



Essex County Council

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Our ref: ECC/VE/StatConQ22023
Your Ref:
Date: 12 May 2023

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Dear Mr Eaton,

Proposed application by Five Estuaries Wind Farm Limited (the Applicant) for an Order granting Development Consent for the proposed Five Estuaries Offshore Wind Farm, which is a proposed extension to the operational Galloper Offshore Wind Farm, located off the Tendring/Essex coast. Statutory Consultation Q2 2022. Response from Essex County Council.

Thank you for consulting Essex County Council (ECC) on the above. Our comments on the same have been requested by the 12 May 2023, this response meets this deadline.

I would also ask you to note that, and for the purpose of clarity, this response on the consultation comes from ECC and Tendring District Council, the authorities having in place a Memorandum of Understanding to work in co-operation in submitting this response.

It is also correct that Tendring Council will be make their own additional response in the form of a returned response to this consultation. ECC have seen in draft and endorse the comments as are made by Tendring in that response.

Five Estuaries (FE) comes in the form of a proposed extension of the now operational Galloper offshore wind farm. It would be located approximately 37km off the Tendring/Essex coast in two separate seabed areas adjacent to the existing Galloper wind farm, which is currently operational.

The proposals are comprehensive and include the following elements:

Offshore

1. An offshore wind turbine generating station with a generating capacity of over 100 megawatts, comprising up to 79 wind turbine generators with associated foundations and a maximum tip height of 420m above sea level.
2. Up to two offshore substation platforms with associated foundations.
3. A network of subsea inter-array cables including cable protection, connecting the wind turbines to each other and to the offshore substation platforms including cable crossings.
4. Up to four subsea export cable circuits including cable crossings, cable protection, sheet piled intertidal exit pits and trenchless installation works from the offshore substation platforms to shore, with an offshore cable route length of up to 84km.
5. Scour protection, as required, for foundations and cables.

Onshore

1. Transition joint bays between Frinton-on-Sea and Holland-on-Sea to connect the offshore cables and the onshore cables.
2. Up to four buried export cable circuits from the transition joint bays at landfall along an approximately 22km route to a new electrical substation near Lawford and Ardleigh, including cable ducts, jointing and trenchless installation works. This route passes under the A120.
3. The construction of a new electrical substation in the vicinity of Little Bromley together with associated equipment, accesses, landscaping and a temporary construction compound.
4. Two buried 400kV cable circuits connecting the new substation to National Grid's proposed East Anglia Connection Node substation, including cable ducts, jointing and trenchless installation works.
5. Temporary construction areas and haul roads together with works to secure vehicular and/or pedestrian means of access for the Project.
6. Associated and/or ancillary works including archaeological and ground investigations, drainage works, highway improvements, works to alter the position of existing utilities, works to watercourses, landscaping and other mitigation and monitoring works.
7. Such other works as may be necessary or expedient for the purposes of or in connection with the construction, operation, maintenance or decommissioning of the Project.

8. If required, temporary stopping up, diversion or alteration of streets, roads and Public Rights of Way.
9. If required, the permanent and compulsory acquisition of land and rights for the Project.
10. If required, overriding of easements and other rights over or affecting land for the Project.
11. If required, the application and/or disapplication of legislation relevant to the Project including inter alia legislation relating to compulsory acquisition.
12. Such ancillary, incidental and consequential provisions, permits and consents as are necessary and/or convenient.

It is stated that the Project has a generating capacity in excess of 100MW and therefore is a Nationally Significant Infrastructure Project under s15(3) Planning Act 2008.

The consultation mentions that this proposal will come together at around the same time with a separate proposal, North Falls, which would also propose in its own DCO submission to extend Galloper, as an independent but linked proposal, which will come with an indicated, but not specified in detail at this time, level of co-operation between the two. Although the developments will be submitted separately, they are similar in terms of their intent, and impact, both taking landfall in Tendring before undergrounding to a substation in a position close to Lawford.

At this time there has been limited but some co-operation between the two proposals, nevertheless the similarity of the proposals and location of same are distinct, hence this current proposal needs to take into account the in-combination effects of the two to ensure that the impact of the same is appropriately mitigated and controlled in the interest of amenity and proper planning for the Tendring area.

It is also correct that the in combination effects of the two proposals would, in terms of for example socio economic impact, be more significant when looked at together rather than individually.

The proposal comes to consultation now more developed than the previous scoping submission to the Planning Inspectorate, and the later non stat consultation which took place in Q3 2022 and for which ECC provided a consultation response in August 2022. Since that time amendments to the as proposed on land route has been developed following detailed additional engagement meetings with ECC and a variety of other stakeholders.

This project is considered a Nationally Significant Infrastructure Project (NSIP) by virtue of there being a proposed an offshore generating station with a capacity greater than 100 megawatts (MW). At 300 MW, the promoter estimates this to be equivalent to the power needs of 380,000 homes.

The wind farm itself will feature up to 79 turbines, each measuring up to 420 metres high, fixed to the seabed, covering a total 149 square kilometres in area. Five Estuaries will be located approximately 37KM off the Tendring shore.

Power from the offshore wind farm will be taken by seabed link to the Tendring coast, with this anticipated at being at a point between Holland on Sea and Frinton, where a connection point will be made following a link being horizontally drilled under the sea wall/defences, before being transported underground to a substation site anticipated close to the existing Lawford Sub Station.

On the landward side the as proposed infrastructure, substation, cable laying, and associated development will arrive at the site by vehicle. The underground link is at an anticipated distance of 20km from the sea wall to the substation at Lawford, where it will be connected to the wider grid network. The impact of much of the work will be localised and temporary, save for the substation which will remain a permanent feature. However, the Tendring peninsular is dotted with residential settlements, business premises and farms. The topography is formed largely of a flat open rural landscape dominated by arable farmland, hedgerows, trees, and watercourses, hence the impacts of the development are significant, potentially hugely injurious to the communities it would affect, and should not be underestimated.

The infrastructure necessary to implement the development should Consent be granted would be delivered either in part form or as whole parts to a nearby muster port and shipped to site offshore. It is anticipated that the onshore development will take approximately 3 years to complete.

Up to date plans are submitted with the statutory consultation to show the extent of the on and offshore proposals and the landfall cable route.

In particular this consultation also includes a Preliminary Environmental Information Report (PEIR) which sets out the current environmental baseline, and based on the applicant's initial assessments, the Project's potential benefits and impacts, and our proposals to mitigate those impacts. The PEIR is a key part of the consultation.

The landfall site has been chosen being mindful of the existing development along the Tendring coast, with a number of alternative locations being ruled out. At this stage two potential landfall connections are proposed in the gap between the developed areas of Holland on Sea and Frinton on Sea. Both these points avoid residential dwellings but this in itself is not short of both technical challenge nor potential for significant impact, particularly on ecology and the Site of Special Scientific Interest (SSSI) and Local Nature Reserve (LNR) which abuts the coast between Holland on Sea and Frinton. This part of the proposal will have to be properly considered and managed, with all impacts being mitigated and a legacy provided going forward.

The onshore cable route has been refined down following the initial Scoping Submission, and again following the previous non-stat consultation. The current route is wide enough to incorporate potential change within this area but is by its nature involves a wide tract of land which is capable of variation depending on detailed land use constraints.

It is at this time unknown if the cable route will be similar to that as proposed by the comparable North Falls development.

The consultation also shows that a link to the Grid is also proposed around Lawford, a position as set by National Grid and as shown in the recent non statutory consultation on East Anglia Green, itself a separate Nationally Strategic Infrastructure Project (NSIP). Due to this connection point, it is therefore necessary to look at, by association linked, cumulative impacts between East Anglia Green and the Five Estuaries proposal.

The current submission makes it clear that the eventual position of the onshore substation will be either opposite or in close proximity to the existing substation in Ardleigh Road, Lawford. The submitted documents show two potential substation locations. It is not the role of ECC in consultation to suggest that one location is preferred over the other, this is for Five Estuaries to develop into their proposals based on evidence given in consultation.

As a matter of public record ECC have responded raising strong objection to the East Anglia Green (EAG) proposal, itself a DCO proposal that will link Norfolk to Tilbury and will run overground across Norfolk, Suffolk and Essex, save for an area of undergrounding within the Stour Valley Area of Outstanding Natural Beauty (AoNB). ECC commented on non-statutory consultation in 2022.

It is also proposed that EAG will re-consult on the as proposed scheme with changes in June 2023, however details of this are not known at this time, nor are the level of changes as may be within the same.

