



The Sizewell C Project

9.45 Written Summaries of Oral Submissions made at ISH5: Landscape and Visual Impact and Design (13 July 2021)

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CONTENTS

CONTENTS	1
1 ISSUE SPECIFIC HEARING 5: LANDSCAPE AND VISUAL IMPACT AND DESIGN	1
1.1 Introduction	1
1.2 Agenda Item 2: The Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB)	1
1.3 Agenda Item 3: Landscape and Visual Impact Assessment (LVIA) ..	12
1.4 Agenda Item 4: Role of a design champion, design review panel and design code	13
1.5 Agenda Item 5: Outage car park location and use of pylons	19
1.6 Agenda Item 6: Main development site design considerations.....	23
1.7 Agenda Item 7: Sizewell Link Road.....	32
1.8 Agenda Item 8: Southern Park and Ride.....	32
1.9 Agenda Item 9: Two Village Bypass.....	32
1.10 Agenda Item 10: Mitigation and controls	32

1 ISSUE SPECIFIC HEARING 5: LANDSCAPE AND VISUAL IMPACT AND DESIGN

1.1 Introduction

1.1.1 This document contains the Applicant's written summaries of the oral submissions made at Issue Specific Hearing 5 (ISH5) on Landscape and Visual Impact and Design held on 13 July 2021.

1.1.2 In attendance at ISH5 on behalf of the Applicant was:

- Hereward Phillpot QC of Francis Taylor Building (Counsel) (HPQC);
- Richard Jones of Quod (Planning Manager (Main Development Site));
- Alistair Kratt of LDA Design (Landscape Architect and Masterplan Lead);
- Daniel Young of SZC Co. (SZC Conventional Island Engineering and Delivery Manager);
- Mike Lavelle of SZC Co. (Operations Director);
- Ewan Jones of Grimshaw Architects LLP (Partner, Architect);
- John Rhodes of Quod (Planning Manager (Strategic));
- Matthew Sharpe of Quod (Planning Manager).

1.1.3 Where further information was requested by the Examining Authority at ISH5, this is contained separately in the Applicant's **Written Submissions Responding to Actions Arising from ISH5** (Doc Ref. 9.52).

1.2 Agenda Item 2: The Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB)

1.2.1 In response to comments made by various stakeholders relating to the ability of the AONB to continue to delivery its statutory purpose, Mr Richard Jones on behalf of SZC Co. made the following statements:

- a) The Suffolk Coast and Heaths AONB covers an area of approximately 400 sq.km. I consider that the purpose of its designation can only be adversely affected by Sizewell C to the extent that either the land is developed or the effects of development can be physically experienced. The construction phase footprint is

approximately 2.5sq.km and the permanent built development footprint is approximately 0.33sq km. These are small percentages of the total area.

- b) For the vast majority of the AONB, SZC Co. would exert no influence on its special qualities at all.
- c) The AONB narrows at Sizewell to Eastbridge Road and Lover's Lane. Nevertheless, access will remain along the coast, except in rare circumstances where it unsafe to do so during construction of the BLFs and coastal defences.
- d) Nuclear power generation has always been present in the AONB. The AONB was designated in 1970, including Sizewell A which became operational in 1966.
- e) Sizewell B was then constructed wholly within the AONB between 1988 and 1995. This is the most recent UK nuclear construction, aside from Hinkley Point C and is a useful precedent. The existence of Sizewell B does not prevent the AONB purposes from being fulfilled in the area that surrounds it, despite its scale. Former construction activity associated with Sizewell B was temporary and has had no effect on the purpose of the AONB designation. The AONB will continue to deliver its statutory purpose with Sizewell C in the same way.
- f) Post construction, enhancements to the natural environment will better demonstrate the Natural Beauty indicators than the current landscape.

1.2.2 Mr Jones concluded that in his opinion the design of the proposed development has had regard to the statutory purpose of the AONB and the proposed development has been designed sensitively in its context.

Policy framework for AONB impacts

1.2.3 Mr Richard Jones on behalf of SZC Co. set the impacts on the AONB in the context of planning policy as follows:

- a) NPS EN-1, Paragraph 5.9.9 states that the decision maker should '*have regard to the specific statutory purposes which help ensure their continued protection*'. LDA Design, SZC Co.'s appointed landscape and visual impact specialists, prepared and agreed the Natural Beauty and Special Qualities Indicators Document with

stakeholders to allow impacts on the Suffolk Coast and Heaths AONB to be assessed.

- b) NPS EN-1, Paragraph 5.9.9 also states that the ‘*conservation of natural beauty of the landscape and countryside should be given substantial weight*’”. It is a deliberate shift from the wording in the National Planning Policy Framework which requires ‘*great weight*’ to be given at Paragraph 172. Mr Jones referred the ExA to SZC Co.’s **Response to ExQ1 LI.1.2 [REP2-100]**, for examples where substantial weight had been given including:
- i. engaged with Suffolk Coast and Heaths AONB Partnership, East Suffolk Council, Suffolk County Council and Natural England on the approach to assessing landscape and visual effects, and effects on the agreed natural beauty and special qualities of the AONB;
 - ii. engaged with the Suffolk Coast and Heaths AONB Partnership on matters related to design;
 - iii. sought to avoid or mitigate adverse impacts on the natural beauty and special qualities of the AONB wherever practicable through the design;
 - iv. assessed and documented the potential impacts of the proposed development on the natural beauty and special qualities of the AONB; and
 - v. agreed an appropriately defined fund in the draft **Deed of Obligation** (Doc Ref. 8.17(C)) to mitigate residual landscape and visual effects of the proposed development on the AONB and its setting, and the wider landscape beyond the area designated.

1.2.4 NPS EN-1 paragraph 5.9.10 states that development consent may be granted in exceptional circumstances and where developments are in the public interest. Mr Jones referred the ExA to Section 7.2 of the **Planning Statement [APP-590]**, which includes:

- a) Responding to the urgent need for new low carbon energy infrastructure. The strength with which it is expressed is notable as is the repeated confirmation that the need is urgent and that substantial weight should be attached to it.
- b) Economic benefits, as set out **Response to First Written Questions, Appendix 2A [REP2-108]**. The benefits are again unusual: 2,400 additional local jobs at peak of construction; £320m in local wages and spending during construction phase; £1.5bn in supply chain contracts (East of England); 900 permanent jobs and

additional 1,000 during outages; long term GDP increase of £225m per year including wages at £44.5m per year.

- c) Infrastructure improvements – Two Village Bypass; Sizewell Link Road; Off-road diversionary route for Bridleway 19; Leiston Sports Facilities.
- d) Education, jobs and skills.
- e) Housing and Tourism Funds.

1.2.5 Mr Jones then went through each element of the assessment identified in NPS EN-1, Paragraph 5.9.10:

- a) *“Need, including in terms of national considerations, and impact on local economy.”*
 - i. Footnote 128 is clear that this includes the national need for the infrastructure and directs the reader to Part 3 of NPS EN-1. At Paragraph 3.5.1, it is clear that the Government believes that there is an urgent need for new electricity generation plant, including new nuclear power. The wording differs from the equivalent wording in the NPPF.
 - ii. A document summarising the unique strength of the urgent need, entitled **Need and Urgency** is submitted at Deadline 5 (Doc Ref. 9.52, Appendix A).
- b) *“Cost of and scope for meeting the need in some other way.”*
 - i. Unlike NPPF policy for development in AONBs, EN-1 5.9.10 requires the decision maker to take account of Section 4 of the NPS.
 - ii. Paragraph 4.4.3 is clear that: for an alternative to be relevant it would need to have a realistic prospect of delivering the same capacity in the same timescale; and the decision maker should not reject a proposal because an alternative might have less impact. Paragraph 2.4.3 and 2.5.4 explain that there are not considered to be any alternatives to the sites in EN-6.
 - iii. The NPPF by contrast does not discount the relevance of alternatives. In that context, Government policy is for new nuclear to contribute as much as possible to meeting the need for low carbon energy (Paragraph 3.3.22 and 3.5.2).
 - iv. Alternative policy approaches were considered – including an approach which placed more emphasis on reducing environmental

impacts – but these were rejected because they would make it harder to gain consent for new energy infrastructure which could have adverse landscape and other effects; and this was not preferred because it would not meet the government’s objectives (EN-1 Paragraph 1.7.10-11).

