

Local Impact Report for Equinor New Energy Limited Makes land fall at Weybourne for the Sheringham Shoal Offshore Wind Farm Extension Project and Dudgeon Offshore Wind Farm Extension Project by South Norfolk Council

Your reference EN010109

Introduction

This Local Impact Report (LIR) has been prepared by South Norfolk Council in accordance with the advice and requirements set out in the Planning Act 2008 (as amended) as, '*a report in writing giving details of the likely impact of the proposed development on the authority's area (or any part of that area)*'.

In preparing this LIR the local authority has had regard to the DCLG's *Guidance for the examination of applications for development consent* (2015) and the Planning Inspectorate's Advice Note One, *Local Impact Reports* (2012).

The LIR relates only to the onshore elements and identifies the most relevant policies and the main issues the Council has concerns over.

Details of the proposal

The Application is for development consent to construct and operate two offshore wind farm generating stations, known as Sheringham Shoal Offshore Wind Farm Extension Project (SEP) and Dudgeon Offshore Wind Farm Extension Project (DEP), both located off the coast of Norfolk (together "the Projects"). SEP is the proposed extension to the operational Sheringham Shoal Offshore Wind Farm and will comprise up to 23 wind turbine generators, together with the associated onshore and offshore infrastructure. The offshore export cable corridor from SEP to landfall will be approximately 40km in length and the onshore cable corridor will be approximately 60km in length. DEP is the proposed extension to the operational Dudgeon Offshore Wind Farm and will comprise up to 30 wind turbine generators, together with the associated onshore and offshore infrastructure. The offshore export cable corridor from DEP to landfall will be approximately 62km in length and the onshore cable corridor will be approximately 60km in length.

The project will make landfall at Weybourne, North Norfolk with a buried cable route between Weybourne and grid connection at Norwich Main National Grid Substation. The route will run through three Local Authorities North Norfolk, Broadland and South Norfolk.

The substation/converter is to be located at a site south of Norwich Main, immediately west of the Norwich to Ipswich rail line. Accessed via the A140 and then Mangreen Lane (currently part of the operational access to Norwich Main). The substation will be open Air Insulated Substation. The substation would comprise of up to 2 Control buildings; up to 2 Static var compensator (SVC) buildings if required; transformers, reactors etc. and ancillary and supporting equipment. The largest buildings within the substation will be the control building and SVC building with a maximum height of 15m. Both buildings are anticipated to be single storey, cube or cuboid shaped. The detailed design and materials of the substation/converter does

not form part of the application; however, the maximum design parameters have been provided. The tallest feature within the onshore substation site will be the lightening masts at a height of 30m.

Relevant development proposals under consideration or granted permission but not commenced or completed

National Highways NSIP's:

A47 – A11 Thickthorn Junction – TRO10037, granted consent 14 October 2022

A47 North Tuddenham to Easton – TRO10038, granted consent 22 June 2022

Hornsea Three Off-Shore Wind Farm NSIP - EN010080, consent granted 31st December 2020 and discharge of requirements being submitted to LPA's

East Anglia Green Energy Enablement (GREEN) Project; pre-application stage – non statutory consultation.

Land at Honingham, adjacent to Easton
Greater Norwich Food Enterprise Zone Local Development Order ref 20170052

2021/2495: Land North and South of brick Kiln Lane, Swainsthorpe.
Installation of a solar farm comprising ground mounted solar panels, access tracks; inverter/transformers, substation; storage, spare parts and welfare cabins, underground cables and conduits, perimeter fence; CCTV equipment, temporary new site entrance and access track, temporary construction compounds, and associated infrastructure and planting scheme. Application is accompanied by an environmental statement. Approved with Conditions.

2021/2645: Land North of Stoke Lane, Dunston
The installation and operation of a Battery Energy Storage System to provide standby emergency electricity for National Grid in times of high electricity demand or when renewable energy projects are unable to fulfil demand. This would be for the installation of 130MW of modular battery units with ancillary equipment, including power conversion units, 132kV transformer compound, metering cabinet, switch room, DNO control room and welfare container. Approved with Conditions.