ECC recognise that Five Estuaries, along with North Falls, will both come to Lawford to link up with EAG for wider distribution within the network, are both actively engaged in the Offshore Transmission Network Review (OTNR), a government-led initiative looking at the opportunities to streamline the way in which offshore wind farms are able to connect to the network. The trade body Renewable-UK is leading the current phase of work on behalf of the Department of Business, Energy and Industrial Strategy ("BEIS"). The intent is for Five Estuaries to work with and review the outputs of the OTNR and potential for the project to adopt an alternative grid solution. It has also been stated that Five Estuaries and North Falls together are committed to exploring alternative grid connections in addition to that as presented in this non stat consultation.

However, both the Government's recent Energy Security Strategy and Net Zero goals demonstrate the importance of bringing new offshore renewable generation of 50GW by 2030. Therefore, Five Estuaries will continue to develop on the basis of a radial connection for which the regulatory framework exists to ensure no delay in its planned grid connection date and supporting the UK Governments' target.

ECC's clear preference is for a coordinated, offshore centred approach, delivered at pace, to minimise onshore infrastructure in Essex. In our response to the recent EAG non-statutory consultation, ECC concluded that National Grid Electricity Transmission (NGET) had not presented a comprehensive and conclusive set of evidence that the transmission objectives of this project cannot be met using the alternative of an offshore link or links. We reasonably concluded that with this there would clearly be significantly less harmful impacts on the terrestrial environment in Essex and the wider region as well as the numerous communities affected by EAG. ECC raised significant objection to EAG for numerous reasons, including but not limited to, it's intent to come overland into Lawford and then out of the same overland towards the north of Colchester.

ECC encourages Five Estuaries to commit to its as stated intent to explore alternative solutions to provide offshore connection options other than by taking a landward route to Lawford. The benefits of this would be significant for Five Estuaries and the Tendring peninsular, it would reduce significantly the projects own impact and the in-combination effects when considered alongside North Falls and negate the need for EAG to enter Tendring to provide a substation connection.

Also, it is currently unclear as to what the impacts of Five Estuaries would be in conjunction with North Falls. These are two alike developments and whilst they would have some impact on views of the Windfarm array in combination from the Clacton coast, the main impact of the same would come in the construction of the landward side of the developments. With two connection points, cable runs, construction works, haul roads, compounds and works proposed in connection with both developments it is not possible to assess what the in-combination effects of the same would be as the consultation documents fall short of making this clear.

ECC has long made the point that the developments as proposed on the Tendring peninsular are similar in type and extent, hence co-operation between the developments needs to be considered. The current draft National Policy Statement EN5, which is likely to be fully in place when FE is at Hearing, plays significant importance on the close co-ordination of onshore projects, in particular section 2.5 of the same which promotes co-ordination between applicants, particularly where the sensitivities of the landfall sites is sufficient, which is clearly the case with FE and the Tendring coast.

As Five Estuaries has received a connection offer from NGET at Lawford via EAG as a grid connection point, ECC considers it reasonable that at the present time Five Estuaries have not presented evidence or assessment of alternative grid connection

proposals, should EAG not be implemented as currently proposed. Until this work is completed, evidenced, and evaluated by ECC, our position on Five Estuaries and this consultation, is one of a **holding objection**, due to lack of assessment of alternatives to a connection at Lawford.

As a Nationally Significant Infrastructure Project (NSIP), this proposal has the potential to significantly benefit the economy and labour market in Essex through direct investment involved in building the substation, the construction facilities necessary to support the offshore wind farms in Harwich and Bathside Bay, and for indirect economic benefits through local supply chains.

Wind generated power is acknowledged to be a renewable source of electricity generation, and therefore this project could help in addressing the County Council's carbon reduction ambitions.

ECC acknowledges the need to increase renewable energy generation, the increasing demand for new additional generation and the UK Government's legal obligation to achieve Net Zero Emissions by 2050, as supported by research and publications by the Committee for Climate Change.

However, and importantly, without appropriate mitigation measures and compensation agreements, the project could significantly impact the amenity, health and wellbeing of some people in Tendring, Essex and the wider region.

ECC note that post the recent Covid-19 pandemic, consultation has taken place both at in person events and online. This is welcomed as it gives interested parties a choice on how to engage. The details as viewed by the Council at both in person and online are considered both intuitive and informative.

In terms of project co-ordination, it is important to stress that the North Falls Offshore Wind Farm proposal is mentioned, and that co-ordination with many aspects of that proposal is being or will be undertaken including stakeholder construction, infrastructure and operational plans. There are many aspects where a collaborative approach between the 2 projects would be extremely beneficial to minimise disruption/visual impact especially if they work together and at the same time in the same area, including the new project onshore substation and cabling. The benefits of this are significant and the impact could potentially be lessened. However, any collaboration may represent additional harm and the impacts of this remain unproven at this time.

National Planning Policy

ECC acknowledges the need to increase renewable energy generation, the increasing demand for new additional generation and the UK Government's legal obligation to achieve Net Zero Emissions by 2050, as supported by research and publications by the Committee for Climate Change.

National Policy Statement (EN-1) is the overarching national policy statement for energy and was published in July 2011. This sets out the UK Government's commitment to increasing renewable generation capacity and recognises that, in the short to medium term, much of the new capacity is likely to come from onshore and offshore wind. Essex, Suffolk and Norfolk's coast is well placed for the location of offshore wind and is known colloquially as the "Energy Coast" and has been the subject of a number of development proposals for the same over recent times.

National Policy Statement (EN-3) is the UK Government's strategy for renewable energy infrastructure. This statement states that, through the Offshore Energy Strategic Environmental Assessment 2009 (SEA) process, the Government have concluded that there are no overriding environmental considerations to prevent the achievement of the planned 25GW capacity. However, this is subject to mitigation measures being implemented to prevent, reduce and offset significant adverse effects, which are relevant to the development as here proposed.

National Policy Statement (EN-5) is the UK Government's strategy for electricity network infrastructure. This policy statement applies to not only transmission systems but also associated infrastructure such as substations and converter stations. This policy statement sets out the general principles that should be applied in the assessment of development consent application across the range of energy technologies.

ECC is of the view that the scheme promoters should use this policy statement effectively to influence their site selection for their onshore substation in Essex.

The Government consulted on changes to the suite of Energy National Policy Statements in 2021 (including revised versions on EN-1, EN-3 and EN-5). The revised versions of this policy guidance may be published later this year, before any NSIP application has been submitted and are likely to be in place when this DCO is considered. If so, the new guidance will need to be considered during the Examination process. However, and at the time of writing, the existing policy framework remains in place.

Essex County Council Policy

The County Council, as with other Authorities in the region, has declared a climate emergency and is therefore predisposed to supporting projects that are necessary to deliver Net-Zero Carbon for the UK.

The Essex Climate Action Commission was set up to advise us about tackling climate change. It was launched in May 2020 for an initial term of two years and has since been extended for a further three years. The commission will run until 2025.

The initial purpose of the Essex Climate Action Commission was to set out recommendations on tackling the climate crisis. This included devising a roadmap to get Essex to net zero by 2050.

These recommendations were set out in the commission's report [Net Zero: Making Essex Carbon Neutral report \(PDF, 5.33MB\)](#), published in July 2021. The report put forwards a comprehensive plan to:

- reduce the county's greenhouse gas emissions to net zero by 2050, in line with UK statutory commitments
- make Essex more resilient to climate impacts such as flooding, water shortages and overheating

The recommendations of the commission were accepted in full by Essex County Council. They form the basis of our Climate Action Plan, produced in November 2021.

The policy also sets out how, in principle, ECC will engage and influence other parties to ensure adverse impacts to our communities are understood and addressed by future decisions and expects to have comprehensive and effective engagement with developers and their supply chain partners to maximise the local business opportunity, skills aspiration, and employment benefits. Where appropriate, ECC and developers should promote synergies between projects that enhance these benefits, deliver growth, and attract inward investment.

ECC will expect projects to deliver appropriate community benefit schemes in addition to the necessary compensation and mitigation, including schemes that support the decarbonisation of heat and transport, reduce energy poverty, and improve the climate adaptive resilience of both the natural environment and communities.

Tendring Council Policy

The Tendring Local Plan was formally adopted in January 2021 (part 1) and January 2022 (part 2) and forms the local plan by which development proposals are considered. The Plan was formally adopted in January 2021 and whilst recognising the need to promote sustainable development to allow for growth, it is equally seen as important to contribute to economic regeneration, jobs and housing growth. This has to be offset with the need to conserve and where possible enhance the historic and natural environment including landscape and habitat creation and promote net environmental gains.

