the modelling in Appendix 10 of that Response Paper and HGV movements through Yoxford, Mr Bull explained that in the event of a more southerly bypass route being adopted, there would still be significant numbers of HGV movements going through Yoxford, assuming 15% of HGVs coming from the north. This would amount to up to 105 HGV movements per day. The Applicant has assessed 224 bus movements to/from the Northern Park and Ride and Lowestoft to the main development site which would either have to go down the B1122, or if they were diverted to a more southerly alignment of a bypass then they would be routed through Yoxford. So, although the HGV cap is to be 300 in the early years, 105 HGVs is a significant further number of movements which would go through Yoxford unless the proposed SLR alignment was adopted. Mr Collins referred to these 105 HGVs as being “only 15%” of the total, but that ignores the real benefit of avoiding those 105 HGVs going through Yoxford. The SLR route avoids that impact, unlike any other bypass route.
- 1.3.22 As to whether a more southerly route would provide beneficial traffic effects on communities to the south, Mr Bull explained that the prime focus of the SLR is mitigating the impacts of the project along the B1122. The Applicant has carefully looked at alternative routes and considers that none of the other alternatives sufficiently mitigate impacts along the B1122. Further, for the reasons set out in the Response Paper, they are not deliverable alternatives. There is in fact no alternative to the SLR. Providing beneficial impacts for other communities to the south is not the purpose of the SLR; the SLR is about mitigating the project's impacts, and it is along the B1122 where the impacts arise and hence need to be mitigated.
- 1.3.23 The ExA queried whether in Table 7.1 on p.160 of the **Site Selection Report** [APP-591], the environmental comparisons and considerations ought to include vehicle kilometres per year and journey time savings. Mr Bull explained that while those routes were considered it did not comprise a full environmental impact assessment of all routes, and planning judgement was used based on a number of different criteria to come up with the route selection. Following feedback from consultees, AECOM undertook a peer review of the selection process, which review was left entirely to them to undertake and the Applicant had no interaction with or impact on the production of that report, and AECOM came up with the same answer as the Applicant. Nonetheless, Mr Bull confirmed that the Applicant would take away as an action to look at the additional consideration the EXA had mentioned. *[This is contained in the Applicant's **Written Submissions Responding to Actions Arising from ISH2** (Doc Ref. 9.49).]*

- 1.3.24 As to the ExA's request for clarification of the Applicant's answer to ExQ1 TT.1.92 [REP2-100], in particular how to explain that the early years traffic levels on the B1122 are higher than the traffic levels in 2034 at the operational stage on the B1122 and the SLR combined and whether that meant the impact of the early years on the B1122 was too great and whether it puts into doubt the legacy benefit for the B1122, Mr Bull stated that he would take the question away to re-look at the tables and data referred to in TT.1.92. *[This is contained in the Applicant's **Written Submissions Responding to Actions Arising from ISH2** (Doc Ref. 9.49).]*
- 1.3.25 In response to observations from the ExA, Mr Bedford, Mr Tait and Mr Collins, Counsel for SZC Co. made the following further points.
- 1.3.26 First, if the SLR is judged to be acceptable in planning terms, the existence of alternatives is not a reason to reject it. That is the correct approach which objectors do not recognise. Indeed, the Applicant says there is no realistic or deliverable alternative to the SLR, but even if there was it would not be a reason to reject the SLR. Counsel for SZC Co. agreed with that the ExA can quite properly consider it appropriate to report the environmental effects of alternatives to the Secretary of State, and indeed NPS EN-1 paragraph 4.4.2 explains that the ES should include information about the main alternatives studied. But the consideration of alternatives in decision-making must take account of the NPS policy on alternatives. Paragraph 4.4.3 of the NPS is very clear that such consideration must take account of the urgency of need, along with the other matters listed in 4.4.3. That includes that the weight to be given to any alternative should be guided by "*whether there is a realistic prospect of the alternative delivering the same infrastructure capacity (including energy security and climate change benefits) in the same timescale as the proposed development*" (bullet point 2). No application for development consent has been made with an alternative alignment of the SLR and there is no realistic prospect of any such application delivering the same infrastructure in the same timescale as the proposed development. That is a very important consideration.
- 1.3.27 Secondly, neither SCC nor ESC have said that the SLR is unacceptable. It is important to recognise the position of the authorities in this respect. SCC (but not ESC) may wish the SLR to be removed post-construction, but SCC notably do not say that the SLR is unacceptable or should be rejected in favour of an alternative. Further and crucially, it is clear that any concerns SCC may have about retention of the SLR have not led SCC to invite the ExA to recommend that development consent is refused. SCC do not invite that. ESC meanwhile agree with the provision of the SLR and recognise that the combination of retention of the SLR and improvements to the

