

FIVE
ESTUARIES
OFFSHORE WIND FARM

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WIND FARM

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REVISION B

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1. EXECUTIVE SUMMARY

- 1.1.1 The Five Estuaries Offshore Windfarm (~~the Project~~ Project ('VE')) and the North Falls Offshore Windfarm Project ('North Falls') have been allocated the same connection point and date of connection to the national electricity transmission network. The proposed connection point is the East Anglian Connection Node (EACN), which is part of National ~~Grids~~ Grid's Norwich to Tilbury reinforcement project.
- 1.1.2 In response to updated policy in the NPSs regarding coordination and feedback received to the consultations carried out by both projects which asked for closer coordination, the two wind farm projects have worked together to: align their landfall locations for their export cables to come ashore, develop a shared export cable corridor, and selected a single site for both onshore substations.
- 1.1.3 This document provides an overview of the coordination achieved to date in the development phase of the two wind farm projects, and details ongoing coordination activities and the proposed coordinated approaches which could be implemented during construction. Iterations of this document are expected to be provided during the examination as more information on the North Falls ~~OWF~~ and National ~~Grids~~ Grid's Norwich to Tilbury Project are available / fixed.
- 1.1.4 The shared design keeps the potential impacts from the projects to a single swathe of land and enables coordination during construction, which has the potential to significantly reduce the impacts on the environment and local community from the construction phase. In order to realise these benefits during construction, the two projects would need to reach their decision points¹ on whether to proceed with the projects (also known as their Financial Investment Decisions (FIDs)) within three years of each other. The shorter the gap between the projects' FIDs, the more coordination in construction could potentially be achieved. The Project is only in control of its timetable, so ensuring flexibility in the consent is essential to encourage ~~co-ordination~~ coordination.
- 1.1.5 In order to secure the flexibility for coordinated construction, the Development Consent Order (DCO) for the Project has considered three delivery scenarios where the two projects proceed to construction on varying timescales. Two 'build options', which cover the three delivery scenarios are set out within the draft DCO. There are three scenarios but only two build options because, in practical terms, the works taken forward either do or do not include the second set of ducts, there are therefore only two options as to what is constructed. The difference in the scenarios relates to timing and sequencing which, while it will affect the detail of the construction methodology, does not create a third build option.

¹ When projects take a decision on whether to proceed with construction, known as FID the following elements need to be in place; consent, appropriate funding mechanism (e.g. CfD).



- 1.1.6 **Build option 1:** This applies to scenario 1 where each project consents the onshore export cable ducts for the other within each DCO and delivers these as part of its own build. If the FID decisions are reached within a year of each other, this would then also allow for the use of a single civils contractor for the onshore export cable civils work for the two projects. Each project would then install its own electrical cables within the ducts. This has the potential to significantly reduce construction impacts during the civils phase, particularly traffic impacts.
- 1.1.7 **Build option 2:** This applies to scenario 2 and 3 where each project delivers its own ducts and cable works. In scenario 2, while this will not deliver a second set of ducts, if the projects reach FID within three years of each other, overlapping order limits still allow for elements of the construction work (such as elements of the haul roads and temporary construction sites) to be transferred for use by the second project where practicable and desirable (having regard to for example the impact on landowners), in order to reduce overall impacts
- 1.1.8 The third delivery scenario concerns the situation where the second project does not reach FID within three years of the first or is not progressed. In such circumstances there is limited scope for coordination, and no scope at all in the event the second project does not proceed. The first project would be constructed so as not to prevent the second project from being built, but without coordination on construction elements.
- 1.1.9 Some elements of construction (e.g. cable installation) would be reserved for each project regardless of the level of coordination for technical and commercial reasons.
- 1.1.10 The background to the FID scenarios, consenting options, and outline of the construction methodologies is set out in more detail in Section 3 of this document.
- 1.1.11 Given the proximity of the selected co-located substation site to the proposed EACN search area for NGET, the two OWF Projects and NGET have been coordinating their proposals on a number of topics, including construction access, and operational noise. Further detail on the status of the coordination between the three parties is included in Annex A, the Tripartite Position Statement. The projects expect to develop coordination in more detail following National Grid's statutory consultation, expected Spring 2024. VE has continued tripartite engagement with NGET and North Falls to agree a cooperation agreement, which supplements the bespoke protective provisions agreed and included in the draft Development Consent Order (dDCO). Ongoing coordination will be undertaken with NGET throughout their examination process once their DCO application is submitted expected mid 2025.



2. COORDINATION WITH OTHER PROJECTS

2.1 OVERVIEW

- 2.1.1 This Report provides information on the coordination between ~~the Five Estuaries Offshore Wind Farm project (hereinafter referred to as 'Five Estuaries' or 'VE')~~ and ~~the North Falls Offshore Wind Farm project (hereinafter referred to as 'North Falls' or 'NF')~~. VE and North Falls. The report has been prepared to support the Development Consent Order ('DCO') for the Five Estuaries project.
- 2.1.2 More specifically, this Report provides information on the coordinated approach to development for the transmission connection between North Falls and ~~Five Estuaries~~VE, including site selection and opportunities during construction and how these are secured in the DCO installation, with the overall aim of minimising impacts on the environment and local communities.
- 2.1.3 This Report also includes reference to how North Falls and ~~Five Estuaries~~VE have jointly engaged with National Grid, the owner of the electricity transmission network and DCO promoter of the Norwich to Tilbury project, which includes the EACN substation where the wind farm projects will connect.
- 2.1.4 Information on the projects involvement in the Offshore Transmission Network Review (OTNR) process and the Offshore Coordination Support Scheme (OCSS) is not included here. Detail on that is set out in the Offshore Connection Scenario (Application Document 9.29). VE along with North Falls and SeaLink (National Grid Electricity Transmission (NGET)) explored the feasibility of coordination options between the two OWFs and an offshore reinforcement to the national grid. Subsequently, VE, along with the nearby North Falls and SeaLink, applied as a consortium for grant funding as part of the OCSS however the Secretary of State decided not to grant funding to the consortium in September 2024. This was confirmed by letter from the Department of Energy Security and Net Zero [AS-011]. An offshore connection has therefore not been pursued.
- 2.1.5 For clarity, the coordination between ~~Five Estuaries~~VE and North Falls presented in this Report does not result in a situation where ~~Five Estuaries~~VE is not consentable or deliverable as a stand-alone project, whether or not North Falls proceeds. Rather, it sets out how the projects have complied with policy in seeking to identify and pursue opportunities for collaborative working and delivery where that is reasonably practicable.
- 2.1.6 This Report has been prepared to aid the ~~Planning Inspectorate's~~Examining Authority and other interested parties / statutory bodies understanding of the co-ordination between the projects and how the potential delivery scenarios included in VE's DCO have been considered.



2.2 DOCUMENT STATUS AND UPDATES

- 2.2.1 VE is the first of the three projects to submit an application for development consent. ~~Five Estuaries understands that North Falls intends to submit an~~submitted its application for development consent in Q3 2024 and National Grid intends to submit its application for development consent for the Norwich to Tilbury project in mid-2025.
- 2.2.2 This document ~~has been~~was developed by VE to provide an overview of the coordination to date, ongoing coordination activities in the development phase and opportunities for coordination in construction. Whilst the document has been shared with North Falls and considers their feedback it has been developed independently by VE. ~~It is intended that a jointly authored coordination report which will build on the information in this report will be prepared and submitted as part of the VE examination once North Falls has concluded its own project design processes and independent environmental assessment. This report has been updated towards the end of the examination in response to the Rule 17 Request received on 27 February 2025 [PD-034] to explain how both projects' mitigation measures would be coordinated. This is included in Section 4 and identifies any changes since submission. .~~
- 2.2.3 Additionally, VE, North Falls and NGET worked together to draft the Tripartite Position Statement in Appendix A. ~~It is intended this will be developed and expended upon where appropriate as both North Falls and NGET move to the next stage of their development processes. VE has continued tripartite engagement with NGET and North Falls to agree a cooperation agreement, which supplements the bespoke protective provisions agreed and included in the dDCO.~~

2.3 NATIONAL POLICY CONTEXT

- 2.3.1 Under the Planning Act 2008, National Policy Statements (NPSs) set out national policy against which proposals for major infrastructure projects will be assessed. The Examining Authority (ExA) will have regard to NPSs in its examination of applications for development consent, and the relevant SoS must also have regard to them when making decisions. The 2023 revised NPSs came into force on 17 January 2024, superseding the NPSs designated in July 2011.
- 2.3.2 The NPSs of relevance to the proposed development, designated in November 2023, comprise:
- > Overarching NPS for Energy (EN-1)² – Provides the primary basis for decisions on applications for nationally significant energy infrastructure. EN-1 sets out national policy for energy infrastructure and has the effect, in combination with the relevant technology specific NPSs, of providing the primary basis for decision making under the Planning Act 2008;
 - > NPS for Renewable Energy Infrastructure (EN-3)³ – Provides the primary basis for decisions on applications for renewable energy infrastructure, defined as energy from biomass and/ or waste (>50 MW), offshore wind (>100 MW) or onshore wind (>50 MW); and

² [Overarching National Policy Statement for Energy - EN-1 \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/115444/Overarching_National_Policy_Statement_for_Energy_-_EN-1.pdf)

³ [National Policy Statement for renewable energy infrastructure \(EN-3\) \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/115444/National_Policy_Statement_for_renewable_energy_infrastructure_(EN-3).pdf)



- > Electricity Networks Infrastructure (EN-5)⁴ – Provides the primary basis for decisions on applications for electricity networks infrastructure defined as above-ground electricity lines of 132 kV and above, or other infrastructure for electricity networks that is associated with an NSIP.

