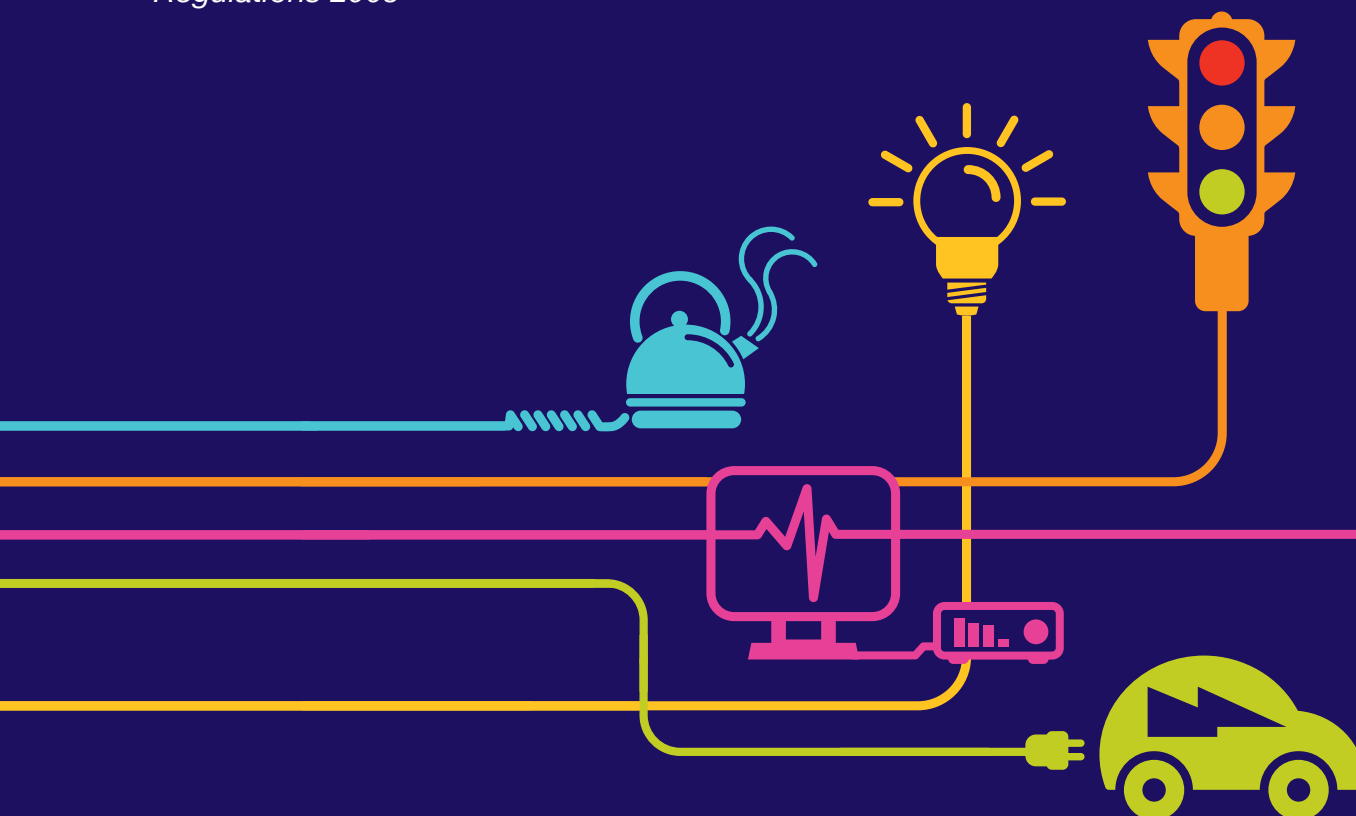


Environmental Statement

The Applicant's Report to Support Habitats Regulations Assessment Sensitivity Test

Hinkley Point C Connection Project

*Regulation 5(2)(q) of the Infrastructure Planning
(Applications: Prescribed Forms and Procedure)
Regulations 2009*



Environmental Statement Sensitivity Test

Hinkley Point C Connection Project

5.29.2 – Environmental Statement Supporting Documents- Sensitivity Test

(orange highlight indicates the contents of this Volume)

Volume	Title
5.29.2.1	The Applicant's Report to Support Habitats Regulations Assessment Sensitivity Test
5.29.2.2.1	Transport Assessment Sensitivity Test
5.29.2.2.2	Transport Assessment Sensitivity Test Appendix A- Revised Construction Programme
5.29.2.2.2	Transport Assessment Sensitivity Test Appendix B Assessment Tables
5.29.2.2.2	Transport Assessment Sensitivity Test Appendix C Junction Profile Graphs
5.29.2.2.3	Transport Assessment Sensitivity Test Appendix D Revised Capacity Model Outputs
5.29.2.3	Flood Risk Assessment Sensitivity Test
5.29.2.4	Draft Construction Environmental Management Plan Sensitivity Test

The Applicant's Report to Support Habitats Regulations Assessment Sensitivity Test