2022/0867: Land East of Main Road Swardeston
Construction and operation of Energy Balancing Infrastructure (EBI) comprising energy storage technology, to form up to two areas of modular or containerised structures. To include containerised or modular battery array, transformers and inverter area, switchgear and control room building(s), connection of EBI plant to the Hornsea Three Onshore Converter Station (ONCS), required access and internal roads, drainage systems, perimeter and internal fences, and required external lighting and lightning pylons. Development is located within the Hornsea Three ONCS area as consented by the Hornsea Project Three Offshore Wind Farm Development Consent Order (DCO) in December 2020. The application is accompanied by an environmental statement. Approved with Conditions.

Relevant development plan policies, supplementary planning guidance etc

The following policies are considered relevant to the consideration of this application (relevant extracts of each policy are attached as Appendix 1).

Joint Core Strategy for Broadland, Norwich and South Norfolk (JCS) adopted in March 2011, amendments adopted January 2014.

Policy 1 : Addressing climate change and protecting environmental assets
Policy 2 : Promoting good design

South Norfolk Local Plan (SNLP)

South Norfolk Local Plan Development Management Policies, adopted October 2015

DM1.4 : Environmental Quality and local distinctiveness
DM3.8 : Design Principles applying to all development
DM3.13 : Amenity, noise, quality of life
DM3.14 : Pollution, health and safety
DM4.4 : Natural Environmental assets - designated and locally important open space
DM4.5 : Landscape Character Areas and River Valleys
DM4.8 : Protection of Trees and Hedgerows
DM4.9 : Incorporating landscape into design
DM4.10 : Heritage Assets

The relevant issues are considered to be as follows:

Design for the substation

Policies DM3.8 of SNLP, Policy 2 of JCS and Section 12 of the NPPF require high quality design with importance being attached to the design of the built environment, which is seen as a key aspect of sustainable development.

The form is simple and driven by the functional requirements of the substation and is typical of the substations required for this type of development. The buildings are anticipated to comprise a steel framed structure with roofs and wall constructed of prefabricated, insulated panels. As set out above the detailed design and materials of the substation does not form part of the application.

The Council fully appreciates that the design of the substation is functionally lead, however key to trying to mitigate the impact of the substation on the open countryside, which is presently a rural landscape setting, is the careful consideration of the material palette in particular its colours. Given the size and scale of the substation (15m in height) landscaping/planting will not minimise the impact of the substation at its higher level. The Council notes that Requirement 10: Detailed design parameters onshore, includes external appearance and materials are to be agreed with the Local Planning Authority. Should the proposed development be granted consent, the Council would wish to work with the applicant to ensure

appropriate and sensitive materials and colours are used in the development, having regard to minimising its impact on the character and visual appearance of the area.

Heritage Assets

Heritage issues arise from both the underground cabling and the installation of the substation. This includes impacts on conservation areas and listed buildings which should be assessed in relation to policy DM4.10 of the SNLP and Section 16 of the NPPF.

The Council note that para 107 of the applicants submissions states:

“The assets identified above were found to either not share intervisibility or had limited intervisibility with the onshore substation and associated infrastructure and the offshore infrastructure. This was considered to have little to limited change on their setting, and due to their distance from the above ground onshore and offshore project infrastructure, no significant impacts to heritage setting (and associated importance) were identified and no further action is considered to be required. This is further evidenced in Section 21.6 and Appendix 21.4 and 21.5.”

Paragraph 30 has screened out the setting of various assets having taken into account the LVIA wireframed on potential impact on setting. The Council agrees with this.

While the majority of heritage assets are agreed to have no significant adverse effect, three assets remain: Church of St Peter, Church of Holy Cross and Church of St Mary Magdalen.

With regard to these assets, St Peter’s Church in Swainsthorpe due to the height of the tower shares intervisibility between it and the application site. However, with the distance between the two ; the nature of the proposed construction; and the ability to appreciate the significance of the asset from many other viewpoints it can be concluded that the impact on the setting of the asset is negligible or non-significant and therefore has been discounted in ES terms. This is agreed by the Council.

In regard to the Church of the Holy Cross, due to topography there may some intervisibility from the top of the tower and the application site, however having regard to the distance involved and the lack of intervisibility at a lower level due to topography, it is concluded that there will be no significant adverse impact on the setting.

