

# APPLICATION STATEMENT

## NON-MATERIAL CHANGE APPLICATION

### HINKLEY POINT C DEVELOPMENT CONSENT ORDER

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## APPROVAL

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# 1 INTRODUCTION AND DESCRIPTION OF THE APPLICATION

## 1.1 Introduction

1.1.1 NNB Generation Company (HPC) Limited (company number 06937084) of 90 Whitfield Street, London W1T 4EZ (known throughout this document as “EDF” is submitting an application for a non-material change to the Hinkley Point C (Nuclear Generating Station) Order 2013 (S.I. No. 648) (the “DCO”), made pursuant to Schedule 6 of the Planning Act 2008 and Part 1 of the Infrastructure Planning (Changes to, and Revocation of, Development Consent Orders) Regulations 2011 (S.I. No. 2055). The proposed changes would be to the siting, layout and design of buildings and structures within the Hinkley Point C (“HPC”) permanent development site, referred to henceforth as the “Site”.

1.1.2 The DCO authorises the development of a new nuclear power station at Hinkley Point in Somerset and associated development. The DCO has been subject to the following correction and non-material changes since it was made on 18 March 2013:

- The Hinkley Point C (Nuclear Generating Station) (Correction) Order 2013 (S.I. No. 2938); (the “**2013 Correction**”);
- The Hinkley Point C (Nuclear Generating Station) (Amendment) Order 2015 (S.I. No. 1666) (the “**2015 Amendment**”);
- The Hinkley Point C (Nuclear Generating Station) (Amendment) Order 2017 (S.I. No. 843) (the “**2017 Amendment**”); and
- The Hinkley Point C (Nuclear Generating Station) (Amendment) Order 2018 (S.I. No. 413) (the “**2018 Amendment**”).

1.1.3 The 2013 Correction corrected issues identified in the DCO (as originally granted) following requests made under paragraph 1(6)(a) of Schedule 4 to the Planning Act 2008.

1.1.4 The 2015 Amendment made changes to service buildings in respect of limited new buildings and structures, to provide for the removal, repositioning and alteration to the dimensions of some buildings and structures, and other minor changes to facilitate safety and better design.

1.1.5 The 2017 Amendment allowed for the consolidation of the two planned temporary offsite accommodation campuses into a single campus (named Bridgwater A), as well as the addition of photovoltaic panels and sports changing facilities to the campus.

1.1.6 The 2018 Amendment allowed for an alteration to the alignment of the sea wall and the erection of additional pipework along the underside of the temporary jetty to enable discharges of water from the Site as well as the redesign of and the change in size and location of a number of permanent buildings and structures.

1.1.7 The design has continued to evolve since the grant of the amendments described above. The reasons for this ongoing evolution include the need to respond to learning from other EDF plants under construction,

from improved safety practice, design optimisation studies, the need for up to date security measures and layout changes to make way for the path of the Heavy-Lift Crane, which will need to remain in place for much of the construction phase of the project. As a result of these reasons, changes are proposed to the siting, layout and design of buildings and structures within the Site. These changes are not currently permitted within the parameters for the layout as shown on the approved HPC Site Parameter Plan, the building dimensions set out on the approved plans and in the Building Dimensions Schedule.

- 1.1.8 As set out below in detail, the changes that are the subject of this application (considered both individually and cumulatively) are minor in nature and would not result in a change to the magnitude or significance of effects on any viewpoints outside the Site which were identified prior to the Environmental Statement (ES)<sup>1</sup> which was prepared to support the DCO.
- 1.1.9 No new significant environmental effects or materially different environmental effects would arise from the changes proposed beyond those already comprehensively assessed within the ES submitted with the DCO application.
- 1.1.10 Construction of the project is underway. For many of the buildings and structures on Site which are identified on the proposed Site Layout Plan as part of the Nuclear Island, Conventional Island, Cooling Water Pumphouse, and Balance of Plant, complex construction is needed beneath the eventual ground level. The Simulator Building and the AREVA Warehouse, which are located outside of these areas, and will need to be operational when other aspects of the construction are underway have nearly been completed. None of the buildings and structures which are the subject of the proposed changes to siting, layout and design have been commenced.

## 1.2 Scope

1.2.1 Accordingly, consent is sought for:

- amendments to the description of the authorised development within Part 1 of Schedule 1 to the DCO and the approved plans within Part 3 of Schedule 1 to the DCO for the purposes of changing the siting, layout and design of buildings and structures within the Site;
- amendments to Schedule 2 to the DCO and other consequential amendments for the purposes of removing references to the permanent helipad which is no longer proposed; and
- an amendment to Schedule 14 to the DCO for the purpose of amending the procedure for the discharge of requirements.

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<sup>1</sup> EDF Energy (2011) *Environmental Statement – Volume 2 – Doc Ref 4.3* [[online](#)] Accessed 23/6/2020

## 2 PROPOSED CHANGES

### 2.1 Reasons for Change

2.1.1 The principal factors necessitating the proposed changes can be summarised as follows:

- **Safety** – The proposed Emergency Response Store and Emergency Response Energy Centre would be relocated to reduce the risk associated with poor geological conditions and as a result of assessment of fire or flood risk. Within the previously approved design, these buildings' functions were combined within one building. Within the proposed design the functions would be separated to reduce fire risk, and provide additional capacity for emergency response facilities. The Helipad has been removed to entirely eliminate the risk of collision with sensitive buildings and structures on Site during helicopter take-off and landing;
- **Security** – The functions of a building previously at the Site entrance will now be located outside on the access road and combined with the vehicle search area to provide one off-site search area;
- **Enabling use of the Heavy Lift Crane for a longer period during the construction phase** – The Sarens SGC-250 Heavy Lift Crane will need to remain in use during the later stages of the construction of Unit 2; as a result, the Oil and Grease Storage and Oil Ancillary Building, which are required prior to the operation of Unit 1 (i.e. before Unit 2 construction is complete), need to be relocated; and
- **Design and Optimisation Studies** – As part of the detailed design process, design and optimisation studies have been carried out by EDF and its appointed contractors, which have resulted in improved engineering and design solutions. Optimisation is a factor in several of the changes which are proposed, and is the primary reason for the incorporation of the functions of the EDF Site Offices within the Operational Service Centre.

### 2.2 Extent of Changes

2.2.1 Considered in the context of the DCO approved project, the proposed changes to the siting, layout and design of buildings are minor in nature, both individually and when considered cumulatively. The changes are consistent with the approved Design and Access Statement<sup>2</sup> for the HPC Site, in particular Section 6 (which sets Design Principles) and Section 9 (which details proposals for Implementation).

2.2.2 The proposed changes are explained in Section 2.4 below. A comparison of the previously approved Site Layout Plan<sup>3</sup> and proposed revised Site Layout Plan (Appendix 1) demonstrates that they are imperceptible when viewed from outside the Site. No changes are proposed to the scale, location or design of the tallest buildings (which are the reactor buildings (64m height) (Ref No. 1 on the revised Site Layout Plan – Appendix 1) and turbine halls (46m height) (Ref No 19 on the revised Site Layout Plan – Appendix 1)) and no changes are proposed to the overall Site footprint or to the landscaping, mounding

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<sup>2</sup> EDF (2011) 8.2 Hinkley Point C Development Site Design and Access Statement 1 [[online](#)] Accessed 18.6.2020

<sup>3</sup> EDF (2017) Site Layout Plan (Operational) - HINK-A1-SL-00-GA-010 – Rev 3 [[online](#)] Accessed 19/6/2020

or boundary treatment of the Site. The proposed changes would principally affect smaller service buildings which have been subject to some limited repositioning, some expansion or reduction in scale.

2.2.3 Section 2.4 below explains the reasons for each of the proposed changes on a building-by building basis. The reference numbers used below are those on the revised Site Layout Plan (Appendix 1).

2.2.4 Architectural plans submitted in relation to these buildings and structures as well as changes to other buildings and structures (whose dimensions are not changing) are set out in the **Book of Revised Plans**.

## 2.3 Materiality

2.3.1 Schedule 6 of the Planning Act 2008 makes provision for the Secretary of State (“**SoS**”) to grant both material and non-material changes to a development consent order.

2.3.2 There is no statutory definition of “materiality” for the purposes of the Planning Act 2008. The Government’s December 2015 “Planning Act 2008: Guidance on Changes to Development Consent Orders” (“**DCLG Guidance**”) is clear that decisions on whether particular types of change would be material or non-material will inevitably depend on the circumstances of the specific case. However, the DCLG Guidance sets out four examples of characteristics which indicate that a change is more likely to be treated as a material change. Each of these characteristics is considered in turn below in the context of EDF’s proposed changes.

### (1) Environmental Statement

2.3.3 The DCLG Guidance states that a proposed change should be treated as material if it would require an updated ES to take account of:

- new likely significant effects on the environment; and/or
- materially different likely significant effects on the environment.

2.3.4 The proposed changes that are the subject of this application do not require an updated ES because the changes would not result in any new or materially different likely significant effects on the environment, as set out in Table 3-1.

### (2) Habitats and Protected Species

2.3.5 The DCLG Guidance states that a proposed change to a DCO is likely to be material if:

- the change would invoke a need for a Habitats Regulations Assessment (HRA); and/or
- the change would result in the need for a new or additional licence in respect of European Protected Species.

2.3.6 The proposed changes that are the subject of this application do not invoke a need for an updated HRA, as set out in Table 3-2, nor a need for any new or amended European Protected Species licence.

### **(3) Compulsory Acquisition**

- 2.3.7 The DCLG Guidance states that a proposed change that would authorise the compulsory acquisition of any land, or an interest in or rights over land, that was not authorised through an existing DCO should be treated as material.
- 2.3.8 This application does not seek authorisation to compulsorily acquire any land, or an interest in or rights over land, that was not authorised through the DCO.

### **(4) Impact on Business and Residents**

- 2.3.9 The DCLG Guidance states that the potential impact of proposed changes on local people will also be a consideration in determining whether a change is material. The DCLG Guidance explains that additional impacts that may be relevant to whether a particular change is material will depend on the circumstances of a particular case, but examples might include those relating to visual amenity from changes to the size or height of buildings; impacts on the natural or historic environment; and impacts arising from additional traffic.
- 2.3.10 The proposed changes that are the subject of this application are not likely to result in any additional or materially different effects on local communities or business, as is demonstrated in the review of Socio-Economic effects in Table 3-1.

### **Conclusion**

- 2.3.11 Having regard to the DCLG Guidance, EDF considers the proposed changes to be non-material.

## **2.4 Detailed Description of the Proposed Changes to the Site Layout and Detailed Design**

- 2.4.1 The paragraphs below explain the proposed changes to the Site layout and detailed design of a number of buildings and structures within the permanent development Site of HPC. The changes are explained, building by building, including a description of the building function and the reasons for the change. These proposed changes would necessitate amendments to the description of the authorised development within Part 1 of Schedule 1 to the DCO and the approved plans within Part 3 of Schedule 1 to the DCO.

### **EDF Site Offices**

- 2.4.2 The EDF Site Offices building is no longer required. EDF is therefore proposing to remove the EDF Site Offices building from the Site Layout Plan. The area of land that was occupied by this building would be left vacant and would not be occupied by a replacement structure. The functions of this building would be incorporated within the approved Operational Service Centre.
- 2.4.3 Within the previously approved Site Layout Plan<sup>3</sup>, the building was located in the southern part of the Site close to the AREVA Warehouse. The original intention was that the Site Offices would be used by staff who do not have a day-to-day operational role, particularly during outage phases. The building was planned to house offices, meeting rooms, plant rooms and welfare facilities. Further to design

optimisation studies, these requirements have been incorporated into the approved Operational Service Centre.

- 2.4.4 Further details of the use, function, layout and appearance of this building can be found at Appendix A13 of the Development Site Design and Access Statement<sup>2</sup> submitted with the original DCO application.
- 2.4.5 The removal of this building would require the removal of two previously approved drawings from Part 3 of Schedule 1 to the DCO:
- EDF Site Offices - Roof Plan and Elevations - HINK-A2-HAO-00-GE-001 – Rev 2<sup>4</sup>; and
  - EDF Site Offices - Part Elevation Detail - HINK-A2-HAO-00-DT-001 – Rev 2<sup>4</sup>.

### Emergency Response Store

- 2.4.6 An Emergency Response Store was added to the Site Layout Plan<sup>4</sup> as part of the 2015 Amendment in response to the Fukushima event and as an opportunity to incorporate lessons learned from EDF Energy's emergency preparedness strategy. It was intended that the building would be used as a storage facility for vehicles and equipment which may be required to respond to an emergency event.
- 2.4.7 EDF is now proposing to move the location and function of this building on the proposed Site Layout Plan (**Appendix 1**) so that it would be co-located with the other emergency response buildings. In addition, the new location would have the benefit of avoiding the building being located on the rock strata known as the Blue Anchor Formation, which does not provide the highest seismic qualification level which is needed for a safety classified building.
- 2.4.8 The Emergency Response Store would also be renamed the Back-up Emergency Equipment Store (see 2.4.11 below for the Back-up Emergency Equipment Store).
- 2.4.9 As indicated on the proposed Site Layout Plan (**Appendix 1**), the footprint occupied on the previously approved Site Layout Plan<sup>3</sup> by the Emergency Response Store would instead be occupied by the Oil & Grease Storage & Oil Ancillary Building.
- 2.4.10 The previously approved drawings for this building would remain within Part 3 of Schedule 1 to the DCO:
- Emergency Response Store – Roof Plan and Elevations - HINK-A2-HHE-00-GA-001 - Rev 1<sup>4</sup>; and
  - Emergency Response Store – Part Elevation Detail - HINK-A2-HHE-00-DT-001 - Rev 1<sup>4</sup>.

### Back-up Emergency Equipment Store

- 2.4.11 The Back-up Emergency Equipment Store is a proposed addition to the Site Layout Plan, although its functions were previously incorporated in the 2015 Emergency Response Store as explained above.
- 2.4.12 The proposed building would be located to the east of the Site, close to the Emergency Response Store and Car Park. It would be located in this area for the safety reasons explained in paragraph 2.4.6 above.

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<sup>4</sup> EDF (2015) *HPC Development Site - Site Plans (Drawings For Approval)* [[online](#)] Accessed 19/6/2020

The new location is seismically qualified, and therefore provides the lowest possible ground stability risk to the building which is safety classified.

- 2.4.13 No new plans and elevations for this building are proposed as part of this application. The previously approved drawings for the Emergency Response Store would be retained for the purposes of the Back-up Emergency Equipment Store within Part 3 of Schedule 1 to the DCO, as described in paragraph 2.4.10 above.

## **Oil and Grease Storage and Oil Ancillary Building**

- 2.4.14 As shown on the proposed Site Layout Plan, the functions of Oil and Grease Storage and Oil Ancillary Building would move to the footprint occupied by the Emergency Response Store on the previously approved Site Layout Plan <sup>5</sup>.
- 2.4.15 The location of the Oil and Grease Storage and Oil Ancillary Building that is currently authorised by the DCO would conflict with the operation of the Sarens SG-250 Heavy Lift Crane. The crane would move on purpose built tracks through the Site where the building was located on the previously approved Site Layout Plan. It is necessary to retain the Sarens Crane on site after Unit 1 is operational as it will be required to perform various lifts, including the dome lift for Unit 2. The Oil and Grease Storage and Oil Ancillary Building is not a safety classified building so it can be safely located within this area of the Site.
- 2.4.16 As indicated on the proposed Site Layout Plan, the site occupied by the footprint of this building on the previously approved Site Layout Plan<sup>3</sup> would be left vacant by the removal of this building and would not be occupied by a replacement structure.
- 2.4.17 The Oil and Grease Storage and Oil Ancillary Building will primarily be used for the storage of containers of lubricating and fuel oil to be used for various operational purposes within the power station. See Appendix A15 of the Development Site Design and Access Statement<sup>2</sup> for further details of the use, function, layout and appearance of this building.
- 2.4.18 The proposed dimensions for the Oil and Grease which are described in Table 2-1, and the footprint which is shown on the proposed Site Layout Plan are consistent with the dimensions of the previously approved Emergency Response Store. It is noted that the proposed height and length would be larger than the previously approved drawings which are described in the paragraph below. It is not necessary to submit the detailed design as part of this application. would be submitted in accordance with DCO Requirement PW3. This design would be within the proposed dimensions, rather than being in accordance with the previously approved drawings.
- 2.4.19 No new drawings are proposed as part of this application. The previously approved drawings for the building would be retained within Part 3 of Schedule 1 to the DCO:
- Oil and Grease Storage and Oil Ancillary Building – Roof Plan - HINK-A2-HOG-00-GA-002 <sup>5</sup>;

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<sup>5</sup> EDF Energy (2011) *Ancillary, Office & Storage (Drawings for Approval)* [[online](#)] Accessed 19/6/2020

- Oil and Grease Storage and Oil Ancillary Building - North and South Elevations - HINK-A2-HOG-00-GE-001 <sup>5</sup>;
- Oil and Grease Storage and Oil Ancillary Building - East and West Elevations - HINK-A2-HOG-00-GE-002 <sup>5</sup>; and
- Oil and Grease Storage and Oil Ancillary Building - Part Elevation Detail - HINK-A2-HOG-00-DT-001 <sup>5</sup>.

### **Auxiliary Administration Building**

2.4.20 The function and dimensions of this building are remaining the same as currently consented and shown on the previously approved Site Location Plan. See Appendix A11 of the Development Site Design and Access Statement<sup>2</sup> for further details of the use, function, layout and appearance of this building. The proposed change relates solely to the name of the building, which EDF is proposing to rename from Auxiliary Administration Centre to Auxiliary Administration Building.

### **Equipment Storage for Interim Spent Fuel Store**

- 2.4.21 As part of the application for the 2018 Amendment, EDF sought consent to add the Equipment Storage for Interim Spent Fuel Store building to the Site Layout Plan. However, in the decision letter, the SoS determined that he was unable to conclude that the proposed change was non-material and, as a consequence, the proposed change was not included as part of the 2018 Amendment Order.
- 2.4.22 The SoS did not require the Site Layout Plan to be amended to remove this building, and therefore the previously approved Site Layout Plan<sup>3</sup> included this building. The proposed Site Layout Plan formalises the removal of this building.
- 2.4.23 On the previously proposed Site Layout Plan, the Equipment Storage for Interim Spent Fuel Store replaced the nearby Access Control Building for the Interim Spent Fuel Store, as described in 2.4.25 below.
- 2.4.24 For the avoidance of doubt, the plans and elevations for the Equipment Storage for Interim Spent Fuel Store which were proposed in the application for the 2018 Amendment were not approved, and are not referenced in Part 3 of Schedule 1 to the DCO.

### **Access Control Building for the Interim Spent Fuel Store**

2.4.25 As part of the application for the 2018 Amendment, EDF sought consent to remove this building from the Site Layout Plan and replace it with a nearby building, the Equipment Storage for Interim Spent Fuel Store. However, in the decision letter, the SoS determined that he was unable to conclude that the proposed change was non-material and, as a consequence, the proposed change was not included as part of the 2018 Amendment Order.



2.4.26 This application confirms that the building's function, location and name on the proposed Site Layout Plan remain as shown on the Site Layout Plan<sup>6</sup> approved for the 2015 Amendment Order.

2.4.27 The previously approved drawings for the Access Control Building for Interim Spent Fuel Store would be retained within Part 3 of Schedule 1 to the DCO:

- Access Control Building – Plan & Elevations - HINK-A2-HUD-00-GA-001 – Rev 1<sup>7</sup>.

### **Interim Spent Fuel Store**

2.4.28 As part of the application for the 2018 Amendment, EDF sought consent to alter the dimensions and functionality (wet storage to dry storage) of this building. However, in the decision letter, the SoS determined that he was unable to conclude that the proposed change was non-material, and as a consequence the proposed change was not included as part of the 2018 Amendment Order.

2.4.29 Therefore, we wish to formalise that we have not included this building within this application and that its location and name remain as shown on the Site Layout Plan<sup>6</sup> approved for the 2015 Amendment Order.

2.4.30 For the avoidance of doubt, the plans and elevations for the building which were proposed in the application for the 2018 Amendment were not approved and are not referenced in Part 3 of Schedule 1 to the DCO. The original DCO approved drawings for the Interim Spent Fuel Store would be retained as shown within Part 3 of Schedule 1 to the DCO:

- Interim Spent Fuel Store – Plan - HINK-A2-HHK-00-GP-000 – Rev 1<sup>7</sup>;
- Interim Spent Fuel Store – North & South Elevations - HINK-A2-HHK-00-GE-001 – Rev 1<sup>7</sup>; and
- Interim Spent Fuel Store – East & West Elevations - HINK-A2-HHK-00-GE-002 – Rev 1<sup>7</sup>.

### **Emergency Response Centre**

2.4.31 EDF is proposing to add the Emergency Response Centre to the Site Layout Plan. This building provides additional capacity and functionality to enhance the existing approved emergency facilities. No building was located at this location on the previously approved Site Layout Plan<sup>3</sup>.

2.4.32 The proposed building would be located next to the Main Access Control Building within the eastern boundary of the Site. The building provides additional capacity and facilities to respond to emergency situations. The Emergency Response Centre building would house the Site's Emergency Control Centre (ECC) and Alternative Access Control Point which would be used to control the response to a Site emergency. These functions would ensure that adequate arrangements are in place to deal with any accident or emergency arising on site. The building would also house facilities which allow coordination with security.

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<sup>6</sup> EDF Energy (2015) *Site Layout Plan (Operational)* – HINK-A1-SL-00-GA-010 Rev 2 [[online](#)] Accessed 19/6/2020

<sup>7</sup> EDF Energy (2011) *Fuel & Waste Storage (Drawings For Approval)* [[online](#)] Accessed 19/6/2020

2.4.33 Three new drawings are submitted for approval, and would be referenced within Part 3 of Schedule 1 to the DCO:

- Emergency Response Centre - Roof Plan – HINK-A2-HUM-00-GP-020 – Rev 1;
- Emergency Response Centre - Elevations - HINK-A2-HUM-00-GE-001 – Rev 1; and
- Emergency Response Centre - Elevations - HINK-A2-HUM-00-GE-002 – Rev 1.

### **Emergency Response Energy Centre**

2.4.34 EDF is proposing to add the Emergency Response Energy Centre to the Site Layout Plan. This building provides additional capacity and functionality to enhance the existing approved emergency facilities. No building was located at this location on the previously approved Site Layout Plan <sup>3</sup>.