Hinkley Point C Connection Project

OCTOBER 2014

**VOLUME 5.29.2.1, APPLICANT'S REPORT TO SUPPORT HABITATS REGULATIONS
ASSESSMENT SENSITIVITY TEST**

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1 INTRODUCTION

1.1 Background

- 1.1.1 National Grid Electricity Transmission plc (National Grid) has submitted an application under the Planning Act 2008 to seek powers to construct, operate and maintain a new 400,000 volt (400kV) connection between Bridgwater, Somerset and Seabank Substation, north of Avonmouth, together with various associated development and other works ('the Proposed Development').
- 1.1.2 The application was submitted to the Planning Inspectorate (PINS) on the 28th May 2014. PINS confirmed that the application has been accepted for examination on 17th June 2014 (reference number. EN020001).
- 1.1.3 Under the terms of its transmission licence, National Grid is obliged to make an offer of connection in response to each valid application made. In September 2007, National Grid received an application from EdF Energy for the connection of a proposed new nuclear power station at Hinkley Point, Somerset (Hinkley Point C Power Station) to the high voltage electricity transmission system. This connection, as well as others in the South West and South Wales, triggered the need for new transmission capacity in the region.
- 1.1.4 That part of the Proposed Development that comprises an electric line above ground within section 16 of the Planning Act 2008 is a Nationally Significant Infrastructure Project (NSIP) for the purposes of that Act.
- 1.1.5 Under Section 31 of the Planning Act 2008, development consent is required for development to the extent that it is or forms part of an NSIP. Development consent is granted by the making of a Development Consent Order (DCO) for which application may be made under section 37 of the Planning Act 2008.
- 1.1.6 An Environmental Statement (ES) was submitted as part of the DCO application (the submitted ES). The submitted ES was prepared in accordance with the Planning Act 2008, The Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (SI 2009/2263) ('the 2009 Regulations') and The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009. The submitted ES comprises **Volumes 5.1 to 5.27** of the DCO application submission.

1.2 Modifications to Connection Date

- 1.2.1 National Grid has received an application from EdF Energy for a modification to the connection date for the Hinkley Point C Power Station that seeks connection two years later than the present connection date described in the submitted ES.
- 1.2.2 As a result of the application from EdF Energy, on the 19 August 2014 a formal offer for a revised connection date of was made by National Grid to EdF Energy.
- 1.2.3 EdF has advised National Grid that, although technically this offer is confidential until signed, National Grid can inform the Planning Inspectorate that an offer has been made to EdF.

- 1.2.4 To meet the revised connection date offered, the construction programme, as presented and assessed in the submitted ES (**Volume 5.3.2, Appendix 3.B**), has also been revised.
- 1.2.5 The revisions to the construction programme are greater than moving the start of construction to a later date than presented in the submitted ES. The duration of the construction of the various individual proposed development components has changed; the duration of some elements of the construction programme have increased, others have decreased. The changes are described and explained in Chapter 3.

1.3 Purpose of this Document

- 1.3.1 In light of the modifications to the connection date and the Revised Construction Programme required, a review of the submitted Applicant's Report to Support Habitats Regulations Assessment (**Volume 5.20.1** of the submitted ES) produced to accompany the DCO application has been undertaken.
- 1.3.2 The purpose of this document is to provide a sensitivity test of the submitted Applicant's Report to Support Habitats Regulations Assessment (HRA) to consider whether there are any changes to the assessment described in the submitted documents as a result of the Revised Construction Programme.
- 1.3.3 This document should be read in conjunction with the submitted Applicant's Report to Support Habitats Regulations Assessment (**Volume 5.20.1**).

1.4 Habitats Regulations Assessment Sensitivity Test Structure

- 1.4.1 The submitted HRA report provides the information sought by the Planning Inspectorate (underlined text below is taken from Advice Note 10) for Stages 1 and 2 of HRA. This sensitivity test follows the structure set out within the submitted HRA which is as follows:

Stage 1

- **Section 2** provides an overview of any changes to the Proposed Development and the physical characteristics of the development area since the submission of the HRA.
- **Section 3** identifies any changes to the methodology used to determine which European sites should be included within the assessment as a result of the Revised Construction Programme.

Stage 2

- **Section 4** identifies any changes to the potential effects on overwintering and migratory birds associated with the Somerset Levels and Moors SPA/Ramsar and the Severn Estuary SPA/Ramsar as a result of the Revised Construction Programme.

- **Section 5** identifies any changes to the potential effects on bats associated with various SAC sites as a result of the Revised Construction Programme.
- **Section 6** summarises the main conclusions from this HRA Sensitivity Test.

1.5 Matrices

- 1.5.1 Appendix 20A and Appendix 20B of the submitted HRA report contains the HRA Screening Matrix required by the Planning Inspectorate and the HRA Integrity Matrix. There are no changes to submitted Matrices as a result of the revised construction programme.

