

Norfolk County Council Comments on Sheringham and Dudgeon Extension Projects

Section 56 Submission Development Consent Order (DCO) Application

1. Introduction

1.1. The principal role of the County Council in responding to the above windfarm proposals, and the onshore infrastructure requirements, is in respect of the Authority's statutory role as:

- Highways Authority
- Minerals and Waste Planning Authority
- Lead Local Flood Authority
- Public Health Responsibilities

1.2. In addition, the County Council has an advisory environmental role and economic development function, which also needs to feed into any response made to the above windfarm proposals.

1.3. Other statutory consultees include:

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| Natural England | Highways England |
| Historic England | Drainage Boards |
| Marine Management Organisation | Public Health England |
| Maritime and Coastguard Agency | Energy and utility companies with cable and pipeline interests |
| Civil Aviation Authority | Parish, Town, District and other County Councils |

2. Previous Comments

2.1. In relation to the previous comments submitted of the Section 42 consultation and the County Council raised the following points (June 2021):

- The principle of the project is supported;
- Consideration of feeding electricity into local transmission networks to facilitate planning housing and employment growth;
- A requirement for an Employment and Skills Strategy;
- Compensation for those affected by the cumulative impacts of construction, including local businesses and fishermen;
- Concern over the cumulative impacts of the Sheringham Extension Project (SEP) and the Dudgeon Extension Project (DEP) being developed separately;
- Concern over the onshore cable route, requiring this route to not fetter the highway improvement schemes in Norfolk, including the Norwich Western Link and A47 improvement schemes;

- Historic Environment Team requiring additional geophysical surveys.
- 2.2. And the following points were raised from the main construction compound consultation:
- The County Council supported the location of the main construction compound being at the greenfield site at Attleborough (A1067 Fakenham Road);
 - The Lead Local Flood Authority required the applicant to consider surface water drainage issues at the main compound site;
 - The Natural Environment team required a 10m stand-off between the compound and the trees to the southeast of the site.
- 2.3. The above comments have largely been positively considered and addressed by the applicant or will be addressed through on-going DCO process.

Strategic Comments on the Development Consent Order Submission

3. Grid Connection and Electricity Supply

- 3.1. The SEP and DEP will feed directly into the National Grid at Norwich Main. The submitted DCO does not extend beyond the onshore cable routes and grid connection infrastructure at Norwich Main. There are separate proposals by National Grid to reinforce the electricity transmission network (400 kV overhead power lines) between Norwich Main substation and Tilbury substation in Essex, known as the East Anglia Green (EAG) Project. This project, which is still at the pre-application stage, is needed according to the National Grid to increase capacity into the existing network to cater for additional electricity generated principally from the offshore wind energy sector.
- 3.2. The County Council in responding to the non-statutory consultation on the East Anglia Green (EAG) project (June 2022) indicated, *inter alia*:
- “Any new electricity infrastructure needs to benefit Norfolk as whole and be capable of supplying existing and planned growth in housing and employment (commercial development).”
- 3.3. The County Council is in continued discussions with National Grid and UK Power Networks (Distribution Network Operator) to look into the potential to feed electricity into the local transmission networks as part of the EAG project, which will be taken forward through the National Significant Infrastructure Project (NSIP) process in 2023.
- 3.4. Equinor, the Planning Inspectorate (PINS), and the Secretary of State need to be aware of these on-going issues regarding the need for improved access to new electricity infrastructure to support the planned housing and employment growth across the County; and recognise the need for joined-up/collaborative approach between the various infrastructure providers (i.e., Equinor; National Grid and UK Power Networks) to deliver power where it is needed in Norfolk.

4. **Socio-Economic**

- 4.1. Equinor have indicated through their economic modelling that their two projects could create up to 2,190 UK jobs and £124.5 million gross value added (GVA) per annum during construction. They estimate that 450 of these jobs would be in East Anglia and £23.7 million GVA generated in the Region annually assuming an East Anglia construction port is used. A further 230 jobs will be generated once operational of which 85 would be within East Anglia.
- 4.2. As previously commented the economic benefits of the above projects are welcomed and officers are working with Equinor to develop an Employment and Skills Strategy. The County Council would wish to see the applicant develop through the DCO process a strategy to accompany the development and secure demonstrable benefits to both the local economy and workforce. Such a Strategy would need to be agreed with both the County Council and the District Councils affected, along with the New Anglia Local Enterprise Partnership.
- 4.3. The County Council would also like to see a local community benefit fund set up outside the planning process, as is being undertaken by other offshore windfarm promoters, designed to support / assist those wider communities affected by the projects.