2.3.3 The NPSs establish a policy expectation for undertakers of individual projects to collaborate with other major infrastructure project undertakers in close proximity or where there are direct overlaps with projects. More specifically:

- > *"Paragraph 2.8.48: Applicants are encouraged to work collaboratively with those other developers and sea users on co-existence/co-location opportunities, shared mitigation, compensation and monitoring where appropriate. Where applicable, the creation of statements of common ground between developers is recommended. Work is ongoing between government and industry to support effective collaboration and find solutions to facilitate greater co-existence/co-location." (NPS EN-3).*
- > *"Paragraph 2.8.87: Where appropriate, applicants are also encouraged to consider monitoring collaboratively with other developers and sea users. Work is ongoing between government and industry to support effective collaboration and the development of monitoring at a strategic level." (NPS EN-3).*
- > *"Paragraph 2.8.217: Where several developers are likely to have cumulative impacts on the same species or feature it may be appropriate to collaborate on mitigation and compensation measures..." (NPS EN-3).*
- > *"Paragraph 2.8.225: Where cumulative impacts on subtidal habitats are predicted as a result of multiple cable routes, applicants for various schemes are encouraged to work together to ensure that the number of cables crossing the subtidal zone is minimised and installation/ decommissioning phases are coordinated to ensure that disturbance is reasonably minimised." (NPS EN-3).*
- > *"Paragraph 2.8.235: Where cumulative impacts on subtidal habitats are predicted as a result of multiple cable routes, applicants for various schemes are encouraged to work together to ensure that the number of cables crossing the subtidal zone is minimised and installation/ decommissioning phases are coordinated to ensure that disturbance is reasonably minimised." (NPS EN-3).*
- > *"Paragraph 2.7.1: EN-1 explains in Section 4.10 that the Planning Act 2008 aims to create a holistic planning regime, such that the cumulative effects of the same project can be considered together. Co-ordinated applications typically bring economic efficiencies and reduced environmental impact." (NPS EN-5).*
- > *"Paragraph 2.12.6: ... a more co-ordinated approach to designing offshore transmission is expected to be adopted compared with the previous standard approach of radial routes to shore. This applies to spatially close groups of*

⁴[Electricity Networks National Policy Statement - EN-5 \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)



offshore windfarms, subsea 'onshore' transmission or bootstraps, interconnectors and multi-purpose interconnectors." (NPS EN-5).

- > "Paragraph 2.13.1: The strategic network designs such as those led or enabled by National Grid Electricity System Operator (ESO) will usually form the basis for identifying proposals for co-ordinated transmission. This includes the Holistic Network Design (HND) for offshore-onshore transmission prepared by ESO." (NPS EN-5).
- > "Paragraph 2.13.4: It is recognised that proposed projects which have progressed through strategic network design exercises have been considered for strategic co-ordination through those exercises. However, any opportunities for subsequent local co-ordination between projects, irrespective of whether they have been through those exercise, should be considered in project development. This is in addition to considerations on co-ordinating delivery in construction..." (NPS EN-5).
- > "Paragraph 2.13.10: The identification of co-ordinated solution options, and any radial option, should consider the criteria for designs to be deliverable and operable, economic and efficient, minimise impact on the environment and minimise impact on the local communities. Options should seek to identify the most appropriate balance between these criteria." (NPS EN-5).
- > "Paragraph 2.13.11: The coordinated solutions assessed should seek to be ambitious in the degree of co-ordination, wherever possible. This includes taking account of geographically proximate projects including opportunities to connect wind farms and multi-purpose interconnectors and/or bootstraps with each other that are planned or foreseen in the near future. Evidence should demonstrate that this has been considered in the assessment of options." (NPS EN-5).
- > "Paragraph 2.13.14: Co-ordinated transmission proposals, including multi-purpose interconnectors and other types of offshore transmission (see Glossary), are expected to reduce the overall environmental and community impacts associated with bringing offshore transmission onshore compared to an uncoordinated, radial approach. These reduced impacts could, for example, relate to: fewer landing sites and reduced landfall impacts; reduced overall cable length and impacts; and fewer cable corridors and reduced impacts from these." (NPS EN-5).
- > "Paragraph 2.13.16: For onshore infrastructure, reduced impacts could, for example, relate to fewer or co-located substations and converter stations and transmission lines as well as demonstrating how environmental and community impacts have been avoided as far as possible." (NPS EN-5).
- > "Paragraph 2.13.17: Applicants are expected to be able to indicate how co-ordination including reduction in impacts have been considered drawing on work of others, including that led or enabled by National Grid Electricity System Operator (ESO)." (NPS EN-5).



- 2.3.4 Further details on compliance with the NPS requirements for collaboration and co-ordination with nearby NSIP projects are set out in the Planning Statement (Volume 9, Report 1) and Policy Compliance Document (Volume 9, Report 2).

2.4 OVERVIEW OF PROJECTS

- 2.4.1 ~~The Project~~ VE and ~~the~~ North Falls have been allocated the same connection point to the national electricity transmission network by the Connection and Infrastructure Options Note process carried out by National Grid. This point is the East Anglia Connection Node substation, which forms part of National Grid Energy Transmission's proposed Norwich to Tilbury reinforcement project.

FIVE ESTUARIES OFFSHORE WIND FARM

- 2.4.2 VE is the proposed extension to the operational Galloper Offshore Wind Farm. The Project includes provision for the construction, operation, maintenance and decommissioning of an offshore wind farm located approximately 37 kilometres off the coast of Suffolk at its closest point in the southern North Sea; including up to 79 wind turbine generators and associated infrastructure making landfall at Sandy Point between Frinton-on-Sea and Holland-on-Sea, the installation of underground cables, and the construction of an electrical substation and associated infrastructure near to the existing Lawford Substation to the west of Little Bromley in order to connect the development to National Grid's proposed East Anglia Connection Node substation, which would be located nearby. All onshore connection infrastructure would be located in the administrative area of Tendring District Council, within Essex County Council. VE will have an overall capacity of greater than 100 Megawatts (MW) and therefore constitutes a Nationally Significant Infrastructure Project (NSIP) under the Section 15 (3) of the Planning Act 2008.

NORTH FALLS OFFSHORE WIND FARM

- 2.4.3 North Falls is the proposed western extension to the southern array only, at the operational Greater Gabbard Offshore Wind Farm. The project includes provision for the construction, operation, maintenance and decommissioning of an offshore wind farm located approximately 42 kilometres off the coast of Suffolk at its closest point in the southern North Sea; including up to 57 wind turbine generators and associated infrastructure making landfall between Frinton-on-Sea and Holland-on-Sea, the installation of underground cables, and the construction of an electrical substation and associated infrastructure near to the existing Lawford Substation to the west of Little Bromley in order to connect the development to National Grid's proposed East Anglia Connection Node substation, which would be located nearby. All onshore connection infrastructure would be located in the administrative area of Tendring District Council, within Essex County Council. North Falls will have an overall capacity of greater than 100 Megawatts (MW) and therefore constitutes a Nationally Significant Infrastructure Project (NSIP) under the Section 15 (3) of the Planning Act 2008.
- 2.4.4 The two offshore windfarm projects are two separate projects which are being developed by different shareholder groupings:
- > The Five Estuaries project partners are RWE (33.3%), a Macquarie-led consortium (25%), ESB (20.9%) and Sumitomo Corporation (20.9%). RWE is leading the development of the Project on behalf of the project partners;



- > The North Falls project is a 50:50 joint venture between SSE Renewables and RWE Renewables.
- > Although the projects have a common shareholder they remain separate legal entities with different ownership groups.

2.4.5 Section 3 of this document sets out the scenarios for coordination in the delivery of the two projects.



2.5 PROJECT CONSENTING APPROACHES

- 2.5.1 The delivery of coordinated construction needs to be considered in depth as part of deciding the strategy for the DCO applications for both wind farm projects. A number of potential approaches were considered early in the development of the project. These ranged from full integration (maximum ~~co-ordination~~coordination) to independent delivery (no ~~co-ordination~~coordination).
- 2.5.2 The decision to proceed with a ~~co-ordinated~~coordinated consenting option, with aligned or overlapping order limits onshore meant that each project could continue to remain fully independent, whilst providing the opportunity for significant ~~co-ordination~~coordination in construction which would minimise the impact of the two projects on the environment and communities. In order to achieve this both projects needed to be developed with a design envelope for its onshore transmission infrastructure that would ensure the other project could be accommodated, while discussions continued on how the projects could coordinate under different delivery scenarios (given there was no guarantee the two project programmes will align).