2.4.35 Located adjacent to the Emergency Response Centre (see paragraph 2.4.32 above), the building would house emergency diesel generators and fuel. It would serve the Hot Workshop, Hot Warehouse, Facilities for Decontamination and Back-up Emergency Equipment Store.

2.4.36 It was previously intended that the diesel generator and fuel tanks would be housed in the Emergency Response Store, however, they have been separated out to reduce the associated fire risk to the inventory, improve working arrangements and improve access for refuelling.

2.4.37 This change is proposed as part of the evolving emergency response strategy for the Site.

2.4.38 One new drawing is submitted for approval, and would be referenced within Part 3 of Schedule 1 to the DCO:

- Emergency Response Energy Centre - Roof Plan and Elevations - HINK-A2-HDU-00-GP-020 – Rev 1.

### **Entry Relay Building**

2.4.39 EDF is proposing to remove the Entry Relay Building from the Site Layout Plan.

2.4.40 As indicated on the proposed Site Layout Plan, the Site within the previously approved Site Layout Plan <sup>3</sup> footprint of this building would be left vacant by the removal of this building and would not be occupied by a replacement structure.

2.4.41 The purpose of the Entry Relay Building was to receive small packages or deliveries relating to the Operational Service Centre. The functions of the Entry Relay Building are being transferred to the Off Site Delivery Checkpoint (see paragraph 2.4.44 below). The security functions within this building need to be delivered outside the secure site area fence but within the Site boundary, which enables deliveries to be made without delivery vehicles entering the secure area.

2.4.42 The removal of this building would require the removal of two previously approved drawings from Part 3 of Schedule 1 to the DCO:

- Entry Relay Building – Roof Plan & Elevations- HINK-A2-ERB-00-GA-002 – Rev 1 <sup>5</sup>; and
- Entry Relay Building – Part Elevation – Detail - HINK-A2-ERB-00-DT-001 – Rev 1 <sup>5</sup>.

## Off-Site Delivery Checkpoint

- 2.4.43 EDF is proposing to add the Off-Site Delivery Checkpoint to the Site Layout Plan.
- 2.4.44 This new building would replace the smaller Off-Site Vehicle Search Area which was in the same location (see paragraph 2.4.48 below) and would also house the facility previously housed in the Entry Relay Building for receiving small packages or deliveries relating to the Operational Service Centre. The expanded Off-Site Delivery Checkpoint would enable deliveries to be made without delivery vehicles entering into the secure area as well as allowing for vehicle searches outside of the secure site area.
- 2.4.45 One new drawing is submitted for approval, and would be referenced within Part 3 of Schedule 1 to the DCO:
- Off Site Delivery Checkpoint – Roof Plan and Elevations - HINK-A2-HUT-00-GP-020 – Rev 1.

## Off-Site Vehicle Search Area

- 2.4.46 EDF is proposing to remove the Off-Site Vehicle Search Area from the Site Layout Plan.
- 2.4.47 As indicated on the proposed Site Layout Plan, the footprint of this building within the previously approved Site Layout Plan<sup>3</sup> would be left vacant by the removal of this building and would not be occupied by a replacement structure.
- 2.4.48 The building's functions would be replaced within the proposed Off Site Delivery Checkpoint, as explained at paragraph 2.4.44 above. The Off Site Delivery Checkpoint is located nearby, but not within the footprint of this building.
- 2.4.49 One previously approved drawing would be removed from Part 3 of Schedule 1 to the DCO:
- Off Site Vehicle Search Area – Roof Plan and Elevations - HINK-A2-VSA-00-GA-001 – Rev 2<sup>8</sup>.

## Filtering Debris Recovery Pit – Unit 1 and Unit 2

- 2.4.50 EDF is proposing to increase the dimensions and footprint of the Filtering Debris Recovery Pit, for both Units 1 and 2. The location of each Filtering Debris Recovery Pit is otherwise unchanged, as shown on the proposed Site Layout Plan.
- 2.4.51 As described in Appendix A4 of the Development Site Design and Access Statement<sup>2</sup>, the Filtering Debris Recovery Pit is part of the Cooling Water Pumphouse structure, alongside the forebay, cooling water pumphouse, and outfall pond. The Filtering Debris Recovery Pit will manage debris, including fish and other marine organisms captured on the pumphouse screens. Fish will be returned to sea via a series of culverts and an Archimedes' screw, channelled along a dedicated discharge line that will run under the sea wall, forming part of the Fish Recovery and Return System. It is proposed to increase the footprint of the structure primarily for the following reasons:

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<sup>8</sup> EDF Energy (2017) *Off-site Vehicle Search Area - Roof Plan & Elevations* [[online](#)] Accessed 19/6/2020

- provide a KRS building, which will provide water sampling facilities to support the operation of the HCBs;
- provide air conditioning equipment for the KRS building;
- provide a 6m tall gantry and crane between the HCB and the Pump House to facilitate the removal of solid waste from the pit;
- increase in HCB pit external wall thickness to strengthen the structure of the building for stability and safety reasons.

2.4.52 Four revised drawings are submitted for approval, and new iterations of these drawings would be referenced within Part 3 of Schedule 1 to the DCO:

- Unit 1: Cooling Water Pumphouse / Forebay / Outfall Pond/ Service Access Buildings 5 and 7 - Roof Plan - HINK-A2-HP-01-GP-030 – Rev 4;
- Unit 1: Cooling Water Pumphouse / Forebay / Outfall Pond/ Service Access Buildings 5 and 7 - Elevation - HINK-A2-HP-01-GE-001 – Rev 4;
- Unit 2: Cooling Water Pumphouse / Forebay / Outfall Pond/ Service Access Buildings 6 and 8 - Roof Plan - HINK-A2-HP-02-GP-030 – Rev 4; and
- Unit 2: Cooling Water Pumphouse / Forebay / Outfall Pond/ Service Access Buildings 6 and 8 - Elevation - HINK-A2-HP-02-GE-001 – Rev 4.

2.4.53 For information, two further drawings for the Unit 1 and Unit 2 Cooling Water Pumphouse and associated structures have previously been approved, but these drawings remain unaffected by the proposed changes to the Filtering Debris Recovery Pits. These drawings would remain as previously described within Part 3 of Schedule 1 of the DCO:

- Unit 1: Cooling Water Pumphouse / Forebay / Outfall Pond/ Service Access Buildings 5 and 7 – Part Elevation - Detail – HINK-A2-HP-01-DT-001 – Rev 3<sup>9</sup>; and
- Unit 2: Cooling Water Pumphouse / Forebay / Outfall Pond/ Service Access Buildings 6 and 8 – Part Elevation - Detail - HINK-A2-HP-02-DT-001 – Rev 3<sup>10</sup>.

## Helipad

2.4.54 EDF is proposing to remove the Helipad which was included in the previously approved Site Layout Plan<sup>3</sup>.

2.4.55 The site of the Helipad within the previously approved Site Layout Plan<sup>3</sup> footprint of this structure would be left vacant by the removal of this building and would not be occupied by a replacement building or structure.

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<sup>9</sup> EDF Energy (2017) *Unit 1: Cooling Water Pumphouse / Forebay / Outfall Pond/ Service Access Buildings 5 and 7 – Part Elevation – Detail* [[online](#)] Accessed 19/6/2020

<sup>10</sup> EDF Energy (2017) *Unit 2: Cooling Water Pumphouse / Forebay / Outfall Pond/ Service Access Buildings 6 and 8 – Part Elevation – Detail* [[online](#)] Accessed 19/6/2020

- 2.4.56 The Helipad would have provided a designated site for emergency landing and access to the Site for staff and visitors. This functionality would be lost.
- 2.4.57 Removal of the Helipad would eliminate the small but significant risk of collision with buildings or structures associated with visitor and emergency helicopters taking off and landing within the Site.
- 2.4.58 A designated emergency landing site would be established within the Southern Landscape Area outside of the permanent development site. The risk of helicopter collision would be eliminated, and the site would only be used in an emergency situation. The design for this site would be submitted for approval as part of wider landscape restoration plans, in accordance with DCO Requirement MS28: Landscape works: landscape restoration.
- 2.4.59 As it is not a building or structure, the Helipad does not have any have previously approved plans and elevations listed in Part 3 of Schedule 1 of the DCO.

### **Sewage Treatment Plant**

- 2.4.60 EDF is proposing to increase the footprint of the Sewage Treatment Plant in order to accommodate all of the equipment which has been identified to ensure the necessary quantities of waste water is treated appropriately. The location of the Sewage Treatment Plant remains consistent with the previously approved Site Layout Plan. The DCO approved design was a wireframe outline, as at the time of the DCO application the precise quantity and type of waste water and the design of the required treatment facilities had not been finalised.
- 2.4.61 The Sewage Treatment Plant is needed to treat foul water generated during operation of the power station. This includes wastewater from the kitchens, wash basins, showers, washrooms and bathrooms. The Sewage Treatment Plant would include preliminary inlet works, primary treatment, secondary treatment and sludge management. Within the system, effluent is pumped through tanks and equipment which perform different functions including managing flow within the system, filtering waste materials, removing solids, and contaminants before pumping the treated water out to sea. The impacts associated with the treated water that would be emitted from the Sewage Treatment Plant remain identical to that set out in the original DCO application and as assessed in the ES<sup>1</sup>. No variation is required to the Environmental Permit (permit reference (EPR/HP/3228)).
- 2.4.62 One revised and one new drawing are submitted for approval, which would be referenced within Part 3 of Schedule 1 to the DCO:
- Sewage Treatment Plant – Roof Plan – HINK-A2-STP-00-GA-001 – Rev 2; and
  - Sewage Treatment Plant – Elevations – HINK-A2-STP-00-GE-020 – Rev 1.

### **National Grid Compound Main Gas Insulated Switchgear Hall**

- 2.4.63 EDF is proposing to revise the layout of the overhead line entry points between the busbars and the Main Gas Insulated Switchgear Hall in the National Grid Compound on the Site Layout Plan.
- 2.4.64 The reconfiguration of the busbars is the result of a design optimisation process carried out by National Grid. The change is proposed in order to reflect the design approved by Somerset West and Taunton

Council in December 2019 in accordance with DCO Requirement PW3. The proposed change to the Site Layout Plan would ensure the arrangement of the overhead lines is consistent with the Requirement PW3 approved Plan.

**Table 2-1 Building Dimensions Schedule**

Proposed Layout Plan (Rev.04) Buildings Ref Nos.	Buildings/Structures	Previously approved dimensions H x W x L (m)	Proposed dimensions H x W x L (m)
30	Filtering Debris Recovery Pit (Unit 1)	2 x 9 x 27	6 x 23 x 37
30	Filtering Debris Recovery Pit (Unit 2)	2 x 9 x 27	6 x 23 x 37
38	Sewage Treatment Plant	3 x 4 x 8	11 x 11 x 56
42	Interim Spent Fuel Store	25 x 65 x 150	No change from previous dimensions (As described in para. 2.4.28, a previously proposed change was not accepted at non-material change 3)
<del>43</del>	Access Control Building for the Interim Spent Fuel Store	5 x 17 x 29	No change from previous dimensions (As described in para. 2.4.25, the proposed removal of this building was not accepted at non-material change 3)
NEW - 46	Emergency Response Energy Centre	N/A	9 x 14 x 29
NEW - 47	Off-Site Delivery Checkpoint	N/A	5.1 x 12.2 x 25.5
48	Auxiliary Administration Building	20 x 29 x 38	No change from previous dimensions (change of building name)
NEW - 49	Emergency Response Centre	N/A	6 x 25 x 40.55
51	Oil and Grease Storage and Oil Ancillary Building	10 x 29 x 38	13 x 27 x 60 (change of location, moving to the existing footprint of the Emergency Response Store)
NEW - 59	Back-Up Emergency Equipment Store (renamed from Emergency Response Store)	N/A	13 x 27 x 60
64	Amenity building within National Grid Compound	No dimensions specified in DCO approved parameters	No dimensions specified in DCO approved parameters
N/A	Overhead Lines within National Grid Compound, adjacent to Building 64 (Main Gas Insulated Switchgear Hall)	No dimensions	No dimensions
N/A	Equipment Storage for Interim Spent Fuel Store	N/A	As described at para. 2.4.21, the proposed addition of this building was not accepted at non-material change 3
<del>46</del>	Entry Building	6 x 17 x 39	Building removed

Proposed Layout Plan (Rev.04) Buildings Ref Nos.	Buildings/Structures	Previously approved dimensions H x W x L (m)	Proposed dimensions H x W x L (m)
47	Off Site Vehicle Search Area	10 x 7 x 4	Building removed
49	EDF Site Offices	15 x 64 x 17	Building removed
65	Helipad	0 x 27 x 39	Structure removed

## 2.5 Amendment to Schedule 14 Paragraph 5 – Procedure for Discharge of Requirements, Interpretation of Schedule 14

2.5.1 Schedule 14 of the DCO sets out a procedure for the discharge or requirements, including timescales, information requirements, fees and appeals.

2.5.2 Paragraph 5 sets out how terms used within Schedule 14 should be interpreted. One of the defined terms set out in paragraph 5 is “major detailed requirements”, which is defined as follows:

*“major detailed requirements” means requirements: PW3, PW4, PW7, MS16, MS17, MS18, MS19, MS20, MS21, MS22, MS25, MS26, MS28, MS30, CW1, CW2, OS3, BRIA5, CP6, C8, J23-5, J24-4, and WP4”*

2.5.3 The draft Amendment Order submitted with this application removes Requirement PW3 (Buildings and structures) from the above list. The effect of this is that requirement PW3 becomes a “minor detailed requirement”, which is defined in paragraph 5 as follows:

*“minor detailed requirements” means requirements other than major detailed requirements, which require agreement or approval of a discharging authority or permit the discharging authority to agree or remove matters otherwise than provided for in the requirement”*

2.5.4 Requirement PW3 states:

*“(1) Buildings and structures comprising Work No. 1A(d) to (k) and (o) shall be carried out in accordance with the plans relating to them as set out in Schedule 1, Part 3, save to the extent that revised plans relating to their siting, scale or appearance have been submitted to and approved by West Somerset District Council.*

*(2) Any revised plans referred to in paragraph (1) shall be in accordance with HPC Site Parameter Plan (HINK-A1-SL-00-GA-002 (Rev 03)) and chapter 6 (Design Principles) and chapter 9 (Implementation) of the HPC development site Design and Access Statement.*

*(3) The works referred to in paragraph (1) shall be carried out in accordance with the approved plans.”*

2.5.5 The fees to be paid where an application is made to the discharging authority for agreement or approval in respect of a requirement are set out in paragraph 3(1) of Schedule 14 to the DCO. Paragraph 3(1)(a) specifies the fee where the application relates to a major detailed requirement, which is calculated by



reference to floor space. Paragraph 3(1)(b) specifies the fee (£335) where an application is made for discharge of a major detailed requirement in respect of which an application has been made previously. Paragraph 3(1)(c) specifies the fee (£85) where the application relates to a minor detailed requirement.

- 2.5.6 The effect of the proposed amendment to paragraph 5 of Schedule 14 would be to remove requirement discharge applications under PW3 from the fee payment calculation detailed under paragraphs 3(1)(a) and (b) of Schedule 14. The fee payment would instead be calculated under paragraph 3(1)(c) of the same Schedule.
- 2.5.7 The detailed design of the buildings and structures comprising Work No. 1A(d) to (k) and (o) is either underway or has been completed. Many of the approved plans and elevations date from designs which are nearly ten years old. Where the design for buildings or structures has changed within the DCO approved parameters, PW3 applications will be submitted for approval. Although the external appearance of these buildings and structures will be reconfigured, the revised designs are consistent visually with the previously approved plans and elevations. However, because of the number of applications required, and that many of the buildings or structures will have a large internal floor space, the fees payable as currently calculated would be disproportionate and unreasonable.
- 2.5.8 It is considered that the difference between “major detailed requirements” and “minor detailed requirements” must relate to the relative complexity and resource implications of the requirement discharge process. The following are examples of criteria that could be used to judge that a DCO requirement is a “major detailed” one:
- Where a requirement discharge process requires a high level of accompanying documentation and assessment in order to demonstrate acceptability;
  - where complex evidence relating to environmental effects or other relevant planning considerations is required;
  - where it would require technical experts to assess the evidence
  - or where considerable and unusually high local authority resource is required to assess the application.
- 2.5.9 DCO Requirement PW3 restricts the extent to which a building or structure design can change within defined parameters, and as a consequence it is not anticipated that any complex consideration of environmental effects or relevant planning considerations, which would require additional technical expertise, would be needed. PW3 requires that buildings or structures should be in accordance with the HPC Parameter Plan, which means that their scale, use and function cannot change within the approved parameters. In addition, PW3 requires the plans and elevations to be in accordance with Chapter 6 (Design Principles) and Chapter 9 (Implementation) of the Design and Access Statement<sup>2</sup>. Chapter 6 defines the appearance, style and architectural treatment of buildings, including the general approach to materials. Chapter 7 describes the Parameters within which it would be possible to move the buildings, and indicates the buildings must be in accordance with their approved parameters (height, width and length).



- 2.5.10 Of the four PW3 discharge applications successfully discharged to date only plans and elevations have been submitted, with no accompanying assessment or documentation. These applications have all been discharged without any substantive comments on the design or appearance of structures.
- 2.5.11 For those buildings and structures which only had an outline design authorised as part of the original DCO and a detailed design has to be submitted prior to construction, it is important to note that they are covered by individual DCO requirements MS16, MS17, MS18, MS19, MS20 and MS21, which are all major requirements.
- 2.5.12 While it is accepted that the payment of fees for the discharge of requirements is essential to allow for the local planning authority to carry out their role in the process, proportionality is also an important principle of the planning process.
- 2.5.13 This proposed amendment would have the consequential effect of altering the timescales for requirement discharge applications under PW3, as set out under paragraph 1 of Schedule 14. However, for the reasons described above, applications under PW3 are considered to be relatively simple to discharge, therefore it is considered that the shorter determination period would not adversely affect the ability of Somerset West and Taunton Council to perform its functions under the DCO.

## 3 SUPPORTING ENVIRONMENTAL INFORMATION

### 3.1 Environmental Impact Assessment

- 3.1.1 Consideration has been given to whether the proposed changes to the DCO give rise to any:
- a) new likely significant effects on the environment that were not identified in the ES<sup>1</sup> for the consented project; and/or
  - b) materially different likely significant effects (positive or negative) on the environment when compared to the effects set out in the ES<sup>1</sup> for the consented project.
- 3.1.2 In doing so, EDF has also considered whether the proposed changes would constitute 'EIA Development' for the purposes of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. The changes do not constitute either Schedule 1 development or Schedule 2 development. Paragraph 13 of Schedule 2 provides that a change or extension to a Schedule 1 development which has already been authorised will be Schedule 2 development only if "the change or extension may have significant adverse effects on the environment". In considering whether or not that is likely, the changes are not to be assessed in isolation. They fall to be considered by looking at the overall effect of the proposed changes on the project, and identifying whether the whole, as modified, is likely to have significant effects, including effects that were not identified in the original assessment<sup>11</sup>.
- 3.1.3 With regards to landscape and visual impacts, a Landscape and Visual Assessment has been submitted with this application at Appendix 2. It concludes that the additional magnitude of change resulting from the proposals during both construction and operation would range from Zero to Very Low resulting in either no effect or a negligible and neutral effect, which is not considered to be significant. Consequently, and in planning terms, there would be no change to the overall effects assessed in the ES<sup>1</sup> as a result of the proposals during construction or operation.
- 3.1.4 With regards to traffic levels, the quantities of materials and duration of movements are unlikely to materially alter as a result of the proposed changes and are, in any event, capped by requirements in the DCO and Construction Traffic Management Plan.
- 3.1.5 The Construction Method Statement within the ES sets out the construction programme and phasing of the project. The proposed changes to the Site layout and building dimensions would not affect the sequencing or methodology which has already been assessed. The changes proposed within this submission would also be carried out in accordance with the Code of Construction Practice and in accordance with existing Requirement PW14.
- 3.1.6 EDF has considered all environmental issues which have been previously assessed in the ES submitted with the original DCO application, and within the SoS's consideration of environmental information. These are summarised below in Table 3-1, together with an indication in each case of the impact of the non-material changes proposed within this application. For the reasons set out in the table, it is not considered

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<sup>11</sup> R (Baker) v. Bath and North East Somerset Council (2009) EWHC 595 (Admin), paragraphs 22-23 and 44-45

that the changes proposed as part of this submission would have any new or materially different likely significant effects on the environment.