1.6 Figures and Appendices

- 1.6.1 The figures and appendices in the submitted HRA (**Volumes 5.20.1**) does not require amendment as a result of the Revised Construction Programme.

2 THE PROPOSED DEVELOPMENT

2.1 Introduction

- 2.1.1 This section of the report provides a summary of the Revised Construction Programme, all other elements of the Proposed Development remain as stated in the submitted HRA.

2.2 Project Components

- 2.2.1 The only change to the Proposed Development will be to the commencement and completion of the construction works and the construction duration of the various components parts of the development. All other aspects of the Proposed Development will remain as described in Chapter 2 of the submitted HRA (**Volume 5.29.2.1**).

2.3 Revised Construction Programme

- 2.3.1 Under the revised construction programme, National Grid would start construction in December 2015, two months later than the Preliminary Construction Programme set out in the submitted ES (**Volume 5.3.1, Table 3.3** and **Volume 5.3.2, Appendix 3B**). Construction of the Proposed Development will be complete by March 2022.
- 2.3.2 The duration of the total revised construction programme will be 76 months which is 25 months longer than the Preliminary Construction Programme detailed in the submitted ES.
- 2.3.3 As described above, this extension in duration is due to the need to connect the Hinkley Point C Power Station to the National Grid system within EdF's requested revised connection programme. This requires re-planning of the construction programme assessed in the submitted ES.
- 2.3.4 The construction methods described in Chapter 3 of the submitted ES and Section 2 of the submitted HRA will not alter if the revised construction programme is implemented, with the exception of the 400kV Underground Cables through the Mendip Hills and at Sandford substation where works will be undertaken in a phased manner and restricted to a maximum working stretch of 3km at any one time. Further information is provided within the ES Sensitivity Test (**Volume 5.29.1.1**) and the Draft Construction Environmental Management Plan Sensitivity Test (**Volume 5.29.2.4**).
- 2.3.5 A summary of the revised construction programme, compared to that assessed in the submitted ES and HRA, is set out below in **Table 2.1**.

Table 2.1 Revised Construction Programme

Proposed Development Component	Revised Start Date	Revised Finish Date	Duration of works in submitted ES (months)	Revised Duration of works (months)
400kV Overhead Line 400kV Route (South)	Q2 2018	Q2 2020	45 (total route)	27
400kV Overhead Line 400kv Route (North)	Q3 2018	Q3 2021	45 (total route)	39
400kV Overhead Line 400kV Route (Huntspill to Bridgewater Tee)	Q3 2019	Q2 2020	45 (total route)	12
400kV Cable Mendip Hills Route- works between A38 Bristol Road to Tower head Road (including South of Mendip Hills CSE Compound, A38 Bristol Road (UGC) Compound and haul Road	Q1 2016	Q2 2020	48 (all works between Sandford Substation and A38)	54
400kV Cable Mendip Hills Route – works between Towerhead Road and Sandford Substation	Q1 2018	Q2 2020	48 (all works between Sandford Substation and A38)	30
400kV Cable – works between Towerhead Road and Sandford Substation (haul road and compound only)	Q1 2017	Q3 2021	48 (all works between Sandford Substation and A38)	45
Bridgewater Tee 400kV Cable Route	Q3 2019	Q3 2020	12	27
AT Route Underground and Overhead Line	Q4 2019	Q3 2020	12	12
W Route	Q2 2017	Q2 2019	24	27
BW Route Avonmouth Option A	Q4 2018	Q2 2019	21	9
BW Route Portishead Option B	Q4 2018	Q4 2019	21	15
G Route	Q3 2019	Q3 2020	13	15
Seabank Line Entries BW Route	December 2015	Q2 2016	30 (all Seabank Line Entries)	9

Proposed Development Component	Revised Start Date	Revised Finish Date	Duration of works in submitted ES (months)	Revised Duration of works (months)
Seabank Line Entries G Route	Q1 2016	Q3 2016	30 (all Seabank Line Entries)	9
Seabank Line Entries DA Route	Q1 2018	Q3 2018	30 (all Seabank Line Entries)	9
N Route Overhead Line (including disconnection and removal)	Q3 2019	Q2 2020	9 (all N route works)	12
Hinkley Line Entries	Q3 2018	March 2022	36	45
Y Route Churchill	Q1 2018	Q4 2018	12	12
W Route Churchill	Q3 2018	Q3 2018	12	3
Sandford 400/132kV Substation	Q1 2018	Q3 2020	24	33
Seabank 400/132kV Substation	Q4 2019	Q4 2021	24	24
Churchill 132/33kV WPD Substation	December 2015	Q4 2018	24	39 (works from Q4 2015 to Q1 2017 within substation boundary only)
Portishead 132/33kV WPD Substation	Q3 2018	Q2 2019	8	12
Avonmouth 132/33kV WPD Substation	Q3 2019	Q2 2020	9	12
Removal of Southern Half F Route	Q3 2019	Q4 2019	12	6
Removal of Northern Half F Route	Q2 2020	Q2 2021	27	15
Removal of 132kV G Route	Q3 2019	Q3 2020	13	15

- 2.3.6 The construction methods described in the submitted HRA do not alter as a result of the Revised Construction Programme, with the exception of the 400kV Underground Cables through the Mendip Hills and at Sandford substation where works would be undertaken in a phased manner and restricted to a maximum working stretch of 3km to reduce the duration of habitat loss.
- 2.3.7 As detailed in the submitted ES, the working area along the length of the underground cables route would be approximately 100m wide and protected by post and wire fencing. Once the cables have been laid and trenches backfilled, habitat reinstatement would be phased as works are completed in each length.