2.6 COORDINATION IN DEVELOPMENT

- 2.6.1 Whilst being independent projects in separate ownership, working together to streamline design and minimise local impacts as far as possible is important to both ~~Five Estuaries~~VE and North Falls.
- 2.6.2 An important consideration for ~~Five Estuaries~~VE during the site selection and design work has been the proximity of the proposed North Falls ~~Offshore Wind Farm~~ (a ~~and~~ vice versa for North Falls). Coordination between the two projects has been increasing as key site selection decisions have been taken and designs have progressed. Once, it was clear both projects had very similar routes it was agreed to progress a 'good neighbour agreement' which was signed in early summer 2023. This enabled much closer liaison, information sharing and joint planning.
- 2.6.3 The primary goal of the coordination is to reduce the potential impacts of building the onshore connection to the national electricity transmission network for the two projects. This meant as part of the initial site selection process both ~~Five Estuaries~~VE and North Falls independently sought to identify suitable options for the project's onshore infrastructure that could accommodate either project alone or co-location with the other project. Both projects ensured their initial export cable corridor was wide enough to accommodate the required ducts for both projects (up to four circuits for each project initially).
- 2.6.4 The projects agreed to use a number of the same consultants to support the project as this would provide the greatest opportunity for ~~co-ordination~~coordination, alignment and reduction of duplication of activities. These have included:
- > Cable route and substation design consultants
 - > Archaeological consultants
 - > Ecologists
 - > Land Agents



- 2.6.5 The projects used information on their various substation search areas and export cable routes, alongside feedback to their statutory consultation on their respective PEIRs to feed into more detailed engineering work on a potential shared route. Key to this was both projects deciding to amend their proposals from a maximum of four export circuits to two per project, which allowed a much-reduced onshore export corridor. The joint engineering exercise led to a single refined cable route corridor capable of delivering a connection between landfall and substations for both projects, with shared construction accesses and temporary construction compounds. This has been achieved with only a few additions to the redline boundaries presented by both projects PEIRs. It has also enabled significantly decreasing the size of both projects redline boundaries. Further detail on the site selection process and decisions made since PEIR is included in the Site Selection and Alternatives Chapter (Volume 6, Part 1, Chapter 4 Site Selection and Alternatives) of the VE Environmental Statement.
- 2.6.6 Both windfarm projects onshore export cable corridors run from a landfall compound zone at Sandy Point between Holland-on-Sea and Frinton-on-Sea on the Essex coast to an onshore substation zone for the co-located substation sites between Ardleigh and Little Bromley.
- 2.6.7 Through joint activities, the projects have been able to:
- > Increase the coordination of engagement with landowners;
 - > Exchange data and share surveys e.g. ecology and archaeology;
 - > Hold joint onshore expert topic groups with statutory bodies on project changes
 - > Almost fully align the onshore export cable corridors;
 - > Identify locations of shared works accesses and temporary construction compounds;
 - > Agree on a shared location for each project's substation and identify possible shared access and screening concepts;
 - > Exchange information on project design at an early stage to carry out cumulative seascape, landscape and visual impact assessments.
 - > Closely aligning the onshore cable routes, substation locations, and landfall areas for the projects has reduced the amount of land required to build and operate both projects, as well as creating the possibility of reducing potential construction impacts through coordinated works.
- 2.6.8 We will continue to explore coordination opportunities to reduce impacts, support local skills and create employment opportunities.
- 2.6.9 Designing of the projects has been and will continue to be, an iterative process, guided by the collaboration between both undertakers, environmental assessments, and consultation with statutory and non-statutory consultees. However, not all the design aspects of both projects can be confirmed at this stage, and some will be developed further detailed design, following the appointment of a contractor. Therefore, whilst the respective applications, give as much detail as possible, the final design and construction processes are yet to be determined.



2.7 COORDINATION IN CONSTRUCTION

- 2.7.1 The two projects reviewed potential ~~co-ordination~~coordination opportunities during construction. Coordination on the civil aspects of the onshore cable route construction would result in the following benefits:
- > Keeps impacts to a single swathe of land;
 - > Reduces overall construction time and therefore impacts from the construction period on communities and the environment;
 - > Reduces other environmental impacts due to efficiencies during construction;
 - > Reduces risks to health and safety from multiple sites accesses and contractors working in the same area;
 - > Provides some opportunity to reduces overall cost for both projects; and
 - > Delivers more coordination in accordance with the National Policy Statement on Energy.
- 2.7.2 Realisation of the benefits of coordination is dependent on both projects being granted consent and relevant funding mechanism (e.g. CfD). In addition, the ability to and level of coordination possible is affected by when the two projects reach their respective Financial Investment Decisions (FID), as this unlocks the ability to finance coordinated construction activities. The flexibility for coordinated scenarios needs to be included in the respective Development Consent Orders of the two projects. The projects have both agreed to include flexibility for coordinated delivery of a number of onshore works in their respective applications. The Project, however, needs to include a back stop in the event it is not possible proceed with a coordinated delivery.
- 2.7.3 Section 3 of this document sets out the three main delivery scenarios and associated build options.



3. DELIVERY SCENARIOS AND BUILD OPTIONS

3.1 OVERVIEW

- 3.1.1 This section provides an overview of the different delivery scenarios and the associated build options included in the DCO. It then provides more detail on each delivery scenario.

DELIVERY SCENARIOS

- 3.1.2 When each project reaches its decision point on whether to proceed with a project (known as its Financial Investment Decision (FID) milestone⁵) affects the level of coordination that can be achieved in the construction of the two projects. There are three scenarios based on the difference in time between the two projects reaching this milestone and entering construction, each affects the level of potential coordination on construction delivery. The timescales included below are indicative to provide context.

- > **Scenario 1:** VE proceeds to construction and undertakes the additional onshore cable trenching and ducting works for NF as part of a single programme of works (ducting for four electrical circuits). VE may also carry out some ground works (vegetation clearance, levelling, grading) in the wider substation zone where the North Falls substation will be located. VE would undertake the cable installation and Onshore Substation (OnSS) build for its project only (two electrical circuits). The two projects would share accesses from the public highway for cable installation and substation construction. The projects would utilise and share the site accesses, haul roads and Temporary Construction Compounds (TCC) with NF for the cable installation works.
- > **Scenario 2:** Both VE and NF projects proceed to construction on different but overlapping timescales (between one and three years apart). Civil works would be undertaken independently but opportunities for reuse of enabling infrastructure e.g. haul roads, temporary construction compounds and site accesses are utilised with the other project reinstating
- > **Scenario 3:** NF does not proceed to construction; or both VE and NF projects proceed to construction on significantly different programmes (over three years apart). In the latter case the significantly different programmes would mean that haul roads and TCCs are reinstated prior to the second project proceeding. In such case cumulative impacts are for a potential construction period of 6 years+. No reduction in overall impacts for the schemes from sharing of infrastructure.

⁵ **Financial Investment Decision** is the point at which a project decides to make its major financial commitment. This typically comes at a point where certainty has increased (for example, securing the consents required for the project) and enables the procurement of equipment and contracts to move into the delivery and construction phases. FID for the major infrastructure projects generally comes after a DCO has been granted.



BUILD OPTIONS

3.1.3 The ~~draft development consent order (dDCO)~~ prepared by the Applicant includes a **list of works** for which consent is sought; therefore, the cable ducts for the second project, common access points and the ability to undertake preparatory works for the second project substation area including levelling have been included in the list. The dDCO sets out two onshore ‘build options’ for the cable corridor works (including the haul roads and temporary construction compounds). The cable ducting works have been split so that those for the second project have their own Work Number (such as 5A, 7A) so that they can be easily identified and discussed separately from the first project’s cable works.

3.1.4 The dDCO sets out two ‘build options’ which cover the three delivery scenarios:

- > “build option 1” means scenario 1 in which the first development will deliver works to support grid connection co-ordination, including the laying of onshore cable ducts for the second project~~;~~
- > “build option 2” means scenarios 2 and 3 in which the undertaker (i.e. ~~Five Estuaries~~VE) only constructs those works required for ~~the Five Estuaries~~VE. The table below shows which build option applies to the different delivery scenarios.

Assessed in ES	Draft DCO
Delivery Scenario 1	Build Option 1
Delivery Scenario 2	Build Option 2
Delivery Scenario 3	

3.1.5 The dDCO requires that, before any of the cable corridor works begin, the Applicant has to formally notify the ~~planning authority~~Discharging Authority which of the build options is being progressed.

3.2 DELIVERY SCENARIO 1

3.2.1 Consent is sought to enable the construction approach set out below (build Option 1 as per para ~~3.1.4~~3.1.4). This will maximise the level of coordination while respecting the required separation of projects on protected areas. It is deliverable on the condition that:

- > Scenario 1 – the second project receives a Contract for Difference (CfD)⁶ prior to the first project reaching FID, and both projects receiving FID within a year of each other; and
- > The two wind farm projects agree a commercial arrangement for reimbursement should one not progress, or alternatively through the anticipatory investment framework being developed by Ofgem.

⁶ **Contracts for Difference** are the government’s main mechanism for supporting low-carbon electricity generation. They work by providing developers with assurance against price volatility to enable the significant upfront capital investment, and the protect consumers from fluctuating prices. CfDs are ‘allocated’ in rounds. You can read more about CfDs at www.gov.uk/government/collections/contracts-for-difference. Achieving CfD is a critical step for a project to make its FID.