- v. It is apparent that this is a very particular policy regime in which impacts which may not ordinarily be considered acceptable may be a necessary consequence of Government policy.
- c) *“Detrimental effects on the environment, landscape and recreational opportunities and the extent to which they can be moderated.”*
- i. Decision making should be undertaken in the context of Annex C, Volume II, EN6 and the assessment of why Government found Sizewell to be potentially suitable. Paragraph C.8.72 – C.8.73 states that *‘there is the potential for some long lasting adverse direct and indirect effects on landscape character and visual impacts on the Suffolk Coast and Heaths AONB, with limited potential for mitigation’*. The Government included Sizewell as a potentially suitable site in NPS EN-6, fully aware the project would impact the AONB. Annex A of EN-6 Volume II explains the IROPI for including listed sites. It is notable that not all nominated sites were listed in EN-6.
- ii. The Government was fully aware of the scale and footprint of Sizewell C and its relationship to the AONB (see for instance, EN-6 Paragraph 3.3.1 (two reactors) and C.8.70-72 in terms of layout and visibility). There should not therefore be an in-principle objection to Sizewell C because if its location in the AONB – the purpose of the Government’s selection exercise was to rule out sites which were unacceptable in principle.
- iii. EN-6 recognises potential for long-term effects on visual amenity and cites Sizewell and the Suffolk Coast and Heaths AONB at Paragraph 3.10.3. Paragraph 3.10.8 of EN-6 states that the *‘scope for visual mitigation will be quite limited. Visual impacts should be reduced as far as reasonably practicable’*. This has been achieved through a considered site selection process (**Site Selection Report [APP-591]**) and reducing as much as reasonably practicable the extent of physical disturbance to the landscape and the visual prominence of development within and in the setting of the AONB.
- iv. Reducing the scale of a project can help to mitigate the visual and landscape effects of a proposed project. However, reducing the scale or otherwise amending the design of a proposed energy infrastructure project may result in a significant operational constraint

and reduction in function – for example, the electricity generation output. (EN-1, Paragraph 5.9.21). Mr Jones noted that the scale of the project was significantly reduced from Hinkley Point C (see **Response to First Written Questions, Appendix 18D [REP2-111]** (46ha reduced to 33ha)). Changing the design of the energy infrastructure project further would result in a significant operational constraint and reduction in electricity output.

- v. From paragraph C.8.82, EN-6, the Government was aware that Sizewell C could have an effect on the purpose of the AONB designation but that is very different from suggesting that its purpose would be undermined. In that context SZC Co. has worked carefully to avoid that outcome. The high-quality design and the approach to Sizewell C will allow the AONB to continue to deliver its statutory purpose in the same way that it does whilst hosting Sizewell B.

1.2.6 Mr Jones noted that the Appraisal of Sustainability: Site Report for Sizewell (November 2009) sets out the key assumptions used in the site level assessment for the Sizewell site at Table 1.2. The base case for assessments was for one nuclear reactor, but for Sizewell it was assessed on the basis of ‘*at least one reactor*’. Paragraph 2.3.4 of NPS EN-6 also states that the SSA was carried out on the basis that additional land for (e.g.) construction activity beyond the nominated site boundary would be required as it was considered by Government to not be reasonable to expect full details at that stage.

1.2.7 HPQC on behalf of SZC Co. emphasised the need to understand the specific differences between the policy test for major development in AONBs set by paragraph 5.9.10 of EN-1 and the equivalent test set by paragraph 177 of the NPPF. The policy in EN-1 was set having regard to the specific circumstances of the development being contemplated in the suite of Energy NPSs, including NPS EN-6 with its identification of Sizewell as a potentially suitable site for a new nuclear power station notwithstanding its location within an AONB.

1.2.8 He explained that where paragraph 5.9.10 of EN-1 requires consideration to be given to whether the development is in the public interest, and provides that this should include an assessment of the need for the development, including in terms of national considerations, a footnote has been added which does not appear in paragraph 177 of the NPPF (footnote 128). Footnote 128 states that national considerations should be understood to include the national need for and contribution of the infrastructure to the national economy as set out in Part 3 of this NPS and the contribution of the infrastructure to the national economy.

- 1.2.9 Similarly, where the second bullet point requires a consideration of the cost of, and scope for, developing elsewhere outside the designated area or meeting the need for it in some other way, the following text has been added which does not appear in the equivalent bullet point in paragraph 177 of the NPPF: *'taking account of the policy on alternatives set out in Section 4.4'*. In that way, the Government has made clear that when this element of the policy falls to be applied in a case such as this, the ExA should follow the principles established in section 4.4 in respect of suggestions that alternatives outside the AONB should have been pursued (whether in respect of the NSIP or any associated development).
- 1.2.10 HPQC also drew the attention of the ExA to the case of *Joan Girling v East Suffolk Council* [2020] EWHC 2579 Admin ("**Girling**") which helpfully examines the concept of exceptional circumstances in the context of AONB policy. *[A copy of the judgment in Girling is attached at **Appendix B** to the **Written Submissions arising from ISH5** (Doc Ref. 9.52) along with a summary of the key points held in that case.]*
- 1.2.11 Mr Alister Kratt on behalf of the Applicant stated that further detail on SZC Co.'s position can be found in the following documents:
- [\[REP2–100\]](#): Responses to the Examining Authority's First Written Questions (ExQ1) - Volume 1 in relation to the following ExQ1 question:
 - LI.1.54 – Changes to proposed development AONB Characteristics
 - [\[REP3–046\]](#): Comments on Responses to Examining Authority's First Written Questions (ExQ1) - Volume 1 - SZC Co. Responses in relation to the following ExQ1 questions:
 - LI.1.2 – AONB Adverse Effects
 - LI.1.3 – AONB Heritage Coast
 - LI.1.27 – Operational Effects AONB
 - [\[REP3–044\]](#): Comments on Councils' Local Impact Report:
 - LIR Chapter 6: 1A,1B,1C,1D
 - LIR Chapter 7: 7.3.2 – 7.3.16
 - [\[REP3–042\]](#): Comments on Written Representations:
 - Chapter 4 – ESC

NOT PROTECTIVELY MARKED

- Chapter 7 – AONB
- Chap 10 – National Trust
- Chap 11 – Natural England
- Initial Statement of Common Grounds:
 - [\[REP2-076\]](#): East Suffolk Council and Suffolk County Council
 - [\[REP2-071\]](#): Natural England
 - [\[REP2-084\]](#): Suffolk Coast and Heaths AONB Partnership
- Supporting Figures to the Environmental Statement landscape and visual assessment at:
 - [\[APP-220\]](#): Volume 2, Figures 13.6A (Zone of Theoretical Visibility (Construction)) and 13.6B (Zone of Theoretical Visibility (Operation))
 - [\[APP-220\]](#): Volume 2, Figure 13.8 (Visual Receptor Groups Detail)
- Supporting Figures to the Environmental Statement Addendum landscape and visual assessment at:
 - [\[AS-192\]](#): Volume 2, Figures 2.8.1 to 2.8.4 (Additional Construction Zones of Theoretical Visibility Studies).