The area of land around Lawford and its rural farmland environment is sensitive to change and, when looked at in combination with the aforementioned developments, the impact of a quasi-industrial development of the scale as proposed would be injurious to the local area and its surroundings, when considering in combination effects. It is noted that within the consultation it makes it clear that this route will be

refined down with the collection of evidence to refine the same. Additional statutory consultation will take place after further engagement.

Response to the Preliminary Environmental Impact Assessment consultation

ECC, as well as other consulted Authorities affected by this proposal, has a clear preference for a coordinated approach between the different proposed offshore windfarm extension projects and multi-purpose interconnector projects within the vicinity of this project.

ECC acknowledges that Five Estuaries have identified their project, together with the promoters of North Falls, Nautilus and Eurolink, as being within the Early Opportunities workstream of the Offshore Transmission Network Review, and that there are ongoing discussions between these parties and National Grid Electricity Transmission (NGET), under the auspices of the Department for Business, Energy and Industrial Strategy and Renewables UK.

However, it is considered, and on balance, that the developers of these separate projects have not presented a comprehensive and conclusive set of evidence that the transmission objectives of this project cannot be met using alternative link(s) to reduce the impact of onshore infrastructure on the terrestrial environment in Essex or Suffolk. If an alternative offshore solution with reduced impacts was to be delivered, in a timely manner, without risking wider Net Zero and decarbonisation targets, it would be welcomed by the County Council. Such a proposal would negate the need for this project to landfall in Tendring, to access a length of undisturbed land, and remove the requirement to provide an on-land substation, as is here proposed in one of two locations.

As is mentioned earlier in this response ECC has separately made strong objections to the recent EAG DCO project on the basis that it does not adequately demonstrate why greater offshore co-ordination would not be feasible, which would avoid or significantly reduce the need for that project and the connection to Five Estuaries at or around Lawford

It is also noted that whilst the landward development rests in Essex, the socio-economic and highway impacts of that inshore development are more widely spread and will also affect the local road network and communities within the wider region.

Hence whilst it is correct to respond to this consultation on its merits it is also necessary to comment on in combination effects.

As the consultation clearly states NGET made clear its plans in Q2 2022 for EAG. Such plans included confirmation of it seeking consent for an overhead link from Norfolk to Tilbury, apart from an area within the Stour Valley AONB where undergrounding is proposed, including looping into Tendring to a point at Lawford

and providing a substation where Five Estuaries would link to the Grid. This connection point has been set by Grid.

As is mentioned above ECC has raised serious objection to this proposal, part of which is of particular reference to FE, in that the proposed connection point would be in Lawford. There are clear and demonstrable reasons why this location is completely unacceptable. By FE constructing its own independent substation linking to the Grid connection point at Lawford it would contribute to the in-combination effects. FE as a project seeks consent for its own substation before connection to the Grid substation, this will result in the provision of significantly harmful industrial type infrastructure in an open, tranquil rural area from the proposal as submitted, from EAG, FE and in addition from North Falls when this comes forward. This means the area around Lawford, where one substation already exists, could result in four independent sub stations in close proximity to each other.

The area of land around Lawford and its rural farmland environment is sensitive to change and, when looked at in combination with the aforementioned developments, the impact of a quasi-industrial development of the scale as proposed would be injurious to the local area and its surroundings, when taking into account in combination effects. It is noted that within the consultation it makes it clear that this route will be refined down with the collection of evidence to refine the same. Additional statutory consultation will take place after further engagement.

Also it is currently unclear as to what the impacts of FE would be in conjunction with North Falls. These are two alike developments and whilst they would have some impact on views of the Windfarm array in combination from the Clacton coast, the main impact of the same would come in the construction of the landward side of the developments. With two connection points, cable runs, construction works, haul roads, compounds and works proposed in connection with both developments it is not possible to assess what the in-combination effects of the same would be as the consultation documents fall short of making this clear.

ECC has long made the point that the developments as proposed on the Tendring peninsular are similar in type and extent, hence co-operation between the developments needs to be considered. The current draft National Policy Statement EN5, which is likely to be fully in place when FE is at Hearing, plays significant importance on the close co-ordination of onshore projects, in particular section 2.5 of the same which promotes co-ordination between applicants, particularly where the sensitivities of the landfall sites is sufficient, which is clearly the case with FE and the Tendring coast.

Going forward it will be necessary for FE to demonstrate how it meets the overarching principles within the current and draft EN5, something that is lacking at this time.

In addition to our statutory role, ECC has a wider leadership role in protecting and promoting the interests of the county's communities, businesses and environment, all of which are of significance. We also recognise the contribution ECC makes to the unique character and quality of Essex as a place within the wider eastern region. Whilst acknowledging the Government's net zero objectives, ECC are mindful of energy security, carbon reduction and energy poverty issues related to the delivery of energy development schemes and offer this response in the context of how these issues affect the County and the wider region.

Although ECC recognises the challenge of achieving net zero as set out by Government, to meet ongoing energy security concerns, it also recognises its role in contributing to the government's climate change objectives. The FE proposal would, by means of its cumulative impact on the landward side of the proposal have a substantial, lasting and potentially seriously detrimental impacts on the residents of the local area, the landscape and environment, at its interface in Lawford in particular. ECC recognises that the impact of the cable laying operations are temporary, can be flexible to move away from historic assets, sensitive areas, areas of population and reduce ecological impacts, never the less the impact of the substation would be both significant and profound on the local area to its detriment.

When considering the non-statutory consultation, ECC are of the considered view that any consultation periods last for an eight-week period. This allows for a consistent approach to be adopted and would align the project to that of the EAG proposals which set an eight-week period for comments. As the consultation took place primarily in the summer months, and corresponded with the school holidays, it is noted that the consultation period only extends to six weeks in this instance. ECC strongly recommends that any future consultations, including the statutory consultation, should last at least a minimum of eight weeks.

It is noted that the intent of this consultation was to set out in a public forum what the proposals were, and canvas for opinions on the same. However, a significant amount of background information remains to be presented and there are a number of gaps in knowledge within the consultation. Whilst these have at least in part been shared with ECC and stakeholder prior to consultation this is missing from the public facing consultation. It is expected that further adjustments to the proposals are likely to be required as greater knowledge is gained of the potential environmental impacts. As this evidence is not presented in this consultation ECC is not in a position to comments on the route choice within the submission nor on the options for substation location and the necessary details are not submitted.

What follows in the following Appendixes are the comments as received covering a wide range of our statutory functions.

If you require further information or clarification on any points raised in this response please contact the case officer, their details are set out below.

Yours Sincerely,

Graham Thomas.

Graham Thomas
Head of Planning and Sustainable Development

Enquiries to: Mark Woodger
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Appendix One

Community benefits

ECC notes the government's intention to consult on the delivery of community benefits from energy developments and encourage NF to engage with officers to provide a proactive position in respect of community benefits. ECC believe that the potential impacts and disturbance placed on local communities by the construction and operation of onshore transmission networks cannot be adequately dealt with through the planning system and it is necessary for Five Estuaries to provide a voluntary Community Benefit Contribution (CBC) package to host local communities.

The CBC package would recognise the role of local communities that are being asked to host nationally significant infrastructure projects that will contribute significantly to the government's commitment to Net Zero and energy security. ECC would welcome the opportunity to work with NF to establish a CBC package, which:

- Provides a clear and transparent framework which formally commits to the concept of a CBC package as part of the NF project.
- Addresses the inherent inconsistency between renewable and low carbon energy generation with onshore transmission network projects for host communities.
- Reflects the overall scale, nature and national significance of the NF project and the particular local needs and circumstances of the host communities.
- Provides short and long-term benefits to host communities, reflecting the longevity of onshore transmission networks.

Such an Environmental Improvement Fund could be used to support local initiatives including, but not limited to, the provision of community woodlands, tree and hedgerow planting, the establishment of traditional orchards and the enhancement of wildlife habitats. Local community groups, parish councils and voluntary sector organisations would be encouraged to make applications to this fund.

ECC would welcome further discussions to explore opportunities to secure benefits for the host communities arising from the development. ECC considers that, notwithstanding embedded mitigation and potential modifications to the scheme as proposed above, it is unavoidable for the development to result in serious and lasting negative residual impacts on the community and locality, including on amenity, loss/reduced quality of recreational opportunity for the community, tourism, culture and heritage, and health and wellbeing. ECC expects appropriate and robust mitigation for such residual impacts, which could be, for example, include but not be limited to, funding for alternative outdoor recreational offers, access and amenity improvements, green space, cultural and heritage enhancements.

