

**20 FEBRUARY 2023**

**THE INFRASTRUCTURE PLANNING (EXAMINATIONS PROCEDURE) RULES 2010**

**THE SHERINGHAM SHOAL AND DUDGEON EXTENSIONS OFFSHORE WINDFARM  
ORDER**

**WRITTEN REPRESENTATION ON BEHALF OF NATIONAL GRID ELECTRICITY  
TRANSMISSION PLC**

**REF: TWHI/MLOF/2026502.413**



## **WRITTEN REPRESENTATION ON BEHALF OF NATIONAL GRID ELECTRICITY TRANSMISSION PLC**

### **1 INTRODUCTION**

1.1 National Grid Electricity Transmission Plc ("**NGET**") made a relevant representation in this matter on 14 November 2022 in order to protect apparatus owned by NGET.

1.2 NGET does not object in principle to the development proposed by Equinor New Energy Limited ("**the Promoter**") and as defined as the "**Authorised Development**" in the draft Development Consent Order (the "**Draft Order**").

1.3 NGET does however, object to:

(a) the Authorised Development being carried out in close proximity to its apparatus in the area unless and until suitable protective provisions and related agreements have been secured to its satisfaction, to which see further at paragraph 5; and

(b) any compulsory acquisition powers for land or rights or other related powers to acquire land temporarily, override or otherwise interfere with easements or rights or stop up public or private rights of access being invoked which would affect its land interests, rights apparatus, or right to access and maintain its apparatus. This is unless and until suitable protective provisions and any necessary related amendments have been agreed and included in the Draft Order.

1.4 NGET owns and operates the electricity transmission network in England and Wales. NGET operate but do not own the Scottish networks. Paragraph 7 below addresses in further detail the role of NGET as a Transmission Owner as opposed to a System Operator. NGET is required to comply with the terms of its Electricity Transmission Licence in the delivery of its statutory responsibility. Under Section 9 of the Electricity Act 1989, NGET have a statutory duty to maintain 'an efficient, co-ordinated and economical' system of electricity transmission.

### **2 NGET ASSETS**

2.1 NGET currently has a sub-station and high voltage overhead electricity transmission lines within or in close proximity to the proposed Draft Order limits. Other above-ground electricity transmission infrastructure is proposed to be constructed in the vicinity of the Substation, subject to, amongst other things, all necessary consents and approvals being obtained.

2.2 Details of NGET's existing assets are as follows:

- (a) Norwich Main Substation (the "**Substation**");
- (b) 4VV 400kV Norwich Main to Walpole 1 and 2;
- (c) 4YM 400 KV Bramford to Norwich Main 1 and 2;
- (d) PGG 132 kV Norwich Main to Norwich Trowse 3;

- (e) PHC 123kV Norwich Main to Norwich Trowse 1 (together with the other assets, the "**NGET Assets**").
- 2.3 The NGET Assets form an essential part of the electricity transmission network in England and Wales.
- 2.4 NGET is particularly concerned about:
- (a) the effect which the Promoter's proposed connection into the Substation (being Works No. 16A/B or C and 17A/B or 17C (defined as the "National Grid substation connection works") in the Draft Order) may have on planned customer connections into the Substation as well as those other connections likely to be proposed at a later date;
  - (b) the effect which the Promoter's rights requested over land surrounding the Substation may have on the intended expansion of the Substation required to enable NGET to discharge its duties to its other customers. The Promoter has previously been made aware of relevant future development in areas surrounding the Substation but continues to request rights and powers related to the Authorised Development that would conflict with this development. Such rights and powers are not necessary, in NGET's opinion, in relation to the Promoter's connection into the Substation, as the proposed connection bay for the Promoter will be located to the west of the Substation;
  - (c) the likely interface between the Authorised Development and other future intended extension or development of the Substation which is necessary in order to allow NGET to discharge its various duties as a statutory undertaker, including to make available sufficient connection space for new customers to ensure adequate electrical supply. However, and based on a review of the submissions made to date by the Promoter, NGET is concerned that the Authorised Development may prevent such necessary developments or extensions as are necessary to accommodate those new connections; and
  - (d) the effect of the rights and powers sought by the Promoter over the access road to the Substation. This is the only means of accessing the Substation, and as owner of the transmission system NGET must have unrestricted access to the Substation to ensure it is capable of discharging its duties with regard to maintenance.
- 2.5 In respect of the NGET Assets (and any other NGET infrastructure located within the proposed Draft Order limits or in close proximity to the Authorised Development and associated works), NGET will require protective provisions to be put in place to ensure that:
- (a) all NGET interests and rights including rights of access to the Substation and such future rights as NGET may require in order to discharge its statutory duty by providing sufficient connection bays for its customers are unaffected by the power of compulsory acquisition, grant and extinguishment of rights and temporary use powers; and
  - (b) appropriate protection for the NGET Assets and any other retained apparatus is maintained during and after construction of the Authorised Development. This includes compliance with all relevant standards on safety clearances EN 43-8 (Development near overhead lines), and HSE Guidance Note GS6 Avoiding Danger from Overhead Electric Lines.