**Table 3-1 Summary Table of EIA Impacts**

Topic	Sub Topic	Original ES <sup>1</sup> Residual Impacts	SoS's Conclusions in DCO Decision <sup>12</sup>	Impact of Proposed Non-Material Change
<b>Socio Economics</b>	Construction employment	Major beneficial	<p><b>Construction Phase</b></p> <p>Impacts during construction will bring economic benefits to the area and employment opportunities to local people. Applicant will work with local services to mitigate potential impacts.</p> <p><b>Operational Phase</b></p> <p>Regular employment for around 900 people with indirect employment accounting for a further 360 jobs. The area will benefit from the annual expenditure of these workers.</p>	<p>Potential socio-economic impacts arise from the workforce demand. The proposed changes would not give rise to a change in the number of people making up the workforce, or the workforce profile, and therefore no new or materially different socio-economic effects are anticipated.</p> <p>No Change</p>
	Construction labour market	Major beneficial		
	Construction supply chain	Negligible – minor beneficial		
	Accommodation supply (60min zone)	Negligible – minor beneficial		
	Owner occupied housing (60min zone)	None		
	Private Rented Sector	Negligible		
	Tourist Sector	Negligible		
	Latest Sector	Minor beneficial		
	Education Capacity	Negligible – minor beneficial		
	Population Dynamics	Minor to moderate		
	Social services	None		
	Leisure	Moderate beneficial		
	Regulatory and Environmental Services	Negligible		
	Crime, anti-social behaviour and policing	Negligible		
	Fire service	Negligible		
	Health	Negligible		
	Ambulance service	Negligible		
Operational employment	Major beneficial			
Operational Supply Chain and multiplier	Moderate beneficial			

<sup>12</sup> Department of Energy & Climate Change (2013) *Decision Letter - Annex E: Note On The Consideration Of The Environmental Information Gathered In Respect Of The Application For Consent To Authorise The Construction And Operation Of The Proposed New Nuclear Power Station Known As Hinkley Point C* [[online](#)] Accessed 23/6/2020

Topic	Sub Topic	Original ES <sup>1</sup> Residual Impacts	SoS's Conclusions in DCO Decision <sup>12</sup>	Impact of Proposed Non-Material Change
Transport	<b>Summary of Impact 2016</b>			
	Severance	Moderate adverse Substantial beneficial	<b>Construction and Operational Phase</b>  The key impacts are driver delay, severance and pedestrian amenity. During the initial stages of construction of the associated developments, in particular the Cannington Bypass, the park and ride facilities and the construction worker accommodation campuses, there will be a moderate to high impact to local residents. However, these impacts will be reduced to slight once the Cannington Bypass is constructed and in use.	The proposed works do not give rise to a significant change in construction materials required for the HPC project and are within the limits assessed in the original Transport Assessment and secured by the DCO Requirements and s106 agreement, specifically Annex 12 – Construction Traffic Management Plan  <b>No change</b>
	Driver Delay	Negligible		
	Pedestrian Delay	Negligible Moderate beneficial		
	Pedestrian Amenity	Moderate adverse Substantial beneficial		
	Accidents and Safety	Negligible		
	<b>Summary of Impact 2021</b>			
	Severance	Moderate adverse Substantial beneficial	See assessment for 2016 above	See assessment for 2016 above  <b>No change</b>
	Driver Delay	Moderate beneficial		
	Pedestrian Delay	Negligible Moderate beneficial		
	Pedestrian Amenity	Negligible Substantial beneficial		
	Accidents and Safety	Negligible		
Noise and vibration	On Site Construction Phase	Major adverse Minor to moderate adverse		
	Off Site Highways Improvement Works	Moderate adverse Minor adverse		
	Off Site Construction Phase Road Traffic	Major adverse Minor adverse		
	Operation Phase	Minor adverse		
	Off Site Early Operation Phase Road Traffic 2012	Major to moderate adverse		

Topic	Sub Topic	Original ES <sup>1</sup> Residual Impacts	SoS's Conclusions in DCO Decision <sup>12</sup>	Impact of Proposed Non-Material Change
		Moderate to minor adverse	All other construction activities would meet the agreed noise limits.	There would be no material change in transport requirements therefore no change in noise levels caused by traffic.
	Off Site Permanent Operation Phase Road Traffic	Moderate adverse to minor adverse	<p><b>Operational Phase</b></p> <p>Commissioning tests on each reactor would be audible at neighbouring properties. These tests would be of very short duration and only during the day.</p> <p>Overall operational noise levels is modelled as being within an agreed threshold.</p>	<p>The buildings and structures proposed do not contain noise-generating functions and therefore the operation of them would not increase noise levels.</p> <p>Construction noise levels would be controlled through the existing DCO requirements and the Code of Construction Practice</p> <p><b>No Change</b></p>
Air Quality	Construction Phase	Negligible to minor	<p><b>Construction Phase</b></p> <p>Key impacts are likely to be dust and particulate generation and dispersal. Due to distance of the site from most potential receptors impacts are not considered to be significant although 2 properties may be affected. Control measures are set out in the Air Quality Management Plan to minimise both dust and particulate generation and dust dispersal to the boundary of the site. Traffic emissions during construction have been modelled and are not considered to be significant. Although there may be emissions of air pollutants from plant and equipment at start-up and from back-up power generation, no exceedances of air quality standards designed to protect public health are predicted to occur.</p> <p><b>Operational Phase</b></p> <p>Modelling predicts no significant impact on human receptors from traffic during the operational phase.</p>	<p>The proposed changes would not give rise to any significant change to construction activities which are controlled by the DCO requirements and the Code of Construction Practice. Therefore, there would be no change to the air quality impact previously assessed.</p> <p><b>No Change</b></p>
	Operational Phase	Not significant		

Topic	Sub Topic	Original ES <sup>1</sup> Residual Impacts	SoS's Conclusions in DCO Decision <sup>12</sup>	Impact of Proposed Non-Material Change
Soils and Land Use	Construction	Minor	<p><b>Construction Phase</b></p> <p>Permanent and temporary loss of agricultural land and of soils stripped as part of the site preparation works. A small proportion of such land in Somerset.</p> <p>Stripped and stored materials would be reused after completion of construction of HPC.</p>	<p>As the proposed changes relate to minor on site building changes, no new or materially different impact on Soil and Land Use is anticipated.</p> <p><b>No Change.</b></p>
	Operation – Restoration of the non-developed footprint	Minor	<p><b>Operational Phase</b></p> <p>Normal Operation of HPC would not prevent agricultural activity on land adjacent to the site or lead to other impacts on soil or land use.</p>	
Geology & Land Contamination	Impacts on Geology		<p><b>Construction Phase</b></p> <p>No significant radiochemical or non-radiochemical contamination at the development site.</p> <p>Some cliff exposure will be lost as a result of the sea wall but these are of limited significance.</p> <p>No significant impact on receptors are anticipated with respect to land contamination.</p> <p><b>Operational Phase</b></p> <p>Pollution prevention measures required by the Environmental Permit, would be used to control the risk of land contamination material stored on site. This would reduce the potential for accidental releases of such material.</p>	<p>As the proposed changes relate to minor on site building changes, no new or materially different impact on Geology and Land Contamination is anticipated.</p> <p><b>No Change</b></p>
	Construction	Minor adverse		
	Commissioning	N/A		
	Operation	N/A		
	Restoration	N/A		
	<b>Impacts on Contamination</b>			
Construction	Negligible to minor adverse			

Topic	Sub Topic	Original ES <sup>1</sup> Residual Impacts	SoS's Conclusions in DCO Decision <sup>12</sup>	Impact of Proposed Non-Material Change
	Commissioning and Operation	Negligible to minor adverse		
	Restoration	Negligible to minor adverse		
<b>Ground-water</b>	Impacts during preliminary works, main construction works and operation	Negligible to minor	<p><b>Construction Phase</b></p> <p>Deep water excavations needed for foundation will need to be dewatered. This would affect groundwater levels over a period of years leading to localised drawdown. This drawdown would reach outside the HPC Site into the Hinkley Point A site. Groundwater collected by dewatering will be discharged into the Bristol Channel. It will be monitored for contamination and treated as necessary prior to discharge.</p> <p>Modelling suggests there will be no other significant impacts on groundwater, but the applicant will undertake a precautionary monitoring programme.</p> <p><b>Operational Phase</b></p> <p>A passive drainage around the Nuclear Island will control groundwater levels. This influence on groundwater levels will be localised and no impacts outside the HPC Site are expected.</p>	<p>Groundwater from construction dewatering is discharged untreated from a sub-tidal outfall at the end of the temporary jetty. There would be no new or materially different significant changes to the groundwater dewatering system as a result of the proposed non-material changes.</p> <p><b>No Change</b></p>
	Impacts during preliminary works	Negligible		
	Impacts during main construction phase	Negligible		
	Impacts during jetty dismantling and restoration	Negligible to minor		
	Impacts during the operational phase	Negligible to minor		
<b>Surface Water</b>	<b>Construction Impacts – Hydrology &amp; Drainage</b>		<p><b>Construction Phase</b></p> <p>The surface water drainage system will be compliant with legislation and there will be a range of mitigation and controls in respect of sewage effluent, reduction of potential for sediment laden water, and monitoring for the treatment of elevated nutrient levels, low ph and accidental contamination.</p> <p><b>Operational Phase</b></p> <p>There are not considered to be any significant surface water</p>	<p>As the relevant proposed changes relate to minor on site building changes, and there would be no increase in permanent land take or hardstanding, no new or materially different impact on Surface Water is anticipated.</p> <p><b>No Change</b></p>

Topic	Sub Topic	Original ES <sup>1</sup> Residual Impacts	SoS's Conclusions in DCO Decision <sup>12</sup>	Impact of Proposed Non-Material Change
			impact during the operation phase of HPC.	
	Elevated surface water run off	Minor to negligible		
	Elevated sediment delivery and deposition in watercourses	Minor		
	Increase flood risk of land outside the HPC development site from pluvial sources of flooding	Minor		
	Tidal flood risk	Minor to moderate		
	Changes to Holford Stream hydraulic characteristics due to the construction of Holford Stream Culvert	Minor		
	<b>Construction Impacts – Water Quality</b>			
	Installation and removal of temporary surface water system including Water Management Zones in the built development areas east and west	Minor to negligible		
	Installation and removal of temporary surface water system including Water Management Zones in Southern Construction Phase Area	Minor		
	Construction of culvert for Holford Stream	Minor to negligible		
	Construction phase earth works	Minor to negligible		
	Construction of site compound, development site roads (access & haul roads)	Minor to negligible		
	<b>Operational Impacts</b>			
	Hydrology and drainage	Minor		



Topic	Sub Topic	Original ES <sup>1</sup> Residual Impacts	SoS's Conclusions in DCO Decision <sup>12</sup>	Impact of Proposed Non-Material Change
	Water Quality	Minor		
	<b>Removal/Restoration Impacts</b>			
	Hydrology and Drainage	N/A		
	Water Quality	N/A		
<b>Coastal Hydrodynamics and Geomorphology</b>	No sub topics	No significant effect on exiting coastal, estuarine and marine hydrodynamics and geomorphologic processes within the area	<p><b>Construction Phase</b></p> <p>Potential impacts may be caused by the positioning of the sea wall, drainage across the shore, the temporary jetty, shafts for the cooling water intake and outfall, the discharge point for fish recovery system and dredging for the temporary jetty. Impacts are assessed as being small scale as they would only interfere slightly with existing dynamic coastal processes. Nonetheless, mitigation measures will be taken.</p> <p><b>Operational Phase</b></p> <p>Potential impacts may be caused by the presence of the new sea wall, abstraction and discharge of the cooling water and new intake and outfall structure on the seabed. Although it is considered that overall HPC would not have a discernible effect on coastal hydraulics and geomorphology, monitoring will be undertaken to maintain an understanding of processes and to adjust mitigation measures as may be necessary.</p>	<p>As the proposed on-site changes are minor changes to buildings and structures, Coastal Hydrodynamics would not be impacted as a result of the construction works or the design of the buildings and structures. Whilst the change to the Filtering Debris Recovery Pit is a change to the cooling water infrastructure, it is not anticipated that this would give rise to any material changes in the functionality of the building, or the quantity of material transported back to the sea.</p> <p><b>No Change</b></p>
<b>Marine Water and Sediment Quality</b>	<b>Construction Phase</b>		<p><b>Construction Phase</b></p> <p>Assessments of potential impacts of construction related discharges and excavation of cooling water tunnels concluded that there would be no significant impact on marine water and sediment quality.</p> <p><b>Operational Phase</b></p>	<p>The proposed changes are minor on-site building changes, marine water &amp; sediment quality would not be impacted as a result of the construction works or the design of the buildings and structures. The proposed changes will not give rise to any changes in the commissioning process</p>

Topic	Sub Topic	Original ES <sup>1</sup> Residual Impacts	SoS's Conclusions in DCO Decision <sup>12</sup>	Impact of Proposed Non-Material Change
			The most significant potential impact on marine water is likely to be thermal discharge via the outfall. The impact of HPC on its own and in-combination with Hinkley Point B is assessed as minor. Chlorination (to clean pipework) would have a minor impact.	or operation of the plant (particularly the cooling water infrastructure). <b>No Change</b>
	Generation of sediment and discharges associated with construction of the outfall	Minor to negligible		
	Surface water discharge to the foreshore	Minor		
	Sewage Effluent	Minor		
	Groundwater Dewatering	Minor		
	Surface water discharges associated with construction of the temporary jetty	Minor to negligible		
	Construction of sea wall	Minor to negligible		
	Offshore construction works	Minor to negligible		
	Other construction phase discharges	Minor		
	Surface water associated with operation of the temporary jetty	Minor to negligible		
	Dismantling of the temporary jetty	Negligible		
	Tunnelling operation	Minor		
	Cumulative Construction Impacts	N/A		
	<b>Commissioning</b>			
	Cold Flush Testing	Minor		
	Hot Flush Testing	Minor		
	<b>Operational Phase</b>			

Topic	Sub Topic	Original ES <sup>1</sup> Residual Impacts	SoS's Conclusions in DCO Decision <sup>12</sup>	Impact of Proposed Non-Material Change
	Operational drainage discharges	No impact		
	Cooling water infrastructure operation	Minor		
	Cooling water discharge	Minor		
	Desalination and Demineralisation	Minor		
	Cumulative Operational Impacts	N/A		
<b>Marine Ecology</b>	<b>Construction Phase</b>		<p><b>Construction Phase</b></p> <p>Construction works and placement of structures in the marine environment will result in the loss of a small amount of intertidal habitat. This loss will affect two species of conservation interest, a red turf-forming alga (Corallina) and a tube worm (Sabellaria) but the loss is not considered to be significant. Mitigation will be put in place for that and also for piling which otherwise would have adverse impact on certain fishes and cetaceans.</p> <p><b>Operational Phase</b></p> <p>Thermal plume from the cooling water discharge was assessed as having a negligible effect on Corallina and Sebellaria and the crustacean, Crangon crangon and minor impact on non-migratory and migratory fish and on the invertebrate Macoma balthica. Operational waste streams are assessed as having a small impact on intertidal and subtidal habitats with the exception of residual biocide on intertidal habitats where the effect is considered to be moderate.</p> <p>Mitigation will be through a fish recovery and return system,</p>	<p>There would be no new or materially different effects to those previously assessed. The proposed minor on-site building changes would not impact marine ecology.</p> <p><b>No Change</b></p>

Topic	Sub Topic	Original ES <sup>1</sup> Residual Impacts	SoS's Conclusions in DCO Decision <sup>12</sup>	Impact of Proposed Non-Material Change	
			acoustic fish deterrent devices and low velocity intake.		
	Habitat Loss and Change	Minor			
	Physical Disturbance	Minor			
	Changes in Water Quality	Minor			
	Noise and Vibration	Negligible to minor			
	Artificial Light	Negligible			
	<b>Operation</b>				<b>No Change</b>
	Thermal Discharges	Minor			
	Chemical Discharges	Minor			
	Impingement of Fish and Shrimp	Minor to negligible			
	Entrainment	Minor			
<b>Terrestrial Ecology and Ornithology</b>	Off-site ditches and grazing marsh	Minor adverse	<p><b>Construction Phase</b></p> <p>The loss of part of the Hinkley Country Wildlife Site and of flower-rich calcareous grassland which is included within it will be a significant impact. Habitat creation measures during construction means that only a minor impact is predicted on other wildlife. A similar impact is predicted on wintering and passage waterbirds due to small numbers and infrequent occurrence close to HPC.</p> <p>Landscaping once construction is complete will include habitat creation (calcareous grassland, woodland and hedgerows).</p> <p><b>Operational Phase</b></p> <p>Once site is complete an Integrated Land Management Plan will implement a programme of monitoring and management control in respect of selected species and habitats (including breeding birds,</p>	<p>As the proposed changes relate to minor on site building changes, no new or materially different impacts on terrestrial ecology &amp; ornithology are anticipated.</p> <p><b>No Change</b></p>	
	Off-site wetland areas	Minor adverse			
	Lowland calcareous grassland	Minor to moderate adverse			
	Woodland	Minor adverse to minor beneficial			
	Hedgerows	Minor adverse to minor beneficial			
	Watercourse	Minor adverse to negligible beneficial			
	Habitat networks	Minor adverse to minor beneficial			
	Birds using terrestrial areas	Negligible adverse to minor beneficial			
	Lesser Whitethroat	Minor adverse to minor beneficial			
	Cetti's warbler	Minor adverse			
	Birds using intertidal areas	Minor adverse			
	Badgers	No impact			

Topic	Sub Topic	Original ES <sup>1</sup> Residual Impacts	SoS's Conclusions in DCO Decision <sup>12</sup>	Impact of Proposed Non-Material Change
	Barbestrelle	Minor adverse	butterflies, reptiles and bats and hedgerows and grassland).	
	Bat assemblage	Minor adverse		
	Otter	Negligible adverse		
	Reptiles	No impact		
	Great crested newts	No impact		
	Invertebrate assemblage	Minor adverse		
	Somerset Notable plant species	Minor adverse to Minor beneficial		
	Bridgwater Bay SSSI	Minor adverse		
	Hinkley CWS	Major adverse		
<b>Radiological</b>	There are no radiological impacts associated with construction and discharges from commissioning of HPC and will be no greater than those expected during operation.	Negligible	<p><b>Construction Phase</b></p> <p>Radiological risk to workers and the public during construction is assessed as very low.</p> <p><b>Operational Phase</b></p> <p>The assessment of discharges from the Hinkley Power Station Complex (the A, B and proposed C stations) are calculated to be well below the regulatory dose constraint. The impact on non-human species were assessed as being below relevant screening levels and therefore impacts are considered low.</p>	<p>As the proposed changes relate to minor on site building changes, no new or materially different radiological impacts are anticipated.</p> <p><b>No Change</b></p>
<b>Landscape and Visual</b>	Refer to Para. 3.1.3 above and the LVIA at Appendix 2	Refer to Para. 3.1.3 above and the LVIA at Appendix 2	Refer to Para. 3.1.3 above and the LVIA at Appendix 2	Refer to Para. 3.1.3 above and the LVIA at Appendix 2
<b>Historic Environment</b>	Construction Phase	Minor adverse to negligible	<p><b>Construction Phase</b></p> <p>Topsoil stripping and mechanical excavation will remove heritage assets. Mitigation will be provided by archaeological investigation in advance of construction. There will be a small physical impact on a section of Green Lane (a historic farm track).</p> <p><b>Operational Phase</b></p> <p>The HPC development will have a significant impact on the</p>	As the proposed changes relate to minor on site building changes, no new or materially different impacts on the Historic Environment are anticipated.
	Operational Phase	Minor adverse		

Topic	Sub Topic	Original ES <sup>1</sup> Residual Impacts	SoS's Conclusions in DCO Decision <sup>12</sup>	Impact of Proposed Non-Material Change
			setting of some designated heritage assets including Wick Barrow (Pixies Mound). At a further distance, the settings of Iron Age and Bronze Age assets in the Quantock Hills would be significantly affected. Mitigation includes screen planting and landscaping although it would not be possible to negate all impacts.	
<b>Offshore &amp; Intertidal Archaeology</b>	Construction Phase	Minor Adverse	<p><b>Construction Phase</b></p> <p>The construction of the temporary jetty may result in significant impacts to marine archaeology as the importance of the deposits is high.</p> <p>The Applicant has therefore implemented a programme of research in respect of the Holocene deposits.</p>	<p>As the relevant proposed changes are minor on site building changes, Offshore &amp; Intertidal Archaeology would not be impacted as a result of the construction works or the design of the buildings and structures.</p> <p>The proposed changes would not give rise to any changes in the commissioning process or operation of the plant (particularly the cooling water infrastructure).</p> <p><b>No Change</b></p>
	Operational Phase	Minor Adverse		
<b>Amenity &amp; Recreation</b>	<b>Construction Phase</b>		<p><b>Construction Phase</b></p> <p>Public rights of way within the inner security fence would be obstructed and access prohibited where necessary for health and safety reasons. Mitigation includes diversions to rights of way and alternative routes. Overall a low impact is predicted.</p> <p><b>Operational Phase</b></p> <p>Public rights of way within the site boundary would be permanently stopped up. However, diversions and network enhancements, and other improvements (e.g. permissive access to 100 hectares of land within the development site) would result in overall no significant impact.</p>	<p>As the proposed changes relate to minor on site building changes, no new or materially different impacts on Amenity and Recreation are anticipated.</p> <p><b>No Change</b></p>

Topic	Sub Topic	Original ES <sup>1</sup> Residual Impacts	SoS's Conclusions in DCO Decision <sup>12</sup>	Impact of Proposed Non-Material Change	
	PRoW (HPC Development Site)	Negligible to moderate adverse			
	PRoW (C182)	Negligible			
	PRoW (off site highway improvements)	N/A			
	Sports and recreation facilities (HPC Development Site)	Major adverse to minor beneficial			
	Sports and recreation facilities (C182)	N/A			
	Sports and recreation facilities (off-site highway improvements)	N/A to moderate adverse			
	Open access land and public open space (HPC development site)	N/A to moderate adverse			
	Open access land and public open space (C182)	Moderate adverse to minor beneficial			
	Open access land and public open space (off-site highway improvements)	N/A			
	<b>Operational Phase</b>				
	PRoW	Minor beneficial to major adverse			
	Sports and Recreation	N/A			
	Open access land and public open space	Negligible to major adverse			
<b>Navigation</b>	<b>Construction</b>	<p><b>Construction Phase</b></p> <p>Risks associated with the construction and dismantling of the temporary jetty and construction of the cooling water intake and outfall would be managed through use of exclusion zones.</p> <p>Dredging, with appropriate mitigation measures, is assessed as having a low risk. Impacts on the Lilstock range firing area would be managed between the applicant and</p>	<p>The proposed changes relate to minor on site building changes. No new or materially different impact on Navigation is anticipated.</p> <p><b>No change</b></p>		

Topic	Sub Topic	Original ES <sup>1</sup> Residual Impacts	SoS's Conclusions in DCO Decision <sup>12</sup>	Impact of Proposed Non-Material Change
			MOD. A temporary exclusion might be required to safeguard users of the River Parrett due to the presence of construction plant at Comwich Wharf.	
	Construction and dismantling of the temporary jetty and construction of the cooling water intake and outfall head structures	Moderate Low/acceptable		
	Passage of dredging plant to/from the off shore disposal site (Cardiff Grounds)	Moderate Low/acceptable		
	Construction plant for jetty and cooling water intake and outfall structures interfering with activities at the Lilstock Range Firing Area	Low/acceptable		
	<b>Residual Operation Risks</b>			
	Presence of the temporary jetty	Moderate to low / acceptable	<b>Operational Phase</b> Impacts on the Lilstock range firing area would be managed between the Applicant and Ministry Of Defence. The risks caused by the presence of maintenance vessels for the intake and outfall structure would be mitigated through various measures for commercial vessels. Operational impacts at the jetty would be mitigated by navigational light and other measures.	
	Jetty and cooling water intake and outfall operation interfering with activities at the Lilstock Range Firing Area	Moderate		
	Presence of the intake and outfall head structure	Moderate to low / acceptable		
	Presence and movements of vessels maintaining the intake and outfall head structures	Low / acceptable		
	Presence of the refurbishment and extended Comwich Wharf	Low / acceptable		



Topic	Sub Topic	Original ES <sup>1</sup> Residual Impacts	SoS's Conclusions in DCO Decision <sup>12</sup>	Impact of Proposed Non-Material Change
	Presence and movement of vessels using Combwich Wharf	Moderate to low / acceptable		
	Maintenance of the Berth at Combwich Wharf	Low/acceptable		

### 3.2 Review of potential effects associated with new topics identified in the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

3.2.1 The Environmental Impact Assessment which was prepared to support the application for the DCO was undertaken in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009, and included those matters identified in Schedule 4, Part 1, paragraph 19 of the 2009 Regulations. This non-material change application is being submitted in accordance with The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the “**2017 EIA Regulations**”), which include assessment topics which were not addressed distinctly within the previous Environmental Impact Assessment<sup>13</sup>. These topics include:

- Human Health;
- Major Accidents and Disasters; and
- Climate Change.