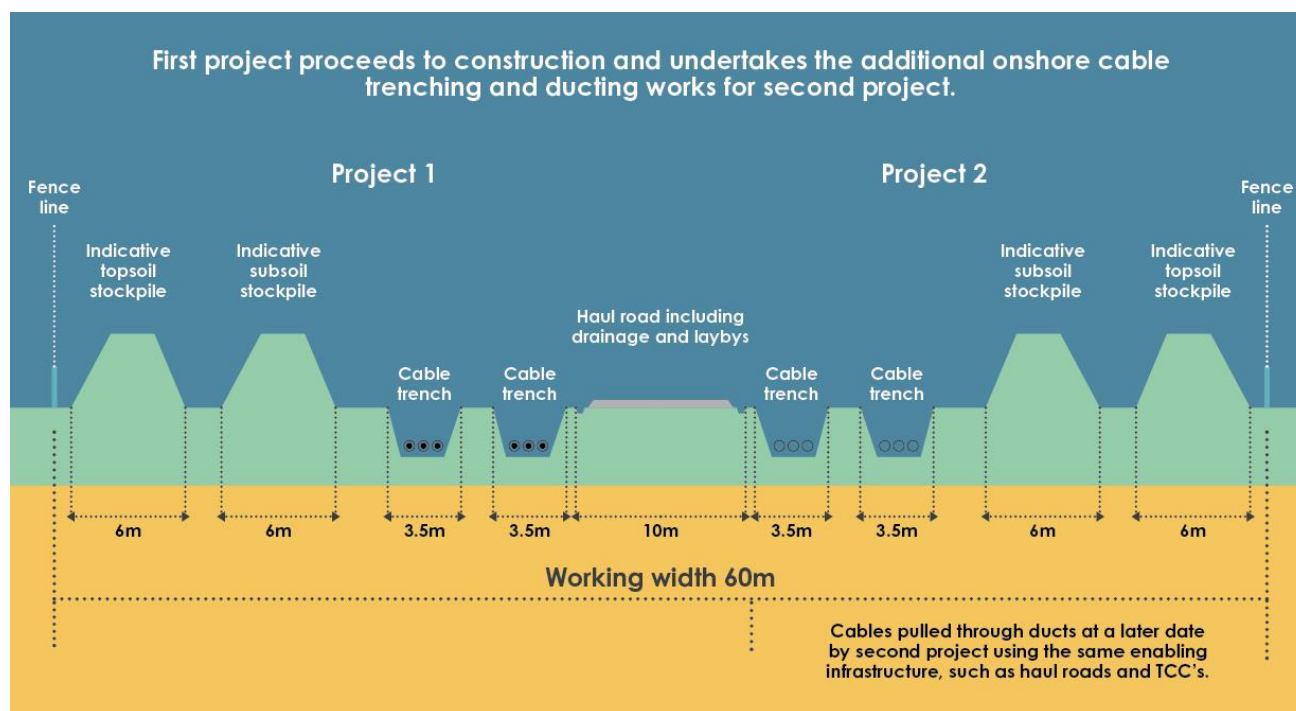
- 3.2.2 A year's difference in programme between projects is acceptable because of the assumption of a typical timeframe between CfD award and FID of between nine and 12 months. Therefore, if one project's DCO is delayed and it has to enter the following year's CfD auction round, then as the first project approaches its FID it should know whether the second project has been successful in its CfD application.
- 3.2.3 If the first project has to wait for a year for the second project, it could cause issues in reaching target dates set out in its CfD. However, the opportunity to share costs and efficiencies with another project is a benefit to the first project and therefore the approval of the delayed project's CfD application would be more likely to make the risk manageable and acceptable.

OUTLINE CONSTRUCTION METHODOLOGY

- 3.2.4 One civil contractor will install haul road(s), ducts and potentially joint bays for both projects. The civil contractor will also undertake all onshore trenchless crossings (e.g. Horizontal Direction Drills (HDDs)) for both projects, with the works at each crossing point undertaken together. After construction, the single contractor would remove the haul road(s) and carry out land restoration work.
- 3.2.5 There would remain the presumption of a separate cable installation contractors for each project (although a common contractor is not excluded). Cable sections would be handed from the joint civil contractor to the respective cable contractors using a transfer of control procedure.
- 3.2.6 By following this approach, the following project efficiencies, with associated reduction in land take and environmental impacts, can be realised:
- > A single haul road to support construction from landfall to Bentley Road (from Bentley Road to the substations the haul roads are still shared between projects, but a separate substation access haul road is envisaged);
 - > Single access points at Temporary Construction Compounds (TCCs) from the highway network to service both projects reducing both the number of physical works and reducing the extent of any traffic management measures required to ensure safety;
 - > Single crossing points on roads where site access is not required from the landfall to Bentley Road.
 - > Use of the same TCCs therefore reducing the total number of TCCs and the area required (minimising the interference with use of land and area of land, volume of soils and extent of vegetation which is disturbed and requires to be restored); and
 - > Coordinated service connection (main power, water, sewage) for TCCs.
- 3.2.7 This construction approach significantly reduces expected traffic volumes compared to separate builds. This is because the establishment of haul roads and TCCs generate a significant proportion of the traffic generated by construction, and by coordinating their establishment and restoration, the need for what is effectively duplicate work is removed.
- 3.2.8 In addition, by using a single contractor to deliver the majority of the listed works, coordination of activities including traffic is significantly easier. For example, the health and safety risk of managing two construction site access points from the highway in close proximity to each other is removed.

3.2.9 The intended haul road ~~arrangements~~arrangement for open trench sections of the cable route is shown below. The use of a shared single central haul road removes the duplication of impacts from each project installing their own haul road.

Figure 1: Haul road and cable duct installation approach delivery scenario 1 – open trench section



CABLE INSTALLATION

3.2.10 It is not proposed to combine cable installation, jointing and testing. The reasons for this are as follows:

- > There are few efficiency savings or potential environmental impact reductions from joint delivery as the level of material and work required will not be affected;
- > The difference in technical requirements for the cables (because of the respective engineering solutions and capacities of the two projects) removes or reduces efficiency savings from coordination; and
- > Cable failure is a key project risk for the connection of wind farms. Installation of cables by another project creates a complex warranty position for the other project and may introduce additional complexities during commissioning and operation.

3.2.11 However, the possibility for joint delivery by a single contractor on behalf of both projects is not precluded by the DCO application.

ONSHORE SUBSTATION

3.2.12 While each project would retain the responsibility for separate substation builds, the following would be delivered jointly to reduce environmental impacts:

- > Common access route to the substations from Bentley Road;



- > Common permanent access point and bell-mouth from Ardleigh Road; and
- > aligned screening principles and advance planting for both projects.

3.2.13 Reduction in the potential impacts would mainly be associated with the reduction in overall land take, which include avoiding duplication of construction access works, and the associated reduction in construction traffic volumes.

3.2.14 As with installation of the cables within the ducts, there is limited environmental benefit to joint construction of the substations themselves and the separate engineering and procurement requirements for each project could create an impediment. Therefore, these would be built separately.

LANDFALL

3.2.15 In this Scenario, the construction methodology at landfall would be similar to the onshore cable route as a whole, although given the complexities of interfaces with the marine works there are fewer opportunities for co-ordination:

- > One civil contractor installing haul road(s) to the landfall compound with the potential to establish a TCC for both projects;
- > Separate project specific HDD contractors (that may be the Offshore Cable Contractor) undertaking the landfall HDDs; and
- > Separate contractors installing joint bays (but with the option for a single contractor to undertake both).

3.2.16 Separate HDD contractors are required for the landfall drill to avoid the need for one project's offshore cable contractor pulling a cable into an HDD installed by a different contractor. Similarly, the landfall compound is more complex due to the HDD and cable pull requirements at this point (which have interfaces with the marine works). Therefore, it is not proposed to commit to joint compound establishment at landfall.

APPROACH IN DCO

3.2.17 This scenario would be delivered under 'build option 1' in the dDCO as explained above in paragraph [3.1.43-1.4](#). The Applicant would consent the works to install ducting for the second project and construct those using single accesses, compounds and haul roads. The Applicant would also seek the necessary powers of compulsory acquisition to keep, access and maintain the ducts for the second project so that it has the land rights to build and maintain these until they are transferred.

3.3 DELIVERY SCENARIO 2

3.3.1 Consent will also be sought to enable the construction approach set out below. This will maximise the level of coordination possible in the case of a longer period between the projects being delivered. This Scenario requires that:

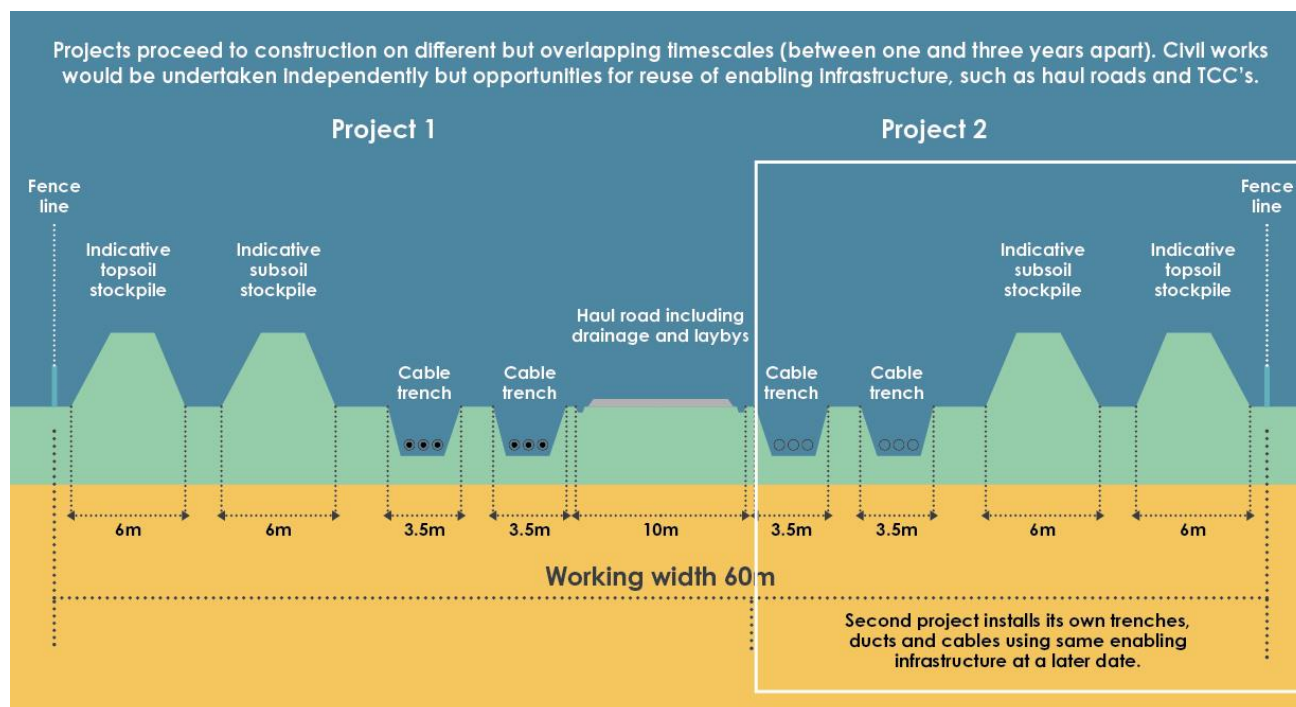
- > The second project receives FID between a year and three years after the first;
- > The second project is able to confirm that it requires the haul road(s) and TCC areas left in place. This confirmation would be needed approximately nine to 12 months before the end of construction for the first onshore project; and
- > Confidence of likely CfD award for the second project.