- 2.6 Discussions between NGET and the Promoter are ongoing regarding the interface between the part of the Authorised Development which comprises onshore connection works (Works No. 16A/B or 16C); permanent mitigation, landscaping and drainage works (Works No. 18A/B); permanent accesses (Works No. 19A/B); permanent landscape and ecological mitigation works (Works No. 22A/B) and an above ground connection into the Substation and other works that NGET is or may be planning to carry out in order to comply with its duties as a statutory undertaker.
- 2.7 NGET welcomes cooperation with the Promoter in terms of the planning of mitigation measures in light of future proposed reinforcements to the electricity network, however until the principles relating to that interface have been established, NGET must continue to note its concerns as to the interference which is likely to be caused by the Authorised Development. Such interference is itself likely to significantly inhibit NGET's ability to fulfil its duties as a statutory undertaker, including through provision of adequate substation resources. NGET would wish to make reference to their document 'Development Near Overhead Lines' which provides overhead line clearance distances from objects, including vegetation.
- 2.8 NGET therefore reserves the right to make further representations to the Examining Authority as these discussions progress.

### 3 **NGET - REGULATORY PROTECTION FRAMEWORK**

- 3.1 NGET have issued guidance in respect of standards and protocols for working near to electricity transmission equipment in the form of:
- (a) Third Party Working near National Grid Electricity Transmission equipment - Technical Guidance Note 287, which gives guidance and information to third parties working close to NGET assets. This cross refers to statutory electrical safety clearances which are used as the basis for ENA (TA) 43-8, which must be observed to ensure safe distance is kept between exposed conductors and those working in the vicinity of electrical assets; and
- (b) Energy Network Associations Development near Overhead Lines ENA (TS) 43-8, which sets out the derivation and applicability of safe clearance distances in various circumstances including crossings of OHL and working in close proximity.
- 3.2 Additionally HSE's guidance note 6 "Avoidance of Danger of Overhead Lines". Summarises advice to minimise risk to life/personal injury and provide guidance to those planning and engaging in construction activity in close proximity to OHL.
- 3.3 NGET requires specific protective provisions in place to provide for an appropriate level of control and assurance that industry standards will be complied with in connection with works to and in the vicinity of its electricity transmission assets (including the NGET Assets).

### 4 **PROPERTY ISSUES**

- 4.1 NGET asserts that maintaining appropriate property rights to support its assets and protecting these from compulsory acquisition and related powers in the Draft Order is a fundamental safety issue.
- 4.2 Insufficient property rights would have the following safety implications:
- (a) Inability for qualified personnel to access apparatus for its maintenance, repair and inspection;

- (b) risk of strike to buried assets and/or cable/overhead lines if Authorised Development occurs within the easement zone which seeks to protect such assets; and
- (c) Risk of inappropriate development within the vicinity of the assets, thereby increasing the risk of damage to the asset and integrity of the electricity transmission network.

## 5 **PROTECTIVE PROVISIONS**

5.1 NGET seeks to protect its statutory undertaking, and insists that in respect of connections and work in close proximity to its Apparatus as part of the Authorised Development the following procedures are complied with by the Promoter:

- (a) National Grid is in control of the plans, methodology and specification for works within 15 metres of any retained Apparatus; and
- (b) works in the vicinity of NGET apparatus are not authorised or commenced unless protective provisions are in place preventing compulsory acquisition of NGET's land or rights or the overriding or interference of the same. Any acquisition of rights must be subject to NGET's existing interests and rights and not contradict with or cut across such rights.

5.2 National Grid maintain that without an agreement or qualification on the exercise of unfettered compulsory powers or connection to its apparatus the following consequences will arise:

- (a) Failure to comply with industry safety standards, legal requirements and Health and Safety Executive standards create a health and safety risk;
- (b) Any damage to apparatus has potentially serious hazardous consequences for individuals located in the vicinity of the apparatus if it were to fail; and
- (c) Prevention of NGET's ability to access its land or exercise its rights over land caused by the Authorised Development could inhibit NGET's ability to comply with its duties as statutory undertaker to provide electricity transmission.