1.2.12 Mr Alister Kratt continued to make the following points:

- a) Regarding the LVIA: the methodology and assessment outcomes are agreed by East Suffolk Council/Suffolk County Council (ESC/SCC) including the assessment of impact on Suffolk Coast and Heaths AONB (SCHAONB), and the SOCG and LIR acknowledges this. In the case of Natural England (NE) they also agree with all matters apart from the judgement on the overall impact on the SCHAONB [a point which is addressed at 1.2.11(e) below].
- b) Understanding the AONB: in the LVIA the nature, extent and significance of effects of the proposals during construction and operation on the SCHAONB is described and informed by a full appreciation of the AONB's documented natural beauty and special qualities. LDA Design's work on natural beauty and special qualities indicators was developed in close consultation with the SCHAONB Partnership and is agreed and adopted by SCC/ESC and

SCHAONBP and established a baseline to both inform design and assessment as part of an iterative process.

- c) The geographic extent of effects: the assessment describes the geographic extents of significant and non-significant landscape and visual effects and impacts on the SCHAONB during construction and during operation. The assessment considers visual and physical impacts on the landscape and consideration of the agreed natural beauty and special qualities indicators of the SCHAONB. It is considered that the visual effects define the largest extent of effect. The worst case extents during construction where the LVIA records significant effects (i.e. Moderate significance) can be defined by an area of approximately 12 km² of the AONB (to include Visual Receptor Groups 5, 8, 7, 11, 12, 14 and 15) extending: north at Coast Guard Cottages - 3km from main site; east and seaward - 2km buffered; south and in the vicinity of Sizewell Gap - 2km; and west defined by bridleway 19 - 2.5km.
- d) Wider AONB impacts: the *'impacts on the wider AONB as a whole'* are not matters relating formally to the LVIA judgements and are more closely related to matters of perception or socio-economics. The wider functioning of the designated area is not fundamentally impacted as a result of the proposal (construction or operation) and that the Natural Environment Improvement Fund correctly provides mitigation for the identified residual impacts (significant and not significant) providing resilience to the AONB. The point raised by ESC/SCC regarding judgements on the extent of impact on the AONB was directed at the Non Technical Summary of the ES rather than the LVIA and this was acknowledged in recent discussions regarding the emerging SOCG with ESC/SCC. The landscape and visual assessment clearly and correctly sets out and acknowledges the more significant effects on the AONB.
- e) Shift in character from Natural Beauty to Energy Infrastructure in what NE call the *'narrow neck'* of the AONB and references to *'industrialisation'*: Mr Kratt explained that he did not agree with NE that Sizewell C could *'shift its landscape character from one of principally natural beauty to one which is primarily associated with energy infrastructure'*. Nor did he consider that the addition of Sizewell C represents the *'industrialisation'* of the coastline. The expansive coastal setting of the Sizewell C site will remain dominant and the landscape and seascape character will prevail and this includes consideration of views for example experienced from Coastguard cottages VP17. The naturalising of the EDF Energy

estate will provide landscape resilience and be better aligned to the AONB character in the longer term.

- f) Setting and supporting landscape: Mr Kratt acknowledged that development in the setting of an AONB can harm the AONB. Setting relates to the nature of views in and out of the designated area and how land adjoining the AONB plays a part in its natural beauty and how any development for example interacts with this. There is no formal boundary to the setting of the AONB. In the case of the Suffolk Coast and Heaths AONB, it is a coastal landscape and views up and down the coast and offshore are important characteristics with the inland extent limited (and drawing on Walmore Report, the AONB is limited in its extent as defined by its geology - The Sandlings). By example, the Accommodation Campus adjoins the AONB boundary and lies in the setting of the AONB given its visual relationship to the AONB and the design response has had regard to this. Mr Kratt submitted that land within the setting of an AONB can play a supporting role to the designated area, as set out in NE's written response. He stated that land adjoining the AONB during construction and operation, would continue to play this supporting role where the visual relationship defines it and where it is not subject to temporary construction activity, with the wider landscape immediately outside the AONB remaining largely '*intact*'. This is what was meant by the '*buffering*' of the AONB in the SZC Co. responses included within the Initial Statement of Common Ground [\[REP2-071\]](#).
- g) Statutory purpose: The statutory purpose of the AONB is defined as '*to conserve and enhance the natural beauty of the AONB*' (Ref para 85 Countryside and Rights of Way Act 2000). Whilst significant effects arise from the proposal, as a whole Mr Kratt considered the AONB would continue to perform its statutory purpose - to protect the land to conserve and enhance its natural beauty. In the short term during construction, the effects are at their widest effect but localised and for a defined period and are reversible. Mr Kratt noted that Sizewell B was built and delivered within the designated area and has essentially integrated as part of the AONB and I consider that Sizewell C would be no different. It was agreed that photographs of Sizewell B under construction would be provided, which will be included in the Deadline 6 submission. In the long term during operation, the geographic extent of effects of SZC reduces with the behaviours of the project in the broader landscape aligning with Sizewell B and a material benefit of the '*naturalising*' of the EDF

estate to align with the character of the AONB Sandlings landscape in the long term. This is a point noted in the LIR [\[REP3–044\]](#).

- h) Design response to AONB: Mr Kratt explained that he and Mr Ewan Jones of Grimshaw Architects have given careful and full consideration to the design of the Sizewell C proposals within the AONB (and Suffolk Heritage Coast) and with regards to its visibility (including in views from locations along the coastline, inland and offshore) and the surrounding built and landscape character, through an iterative design process. Mr Kratt and Mr Jones have been given extensive leadership in the project team to drive design quality and proper consideration of design outcomes and scheme effects from their earliest involvement to the extent it is reasonably practicable.
- i) In landscape terms: to retain a natural appearance to the coastline with the dune sea defences; reduce footprint of the main facility in the AONB (Hinkley Point C at 46ha vs. Sizewell C at 33ha); the consolidation of operational car parking and outage car parking into a single location at Goose Hill, rather than distributed across the site as at Hinkley Point C; address specific colour responses in response to the AONB; and secure widespread naturalising of the EDF estate landscape from intensive farming to land cover more closely aligned to the Sandlings landscape character.
- j) In terms of building design: to deliver good building design working to the high bar behaviours of Sizewell B in the landscape as far as is practicable.
- k) Delivery of good outcomes and having ‘regard’: Accepting the LVIA records significant adverse effects during construction and operation, it is important to note that the project delivers much benefit to landscape of AONB across the estate with proposed ‘naturalising’ which formed part of the earliest vision and via the proposed Natural Environment Improvement Fund which has been structured with my support to provide resilience for the AONB landscape to address residual effects.

1.2.13 In conclusion, Mr Kratt stated that he considered that LDA Design has had the authority to properly influence relevant aspects of the project having regard to the purpose of conserving and enhancing the natural beauty of the AONB. This is demonstrated in the design process and final design outcome, and this is exceptional. This regard is also reflected in ESC's and SCC's involvement in the process with whom LDA has worked for approximately 10 years from the establishment of early design principles and assessment methodology to the point reached now in the emerging SoCG.

1.2.14 A number of interested parties identified the importance of the Natural Environment Fund in mitigating or ‘*compensating*’ for the visual impact of the project generally and specifically on the AONB.