Whilst the cables would be laid in a phased manner, the haul road for this development component would remain in place for the duration of works.

2.4 Limits of Deviation

- 2.4.1 There are no changes to the Limits of Deviation. These remain as set out within the submitted HRA.

3 SCREENING STAGE (HRA STAGE 1)

3.1 Introduction

- 3.1.1 There are no changes to the overall screening stage which remains the same as that set out within the submitted HRA. However the in-combination assessment has been updated. An updated version of section 3.9 of the submitted HRA is provided below (related updates to sections 4.11 and 5.5 of the submitted HRA are also included in this document).

3.2 Screening of In-combination Effects

- 3.2.1 As part of the ES Sensitivity Test, a review has been undertaken to identify any new major development projects which have come forward since the submission of the DCO application (Chapter 17 of the ES Sensitivity Test (**Volume 5.29.1.1**) provides further details of the method used to identify new major development projects). It is appropriate to consider the potential for in-combination effects to arise as a result of these new additional development proposals and the Revised Construction Programme.
- 3.2.2 The approach to screening in-combination effects on European sites is unchanged from that set out in the submitted HRA (**Volume 5.20.1**, paragraphs 3.9.1 to 3.9.4) and the submitted Environmental Statement (**Volume 5.17.1**).

Potential In-combination Effects on SPA Designated Interests

- 3.2.3 The approach to scoping projects and plans for in-combination effects on SPA Designated Interests is unchanged from that set out in the submitted HRA (**Volume 5.20.1**, paragraph 3.9.5 to 3.9.10).
- 3.2.4 Following the scoping of projects and plans as described in the submitted HRA and ES (which are referenced above) Table 3.5 lists an additional 16 new projects for consideration.

Table 3.5 Plans and Projects Considered for In-combination Assessment

Projects Considered (ID numbers in brackets, illustrated at Volume 5.29.1.3, Figure 17.1 Issue B)
(100) Brilliant Harvest Planning permission for the installation of standalone solar photovoltaic (PV) modules, grid connection and Associated Infrastructure.

Projects Considered (ID numbers in brackets, illustrated at Volume 5.29.1.3, Figure 17.1 Issue B)
<p>(101) New Earth Solutions</p> <p>Full planning permission for the erection of 10,405 sqm (112,000 sqft) of B1c, B2 and B8 development comprising 3 units on land at Access 18, off Kingsweston Lane/Avonmouth Way, Avonmouth.</p> <p>EIA Screening and scoping requests only.</p>
<p>(102) Smiths Gore</p> <p>EIA Screening opinion for a 36 MW power Solar Farm.</p> <p><i>EIA Screening request only.</i></p>
<p>(103) Bridgwater Gateway Ltd</p> <p>Outline planning application for the erection of three storey building (use class B1), formation of parking and access. Total B1 comprises 2,867 sqm.</p>
<p>(104) DFE Skanska Residential Ltd.</p> <p>Outline application including access with all other matters reserved for a mixed use development of 51.49 hectares of land comprising: up to 1,000 new dwellings (Use Class C3); a 36-bed Extra Care Home (Use Class C2); a mixed use local centre including a food store up to 2000 sqm. gross floor area (Use Classes A1, A2, A3, A4, A5, B1, D1, D2); a 2-form entry primary school; community facilities including a satellite GP surgery, dentist and community centre; associated public open space and sporting facilities; green infrastructure integrated with foot and cycle paths; together with supporting infrastructure and facilities including three new vehicular accesses.</p>
<p>(105) A & R House Partnership</p> <p>Large scale major application for Leisure complex together with an Environmental Impact Assessment with change of use from agricultural lakes to tourist facility(D2) providing a water-park for cable-tow wake-boarding, water-skiing, canoeing and other non-powered water-based sports with construction of retaining bank for a series of lakes consisting of a long lake for triathlon with 2no islands, a main lake with central island, up to 8 masts for cable-skiing, a balancing lake and a training lake. Works to include erection of club house with showers/wc, restaurant/cafe, equipment hire/shop-(A1), kitchen-(A3 and A4), offices, training facilities and grounds management. Erection of a boat and equipment storage building, boiler room, pumping and control cabins, parking for 65 vehicles, reed-bed treatment plant, associated landscaping with hard-surfaced tracks and water-control features for attenuation of excess water (part retrospective).</p>
<p>(106) Taylor Wimpey UK Ltd and Bristol Polytechnic Enterprises Dev.</p> <p>Development on 14.8 hectares of land seeking outline permission for the erection of up to 550 no. dwellings with associated infrastructure to include full permission for Phase I of development, consisting of the erection of 282 no. dwellings (of the 550 no. total), 250m2 of Retail and/or Community Meeting Space (mixed Class A1 Retail / Class D2 Assembly and Leisure), site access/spine road, car parking, open space, landscaping and drainage infrastructure.</p>
<p>(107) Bridgwater Gateway Phase 2</p> <p>Outline application for residential development of up to 292 dwellings and associated infrastructure.</p>