5. **Highways**

- 5.1. Detailed discussions and negotiations will remain on-going throughout the DCO application process, particularly in respect of any temporary road closures; construction traffic management plans (CTMPs); and other travel related planning. Notwithstanding these ongoing discussions, officers have assessed the impact of construction traffic on receptors along 140 roads (over 300 miles of road network) including consideration of pedestrian delay, road safety, driver delay and abnormal (large) deliveries.
- 5.2. Resulting from the above, mitigation measures will be needed including reducing construction vehicle numbers on certain routes and the use of escort vehicles and/or provision of passing places along narrow roads. An Outline Traffic Management Plan (OTMP) will be submitted as part of the DCO and then completed when the contractor is appointed. The final mitigation will be agreed with the contractor.
- 5.3. A cumulative impact assessment has also been undertaken to assess impacts with other significant projects, notably other offshore windfarms and highways schemes (e.g., widening / dualling of the A47 between Easton to North Tuddenham). Roads that could be utilised by the other projects have been identified. Officers are satisfied that the potential for cumulative impacts can be managed through the respective projects' CTMPs.

5.4. The County Council's highway officers are still carefully assessing the supporting documentation in respect of the above matters and will make appropriate comments under delegated officer powers and feed these back to PINS within the prescribed consultation period. This may include, where appropriate:

- (a) Raising any necessary holding highway objection in the event that highway safety is deemed to be compromised; and/or
- (b) Seeking Planning Conditions (Requirements) to be attached to the DCO in order to overcome any highway issue.

6. **Lead Local Flood Authority**

6.1. At present, two outline surface water drainage designs have been developed but neither has been selected as the preferred option as the applicant is not yet able to state where they are intending to discharge surface water to for disposal. Further information on the proposed surface water drainage will need to be provided for the Lead Local Flood Authority (LLFA) to review.

6.2. At this stage, the LLFA has considered the outline surface water drainage design as set out in the Outline Operational Drainage Plan; as well as the Flood Risk Assessment (FRA); Onshore Sub-station Drainage Study; and accompanying Hydraulic Modelling. At this time, further evidence and clarification of information is required to demonstrate:

- That the proposed development is in accordance with National Planning Policy Framework (NPPF) with regard to the risk of flooding. There is currently insufficient information to demonstrate that surface water arising from the development would not result in an increase of flood risk to the proposed development at the Onshore Sub-Station or elsewhere.
- There is a lack of confirmation of where the surface water drainage proposals for the onshore sub-station will drain, site specific greenfield runoff rates and volumes, the comparable post-development runoff rate and volumes proposed to prevent an increased risk of flooding elsewhere.
- The hydraulic modelling on which the FRA, which influences the proposed development design, and its associated drainage design requires updating and clarification.

6.3. As such the LLFA has a holding objection to the onshore elements of this proposal.

Reason

6.4. To prevent flooding in accordance with NPPF paragraph 167, 169 and 174 by ensuring the satisfactory management of local flood risk, surface water flow paths, storage, and disposal of surface water from the site in a range of rainfall

events and ensuring the sustainable drainage systems proposed operates as designed for the lifetime of the development.

- 6.5. The LLFA would remove its holding objection if the following issues are adequately addressed:
1. An updated FRA and Drainage Strategy that confirms the proposed surface water discharge location for the onshore sub-station.
 2. The provision of the site-specific greenfield runoff rates and volumes, the comparable post-development runoff rate and volumes.
 3. An updated hydraulic model that appropriately applies the latest climate change allowances and provides an assessment of the change in flood risk.
 4. Adequate consideration of the surface water flood risk associated with discharging to the foul sewer in Swainsthorpe and the residual risks.
 5. A maintenance and management plan detailing the activities required and details of who will adopt and maintain all the surface water drainage features for the lifetime of the development.
- 6.6. The LLFA may need to make further detailed comments on the above matters as part of the Examination process and through submission of the County Council's Local Impact Report; and if appropriate an agreed emergency flood plan for the onshore sub-station (construction and operation), landfill site (construction only) and the onshore cable route (construction only).

LLFA Detailed Comments on Flood Risk Assessment (FRA)

- 6.7. Informatives:
- The Norfolk Local Flood Risk Management Strategy was updated in 2021 with an addendum.
 - The Norfolk LLFA Statutory Consultee for Planning Guidance Document has been updated in 2022 (currently version 6) to take into account some of the recent National Planning Policy Framework (NPPF) updates and the Climate Change guidance updates.
 - The Planning Practice Guidance (PPG) for Flood risk and Coastal Change was updated in August 2022.