1.2.15 John Rhodes for the Applicant explained that provisions for the Fund were set out in draft in Schedule 11 of the **draft Deed of Obligation** (Doc Ref. 8.17(E)), although SZC Co. is continuing to discuss the approach to the Fund with stakeholders including the AONB Partnership whose concerns were reflected in relation to a ring-fenced element to fund; officer resource provided to the Partnership; the criteria for the fund; and the make-up of the Awards Panel. Criteria are aimed at mitigating impacts of the development, including the Associated Development. The structure and approach is draft currently – it is considered to be the best approach at the moment but it is evolving and discussions are continuing. The Fund is a landscape mitigation fund, not an ecology fund. Ecology impacts have their own mitigation but SZC Co. can see indirect benefit to ecology through landscape enhancements which, for example, connect fragmented landscapes, so ecology is one of the stated criteria for the Awards Panel to consider. In relation to the length of the Fund, that is to be determined but SZC Co. believe it is better for it to be a front-loaded construction phase fund, so that mitigation can be established early on.

1.2.16 In accordance with NPS policy, Mr Rhodes explained that it is conceived as a mitigation fund, delivering relevant and meaningful landscape mitigation but not as a compensation fund. The size of fund is still subject to discussion and SZC Co. remains very open to how the administration of the fund can be improved.

1.3 **Agenda Item 3: Landscape and Visual Impact Assessment (LVIA)**

1.3.1 Mr Kratt made the following points:

- a) Visualisations: construction and operation phase visualisation approach (location and methodology) were agreed by LVIA Consultees (which includes the Suffolk Coast & Heaths AONB Partnership).
- b) HPC Report including site reference photographs: In response to comments from the SCHAONB [RR-1170], Mr Kratt did not consider preparation of additional construction visualisations is necessary to illustrate effects/inform judgements given limits of Wylfa identified by the applicant and the acknowledgement by ESC/SCC that the provision of parameters information in the DCO were sufficient to inform judgements. Mr Kratt noted that ESC/SCC/AONBP were consulted on the **HPC report** [\[REP2-111\]](#): Appendix 18E to the SZC

Co. response to ExQ1]. Mr Kratt committed to taking instruction from SZC Co. regarding whether to provide to the examination additional visualisations to support understanding but reemphasised that this was not considered necessary by ESC/SCC to inform the acceptance of judgements relating to significance of effects. Mr Kratt also committed to taking instruction from SZC Co. regarding the ExA's request for clarity on the status and timing of the cover image on application documents. *[Refer to the **Written Submissions arising from ISH5** (Ref Doc 9.52) for details.]*

- c) Fit for purpose: Mr Kratt considered that the LVIA is fit for purpose, appropriate and robust. ESC/SCC LV 4 SoCG confirms the position (+ verbal updates) and NE also agree (except wider AONB impact).
- d) Agreed scope and methodology: The scope of LVIA was established through a formal EIA scoping process and the approach to the LVIA and methodology adopted were agreed through consultation with LVIA Consultees.
- e) Agreed judgements: The assessment judgements are agreed by ESC/SCC and NE (in their case except regarding the wider AONB).

1.4 Agenda Item 4: Role of a design champion, design review panel and design code

The importance of good design and how it is embedded in the proposals

1.4.1 Mr Kratt explained that in his professional view he considered the proposal constitutes good design and emphasised that good design does not stop at submission of the DCO application including any amendments made to it during the Examination. Governance of good design is key and is recognised by the NIC and others. What constitutes good design is as much about process as it is about product or outcome. Mr Kratt stated that he is aware that continuity of design is important.

1.4.2 Mr Kratt explained that good design is not only about operational/permanent design outcomes but also about temporary ones during construction and how things are planned, to the extent it is possible. Good design refers to individual parts of a project, but also the whole project including its masterplan and the relationship of the parts, and design process - the role of consultation in the 'front loaded' NSIP regime and onwards into construction.

1.4.3 Mr Kratt explained that the **Design and Access Statement** [[APP-587](#)] and the design governance that is set out within that document with regard to the role of Design Principles, and the structure of Requirements, represents

a very sound basis as a starting point, accepting that there are additional questions being raised regarding the role of design panels, design champion and design codes.

1.4.4 The design governance position is reflected in DCO submission. The submission provides considerable and proportionate design information to support good design delivery. Mr Kratt explained that whilst some matters remain in discussion, including additional Design Principles, some of the key points are:

- the extent of detail committed to in the DCO application especially for the main buildings;
- the approach to Requirements to structure the role of the Design Principles;
- the fact that the strategic and detailed Design Principles have been defined and agreed with stakeholders at all stages and for all stages of the project; and
- LDA has had extensive access to the design evolution to date, including in relation to constructability.

1.4.5 Mr Kratt explained that the design principles were conceived with a view to providing design continuity for the life of the project and to form the basis for good design practice. The principles were agreed with consultees early in the project.

1.4.6 The Design Council reviews provide an independent perspective on the design and SZC Co.'s consultation with it is a recognised part of good design process. The Design Council's reports are appended to the **DAS** [[APP-587](#)] and are positive. Mr Kratt drew the ExA's attention to examples of good design in the proposal presented in the DAS.

1.4.7 Mr Kratt pointed out that SCC/ESC recognise in the LIR [[REP1-045](#)] the qualities of the design and also recorded in the response to the LIR [[REP3-044](#)]. Examples of references are found at:

- a) 14.12- 14.15 – building design
- b) 14.33 - accommodation campus
- c) 14.39 - embedded mitigation
- d) 6.57 - outage car park (ESC)
- e) 6.18 and 6.33 - estate wide strategy

1.4.8 Mr Kratt explained that he recognised the need for design governance and control to provide reassurance on delivery of good design for the Secretary of State and ESC but maintained that our suggestions, as set out in response to ExQ1 LI.1.1 at Appendix 18.B of the **SZC Co. Responses to the ExA's First Written Questions** [\[REP2-111\]](#) (clear design governance, continuity of the SZC Co. design team, funding of appropriate planning and design officer resources to properly support the discharge of requirements, use of the DAS rather than an additional Design Code, etc), are preferable and better reflect workable outcomes. However, the Applicant was keen to explore matters in constructive dialogue with ESC/SCC and an update will be provided at Deadline 7.

Responses to matters raised by stakeholders

- 1.4.9 Replication: the Sizewell C proposals are not a straight replication of Hinkley Point C and responses to this point addressing landscape and building design responses specific to Suffolk and the AONB, were provided at **ExQ1 LI.1.21** [\[REP2-111\]](#).
- 1.4.10 Accommodation Campus: the campus design is not a replication of Hinkley Point C and has been designed as a bespoke response to the site context and brief with 12 design principles to guide its design. The design responds in massing and masterplan layout to address amenity and visual considerations from Eastbridge Road and the AONB (refer to **DAS Appendix A** [\[APP 585- APP-587\]](#)).
- 1.4.11 Road route alternatives: LDA was involved in the route alignment selection for the highway schemes and route design, working with the project engineering team on the preferred options and working in accordance with Design Manual for Roads and Bridges guidance. The highways schemes have not been subject to design review but have been consulted upon especially with ESC and SCC.
- 1.4.12 Mitigation and design quality: the proposals embed mitigation as part of the integrated design approach which is outlined in the **DAS** [\[APP 585- APP-587\]](#) and is reflected in the Design Principles which supported governance

of design evolution prior to the submission of the DCO application and are intended to provide continued support.