Projects Considered (ID numbers in brackets, illustrated at Volume 5.29.1.3, Figure 17.1 Issue B)
<p>(108) Green Switch Solutions</p> <p>Development of a 7 MW solar park on land associated to Howgrove Farm, Redhill, Bristol (nearest postcode BS40 5TS).</p> <p><i>EIA Screening request only.</i></p>
<p>(109) KWTN Solar Ltd</p> <p>Proposed 7.48 MW solar farm.</p> <p><i>EIA Screening request only.</i></p>
<p>(110) Green Energy UK Direct Ltd.</p> <p>Proposed 4.5 MW solar farm.</p> <p><i>EIA Screening request only.</i></p>
<p>(111) Estrans Ltd</p> <p>Proposed 3.5 MW Solar Farm.</p> <p><i>EIA Screening request only.</i></p>
<p>(112) Network Rail</p> <p>Filton bank capacity improvement project - railway line improvements between Temple Meads and Filton Abbey Wood stations including track re-doubling, new road access and replacement of bridges.</p> <p><i>EIA Screening request only.</i></p>
<p>(113) Bristol City Council & South Gloucestershire Council</p> <p>Construction of North Fringe to Hengrove Package (NFHP) MetroBus: A rapid bus route between Bristol North and East Fringes to South Bristol via Bristol City Centre comprising new roads and alteration to existing highways to prioritise MetroBus, including widening of Bradley Stoke Way, A 4174 Avon Ring Road at Hambrook junction, Stoke Lane/Coldharbour Lane, new footbridge at Church Lane over A 4174, a new bus only junction on the M32, alterations to roads and public spaces at St Augustine's Parade/Baldwin Street/ Colston Avenue, widening of Hartcliffe Way, new MetroBus stop infrastructure, public realm works, associated engineering and earthworks, drainage works and landscaping.</p>
<p>(114) Oaktree Environmental Limited</p> <p>Infilling of irrigation lakes and landscaping works to practice area at Filton Golf Course.</p> <p><i>EIA Screening request only.</i></p>
<p>(115) Clean Earth</p> <p>Single wind turbine single wind turbine of maximum hub height 50m and maximum tip height 77 m, with a 3 bladed rotor design.</p> <p><i>EIA Screening request only.</i></p>
<p>(116) Balfour Beatty</p> <p>Request for a Scoping Opinion for the erection of a 10.4 MW Bioenergy Facility using a gasification process to approximately 60,000 tonnes (dry) of waste wood per annum being supplied by the neighbouring wood recovery facility Boomeco.</p> <p><i>EIA Screening request only.</i></p>

- 3.2.5 As per the approach detailed within the submitted HRA (**Volume 5.20.1**, paragraph 3.9.12) the new additional projects have been scoped to determine those that could potentially affect birds associated with either the Somerset Levels and Moors SPA/Ramsar or the Severn Estuary SPA/Ramsar.
- 3.2.6 The only project identified with potential for relevant impact pathways and interaction with the Proposed Development is project ID 115, Clean Earth single wind turbine located west of Prior's Wood near Wraxall (Section E).

Potential In-combination Effects on SAC Designated Interests

- 3.2.7 As per the approach set out in the submitted HRA (**Volume 5.20.1**, paragraph 3.9.14) the new additional projects have been scoped to identify those that may potentially affect bats associated with either the North Somerset and Mendip Bat SAC, the Mendip Limestone Grassland SAC, Exmoor and Quantock Oakwoods SAC, Mells Valley SAC or Bath and Bradford-on-Avon Bats SAC. The following six projects fall within one or more SAC Bat Consideration Zones for these SACs:
- ID 100 - Brilliant Harvest (solar farm)
 - ID 102 - Smith Gore (solar farm)
 - ID 105 - A & R House Partnership (water park leisure complex)
 - ID 108 - Green Switch Solutions (solar farm)
 - ID109 - KWTN Solar Ltd (solar farm)
 - ID 110 - Green Energy UK Direct Ltd (solar farm)
- 3.2.8 The full cumulative effects assessment is presented in **Volume 5.29.1.1**, Chapter 17.