3.2.2 These topics were considered either within assessments which supported the DCO application, or within other assessments undertaken separate to the DCO. This provides a firm basis from which to undertake the following review of:

- effects associated with the project as approved; and
- the change in effects which this proposed non-material change would result in.

#### Major Accidents and Disasters

##### 2017 EIA Regulations and Policy Requirements

3.2.3 The 2017 EIA Regulations have introduced the requirement for “expected significant effects arising from the vulnerability of the proposed development to major accidents or disasters that are relevant to that development” (Regulation 5(4)) to be assessed within EIAs where the potential for significant effects has been identified.

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<sup>13</sup> EDF Energy (2011) *Hinkley Point C Environmental Statement – Volume 2 Development Site* [online] Accessed 30.6.2020

### Previous assessment methods

- 3.2.4 The threat of Natural Disasters were not quantified within the Environmental Impact Assessment. Safety risks associated with major incidents and natural disasters were considered in the nuclear safety case. The nuclear safety case considers a wide range of natural phenomena to magnitudes that are extreme compared to the requirements of non-nuclear assessments, taking care to identify all reasonably foreseeable "external hazards" that could affect the HPC Site and derive a maximum hazard magnitude. All holders of an Office for Nuclear Regulation (ONR) Nuclear Site Licence maintain a safety case for their nuclear operations, which ONR assesses against its Safety Assessment Principles. These guide the implementation of the 36 ONR Nuclear Site Licence Conditions, and the requirements of the Nuclear Installations Act 1965, the Health & Safety at Work Act 1974, and the Energy Act 2013 pertaining to nuclear installations in the UK. Licensees also provide information to ONR as the Regulator for the Ionising Radiation Regulations 2017 and Radiation (Emergency Preparedness and Public Information) Regulations 2001, as well as to the Environment Agency for its regulation and permitting with respect to "Radioactive Substances Regulation", which consists of the Environmental Permitting (England and Wales) Regulations 2010 amongst others.
- 3.2.5 These assessments were reviewed by the ONR as part of the Generic Design Assessment (GDA) exercise that resulted in the joint issue of a Design Acceptance Confirmation (DAC) by ONR and a Statement of Design Acceptability (SoDA) by the Environment Agency in December 2012. The Hinkley Point C Pre-Construction Safety Report (PCSR3) then developed the generic design into a site-specific safety case, the third version of which has been assessed by ONR and resulted in Regulatory Consents being granted in 2017 and 2018 for construction of Nuclear Island Concrete. Construction is now well-advanced, including the works that set the final height of the site platform and provide surface water run-off and drainage features.
- 3.2.6 This derivation of hazard intensity is itself conservative, firstly being based upon a design basis return period of 10,000 years or more, and then normally against an upper confidence limit of at least 85% (or more if current knowledge of the specific phenomenon permits and is supported by relevant authorities such as the UK Meteorological Office and topic-specific research bodies). Hazards of natural origin considered by PCSR3 are: earthquake; external flooding (including coastal flooding, rainfall and surface run-off, hail and high groundwater level); extreme climatic conditions (snow, wind, tornado, extreme heat and extreme cold); lightning and electromagnetic interference; heat sink-specific hazards. Most of these consider further sub-topics, recognising that many hazards comprise more than one contribution and that these may either occur cumulatively or result in further, consequential events. Hence, the external coastal flooding hazard considers the platform height required to protect the site from high sea level (including tides, surges and waves) and extreme rainfall both on the site itself and run-off from elsewhere.
- 3.2.7 The safety case as presented in PCSR3 will continue to be updated and maintained throughout the entire lifecycle of the HPC site, with the next major submission expected to be the Pre-Commissioning Safety Report (PCmSR), assessment of which is required to enable ONR to consider granting Regulatory Consent before nuclear fuel may be loaded into the HPC reactors. The Site Data Summary Report now provides the major collated source of information (with references to specific, underlying studies) on External Hazards to PCmSR onwards and will therefore be maintained in its own right as knowledge of natural phenomena continues to develop, both with respect to the HPC Site itself and more generally in each field

of study. As the holder of the Nuclear Site Licence for the HPC site, NNB GenCo (HPC) Ltd. seeks continuous improvements to safety and is required to conduct a periodic review its safety case at least every ten years. Where these exercises identify changes or new contributions to external hazards, they will be considered and reasonably practicable improvements will be implemented. This work will take into account the future state of knowledge contributing to understanding of each natural phenomenon, including the assessment of real and predicted consequences of climate change to each hazard topic. The use of a conservative approach to design allows for significant margins to safety with current understanding of climate change, and future improvements should the climate worsen significantly.

- 3.2.8 Further to consideration of 10,000-year return periods for design basis external hazards, the safety case further considers "beyond design basis" external hazards, where the magnitude of phenomena could potentially be higher. This aims firstly to ensure the absence of "cliff-edge effects", such that a small change in hazard magnitude must not have significant impact on the site, and informs the provision of design margins and development of reasonably practicable design improvements. The return period is therefore generally extended to 100,000 years where the current state of knowledge permits meaningful consideration of impact on a best-estimate basis. This assessment will also be maintained throughout the lifecycle and will particularly consider the impact of real and predicted consequences of climate change, as understanding improves.

#### Effects associated with DCO Approved Project

- 3.2.9 As is indicated a range of potential safety risks have been considered.
- 3.2.10 Following the events caused by the earthquake and tsunami damage to the Fukushima Daichi plant, the ONR examined the circumstances of the Fukushima accident to determine what lessons could be learnt to enhance nuclear safety in the UK. Furthermore, the flood assessment within the ES considers the probability of flooding and risk of sea water rise including an analysis of historical flood events. This has been reflected through the design process and subsequently the nuclear island has been set at 14.0m above ordnance datum (sea level) so as to remain flood free during an extreme 1 in 10,000 year tidal event.
- 3.2.11 Based on the strict legal requirements, we can be confident that any risks associated with Major Accidents and Disasters have been mitigated to the extent that they would not result in a significant adverse effect.

#### Potential effects associated with this proposed non-material change

- 3.2.12 The proposed new or revised buildings and structures have been designed to the same standards, meaning that they will respond to threats from Major Accidents and Disasters.
- 3.2.13 Overall, no change in the significance effects associated with Major Accidents and Disasters are envisaged.

## Health and Wellbeing

### 2017 EIA Regulations and Policy Requirements

- 3.2.14 The 2017 EIA Regulations introduce the requirement that an EIA must describe and assess the direct and indirect effects on population and human health.
- 3.2.15 Human health is an embedded theme within the Overarching National Policy Statement for Energy (EN1) and the National Policy Statement for Nuclear Power Generation (EN-6).

### Previous assessment methodology

- 3.2.16 The Hinkley Point C Health Impact Assessment (HIA)<sup>14</sup> was prepared on a voluntary basis to investigate and address the potential impact of the project upon community health and well-being. The executive summary of the HIA states that:

*“The scope and focus of the HIA has been defined and iteratively refined through significant engagement with key stakeholders through the scoping exercise and the formal consultation process. It has benefited from the support of the members of the Health and Task Finish Group including Somerset Primary Care Trust, Somerset County Council, West Somerset District Council and Sedgemoor District Council in the development of appropriate mitigation.”*

### Effects associated with DCO Approved Project

- 3.2.17 The executive summary of the HIA states that:

*“Potential impacts on local health care services from a large construction workforce will be largely managed through a preventative approach to occupational health care, including site and staff risk management, health awareness and safety training, and a comprehensive occupational health care system (including health screening, health promotion and health care). In addition, the potential worst-case residual impact upon local health care has been assessed and an appropriate health care planning contribution applied to support local health care services during the HPC Project.”*

- 3.2.18 With regards to Construction effects, the HIA concluded that the project *“would generate significant direct, indirect and induced income and employment at the local and regional level, with subsequent socio-economic health benefit.”*
- 3.2.19 With regards to operational effects, the HIA concluded that *“any health risks from discharges of radioactivity would be low, and is significantly within regulatory constraints, legal limits and ICRP guidelines set to protect health”*. In addition, *“The operational facility would generate a significant number of direct jobs (700)”* addressing the need for skilled jobs identified in local policy.

### Potential effects associated with proposed non-material change

- 3.2.20 The proposed changes involving the Emergency Response Centre, Back-up Emergency Equipment Store, and Emergency Response Energy Centre involve improving the functionality and capabilities of the

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<sup>14</sup> EDF Energy (2012) *Hinkley Point C Health Impact Assessment* [[online](#)] Accessed 7.7.2020

emergency response facilities on Site. These changes will improve the response to emergencies which involve a risk to health, and are expected to be beneficial when compared to the previous assessment.

- 3.2.21 The previously approved Helipad would be replaced with an emergency landing site (which is not included within this application). The health benefit of having a fast means of extracting people to hospital would not change.
- 3.2.22 Overall, no change in the significance effects associated with health or well-being are envisaged.

## Climate Change

### 2017 EIA Regulations and Policy Requirements

- 3.2.23 The Climate Change Act 2008 establishes a legally binding target to reduce the UK's greenhouse gas (GHG) emissions by at least 100% by 2050 compared to 1990 baseline levels. To drive progress and set the UK on a pathway towards this target, the Act introduced a system of 5-year carbon budgets, including a target that the annual equivalent of the carbon budget by 2020 is at least 34% lower than 1990.
- 3.2.24 The Paris Agreement (2016) is an agreement to enhance the United Nations Framework Convention on Climate Change. Its purpose aims to strengthen the global response to the threat of climate change by holding the increase in the global average temperature to well below 2°C above preindustrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels. All parties, including the UK, are to undertake and communicate ambitious efforts with the view to achieving this purpose.
- 3.2.25 The following national legislation is relevant to a climate change assessment:
- Climate Change Act 2008;
  - Climate Change Act 2008 (2050 Target Amendment) Order 2019;
  - Carbon Budget Order 2011 (4th Carbon Budget, 2023 to 2027);
  - Carbon Budget Order 2016 (5th Carbon Budget, 2028 to 2032); and
  - The 2017 EIA Regulations.
- 3.2.26 The NPS for Nuclear Power Generation (NPS EN-6) and Energy (NPS EN-1) set out the Government's energy policy, and guidance for determining an application for a development consent order. The NPSs also include specific criteria and issues which should be covered by applicants' assessments of the effects of their scheme.

### Effects associated with DCO Approved Project

- 3.2.27 The requirement to assess the climate change impacts of a project was first introduced into the EIA process through the 2017 EIA Regulations and was therefore not explicitly considered in the EIA prepared to support the DCO application.
- 3.2.28 The project has been designed to a standard which means that it has adapted to future climate change scenarios, in particular in terms of managing operational risks to the project from flooding and storm surge. In addition, the project has also been designed to ensure it remains operational during all envisaged weather (extreme heat or extreme cold) conditions.

- 3.2.29 The project will contribute to the UK meeting the predicted increase in demand for electricity over the coming decades. Nuclear power stations produce minimal GHG emissions while operating. The electricity generated by HPC's two reactors will offset nine million tonnes of carbon dioxide emissions a year, which is equivalent to taking nearly four million cars off the road annually. The emissions take into account any carbon emissions produced during construction of the power station. Hinkley Point C will provide low-carbon electricity for around six million homes, which represents 7% of the UK's electricity demand.
- 3.2.30 The project would result in an overall beneficial effect, primarily due to reducing the UK's reliance on more carbon intensive methods of energy production.

#### Potential effects associated with proposed Non-Material Change

- 3.2.31 In terms of adapting to climate change, the proposed new or revised buildings and structures have been designed to the same standards as buildings which have previously been approved. They will not change the extent to which the project is able to adapt to climate change (for example, increased heat or cold).
- 3.2.32 Buildings are being added, removed and rearranged as part of the proposals, overall there is a slight increase in the number of buildings. No calculation of the carbon cost associated with construction has been undertaken. However, relative to the overall benefits of the project, it anticipated that the proposed changes are only expected to result in a minor increase to the carbon emissions which are associated with the construction of the project. The project will continue to have a positive impact on emissions at a national level.
- 3.2.33 Overall, no change in the significance effects associated with climate change are envisaged.

### **3.3 Ecological Impact of Change in Number of Green Roofs**

#### **Background**

- 3.3.1 Planned alterations in site layout and function of certain buildings mean it will not be possible to install green roofs on 7 buildings where installation of green roofs had been previously planned. This will reduce the total number of green roofs on Site from the originally planned 15 to 8.
- 3.3.2 The assessment made in the ES<sup>1</sup> was made with the assumption sedum green roofs would be installed as planned, though does not clearly link installation of the roofs to any specific environmental receptors. The ES does not specify the number of green roofs to be installed, though at the time of production it was anticipated that 15 would be installed. The biodiversity section of the ES concluded that the overall impact of development on biodiversity at HPC would be 'minor beneficial' to terrestrial ecology and ornithology.
- 3.3.3 It is necessary to evaluate any potential negative impact which could result from the reduction in numbers of green roofs installed on biodiversity, thereby leading to a change in likely outcome from 'minor beneficial'.

#### **Ecological Benefits of Green Roofs**

- 3.3.4 Ecological benefits of green roofs include provision of space for plants and wildlife within the footprint of the building. In some instances, green roofs can provide additional habitat for a diverse array of invertebrate life. This in turn can be of benefit to bats and other species foraging for insects in the area,

thereby providing benefits to the wider ecosystem. At the time of inclusion of sedum green roofs in the design, benefit to invertebrate life and associated species was considered a key benefit of green roof installation.

## Developments

- 3.3.5 Since the decision was made to include 15 green roofs in the Site’s operational design, opinions on the ecological value of sedum green roofs has changed. A best practice guidance document released by Buglife in 2019<sup>15</sup> set out that standard sedum green roofs are not of high value to invertebrate life, stating;

*“A common approach to establishing an extensive green roof is to specify an ‘off the shelf’ standard green roof system. In most cases, these will consist of a uniform, low diversity sward, usually dominated by plants of the Sedum genus. The resulting lack of plant diversity and habitat diversity means that these systems do not constitute a biodiverse roof. The inclusion of Sedum plants on a biodiverse roof can be useful – but should normally comprise no more than 30% of the species composition.”*

- 3.3.6 The recent guidance indicates that the installation of green roofs may not be as beneficial to biodiversity as first thought. It is considered that the reduction in the number of green roofs to be installed from 15 to 8 is highly unlikely to have a negative effect on the overall biodiversity value of the Site during its operational phase.

## Other Additional Enhancement

- 3.3.7 Recent ecological enhancement at the Site has included 2.2 hectares of woodland planting along Bum Brook at the south of the Site. The outcome of this has been highly beneficial to biodiversity with successful establishment of the woodland strip, leading to improved connectivity for bats along this southern corridor. Survey findings from 2019 have shown bats to favour this new route and establishment and growth following planting has been more successful than anticipated. As well as providing a corridor for bats to use when commuting across the Site, planting here will be of benefit invertebrate life and therefore will therefore be providing high quality foraging habitat for bats now and throughout the operational phase of the Site.
- 3.3.8 Other enhancements which may be considered to have been more successful than anticipated include planting of tussocky grassland mixture in the soil storage areas which will provide additional habitat for invertebrate and bat species during the construction phase. Ahead of the operational phase EDF plan to carry out additional native planting wherever possible within the Site. Over and above that specified in the Habitat Management Plan (as submitted under DCO Requirement P19) in an effort to ensure a net-gain for biodiversity.

## Groundwater

- 3.3.9 During the operations phase it is necessary to manage groundwater levels and as a result infiltration of rainwater into the ground is minimised. Runoff from the operational area of the site is directed to the

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<sup>15</sup> Buglife – The Invertebrate Conservation Trust (2019) *Creating Biodiverse Green Roofs For Invertebrates* [\[online\]](#) Accessed 7.7.2020



surface water drainage system. As a result, changes to the roofing materials at HPC will have no impact on groundwater and the conclusions of the Environmental Statement remain valid.

## Surface Water

- 3.3.10 Although green roofs can form part of sustainable drainage systems, the drainage design for HPC assumed that all roofs would be impermeable and provide no flow attenuation. Therefore, the removal of the sedum-based green roofs will not impact upon the volume of runoff that the site's storm water drainage system needs to manage. The removal of the green roofs will not have any impact on water quality with roof runoff being considered to be clean uncontaminated water by the Environment Agency. It is concluded that the removal of the green roof will not impact upon the surface water environment and the conclusions of the Environmental Statement remain valid.

## Conclusion

- 3.3.11 It is considered that the reduction in number of sedum green roofs installed at the Site (from 15 to 8) will have negligible impact on the overall biodiversity value of the Site and would not cause a change of conclusion from 'minor beneficial' for biodiversity (stated in the ES<sup>1</sup>) as a result of development. Furthermore, it is considered that the additional success of other enhancements at HPC described above provide benefit to invertebrates and bats species outweighing any reduction in value from removal of 7 green roofs from the operation design plan.

## 3.4 Habitats Regulations Assessment

- 3.4.1 In addition to an ES<sup>1</sup> (see Section 3.1), the original DCO application was accompanied by a Report to Inform the HRA<sup>16</sup>. The HRA Report was prepared based on a three stage process, which included screening, testing for likely significant effects (LSE), and appropriate assessment. The potentially significant effects of the project were assessed alone as well as in-combination with other relevant plans or projects.
- 3.4.2 The SoS for Energy and Climate Change undertook a HRA for the DCO application, the record of which is appended to the Decision Letter<sup>17</sup> at Annex F<sup>18</sup>. In accordance with Regulation 61(3) of the Habitats Regulations, the SoS carried out consultation with the appropriate nature conservation bodies to inform the HRA. A document entitled Report on the Implications for European Sites<sup>19</sup> was prepared by the examining authority for the DCO application for the purposes of Regulation 61(3) consultation. Written responses were received from Natural England ("NE"), Countryside Council for Wales ("CCW"), the Marine Management Organisation ("MMO"), the Environment Agency ("EA"), and EDF Energy.

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<sup>16</sup> EDF Energy (October 2011) *Hinkley Point C Project Report to Inform Habitats Regulations Assessment* [[online](#)] Accessed 22/6/2020

<sup>17</sup> Department of Energy & Climate Change (2013) *Decision Letter* [[online](#)] Accessed 22/6/2020

<sup>18</sup> Department of Energy & Climate Change (2013) *Decision Letter - Annex F: Record Of The Habitats Regulations Assessment Undertaken Under Regulation 61(1) Of The Conservation Of Habitats And Species Regulations 2010 (As Amended) For An Application Under The Planning Act 2008 (As Amended)* [[online](#)] Accessed 22/6/2020

<sup>19</sup> Examining Authority report prepared with the support of the Planning Inspectorate Secretariat (July 2012) *Report On The Implications For European Sites Proposed Hinkley Point C Nuclear Power Station* [[online](#)] Accessed 22/6/2020



3.4.3 The SoS's HRA took into account the Report on the Implications for European Sites<sup>19</sup>, the written responses to it, a HRA undertaken by the EA (March 2012), a HRA undertaken by the MMO in respect of the temporary jetty (July 2012) and a specific hearing on HRA matters at which NE, CCW, the MMO and the EA stated that they were content with the sufficiency of the Report on the Implications for European Sites<sup>19</sup> (August 2012), and advice from the Panel that the requirements included in the draft DCO (August 2012) would protect the integrity of the European sites and Ramsar site. The SoS's HRA concluded that the HPC project will not have an adverse effect on site integrity based on the inclusion of certain mitigation requirements in the DCO and conditions in the relevant EA permits (Paragraph 4.11 of Decision Letter<sup>17</sup> and paragraph 10.3 of Decision Letter Annex F<sup>18</sup>).

3.4.4 The Table below describes the relevant designated sites and features, which include Special Areas of Conservation (SAC) and Ramsar Site, and assesses the impact of the proposed non-material changes.