These updates are not fully reflected in the FRA such as those in the PPG update. The LLFA has considered the impact these changes could have and has only provided comments relating to the proposed scheme where there is a potential moderate to significant impact.

- 6.8. The FRA based on the Drainage Study identified the two most feasible surface water drainage options were either discharge to the Anglian Water Sewer in Swainsthorpe or to discharge to infiltration. However, no conclusion as to which option was preferred was reached in either the FRA or the Drainage Strategy.

The LLFA acknowledges that while neither of these solutions are preferable, the options available at this location are very limited and constrained.

- 6.9. In Plates 2 to 5 (pages 69-72), the LLFA notes the surface water hydraulic modelling results are not consistent with the latest national guidance for climate change allowances. The LLFA requires for this modelling to be updated to incorporate the latest climate change allowances.
- 6.10. In section 18.2.8.1.4, Para 455-456 (pages 72-73) the applicant should ensure staff and users also sign up for Met Office Weather warnings too, as some areas of surface water flood risk in Norfolk do not coincide with the Environment Agency Flood warning areas.
- 6.11. In section 18.2.8.1.4 (pages 72-73) where a Flood Plan is required, it should be reviewed and agreed with the Relevant Resilience and Emergency Planning teams in accordance with NPPF Para 167.
- 6.12. In the hydraulic modelling report, the hydraulic modelling must be updated for the 1% and 3.3% future scenarios in accordance with the latest climate change allowance guidance.
- 6.13. In relation to the hydraulic modelling, confirmation of either the finished ground level that was used in “Option 1” and “Option 2” for the platform or whether the existing ground levels were proposed to be used as it was not provided in the report.
- 6.14. The LLFA requests clarification in relation to hydraulic modelling of “Option 2 with Embankments” on whether the footprint of the platform was extended to account for the slope of the embankment, along with clarification of the height of the embankments.
- 6.15. The LLFA requires that the applicant provides confirmation of the change in flood risk through a series of figures depicting the areas where a change in maximum flood depth and extent are experienced between the baseline and the post development scenario.

LLFA Comments on 9.17 Outline Code of Construction Practice, Section 6

- 6.16. 6.1.8, para 118-119 (pages 33-34) the applicant should ensure that staff and users also sign up for Met Office Weather warnings too as some areas of surface water flood risk in Norfolk do not coincide with the Environment Agency Flood warning areas.

6.17.6.1.8, para 120 (page 34) should a Flood Plan be required, the applicant should ensure that it is reviewed and agreed with the Relevant Resilience and Emergency Planning teams in accordance with NPPF Para 167.

LLFA Comments on Appendix 18.2 - Annex 18.2.1: Onshore Substation Drainage Study

6.18. The Drainage Study identified the two most feasible options were either discharge to the Anglian Water Sewer in Swainsthorpe or deep bore infiltration. However, no conclusion of which options was preferred was reached in the study.

6.19. Further guidance on the information required by the LLFA from applicants [can be found on Norfolk County Council's website](#).

Detailed Comments on the DCO Submission

7. Natural Environment

(a) Arboriculture:

7.1. An Arboricultural Survey Report - Volume 3, Appendix 20.15 (Wild Frontier Ecology, September 2022) along with the ecology reports provided by Wild Frontier Ecology have provided an overview to inform the DCO application and have been referenced to refine the proposed cable route.

7.2. From an arboriculture perspective the County Council is satisfied that the correct procedures have been followed to inform the design and construction of the onshore cable route and associated access routes and infrastructure to reduce the impact on significant trees and woodland as far as practically possible.

7.3. Advice on possible arboricultural impacts, mitigation and compensation options has been provided in Table 4 and elaborated in Sections 6.2-6.5 of the Arboricultural Survey Report; however, the report has not provided a full tree survey of the DCO boundary but has looked initially at the Area of Outstanding Natural Beauty (AONB) and the Norwich Main substation and provided a desk study for the remaining cable route.

A full tree survey and Arboricultural Impact Assessment of trees within the DCO boundary, including trees within 15m of the boundary, will be required prior to work on the onshore cables commencing. This will ensure that tree protection measures are secured through Tree Protection Plans and an Arboricultural Method Statement.