Health and Wellbeing

ECC is working in close partnership with the NHS, CCG and the Blue Light Emergency Services on all NSIPs and therefore supports the comments as are made by the same on this consultation.

ECC consider it necessary that the Five Estuaries project includes the submission of a detailed Construction Management Plan (CMP) to mitigate and compensate against any as proposed construction impact on health and wellbeing. The CMP should have regard to BS 5228:2009 Code of Practice of Noise and Vibration Control on Construction and Open Sites.

It is necessary that an appropriate noise assessment undertaken and this will need to address the construction phases of the proposal and the operational noise. Methodology of the aforementioned assessment shall be agreed once specific details of the proposal are known. A lighting assessment will also be necessary.

It is noted that the assessment of effects on healthcare services is the subject of ongoing data collection and will be addressed in full in the ES submitted with the DCO.

It is noted that within the documentation, reference is made to Health impacts over a large number of separate documents. It would be preferable if the same were incorporated within a separate Health Impact Assessment in the interest of clarity.

Highways and Transportation

From a highway viewpoint the submission as made at this consultation phase is comprehensive, and we appreciate in many cases will be further refined prior to submission of the DCO, and further engagement on the same is welcomed going forwards.

Whilst the as consulted upon Traffic and Transport Chapter includes a comprehensive review of the network, specific regard should be given to any of the 28 key junctions across the district that were investigated as part of the evidence base for the Local Plan process that may be affected by development traffic. Whilst published in 2017 to support the Local Plan this is the last time a comprehensive review of the local road network took place.

The information can be found on the Tendring District Council website here:

[Tendring District Council | Evidence Base - 8. Connected Places \(tendringdc.gov.uk\)](https://www.tendringdc.gov.uk/evidence-base-8-connected-places)

The specific reference to the key junctions is the TDC Local Plan Modelling Support Stage 3 (May 2017), chapter 6 Junction Modelling, 6.1 Key Junctions Figure 4 page 23 and subsequent content of that report.

The specific comments from ECC's Highways and Transportation Team are as follows:

Volume 3 Chapter 8 Traffic and Transport

8.6.7 Further details of all access point and road crossings will be required with the submission of the DCO including stage 1 road safety audit.

8.6.11 It is not clear which version of TEMPRO has been used. Essex County Council have issues with the use of TEMPRO 8 on the Essex Road network as experience is that it underestimates growth.

8.6.37 Committed development planning application numbers are set out, but it would be useful to show these on a plan and provide a description of the development. It is unclear if Tendring District Council have been involved in identification of committed developments.

8.7.2 The core working hours are 12 hours and the peaks fall outside of the network peak, is this realistic, particularly in winter months?

Table 8.2.1 and Figure 8.14 etc. are these for AM or PM peaks?

The Highway Authority have not been able to undertake site visits of all roads that are proposed to access the works compounds and there are specific concerns regarding use of some minor routes including Waterhouse Lane to the north of the A120. It is likely that if it is not possible to avoid use of the minor/rural road network by utilising internal haul roads then further mitigation should be investigated on roads where two HGVs cannot pass each by possible road widening or provision of passing bays.

Whilst the DCO provides powers in respect of highway works the Highway Authority would wish all highway works to be delivered using its standard S278 Highways Act 1980 process and would seek early agreement from Five Estuaries regarding this point. Additionally, the DCO provides powers regarding Streetworks and again the Highway Authority would wish to seek assurance that the Essex Permitting Scheme is used so that Essex County Council can properly manage Five Estuaries proposed Streetworks in addition to that of other statutory undertakers/Highway Authority/developers, as well as Section 50 (Highways Act 1980) licences for private apparatus under the highway.

It is noted that cumulative development has been addressed but will be subject to further assessment within the DCO submission. The Highway Authority obviously have concerns over similar offshore schemes occurring in the local area and every

effort should be made for the schemes to work together to reduce impact and disruption to local communities.

It is noted that further information regarding AILs will be provided at the DCO stage.

Public Rights of Way

I am unsure if Public Rights of Way have made separate representation on this consultation which would usually be the case. I have looked briefly at the information supplied in this regard and it appears that comprehensive consideration of the Public Rights of Way network has taken place. My main concerns are that where temporary diversion is required this can usually only occur for 6 months, I suspect the DCO may have additional powers in this regard, but I would recommend further discussion with the rights of way team takes place regarding diversions and the proposed temporary public rights of way management.

Volume 5 Annex 8.5 Outline Workforce Travel Plan

This is very basic and not very far reaching. In other schemes I have seen minibuses being provided to pick up groups of workers staying in local accommodation. Whilst I understand that this scheme covers a large geographic area, I would have thought that some kind of shuttle bus service could work and reduce workers vehicles using the local road network, more information/further discussion regarding this would be welcomed.

Car sharing is an obvious measure, and it is important that this is encouraged positively by reducing on site car parking and to support the assumption of 1.5 people car occupancy.

Lead Local Flood Authority

ECC as the LLFA have reviewed the consultation documents for the Five Estuaries Wind Farm, further information will be required to cover drainage concerns and drainage elements onsite.

It is our wish the future consultation takes place which will be with more information for specific areas under concern.

Essex county council as LLFA is consulted on the areas that are proposed for underground cable installation and compound construction sites.

The LLFA recommends that the drainage proposal for the areas under Essex should comply with SuDS Design Guide, a link to the same being here: [suds | Essex Design Guide](#) . The proposal should assess the areas susceptible to surface water flooding and requires appropriate measures to mitigate any adverse impacts during the

construction phase and any implication associated with existing drainage interruption/blockage or temporary diversions.

Details should include any temporary works (culverts) to ordinary water courses, drainage channels for the purpose to give access to the project location. The surface water management during the construction of office, storage compounds. The proposal should enlist the required mitigation to prevent onsite/offsite flooding. Measures taken to prevent any pollutants entering surface water or ground water. Appropriate measures to deal with spills and leakages onsite.

Proposal for surface runoff disposal during construction phase and from the built area's (offices, storage compounds) in accordance with SuDS Design Guide.

Consultation with the LLFA is required to have section 23 consent for the areas where the project will have direct or indirect effect on drainage channels, or ordinary water courses

Green Infrastructure (GI)

ECC currently provides advice on green infrastructure schemes (GI) for major developments. Whilst there are no statutory requirements for GI, the 25 Year Environment Plan and Environment Act (2021) place significant importance on protecting and enhancing GI, accessibility, and biodiversity net gain. Having reviewed this stage 2 consultation, ECC raise the following points.

Biodiversity Net Gain (BNG)

ECC welcomes the proposed BNG approach as detailed in Volume 5, Annex 4.14 and the proposed minimum 10% BNG for this development. We welcome reference to the Essex Green Infrastructure Strategy (2020) but would also highlight the need to take account of the Essex Green Infrastructure Standards (2022) which provide clear guidance on the requirements on both planning policy and planning application and processes. We would also note that an updated Biodiversity Metric 4.0 was published in March 2023 and should be used in place of the previous version of the metric to accompany the DCO submission.

GI Strategy

Moving forward, ECC would ask for the production of a Green Infrastructure Strategy for the route, based on the Essex Green Infrastructure Strategy (2020) and Essex Green Infrastructure Standards (2022) to provide a more detailed an assessment of the ecological context of the development. The scheme should include but not be limited to:

- The design of the development to deliver Biodiversity Net Gain and wider environmental net gain. This that forms an important component of nature recovery networks and the wider landscape scale GI network.
- A Green Infrastructure Plan outline the implementation of green infrastructure across the proposed preferred option corridor, the timescale for the implementation of each aspect and, the details of the quality standard of construction, management and maintenance that will occur.

Essex Local Nature Partnership

ECC has now established a Local Nature Partnership (LNP) covering Greater Essex. The LNP contains three working groups – a community engagement group, a planning and biodiversity net gain working group and, a Local Nature Recovery Strategy (LNRS) group. The works of this group, including the upcoming LNRS, will need to be supported and acknowledged moving forward.

Landscape and Ecological Management Plan (LEMP)

Volume 7, Report 5, 1.3.29 states: “It is expected that a standard 5 year maintenance period will be applied. The detail of replacing failed planting will be presented in the OLEMP and LEMP.” A landscape ecological management and maintenance plan and work schedule should be for a minimum of 10 years, although through mandatory biodiversity net gain it will be expected for the habitat to be secured for at least 30 years via obligations/ conservation covenant. Therefore, the proposed 5 year maintenance period is insufficient.