OUTLINE CONSTRUCTION METHODOLOGY

- 3.3.2 This methodology is fundamentally similar but due to the expected gap between the majority of construction activities, it is not considered possible for a common civil contractor. However, the following action would be considered to minimise impacts and improve construction efficiency depending on practicality:
- > The haul road from landfall to Bentley Road, created by the first project, would where practical be left in place and re-used by the second. This avoids the need to remove and re-construct a haul road in a similar location, therefore significantly reducing associated impacts for the second project;
 - > TCC hardstanding areas would where practical be left in place and re-used to avoid the disruption of removal and re-instatement. If the projects are closer together in programme, there may be some requirement to extend some elements of the TCCs;
 - > Service connections for TCCs (main power, water and sewage) would be reused;
 - > Access points and crossing points would be retained.
- 3.3.3 This scenario keeps the same main impact reduction benefits achieved in Scenario 1, with the difference that a longer construction period is inevitable for the two projects. There would also be some loss of efficiency and consistency from the need to 'hand over' from the initial project's civil contractor to the subsequent projects, for example the majority of TCCs may have to be demobilised while leaving the hardstanding and access points in place.
- 3.3.4 It is worth noting that in order to enable effective reuse of the haul road, the construction method of the ducting would be different to normal practice for a single construction. In the case of two sets of ducts being installed, it would be normal to install one set either side of the haul road. In order to preserve the ability to effectively reuse the haul road, this scenario proposes the first project installing both its ducts to one side of the haul road so that the subsequent project can instal its ducts without creating the need for cable crossings. This approach is shown in the figure below.

Figure 2: Haul road and cable duct installation approach for Delivery Scenario 2



CABLE INSTALLATION

- 3.3.5 As with Scenario 1, installation of the cables within the ducts would be reserved as a deliverable for each project separately. The extension in time between projects has no effect of this aspect of the construction.

ONSHORE SUBSTATION

- 3.3.6 This scenario is the same as proposed for the construction of the onshore substations in Scenario 1.
- 3.3.7 As with Scenario 1, the key commitment for the joint projects are the use of a common access route and the development screening proposals that consider both projects.

LANDFALL

- 3.3.8 As with the other elements above, the coordination around landfall would be similar to that as Scenario 1 and mainly be the haul road.

ALTERNATIVES

- 3.3.9 It would be possible for the coordination in this scenario to be extended beyond the single haul road and TCCs sites, closer to the methodology set out for Scenario 1, however this is dependent on commercial arrangements being reached to de-risk investment by the leading project.



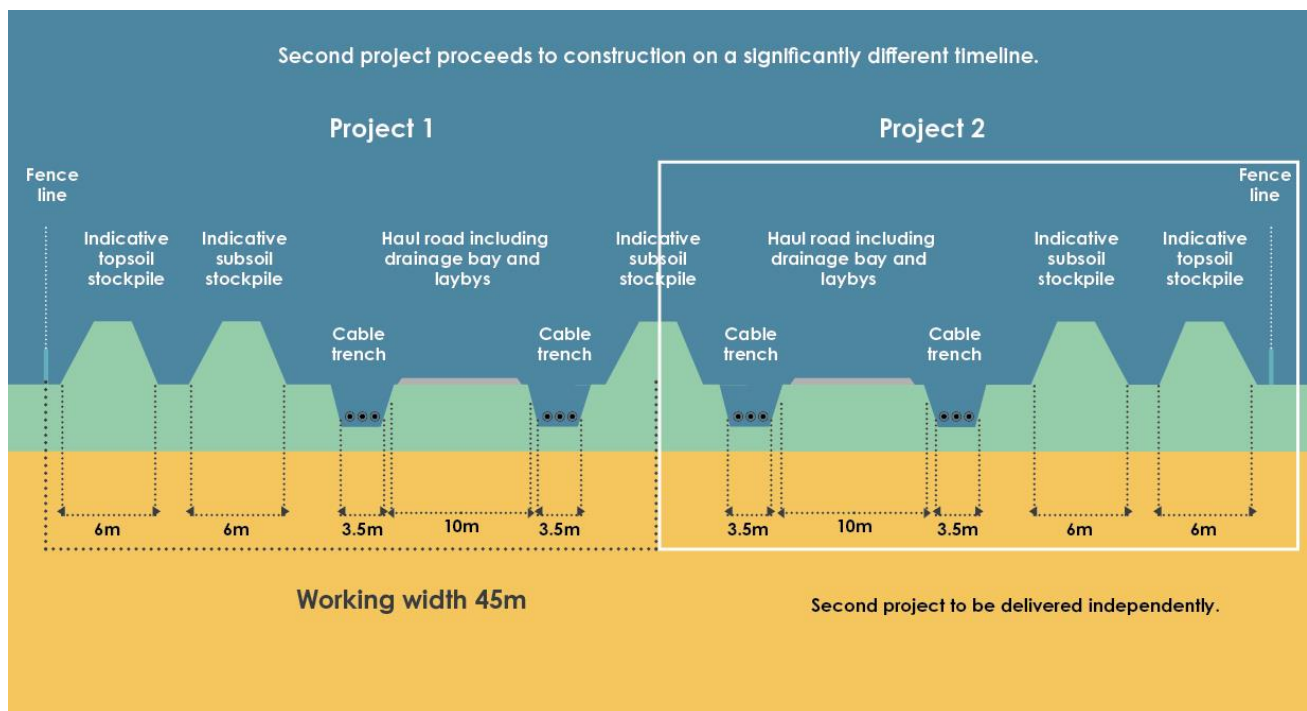
APPROACH IN DCO

- 3.3.10 This scenario would be delivered under 'build option 2' as explained above. Each DCO would consent the creation and use (and where required maintenance) of the common proposals. The first project would rely on their Order to create the accesses and TCCs but, following construction of the first project, these are transferred to the second project rather than being restored. The DCO requirement on the first project to restore or reinstate these sites is superseded by the transfer. The second project essentially 'takes over' these sites and the requirements for reinstatement and restoration of these are secured in the second project's Order. To achieve this for areas which are only needed during construction, each project would rely on powers of temporary possession and the first project would not acquire any land or rights which would be transferred to the second project.

3.4 DELIVERY SCENARIO 3

- 3.4.1 This scenario assumes the default position as if there was no second project, and ~~Five Estuaries~~VE proceeds as the only project – or with a significant enough time gap between FID as to remove realistic opportunities to de-risk the investment in coordination activities.
- 3.4.2 The assumption for this scenario is that there would be no simultaneous works to coordinate.

Figure 3: Haul road and cable duct installation approach for Scenario 3.



APPROACH IN DCO

- 3.4.3 This scenario would be delivered under 'build option 2' as explained above. The dDCO would consent all of the works necessary to build and operate the project and would remove and restore all temporary elements at the end of construction. No land or rights would be taken, used or acquired for the second project and no transfers of any area or liability between projects would be required.



3.5 ONSHORE SUBSTATION ORDER LIMITS

- 3.5.1 For the onshore substation zone (Works No.15) a wider boundary has been retained for the project order limits than would be necessary to deliver the VE OnSS alone. This has been done to allow for further opportunities for ~~co-ordination~~coordination in delivery, as well as undertaking advanced landscaping / screening, ecological works, archaeological investigations that could benefit both projects, and delivering construction infrastructure, such as site access roads, or undertaking levelling in a single campaign across the whole site.

3.6 APPROACH TO ENVIRONMENTAL ASSESSMENT

- 3.6.1 For the purposes of applying for the DCO, the maximum design scenario and construction techniques are considered in line with the principles of the "Rochdale Envelope". This means a likely worst-case assessment of potential environmental effects of the schemes are assessed where the design details cannot yet be fixed. VE has considered the three delivery scenarios and within the different topic assessments and Scenario 1 is generally assumed to be the Maximum Design Scenario for the ES assessment of the project.
- 3.6.2 For the assessments for each environmental topic the following approach has been taken:
- > For assessment of the project, each onshore chapter has assessed ducting for four circuits and installation of cabling for two circuits.
 - > For CEA assessment, each chapter / topic has determined which of the following Cumulative (Maximum Design Scenario) MDS is relevant for each topic:
 - > MDS 1 – VE delivers two ducts and two circuits only and North Falls delivers two ducts and two circuits separately with parallel or overlapping construction programmes;
 - > Example impact: higher numbers of plant and equipment on site.
 - > MDS 2 – VE delivers two ducts and two circuits only and North Falls delivers two ducts and two circuits separately in succession i.e. one project reinstates and the other then starts works;
 - > Example impact: longer duration of topsoil being stripped / stored for compounds approx. 4 years.
- 3.6.3 This means that the extent of the project used in CEA for VE may be lower than for the standard project assessment – as the CEA version of the project in certain circumstances would only consider the impacts associated with the installation of two circuits and associated ducting.