- 1.4.13 Control of design is expressed in the DCO and **DAS** [[APP 585- APP-587](#)]:
- Requirements provide the formal route for applying the Design Principles for ongoing design submissions;
 - Chapter 5 - Strategic and Detailed Design Principles for all elements including buildings where they are not applied for in detail, and landscape matters recorded in Chapter 8 where all landscape design is presented as illustrative and subject to Requirements' submissions to accord with Design Principles.
 - Appendix A - Design Principles for Accommodation Campus including Statement of Compliance.
 - **Associated Development Site Design Principles** [[REP3-023](#)]

Responses to matters raised by the EXA

- 1.4.14 There was a discussion about the Accommodation Campus 'follow up' design review and it was noted that a decision on this matter can be made on the recommendation of ExA or SZC/ESC (see ExQ1 Appendix 18B LI.1.1 and 1.2.24 [[REP2-111](#)]).
- 1.4.15 With reference to National Infrastructure Commission Design Principles and the National Design Code, the ExA raised question at ExQ1 LI1.0 having regard to best practice documents. It was noted that a response was provided at **ExQ1 Appendix 18A** [[REP2-111](#)] and considered the Sizewell C Design Principles and structure of approach is well aligned to the extent its appropriate. It was noted that SZC Co. worked hard with ESC and other consultees over a long period of time to agree a comprehensive set of Design Principles to inform design and before the guidance references provided came out.
- 1.4.16 The ExA requested a track change version of the DAS. It was confirmed that a tracked change version of the DAS is being maintained and will be issued at Deadline 5 along with updates.

Design Review Panel; Design Champion and Use of Design Codes

- 1.4.17 Three matters raised in relation to possible design governance were addressed in response to **ExQ1 LI.1.1 Appendix 18B** [[REP2-111](#)].

Design Review Panel

1.4.18 It was suggested that there would be a '*design review panel*' to provide a '*critical friend*' role - such a role would provide comment on the development of sustainable design proposals.

- It was noted that SZC Co. is in dialogue with East Suffolk Council/Suffolk County Council regarding the funding of appropriate planning and design officer resources to properly support the Requirements discharge process for the project.
- It was noted that SZC Co. has been in recent discussions with ESC regarding the use of a design review panel and the applicant is content to accept the use a panel to provide independent support for the processing of design submissions defined by the Requirements. The exact nature of the panel, Suffolk Design Review Panel (established by Suffolk branch of RIBA) or a bespoke panel established by the Design Council is subject to ongoing discussions.
- If a design panel is to be agreed it will be key to understand its authority i.e. advisory/ consultative etc.

Design Champion

1.4.19 The idea of a '*design champion*' was suggested - such a role would advise on the quality of sustainable design and the spatial integration of the both the Main Development Site and Associated Development Sites.

- It was assumed that the role of a design champion function is to reflect the expectations of the NIC with reference to board representation (applicant side) on design matters and to ensure design remains a key consideration in project delivery and work meets appropriate design standards (whatever the mechanism for delivery). SZC Co.'s suggestion provides for design continuity rather than a '*champion*' commencing from a '*standing starting*'.
- It was considered that the retention of the key members of the design team in a '*design guardianship*' role marks the Applicants' commitment for consistent high quality advice and direction in delivering good design through the discharge of requirements and that this would complement properly qualified officer time funded by SZC Co. and review panel involvement, working in conjunction with key stakeholders including the AONB Partnership in a consultative role as ESC may see fit. The exact mechanism requires definition which SZC Co. will advise on in due course. The designers would

have a defined role as part of the project delivery process and report to the Chief Planning Officer at EDF.

- It was noted that the Design Council has recognised the quality of the design and design process in its 2019 design review and the governance proposed above will build on a culture of design quality which has been established within the project and which SZC Co. will retain.

Design Code

- It was suggested that the production of an approved '*design code*' or '*design approach document*' which would establish the approach to delivering the detailed design specifications to ensure good quality sustainable design (as approved in the Hinkley Point C Connector Project (EN020001)).
- The **DAS** presents a comprehensive explanation of the design approach and outlines a commitment to quality design. It was not considered necessary that an additional control document is necessary.
- SZC Co.'s representative opined that the DAS provides a greater level of detail than the HPC connector document precedent "Design Approach to Site Specific Infrastructure" suggested by the ExA and that the **DAS** could be properly used to support the LPA in consideration of requirement discharge on design matters and form the foundation for ongoing design development/requirement submission by the Applicant.
- It was noted that a code is generally used to provide design control on delivery of multiple/repeat development, such as for new housing on new streets.
- Where necessary the wording of requirements, or additional design principles, could be agreed to secure sufficient design control for areas of remaining detail design approval, based on information within the DAS.
- It was noted that additional requirements have already been offered or are in preparation.
- The Applicant remains in discussion with SCC/ESC on these matters and SZC Co.'s representative considered that the suggestion

provides the basis for further discussions and will provide an update at Deadline 6.

1.5 Agenda Item 5: Outage car park location and use of pylons

1.5.1 On behalf of the Applicant, Mr Richard Jones noted and welcomed ESC's support for the SZC Outage Car Park, which reflects an understanding derived from a close working relationship with both Councils over many years.

1.5.2 He did not consider that there are any realistic alternatives to two outage car parking areas (one at Sizewell C and one at Sizewell B).

1.5.3 Workers need to be able to access the site quickly and safely. Up to 1,000 additional staff are required to work on site at any one time. SZC Co. would need people on-site as soon as possible to fix the problem and get the NSIP back up and running. Anything relying on a bus transfer connection is unacceptably cumbersome and slow and does not reduce risks to as low as is reasonably practicable. It is therefore necessary to have a dedicated Sizewell C outage car park within walking distance of the power station access building.

1.5.4 He considered that exceptional circumstances do exist in the public interest for these reasons. The outage car park is necessary to meet the operational requirements of the NSIP and minimise safety risks.

1.5.5 Further details to support this view are included in **Written Submissions arising from ISH5** (Doc Ref. 9.52). Further details relating to environmental assessment of clashing outages are also included in these written submissions.

1.5.6 HPQC explained that if the ExA is being asked by SCC to consider an alternative to the outage car park location that has been applied for, it needs to explain to the ExA the practical implications of its submissions for the determination of the application, including in particular how it sits with the policy on considering alternatives in NPS EN-1 section 4.4. SCC has not explained if it is asking for the DCO application to be refused because of the proposed outage car park or pylon arrangements. It did not take the opportunity to state its position on this matter.

1.5.7 If (as appears to be the case) SCC is not in fact inviting the ExA to make such a recommendation, it is very hard to see how the points that it is raising in this respect can be regarded as an important and relevant consideration, and/or be given any material weight by reference to EN-1 section 4.4 (or generally).

- 1.5.8 In any event, if SCC wants the ExA and Secretary of State to regard its suggestions of alternative ways of meeting the need for outage car parking and/or export of power to the grid as important and relevant, it must spell out what it says are the implications for the decision to be made on the project which is the subject of the application to be determined and which does not include those alternatives.
- 1.5.9 Assuming that is done (and it has not been so far) SCC also carries the burden of having to demonstrate that the alternative is workable and achievable, and that it meets the EN-1 policy requirements in order to be given any weight. For example, paragraph 4.4.3 of EN-1 states that alternative proposals that are vague or inchoate should be disregarded. That is the case in respect of SCC's 'alternative' arrangements for the provision of outage car parking. Similarly, paragraph 4.4.3 provides that the ExA should be guided in considering alternative proposals 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. If the possibility of an alternative proposal aligned with SCC's preferences is considered against that principle, it is clear that it would fail. Refusing development consent for the current proposal in the hope that such an alternative would come forward in due course would inevitably lead to substantial delay, even if (contrary to SZC Co.'s evidence) this did prove to be a workable and practical proposition. If, as seems much more likely, SCC's proposed alternative did not prove to be workable and practical, there would be no gain whatsoever for the price paid to the public interest from delaying the scheme.
- 1.5.10 In response to SCC's contention that its preferred approach to outage parking would only require a bus shelter and turning area within the AONB, HPQC drew attention to the fact that any facilities on site for providing shelter from the elements to outage workers would need to be of a scale to accommodate approximately 1,000 people. This would be in addition to the need for facilities and parking to accommodate the need to transport equipment and supplies to the site (which could not be transported by bus).
- 1.5.11 Mr Young noted that a full explanation of the option evaluation process for the power export connections is given in the Technical Recommendation Report **Appendix 5E** of SZC Co's **Response to ExQ1s** [[REP2-108](#)].
- 1.5.12 Responses to the questions raised specifically on the potential suitability of Gas Insulated Lines (GIL) are detailed in SZC Co's response to question ExQ1 LI.1.50.
- 1.5.13 In relation to the question of whether the use of alternative gas make gas insulated lines more acceptable, Mr Young noted that the insulating gas

traditionally used in GIL (sulphur hexafluoride) is a very damaging greenhouse gas, but alternatives are now coming onto the market which are more environmentally friendly.