Details of the LEMP should include who is responsible for GI assets (including any surface water drainage system) and the maintenance activities/frequencies. We would also expect details on how management company services for the maintenance of GI assets and green spaces shall be funded and managed for the lifetime of the development to be included. This is to ensure appropriate management and maintenance arrangements and funding mechanisms are put in place to maintain high-quality value and benefits of the GI assets.

Climate Focus Area

The proposed development is situated within the Essex Climate Action Commission’s (ECAC) recommended Climate Focus Area (CFA), which is formed of the Blackwater and Colne River catchment areas (please see Figure 1 for further details). The objective of this recommendation is for the CFA to “accelerate [climate] action and provide exemplars, for learning and innovation: adopting Sustainable Land stewardship practices: 100% by 2030 and Natural Green Infrastructure: 30% by 2030” (ECAC, 2021). Among the objectives of the CFA are to achieve net zero carbon, biodiversity net gain, improve soil health and air quality, reduce flooding and urban heat island effect, and enhance amenity, liveability and wellbeing of Essex

communities. It will achieve this by wholesale landscape change in rural areas and urban areas and it will look to developments to contribute to these targets.

Figure 1: Map of ECACs Climate Focus Area



The CFA require developments to take into account the following requirements in line with meeting the requirements outlined in NPPF:

- a) biodiversity net gain to enhance biodiversity and the natural environment by creating Natural Green Infrastructure contributing to the CFA 30% by 2030 target and the wider Local Nature Recovery Network/Strategy.
- b) flood and water management, for those properties at risk of flooding to include Integrated Water Management and Natural Flood Management techniques.
- c) New developments to improve urban greening of our towns, and villages through the provision of street trees for example. New developments are necessary in terms of increasing greenspace creation, naturalizing existing green spaces, greening the public realm, and implementing sustainable drainage systems (SuDS).

This proposed development has the opportunity through the development of an effective GI Strategy to also contribute towards meeting the CFA targets and in promoting nature recovery and habitat connectivity.

Shoreline Management

The following comments relate to Volume 3, Chapter 6: Hydrology and Flood Risk.

Page 15: The Shoreline Management Plan (SMP) is not one which has been produced by Essex County Council (ECC) which the header for 6.2.25 suggests, but

it is a plan which was developed in partnership (endorsed by ECC) and led by the Environment Agency. The SMP presents a preferred management policy for different frontages over different time periods (epochs).

The SMP highlights that the defences at Holland-on-Sea are under pressure and a landward realignment would create a more sustainable situation by reducing the pressure on defences and moving towards a more natural coastal frontage. The SMP also states on p 89 section 3.3 that a defence that is economic to maintain (i.e. benefits:costs ratio greater than 1) may not also be afforded from finite public finances, and this should be considered by the proposed developer as the comment on page 75, para 6.7.70 states that the current line will be held until 2055 (though this will in fact depend on the availability of funding). The longer-term management intent for the area where landfall is proposed (Policy Development Zone C2) has a dual policy of both Hold the Line and Managed Realignment. It is therefore important that the applicant fully considers the implications of a managed realignment on the siting of the onshoring of the cabling and associated infrastructure, as well as the access and egress for construction and any ongoing maintenance.

On page 26, it is noted that the potential for damage to flood defences or surface water drainage infrastructure during construction has been scoped in for assessment (6.4.1), and it is therefore assumed that any potential impact of horizontal drilling on the integrity of the seawall will also be covered by this and included.

It is not clear how much material will be generated by the Horizontal Drilling or other trenched excavations, or where the material that's been generated will be deposited. This material could be extremely valuable for beneficial use of dredged material coastal protection and/or habitat creation schemes in Essex. The applicant should liaise with the Environment Agency and other interested organisations including Essex County Council to determine where this material could best be utilised. The Pollution Prevention parameter of the "Mitigation measures embedded into the project design" table on page 83 states that excavated material will be placed in such a way as to avoid any disturbance of areas close to the banks of watercourses and to prevent spillage into water features and so it is assumed from this that it is not being deposited at sea – in either case, beneficial use of the material should be actively considered with Environment Agency or local stakeholders advising of potential receiving locations.

On page 30, under 6.4.9 it has been mentioned that data requests have been sent to Essex County Council with regard to shoreline monitoring data. Essex County Council hold no data of this type, this would be able to be sourced from either Tendring District Council and/or the Environment Agency.

Energy & Low Carbon

ECC welcomes the support the Government's Energy Security Strategy gives for offshore wind expansion and goal of 50 GW of offshore wind production by 2030.

The Essex Sector Development Strategy advocates offshore wind through recognising clean energy as a key growth area for Essex with a key role for offshore wind in that as part of the outcomes being delivered from the strategy. The ECAC report also recognises the need to embrace large-scale renewable energy installations, such as solar and wind farms. And the recommendations also include:

- Essex to produce enough renewable energy within the county to meet its own needs by 2040.
- All large-scale renewable developments to have an element of community ownership from 2021.

Everyone's Essex also supports the acceleration of growth in sustainable energy through its environment commitments. As such the proposed development will contribute to meeting the above targets and commitments for off-shore wind.

ECC recognises and welcomes the identified opportunities for employment, local skills development and local supply chains, but would welcome further details of community benefits of the scheme. For example, whether there is the opportunity for part-community ownership, a community benefit fund, etc.

We would welcome details on how Green House Gas (GHG) emissions of associated infrastructure i.e. the substation, and throughout the lifetime of the development will be minimised including embodied and operational carbon. Whilst the overall project is likely to be considered net zero due to the net positive impact of the generation of renewable energy- it is also important that emissions reduction measures are sought at each stage of the project. The aim should be for a net zero development at all stages/ within each element of infrastructure of the project and reliance on the positive impact of renewable energy production should not be relied upon to mitigate those. The potential impact on not just the UK to meet its climate GHG reduction commitments and wind energy targets, but the impact on Essex and the various commitments by ECC and its boroughs/districts should also be considered within the PEIR and future assessments/reports.

Additionally, BEIS analysis has identified the incredible need for energy storage, in a decarbonised net zero energy system. This is due to the intermittent nature of renewable energy technologies such as offshore wind. Hence it is asked for confirmation as to the plans for the FE project also include battery storage or more innovative solutions such as green hydrogen production?

Minerals and Waste

Previously at the non-statutory consultation ECC made a detailed response as it refers to the safeguarding of mineral reserves and the place the development should be within the waste hierarchy.

It is noted that a Mineral Resource Assessment will be included within the suite of submitted DCO documents hence and until submission of the same the previous points as made in consultation are considered relevant at this time as far as mineral reserves is concerned.

Hence the comments as made at the non-stat consultation remain as previously set out. For the purpose of brevity they are not repeated here but can be provided again on request.

Landscape

General Comments:

Proposed Viewpoint Selection

The proposed locations for Viewpoints and Illustrative Viewpoints, including reference to Clacton-on-Sea and Harwich. Whilst the viewpoints proposed are broadly acceptable, we would advise a specific viewpoint from Clacton-on-Sea pier is also included.

Cable Corridor viewpoints and receptors

Viewpoints have primarily been selected based on the potential impacts from the turbines. However, we would also be expecting receptors along the onshore cable corridor to also be assessed where impacts may occur. This does not appear to have been addressed in the latest revision and further clarification is therefore required.

Approach to Viewpoint Photography

As previously advised, the applicant should note that the turbines are likely to be at their most visible in the evening as the sun will be by the setting sun in the west, and views will, subject to weather conditions, be widely available from coastal locations both on the shore and from elevated locations back from the beach or cliffs. The inclusion of photomontages taken in the late afternoon is considered appropriate.

Viewpoints from Dunwich Beach, Aldeburgh, Old Felixstowe and The Naze, Walton have been undertaken as night-time photography. Furthermore, we note that the accumulation of non-significant visual effects along such a route may together be of significance. As previously advised, this assessment will also need to consider the cumulative and in-combination sequential visual effects in the evenings with other projects and proposals.

Substation Location

The proposed substation search area is located to the south of the Dedham Vale AONB and therefore may contribute towards its setting. For this reason, the proposed substation design and location need to be carefully considered. We also note that the landscape around Lawford and the proposed substation location is an open and exposed plateau with a low density and rural settlement pattern, therefore any changes to the landscape will undoubtedly have an adverse impact on visual amenity and landscape character. Therefore, mitigation measures and landscape enhancements must be appropriately considered to ensure these are minimised considerably.