3.7 APPROACH TO LAND ENGAGEMENT

3.7.1 VE and NF jointly instructed a Land Agent to lead negotiations with affected landowners, and have been seeking to engage with affected parties on land agreements since April 2021. As part of a collaborative approach with North Falls, tripartite Heads of Terms were drafted, as opposed to two separate sets of agreements. This approach ensured that landowners were not required to negotiate multiple agreements at the same time and presented a consistent approach for both projects in acquiring the necessary land and land rights.



4. COORDINATED MITIGATION MEASURES IN DRAFT DEVELOPMENT CONSENT ORDERS

4.1 OVERVIEW

~~4.1.1 Once the North Falls application is submitted this section will be updated to include details of draft DCO provisions that are aligned between North Falls and Five Estuaries.~~

~~4.1.24.1.1~~ Whilst each project ~~is preparing~~has prepared its own dDCO and outline management plans, there has been coordination on the approach to mitigation measures and the types of mitigations measures proposed by the projects. It is noted that NGET is still preparing its DCO application, including ongoing consultations, with plans to submit later in 2025.

~~4.1.3 At this stage, given the development stages of both projects it is not possible to provide detailed information on the approach. This information will evolve as North Falls finalises its application. It is expected this document (or similar jointly branded document) will be provided for the Examination phase.~~

~~4.1.4 The projects expect to provide more detail on how mitigation measures are co-ordinated in different delivery scenarios in the following areas:~~

~~4.1.2 The dDCO commits VE to notify the Discharging Authority which build option is being taken forward before commencement (Requirement 17). Where the projects are coordinating, this will be controlled by the commercial agreement between them, which includes the process and timings for approval of plans before they are submitted under requirements.~~

~~4.1.3 When either VE or NF submits any plan for approval, it will be doing it under its own DCO only. The respective undertaker for each DCO will be solely responsible for compliance with the approved details. The level of coordination on mitigation and the management plans will depend on which delivery scenario materialises.~~

~~4.1.4 The significance of coordination in the development and implementation of mitigation measures is recognised by both projects. The current position for coordinated measures is outline below:~~

- ~~> Detailed Design Coordination arrangements for landfall works(including landscape screening)~~
- ~~> Construction traffic considerations~~
- ~~> Approach to landscape screening at the substation and how to two screening proposals work together~~
 - ~~> Traffic and Transport~~
 - ~~> Operational Noise~~
 - ~~> Archaeology~~
 - ~~> Ecology (Including approach to European Protected Species Licences and Biodiversity Net Gain)~~
 - ~~> Groundwater~~
 - ~~> Skills and Employment~~



- > ~~Construction Management—both projects propose to utilise a CoCP to ensure the works are managed appropriately on site.~~

4.2 DETAILED DESIGN COORDINATION

- 4.2.1 VE has actively participated in the Design Council review process, initiated by North Falls to support the initial design stages for two co-located substations. The Design Council was invited to provide an independent review of the Preliminary Environmental Information Report (PEIR)-stage designs, and issue recommendations to VE and North Falls; the projects propose to utilise a CoCP. Have carefully considered these recommendations and have incorporated them where it is has been appropriate to do so.
- 4.2.2 9.4 Onshore Substation Design Principles Document – Revision C and the North Falls Design Vision [REP7-118] outline in further detail the engagement activities undertaken to date and the proposed collaboration going forward. This includes the commitment to a joint Design Guide and associated engagement with Essex County Council and other stakeholders.
- 4.2.3 Whilst VE and North Falls have different landscape concepts for their onshore substations the overall landscape design ethos is shared and both concepts work independently or in conjunction with one another, and both projects will ensure the workstheir designs work coherently as they develop into detailed design.
- 4.2.4 Whilst each project will have their own outline planting schemes, VE and North Falls are coordinating their approaches to landscape screening. Discussions are ongoing between the two projects and NGET to coordinate plans. The design for the NGET EACN project is too early in the development process, but when NGET has further developed proposals, the projects will consider those in the detailed design of their landscaping to ensure a coherent design approach is taken. The need to undertake this coordination on landscape proposals has been strengthen in the Outline Landscape and Ecological Plan submitted at Deadline 8.

4.3 TRAFFIC AND TRANSPORT

- 4.3.1 In Delivery Scenario 1 VE and North Falls would share accesses from the public highway for onshore cable installation and substation construction. The projects would utilise and share the same TCCs for the cable installation works.
- 4.3.2 In Delivery Scenario 2 with onshore cable trenching and ducting works undertaken independently there would be opportunities for reuse of enabling infrastructure including haul roads / site accesses, with the other project then reinstating the land once complete.
- 4.3.3 VE and North Falls has jointly held meetings with Essex County Council as the Local Highway Authority on the arrangements for access during the construction period which was agreed through consultation with the Essex County Council.
- 4.3.4 VE has co-ordinated with North Falls to agree shared points of access to the public highways for the construction of the cable route corridor and on the road layout and design. This has included a coordinated approach to the design and subsequent road safety audits are aligned in both projects' respective DCO's.



4.3.5 The location of the onshore substations for VE and North Falls are adjacent to NGETs proposed EACN substation which resulted in the selection of Bentley Road, as the preferred site access route. This decision was arrived at jointly by North Falls and VE in consultation with NGET and a number of improvement measures such as widening and speed restrictions were included in the three project envelopes.

4.3.6 It is understood that NGET are proposing the use of Bentley Road to access its site for the construction of the EACN. Through engagement between the three projects the potential for overlapping and complementary transport strategies that reduced effects were identified. It is acknowledged that there would be a significant cumulative increase in traffic numbers along Bentley Road should all three projects overlap during construction and therefore all three projects have agreed on the need to improve the A120 / Bentley Road junction and widen Bentley Road and this has been included within the VE and North Falls Order Limits and is expected to be included in the NGET Order limits when it is submitted.

4.1.54.3.7 Further details will be set out within each projects' Construction Traffic Management Plans as to how communication will be undertaken between projects and how traffic impacts will be managed between the projects, including for example communication around abnormal load delivery timings and routes.

4.3.8 Specifically for VE, commitments on the coordination between the projects on traffic, particularly along Bentley Road, are included in the 9.24 Outline Construction Traffic Management Plan – Revision E [REP7-052] at sections 5 and 6 to mitigate the cumulative effects should the construction periods for the projects overlap.

4.4 OPERATIONAL NOISE

4.4.1 All three project substations (North Falls, Five Estuaries, EACN) are proposed to be situated in close proximity to each other and therefore consideration has to be given to avoiding any potential significant cumulative effects of operational noise.

4.4.2 The projects have agreed a maximum noise level at nearby identified Noise Sensitive Receptors based on current best practice (specifically BS 4142:2014+A1:2019 and World Health Guidelines) and site-specific measured data, such that the Lowest Observed Adverse Effect Level will not be exceeded. The maximum cumulative noise level has been apportioned to the three projects based on the respective location of, and the likely noise levels produced by, each of the substations. This affords individual limits reflective of the location of the receptors to each project. These limits at specific nearby receptors will be included in each respective projects DCO, which taken together will avoid any significant impact cumulatively.

4.4.3 It was identified by the three projects that there needed to be a protocol to be followed in the event of complaints from nearby receptors about noise during the operational period.

4.4.4 The projects committed to the production of a noise investigation protocol, which is to be secured by the three respective DCOs. A tripartite outline protocol was provided by Five Estuaries 10.36 Onshore substations operational noise and the noise complaints protocol – Revision B.



4.5 ARCHAEOLOGY

- 4.5.1 Five Estuaries and North Falls have undertaken a coordinated series of archaeological surveys and investigations across the onshore project area. This has required the projects to work with landowners to balance the project survey requirements with considering the impacts to individual landowners and minimising the extent of access required. The collaboration between the projects has been multifaceted, involving landowner access, technical work, and the sharing of data.
- 4.5.2 The projects worked together to commission desk-based surveys, including the use of aerial photography, and field work. The field work involved geophysical surveys, trial trenching and test pitting at discreet locations, and watching briefs of ground investigations (boreholes) which have helped to develop the geoarchaeological assessment. The geophysical survey was completed over all of the available/suitable areas for survey, subject to access/ground conditions.
- 4.5.3 The survey works were jointly discussed and agreed with the County Archaeologist and Historic England, and undertaken in line with written schemes of investigation prepared by the appointed archaeological consultant.
- 4.5.4 North Falls and Five Estuaries plan to continue this approach, where practicable, for the next phase of archaeological works and have been working with the County Archaeologist and Historic England to agree an Archaeological Mitigation Strategy – Revision B, a version of which with the same commitments will be included as a certified document in both applications, secured by DCO requirement.