B1122 would be “hugely significant” in terms of legacy benefits, in their words in written submissions.

1.3.28 Thirdly, Mr Collins’ remarks about the NPS allegedly being out of date are not a matter for this examination. It is not the role of this examination to interrogate the merits of national policy.

1.3.29 Mr Bull explained the progress on agreeing B1122 early years mitigation. There have been recent discussions with SCC on this and the Applicant wishes also to move discussions forward with the Parish Council on the matter. Mr Bull also explained the insurmountable conflict that route W would have with the proposed housing scheme to the south of Saxmundham.

1.3.30 Mr Bull, in response to comments from Mr Galloway, explained that while the SLR would initially be used as a haul road it would then become a permanent road and be a legacy which supports what would be three nuclear units, including during outages. Outages would be staggered where possible but could be concurrent in the event of unplanned outages. The Applicant has had useful discussion with the local authorities about what the B1122 could become once traffic has been predominantly removed from it, including repurposing it to support cycling with more cycle friendly infrastructure. This could be linked up with the Quiet Lanes initiative that already intersects the B1122. There is a huge legacy benefit here linking to tourism and creating circular routes. It dovetails with the provision of off-road cycling routes from the southern extent of the construction site to the northern extent.

Two Village Bypass – implications for possible four village bypass

1.3.31 Mr Rhodes for the Applicant explained that route that the Applicant has adopted for the Two Village Bypass (TVBP) is consistent with, so far as it goes, and does not physically prejudice the route that is the preferred route for a four village bypass, as shown in Figure 5.1 to the Applicant’s responses to ExQ1s and stated in AI.1.16. The TVBP would thereby be of assistance if any four village bypass was to come forward in the longer term. There is wide recognition that it is not proportionate or sensible for a four village bypass to be proposed as part of this application. The Applicant has also provided evidence from previous studies which indicate a consensus that a four village bypass may not be the most sustainable approach in any event, and if there are in future to be bypasses of the other villages then individual bypasses for those villages may be preferable, though that is not for the Applicant to say.

- 1.3.32 In response to suggestions by Mr Bedford for SCC that the TVBP might prejudice the business case for a four village bypass, Counsel for SZC Co. submitted that such a consideration, even if it was made out for which there is no evidence, should not weigh heavily in the balance because the case for a four village bypass was put forward to the Department for Transport (DfT) and rejected by the DfT as recently as 2019. This was the SEGway scheme to which Mr Bedford referred. Counsel for SZC Co. also observed that again, despite the points which SCC raise, SCC have not suggested that this issue should lead to the ExA recommending refusal of development consent.

1.4 Agenda Item 4: Transport Assessments approach and modelling

Early years traffic modelling

- 1.4.1 In response to questions from the ExA about the Applicant's response to ExQ1 TT.1.29 [\[REP2-100\]](#), workforce numbers and the fact that the latest version of the Implementation Plan had expedited some infrastructure, Ms McMullen explained that the 2230 workforce figure in TT.1.29 was based on all the 730 AD workers (plus 1500 for the MDS), which was conservative given that in reality the workforce profile would be lower as not all of the AD sites workforce would peak at the same time and they would also be travelling to different AD sites. Further, as to the ExA's query as to what measures would be in place if the Park and Ride sites were delayed, Ms McMullen explained that the TRG would manage matters and monitor the mode share targets in the CWTP. There is also a commitment to fund buses and to limit parking spaces at both the LEEIE and the main site. Thus there are 'carrots and sticks' to manage any delay and ensure that the impact was not unacceptable. The TRG also has the ability to draw down from the Contingency Funds. Further, there is a commitment from the Applicant to fund remedial measures.