Landscape Character

The scheme falls within multiple national / landscape character assessments. The LVIA (Section 2.7) has included the National Character Areas, the Tendring District Landscape Character Assessment, the Joint Babergh and Mid Suffolk District Council Landscape Guidance and the Colchester Borough Landscape Character Assessment as part of the landscape baseline.

However, limited reference has been made to the Essex Landscape Character Assessment. In line with our previous comments, we would advise that the Essex Landscape Character Assessment should provide the overarching framework for the baseline study, with further reference to the Tendring Landscape Character Assessment and Landscape Character Assessment of the Essex Coast for additional local landscape characteristics and qualities. We also note that the scheme falls within the East of England Landscape Framework

We would also expect localised landscape studies (1:2500 scale) to be undertaken for areas surrounding the proposed substation to ensure the baseline and potential impacts are accurate.

In determining landscape value, the Landscape Institute's Technical Guidance Note (TGN) 02-21 'Assessing the Value of Landscapes Outside National Designations' has recently been published and builds on the details within GLIVIA3 and the assessment of value (GLIVIA3 Box 5.1). For instance, Table 1 of the TGN provides a range of factors that can be considered when identifying landscape value. This includes the incorporation of cultural associations (natural heritage and cultural heritage) into consideration of landscape value, which is greatly supported.

We note that the LVIA (Table 2.2) suggests that TGN 02-21 has been "...referenced in section 2.4.21 and its contents have been used to inform the assessment of effects on landscape character in section 2.11". The Technical Guidance current appears to be missing from Section 2.4.21 and is also omitted from the 'Guidance' (Section 2.4.22). Similarly, Section 2.11 of the LVIA refers to 'Visual Effects' and we

are unable to see how the additional factors have been taken into consideration within the 'Physical Landscape' assessment (Section 2.10).

Assessment of Sequential Impacts on the England Coast Path

The Jaywick to Harwich stretch of the England Coast Path was approved by the Secretary of State July 2021. Work is now underway to prepare the new stretch of coast path for public use and therefore the LVIA should consider the cumulative sequential visual effects on users of the England coast path along this stretch and in turn, additional viewpoints along this stretch of coast will be necessary to ensure this assessment can be undertaken. We note that the Figure 10.23 'Cumulative ZTV – Five Estuaries with Baseline (operational OWF)' and Figure 10.24 'Cumulative ZTV - Five Estuaries with Tier 1 OWF' indicate that Five Estuaries would be theoretically visible from the England Coast Path and further clarification is therefore sought.

Cumulative Impacts

Potential cumulative effects (both in combination and sequential) with other infrastructure projects will need to be considered. In terms of landscape and visual cumulative effects, we would expect all proposed receptors to be scoped in.

GLVIA3 (para. 7.3) refers to the Scottish Natural Heritage (SNH) definition of cumulative effects as set out in their 2012 paper:

“Cumulative effects are ‘the additional changes caused by a proposed development in conjunction with other similar developments or as the combined effect of a set of developments, taken together’ (SNH, 2012: 4) ...

Cumulative landscape effects are effects that ‘can impact on either the physical fabric or character of the landscape, or any special values attached to it’ (SNH, 2012: 10); and

Cumulative visual effects are effects that can be caused by combined visibility, which ‘occurs where the observer is able to see two or more developments from one viewpoint’ and/or sequential effects which ‘occur when the observer has to move to another viewpoint to see different developments’ (SNH, 2012: 11).

We note the 'high-level cumulative assessment(s) have only made reference to the Tendring District Landscape Character Assessment (7A Bromley Heaths) whereas we would expect other receptors such as those identified within Section 2.7 to be included.

Trees and Hedgerows

We note that hedgerows within the survey area are considered to meet the definition of important hedgerows' in relation to wildlife and landscape criteria under the Hedgerow Regulations 1997. In line with our previous comments, we would advise that both trees and hedgerows are assessed in detail:

A detailed hedgerow assessment (in accordance with the Hedgerow Regulations 1997) to be undertaken to assess the value and health of the hedgerows impacted. This should account for wildlife and landscape, as well as Archaeology and History. Details of both are shown below:

- a. Wildlife and Landscape
 - i. The hedgerows should be fully assessed according to a standard methodology, with their woody species recorded, as set out in the Hedgerows Regulations 1997.
- b. Archaeology and History
 - i. Assessment against the criteria set out in the Hedgerows Regulations 1997 for archaeology and history should be based on an assessment utilising information from National Heritage List or England for information on Scheduled Ancient Monuments and the Suffolk Historic Environment Record (SHER) for non-designated heritage assets.

As per our previous comments, we would advise that an Arboricultural survey and impact assessment should be undertaken to understand the quality of trees in the study area and proposed impacts on them. The assessment should also identify any ancient woodland or veteran trees that could pose a constraint on the scheme. This assessment should be undertaken in accordance with British Standard 5837:2012 'Trees in relation to design demolition and construction – Recommendations' and should provide details on trees and shrubs to be retained and/or removed, the impact on them and any constraints.

Archaeology

The proposed offshore windfarm is likely to have considerable impact on the historic environment and especially the archaeological deposits, both onshore and offshore. The proposed cable route/s passes through extensive areas of known archaeological deposits many recorded from aerial photographic research. To date, little archaeological fieldwork has taken place within the area of the proposed development to inform on the nature, extent and significance of the known heritage assets. The proposed cable route will run across 22km (60m wide) of land within the Tendring District and 84km of seabed and there is high potential of the cable route and associated works identifying previously unknown archaeological and geoarchaeological deposits.

Following consultations and discussions with the Applicant a number of desk based reports have been completed and a programme of geophysical survey undertaken

on part of the development area, both onshore and offshore. The reports submitted include: a Historic Desk Based Assessment (5.7.1), Onshore Geophysics (5.7.2) Geoarchaeological Desk Based Assessment (5.7.3) and Archaeological and Geoarchaeological Monitoring of Ground Investigation works (5.7.4). Offshore reports include Offshore Archaeology and Cultural Heritage Technical Report (4.11.1) and an Outline Marine Written Scheme of Investigation (4.11.2)

The results of the preliminary environmental information report with regard to archaeology are presented in Volume 3, Chapter 7: Archaeology and Cultural Heritage for onshore archaeology and Volume 2 Chapter 11: Offshore Archaeology and Cultural Heritage.

The work carried out so far has provided a reasonable account of the known archaeological and geoarchaeological remains within the proposed development area and geophysical survey has identified further archaeological features and sites. This includes potential prehistoric ritual and settlement evidence, Roman roads and associated activity and later activity. The geoarchaeological desk based assessment has also identified the potential for the presence of deposits which may contain Palaeolithic archaeological and geoarchaeological evidence that would contribute to national and regional research themes and priorities due to their rarity. The geoarchaeological DBA also highlights the potential for the presence of offshore submerged prehistoric land surfaces and relict channels which may contain archaeological and paleoenvironmental evidence.

The onshore geophysical survey is ongoing and therefore the information presented as part of the PEIR is incomplete. Further onshore and offshore geophysical survey is proposed. The combination of geophysics and aerial photography allow a greater understanding of the nature and significance of any potential archaeological remains, however, these methods, by their nature, can only provide confidence in larger and long-lived archaeological features and the proportion of unidentified archaeological remains within the area could be significant. A programme of archaeological trial trenching to cover the pipeline corridor and new substation has been recommended to be completed in advance of the DCO application in order to inform on the extent, complexity and significance of any archaeological deposits and to allow for appropriate consideration to be given to the impact of the scheme on the historic environment. Trial trenched evaluation is currently being undertaken across part of the proposed substation site, results of the evaluation will need to be included in the DCO application.

In relation to both onshore and offshore archaeology, the assessment of significance is based on desk-based research and non-intrusive evaluation survey across part of the scheme only, and therefore the potential adverse effect remains difficult to state with confidence. Direct effects to archaeological remains from physical damage or disturbance will be incurred within the footprint of the proposed development and associated enabling works. Any adverse impact to buried archaeological features as a result of the implementation of the project would be permanent and irreversible in

nature. An assessment of effects on any heritage asset involves an understanding of the heritage significance of an asset, with regard to subsurface archaeological remains this can only be confidently achieved through intrusive investigation such as the programme of trial trenching recommended.