**Table 3-2 Potential Effects on Designated Site Features during the Construction and**

Designated Site and Interest Feature	Construction and Operation Activity and SoS Conclusion on Site Integrity in Decision	Impact of Proposed Non Material Changes
Severn Estuary SAC/Ramsar Site Estuaries	<p><b>Construction:</b> Hinkley Point C temporary jetty, seawall and Combwich Wharf could have a significant effect on this feature due to habitat loss and physical damage, changes to water quality associated with sediment discharges, and changes to hydrodynamics and sediment transport. No adverse effect on site integrity was concluded for alone or in-combination effects.</p> <p><b>Operation:</b> Hinkley Point C could have a significant effect on this feature due to habitat loss and physical damage, changes to water quality associated with total residual oxygen (TRO), hydrazine and thermal plume inputs from the cooling water discharge, and due to surface water drainage from off-site associated development. No adverse effect on site integrity was concluded for alone or in-combination effects, taking into account that EA permit conditions would be in place for regulated discharges.</p>	<p>The proposed changes relate to minor on site building changes and would not affect construction activities associated with the temporary jetty, seawall, cooling water infrastructure and Combwich Wharf, therefore there would be no additional impact on the Severn Estuary SAC / Ramsar site feature (estuaries) and site integrity over and above what has already been assessed by the SoS.</p> <p>Whilst there would be a change to the cooling water infrastructure resulting from the amendment to the Filtering Debris Recovery Pit, there would be no change in the functionality of the building. Therefore there would be no additional operational impact on the Severn Estuary SAC / Ramsar site feature (estuaries) and site integrity over and above what has already been assessed within the original DCO application.</p>
Severn Estuary SAC / Ramsar Site: Sub-tidal Sandbanks	<p><b>Construction:</b> Hinkley Point C could have a significant effect on habitats and species due to and changes to water quality associated with site surface water and foul drainage discharges. No adverse effect on site integrity was concluded for alone or in-combination effects.</p> <p><b>Operation:</b> Hinkley Point C could have a significant effect on this feature due to habitat loss and physical damage associated with scouring from the cooling water discharge, and changes to water quality associated with total residual oxygen (TRO), hydrazine and thermal plume discharges from the cooling water discharge. No adverse effect on site</p>	<p>The proposed changes relate to minor on site building changes and would not affect construction activities associated with the temporary jetty, seawall, cooling water infrastructure and Combwich Wharf; therefore there would be no additional impact on the Severn Estuary SAC / Ramsar site feature (sub-tidal sandbanks) and site integrity over and above what has already been assessed by the SoS.</p> <p>Whilst there would be a change to the cooling water infrastructure resulting from the amendment to the Filtering Debris Recovery Pit, there would be no change in the functionality of</p>

Designated Site and Interest Feature	Construction and Operation Activity and SoS Conclusion on Site Integrity in Decision	Impact of Proposed Non Material Changes
	integrity was concluded for alone or in-combination effects.	the building. Therefore there would be no additional operational impact on the Severn Estuary SAC / Ramsar site feature (estuaries) and site integrity over and above what has already been assessed within the original DCO application.
Severn Estuary SAC / Ramsar Site:  Inter-tidal mudflats and sandflats	<p><b>Construction:</b> Hinkley Point C could have a significant effect on this feature due to changes to water quality associated with site surface water and foul drainage discharges, and habitat loss and physical damage associated with erosion at Combwich Wharf. No adverse effect on site integrity was concluded for alone or in-combination effects.</p> <p><b>Operation:</b> Hinkley Point C could have a significant effect on this feature due to habitat loss and physical damage associated with scouring from the cooling water discharge and erosion at Combwich Wharf, and changes to water quality associated with total residual oxygen (TRO), hydrazine and thermal plume discharges from the cooling water discharge. No adverse effect on site integrity was concluded for alone or in-combination effects.</p>	<p>The proposed changes relate to minor on site building changes and would not affect construction activities associated with the temporary jetty, seawall, cooling water infrastructure and Combwich Wharf; therefore there would be no additional impact on the Severn Estuary SAC / Ramsar site feature (Inter-tidal mudflats and sandflats) and site integrity over and above what has already been assessed by the SoS.</p> <p>Whilst there would be a change to the cooling water infrastructure resulting from the amendment to the Filtering Debris Recovery Pit, there would be no change in the functionality of the building. Therefore there would be no additional operational impact on the Severn Estuary SAC / Ramsar site feature (estuaries) and site integrity over and above what has already been assessed within the original DCO application.</p>
Severn Estuary SAC / Ramsar Site:  Atlantic salt meadows (saltmarsh)	<p><b>Construction:</b> Hinkley Point C could have a significant effect on this feature due to direct loss and physical damage associated with Combwich Wharf. No adverse effect on site integrity was concluded for alone or in-combination effects.</p> <p><b>Operation:</b> Hinkley Point C could have a significant effect on this feature due to indirect loss and physical damage associated with erosion at Combwich Wharf and wash effects associated with vessel movements at Combwich Wharf. No adverse effect on site integrity was concluded for alone or in-combination effects.</p>	<p>The proposed changes relate to minor on site building changes and would not affect construction activities associated with the temporary jetty, seawall, cooling water infrastructure and Combwich Wharf; therefore there would be no additional impact on the Severn Estuary SAC / Ramsar site feature (Atlantic salt meadows) and site integrity over and above what has already been assessed by the SoS.</p> <p>Whilst there would be a change to the cooling water infrastructure resulting from the amendment to the Filtering Debris Recovery Pit, there would be no change in the functionality of the building. Therefore there would be no additional operational impact on the Severn Estuary SAC / Ramsar site feature (estuaries) and site integrity over and above what has already been assessed within the original DCO application.</p>

### 3.5 Specific Assessment of the Effects of the Proposed Operational Site Changes on the Exmoor and Quantocks Oakwoods SAC

- 3.5.1 The SoS's HRA assessed the potential impacts of the HPC project on Barbastelle bats, a qualifying feature of the Exmoor and Quantock Oakwoods SAC including potential habitat losses and gains, the risk of fragmentation of foraging habitat and disruption to commuting corridors by artificial lighting. The SoS concluded that the HPC project alone and in combination would not have an adverse effect on site integrity with the relevant DCO requirements in place (Section 9 of Decision Letter Annex F <sup>18</sup>).
- 3.5.2 Specific consideration has been given to whether it is likely that there would be any new or materially different effects on the Barbastelle bats feature of the Exmoor and Quantocks Oakwoods SAC over and above those already assessed in the SoS's HRA as a result of the proposed changes to the DCO. In particular, consideration has been given to the SoS's assessments in relation to any additional habitat fragmentation and disturbance that might affect foraging habitat and/or disruption to commuting corridors; as presented in Paragraphs 9.3-9.11 and Paragraphs 9.12-9.18, Section 9, of the SoS Decision Letter Annex F<sup>18</sup>.
- 3.5.3 The proposed changes within the HPC development Site relate to some of the buildings and structures within the operational Site boundary. These changes would not include additional land clearance and changes to the availability of foraging resource, and would not include additional loss or fragmentation of foraging habitat. Also, these changes would not include additional lighting around the retained commuting corridors, and would not include additional construction activity and operational maintenance activity around the retained commuting corridors. Accordingly, it is considered that these changes would not change the SoS's assessment of potentially significant effects within the Site boundary.
- 3.5.4 Also, these proposed changes would remain within the HPC operational Site boundary and well within the perimeter fence. Accordingly, it is considered that these changes would not change the SoS's assessment of potentially significant effects outside the Site boundary.
- 3.5.5 In summary, loss and fragmentation of foraging habitat (e.g. due to land clearance) and disruption of community corridors (e.g. due to lighting) would not change over and above that already assessed by the SoS (Section 9 of Decision Letter Annex F <sup>18</sup>). Therefore, it is considered that the proposed changes to the DCO would not have any new or materially different effect on the assessment outcomes on the Barbastelle bats feature of the Exmoor and Quantocks Oakwoods SAC over and above those already assessed in the SoS's HRA. Accordingly, it is considered that there would be no adverse effect on the integrity of the SAC and the SoS's conclusion remains valid (Paragraph 4.11 of Decision Letter <sup>17</sup> and paragraph 10.3 of Decision Letter Annex F<sup>18</sup>).

### 3.6 Conclusion on HRA

- 3.6.1 The SoS's assessments and conclusions of potential effects have been considered in relation to the proposed non-material changes to the DCO.
- 3.6.2 A change might be considered as material if:
- a) the change would invoke a need for a HRA; and/or

b) the change would result in the need for a new or additional licence in respect of European Protected Species.

3.6.3 Consideration has been given to whether it is likely that there would be any additional potentially significant effects on European designated sites over and above those already assessed in the SoS's HRA as a result of the proposed changes to the DCO. Since the proposed changes are all within the operational Site boundary and would not change the footprint of the development platform or the power station's operation, they are unlikely to materially change the potential significant effects on the designated European sites.

3.6.4 EDF has considered the potential effects that have been assessed by the SoS (Sections 6-9 of Decision Letter Annex F<sup>18</sup>). These effects are summarised in Table 3-2 above. For the various reasons set out in the last column of Table 3-2, it is considered that the proposed changes to the DCO would not have any new or materially different effects on the assessment outcomes on the site features over and above those already assessed by the SoS. Accordingly, it is considered that there would be no adverse effect on the integrity of the sites and the SoS's conclusion remains valid (Paragraph 4.11 of Decision Letter<sup>17</sup> and paragraph 10.3 of Decision Letter Annex F<sup>18</sup>).

## 4 STAKEHOLDER ENGAGEMENT

### 4.1 Introduction

4.1.1 The section below describes the way in which the scope of this application and the scope of assessment which has been carried out to support consideration of the application has been the subject of discussion with key stakeholders.

### 4.2 Office for Nuclear Regulation ("ONR")

4.2.1 The evolution of the Site Layout Plan since the DCO was originally made has been carried out in phases aligned to the engineering sequence for the design of HPC. EDF has been working closely with the ONR for a number of years and has kept it involved at each of the various stages. The changes that are being proposed represent improvements to the design either in terms of nuclear safety, industrial safety or constructability.

4.2.2 As the HPC Site has a Nuclear Site Licence, granted by the ONR on behalf of the Health and Safety Executive, EDF is bound by a series of Licence Conditions, 36 in total. Licence Condition 16 (LC16) relates to Site plans, designs and specifications. This condition requires the licensee (NNB Generation Company (HPC) Limited) to indicate, using a Site plan, all buildings and plant or areas which might affect safety and to provide a schedule, updated as necessary, giving details of each building and its associated operations. The plan and schedule must be updated as necessary. Modifications to the design are controlled by EDF's modifications procedures which include proportionate ONR engagement under the requirements of Licence Condition 20.

4.2.3 At each of the key design stages, the ONR has been kept informed of the changes and therefore should be able to provide the Planning Inspectorate with authoritative advice if requested as part of the determination of this application.

4.2.4 EDF has engaged with the ONR and discussed the safety rationale associated with each individual Site layout and design change. As such, following our discussions on these matters, EDF believes that the changes incorporated within this submission are supported by the ONR.

### 4.3 Local Planning Authorities

4.3.1 A joint meeting was held with Sedgemoor District Council and Somerset County Council on 4 March 2020 and separately with Somerset West and Taunton Council on 6 March 2020 to provide an overview of the proposed changes. The three Councils represent key stakeholders as they are host local planning authority for the associated development sites, local highway authority, and host local planning authority for the main Site respectively.

4.3.2 Draft and previously approved Site Layout Plans were provided which identified how the proposed Site Layout Plan would change from the previously approved layout. The layout has evolved from the time DCO was made and as a result of two of the three non-material changes. EDF explained the main reasons why changes had occurred to various elements of the plant and how that impacted the Site layout. Detailed layout plans were discussed which indicated where new buildings or structures would be located and which buildings were proposed to be enlarged in size, removed or relocated as a result of the proposed changes. It was explained that all these changes were a result of learning and evolution of the design.

4.3.3 The LPAs agreed that consideration should be given to the ES which formed part of the DCO application and whether there would be any new or materially different likely significant effects on the environment in establishing whether the proposed changes would be material. The LPAs also agreed that particular attention should be given to the Landscape and Visual Assessment, as the changes had more potential to impact local views. Somerset West and Taunton Council raised queries around the need for additional viewpoints and whether safety issues have been considered.

4.3.4 The LPAs concurred that as long as the proposed changes did not result in any new or materially different likely significant effects on the environment then the proposed changes were justified as they are a result of increased learning and further strengthen the safety of HPC.

4.3.5 Notes of both meetings are appended at **Appendix 3** (SWT) and **Appendix 4** (SDC/SCC).

### 4.4 Local Stakeholders

4.4.1 On 27 February 2020 a presentation was made to the Main Site Forum, which is a regularly held meeting giving an opportunity for local residents, interested stakeholders and statutory bodies to hear about progress on Site and discuss matters of interest.

4.4.2 At the meeting a discussion was held, with various stakeholders requesting clarity on matters such as how to participate in the application and the nature of the change. A meeting note providing further detail is appended at **Appendix 5**.

## 5 CONCLUSION

- 5.1.1 The Hinkley Point C nuclear power station is an essential nationally significant infrastructure project and the need for new nuclear generating capacity is strongly supported in national policy. The proposed amendments to the DCO, set out above, are made for reasons relating to safety, design optimisation and security and are vital to the efficient and safe construction and operation of the power station.
- 5.1.2 As set out above, the changes are minor in nature and the effects of the changes individually and cumulatively would be imperceptible from viewpoints outside the Site. No new or materially different likely significant effects on the environment would arise from the changes proposed beyond those already comprehensively assessed within the ES. The proposed changes would not invoke a need for a HRA and would not result in the need for a new or additional licence in respect of European Protected Species. This application does not seek authorisation to compulsorily acquire any land, or an interest in or rights over land, that was not authorised through the DCO. The proposed changes are not likely to result in any additional or materially different effects on local communities or business. On this basis, the proposed changes are all considered to be non-material.

## APPENDIX 1 SITE LAYOUT PLAN



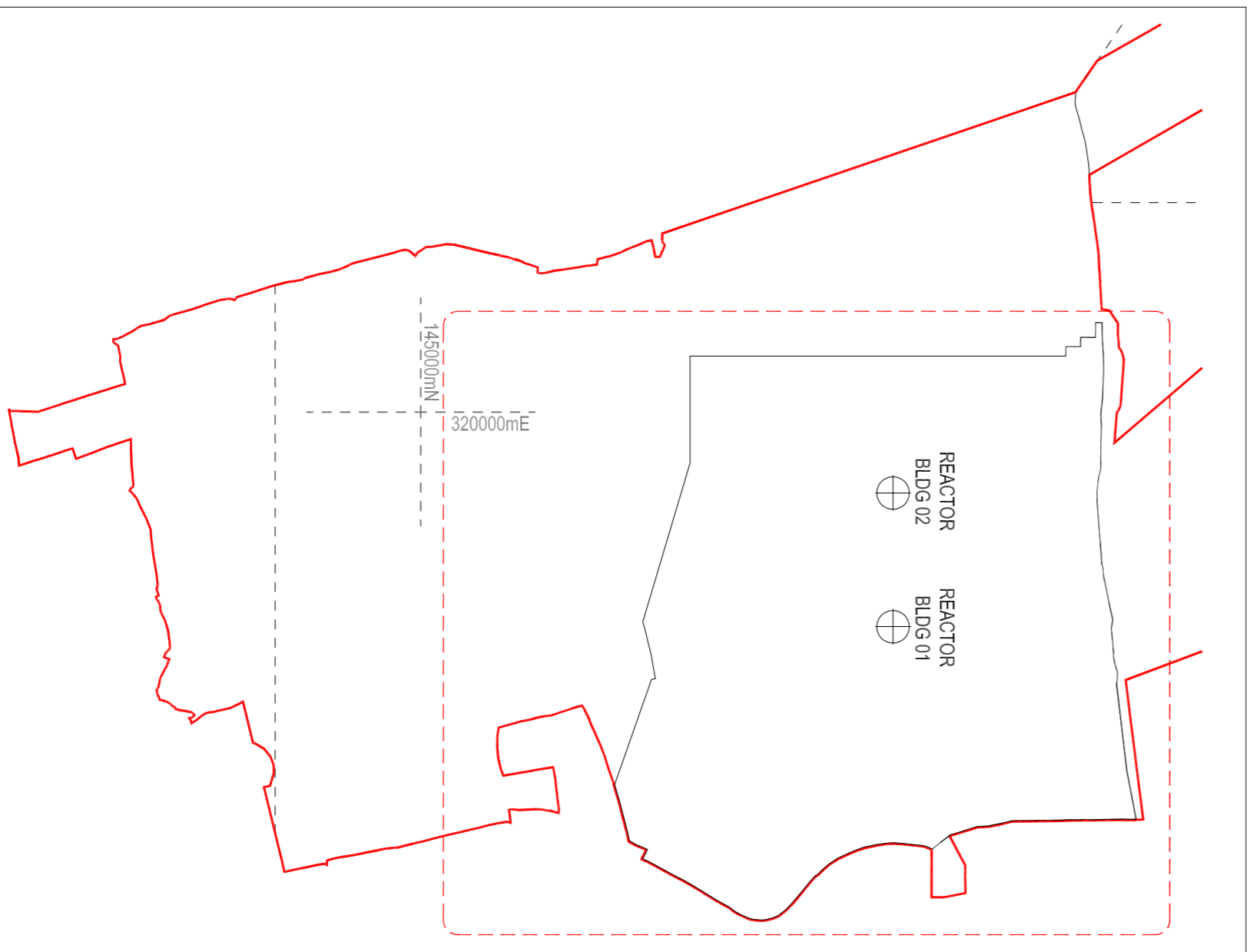


EXISTING HINKLEY POINT POWER STATION COMPLEX

C182 (WICK MOOR DRIVE)

GREEN LANE

BRIDGEWATER BAY



HPC PERMANENT DEVELOPMENT SITE LOCATION PLAN  
SCALE 1:10000

INTERNAL BUSINESS ONLY AND NOT FOR PUBLICATION  
HPC-INBPCC-00-000-DRW-000001

- NUCLEAR ISLAND**
- 01 REACTOR BUILDING
- 02 REACTOR BUILDING
- 03 REACTOR BUILDING
- 04 SAFEGUARD BUILDINGS
- 05 NUCLEAR AUXILIARY BUILDING
- 06 ACCESS TOWER
- 07 ACCESS TOWER
- 08 BORDON STORAGE
- 09 RADIOACTIVE WASTE PROCESS BUILDING
- 10 RADIOACTIVE WASTE PROCESS BUILDING
- 11 RADIOACTIVE WASTE PROCESS BUILDING
- 12 HOT LANDFILL
- 13 HOT WORKSHOP - HOT WAREHOUSE
- 14 FACILITIES FOR DECONTAMINATION
- 15 WATER TANKS - REFUELLING
- 16 EMERGENCY DIESEL GENERATORS
- 17 COOLING WATER DISCHARGE WEIR
- 18 BATTERY (BUILDINGS) TUNNEL - HIGH POINT
- 19 BATTERY LOAD BANKS
- CONVENTIONAL ISLAND**
- 20 FURNACE TAIL & SLAG BRIGGS
- 21 FURNACE TAIL & SLAG BRIGGS
- 22 GAS INSULATED SWITCH GEAR
- 23 UNIT TRANSFORMER
- 24 UNIT TRANSFORMER
- 25 HYDRAZINE STORAGE
- OPERATIONS**
- 26 OPERATIONAL SERVICE CENTRE
- COOLING WATER PUMPHOUSE & ASSOCIATED BUILDINGS**
- 27 COOLING WATER PUMPHOUSE
- 28 COOLING WATER PUMPHOUSE
- 29 COOLING WATER PUMPHOUSE
- 30 FILTERING OILS RECOVERY PIT
- 31 FIRE-FIGHTING WATER BUILDING
- 32 DISCHARGE SHALT
- REMAINING BALANCE OF PLANT & OTHER PLANT**
- 33 DENIMERALISATION STATION
- 34 AUXILIARY BUILDINGS
- 35 AUXILIARY BUILDINGS
- 36 OXYGEN STORAGE
- 37 CHEMICAL PRODUCTS STORAGE
- 38 SEWAGE TREATMENT PLANT
- 39 CONVENTIONAL ISLAND WATER
- 40 NUCLEAR ISLAND WATER STORAGE TANK
- 41 DEGASSED WATER STORAGE TANKS
- 42 FUEL & WASTE STORAGE
- 43 FUEL & WASTE STORAGE
- 44 INTERMEDIATE LEVEL WASTE INTERNAL STORAGE FACILITY
- AUXILIARY OFFICE & STORAGE**
- 45 MAIN ACCESS CONTROL BUILDING
- 46 EMERGENCY RESPONSE ENERGY CENTRE
- 47 OFF SITE DELIVERY CHECKPOINT
- 48 BUILDING ADMINISTRATION BUILDING
- 49 BUILDING ADMINISTRATION BUILDING
- 50 GARAGE FOR HANDLING FACILITIES
- 51 OIL & GREASE STORAGE - OIL
- 52 AUXILIARY BUILDING
- 53 RAW WATER AND POTABLE WATER SUPPLY
- 54 METEOROLOGICAL STATION
- 55 OUTRAGE ACCESS CONTROL BUILDING
- 56 CONVENTIONAL WASTE STORAGE
- 57 CONVENTIONAL WASTE STORAGE
- 58 TRANSIT AREA FOR VERY LOW LEVEL WASTE AND LOW LEVEL WASTE
- 59 BATTERY STORAGE
- 60 SERVICE ACCESS BUILDINGS
- 61 SERVICES VENTILATION BUILDING
- PUBLIC & TRAINING**
- 62 PUBLIC INFORMATION CENTRE
- 63 PUBLIC INFORMATION CENTRE
- NATIONAL GRID SUBSTATION**
- 64 NATIONAL GRID SUBSTATION
- OTHER SITE STRUCTURES**
- 66 SEA WALL (INCORPORATING COASTAL PROTECTION)
- 67 CAR PARK
- 68 METEOROLOGICAL STATION MAST
- 69 EDF ENERGY PYLON
- 70 WALKER ROOM FOR DENIMERALISATION
- 71 BACK-UP CONDENSER GENERATORS

**DRAWING SYMBOLS & LEGEND**

- HINKLEY POINT C DEVELOPMENT
- HINKLEY POINT C PERMANENT DEVELOPMENT SITE BOUNDARY
- TEMPORARY LEFTY SEAWARD HARBOUR LIMITS
- BUILDINGS / STRUCTURES
- NATIONAL GRID MAST / PYLONS & LINES (SEE TABLE BELOW)
- EMBANKMENT
- PYLONS & LINES - EDF ENERGY STANDARD
- RAILWAY TRACKS
- FENCES
- PARAMETER BUILDINGS
- RAINWATER CHANNEL

**NOTE:**  
ALL CO-ORDINATES ARE IN METRES AND ARE BASED ON THE OSNADNICE SURVEY NATIONAL GRID  
1458122N  
320596E

**REACTOR CENTRELINE OS COORDINATES**

UNIT 1 320596E  
UNIT 2 1458122N

**THE OVERHEAD LINES AND TOWER (PYLON) POSITIONS ILLUSTRATED ON THIS PLAN ARE INDICATIVE. NATIONAL GRID PROPOSALS FOR THESE OVERHEAD LINES AND PYLONS ARE SUBJECT TO A SEPARATE DCO APPLICATION REF: EN20001**

NO	DATE	BY	CHKD	DESCRIPTION	APPROVED
01	JUNE 2020	NMB	NMB	PERMANENT DEVELOPMENT DCO CHANGE SUBMISSION	NMB
02	SEPT 2017	NMB	NMB	PERMANENT DEVELOPMENT DCO CHANGE SUBMISSION	NMB
03	NOV 2014	NMB	NMB	PERMANENT DEVELOPMENT DCO CHANGE SUBMISSION	NMB
04	SEPT 2011	NMB	NMB	FOR HPC SUBMISSION	NMB
05	SEPT 2011	NMB	NMB	FOR HPC SUBMISSION	NMB



**DRAWING TITLE**  
Hinkley Point C Development Site  
HPC Permanent Development Site

**Site layout Plan (Operational)**  
Regulation 5(2)(o)

PROJECT DRAWING REFERENCE NO	REVISION	SCALE	DATE
HINK-A1-SL-00-GA-010	04	1:2500 @ A1	JUN 2020

**DCO Change Application Drawing - Detail (for Approval)**

**SCALE BAR**  
0 20 40 60 80 100 200 METRES

**DRAWING SECURITY CLASSIFICATION**  
 PROTECTIVE MARKING REQUIRED  
 NOT PROTECTIVELY MARKED



## APPENDIX 2 LANDSCAPE AND VISUAL IMPACT ASSESSMENT

### A.2.1 Introduction

This Appendix provides a Landscape and Visual Impact Appraisal (LVIA) of the proposed built development changes (the 'proposals') to the operational layout of the Hinkley Point C (HPC) development. The effects of these proposals are compared with the previous LVIA reported in the Environmental Statement (ES) for HPC, Volume 2, Chapter 22, October 2011. This formed part of the Environmental Impact Assessment, submitted in support of the application for development consent (the DCO application).