4.6 ECOLOGY AND BIODIVERSITY NET GAIN

- 4.6.1 Ecology (Including approach to European Protected Species Licences (EPSL) and Biodiversity Net Gain (BNG)).
- 4.6.2 Throughout the EIA process, there have been regular VE and North Falls ecology workshops, where (as lead project) VE typically set out its proposed approach and sought feedback from North Falls prior to finalising the approach. The aims throughout were to:
- > Ensure, as far as possible, comparable approaches to baseline data gathering, evaluation and impact assessment processes - it is worth noting that, where both projects independently collected baseline data, there are some differences.
 - > To share data via the good neighbour agreement - all baseline data and all draft reports were shared in advance of final submissions.
 - > To share the requirements for, and approach to EPSL - both projects have identified that Great Crested Newt (GCN) District Level License (DLL) may be most appropriate approach to manage potential impacts on GCN
 - > To share an approach to using the Statutory Metric to measure BNG - though as both projects independently collected baseline data, and have different DCO boundaries there are some differences in outcome, but both projects are seeking to achieve 10% net gain; and
 - > To ensure similar and complementary approaches to landscaping and habitat creation at the OnSS.



4.7 SKILLS AND EMPLOYMENT

- 4.7.1 North Falls and Five Estuaries have both produced Outline Skills and Employment Strategies (OSES) in close collaboration, which are secured through the respective draft DCO's. Although there is a separate OSES for each project, they are cognisant and reflective of each other.
- 4.7.2 To develop the outline strategies, including key principles and approaches, both North Falls and Five Estuaries engaged jointly with several key stakeholders in the education / training / employment / skills sector within the Essex and Suffolk area, including the local host authorities, and key education providers (e.g. University of Essex).
- 4.7.3 The Projects will seek to continue to develop their strategies and plans jointly to seek to maximise the benefits locally, and have continued holding meetings with stakeholders throughout the examination period.
- 4.7.4 A key element is consideration of the number and type of opportunities brought forward by the Projects during the construction phase where infrastructure and therefore labour and supply chain is likely to be shared/overlap (both spatially and temporally). VE and NF intend to feed into existing local and regional structures and workstreams rather than duplicating them and ensure coordination with other NSIP projects in the area, such as National Grid's Norwich to Tilbury project. Further information is set out in 9.27 Outline Skills and Employment Strategy [APP-260]

4.8 GROUNDWATER

- 4.8.1 VE and North Falls have been working together to understand groundwater and minimise effects on private water supplies during construction. Since submission of the DCO application, the projects have jointly undertaken groundwater monitoring. This has been done to understand existing baseline and groundwater levels and inform future monitoring proposals to manage any effects on the private water supplies of the residents of Little Bromley.
- 4.8.2 VE prepared 6.6.6.1 Ground Water Risk Assessment - Revision B [REP6-017] to collate the ongoing groundwater monitoring data collected to date, which includes outline groundwater monitoring proposals. This has been aligned with North Falls who is in the process of preparing its own version of the document for submission in to its examination.

4.9 CONSTRUCTION MANAGEMENT

- 4.9.1 9.21 Code of Construction Practice (CoCP) [REP7-050] governs the practice on site and includes the need to coordinate with North Falls and National Grid to seek to minimise impacts. The CoCP and North Falls Outline CoCP have been produced separately but have continually reviewed by both projects to ensure there is no conflicting commitments and a general alignment in approach, noting that they have been produced by two different environmental consultancies. Both sets of project documents include the following key measures on which the projects would coordinate in the appropriate scenarios:
- > Completion of a pre-consent soil survey and preparation of Soil Management Plan (SMP) which will define the sites specific mitigation measures and good



industry practice techniques required to be followed by all to protect soil resources.

- > Delivery of best practice measures to limit construction noise;
- > Appointment of an Agricultural Liaison Officer, as the primary contact for ongoing engagement with owners, their agents and occupiers of land about practical agricultural matters before and during the construction process.
- > Delivery of construction drainage mitigation measures, including:
 - > Sediment management;
 - > Pollution prevention;
 - > Preparation of construction drainage plans with individual landowners;
- > HDD 'frac' out plans, including contingency measures.

4.9.2 The need to coordinate with nearby construction projects is also addressed by Health and Safety regulations, such as the Construction (Design and Management) Regulations 2015, are designed to address potential hazards and risks associated with construction activities, thereby reducing the likelihood of accidents and injuries.

4.9.3 It is important to understand the need for best-practice and coordination, to ensure that measures to improve and learn with respect to safety are documented across projects.

4.9.4 The potential safety measures are likely to encompass a wide range of protocols which will be determined once contractors are appointed by the projects. A significant degree of co-ordination could be required on measures such as (but not limited to):

- > Risk Assessment: Prior to the commencement of any construction activity, a comprehensive risk assessment will be conducted to identify potential hazards. This will enable us to implement appropriate safety measures to mitigate these risks.
- > Safety Training: All personnel involved in the project will undergo mandatory safety training. This will ensure that everyone is aware of the safety protocols and understands their role in maintaining a safe working environment.
- > Emergency Response Plan: A detailed emergency response plan will be in place to ensure swift and effective action in the event of an accident or emergency.
- > Regular Safety Audits: Safety audits will be conducted regularly to assess the effectiveness of the safety measures in place and to identify areas for improvement.



5. ANNEX A – TRIPARTITE POSITION STATEMENT

Tripartite Position Statement

March 2024

Between

Five Estuaries Offshore Wind Farm Limited

North Falls Offshore Wind Farm Limited

National Grid Electricity Transmission Plc

FIVE
ESTUARIES
OFFSHORE WIND FARM


NORTH FALLS
Offshore Wind Farm

nationalgrid

Tripartite Position Statement

This Statement sets out the agreed position between

- Five Estuaries Offshore Wind Farm Limited (Five Estuaries), being the promoter of the Development Consent Order application for the Five Estuaries Offshore Windfarm (Planning Inspectorate reference EN010115);
- North Falls Offshore Wind Farm Limited (North Falls), being the promoter of the Development Consent Order application for the North Falls Offshore Windfarm (Planning Inspectorate reference EN010119); and
- National Grid Electricity Transmission Plc (NGET), being the promoter of the Norwich to Tilbury Development Consent Order application (Planning Inspectorate reference EN020027).

All three being 'parties' and Five Estuaries and North Falls being collectively the 'OWFs'.

The parties have jointly prepared this Statement for submission to the Examination of their DCO applications. The parties will work together to update this as required for each Examination process.

Statement status and revisions:

Revision	Date	Notes
A	[March 2024]	For submission with the Five Estuaries DCO application. North Falls DCO application is pre-submission, National Grid's DCO application is approaching statutory consultation.

1 PURPOSE OF THIS STATEMENT

- 1.1 This Statement provides information on the interrelationships between the parties' projects. The Statement has been prepared to support the Development Consent Order (DCO) applications for the three projects.
- 1.2 Noting that the three projects are at different stages in the development process. This Statement seeks to explain the interactions around the onshore project substation areas, where there is potential for co-ordination or overlapping interests. It is intended that this Statement is updated as required.
- 1.3 The two offshore windfarm (OWF) projects are separate joint ventures, with different shareholder groupings and are being developed as independent standalone projects. A specific North Falls / Five Estuaries Co-ordination Document is available, which sets out specific co-ordination details between the two offshore wind farm projects, particularly setting out different onshore delivery scenarios.

2 BACKGROUND

- 2.1 In response to policy in the updated National Policy Statements for energy and electricity networks infrastructure (specifically EN-1 and EN-5) on co-ordination and feedback from consultees identifying the need for closer coordination, the projects have worked together to align the three substation proposals and identify opportunities to minimise or control cumulative impacts.
- 2.2 The OWF projects both have grid connection offers to connect into a new East Anglia Connection Node (EACN) substation, being brought forward as part of the Norwich to Tilbury reinforcement Project. The siting study of the EACN, where the project connects into the national electricity transmission system, was undertaken by NGET.
- 2.3 NGET identified a search area on the Tendring Peninsula in Essex, which could be integrated as part of the Norwich to Tilbury reinforcement project, as an economic and efficient site for the EACN as set out in the Corridor and Preliminary Routeing and Siting Study published by NGET in 2022. In Q4 2022 NGET identified a EACN Land Take and furthermore a substation construction and operational footprint within which it is anticipated the EACN substation will be located.
- 2.4 The OWF projects and Norwich to Tilbury reinforcement project are being developed in parallel with the same ambition to be operational by 2030, with construction expected to start (subject to DCO confirmation) in early 2027. Throughout the development the project teams have met regularly to exchange design information and explore opportunities for coordination to reduce impacts on local communities.
- 2.5 Working together to streamline design and minimise local impacts is important to the Projects. A primary goal of coordination is to reduce the potential impact of building the substation for the three projects in the same location. Co-locating infrastructure is intended to reduce the overall environmental impact of the schemes and focus the impacts to a reduced area. The topics in which co-ordinated work has been undertaken are set out in section 5 below.
- 2.6 Should the projects receive development consent, these efforts will continue throughout the construction and operational phases.