Lastly in relation to the heritage assets, is the impact on the setting of The Church of St Mary Magdalen in Swardeston. Similarly, to the assets previously referred to, intervisibility between the asset and the application is only possible with the top of the church tower. Having regard to the separation distance between the two and the ability to appreciate the significance from many other viewpoints, there is considered to be no significant adverse impact on the setting of the church.

The Council agrees with the above assessment of the designated heritage assets.

In the Council's relevant representation, it raised that further clarification needed to be undertaken regarding the impact of the project on Ketteringham Hall Park which is a historic parkland and garden although not registered which is identified on Historic Environment record and can be considered a non-designated heritage asset. The applicant has acknowledged that the Park is a non-designated heritage asset and has responded to the Council advising that they are proposing a Trenchless route section of the cabling where the route crosses the historic parkland. The Council welcomes this approach.

The Examining Authority has in its questions, has asked the Council to set our position on the significance of Ketteringham Hall Park as a non-designated asset and the features that contribute to its significance and setting. Also, in accordance with the NPPF, set out the harms weighed against the public benefits. Whilst the Council has responded to the question separately, it considered that the comments should also form part of this report.

The Council would comment as follows:

The area known as Ketteringham Hall Park is the historic parkland created for and associated with Ketteringham Hall. The present Hall, still standing, dates from the 1830's and is grade II. Parts of the park date from an earlier house on the site and appear on Faden's Map of 1797 although not the area of the wider park area that the cable is running through. The Park is registered on the HER (NHER 44333) which states it was in existence by the late C18 and is shown in detail on C19 Maps. The historic remains of the parks now date from the C19 design which was the last major period of planting.

The part of the park closer to the hall remains parkland in character, however the part of the park which the cable route runs through is a more peripheral parkland area that has been turned to arable. This area has been ploughed in the past and lost parkland trees within fields, although the plantations remain as parkland features including an oval clump which is referred to on the 1880s 1st edition OS map as 'The Oval' and a plantation area called "Norwich Hill". Even by the 1880s maps these areas were outside the main area of recreational parkland which are identified with different shading – however clearly these features are areas of estate tree planting associated with the hall. These plantation areas therefore remain of some heritage significance as remnants of historic plantation estate tree belt planting, and 'the oval' in particular as a distinctive parkland feature which might have had some purpose for the state such as being used for game bird shooting for example. In accordance with table 21-6 in the EIA, we would accord the remains of the park, being a non-designated heritage asset and not a designated heritage asset and of local importance only, to be of low significance.

In terms of impact the electricity line will pass through the northeast of the park through a field and through plantation planting called on the OS 1880s Maps known as "The Oval" and "Norwich Hill" and which are both features of the parkland landscape. When passing through the cultivated area the cable will be trench dug, whereas it will be tunnelled at a depth of 10m under the plantation areas. This is shown on sheet 17 document 6.2.4. In the short term there will be some minor harm resulting from trench digging within the arable area which over time will revert back to the original appearance. Overall, therefore it is considered that there will be minor temporary short-term harm and impact but no long-term harmful impact to the heritage asset so there is negligible short-term harm and no long-term harm. Paragraph 203 has been taken into account and it is considered that there is no requirement to carry out a planning balance assessment.

Landscape and visual impact

The key landscape and visual impacts will result from the laying of underground cabling in respect of the removal/loss of hedgerows, trees and the impact of the substation on the landscape character and visual amenities of the area. The proposed substation is located within the B1 Tas Tributary Farmland Landscape Character Area and to the west of the A1 Tas Rural River Valley. Policies DM4.5, DM4.8 and DM4.9 are relevant in the consideration of the proposal.

Landscape and Visual Impact – The Council is satisfied that the work has been undertaken in accordance with the accepted industry guidance. Whilst there are some points of detail that may merit further scrutiny/debate, which is often the case when judgement is involved overall, generally we concur with the findings. Landscape and visual impacts, although linked, are treated separately.

For landscape impact, the greatest effect is on the site of the proposed sub-station; the LVIA concludes that the impact would be moderate significance adverse but that this would diminish outside the site where the effects would not be significant.