4 INFORMATION FOR APPROPRIATE ASSESSMENT – SPA AND RAMSAR DESIGNATED BIRD POPULATIONS

4.1 Introduction

- 4.1.1 There are no changes to the effects on SPA and Ramsar designated bird populations. This remains as set out within the submitted HRA.
- 4.1.2 As set out in the submitted ES, National Grid has committed to phase the conductor and earth wire removal of the existing 132kV F-Route south of Mark and the stringing of the proposed 400kV line, to avoid both lines being in place when potential wintering or migratory bird collision risk would occur. This remains a requirement of the Revised Construction Programme.
- 4.1.3 The update to the in-combination assessment (see section 3.9) has been undertaken. The findings are set out within updated section 4.11 (see below). This does not change the conclusion of the submitted HRA.

4.2 In-combination Assessment on SPA Designated Interests

- 4.2.1 The only project identified with potential interaction with the Proposed Development was project ID 115, Clean Earth single wind turbine located west of Prior's Wood near Wraxall (Section E). However, this project is currently only at the stage of requesting an EIA screening opinion. There is no survey data against which to judge potential in-combination effects with the Proposed Development. As such there is no change to the conclusions of the submitted HRA in relation to SPA designated interests.

5 INFORMATION FOR APPROPRIATE ASSESSMENT – SAC DESIGNATED INTERESTS

5.1 Introduction

- 5.1.1 The revised construction programme represents an overall increase in the construction phase of this development by 25 months (total 76 months). Despite the longer duration of the Revised Construction Programme, the duration for construction of each project component would typically be less or similar to that considered in Chapter 8 of the submitted ES. There are a few exceptions to this. The works at Portishead and Churchill substations and the Hinkley line entries are extended by 4, 15 and 9 month respectively. These periods are largely associated with works within the existing substation footprints and there are no changes to the predicted effects on ecological receptors and therefore no change to the submitted HRA.
- 5.1.2 The Bridgwater Tee 400kV cable route works extend from 12 to 27 months, this is due to the availability of outages and does not represent continual working during this period. There are no changes to the predicted effects on ecological receptors and therefore no change to the submitted HRA. The 400kV underground cable route (south of Towerhead Road) and Sandford substation works are extended by 14 and 9 months respectively. As detailed in Section 2, these works would be undertaken in a phased manner to minimise effects on ecological receptors and this is described further in section 5.2 below. The detail of the Revised Construction Programme is set out in **Table 2.1** and a full assessment is presented in **Volume 5.29.1.1**, Chapter 8.

5.2 Consideration of Effects on SAC Designated Populations

- 5.2.1 The 400kV underground cable component of the development has been identified as having the potential to impact on SAC bat populations due to loss of hedgerows and agricultural fields (pasture and arable) during the construction phase resulting in potential loss and fragmentation of bat foraging and commuting habitat.
- 5.2.2 The Revised Construction Programme for the 400kV underground works through the Mendip Hills would require a total working period of up to 57 months (Q1 2016 to Q3 2020, spanning five bat active seasons), in contrast to the 48 months (spanning four bat active seasons) previously assessed. As presented in the submitted ES (**Volume 5.8.1**) and HRA (**Volume 5.20.1**), these underground works lie within the SAC Consideration Zones for horseshoe bats.
- 5.2.3 To avoid complete loss of all hedgerows throughout the entire 8.5km length of the 400kV underground works, the works would be delivered in a phased manner under the Revised Construction Programme. National Grid has advised that the length of cable being installed, plus the section behind and section in front which would need to remain open at any one time would equate to a maximum of 3km of the 400kV underground cable route where habitat loss, would take place at any one time (i.e. ca 35% of that assessed in the submitted ES at any one time). Whilst the cables would be laid in phases, the haul road for this project component would

remain in place for the duration of works (57 months) and until testing of the cables is complete (up to 76 months). Once the cables have been laid and trenches backfilled, habitat reinstatement work would begin. The reinstatement of subsoil, topsoil and hedgerows would also be undertaken in phases and within 12 months of completion of each phase.

5.2.4 Sandford substation also lies within the SAC Consideration Zones for horseshoe bats. The Revised Construction Programme requires works at the substation for up to 33 months (Q1 2018 to Q3 2020). The initial site clearance and levelling works would be undertaken during 2018 under the Revised Construction Programme, thereby facilitating early reinstatement of some habitats. These are described under 'Embedded Landscape Mitigation' as described in **Volume 5.29.1.1** of ES Sensitivity Test. Early reinstatement of habitats include:

- planting along the existing and reinstated orchard line in November/December 2017;
- orchard tree planting in the north west in November/December 2017;
- planting (ditch and hedgerow) along the realigned ditch in the first Spring or Autumn following construction of the ditch (November/December 2018 or April/May 2019); and
- native structure planting north of the pond on November/December 2018.

5.2.5 There are no changes regarding the effects on SAC designated populations. These remain as set out in the submitted HRA.

5.3 Conservation Objectives and Views about Management

5.3.1 There are no changes regarding the Conservation Objectives and Views about Management. These remain as set out within the submitted HRA.