A full tree survey will also highlight any additional veteran and ancient trees to allow consultation with an arboriculturist to devise suitable mitigation measures such as horizontal directional drilling and ensure that entry and exit pits for trenchless crossings are at least 15m from the stems of any

retained trees and outside prescribed veteran tree buffer zones.

- 7.4. Post DCO consent, once the extent of tree and habitat loss are quantified, an appropriate detailed landscape scheme must be submitted as stated in the Outline Landscape Management Plan. This should take account of Biodiversity Net Gain as per the submitted documents Appendix 9.19.2 - Outline Biodiversity Net Gain Strategy and Environmental Statement (ES) Appendix 20.6 - Initial Biodiversity Net Gain Assessment Report (document reference 6.1.20.6).

(b) Ecology:

- 7.5. It should be noted that our response is necessarily limited in extent, due to the role that Norfolk County Council has in relation to NSIP's, with the relevant District Council(s) expected to have a more significant input, for example due to their role regarding the agreement and enforcement of planning requirements. Comments below refer to onshore ecology only.
- 7.6. Having reviewed Chapter 20 (Onshore Ecology & Ornithology) of the environmental statement, the County Council is satisfied it has been informed by adequate habitat and species surveys and data analysis. The ecological mitigation hierarchy appears to have been adhered to, with the embedded mitigation (as summarised in the Schedule of Mitigation & Mitigation Route map Document Ref. 6.5) welcomed. However, it is important to note that additional mitigation measures (as identified in Table 1: Offshore Mitigation Measures and Table 2: Onshore Mitigation Measures) will be required to be secured via DCO requirements. Of particular note is the DCO Schedule 2, Part 1, Requirement 13 for an Ecological Management Plan (EMP).
- 7.7. The Outline EMP (Ref. 9.19) appears fit for purpose, noting however, that a Final EMP (DCO requirement 13) will be required to be submitted and should include details of all updated and pre-commencement surveys as necessary. The submission of an associated Construction Environmental Management Plan (CEMP) will also be required to be submitted.
- 7.8. Regarding the Outline Code of Construction Practice (Ref. 9.17) (Requirement 19 of the Draft DCO), it should be noted that a range of detailed environmental management plans will be required to be produced as set out in Table 1-1, including for example, a Dust Management Plan, Invasive Non-native Species Management Plan and Artificial Light Emissions Management and Mitigation Plan.
- 7.9. The Outline Biodiversity Net Gain (BNG) Strategy (Ref. 9.19.2) has been informed by an Initial BNG Assessment (ES Appendix 6.3.20.6). The Strategy states that the applicant has committed to deliver a positive BNG for the project, which is welcomed, however, although while not yet mandatory under the Environment Act for NSIP's, the achievement of a minimum 10% BNG figure is strongly encouraged.

- 7.10. It is of concern to note that the Initial BNG Assessment indicates a net loss of 0.5% Habitat Units and a net loss of 0.98 River Units, with only the Hedgerow Units currently indicating a positive gain of 3.02% (as per Table 4 Summary of Biodiversity Metric).
- 7.11. It is noted that only 90% of the area has been assessed to date, and that the BNG calculations will require updating as the construction parameters and detailed restoration proposals are finalised.
- 7.12. The Strategy states that BNG opportunities are to be developed further with stakeholder's post consent, with detailed and refined calculations provided on the final design. Norfolk County Council's Natural Environment Team would welcome the opportunity to engage in this process.
- 7.13. There does not appear to be a requirement in the current Draft DCO to secure the submission of a BNG Strategy and therefore it is recommended that further consideration is given to its specific inclusion in the DCO.
- 7.14. The Outline Landscape Management Plan (LMP) (Ref.9.18) (Requirement 11 of the Draft DCO) is a key document to facilitate the delivery of BNG targets and should therefore be developed with this in mind. Opportunities to enhance and create suitable habitats should be sought at every opportunity as the final version of the LMP is further refined.

(c) Landscape:

- 7.15. These comments are limited in nature due to Norfolk County Council's remit within the process. Detailed comments on Landscape and Visual, Planting and Landscape Plans should be sought from the relevant district councils.
- 7.16. Chapter 26 – Landscape and Visual Impact Assessment (LVIA) The County Council is satisfied that the methodology for the LVIA follows industry standard guidance and practices and is fit for purpose. Suitably data sources have been used for the desk top study aspects of the assessment and the viewpoints selected have been done so in coordination with relevant parties. It is noted that the LVIA is based on a "mitigation by design" approach and therefore there are no further measures proposed for mitigation. There are some long-term effects that will remain even once planting has established, that are therefore residual. Detailed views on these residual effects should be sought from District officers, however the County Council is willing to be part of any ongoing discussions.