With regards to the visual impact, the most significant visual effects (major adverse) are from PRowWs, permissive bridleway and Gowthorpe Lane. The application submission advises: *“The LVIA is based on a ‘mitigation by design’ approach, which means that landscape considerations have been accounted for as an integral part of the design process and therefore, appropriate landscape mitigation measures required to reduce the effect of the Proposed Development on landscape character and views have been incorporated into the design of the project and the assessment of effects, and it is assumed that this mitigation forms part of the final design.”* The Council agrees that the effect of the development will be major adverse. In respect of mitigation, it is noted that additional planting to further screen the substation is proposed however, the planting will take a long time to establish. It is also considered that some of the degree of harm can be mitigated against through use of carefully considered materials and colours, as the Council has set out above.

As the assessment work is limited to some degree by the fact that final form of the proposed substation is not known at this stage, the visualisations are based on a buildings modelled at 15m high and external equipment modelled at 30m high. From these it is clear that full visual mitigation from planting will not be possible, especially if the structures are to the maximum height modelled.

In respect of the impact of the cable route, the Arboricultural Survey Report survey identifies the trees and constraints within parts of the DCO boundary, but not all. The Council considers that the tree/hedge details for the whole corridor should be provided, this should also include veteran trees which maybe outside the corridor but could still be impacted. Although it is accepted that currently no veteran trees/ancient woodland are shown to be removed or impacted on, as stated above we still do not have a survey for the whole route. The only veterans/ancients which have been picked up are those which are recorded on the Ancient Woodland/tree Inventory. The Council know that there are many smaller ancient woodlands and veteran trees which are not recorded, so again in the absence of a full survey we cannot say categorically that none will be lost or harmed by the proposed

development. This applies to trees within the DCO boundary as well as those outside but still within buffer zones.

Currently there is not an assessment in line with the 1997 Hedgerow Regulations, in the absence of the information in terms of the 'importance' of hedgerows under the Hedgerows Regulations and assessment of trees implicated in the scheme, it is not possible to conclude on the impacts of the cable route. Our local plan policy DM4.8 presumes in favour of retention of important hedgerows unless the need for, and benefits of, a development clearly outweigh their loss.

The Council understands that any section of hedgerow that has to be removed as part of the cabling will be replanted, which does lessen the concern about potential loss of 'important' hedgerows (especially if their status is solely because of an historic line). However, we need to be clear as to when replanting may not be possible, or when the 'importance' of a hedgerow cannot be safeguarded.

From experience of other NSIPs in the Councils area, the Council would bring to the Examiners attention that the lack of a full survey's at the time of the assessment and consideration of the DCO has led to a greater loss of trees/hedges and woodlands at the Discharge of Requirements stage that had been accounted for during that determination. Not only has this put the Council in a difficult position wishing to protect its natural environment, but also has not enabled the full implications of the proposed development to be considered during the determination of the development, as it should be. Furthermore, the Council has had to deal with additional hedge/tree removal outside of the order limits to facilitate NSIP development, this makes it difficult to ensure adequate mitigation/compensation is provided.

It is also noted as above that the cable route is passing through Ketteringham Hall Park and through some planted plantation belt historic feature "The Oval". The applicant has responded to the Council advising that they are proposing a Trenchless route section of the cabling where the route crosses the historic parkland. The Council welcomes this approach.

The Council would bring to the Examiners attention the location of the Hornsea Project Three substation, the Energy Balancing Infrastructure, the infrastructure for the provision and storage of energy; and the East Anglia GREEN electricity pylons as set out in the relevant development projects. The Council continues to be concerned, the combined impacts of these developments proposed and consented, which are located around Norwich Main, together with this proposed substation, will have on the District's rural landscape.

Noise and Pollution

The key noise and pollution considerations are the impacts of the construction of and the operation of the proposal on the amenities on local residential in respect of air quality, water quality, noise and vibration, light pollution etc. Policy DM3.13 and DM3.14 are relevant to the consideration of the proposed development.

The Council considers that the documentation would indicate that the proposal could take place (both the construction and operational phase) without an unacceptable impact on residents, if managed and operated appropriately.

In view of the above, with regards to specified works to be undertaken issues relating to Control of Noise, Air Quality, Artificial Light, Waste Management, Pollution Prevention, Contamination Assessment and Mitigation and Working Hours are adequately covered by the Requirements in the Draft DCO. The Council is in general agreement and appreciates that the exact wording of the listed documentation/requirements will be subject to further discussion with the applicants.