3 OVERVIEW OF PROJECTS

Five Estuaries Offshore Wind Farm

- 3.1 Five Estuaries Offshore Wind Farm Limited has submitted an application to the Planning Inspectorate on behalf of the Secretary of State, for a Development Consent Order for the Five Estuaries Offshore Wind Farm (herein referred to as VE) under section 37 of the Planning Act 2008.
- 3.2 VE is the proposed extension to the operational Galloper Offshore Wind Farm. The project includes provision for the construction, operation, maintenance and decommissioning of an offshore wind farm located approximately 37 kilometres off the coast of Suffolk at its closest point in the southern North Sea; including up to 79 wind turbine generators and associated infrastructure making landfall at Sandy Point between Frinton-on-Sea and Holland-on-Sea, the installation of underground cables, and the construction of an electrical substation and associated infrastructure near to the existing Lawford Substation to the west of Little Bromley in order to connect the development to National Grid's proposed East Anglia Connection Node substation, which would be located nearby. All onshore connection infrastructure would be located in the administrative area of Tendring District Council, within Essex County Council. VE will have an overall capacity of greater than 100 Megawatts (MW) and therefore constitutes a Nationally Significant Infrastructure Project (NSIP) under the Section 15 (3) of the Planning Act 2008.

North Falls Offshore Wind Farm

- 3.3 North Falls is the proposed western extension to the southern array only, at the operational Greater Gabbard Offshore Wind Farm. The project includes provision for the construction, operation, maintenance and decommissioning of an offshore wind farm located approximately 42 kilometres off the coast of Suffolk at its closest point in the southern North Sea; including up to 57 wind turbine generators and associated infrastructure making landfall between Frinton-on-Sea and Holland-on-Sea, the installation of underground cables, and the construction of an electrical substation and associated infrastructure near to the existing Lawford Substation to the west of Little Bromley in order to connect the development to National Grid's proposed East Anglia Connection Node substation, which would be located nearby. All onshore connection infrastructure would be located in the administrative area of Tendring District Council, within Essex County Council. North Falls will have an overall capacity of greater than 100 Megawatts (MW) and therefore constitutes a Nationally Significant Infrastructure Project (NSIP) under the Section 15 (3) of the Planning Act 2008.

National Grid Norwich to Tilbury and East Anglia Connection Node Substation

- 1.1 The way we generate electricity in the UK is changing rapidly and we are transitioning to cheaper, cleaner and more secure forms of energy, including new offshore windfarms. National Grid has a duty to facilitate new connections by making changes to the network of overhead lines, pylons, underground cables and other infrastructure that transports electricity around the country, so that everyone has access to the clean electricity from these new renewable sources. National Grid is currently developing the Norwich to Tilbury reinforcement scheme, which will provide connections for a number of new generation

facilities and facilitate the transportation of clean electricity from the north to south of England.

- 3.4 As part of that scheme, agreements are already in place with two offshore wind farm projects, Five Estuaries and North Falls, and are based on connection offers into a new East Anglia Connection Node (EACN) substation.
- 3.5 National Grid is commencing their Section 42 Statutory Consultation in Spring 2024 and intends to submit an application to the Planning Inspectorate on behalf of the Secretary of State, for a Development Consent Order for the Norwich – Tilbury project in mid 2025.

4 INTERACTIONS

- 4.1 The proposed NGET EACN 400kV Substation facilitates the connection of the offshore generation from the OWFs to the main National Electricity Transmission System. It will include HV transformers, reactors and other typical HV Plant and equipment. The two OWF projects will connect to the EACN with underground 400kV circuits from their own substations.
- 4.2 The OWFs DCO applications will include works for the cable connection between the new OWF substations and the NGET substation and works to facilitate the connection within the EACN substation compound,
- 4.3 The configuration of the OWF switchgear within the footprint of the NGET EACN substation will depend on a number of factors including the detailed design of the equipment required and the final layout of the proposed NGET EACN Substation.
- 4.4 As the exact location or layout of the NGET substation is not yet known the whole EACN construction and operational zone has therefore been included within the OWF Order Limits to ensure that the works required to connect the new OWF substations to the NGET EACN substation (as set out above) are encapsulated and have been appropriately assessed.
- 4.5 Currently, although the projects expect to make their DCO applications at different times, there is an expectation that the overall construction programmes of the three projects are likely to overlap and so it is expected that there will be the potential for cumulative construction impacts, which have been considered in the ES. The parties recognise this potential, particularly in relation to construction traffic accessing the three sites from the Strategic Road Network, but also recognise opportunities for collaborative working to mitigate effects to a substantive degree.
- 4.6 The Norwich-Tilbury construction programme for the EACN and the associated OHL/Cable installation works is due to commence Q1 2027 and complete in Q4 2031.

5 TRIPARTITE CO-ORDINATION - OWFS AND NATIONAL GRID

- 5.1 In line with good practice and the new policy considerations in the updated Energy NPS', particularly EN-5, *"2.14.2 the construction planning for the proposals has been co-ordinated with that for other similar projects in the area on a similar timeline;"*
- 5.2 Therefore, considerable work has been undertaken since the announcement of the grid connection points in 2022 with the objective of minimising the cumulative impacts associated with the projects. This has focussed on three key topics near to the substation:
 - (a) Traffic and Transport, particularly construction traffic

(b) Landscape and Visual, and

(c) Operational Noise

- 5.3 The three projects have undertaken independent options appraisals of construction access routes and shared proposals with a view to identifying a co-ordinated solution. NGET will be consulting on proposed temporary and permanent access arrangement to the EACN substation as part of its spring 2024 section 42 statutory consultations. In light of this the emphasis for the OWF projects has been to provide flexibility in their applications to allow for co-ordination with NG depending on their access proposals. This is discussed further in Section 6.
- 5.4 Independent, but co-ordinated design work is required to minimise impacts during the operation of the substations, this will include landscape proposals and management of operational noise.
- 5.5 Information has been shared between the projects to assist with Environmental Assessment.

6 TOPIC SUMMARIES

Site Access

- 6.1 At this stage NGET is still to consult on its proposals for accessing site. The OWF projects have shared their proposals and have maintained flexibility within their designs to allow the potential for co-ordinated access proposals.
- 6.2 The working assumption is that NGET will use Bentley Road to access its site and therefore the Projects acknowledge there would be a significant cumulative increase in traffic numbers along Bentley Road and have all agreed on the requirement to improve the A120 / Bentley Road junction and widen Bentley Road.
- 6.3 Further details will be set out within each projects' Construction Traffic Management Plans as to how communication will be undertaken between projects and how traffic impacts will be managed between the projects, including for example communication around abnormal load delivery timings and routes.

Operational Noise

- 6.4 All three project substations are proposed to be situated in close proximity to each other and therefore consideration has to be given to avoiding any potential significant cumulative effects of operational noise. The projects have agreed a maximum noise level at nearby identified Noise Sensitive Receptors based on the respective location of, and the likely noise levels produced by, each of the substations. This affords individual limits reflective of the location of the receptors to each project. These limits at specific nearby receptors will be included in each respective projects DCO, which taken together will avoid any significant impact cumulatively.

Landscape Screening

- 6.5 A strategic approach is also being taken with regards to the mitigation planting associated with the onshore project substations. Whilst each project will have their own planting schemes, the OWFs are co-ordinating their approaches to landscape screening. The design for the NGET project is too early in the development process to incorporate a three way design to provide necessary visual mitigation for all three Onshore Substations. Discussions are ongoing between the OWFs and NGET to co-ordinate plans. When NGET has further developed proposals, the projects will work together to deliver a co-ordinated scheme for the three projects.

7 CO-ORDINATED COMMUNICATIONS

- 7.1 It is expected that a joined up approach to local liaison will be implemented during overlapping construction periods to enable stakeholders and the local community to receive co-ordinated updates and minimise confusion around who is carrying out what activity and where complaints and questions should be directed. Each project will set out its own approach in its control documents (e.g. Code of Construction Practice) Potential measures may include:
- (a) Co-ordination between the communication teams of complaints and enquiries regarding the substation to ensure efficient handling of issues.
 - (b) Co-ordinated project updates with information from each project.
 - (c) Establishment of a liaison group for communities around the substation location to provide a platform for representatives of the community to receive updates and speak directly to representatives from the three projects.
 - (d) Co-ordinated provision of construction information, providing detailed information on how the construction activity will be carried out represented by the projects and key contractors.

8 ASSESSMENT APPROACH

- 8.1 In order for the OWF's to connect to the National Grid, the proposed National Grid Norwich to Tilbury Reinforcement Project and the associated EACN substation must be operational. National Grid has defined a construction and operational zone within which their EACN substation will be situated.
- 8.2 Despite its stage in the planning process, due to the OWF's reliance on this project for its connection to the National Grid, it has been given detailed consideration and treated with more certainty than other projects at similar stage in the planning process in the Cumulative Effects Assessment in each OWF projects Environmental Statement. To assist with the assessment, it has been necessary to make assumptions as to the siting, scale, form, and construction of the project, particularly the EACN substation. These assumptions have been checked and agreed to be appropriate and reasonable by NGET.

9 RELEVANT DCO DRAFTING

- 9.1 All three projects will include all the compulsory powers which would be needed to deliver their project in their DCO. The overlap in compulsory powers is being discussed between the parties to reach an agreed position as to how these will be managed and co-ordinated in practice.
- 9.2 Both OWFs will include the ability to compulsorily acquire rights over the land within which the EACN will be constructed to allow the projects to get their cables to the connection points which will be specified by NGET following detailed design. As those connection points are not yet known, the rights are sought over the whole area to allow flexibility to route the cables as required to meet the then current standards. The OWFs have agreed that they will not seek to acquire any existing land rights or apparatus of NGET. A commercial connection agreement will also manage the connection works between the parties within the proposed substation footprint. The OWFs have agreed to enter into reciprocal protective provisions to secure the delivery of both projects. These provisions provide each undertaker sufficient protection from overlapping development consent and

compulsory acquisition powers, providing sufficient assurance to each Examining Authority and the Secretary of State that each DCO can be granted as sought.



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