This LVIA is in support of the third Non-Material Change application that affects the Site Layout Plan. The LVIA process has been used for each previous Non-Material Change application in order to assess each proposed change from a landscape and visual perspective.

The LVIA accords with the *Guidelines for Landscape and Visual Impact Assessment*, Third Edition, Landscape Institute and IEMA, 2013 and identifies the likely landscape and visual effects of the proposals and whether these would be significant. The LVIA has been compiled by chartered Landscape Architects at Wood Environment & Infrastructure Solutions UK Ltd.

The structure of this Appendix is set out as follows:

- Introduction;
- Description of proposed changes to built structures;
- LVIA Methodology;
- Impact Assessment – Short-range Viewpoints;
- Impact Assessment – Medium-range Viewpoints; and
- Summary and Conclusions.

This report is supported by the following figures:

- Figure 1: Proposed changes to Built Development;
- Figure 2: ZVT and Viewpoint Locations;
- Figure 3: Viewpoint 2 (Short-range);
- Figure 4: Viewpoint 11 (Short-range) Shurton East;
- Figure 5: Viewpoint 5 (Medium-range) Higher Hill; and
- Figure 6: Viewpoint 19 (Medium-range) West Somerset Coast Path, Stolford.

## A.2.2 Description of the development and layout changes

HPC have reviewed the need, design, function and arrangement of permanent buildings and structures which would be part of the operational power station. This has resulted in changes to size, name and location of buildings on the Site Layout Plan, including the removal and addition of buildings and structures. The proposed changes are shown in 'Site Layout Plan (Operational) Regulation 5(2)(o)' (HINK-A1-SL-00-GA-010 Rev 04) at Appendix 1. A simplified layout of the proposals is illustrated in **Figure 1**. The proposed revisions to the consented layout will be a permanent change to the operational layout.

Following the DCO consent in 2013 and previous non-material applications approved in 2015 and 2017, the design of the main development site has matured further – the reasons for these changes are set out in Section 2 of the Application Statement. As a result, a number of changes are proposed to the operational layout of the HPC development. The changes principally affect the ancillary buildings on the periphery of the site layout, with some limited new structures proposed, as well as the repositioning or change in scale of some buildings already consented and the deletion of some buildings and features. The proposed changes are set out in **Table A.2.1** which refers to the 'Site Layout Plan (Operational) Regulation 5(2)(o)' (HINK-A1-SL-00-GA-010 Rev 04) dated June 2020 at Appendix 1.

**Table A.2.1 Layout and Building Changes within NMC4**

NMC 4 Building Ref	Description	Status	Previously approved size h x w x l (m)	Proposed size h x w x l (m)
30	Filtering debris recovery pit Unit 1	Revised	2 x 9 x 27	6 x 23 x 37
30	Filtering debris recovery pit Unit 2	Revised	2 x 9 x 27	6 x 23 x 37
38	Sewage Treatment Plant	Revised	3 x 4 x 8	11 x 11 x 56
42	Interim Spent Fuel Store	Revert footprint to previously approved DCO and NMC1 dimensions	25 x 65 x 150	
43	Access Control Building for the Interim Spent Fuel Store		5 x 17 x 29	
46	Emergency Response Energy Centre	New	Not Applicable	9 x 14 x 29
47	Off-Site Delivery Checkpoint	New	Not Applicable	5.1 x 12.2 x 25.5
48	Auxiliary Administration Building	Change of building name	20 x 29 x 38	No Change
49	Emergency Response Centre	New	Not Applicable	6 x 25 x 40.55
51	Oil and Grease Storage and Oil Ancillary Building	Relocated to footprint of Emergency Response Store	10 x 29 x 38	13 x 27 x 60
59	Back-Up Emergency Equipment Store (renamed from Emergency Response Store)	New	Not Applicable	13 x 27 x 60
N/A	Overhead Lines within National Grid Compound, adjacent to Building 64 (Main Gas Insulated Switchgear Hall)	Revised	No dimensions	No dimensions
N/A	Equipment Storage for Interim Spent Fuel Store	Removed	No dimensions	

NMC 4 Building Ref	Description	Status	Previously approved size h x w x l (m)	Proposed size h x w x l (m)
N/A	Entry Relay Building	Removed	6 x 17 x 39	
N/A	Off Site Vehicle Search	Removed	10 x 7 x 4	
N/A	EDF Offices	Removed	15 x 64 x 17	
N/A	Helipad	Removed	0 x 27 x 39	

Those proposals that include ‘new’ built development or a ‘revision’ to the proposed development are included in the LVIA as follows:

- Building 30 (Unit 1): Filtering Debris Recovering Pit, 6m in height;
- Building 30 (Unit 2): Filtering Debris Recovering Pit, 6m in height;
- Building 38: Sewage Treatment Plant, 11m in height; (Note, that the proposed dimension of Building 38 is a grouping of tanks with a similar height range. The maximum height is 11m.)
- Building 46: Emergency Response Energy Centre, 9m in height;
- Building 47: Off-Site Delivery Checkpoint, 5.1m in height;
- Building 49: Emergency Response Centre, 6m in height; and
- Building 59: Back-Up Emergency Equipment Store, 13m in height.

Changes to the Overhead Line arrangement within the National Grid Substation Compound, adjacent to Building 64 (Main Gas Insulated Switchgear Hall) have been approved by Somerset West and Taunton Council pursuant to DCO Requirement PW3. Changes to retain 50 (Garage for Handling Facilities) as a fenced area can also be achieved within consented parameters. Consequently, the changes around Buildings 64 and removing Building 50 are also excluded from the scope of this LVIA.

Where the proposals would ‘remove’ built development there would be a reduction in the effects previously assessed in the ES and these changes have not been included in the assessment as they would represent a *reduction* in the overall effects of HPC (Buildings and structures removed have been indicated in the annotated viewpoints illustrated in **Figures 3-6**).

Repurposing involves changing some of the functions of the building, without any change to its dimensions. In respect of the Interim Spent Fuel Store (ISFS) and the ISFS Access Control Building, the Site Layout Plan would revert to showing the previously approved arrangement for these buildings, as the changes proposed at Non Material Change 3, and involved increasing the size of the ISFS, and removing the ISFS Access Control Building, and including an ISFS Equipment Store were not approved. Where the proposals are to ‘repurpose’ or ‘revert to previously approved layout’ this is also excluded from the LVIA as there would be *no change* to the significance of effects previously assessed in the ES.

Substantial landscape mitigation for HPC, in the form of earthworks and advanced woodland planting, was initially carried out in 2012, alongside additional planting which has been carried out in subsequent years. This is already presenting a ‘green edge’ to the development and is effective in screening out views of construction works from the surrounding area, particularly to the west and south.

Permanent lighting is controlled by DCO Requirement MS29 which requires external lighting to be installed in accordance with the HPC Operational Lighting Strategy. Lighting associated with new or repositioned buildings the subject of this application will be presented to Somerset West and Taunton Council within a MS29 submission prior to its installation however, proposals will be developed in accordance with the approved Operational Lighting Strategy and are not included within this assessment.

### A.2.3 LVIA Methodology.

The LVIA accords with the *Guidelines for Landscape and Visual Impact Assessment*, Third Edition, Landscape Institute and IEMA, 2013 and identifies the likely landscape and visual effects of the proposed layout and building changes and whether these would be significant.

#### Scope of Assessment

The scope of this assessment, as previously noted, assesses the effects of proposed new or revised buildings and structures within the HPC operational layout. The LVIA will assess both the construction and the Year 1 operational effect of the proposed changes and compare these effects with the previous LVIA assessment in the ES, reporting on the *additional* effect of the proposals and the *combined* effect of the proposals in combination with the effects previously assessed in the ES.

#### Assessment Terminology

The terminology used in this LVIA is the same as that set out in the ES for HPC, Volume 2, Chapter 22, pages 28-41, October 2011. The sensitivity of the visual receptor ranges from ‘High’, ‘Medium’, ‘Low’ to ‘Very Low’ and the same level as assessed in the ES has been retained for this assessment.

The magnitude of change likely to result from the proposals also ranges from ‘High’, ‘Medium’, ‘Low’ to ‘Very Low’ as defined in the ES and **Table A.2.2**. No change is defined in this assessment as ‘Zero’.

The level of effect likely to result from the proposals ranges from ‘Major’, ‘Moderate’, ‘Minor’ to ‘Negligible’ as set out in the ES and **Table A2.3**. The result of a Zero magnitude of change is described as ‘no change’ in this assessment.

Significant effects are defined as **Major** and **Moderate** as per the ES, paragraph 22.4.51: “predicted impacts of Major and Moderate significance equate to a significant impact in planning terms”.

**Table A.2.2 Level of Magnitude**

Level of Magnitude	Description
High	Complete change or widespread alteration to the existing view.
Medium	Noticeable but localised alteration to the existing view.
Low	Partial and very localised alteration to the existing view.
Very Low	Barely perceptible change to the existing view. It may be difficult to differentiate the proposed development from its surroundings.

**Table A.2.3 Level of Effect and Significance**

Level of Effect and Significance	Description
Major	Very important or substantial change in landscape and visual conditions. Impacts may be adverse or beneficial. *
Moderate	Noteworthy or medium change in landscape and visual conditions. Impacts may be adverse or beneficial. *
Minor	Inconsiderable or small change in landscape and visual conditions. Impacts may be adverse, neutral or beneficial. *
Negligible	No discernible change in landscape and visual conditions. Impact is likely to have a negligible (neutral) influence irrespective of other impacts. *
* Note: Construction impacts have been assessed as adverse in all cases.	

## Viewpoint Selection and Initial Viewpoint Appraisal

The original LVIA set out in the ES included 48 assessment viewpoints which were subdivided into short, medium and long-range views. The viewpoints for this assessment have been selected from the original viewpoints included within the original LVIA, where the proposals have the potential to result in a change to effects from those viewpoints.

In total, 21 of these viewpoints represent short to medium-range views, which are most likely to be significantly affected by the HPC development, although it is noted that some long-range viewpoints were also assessed as significant. The 21 viewpoints are illustrated in **Figure 2** along with a Zone of Theoretical Visibility (ZTV) which indicates the theoretical visibility of the proposed development. An initial desk-based appraisal was carried out of the 21 short and medium range viewpoints in order to establish the potential visibility of the proposals from each location. This ZTV does not take account of earthworks or other buildings and vegetation, so each viewpoint has been considered in turn. The potential level of effect was considered alongside the construction effects and the year 1 operational effects reported in the ES. This appraisal was supported by a further site visit which indicated that there would be either ‘no change’ or an additional negligible effect to the overall level of effect reported in the ES as a result of the proposals.

This initial viewpoint appraisal was then further used to support the viewpoint selection for the detailed assessment of potential effects and their illustration in **Figures 3-6**.

**Table A.2.4 Short and Medium Viewpoint Selection Criteria (Viewpoints 1-21)**

Viewpoint No, Title and Distance*	Comments
<p><b>1. West of Benhole Lane, PRoW N° WL23/110</b> Distance: 92m</p>	<p><u><b>No change to overall ES assessment:</b></u> View from a rural farm track to the west of HPC. <i>ES Assessment: High sensitivity and High magnitude resulting in a <b>Major</b> construction effect reducing to a Medium magnitude in Year 1 operation, but also resulting in a <b>Major</b> Year 1 operational effect.</i> All ground based and low-level development would be largely screened by earthworks and planting illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of significant visual effects identified in the ES.</p>
<p><b>2. West Somerset Coast Path, PRoW N° WL23/95</b> Distance: 885m</p>	<p><u><b>No change to overall ES assessment:</b></u> Western view from the West Somerset Coast Path, a national trail. <i>ES Assessment: High sensitivity and High magnitude resulting in a <b>Major</b> construction effect reducing to a Medium magnitude in Year 1 operation, but also resulting in a <b>Major</b> Year 1 operational effect.</i> All ground based and low-level development would be largely screened by earthworks and planting illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of significant visual effects identified in the ES.</p>
<p><b>3. West Somerset Coast Path, Lilstock, PRoW N° WL. 24/10</b> Distance: 2,419m</p>	<p><u><b>No change to overall ES assessment:</b></u> Western view from the West Somerset Coast Path, a national trail. <i>ES Assessment: High sensitivity and Medium magnitude resulting in a <b>Major</b> construction effect reducing to a Low magnitude and resulting in a <b>Moderate</b> Year 1 operational effect.</i> All ground based and low-level development would be largely screened by earthworks and planting illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of significant visual effects identified in the ES.</p>
<p><b>4. PRoW N° WL 24/8</b> Distance: 1,732m</p>	<p><u><b>No change to overall ES assessment:</b></u> Western view from public right of way (PRoW). <i>ES Assessment: Medium sensitivity and Medium magnitude resulting in a <b>Moderate</b> construction effect reducing to a Low magnitude resulting in a <b>Minor</b> Year 1 operational effect.</i> All ground based and low-level development would be largely screened by existing landform illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of visual effects identified in the ES.</p>
<p><b>5. Higher Hill, PRoW N° WL 24/3</b> Distance: 3,186m</p>	<p><u><b>No change to overall ES assessment:</b></u> Western view from public right of way. <i>ES Assessment: Medium sensitivity and Medium magnitude resulting in a <b>Moderate</b> construction effect reducing to a Low magnitude and resulting in a <b>Minor</b> Year 1 operational effect.</i> All ground based and low-level development would be largely screened by earthworks and planting illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of visual effects identified in the ES.</p>
<p><b>6. Edge of Great Plantation, PRoW N° WL 24/11</b> Distance: 2,101m</p>	<p><u><b>No change to overall ES assessment:</b></u> South-western view from public right of way. <i>ES Assessment: Medium sensitivity and Medium magnitude resulting in a <b>Moderate</b> construction effect and Year 1 operational effect.</i></p>

Viewpoint No, Title and Distance*	Comments
	All ground based and low-level development would be largely screened by existing landform and mitigation earthworks and planting illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of significant visual effects identified in the ES.
<b>7. Fairfield House driveway</b> Distance: 1,678m	<p><b><u>No change to overall ES assessment:</u></b></p> <p>South-western view from residential property.</p> <p><i>ES Assessment: High sensitivity and Medium magnitude resulting in a <b>Major</b> construction effect reducing to a Low magnitude during Year 1 operation and resulting in a <b>Moderate</b> effect.</i></p> <p>All ground based and low-level development would be largely screened by existing landform and mitigation earthworks and planting illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of significant visual effects identified in the ES.</p>
<b>8. Knighton Farm, PRoW No. WL 23/46</b> Distance: 444m	<p><b><u>Selected Viewpoint:</u></b></p> <p><b><u>No change to overall ES assessment:</u></b></p> <p>South-western view from public right of way at Knighton Farm.</p> <p><i>ES Assessment: High sensitivity and Medium magnitude resulting in a <b>Major</b> construction effect reducing to a Low magnitude and a <b>Moderate</b> Year 1 operational effect.</i></p> <p>All ground based and low-level development would be largely screened by existing landform and mitigation earthworks and planting illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of significant visual effects identified in the ES.</p>
<b>9. Burton</b> Distance: 450m	<p><b><u>No change to overall ES assessment:</u></b></p> <p>South-western view from Burton.</p> <p><i>ES Assessment: Medium sensitivity and Medium magnitude resulting in a <b>Moderate</b> construction and Year 1 operational effect.</i></p> <p>All ground based and low-level development would be largely screened by existing landform and mitigation earthworks and planting illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of significant visual effects identified in the ES.</p>
<b>10. Shurton West, Local Farm near PRoW N° WL 23/48</b> Distance: 53m	<p><b><u>No change to overall ES assessment:</u></b></p> <p>South-western view from public right of way at Shurton West.</p> <p><i>ES Assessment: High sensitivity and Medium magnitude resulting in a <b>Major</b> construction effect reducing to a Low magnitude and a <b>Moderate</b> Year 1 operational effect.</i></p> <p>All ground based and low-level development would be largely screened by existing landform and mitigation earthworks and planting illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of significant visual effects identified in the ES.</p>
<b>11. Shurton East, PRoW N° WL 23/56</b> Distance: 144m	<p><b><u>Selected Viewpoint:</u></b></p> <p><b><u>No change to overall ES assessment:</u></b></p> <p>South-western view from public right of way at Shurton East.</p> <p><i>ES Assessment: High sensitivity and High magnitude resulting in a <b>Major</b> construction effect reducing to a Low magnitude and a <b>Moderate</b> Year 1 operational effect.</i></p> <p>All ground based and low-level development would be largely screened by existing landform and mitigation earthworks and planting illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of significant visual effects identified in the ES.</p>
<b>12. Local road near to Gunter's Grove</b>	<p><b><u>No change to overall ES assessment:</u></b></p> <p>South-eastern view from local road near Gunter's Grove.</p>



Viewpoint No, Title and Distance*	Comments
Distance: 663m	<p><i>ES Assessment: Low sensitivity and Medium magnitude resulting in a <b>Minor</b> construction and Year 1 operational effect.</i></p> <p>All ground based and low-level development would be largely screened by earthworks and planting illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of visual effects identified in the ES.</p>
<b>13. West of Wick</b> <b>PRoW N°WL23/57</b> Distance: 172	<p><b><u>No change to overall ES assessment:</u></b></p> <p>South-eastern view from public right of way west of Wick.</p> <p><i>ES Assessment: Medium sensitivity and Medium magnitude resulting in a <b>Moderate</b> and Year 1 operational effect.</i></p> <p>All ground based and low-level development would be largely screened by existing landform and mitigation earthworks and planting illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of significant visual effects identified in the ES.</p>
<b>14. Pixie's Mound (Wick Barrow)</b> Distance: 23m	<p><b><u>No change to overall ES assessment:</u></b></p> <p>Eastern view from Pixie's Mound.</p> <p><i>ES Assessment: High sensitivity and High magnitude resulting in a <b>Major</b> construction effect reducing to a Medium magnitude in Year 1 operation, but also resulting in a <b>Major</b> Year 1 operational effect.</i></p> <p>All ground based and low-level development would be largely screened by proposed planting illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of significant visual effects identified in the ES.</p>
<b>15. PRoW N° WL 23/61</b> Distance: 873m	<p><b><u>No change to overall ES assessment:</u></b></p> <p>Western view from public right of way.</p> <p><i>ES Assessment: High sensitivity and Low magnitude resulting in a <b>Moderate</b> construction effect reducing to a Very Low magnitude and a <b>Minor</b> Year 1 operational effect.</i></p> <p>All ground based and low-level development would be largely screened by existing vegetation illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of visual effects identified in the ES.</p> <p>(It is considered that this viewpoint has been over assessed in the ES.)</p>
<b>16. Wick. PRoW N° WL 23/61</b> Distance: 744m	<p><b><u>No change to overall ES assessment:</u></b></p> <p>South-eastern view from public right of way.</p> <p><i>ES Assessment: High sensitivity and Medium magnitude resulting in a <b>Major</b> construction effect reducing to a Low magnitude and a <b>Moderate</b> Year 1 operational effect.</i></p> <p>All ground based and low-level development would be largely screened by existing landform and mitigation earthworks and planting illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of significant visual effects identified in the ES.</p>
<b>17. Farrington Hill Farm</b> Distance: 1,349m	<p><b><u>No change to overall ES assessment:</u></b></p> <p>South-eastern view from Farrington Hill Farm.</p> <p><i>ES Assessment: Medium sensitivity and Medium magnitude resulting in a <b>Moderate</b> construction effect reducing to a Low magnitude and a <b>Minor</b> Year 1 operational effect.</i></p> <p>All ground based and low-level development would be largely screened by existing landform and mitigation earthworks and planting illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of visual effects identified in the ES.</p>



Viewpoint No, Title and Distance*	Comments
<p><b>18. Burgage Road / Lime Street, Stogursey</b> Distance: 1,283m</p>	<p><b><u>No change to overall ES assessment:</u></b> Southern view from Burgage Road / Lime Street, Stogursey. <i>ES Assessment: High sensitivity and Low magnitude resulting in a <b>Moderate</b> construction effect and Year 1 operational effect.</i></p> <p>All ground based and low-level development would be largely screened by existing buildings and vegetation as well as proposed earthworks and planting illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of significant visual effects identified in the ES.</p> <p>(It is considered that this viewpoint has been over assessed in the ES.)</p>
<p><b>19. West Somerset Coast Path, Stolford. PRoW N° WL23/95</b> Distance: 2,113m</p>	<p><b><u>Selected Viewpoint:</u></b> <b><u>No change to overall ES assessment:</u></b> Eastern view from West Somerset Coast Path and national trail. <i>ES Assessment: High sensitivity and Medium magnitude resulting in a <b>Major</b> construction effect reducing to a Low magnitude and a <b>Moderate</b> Year 1 operational effect.</i></p> <p>All ground based and low-level development would be largely screened by earthworks and planting illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of significant visual effects identified in the ES.</p>
<p><b>20. Stockland Bristol</b> Distance: 3,385m</p>	<p><b><u>No change to overall ES assessment:</u></b> South-eastern view from Stockland Bristol. <i>ES Assessment: High sensitivity and Medium magnitude resulting in a <b>Major</b> construction effect reducing to a Low magnitude and a <b>Moderate</b> Year 1 operational effect.</i></p> <p>All ground based and low-level development would be largely screened by earthworks and planting illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of significant visual effects identified in the ES.</p>
<p><b>21. Quantock Hills AONB</b> PRoW N° WL 24/1 Distance: 3,739m</p>	<p><b><u>No change to overall ES assessment:</u></b> South-western view from public right of way in the Quantock Hills AONB. <i>ES Assessment: High sensitivity and Low magnitude resulting in a <b>Moderate</b> construction effect reducing to a Very Low magnitude and a <b>Minor</b> Year 1 operational effect.</i></p> <p>All ground based and low-level development would be largely screened by existing landform and proposed earthworks and planting illustrated in the ES photomontage. It is considered unlikely that the proposals would alter the overall level of visual effects identified in the ES.</p>
<p>*Note: Distance taken from the ES as 'distanced from site'. Short-range viewpoints are defined as those within 1.5km distance from the site and include viewpoints 1 – 2 and 8 – 18.</p>	

## Scope of Detailed Viewpoint Assessment

Considering the results of the appraisal set out in **Table A.2.4** which indicates that the proposals would be unlikely to alter the level of effect in comparison to the effects identified in the ES) a proportionate assessment of four viewpoints (Nos. 2, 11, 5 and 19 illustrated in **Figure 2**) have been assessed and illustrated. The four viewpoints (No. 2, 11, 5 and 19) were also selected as representative of the surrounding visual receptors, and a range of distances and directions as follows:

- Short-range Viewpoints:
  - Viewpoint 2: West Somerset Coastpath, ProW No WL23/95; and
  - Viewpoint 11: Shurton East, near Public Right of Way (PRoW) WL23/56.
- Medium-range Viewpoints:
  - Viewpoint 5: Higher Hill, PRoW No WL 24/3; and
  - Viewpoint 19: Stolford, West Somerset Coast Path, near PRoW 23/95.