5.4 Summary of Predicted Effects of the Proposed Development on Designated Bat Populations

5.4.1 The construction phase associated with the 400kV underground cable element of the Proposed Development is increased under the Revised Construction Programme. However, these works would be delivered in a phased manner, thereby enabling reinstatement to be staggered and reducing the area of habitat loss at any one time. As such, the overall effect is not anticipated to exceed that assessed in the submitted ES and HRA.

5.5 Assessment of Potential In-combination Effects

5.5.1 The submitted HRA (**Volume 5.20.1, Table 5.10**) details those projects or plans which fall with SAC Bat Consideration Zones but which were scoped out of the in-combination assessment. None of the new additional projects identified in **Table 3.5** have been scoped out and therefore this table is not included here.

5.5.2 **Table 5.1** details those additional projects which have the potential to result in in-combination effects.

Table 5.1 Projects and Plans with the Potential for In-combination Effects

Project/Plan	Potential Impacts	Mitigation
<p>ID 100 – Brilliant Harvest</p> <p>Land at, Ashlawn Farm, Pill Road, Rooksbridge, Axbridge, BS26.</p> <p>Planning permission for the installation of standalone solar photovoltaic (PV) modules, grid connection and Associated Infrastructure.</p>	<p>The construction period of this project is unknown but could coincide with that of the Proposed Development.</p> <p>A small section of the northwest edge of the site falls within the 5.75km bat consideration zone for greater horseshoe bats of the North Somerset and Mendip Hills Bat SAC. There is potential for bats to use the proposed solar energy facility to forage within the site.</p> <p>No assessment has yet been made in support of this project however it is reasonable to assume that in the absence of mitigation there is potential for greater horseshoe bats associated with the North Somerset and Mendip Hills Bat SAC to be impacted by the proposals.</p>	<p>The Proposed Development will provide bat foraging habitat during the construction phase and undertake reinstatement of habitats post construction</p> <p>It is reasonable to assume that that the proposed solar farm development will include appropriate mitigation if impacts on bats are identified.</p> <p>No in-combination effects either during construction or operational phases are predicted.</p>
<p>ID 102 – Smith Gore</p> <p>EIA Screening opinion for a 36 MW power Solar Farm</p> <p>THIS IS NOT A PLANNING APPLICATION</p>	<p>The construction period of this project is unknown but could coincide with that of the Proposed Development.</p> <p>This site falls within the 2.75km bat consideration zone for lesser horseshoe bats and the 3.4km consideration zone for lesser and greater horseshoe bats of the North Somerset and Mendip Hills Bat SAC. There is potential for bats to use the proposed solar energy facility to forage within the site.</p> <p>No assessment has yet been made in support of this project however it is reasonable to assume that in the absence of mitigation there is potential for lesser and greater horseshoe bats associated with the North Somerset and Mendip Hills Bat SAC to be impacted by the proposals.</p>	<p>The Proposed Development will provide bat foraging habitat during the construction phase and undertake reinstatement of habitats post construction</p> <p>It is reasonable to assume that that the proposed solar farm development will include appropriate mitigation if impacts on bats are identified.</p> <p>No in-combination effects either during construction or operational phases are predicted.</p>

Project/Plan	Potential Impacts	Mitigation
<p>ID 105 - A & R House Partnership</p> <p>Large scale major application for Leisure complex with change of use from agricultural lakes to tourist facility(D2) providing a water-park for cable-tow wake-boarding, water-skiing, canoeing and other non-powered water-based sports and associated facilities.</p>	<p>The construction period of this project is unknown but could coincide with that of the Proposed Development.</p> <p>The site falls within the 3.4km bat consideration zone for greater horseshoe bats of the Mendip Limestone Grasslands SAC. There is potential for bats to use the proposed leisure complex development to forage within the site.</p> <p>The Environmental Statement summarises that several bat species were recorded but most were off site. Natural England's response does not provide any comment in relation to bats.</p> <p>In light of this it seems unlikely that greater horseshoe bats associated with the Limestone Grasslands SAC will be impacted by the proposals although this cannot be completely ruled out at this time.</p>	<p>The Proposed Development will provide bat foraging habitat during the construction phase and undertake reinstatement of habitats post construction</p> <p>It is reasonable to assume that that the proposed leisure complex development will include appropriate mitigation if impacts on bats are identified.</p> <p>No in-combination effects either during construction or operational phases are predicted.</p>
<p>ID 108 - Green Switch Solutions</p> <p>Development of a 7 MW solar park on land associated to Howgrove Farm, Redhill, Bristol (nearest postcode BS40 5TS).</p> <p>THIS IS NOT A PLANNING APPLICATION</p>	<p>The construction period of this project is unknown but could coincide with that of the Proposed Development.</p> <p>A small section of the northwest edge of the site falls within the 5.75km bat consideration zone for greater horseshoe bats of the North Somerset and Mendip Hills Bat SAC. There is potential for bats to use the proposed solar energy facility to forage within the site.</p> <p>No assessment has yet been made in support of this project however it is reasonable to assume that in the absence of mitigation there is potential for greater horseshoe bats associated with the North Somerset and Mendip Hills Bat SAC to be impacted by the proposals.</p>	<p>The Proposed Development will provide bat foraging habitat during the construction phase and undertake reinstatement of habitats post construction</p> <p>It is reasonable to assume that that the proposed solar farm development will include appropriate mitigation if impacts on bats are identified.</p> <p>No in-combination effects either during construction or operational phases are predicted.</p>