The Tendring District is particularly rich in prehistoric ritual remains which range from single monuments to extensive cemetery areas. One example is the scheduled monument site at Ardleigh, which lies c.1.5km directly west of the proposed substation site, the scheduled area covers a site nearly 900m long by 600m wide and provides a good illustration of a well preserved extensive prehistoric landscape within the Tendring peninsula.

The Offshore Archaeology and Cultural Heritage report (Volume 2 Chapter 11) states that there is substantial potential for in situ prehistoric archaeological remains in the intertidal zone, including occupational material, ritual deposits, burials, and structures relating to coastal marine practices, such as jetties, causeways, and fish traps. Waterlogged deposits can often contain palaeoenvironmental evidence as well as a wider range of archaeological remains such as wood, textiles etc. In addition, the offshore cable corridor will run through an area of seabed that was a large swathe of dryland during the Pleistocene and early Holocene period. The potential for submerged landscapes with evidence for archaeological remains within this area is considered high, especially for Palaeolithic and Mesolithic archaeological remains. The significance of this is illustrated through the discoveries at Happisburgh and Pakefield, off the Norfolk and Suffolk coast, of the earliest evidence of hominin occupation of northern Europe (c. 900 ka to 800 ka).

At present the details of the proposed development retain a degree of flexibility within the Rochdale Envelope approach and will not be finalised until the detailed design phase, post consent. The primary mitigation approach, both onshore and offshore, is avoidance and therefore should entail preservation in situ of any significant archaeological remains. However, the extent, nature and significance of the archaeological remains, both onshore and offshore, has not yet been fully determined and it is uncertain that avoidance will be a practical option given the engineering requirements of the proposed works. The Applicant would be required to conclusively demonstrate that there is potential to avoid impact on any significant concentrations of archaeological remains where preservation would be the most appropriate mitigation strategy. Prior to the DCO application we would expect the results of all desk based assessments and geophysical surveys to be combined in order to identify any concentrations of archaeology which may be difficult to avoid through design. Any areas where there is little or no opportunity through design to avoid these archaeologically sensitive areas would need to be evaluated through a programme of trial trenching prior to the submission of the DCO to ensure that a suitable mitigation strategy, including preservation can be proposed.

In addition, there may be cumulative direct effects with the North Falls OWF. The North Falls OWF will follow the same or very similar onshore ECC, substations and

cable routes. It is unclear how much flexibility in design there will be, with both wind farms following similar designs, with regard to avoiding archaeological remains of high significance when no intrusive archaeological fieldwork has been undertaken. This would be of significance for any Palaeolithic sites which are rare and highly significant.

At present there are also no proposals for outreach and enhanced public understanding as part of the mitigation beyond appropriate publication of the results of archaeological investigations and archiving. It is considered there would be scope to demonstrate a commitment to delivering enhanced public understanding/benefit and legacy as part of the mitigation considering the significant size of the scheme and the interest in the heritage of the area. The details of outreach should be included within an outline Written Scheme of Investigation for both onshore and offshore archaeology.

RE: Volume 3, Chapter 7: Table 7.8: Additional mitigation relating to Onshore Cultural Heritage and Archaeology - An agreed programme of archaeological investigation work will be put into place to ensure that any heritage assets or deposits of geoarchaeological/ palaeoenvironmental interest that may be present could be identified and recorded. Further details of this will need to be provided in the ES and the submission of an Outline Written Scheme of Investigation.

RE: Volume 3 (Sub-section 7.10.2) - Kesgrave sand and gravel was found at 9.2 m below ground level (bgl) in BH203 (although this is likely to vary across the route area). As these deposits are likely to be deeply buried it is likely that these deposits may only be affected through deep excavations at HDD sites and not by the excavations for the Onshore ECC trench. The geoarchaeology DBA identified that the Kesgrave deposits lie at depths that will be impacted upon, in places, by the cable trenches. The discovery and identification of any Palaeolithic and Mesolithic sites within the development area would be considered of high significance. The impact of the whole development on geoarchaeological remains including potential Palaeolithic remains will need to be considered and not just at HDD sites.

RE: Volume 3 (Sub-section 7.17.1) - The following steps will be undertaken to progress the onshore archaeology and cultural heritage from PEIR stage to DCO application stage;

- Completion of the walkover survey (subject to access and constraints) and an additional walkover survey of the foreshore/inter-tidal zone within the RLB (subject to conditions)- This should be presented as a report in the Appendix
- Archaeological and geoarchaeological monitoring of future geotechnical works, if such works are required for engineering purposes; These should be used to inform the site deposit model and update geoarchaeological character zones if

necessary. This would be beneficial to the existing site deposit model which is based on minimal information.

Additional Next Steps are considered necessary in advance of the DCO submission:

- Production of report on archaeological trial trenching and geoarchaeological test pits within the SSA West Area. To be submitted as an Appendix and results of geoarchaeological test pits to inform on site deposit model and geoarchaeological DBA which should be updated with any relevant information.
- Illustrative plan of archaeological evidence including geophysics, APs and HER overlaid and identification of any archaeological sensitive areas (where mitigation by design may not be possible).
- Production of Outline WSI to set out approach to assessment and mitigation- This will need to include opportunities for the enhancement of heritage assets, and how the project might deliver public (heritage) benefit. The ES should aim to make clear public heritage benefits and outreach as part of planned mitigation

RE: Historic Environment DBA (Sub-section 5.7.1) - A map regression should be included in an archaeological DBA which would help identify any heritage assets that may no longer be extant but which may have associated below ground remains. Any assets identified will need to be plotted and listed as an additional heritage asset.

RE: Volume 5 Annexe 7.4 - Only three boreholes have been monitored and two historic borehole records used to create a stratigraphic model. This would not be considered robust enough to make conclusions across the whole scheme. The report states that the gravel deposits are deeply buried, and conventional archaeological evaluation of this buried land surface is unlikely to be practical. This is based on one borehole record, the geoarchaeological DBA notes that the Kesgrave gravels are present at much shallower depths. The report needs amending to clarify this and should be updated as new information becomes available. A site deposit model across the entire scheme would be beneficial.

RE: Volume 5 Annexe 7.3: Geoarchaeological Desk Based Assessment - The geoarchaeological DBA has presented a very high-level assessment based on existing BGS borehole data and desk based research. It has created a basic deposit model and zoned the route into Geoarchaeological Characterisation Zones (GCZs). This approach is considered appropriate however the interpretation is based on a limited number of borehole records and should be supplemented with purposive borehole data which includes analysis and interpretation of the sediments from the

borehole cores. Any geotechnical boreholes taken prior to DCO submission should be monitored by a geoarchaeological specialist in order to refine the model.

The DBA has identified that the Kesgrave deposits lie at depths that will be impacted upon, in places, the cable trenches. The discovery and identification of any Palaeolithic and Mesolithic sites within the development area would be considered of high significance.

RE: Volume 2 Ch.11 Offshore archaeology and Cultural Heritage - Commitment to avoid heritage receptors is preferable, the success of this will depend on the accuracy in the identification of Archaeological Exclusion Zones and the practicality of avoiding these by design. This information should be clearly presented in the ES to ensure there is flexibility in design to achieve the mitigation proposed.

RE: Offshore archaeology and Cultural Heritage Technical Report Volume 4.11.1 - There are a number of maps depicting the Archaeological Exclusion Zones. It would be beneficial to overlay all AEZ's onto one map to determine where there may be design issues where mitigation by avoidance is not feasible and to identify areas at the earliest opportunity where further investigation may be required to understand the nature and significance of the marine heritage assets that may be impacted upon by the development.

RE: Volume 4.11.2 - The Mitigation methods listed (other than avoidance) include geotechnical campaign and archaeological watching briefs. Any AEZs within the intertidal zone could be of high significance and there would be potential for more traditional 'land-based' archaeological investigation techniques to be proposed should a direct impact be identified. The potential for archaeological evaluation within the intertidal zone should be explored and considered as a mitigation method. Clarification is needed on how the offshore fieldwork will be presented, and results fed back into the site deposit model. More information on methods of publication is required, should this be appropriate and proposals for outreach and enhanced public understanding should be included as part of the mitigation.

RE: Volume 4.11.2 (Table 4 Pg 22) - Table 4 states London Clay -Sometimes referred to as Till. London Clay is not a till deposit. This needs to be amended.

RE: Volume 4.11.2 (Sub-section 8.7.1) - The WSI indicates that Post-Fieldwork Assessment is currently not expected. Provisions should be made for the need for post-fieldwork assessment in the case where archaeological evaluation or archaeological watching briefs may be required.