Further explanation of the viewpoint selection is provided in paragraphs 4.1 and 5.1. Each of these viewpoints were subject to further visual assessment (**Tables 4.1a-2b** and **5.1a-2b**) and are illustrated in **Figures 3-6** as annotated views of the proposed development. This report provides an assessment for each of the four viewpoints as follows:

- Summary of the key construction impacts of HPC identified in the ES on visual receptors from short and medium range views:
  - An assessment of the additional likely potential effects of the proposed changes to the built development; and
  - An overall assessment of the combined or cumulative effects of the proposed changes to the built development and the effects assessed in the original LVIA in the ES.
- Summary of the Year 1 operational effects of HPC identified in the ES on visual receptors from short and medium-range views:
  - An assessment of the additional likely potential effects of the proposed changes to the built development; and
  - An overall assessment of the combined or cumulative effects of the proposed changes to the built development and the effects assessed in the original LVIA in the ES.

### A.2.4 Receptors Excluded from the Assessment

All landscape effects were excluded from the assessment. This was due to the location of the proposed building and layout changes within the existing site boundary of the HPC development. As a result, there would be no additional landscape effects beyond those previously assessed as part of the original LVIA in the ES.

All long-range viewpoints beyond 5km distance have also been excluded from the assessment due to the results of the initial appraisal of short and medium-range views set out in **Table A.2.4**. The initial appraisal provided a clear indication and a high degree of confidence that there would be no significant visual effects resulting from the addition of the proposals and that the combined assessment of the

proposals and the effects assessed in the original LVIA in the ES would not alter the overall level of visual effects identified in the ES. For these reasons, the long-range viewpoints have also been excluded from further assessment.

## A.2.5 Impact Assessment - Short Range Viewpoints

Two short-range viewpoints have been selected for detailed assessment and illustration (Viewpoints 2 and 11). Viewpoint 2 is located to the west and is representative of views likely to be experienced by walkers on footpaths in the west and of those receptors Viewpoint 2 represents a location on the West Somerset Coast Path, whereas Viewpoint 1 is a local footpath. Viewpoint 11 is representative of views to the south likely to be experienced by local residents and are similar to other viewpoints in this area (Viewpoints 8, 9, 10, 12, 13 and 16). Views of the proposals from Viewpoint 14 (in the east) would be screened by other construction works during the construction period or proposed planting during operation. Views from Viewpoint 15 (also in the east) would be screened by existing vegetation during both the construction and operation. Although not considered as part of the ES, new viewpoints closer to the proposals, on the West Somerset Coast Path could be considered. However, the views of the proposals from these locations would also be screened by either Hinkley Point A and B in the east or by earthworks, vegetation and other buildings in the west as indicated in Figures 3 and 6. Walkers on the path, directly in front of HPC during operation would see the proposals as part of the wider HPC development.

The ES assessment of short-range viewpoints acknowledges significant visual effects would be likely to affect the views experienced by local residents and walkers on PRoW during the construction period, with reduced effects during Year 1 operation, due to the screening effects of earthworks and planting. These effects would further decrease as indicated by the assessment of Year 15 operation effects in the original LVIA in the ES.

### Viewpoint 2: West Somerset Coast Path, ProW No WL23/95

Viewpoint 2 is located on the West Somerset Coast Path, within the Quantock Vale Local Landscape Character Area, approximately 1.5km from the nearest part of the proposals (Nos. 30). It represents views experienced by walkers and the sensitivity of visual receptors is assessed as High.

A photomontage of Viewpoint 2 (extracted from the ES) is illustrated in **Figure 3** showing the completed development in Year 15. The planting to the earthworks shown on the photomontage was carried out in 2012 and is becoming established. The proposals are annotated on the photomontage in blue (revised proposals) orange (new proposals) and green (removed proposals). The annotations on each photomontage are only applied if the proposals would be visible or not screened by the pre-existing landform (Digital Terrain Model or DTM). Annotated dashed lines indicate that the proposals are not visible (screened by either earthworks, buildings or vegetation). The changes to the view likely to be experienced from this viewpoint are described as follows:

- Buildings / development 30 (both units) would be screened by the existing earthworks to the west of the power station and would not be visible at the proposed height of 6m;

- Building 38 is a group of treatment tanks situated to the rear of the power station. They would be screened by the intervening earthworks and Unit 2 Turbine Hall and Unit 1 Water Cooling Plant and would not be visible at the proposed height of 11m;
- Building groups / development 46, 49 and 59 have a maximum height of between 6m and 13m and would be screened by the Unit 1 reactor building (46m in height) and not visible; and
- Building 47 (5.1m high) is also screened by existing topography and would not be visible.

Consequently, the visual magnitude of the proposals from this viewpoint would be Zero and there would be **no change** to the effects assessed in the ES during construction or operation.

**Table A.2.5 Viewpoint 2 - Summary of Assessment**

ID	Phase	Sensitivity	Nature	Magnitude	Significance
<b>Original LVIA set out in the HPC Environmental Statement, Volume 2, Chapter 22, October 2011</b>					
2	Construction	High	Adverse and medium-term	High	Major
2	Operation Year 1	High	Adverse, medium-term	Medium	Major
2	Operation Year 15	High	Adverse, long-term	Low	Moderate
<b>Additional visual assessment of the Proposals</b>					
2	Construction	High	N/A	Zero	No change
2	Operation Year 1	High	N/A	Zero	No change
<b>Overall combined visual assessment for the HPC (including the Proposals)</b>					
2	Construction	High	Adverse and medium-term	High	Major (No change to assessment)
2	Operation Year 1	High	Adverse, medium-term	Medium	Major (No change to assessment)

## A.2.6 Viewpoint 11: Shurton East

Viewpoint 11 is located on PRoW WL23/56 to the north of settlement at Shurton East, viewing north towards the existing HPA and HPB power stations and the intervening earthworks and advance mitigation planting. The viewpoint is located approximately 1.2km from the nearest part of the proposals (No. 47). The viewpoint is representative of the views experienced by walkers on the PRoW and although road users and residents may experience similar views, these would generally be further screened by roadside hedgerows and variable levels of garden vegetation.

A photomontage of Viewpoint 11 (extracted from the ES) is illustrated in **Figure 4** showing the completed development in Year 15. The planting to the earthworks shown on the photomontage was carried out in 2012 and is becoming established. The proposals are annotated on the photomontage in blue (revised proposals) orange (new proposals) and green (removed proposals). The annotations on each photomontage are only applied if the proposals would be visible or not screened by the pre-existing landform (Digital Terrain Model or DTM). Annotated dashed lines indicate that the proposals are not visible (screened by either earthworks, buildings or vegetation). The changes to the view likely to be experienced from this viewpoint are described as follows:

- Buildings / development 30 (both units) would be screened by the existing earthworks and planting to the west of the power station and would not be visible at the proposed height of 6m;
- Building 38 is a group of treatment tanks situated to the rear of the power station. They would be screened by the intervening earthworks and Unit 2 Turbine Hall and Unit 1 Water Cooling Plant and would not be visible at the proposed height of 11m; and
- Buildings / development 46, 47, 49 would all be screened by existing development and would not be visible from this location.

Consequently, the visual magnitude of the proposals from this viewpoint would be Zero and there would be **no change** to the effects assessed in the ES during construction or operation.

**Table A.2.6 Viewpoint 11 - Summary of Assessment**

ID	Phase	Sensitivity	Nature	Magnitude	Significance
<b>Original LVIA set out in the HPC Environmental Statement, Volume 2, Chapter 22, October 2011</b>					
11	Construction	High	Adverse and medium-term	High	Major
11	Operation Year 1	High	Neutral, medium- term	Low	Moderate
11	Operation Year 15	High	Neutral, long- term	Low	Moderate
<b>Additional visual assessment of the Proposals</b>					
11	Construction	High	N/A	Zero	No change
11	Operation Year 1	High	N/A	Zero	No change
<b>Overall combined visual assessment for the HPC (including the Proposals)</b>					
11	Construction	High	Adverse and medium-term	High	Major (No change to assessment)
11	Operation Year 1	High	Neutral, long- term	Low	Moderate (No change to assessment)

## A.2.7 Impact Assessment - Medium Range Viewpoints

Viewpoint 19 was selected as one of 2 possible mid-range coastal viewpoint locations, located on the West Somerset Coast Path (High sensitivity) and has been selected due to its location in the east. The viewpoint would not view substantial earthworks or advance planting (as in the case of viewpoints 2, 7 and 17) whilst viewpoints 4, 6 and 17 are representative of Medium rather than High sensitivity receptors (local footpaths); viewpoint 18 has very limited visibility and viewpoints 20 and 21 are more distant. Viewpoint 5 was selected as a further medium-range viewpoint from an elevated location, viewing over earthworks.

The ES assessment of medium-range viewpoints advises that “visual impacts during construction would slightly decrease compared to short-range views due to distance, topography and screening effects of intervening landscape and would be predominantly of moderate significance.” Although still likely to

lead to significant effects experienced by local residents and walkers, these effects would reduce further during operation.

## Viewpoint 5: Higher Hill

Viewpoint 5 is located at a hilltop position, on PRoW 24/3, viewing northeast, approximately 4km from the nearest part of the proposals (No. 47). The viewpoint is representative of the views experienced by walkers on the PRoW.

A photomontage of Viewpoint 5 (extracted from the ES) is illustrated in **Figure 5** showing the completed development in Year 15. The planting to the earthworks shown on the photomontage was carried out in 2012 and is becoming established. The proposals are annotated on the photomontage in blue (revised proposals) orange (new proposals) and green (removed proposals). The annotations on each photomontage are only applied if the proposals would be visible or not screened by the pre-existing landform (Digital Terrain Model or DTM). Annotated dashed lines indicate that the proposals are not visible (screened by either earthworks, buildings or vegetation). The changes to the view likely to be experienced from this viewpoint are described as follows:

- Buildings / development 30 (both units) would be screened by other HPC structures and the existing earthworks and planting to the west of the power station and would not be visible at the proposed height of 6m;
- Building 38 is a group of treatment tanks situated to the rear of the power station. They would be screened by the intervening earthworks and Unit 2 Turbine Hall and Unit 1 Water Cooling Plant and would not be visible at the proposed height of 11m;
- Buildings / development 46, 49 and 59 have a maximum height of between 6m and 13m and would be visible in front of HPC, appearing as barely perceptible change to the assessed view and the overall mass of the HPC power station (Very Low magnitude). The visual effect would be Negligible and neutral; and
- Building 47 (5.1m high) would also be visible in front of HPC, appearing as barely perceptible change to the assessed view (Very Low magnitude) and resulting in a Negligible and neutral effect.

Consequently, the visual magnitude of the proposals from this viewpoint would be **Negligible** and the nature of this effect would be direct, temporary during construction and permanent during operation, cumulative and neutral. The overall combined level of effect would remain **Moderate** and significant during construction and **Minor** and not significant during operation as assessed in the ES.

In planning terms there would be no change to the overall effects assessed in the ES during construction or operation.

**Table A.2.7 Viewpoint 5 - Summary of Assessment**

ID	Phase	Sensitivity	Nature	Magnitude	Significance
Original LVIA set out in the HPC Environmental Statement, Volume 2, Chapter 22, October 2011					
5	Construction	High	Adverse and medium-term	Medium	Moderate

ID	Phase	Sensitivity	Nature	Magnitude	Significance
5	Operation Year 1	High	Neutral, medium- term	Low	Minor
5	Operation Year 15	High	Neutral, long- term	Low	Minor
<b>Additional visual assessment of the Proposals</b>					
5	Construction	High	Neutral, medium- term	Very Low	Negligible
5	Operation Year 1	High	Neutral, long- term	Very Low	Negligible
<b>Overall combined visual assessment for the HPC (including the Proposals)</b>					
5	Construction	High	Adverse and medium- term	Low	Minor (No change to assessment)
5	Operation Year 1	High	Neutral, long- term	Low	Minor (No change to assessment)

## Viewpoint 19: West Somerset Coast Path, Stolford

Viewpoint 19 is located on the West Somerset Coast Path near Stolford, approximately 2.2km from the nearest part of the proposals (Nos. 46, 49 and 59), viewing west from the West Somerset Coast Path. The viewpoint is representative of the views experienced by walkers on the coast.

A photomontage of Viewpoint 19 (extracted from the ES) is illustrated in **Figure 6** showing the completed development in Year 15. The proposals are annotated on the photomontage in blue (revised proposals) orange (new proposals) and green (removed proposals). The annotations on each photomontage are only applied if the proposals would be visible or not screened by the pre-existing landform (Digital Terrain Model or DTM). Annotated dashed lines indicate that the proposals are not visible (screened by either earthworks, buildings or vegetation). The changes to the view likely to be experienced from this viewpoint are described as follows:

- Buildings / development 30 (both units) would be screened by other HPC structures and would not be visible at the proposed height of 6m;
- Building 38 is a group of treatment tanks situated to the rear of the power station. They would be screened by the intervening earthworks and Unit 2 Turbine Hall and Unit 1 Water Cooling Plant and would not be visible at the proposed height of 11m;
- Buildings / development 46, 49 and 59 would all be screened by existing vegetation and would not be visible from this location;
- Building 47 (5.1m high) would also be partly visible beyond vegetation, appearing as a barely perceptible change to the assessed view (Very Low magnitude) and resulting in a Negligible and neutral effect.

Consequently, the visual magnitude of the proposals from this viewpoint would be Negligible and the nature of this effect would be direct, temporary during construction and permanent during operation, cumulative and neutral. The overall combined level of effect would remain significant (Major during construction and Moderate during operation) as assessed in the ES.

In planning terms there would be **no change** to the overall effects assessed in the ES during construction or operation.

**Table A.2.8 Viewpoint 19 - Summary of Assessment**

ID	Phase	Sensitivity	Nature	Magnitude	Significance
<b>Original LVIA set out in the HPC Environmental Statement, Volume 2, Chapter 22, October 2011</b>					
19	Construction	High	Adverse and medium-term	Medium	Major
19	Operation Year 1	High	Neutral, medium-term	Low	Moderate
19	Operation Year 15	High	Neutral, long-term	Low	Moderate
<b>Additional visual assessment of the Proposals</b>					
19	Construction	High	Neutral, medium-term	Very Low	Negligible
19	Operation Year 1	High	Neutral, long-term	Very Low	Negligible
<b>Overall combined visual assessment for the HPC (including the Proposals)</b>					
19	Construction	High	Adverse and medium-term	Medium	Moderate (No change to assessment)
19	Operation Year 1	High	Neutral, long-term	Low	Moderate (No change to assessment)

## A.2.8 Summary and Conclusion

Following the DCO consent in 2013 previous non-material applications approved in 2015, 2017 and 2018, the design of the main development site has matured further. As a result, a number of changes are proposed to the operational layout of the HPC development. The changes principally affect the ancillary buildings, with some limited new structures proposed, as well as the repositioning or change in scale of some buildings already consented. The proposed changes or ‘proposals’ are set out in Table A.2.1. which refers to the ‘Non-Material Change Application 4, Site Layout Plan’ (HINK-A1-SL-00-GA-010 Rev 4) dated July 2020 at Appendix 1.

Those proposals that include ‘new’ built development or a ‘revision’ to the proposed development are included in the LVIA as follows:

- Building 30 (Unit 1): Filtering Debris Recovering Pit, 6m in height;
- Building 30 (Unit 2): Filtering Debris Recovering Pit, 6m in height;
- Building 38: Sewage Treatment Plant, 11m in height;
- Building 46: Emergency Response Energy Centre, 9m in height;
- Building 47: Off-Site Delivery Checkpoint, 5.1m in height;



- Building 49: Emergency Response Centre, 6m in height; and
- Building 59: Back-Up Emergency Equipment Store, 13m in height.

The Landscape and Visual Impact Assessment of the proposals accords with the Landscape Institute and IEMA's *Guidelines for Landscape and Visual Impact Assessment*, Third Edition (2013).

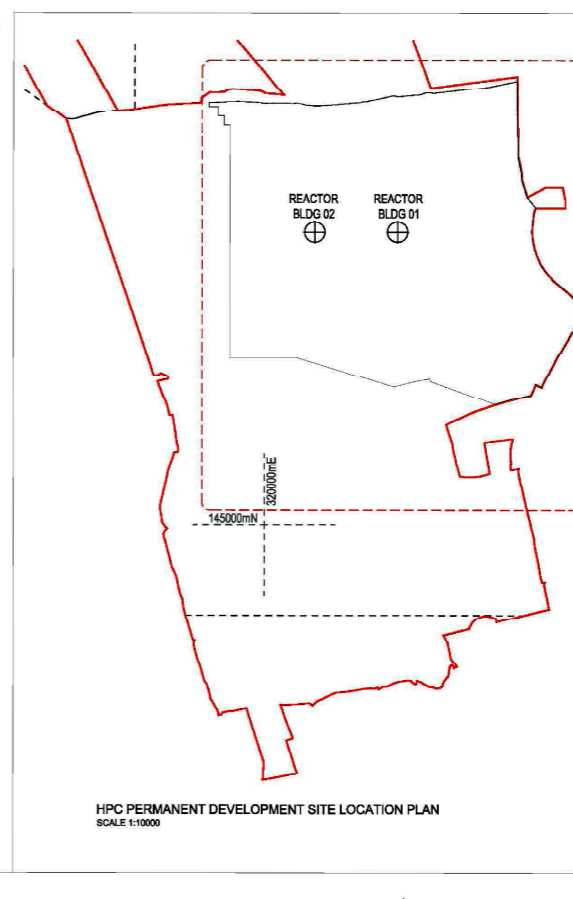
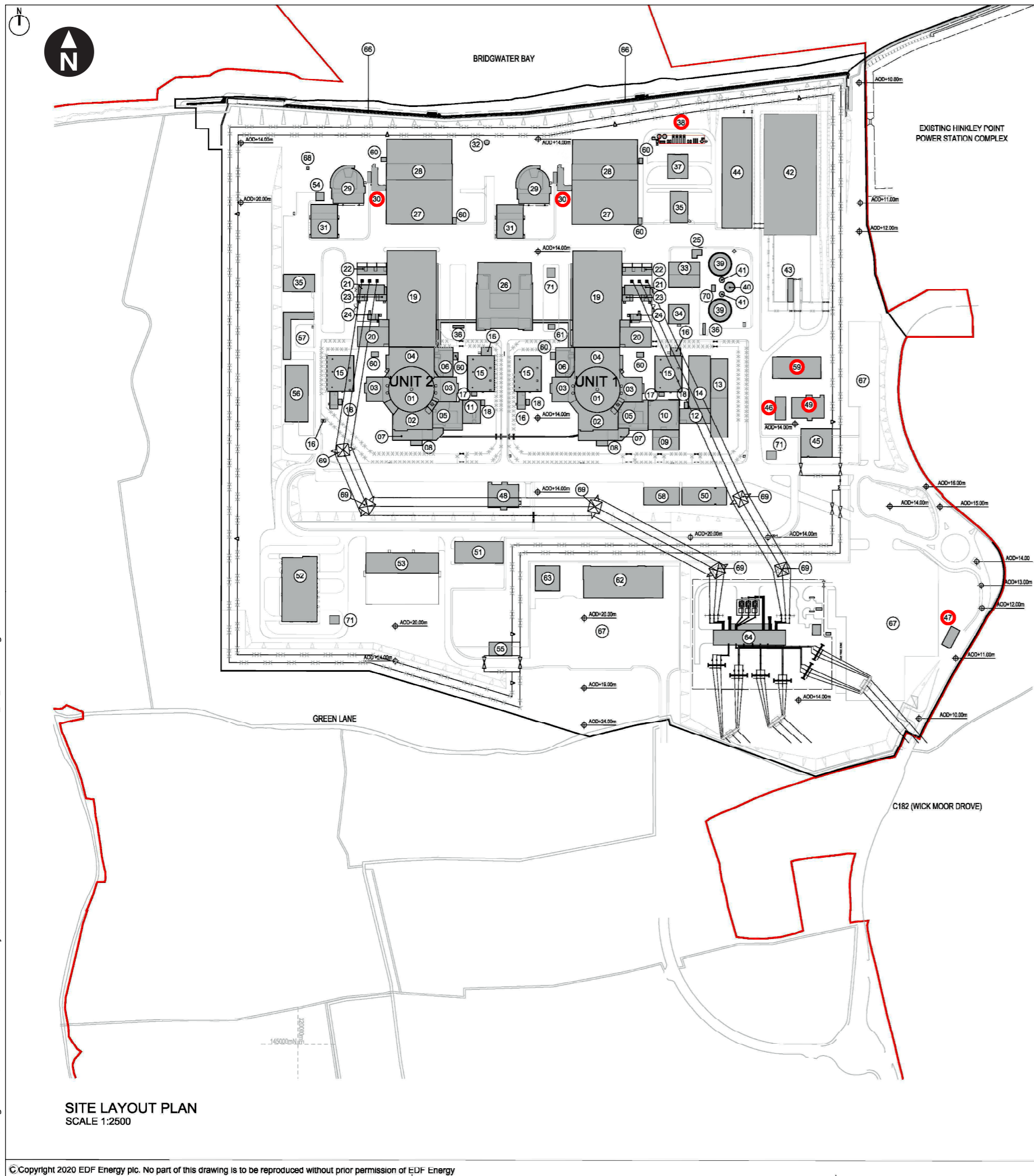
An initial desk-based appraisal was carried out of the 21 short and medium-range viewpoints in order to establish the likely potential effects visible from each location. This appraisal, supported by a further site visit, indicated that there would be 'no change' to the overall level of visual effects (during construction and operation) in comparison to the effects identified in the ES as a result of the proposals.