5.3 While discussions with the Promoter remain ongoing, the Draft Order does not yet contain fully agreed protective provisions expressed to be for the protection of NGET to NGET's satisfaction, making it currently deficient from NGET's perspective.

5.4 NGET contend that it is essential that these provisions are addressed to its satisfaction to ensure adequate protection for the NGET Assets. Negotiations between the parties in respect of the form of the Protective Provisions to be included within the Draft Order are well advanced but not concluded and there remain a few outstanding issues.

5.5 Should it not be possible to reach agreement with the Promoter, National Grid reserves its right to attend a Compulsory Acquisition Hearing or Issue Specific Hearing to address the required format of the Protective Provisions and any necessary amendment to the Draft Order.

5.6 If this is necessary NGET reserve the right to provide further written information in advance in support of any detailed issues remaining in dispute between the parties at that stage.

## 6 **ATTENDANCE AT ISSUE SPECIFIC HEARING (ISH4)**

- 6.1 NGET notes the contents of the Rule 8 Letter (dated 27 January 2023), and specifically the invitation made by the Examining Authority (“**ExA**”) at Annex B for NGET to attend ISH4 on 23 March.
- 6.2 NGET is grateful to the ExA for its invitation to attend ISH4.
- 6.3 NGET does not consider at this time that it will need to attend ISH4 provided that there is substantive and meaningful engagement with the Promoter in the interim period.
- 6.4 However, NGET reserves the right to request to attend ISH4 should demonstrable progress in terms of resolving remaining issues between the Parties not be made.

## 7 **RESPONSE TO FIRST WRITTEN QUESTIONS**

- 7.1 In response to the Examining Authority’s publication on 27 January 2023 of the Written Questions and Requests for information (WQ1), NGET has set out at Appendix 1 its replies to those questions addressed to ‘National Grid’.
- 7.2 In some of NGET’s replies at Appendix 1 below, NGET directs the Examining Authority to responses that will be separately submitted by National Grid Electric System Operator (“NGESO”). The following paragraphs explain the rationale for this distinction further, and are intended to assist the Examining Authority moving forwards.
- 7.3 NGET is one of three Transmission Owners in Great Britain, owning the high voltage National Electricity Transmission System (“NETS”) in England and Wales. NGET’s obligations include building and maintaining the NETS safely, reliably, economically and efficiently; providing transmission services to its System Operator; and supporting the System Operator to provide connection offers in response to customer or users’ requests.
- 7.4 NGESO is a System Operator. Its role is to coordinate and direct the flow of electricity onto and over the NETS in an economic and coordinated manner. NGESO must maintain system balance minute by minute, and address supply and demand mismatch, generation shortfall and/or high demand and insufficient generation margins to maintain supply. Additionally NGESO manages the connection application and offer process in Great Britain between NGET and the party wishing to connect to the NETS (generator, customer etc.). NGESO operates the system, but is not responsible for the infrastructure needed to carry the electricity.
- 7.5 NGET has had business separation obligations in its licence for a long time, requiring it to be separate from other National Grid group businesses operating in markets of Interconnectors, Carbon Capture and Storage and Offshore Transmission. Legal separation between NGET as Transmission Owner and NGESO as System Operator occurred on 1st April 2019. NGET and NGESO are legally separate companies operating within the National Grid group as separate businesses. Interactions between the two businesses are formalised, and NGET is not in a position to respond to the Examining Authority on matters which are the responsibility of NGESO.
- 7.6 NGET have drawn to NGESO’s attention the ExA’s First Written questions and, as noted above, a response to the relevant questions will be submitted separately on behalf of NGESO.