RE: Volume 4.11.2 (Sub-section 8.7.4) - The spot-dating of all pottery from any investigation. Specialists may be required for identification of any ceramic finds, named specialists should be included in the WSI. In addition, a flint specialist would be required to identify any flint artefacts.

RE: Volume 4. 11.2 - No archive is suggested

Ecology

We have reviewed the PEIR Volume 3 in particular Chapter 4 Onshore Biodiversity and Nature Conservation Rev A together with the related Onshore Annexes for Chapter 4 (Five Estuaries OWFL, March 2023). We note that as expected, some of the ecological survey results are from North Falls OWF as part of the agreed shared approach and that the final site selection for the onshore substation has not been made yet.

We welcome Chapters 7.2 Schedule of Mitigation, 7.3 Draft Code of Construction Practice (CoCP) and 7.5 Landscape and Ecology Design Principles. We note that no reporting in respect of biodiversity net gain assessment will be included at PEIR as set out in Volume 5 Annex 4.14 (Five Estuaries OWFL, Feb 2023) Volume 5 Annex 4.14 BNG Approach Section 5.1.3.

We note that ecological field survey and/ or reporting is ongoing (except for plants, GCN and some bird species) and we are satisfied that the ecological impact assessment has been undertaken in accordance with CIEEM guidelines.

RE: Vol 3 Chapter 4 section 4.7.5 and Table 4.9 - We note the limitations to non-breeding bird surveys and that, adopting a precautionary approach, could form a significant proportion of nearby SPA/ Ramsar non-breeding populations. We would appreciate clarification on whether any land within the RBL is considered to be functionally-linked to notified birds for the Habitats sites within scope of the HRA report and what mitigation will be needed to avoid adverse effect on integrity.

RE: Vol 3 Chapter 4 section 4.8.9 and Table 4.9 - We note that four hedgerows within the survey area are considered to meet the definition of important hedgerows' in relation to wildlife and landscape criteria under the Hedgerow Regulations 1997, as shown on Figure 4.4. We welcome the clarification that additional important hedgerows may be identified following analysis of protected species survey results and await further detail.

RE: Vol 3 Chapter 4 section 4.10.1 4.8.9 and Tables 4.11 and 4.13 - We welcome the embedded mitigation measures and commitments made to be secured by Requirements of any DCO made e.g. draft CoCP & LEMP. These should also relate to Priority s41 species as well as protected and notable to allow SoS to demonstrate they are meeting their NERC duty ahead of Env Act enhanced duty becoming mandatory. We also welcome the preliminary mitigation and compensation in Table 4.13 with the additional of s41 in the Table name as the term notable does not include all Priority s41 species.

RE: Vol 3 Chapter 4 Table 4.12 and Vol 7 Chapter 5 - We recommend that the creation option for natural regeneration of woodland/scrub is added to the

Landscape and Ecology Design Principles to be used where appropriate to increase habitat connectivity.

RE: Vol 5 Annex 4.14 BNG Approach section 5.1.3 - We note that, to account for potential changes to the detailed scheme design, once detailed design is known the Metric will be re-run, and the Biodiversity Net Gain Final Design Report shall be prepared.

Arboriculture

A desktop study has been undertaken regarding the route of the underground cabling and substation positioning of this proposal. Although the area indicated looks to be primarily farmland, an arboricultural survey and impact assessment should be undertaken to assess the quality of the existing trees along the length of this route, as well as to identify any ancient woodland or veteran trees that could pose a constraint on the scheme.

This assessment should be undertaken in accordance with 'British Standard 5837:2012 Trees in relation to design demolition and construction – Recommendations' and should provide details on trees and shrubs to be retained and/or removed, the impact on them, and any constraints. This will identify any trees within the site that would pose a constraint to this development and if they are of sufficient quality to merit protection and/or retention. Once this is ascertained an arboricultural method statement and tree protection plan will be required to ensure no preventable damages are made during the development.

If trees pose a constraint or their removal is required for this development to proceed than replacement planting opportunities could be incorporated into the design through methods such as native hedgerows and SUDs schemes and should be presented with the submission of a Soft Landscaping Plan. Good species selection would allow for an enhanced provision for wildlife and bring long term ecological benefits to area to potentially mitigate any disturbance during construction. The area of land chosen passes closely to residential areas and there may be trees on site that hold special cultural or personal value to the residents. This could prove a source of contention if trees are seen to have high amenity value. Consultation with the residents should be undertaken once the tree impacts and methods has been established.

It has been mentioned in the inspectorate report and the Landscape and Visual Amenity Assessment that the development should avoid mature woodland, historic woodland and important hedgerows however, it is impossible to assess the impact this proposal will have on trees without knowing the precise location of the built structures/hard surfacing and the route the cabling will be taking. Whilst considering the design, the site access route must also be considered as it would be inappropriate to remove mature trees for temporary access.

Socio Economics and Skills

Documents in support of the consultation have been considered and the following points are made:

3.1.3 - We welcome and agree with the assumption that there is potential for long-term socio-economic benefits to the community resulting from investment into skills, including green skills, providing a lasting legacy. However, we are of the opinion that skills and workforce planning needs to commence immediately. We need a 'skills pipeline' lead up time to construction and operations.

3.2.37 – there is an error in the title of the document referred to here. It should say 'Skills for Essex Strategy and Action Plan'. However, this plan has now been superseded by the Essex Skills Plan 2023, and the emerging Local Skills Improvement Plan (LSIP) 2023.

Table 3.2 – Whilst we understand that current levels of employment are unknown, we'd expect that the nature of the employment should not be an unknown to the developer. We reiterate our previous feedback in the PINS scoping opinion which is that the developer should clearly set out the assumptions about the number of workers required and the skills profile(s) at this early stage. This will inform engagement with local skills providers, educators and Essex County Council. A construction and operational workforce profile would also need to be scoped as this information is required for us to help prepare the workforce for the future. This can be confirmed at ES stage, but early work on this is needed.

Climate Change

ECC notes the submission of details pursuant to climate change in Volume 3 Chapter 11 of the submission.

ECC notes that each PEIR chapter, where relevant, considers the issue of climate change, this being set against both National and County expectations. It states: *Further information in relation to climate change will be included in the ES which will accompany the DCO application when more detailed project information will be available.*"

ECC looks forward to the receipt of the as promised details at DCO submission.

Tourism

As stated by Tendring Council Tourism is a major part of the District economy providing a wide and diverse range of tourism opportunities as it makes the most of its rural seaside location which is well connected to the wider region by means of a variety of transport modes. Options include hotels, guest houses, holiday parks,

camping and caravanning, attracting significant number of visitors if all age ranges in a variety of settings. One of Tendring's stated Local Plan priorities is to

Associated with this is the as set Tendring priorities as at Policy PP9 to PP 11 in the Local Plan and Objective 10 within the same *"to work with partners to provide an enhanced environment for tourism and the maritime sector and its associated services."*

The Cultural, Visitor and Tourism sector encompasses a range of activities which play an important role in the District's economy. This sector is worth more than £353 million per annum to the economy and is estimated to provide 7,900 jobs across Tendring District. The majority of jobs and businesses in this sector are located in and around Clacton. Figures from the Economic Strategy 2019 show that tourism employment has grown by 35% over the last five years.

The cumulative impacts of the entire project on the transport infrastructure, in particular any challenges around heavy plant traffic impact across the proposed routes at busy times of the year, will need to be assessed against any potential impact on access to tourism facilities within the District. Whilst it is correct that these are assessed in detail in PEIR Volume 3 Annex 3.8 Traffic and Transport, seasonal increases as a result of tourism will need to be looked at and mitigated as required to safeguard and where possible enhance the impact the development would have on the tourism sector to protect its attractiveness of the same and safeguard socio economic interests and enhance the same wherever possible.

As such it would be necessary to see a full outline of the impacts on tourism will be mitigated. The PEIR Volume 3 Annex 3.3 Socio-Economic, Tourism and Recreation cites potential impacts on the identified sites as 'negligible'. However and to assess the impact this development would have on this important sector this should be monitored and further work carried out as necessary, at sites at landfall are popular destinations. The cumulative impacts of the entire project on the transport infrastructure, in particular any challenges around heavy plant traffic impact across the proposed routes at busy times of the year. Again, whilst these are assessed in detail in PEIR Volume 3 Annex 3.8 Traffic and Transport, seasonal increases as a result of tourism will need to be looked at and mitigated as required.