Ecology

Policy 1 of the JCS requires the development to both have regard to and protect the biodiversity and ecological interests of the site and contribute to providing a multi-functional green infrastructure network. Policy DM4.4 looks for new development sites to safeguard the ecological interests of the site and to contribute to ecological and Biodiversity enhancements.

The Council considers that all developments should take all reasonable opportunities to enhance biodiversity to achieve a net gain for nature. To achieve this the application should adhere to the mitigation hierarchy (providing effective avoidance, minimisation and compensate measures) and deliver biodiversity net gains.

The scope for terrestrial ecological surveys has been previously agreed and surveys of 90% of the route were undertaken between 2020-2021 by suitably qualified and experienced ecologist in line with best practice guidelines. The Council would also encourage the applicant to update the desk top study as our County Wildlife Sites were recently updated.

The cable route has been designed to avoid impacts where possible and further micro-siting is expected at the detailed design. The Council would encourage the applicant to explore further opportunities to avoid/minimise impacts in partnership with other schemes in the area as the schemes develop and are delivered.

The ES provides an outline for mitigation and the Council welcome the use of native species of local provenance and biodegradable tree guards. The proposed mitigation will be reviewed and adjusted as the design progresses. Consideration should be given to the use of moveable 'hedges' which could be placed within hedge gaps at night and removed the following day, to provide for continued connectivity. These have been proposed and will also be trailed by another linear scheme.

Should reptile translocation be required, the translocation site will need to be identified, secured, and maintained for at least the lifetime of the scheme.

The applicant is committed to deliver biodiversity net gain (BNG) and an Initial Biodiversity Net Gain Assessment has been undertaken. At the present time it is anticipated that the scheme will deliver a 0.50% net loss in habitats, and a 3.02% net gain in hedge units. Because it is not possible to offset the loss of habitat units

against the gain in hedge units additional work will be required to deliver net habitat gains to ensure the scheme complies with National Planning Policy. With regards to the delivery of BNG we would encourage consideration of the Local Nature Recovery Strategy which should be published by November 2023, and compliance with best practice guidelines to ensure that BNG is delivered post-construction.

Letters of No Impediment (LoNI) have been received from Natural England for bats and badgers and great crested newts will be licenced under the District Level Licensing Scheme. No other licences are anticipated to be required based on the information obtained to date although additional ecological surveys will be undertaken on the remaining 10% of the route to inform the detailed design. In line with best practice Reasonable Avoidance Measures should be employed to minimise impacts on great crested newts and we would encourage the design of a wildlife friendly surface water drainage scheme, with Sustainable Urbans Drainage Systems designed for the benefit of wildlife.

Again, as part of the Council's experience in Discharging Requirements, it is evident that the cabling routes have an impact that South Norfolk need to have regard to for Pink-footed Geese. This impact results from the grazing of the Pink-footed Geese on post-harvest cereal stubs, sugar beet tops etc. A Pink-footed Geese management plan will need to be a requirement of any consent which should set out a clear understanding of their impact and protection needs during the winter months when vegetation removal for the development is most likely to happen.

Overall, following mitigation which will be secured via the DCO, the scheme is predicted to have negligible or minor adverse impacts on ecological receptors i.e. the impacts would have minimal effect at the lower end of the scale, but could adversely affect an ecological receptor but would not adversely affect the integrity or conservation status at the other end. The ES has addressed inter-relationships between ecology, water and air, noise, and vibration.

Socio-economic and community matters

In general, the District Council is supportive of the project, recognising its importance in relation to the diversification of UK energy supplies; the contribution the projects will make to the achievement of the national renewable energy targets toward net zero; the reduction of the UK's reliance on imported energy and increased energy supply security; and potential contribution to the national and local economy. South Norfolk Council continues to raise concerns that there will be no direct local benefit in terms of electricity supply, given that South Norfolk is hosting a number of NSIP's and infrastructure for the provision and storage of energy.

The economic benefits in terms of investment and job creation are welcomed.

Consideration of the draft order

With regards to the Draft Development Consent Order, the Council in general terms does not wish to raise any concerns, however as set out in our Statement of Common Ground and in response to the Examining Authority's questions there are

issues and concerns relating to specific requirements/conditions. The Council wishes to reserve its position due to ongoing discussions with the applicant.