8. Historic Environment Service

- 8.1. The Historic Environment Service has been in regular communication with the applicant of this scheme for about three years and have had detailed discussions with them through expert topic group meetings.
- 8.2. In broad terms the documents relating to the below-ground archaeology and undesignated heritage assets to be submitted with the DCO application reflect what we have agreed with the applicant and in line with our expectations.
- 8.3. Chiefly though not exclusively these documents consist of.
- An archaeological desk-based assessment
 - An aerial photographic, LiDAR Data and Historic Map analysis
 - Archaeological geophysical survey report, priority areas
 - Report and assessment of Archaeological and Geoarchaeological Monitoring of site investigation works
- The Historic Environment Services has no comments on the above documents.
- 8.4. The applicant has largely followed our advice to use windows within the agricultural cycle to carry further geophysical survey prior to and in tandem with the NSIP DCO application process.
- 8.5. It is noted that the Outline Onshore Written Scheme of Investigation (Ref. 9.21) has also been included in the documentation. The Historic environment Services' comments are as follows:
- Paragraph 77, third bullet point. The Historic Environment Service has moved away from the use of the term 'strip, map and sample excavations' as this can create the false impression of faster and less rigorous piece of work when compared to a 'set-piece (open-area) excavation'. We would like to see the term 'excavation' used for large scale mitigation taking place both prior to and during the construction programme.

9. Minerals and Waste

- 9.1. Norfolk County Council in its capacity as the Mineral and Waste Planning Authority has been involved in discussions with the proposer of the SEP and DEP; regarding mineral and waste safeguarding, both of sites and resources. Throughout the project preparation information has been exchanged between the parties regarding these safeguarding issues. The Mineral Planning Authority considers that the Environmental Report for the SEP and DEP correctly assesses the magnitude, sensitivity and significance of the effect of the projects on Mineral Safeguarding Areas within section 17.6.1.4. The further mitigation suggested in section 17.6.1.4.5 is considered likely to be effective. Therefore, Norfolk County Council in its capacity as the Mineral Planning Authority does not object to the proposed SEP and DEP provided that the proposer constructs the cable corridor in the manner set out in the Preliminary

Environmental Information Report and continues to work with Norfolk County Council regarding the mitigation of impacts on the Mineral Safeguarding Areas.

- 9.2. The Mineral and Waste Planning Authority will continue ongoing discussions with the applicant as required and will ensure that any future issues are resolved through the Local Impact Report and through the DCO process.

10. **Public Health**

10.1. Public Health's comments are limited to Chapter 28 of the Environmental Statement on health. Public Health has previously discussed the health impact assessment methodology used to assess the impacts of the project on human health with the applicant and welcomes its usage. We believe the assessment methodology for the Health Impact Assessment is appropriate and based on best practice. Public Health agrees that there are unlikely to be any significant, long term adverse health impacts from the proposal compared to baseline conditions.

10.2. Public health would like the applicant to include further mitigation measures to address any adverse impacts on mental health, especially given the potential length of construction works. The applicant should increase the involvement of local communities to plan for how disruption of the natural environment and its impacts on mental health can be minimised; how current levels of physical activity can be maintained and improved through provision of information around alternative undisturbed routes on land, how any perceived or real water pollution at sea will be managed; and how information on electromagnetic fields are communicated to the public to reduce the stress, uncertainty, and associated mental health impacts in clear and non-technical ways.

10.3. Public Health has the following specific comments on Chapter 28 of the Environmental Statement on health:

- There is evidence to suggest that cold related deaths are unlikely to significantly decrease due to a warming climate as stated in paragraph 119.
- Paragraph 128 does not consider changing working patterns with increased numbers of people working from home.
- Impacts of air quality should include adverse impacts on pregnant women in paragraph 185 as there is evidence that poor air quality adversely impacts birth weight.
- Paragraph 186 states the key health outcomes affected by air quality are cardiovascular diseases and asthma. Lung cancer and type 2 diabetes are also key health outcomes related to air quality.
- Any potential contamination of water quality during construction (paragraph 216) may impact physical activity behaviours even if works are conducted out of season.
- Health outcomes related to reduced physical activity (paragraph 231) should include type 2 diabetes, unhealthy BMI, stroke and musculoskeletal conditions.