- 1.5.14 However, these alternative gases would not make GIL more acceptable at Sizewell C, as the choice of insulating gas does not materially influence the option evaluation for the power export connections.
- 1.5.15 In relation to security concerns in respect of the use of the gas insulating lines and whether there are alternative designs available that would be able to remedy that security concern, Mr Young noted that the security issue relates specifically to the sterile zone which runs around the perimeter of the site inside the fence. GIL could not be installed along this sterile zone either above ground or below ground without compromising its security functions. These are described in detail in the Technical Recommendation Report. This is a very important concern that materially influenced the option evaluation process.
- 1.5.16 In relation to whether consideration is being given to a hybrid approach of the gas insulated lines, Mr Young commented that the potential to employ a ‘*hybrid*’ solution by combining overground and underground installation techniques for GIL was also considered. This does not make the option more feasible, as the GIL would always need to traverse parts of the site where both overground and underground constraints prohibit installation without unacceptable impacts on operations or security.
- 1.5.17 In relation to why the pylons that are currently on site and the pylons in the application of a different design, Mr Young noted that the pylons proposed to be built within the footprint of the Sizewell C operational site differ slightly in design to those present at Sizewell due to differences in how the conductors are arranged. Both types are steel lattice towers.
- 1.5.18 The existing pylons are each required to carry two electrical circuits (each circuit consisting of three conductor bundles, held in a vertical formation down each side of the pylon). The proposed pylons are each required to carry just one electrical circuit (consisting of three conductor bundles, held in a horizontal formation).
- 1.5.19 The proposed pylons are the standard solution for a single circuit connection. Double-circuit pylons of the type that are currently on site would not an appropriate technical solution for new connections within the Sizewell C footprint.
- 1.5.20 The horizontal configuration of the conductors allows the overall height of the pylons to be minimised.

- 1.5.21 The Examining Authority noted that [REP2-189](#) dated October 2020 says Applicant is exploring opportunities to reduce tower heights. It was asked whether the reduction made in the change request or are further changes anticipated. Mr Young commented that no further changes are anticipated – that reference is to the one brought forward in the change request.
- 1.5.22 In relation to the question of whether it would be possible for the outage staff to use a mix of the new main car park on site and part of Sizewell B's car park, Mr Lavelle noted that outages by their nature can be planned or unplanned. In the instance of the site, SZB could be having a planned or unplanned outage at the same time as the SZC station. It was noted that having a coinciding planned or unplanned outage would give rise to a parking crisis if car parks were shared. Mr Lavelle noted that it was the intention to avoid clashing outages but there is a risk that they occur.
- 1.5.23 Mr Lavelle noted that generally in an outage up to 1,000 people extra arrive, which includes a lot of contractors that bring their site vehicles to the car park full of equipment and components that need to be trans shipped into the site and carried in.
- 1.5.24 With both stations having an outage there would not be enough space. And generally during an outage, both the operational car park and the outage car park become full to almost overflowing.
- 1.5.25 In relation to the likelihood of outages occurring at the same time, Mr Lavelle noted that the aim would be to keep outages apart simply because of the demand on local labour as there is a lot of local level work which comes from outages, but inevitably outages either forced outages or unplanned outages where the plant breaks down and staff have to be brought in rapidly to repair whatever has broken and that often involves a prolonged shutdown. Although unlikely, it can happen and it will need to be prepared for.
- 1.5.26 Mr Kratt noted that:
- a) ESC accepts the justification and design response and SCC to the extent if its justified, then the most that can be done has been done to deliver a good design and this had been discussed in the last SOCG meeting.
 - b) The design responds to Goose Hill woodland as part of the AONB extending the woodland to form a framework within which car park is

located. The design response is appropriate to AONB and provides for different intensities of use reflected in parking surfacing

- c) Lighting will be kept to a minimum for safety and the lighting design will use the Lighting Management Plan (LMP) which is considered sufficient by ESC

1.5.27 It was confirmed that there is an intention to supplement the planting scheme for the outage car park as proposed under the Sizewell B scheme to 'soften' and better integrate it in the event that it is not constructed.

1.6 Agenda Item 6: Main development site design considerations

A - Additional design principles

1.6.2 Mr Kratt provided an update on the additional Design Principles and DAS status.

1.6.3 Mr Kratt noted that additional design principles have been considered and responses provided for:

- ISFS - Amended Design Principle 57 issued May 2021 with DAS Second Addendum
- Coastal – additional Design Principle 75 issued at D2
- Campus – additional Design Principles set out in response to ExA Q1 LI.1.41 at D3, which will be included in the Design and Access Statement in D5 submission.
- Main Access Building - Design Principle, to be provided within the Design and Access Statement in D5 submission.
- SSSI Crossing – to address responses from AONBP to LI.1.47 at D3, a new Design Principle was provided. This will be included in the Design and Access Statement in D5 submission.

1.6.4 There have been three addendums to the **Design and Access Statement** (DAS) issued since the DCO submission [[AS-261](#), [REP1-005](#) and [REP2-040](#)]. A full DAS update (Revision 02) and mark up are provided at Deadline 5 to assist the ExA (Doc Ref. 8.1(A)).

B- Design and scale of turbine halls, OSC and skybridges

- 1.6.5 There was limited discussion on this matter, however, the ExA stated that any questions on this issue would be put to the Applicant in the next round of written questions. .

C - Colour considerations and finishes

- 1.6.6 Ewan Jones on behalf of the Applicant stated that the concrete structures have very specific performance requirements that require high quality concrete. During design development appearance issues were challenged by the architectural team in discussions with the engineering team. Cladding ruled out due to need for regular inspection of the concrete surface (e.g. to check for any signs of cracking or other deterioration).
- 1.6.7 The exact mix of concrete is crucial to meeting the demanding performance requirements, including durability.
- 1.6.8 The potential use of dyes within the concrete was explored but ruled out due to the risk that they change the chemical composition of the concrete and then have an unpredictable impact upon performance.
- 1.6.9 The concrete colour is defined by the mix of ingredients used. In addition to the cement, the colour of aggregates in the mix has a substantial effect so the aggregate source is important.
- 1.6.10 Concrete will be mixed on site with close quality control by the contractor.
- 1.6.11 Longer term, the appearance of concrete depends on how it ages or weathers. This is dependent upon multiple factors including exposure to weather and orientation, for example a near horizontal surface (e.g. the top of the dome) will weather differently to a vertical wall.
- 1.6.12 The quality of surface finish provided by the formwork is also important as it affects how dirt or organic growth might be trapped on the concrete.
- 1.6.13 Descriptive information about the proposed concrete installation and finishes can be provided. There will be an inspection and maintenance regime for the concrete: further information on that, including any maintenance of appearance, could also be provided.