Seasonal traffic effects

- 1.4.2 In response to a query from the ExA about ExQ1 TT.1.41 [\[REP2-100\]](#) and whether the Applicant was saying that outages have been included in a reference case base level of existing traffic and that they more than offset any holiday season peaks as happens in August, Ms McMullen confirmed that that was not what the Applicant was saying. The Applicant has followed DfT guidance regarding transport assessments, which provides that, in general, assessment should be based on normal traffic flow (i.e. non school holiday periods) (p.15). May has been used as a neutral and average month, as set out in 2.3 of the Consolidated Transport Assessment (TA) [\[REP4-005\]](#). The scope of the TA and the use of the neutral month had

been agreed with SCC. An element of robustness has been incorporated by including outage traffic at Sizewell B within the Reference Case for each scenario but mitigation and infrastructure should not be provided for abnormal peaks and therefore the assessment has not been based on the worst case traffic flows over the year. Ms McMullen also offered to take the matter away and as the answer to ExQ1 TT.1.41 [REP2-100] was based on a Friday peak, the Applicant would have to look at Monday to Thursday also to answer the ExA's question. *[This is contained in the Applicant's Written Submissions Responding to Actions Arising from ISH2 (Doc Ref. 9.49).]*

- 1.4.3 Ms McMullen also drew attention to the fact that the Applicant's traffic modelling had factored in future traffic growth based on pre-Covid forecasts and since then the situation is showing less growth. While the government has yet to produce its forecasts, there will be a reduction, which adds a further level of robustness to the assessment.
- 1.4.4 On the Department for Transport (DfT) letter concerning seasonality submitted by Mr Galloway, Ms McMullen stated that the Applicant would consider that and come back in writing. *[This is contained in the Applicant's Written Submissions Responding to Actions Arising from ISH2 (Doc Ref. 9.49).]*
- 1.4.5 Mr Bedford on behalf of SCC stated that the Transport Assessment had been scoped with SCC and they were content with the approach to seasonality. It is a similar approach to the one that SCC takes when assessing their own infrastructure project such as the recent Gullwing bridge scheme.
- 1.4.6 In response to a question from Mr Sutherell and the differences with the network around HPC, Ms McMullen noted that bespoke traffic models had been developed for the Sizewell C project and those had been agreed with SCC as the local highway authority.
- 1.4.7 On the suggestion of the potential for 'rat-running', Ms McMullen observed that it could more neutrally be referred to as route choice and it is looked at and taken into account through the strategic VISUM model and junction modelling.
- 1.4.8 In response to two points from Mr Streeten on behalf of the Heveningham Hall Estate concerning the gravity model and the Yoxford VISSIM model, Ms McMullen explained that the purpose of the gravity model is to estimate the distribution of home based and non-home based workers across the study area. The gravity model does not include those workers living in the accommodation campus or caravan park at Land East of Eastlands Estate

(LEEIE) as their trip origin is fixed. The allocation of workers within the gravity model is based on the overall quickest time to the site including the journey time from the workers residence to the park and ride facility and onward journey time to the main development site. Ms McMullen offered to provide a more detailed response in writing, with regards to the points raised by Heveningham Hall Estate on the gravity model and Yoxford VISSIM model.

- 1.4.9 In response to a question from Mr Scott regarding access to the Southern Park and Ride, Mr Bull confirmed that the slip road which the Southern Park and Ride facility is accessed from is a two-way road at the point of access and therefore traffic travelling to and from the facility would be able to access it from both directions.