This appraisal was subject to more detailed viewpoint assessment and four viewpoints (Nos. 2, 5, 11, and 19) were selected from the short and medium-range viewpoints as representative of the surrounding visual receptors, and from a range of distances and directions.

A summary of the viewpoint assessment concludes that the additional magnitude of change resulting from the proposals during both construction and operation would range from Zero to Very Low resulting in either no effect or a negligible and neutral effect.

Consequently, and in planning terms, there would be **no change** to the overall effects assessed in the ES as a result of the proposals during construction or operation.

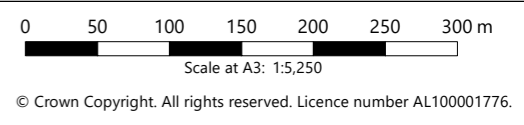
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Key

### Layout and Building Changes within NMC4

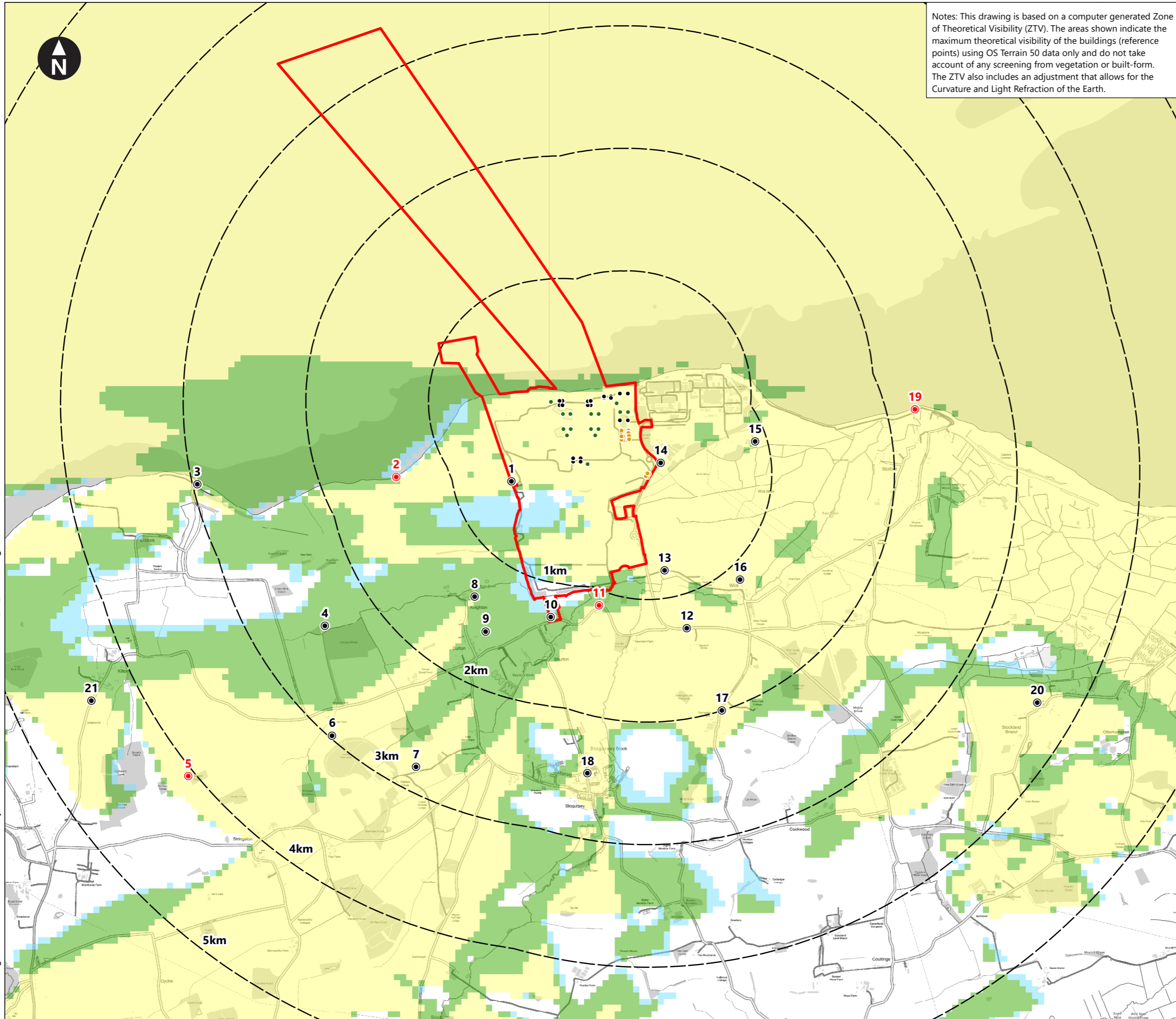
Revised	
NMC 4 Building Ref	Description
30	Filtering Debris Recovery Pit #1
30	Filtering Debris Recovery Pit #2
38	Sewage Treatment Plant
50	Garage for Handling Facilities Fenced area
64	Gas Insulated Switchgear Hall
Reverted	
NMC 4 Building Ref	Description
42	Interim Spent Fuel Store
43	Access Control Building
N/A	Equipment Storage for Interim Spent Fuel Store
New	
NMC 4 Building Ref	Description
46	Emergency Response Energy Centre
47	Off-Site Delivery Checkpoint
49	Emergency Response Centre
59	Back-Up Emergency Equipment Store
Repurposed	
NMC 4 Building Ref	Description
48	Auxiliary Administration Building
51	Oil and Grease Storage Building
Removed	
NMC 4 Building Ref	Description
N/A	Entry Relay Store
N/A	Off Site Vehicle Search
N/A	EDF Offices
N/A	Oil and Grease Storage
N/A	Helipad



Hinkley Point C  
Non-Material Change Application 4  
for Layout and Building Changes  
Landscape and Visual Assessment

**Figure 1**  
**Building Change Location Plan**

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Notes: This drawing is based on a computer generated Zone of Theoretical Visibility (ZTV). The areas shown indicate the maximum theoretical visibility of the buildings (reference points) using OS Terrain 50 data only and do not take account of any screening from vegetation or built-form. The ZTV also includes an adjustment that allows for the Curvature and Light Refraction of the Earth.

Key

- Reverted Building (Reference Point)
- New Building (Reference Point)
- Re-purposed, Revised Building (Reference Point)
- Main Site Boundary
- Lines indicating the distance from relevant buildings
- LVIA Viewpoint Locations
- Scoped Out Viewpoints
- Reverted buildings may be theoretically visible
- New buildings may be theoretically visible
- Re-purposed, Revised buildings may be theoretically visible
- Reverted and New buildings may be theoretically visible
- Reverted and Re-purposed, Revised buildings may be theoretically visible
- New and Re-purposed, Revised buildings may be theoretically visible
- Reverted, New and Re-purposed, Revised buildings may be theoretically visible

N.B. No visibility on map for this group.

Viewpoint 2: West Somerset Coast Path, PRoW no. WL 23/95  
 Viewpoint 5: Higher Hill  
 Viewpoint 11: Shurton East  
 Viewpoint 19: West Somerset Coast Path, Stolford

Scale at A3: 1:30,000

0 0.5 1 1.5 km

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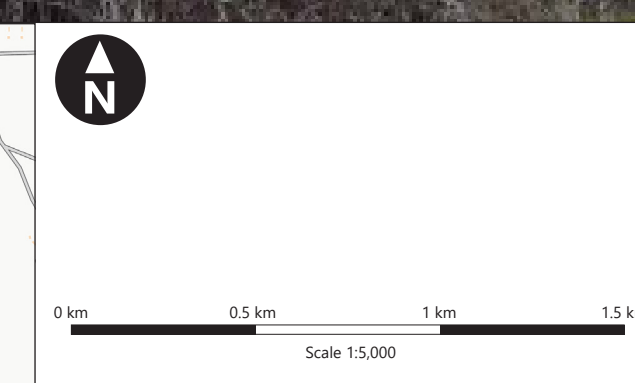
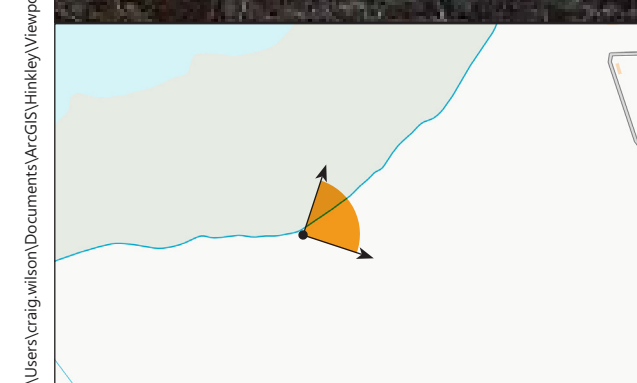
Client

Hinkley Point C  
 Non-Material Change Application 4  
 for Layout and Building Changes  
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**Figure 2**  
**Zone of Theoretical Visibility (ZTV) of**  
**Consented, New & Re-purposed /**  
**Revised Buildings to 5km**



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Location grid reference:	E318 776, N145 448	Camera:	Arca Swiss F-Compact 6x9
GPS location accuracy:	+/- 3m	Lens:	35mm
Horizontal field of view:	90° (cylindrical projection)	Camera height:	1.5m AGL
Paper size:	841mm x 297mm (A1)	Date and time:	03/03/2011 12:50
Correct printed image size:	820 x 250mm		

Revised Building Corner

Not visible / All or partially visible

New Building Corner

Not visible / All or partially visible

Removed Building Corner

Not visible / All or partially visible

100% Enlargement

Hinkley Point C  
Non-Material Change Application 4  
for Layout and Building Changes  
Landscape and Visual Assessment

**Figure 3**  
Annotated existing Viewpoint 2  
(Short-range): West Somerset Coast Path,  
PRoW no. WL 23/95

June 2020

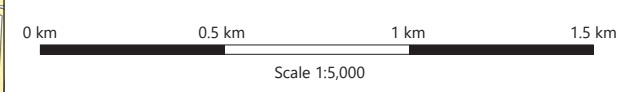
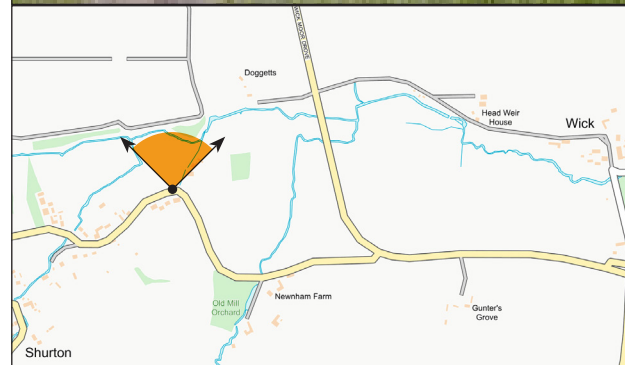


TYPE 1 VISUALISATION

Note: Figure produced to accord with the Landscape Institute's Technical Guidance Note 6/19: Visual Representation of Development Proposals.

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Originator: wisc03



Location grid reference:	E320 401, N144 423	Camera:	Arca Swiss F-Compact 6x9
GPS location accuracy:	+/- 3m	Lens:	35mm
Horizontal field of view:	90° (cylindrical projection)	Camera height:	1.5m AGL
Paper size:	841mm x 297mm (A1)	Date and time:	01/03/2011 16:20
Correct printed image size:	820 x 250mm		

Revised Building Corner

Not visible / All or partially visible

New Building Corner

Not visible / All or partially visible

Removed Building Corner

Not visible / All or partially visible

100% Enlargement

Hinkley Point C  
Non-Material Change Application 4  
for Layout and Building Changes  
Landscape and Visual Assessment

**Figure 4**  
Annotated existing Viewpoint 11  
(Short-range): Shurton East

June 2020

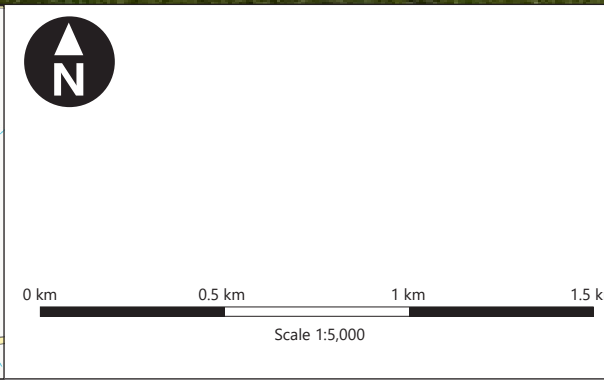
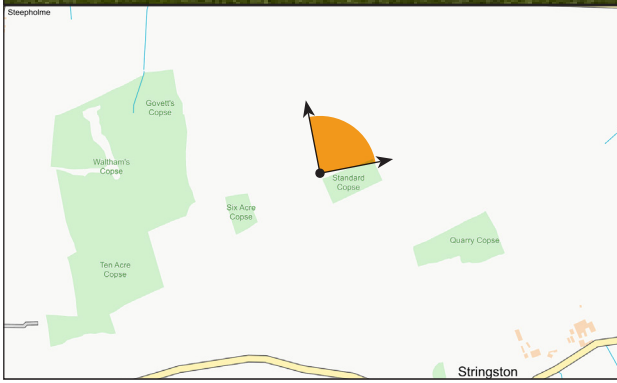


Note: Figure produced to accord with the Landscape Institute's Technical Guidance Note 6/19: Visual Representation of Development Proposals.

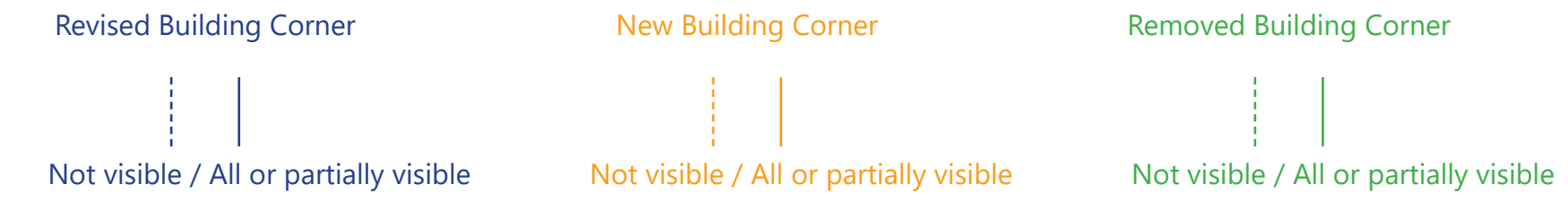
TYPE 1 VISUALISATION



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Correct printed image size:	820 x 250mm		



100% Enlargement

Hinkley Point C  
Non-Material Change Application 4  
for Layout and Building Changes  
Landscape and Visual Assessment

**Figure 5**  
Annotated existing Viewpoint 5  
(Medium-range): Higher Hill

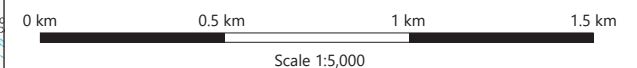
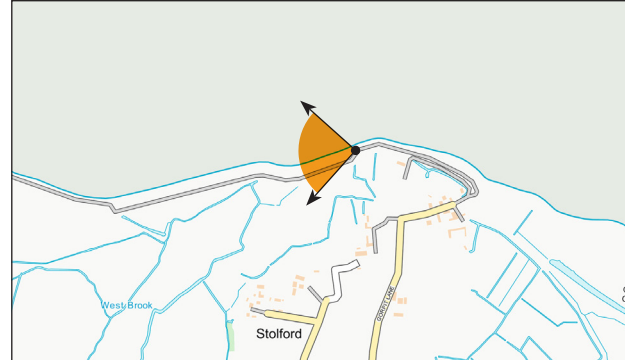
June 2020



TYPE 1 VISUALISATION

Note: Figure produced to accord with the Landscape Institute's Technical Guidance Note 6/19: Visual Representation of Development Proposals.

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Originator: wils03



Location grid reference:	E322 940, N145 987	Camera:	Arca Swiss F-Compact 6x9
GPS location accuracy:	+/- 3m	Lens:	35mm
Horizontal field of view:	90° (cylindrical projection)	Camera height:	1.5m AGL
Paper size:	841mm x 297mm (A1)	Date and time:	08/03/2011 12:00
Correct printed image size:	820 x 250mm		

Revised Building Corner



Not visible / All or partially visible

New Building Corner



Not visible / All or partially visible

Removed Building Corner



Not visible / All or partially visible

100% Enlargement

Note: Figure produced to accord with the Landscape Institute's Technical Guidance Note 6/19: Visual Representation of Development Proposals.

TYPE 1 VISUALISATION

Hinkley Point C  
Non-Material Change Application 4  
for Layout and Building Changes  
Landscape and Visual Assessment

**Figure 6**  
Annotated existing Viewpoint 19  
(Medium-range): West Somerset  
Coast Path, Stolford

June 2020





## **APPENDIX 3 MEETING NOTE WITH SOMERSET WEST AND TAUNTON COUNCIL**

### **Attendees**

John Burton, Somerset West and Taunton Council

### **Summary of Presentation:**

The proposed changes to the plot plan and affected buildings were explained to attendees using a marked up version of the plot plan which highlighted 'new, removed, relocated and repurposed buildings/structures' and some draft plans of individual buildings. The reason for the proposed changes to each building and structure was given along with an explanation where buildings were being grouped together and where buildings were proposed to be relocated/repurposed. It was confirmed that potential changes to the interim spent fuel store were not being proposed as part of this application. In addition to the marked up version of the plan an explanation of the assessment process to be undertaken was provided, including the intention to undertake a high level review of the ES and HRA. The viewpoints proposed to be used during the LVIA were set out.

The discussion then set out briefly a summary timeline of the process going forwards was presented explaining the planned pre-application engagement, anticipated submission date, the opportunity post submission for formal consultation and an anticipated decision date.

### **Summary of Discussion:**

- A more detailed explanation of the purpose and function of some of the affected buildings was provided
- SW&TC would like to understand if any of the buildings proposed to be changed contain fuel or other combustible material and sought clarity on how safety issues would be considered
- SW&TC sought an additional view point analysis from the coastal path given that some of the proposed changes would be potentially visible from the reinstated path post construction
- It was agreed that a further discussion once the Councils had digested the presentation and content of the application would be held in 4 weeks.



## **APPENDIX 4 MEETING NOTE WITH SEDGEMOOR DISTRICT COUNCIL AND SOMERSET COUNTY COUNCIL**

### **Attendees**

Charlotte Rushmere, Sedgemoor District Council

April Waterman, Sedgemoor District Council

Alex Smith, Sedgemoor District Council

Tessa Bond, Somerset County Council

### **Summary of Presentation:**

The history of previous NMC applications was explained. The proposed changes to the plot plan and affected buildings were explained to attendees using a marked up version of the plot plan which highlighted 'new, removed, relocated and repurposed buildings/structures' and some draft plans of individual buildings. The reason for the proposed changes to each building and structure was given along with an explanation where buildings were being grouped together and where buildings were proposed to be relocated/repurposed. It was confirmed that potential changes to the interim spent fuel store were not being proposed as part of this application. In addition to the marked up version of the plan an explanation of the assessment process to be undertaken was provided, including the intention to undertake a high level review of the ES and HRA. The viewpoints proposed to be used during the LVIA were set out.

The discussion then set out briefly a summary timeline of the process going forwards was presented explaining the planned pre-application engagement, anticipated submission date, the opportunity post submission for formal consultation and an anticipated decision date.

### **Summary of Discussion:**

- Heights of new buildings were clarified
- SCC asked if the Quantocks AONB service were going to be contacted in light of the potential impact on the AONB from a landscape perspective
- SCC agreed to contact the Quantocks AONB service
- The initial view from SDC and SCC was that the proposed changes would have a limited impact
- It was agreed that a further discussion once the Councils had digested the presentation and content of the application would be held in 4 weeks

## **APPENDIX 5 MEETING NOTE OF MAIN SITE FORUM 27 FEBRUARY 2020**

### **Attendees:**

Jim Claydon, Chair  
Erland Plomgren, Holford Parish Council  
Penny Harvey, Manchester University  
Judy Bastic, Stogursey Parish Council  
Daniel Aplin, Environment Agency  
Sue Jones, Burton Resident  
Sue Spicer, Burton resident  
Sue Goss, Stogursey Parish Council  
Peter Farmery, West Hinkley Action Group  
Sue Sealey, Avon & Somerset Police  
Jenny Ody, Stogursey Parish Council  
Susan Jones, Stogursey Parish Council  
Alistair Higton, Somerset Parish Council  
Chris Morgan, Somerset West & Taunton / Stogursey Parish Council  
John Burton, Somerset West & Taunton Council

### **Summary of Presentation:**

Proposed changes to the plot plan and affected buildings was given to the Main Site Forum using a marked up version of the plot plan which highlighted 'new, removed, relocated and repurposed buildings/structures'. The reason for the proposed changes to each building and structure was given along with an explanation where buildings were being grouped together and where buildings were proposed to be relocated/repurposed. In addition to the marked up version of the plan, a table categorising 'new, removed, relocated and repurposed buildings/structures' was used to provide a clear explanation.

Following the slides setting out the scope of the proposed non-material change application, a summary timeline of the process going forwards was presented explaining the planned pre-application engagement, anticipated submission date, the opportunity post submission for formal consultation and an anticipated decision date.

### **Summary of Discussion:**

- A more detailed explanation of the written process for formal consultation post submission was given setting out the opportunity for individuals and organisation to comment to the Planning Inspectorate
- Confirmation was provided on the differences between a non-material change and material change and why it is EDFs view that this change represents a non-material change
- Clarity was provided on EDFs approach to the Interim Spent Fuel Store and confirmation that the building was not going to be included in this proposed application
- Confirmation was provided that the non-material change process was a written process and the plans/supporting information would be posted on the Planning Inspectorates website
- A more detailed explanation of what parameters for particular buildings were and what was changing and why – with a focus on the filtering debris recovery pits as an example
- Clarity was provided on what engagement was planned with the community in April / May prior to submission including a discussion around presentations at a HPC Community Forum and potentially Stogursey Parish Council