D - Night-time lighting effects

- 1.6.14 Mr Kratt noted six matters in relation to lighting effects noting that these matters are important given the AONB context having reference to AONB natural beauty and special qualities including tranquillity:

NOT PROTECTIVELY MARKED

- i. SCC/ESC confirm their agreement to the lighting assessment in the LVIA.
- ii. **DAS** Section 7.1 [[APP-586](#)] provides an outline of the lighting strategy and confirms that the existing lighting environment of the AONB is generally an E1 Environment Zone (an area with intrinsically dark landscape) - the proposals have been developed cognisant of that dark landscape context.
- iii. The modelling of night-time views is based on close collaboration with Atkins' lighting team and using an agreed methodology and best practice.
- iv. In relation to consideration of the impact of construction lighting on dark skies, it was noted with ref to Fig 13B.2 in the LVIA [[APP-218](#)], that Westleton Common is the nearest Dark Sky Site and impacts on this have been assessed. In addition, the team have had positive engagement with Astronomical Society with reference to understanding issues relating to lighting and dark skies and understand that they were comforted by the team's understanding and technical approach to managing lighting effects, lighting design and how measures to control construction lighting by reference to HPC have been deployed.
- v. A Lighting Management Plan is in place and the controls are considered appropriate by ESC. The Lighting Technical Note has provided further clarity on modelling which stakeholders including SCC/ESC have found helpful. Requirement 9 provides for the Lighting Management Plan (LMP) and that ESC endorse its content and its ability to control lighting along with the Construction Phase Management Plan.
- vi. With reference to the provision of 9 night-time views of the construction site (ExQ1 LI.1.25), the proxy for visualisations using the HPC construction illustrations are helpful and ESC/SCC and the AONBP consider the document helpful to inform understanding. In note and emphasise that ESC/SCC found the existing information sufficient to adequately inform and confirm the LVIA judgements prior to the provision of the HPC document. The Applicant will

consider the provision of night time visualisations. Refer to **Written Submissions arising from ISH5** (Ref Doc 9.52).

E - Proposed design of Sizewell C power station and effect on 'iconic' status of Sizewell B power station

- 1.6.15 In response to comments made by Dr Bowes (on behalf of TASC) about transferring a generic design from HPC to Sizewell, HPQC explained that Dr Bowes had not engaged with the evidence provided which sets out detailed descriptions of the significant differences between HPC and SZC and how the proposed design of SZC responds to Suffolk and the AONB context.
- 1.6.16 It was explained that SZC Co. would respond in writing to the specific suggestion about the use of alternative reactor technology on the Sizewell site. Refer to **Written Submissions arising from ISH5** (Ref Doc 9.52).
- 1.6.17 HPQC explained (by way of an initial overview) that there is no alternative proposal for a twin reactor using different technology that has been presented to the ExA (whether on behalf of TASC or anyone else) and shown to be both workable and clearly preferable. Vague and inchoate alternatives such as this, which would also inevitably fail to deliver the same capacity in the same timescale, would fail the guiding principles in paragraph 4.4.3 of EN-1 and can be excluded by the ExA on the grounds that they are not important and relevant. It should also be noted that consideration of alternatives must be proportionate (see paragraph 5.9.10 of EN-1).
- 1.6.18 Ewan Jones on behalf of the Applicant stated that architectural design work started with analysis of the built context, alongside understanding of the landscape context. Section 2.11 of the DAS looks at SZA and SZB and their influence and Section 6.11 of the DAS looks at the composition of A, B and C together as three generations of power stations. That analysis showed that the SZB dome is the dominant feature.
- 1.6.19 SZC Co. used the viewpoints established through the LVIA to examine the impact of the SZC structures through extensive 3-d modelling and photomontages. This established that the landscape form largely screened views from inland but views along the coast, especially from the adjacent coastal path and from further north along the coast would be the most important to consider in the design of the new station. In those views the turbine halls are the most prominent structures.
- 1.6.20 The technology of SZC is different and that should come through in the architecture. It is not, and cannot be, a replica of SZB.

- 1.6.21 SZC Co. studied how SZB works within its landscape. It is seen as a relatively simple form and provided some important lessons learnt for SZC, whilst not attempting to reproduce SZB. Landscape screening (inland and coastal defences) screens the ancillary buildings and smaller scale industrial clutter. The turbine halls have been simplified as much as possible and then attention paid to a smaller scale of design detail. For example, SZB deliberately manipulates perceptions of scale in its design: the red tubular rail on the building parapet looks like a simple handrail but is a much larger diameter tube. This is reinforced by ensuring that there are no human-scaled features visible within the buildings (windows, doors) and no obvious signs of human activity.
- 1.6.22 Alongside creating ambiguity about scale, this responds the tranquillity of the AONB. Avoiding windows facing the coast also assists with maintenance of dark skies and minimising SZC's impact on coastal viewpoints at night. Those sensitive features of SZB are recognised and continued in the designs for SZC, whilst using different technology where appropriate. The proposed cladding is aluminium, like SZB but with an anodised finish that will be more durable than the coatings used for SZB where the blue areas, in particular, have suffered from fading.
- 1.6.23 Ewan Jones on behalf of the Applicant continued to note that the Operations Service Centre (OSC) sits between the two turbine halls. The feedback from Design Council CABE queried the amenity created for the workforce in the OSC through our decision to avoid any windows in the east (coastal) façade. SZC Co. disagreed with CABE feedback that windows should be provided for coastal views and consider the proposed design to achieve the right balance between the needs of staff and impact on the AONB views.
- 1.6.24 Mr Jones continued to state the scale (height) of the OSC has been reduced compared to HPC whilst including additional facilities within it.
- 1.6.25 The office spaces are designed to follow British Council for Offices (BCO) guidance and benefit from a large daylight atrium as well as windows to the other three elevations. The floors are planned so that 'black box' functions that do not require windows are placed on the eastern (coastal) façade.
- F - Proposed design of Sizewell C power station and effect on 'iconic' status of Sizewell B power station*
- 1.6.26 Mr Kratt made three points:
- i. The setting of SZB will alter and it will be seen in context of three periods of power generation but it will remain visible and distinct. Detailed Design Principle 48, notes the need to align the major

structures in close east west alignment with the SZB dome and continue the axis of structures to replicate the behaviour of the structures and Overarching Design Principles 18 – 22 make specific reference to the design response to SZB.

- ii. Opinion is split on whether SZB is 'iconic' and note that in the jointly authored SCHAONB Natural Beauty and Special Qualities Indicators document [APP-217] notes that opinion varies based on the document research undertaken.
- iii. The design of SZB is recognised as good design and establishes a benchmark with important behaviours which SZC seeks to reflect and which are established through detail design commitments and Design Principles (ExQ1 LI.1.21). The '*behaviour*' of the Sizewell C proposals in the landscape is considered an important design consideration respecting the behaviour of Sizewell A and Sizewell B including reflecting a simplicity of profile and the screening of low level clutter at distance by example. This is reflected in a number of the Overarching Design Principles (Doc Ref. 8.1Ad2(A)): 18, 19 and 20 and coastal defence Design Principles 73/74.