Project/Plan	Potential Impacts	Mitigation
<p>ID 109 - KWTN Solar Ltd</p> <p>Proposed 7.48 MW solar farm.</p> <p>THIS IS NOT A PLANNING APPLICATION</p>	<p>The construction period of this project is unknown but could coincide with that of the Proposed Development.</p> <p>This site falls within the 2.75km bat consideration zone for lesser horseshoe bats and the 3.4km consideration zone for lesser and greater horseshoe bats of the North Somerset and Mendip Hills Bat SAC. There is potential for bats to use the proposed solar energy facility to forage within the site.</p> <p>No detailed assessment has currently been made in support of this project however it is reasonable to assume that in the absence of mitigation there is potential for lesser and greater horseshoe bats associated with the North Somerset and Mendip Hills Bat SAC to be impacted by the proposals.</p>	<p>The Proposed Development will provide bat foraging habitat during the construction phase and undertake reinstatement of habitats post construction</p> <p>The EIA Screening Analysis Proforma for this proposed solar farm development states that: <i>“The proposed development will be designed to preserve the habitat of the Greater and Lesser Horseshoe bat in part through retaining a 5m buffer to existing hedgerows on the site”</i>; further, that <i>“Grazing will be maintained during the operational life of the solar farm”</i>.</p> <p>No in-combination effects either during construction or operational phases are predicted.</p>
<p>ID 110 - Green Energy UK Direct Ltd.</p> <p>Proposed 4.5 MW solar farm.</p> <p>THIS IS NOT A PLANNING APPLICATION</p>	<p>The construction period of this project is unknown but could coincide with that of the Proposed Development.</p> <p>This site falls within the 2.75km bat consideration zone for lesser horseshoe bats and the 3.4km consideration zone for lesser and greater horseshoe bats of the North Somerset and Mendip Hills Bat SAC. There is potential for bats to use the proposed solar energy facility to forage within the site.</p> <p>No detailed assessment has currently been made in support of this project however it is reasonable to assume that in the absence of mitigation there is potential for lesser and greater horseshoe bats associated with the North Somerset and Mendip Hills Bat SAC to be impacted by the proposals.</p>	<p>The Proposed Development will provide bat foraging habitat during the construction phase and undertake reinstatement of habitats post construction</p> <p>The EIA Screening request for this proposed solar farm development states that the hedgerows and trees would be retained and that planting proposals would incorporate biodiversity enhancement. No potential adverse ecological effects are identified although no detailed work has been undertaken.</p> <p>It is reasonable to assume that that the proposed solar farm development will include appropriate mitigation if impacts on bats are identified.</p> <p>No in-combination effects either during construction or operational phases are predicted.</p>

5.5.3 On the basis of the assessment information presented in **Table 5.1** it is therefore concluded that the Proposed Development in-combination with other plans and

projects would not give rise to an adverse effect on the integrity of the designated bat populations of the:

- North Somerset and Mendip Bats SAC
 - Greater horseshoe bat
 - Lesser horseshoe bat
- Mendip Limestone Grasslands SAC
 - Greater horseshoe bat
- Exmoor and Quantock Oakwoods SAC
 - Barbastelle bat
- Mells Valley SAC
 - Greater horseshoe bat
- Bath and Bradford-on-Avon Bats SAC
 - Greater horseshoe bat

5.6 Climate Change

- 5.6.1 There are no changes regarding the effects of climate change as a result of the Revised Construction Programme or the additional projects. This remains as set out within the submitted HRA.

6 SUMMARY AND CONCLUSIONS

6.1 Introduction

- 6.1.1 This report considers the implications of the Revised Construction Programme to the proposed Hinkley Point C Connection project for the European and Ramsar designated sites in the study area.
- 6.1.2 The Revised Construction Programme does not affect the conclusion of the in-combination assessment in the submitted HRA.
- 6.1.3 The additional projects identified since the submitted ES do not affect the conclusions of the in-combination assessment in the submitted HRA.
- 6.1.4 The commitment in the submitted HRA and ES to remove the cables of the existing F-route 132kV overhead line in the south, prior to stringing the new 400kV connection in that location, will ensure that the Revised Construction Programme does not alter the conclusion of the HRA in relation to SPA designated interests.
- 6.1.5 The commitment to undertaking the 400kV underground cabling works and associated reinstatement of habitats in a phased manner will ensure that the Revised Construction Programme does not alter the conclusion of the HRA in relation SAC bats.
- 6.1.6 The Revised Construction Programme does not affect any other conclusion of the submitted HRA.