**Bryan Cave Leighton Paisner LLP**

**For and on behalf of National Grid Electricity Transmission Plc**

**20 February 2023**

## Appendix 1

### NGET's Responses to the Examining Authority's First Written Questions

Question Number	Question	NGET Response
Q1.2.2.1	<p><b>Grid Connection</b></p> <p>The Applicant has reported on the optioneering process that underpinned the selection process for the wind farm locations, the landfall location and the onsite substation location, commenting that the latter emerged following consultation with National Grid [APP-089] [APP-175]. The ExA seeks clarification, in light of policy and legislative requirements set out in NPS EN-1 Section 4.4 and the EIA Regulations 2017, on the following matters:</p>	
	<b>Addressed to National Grid</b>	
	a) Signpost in the Application material or submit information to highlight what alternative grid connections, other than Norwich Main, were offered to the Applicant?	For reasons set out in NGET's Written Representation, a response to this question is to be provided separately by National Grid Electric System Operator ("NGESO").
	b) What criteria did you consider in making the connection offer to the Applicant?	For reasons set out in NGET's Written Representation, a response to this question is to be provided separately by National Grid Electric System Operator ("NGESO").
	<b>Addressed to National Grid and the Promoter</b>	
	a) Further explanation is needed to support the nuanced steps in the site selection process [APP-175, Plate 3-1]. For instance, did the identification of the offshore cable corridor, landfall, onshore cable corridor and onshore substation take place concurrently as shown [APP-175, Plate 3-1]?	For reasons set out in NGET's Written Representation, a response to this question is to be provided separately by National Grid Electric System Operator ("NGESO").
	b) Applicant, submit marked on a map all the sites (field 1 to field 5 [APP-175, Table 3-5] and any others) considered for the onshore substation, a comparative assessment of suitability, including the criteria and weighting used for the assessment, with a statement of why each other site was dismissed, and the proposed site selected. In that regard, identify what options 1 to 6 refer to [APP-175, Table 3-1].	NGET refers this question to the Applicant.



Question Number	Question	NGET Response
	c) Provide a full flow chart with the sequence of steps taken, and the criteria and weighting that underpinned key decisions. In particular, outline how the MCZ, biodiversity and designated natural and built assets were considered.	NGET refers this question to the Applicant.
	d) What weight or extent of consideration is given to nature, biodiversity and sites designated for nature conservation when preparing the CION and offer options?	For reasons set out in NGET's Written Representation, a response to this question is to be provided separately by National Grid Electric System Operator ("NGESO").
	e) Given its distance in-land, what factors made Norwich substation the best option for the grid connection?	For reasons set out in NGET's Written Representation, a response to this question is to be provided separately by National Grid Electric System Operator ("NGESO").
	f) Submit the CION and any relevant supporting material. If the CION is an extensive document, provide a summary as well.	For reasons set out in NGET's Written Representation, a response to this question is to be provided separately by National Grid Electric System Operator ("NGESO").
Q1.2.2.2	<p><b>Substation Location</b></p> <p>In relation to the proposed substation for the Proposed Development:</p>	
	<b>Addressed to National Grid</b>	
	a) Are there any concerns from a structural, engineering or technical perspective with regards to the specific location for the proposed substation [AS-005]?	NGET would be grateful for clarification from the ExA as to what is contemplated by the reference to the "proposed substation".
	b) Are the works you require to upgrade and extend Norwich Main, or to connect and integrate with the Proposed Development adequately, covered within Schedule 1 of the dDCO and the associated Works Plans [APP-011, AS-009]?	NGET is not proposing to seek any consents which may be required to upgrade and extend the Norwich Main Substation through the Draft Order. To the extent that such consents are required, NGET will seek those separately.
Q1.2.2.3	<b>Walpole Substation</b>	
	At OFH1 [EV-009] [EV-010], a number of speakers highlighted that there was spare capacity at the Walpole Substation following the mothballing of Sutton Bridge gas fired power station and the declination of an application for Docking Shoal wind farm to connect. Comment on all aspects of this scenario. If this is the case how did this feature in the assessment of alternatives for the	For reasons set out in NGET's Written Representation, a response to this question is to be provided separately by National Grid Electric System Operator ("NGESO").

Question Number	Question	NGET Response
	substation selection for the Proposed Development?	
Q1.2.3.1	<b>Offshore Transmission Network</b>	
	a) Explain what an OTN would consist of and what the current policy and industry support for such an approach is.	For reasons set out in NGET’s Written Representation, a response to this question is to be provided separately by National Grid Electric System Operator (“ <b>NGESO</b> ”).
	a) Has an OTN has been considered for the Proposed Development? Is an OTN, as described by IPs during representations at OFH1 [EV-009] [EV-010] feasible?	For reasons set out in NGET’s Written Representation, a response to this question is to be provided separately by National Grid Electric System Operator (“ <b>NGESO</b> ”).
b) In light of policy support (if any) discuss how, in your opinion, this can be considered in this Examination.	For reasons set out in NGET’s Written Representation, a response to this question is to be provided separately by National Grid Electric System Operator (“ <b>NGESO</b> ”).	