In response to questions raised by the EXA

- 1.6.27 Section 2.11 of the DAS looks at SZA and SZB and their influence and Section 6.11 of the DAS looks at the three stations together. The SZB dome is a dominant feature. The technology of SZC is different and it is correct that this should be reflected in its architecture. SZB is a relatively simple form and establishes important behaviours for SZC to echo including securing low level screening of smaller ancillary buildings and the absence of human scaled features to limit the scaling of the buildings.
- 1.6.28 In relation to questions about the design of the Operational Service Centre (OSC) and the position following the Design Council Review, Mr Kratt confirmed the design proposal responds to the issues raised and that the proposal provides good levels of natural daylight for staff. However, the suggestion that views from coastal facing windows would be desirable are not considered appropriate.
- 1.6.29 Analysis of the main structures and their relationship with the context and key views, identified the turbine halls as the most prominent structures within SZC due to their scale and location (DAS Section 6.11,6.12 and 7.2). They were, therefore, subject to very careful design development and scrutiny exploring cladding design and colour etc from long distance and short distance views and in the light of the behaviours of the SZB design. The OSC has an important relationship to these structures.

- 1.6.30 The Operational Service Centre (OSC) has the same strategic location and contains similar engineering functions to those seen at HPC but is a bespoke design for the SZC site (DAS, Section 7.15). Additional functions are housed, to enable the more compact footprint of the SZC masterplan whilst the height of the building is reduced (compared to HPC), to reduce impact on views from and along the coastline.
- 1.6.31 The OSC's location, prominence and operational significance clearly established it as a key visual component deserving special attention as part of an architectural composition with the two turbine halls (DAS, Figure 7.60). There are deliberately devised links between the architectural treatment on the three structures and their linking sky bridges.
- 1.6.32 At a more detailed level, the OSC's internal planning places functions that do not need natural light along the eastern (coastal) elevation. This serves 2 purposes. Following the SZB precedent (**DAS**, section 6.14), the proposals deliberately obscure elements that may provide a clue to scale, such as windows, doors and visibility of staff. This makes the viewer's relationship to the scale and distance of the buildings harder to perceive within the context of a large landscape setting. (At SZB this can be seen, for example, in the 'oversized' red steel tube long the roof parapets: it looks like a handrail but is a much larger diameter). The second purpose is to minimise light spill towards the coast. These aims continue into the north and south glazing of the upper floors of the OSC where vertical blades in the façade restrict light spillage and direct views from the coast (DAS Fig 7.60).
- 1.6.33 The skybridges provide a secure personnel link from the OSC to each turbine hall and reactor (DAS, Figures 7.43 and 7.44). The proposals continue architectural themes from the OSC to provide an opaque façade toward the coastline, again for the two purposes described above (DAS, Figures 7.60).

G - Coastguard Cottages – adequacy of LVIA and proposed mitigation

- 1.6.34 Mr Kratt stated four matters in relation to adequacy:
- i. The issues connected with VP 17 have been substantially addressed in agenda item 2 in relation to the AONB. He noted that the LVIA assessment outcomes are agreed with SCC/ESC and based on the agreed construction phase and operational phase project description

and parameters and embedded mitigation expressed in the detail design and Design Principles.

- ii. It is for ESC to engage with the National Trust with reference to final material colour selection and how this will be appreciated from Viewpoint17 as may be considered appropriate.
- iii. The Applicant has agreed to provide construction phase visualisations for Viewpoint 17 to aid the National Trust to better understand the effects on Coast Guard Cottages.
- iv. Matters relating the residual effects are addressed by the Deed of Obligation -Natural Environment Fund and by the National Trust Resilience Fund.

H - Design and location of beach landing facilities and additional suggested requirement

1.6.35 The ExA queried whether consideration had been given to moving the two BLFs closer together.

1.6.36 Mr Jones referred the ExA to a General Arrangement Plan [[PDA-005](#)] for useful context on the marine infrastructure required in this location. The location of the temporary BLF in relation to the permanent BLF is constrained to the south by:

- two intake tunnels;
- two fish return tunnels;
- one outfall tunnel; and
- sizewell B cooling water infrastructure.

1.6.37 The location to the north is constrained by the Construction Drainage Outfall and the distance required for tug boats to safely manoeuvre and turn the barges at the permanent BLF.

I - Location of accommodation campus, additional design commitments and requirement

1.6.38 Mr Kratt provided an update under agenda item 6A.

J - Coastal defences – visibility of sheet piling, use of rock armour on the Northern Mound and effectiveness of landscaping

1.6.39 Mr Jones summarised the coastal defence design refinements that will be submitted at Deadline 5 to minimise the seaward extent of the Permanent

HCDF, which will remain within the existing Rochdale envelope parameters:

- Paring back the Permanent HCDF at the intersection with the Permanent BLF by approximately 15m. The beach was previously at its narrowest point in this location. This is made possible by removing a turning and an area of hardstanding that was associated with the Permanent BLF on the Northern Mound.
- Paring back the main Permanent HCDF frontage along the beach by approximately 5m.
- Reducing the extent of temporary sheet piled HCDF on the northern boundary with Minsmere and replacing it with early implementation of part of the permanent HCDF in this location.

1.6.40 These changes are shown in Revision 2 of the **Temporary and Permanent Coastal Defence Feature Plans** (Doc Ref. 2.5(A)) to be submitted at Deadline 5. They are further explained in a written submission associated with Issue Specific Hearing 6 – Coastal Geomorphology (Doc Ref. 9.53).

1.6.41 The Permanent HCDF is now typically only 3m further seaward than in the May 2020 design and brings the benefit of not needing adaptation during the lifetime of the power station (including decommissioning), unless climate change occurs beyond the ‘reasonably foreseeable’ scenario. Further detail on that scenario is set out in Section 3.3(a) of the **Coastal Defences Design Report** [[REP2-116](#)].

1.6.42 Mr Kratt noted that the design control and experience is key to the evolution of the operation defences is the retained knowledge from Sizewell N which informs confidence levels in establishing it successfully.

1.6.43 Mr Kratt stated that the design has been the subject of ongoing design development including the **Coastal Defence Feature Report** [[REP2-116](#)] issued in Deadline 3. A further update on the design is due to be submitted at Deadline 5 but will remain subject to the design control of the Parameters, Detailed Design Principles (73/74) and requirement.

K - Location and height of borrow pits/spoil heaps and impact on neighbouring residential locations

1.6.44 In response to a question raised by the ExA on how additional environmental impacts would be taken into consideration should the spoil heaps increase in height during construction, HPQC explained that if the increase in height would exceed the parameters and go beyond what has been assessed and is permitted by the DCO then SZC Co. would need to

make an application to amend the DCO and any environmental impacts would have to be assessed *de novo* accordingly.

- 1.6.45 The ExA stated that there was concern from Mr and Mrs Dowley about the lack of information and requested that the applicant provide a note of the exact types of works and what would be left behind at the end of the construction period. An appendix is provided to the **Written Submissions Responding to Actions Arising from ISH5** (Doc Ref. 9.52).

1.7 Agenda Item 7: Sizewell Link Road

- 1.7.1 This agenda item was not covered in the hearing and will be dealt with at a future Issue Specific Hearing.

1.8 Agenda Item 8: Southern Park and Ride

- 1.8.1 This agenda item was not covered in the hearing and will be dealt with at a future Issue Specific Hearing.

1.9 Agenda Item 9: Two Village Bypass

- 1.9.1 This agenda item was not covered in the hearing and will be dealt with at a future Issue Specific Hearing.

1.10 Agenda Item 10: Mitigation and controls

- 1.10.1 A very brief discussion took place in relation to agenda item 10. Relevant amendments have been made to **draft DCO** and/or are being discussed between the parties. Mr Matthew Shape confirmed that drafting updates would be provided to R14 in relation to '*Unit 1 or Unit 2 whichever is earlier*'. This is provided at Deadline 5. HPQC confirmed that a meeting had been arranged with the Councils on the draft DCO on 27 July, which will hopefully resolve the issues in respect of R22A and R24.