

# East Anglia ONE North and East Anglia TWO Offshore Windfarms

# Statement of Common Ground

National Grid Electricity System Operator Limited

Applicants: East Anglia ONE North Limited and East Anglia TWO Limited

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Applicable to East Anglia ONE North and East Anglia TWO

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# Glossary of Acronyms

CION	Connection and Infrastructure Options Note
DCO	Development Consent Order
ESO	Electricity System Operator Limited
NG	National Grid
NG-ESO	National Grid Electricity System Operator Limited
NGET	National Grid Electricity Transmission plc
SoCG	Statement of Common Ground

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# Glossary of Terminology

Applicants	East Anglia TWO Limited / East Anglia ONE North Limited.
Cable sealing end compound	A compound which allows the safe transition of cables between the overhead lines and underground cables which connect to the National Grid substation.
Cable sealing end (with circuit breaker) compound	A compound (which includes a circuit breaker) which allows the safe transition of cables between the overhead lines and underground cables which connect to the National Grid substation.
East Anglia ONE North project	The proposed project consisting of up to 67 wind turbines, up to four offshore electrical platforms, up to one construction, operation and maintenance platform, inter-array cables, platform link cables, up to one operational meteorological mast, up to two offshore export cables, fibre optic cables, landfall infrastructure, onshore cables and ducts, onshore substation, and the National Grid infrastructure.
East Anglia TWO project	The proposed project consisting of up to 75 wind turbines, up to four offshore electrical platforms, up to one construction, operation and maintenance platform, inter-array cables, platform link cables, up to one operational meteorological mast, up to two offshore export cables, fibre optic cables, landfall infrastructure, onshore cables and ducts, onshore substation, and the National Grid infrastructure.
National electricity grid	The high voltage electricity transmission network in England and Wales owned and maintained by National Grid Electricity Transmission Owner.
National Grid Electricity System Operator Limited	A legally separate business within the National Grid Group responsible for operating the national transmission system (including the national electricity grid).
National Grid Electricity Transmission plc	A legally separate business within the National Grid Group and owner of the national electricity grid infrastructure in England and Wales.
National Grid infrastructure	A National Grid substation, cable sealing end compounds, cable sealing end (with circuit breaker) compound, underground cabling and National Grid overhead line realignment works to facilitate connection to the national electricity grid, all of which will be consented as part of the proposed East Anglia TWO project / East Anglia ONE North project Development Consent Order comprising Work Nos. 34, and 38 to 43 but will be National Grid Electricity Transmission plc owned assets.
National Grid substation	The substation (including all of the electrical equipment within it) necessary to connect the electricity generated by the proposed East Anglia TWO / East Anglia ONE North project to the national electricity grid which will be owned by National Grid but is being consented as part of the proposed East Anglia TWO project/ East Anglia ONE North project Development Consent Order comprising Work No. 41.
Onshore substation	The East Anglia TWO project / East Anglia ONE North project substation and all of the electrical equipment within the onshore substation and connecting to the National Grid infrastructure.





## 1 Introduction

### 1.1 Background

- 1. This document is applicable to both the East Anglia TWO and East Anglia ONE North DCO Applications, and therefore is endorsed with the yellow and blue icon used to identify materially identical documentation in accordance with the Examining Authority's procedural decisions on document management of 23<sup>rd</sup> December 2019 (PD-004). Whilst this document has been submitted to both Examinations, if it is read for one project submission there is no need to read it for the other project submission.
- 2. This Statement of Common Ground (SoCG) has been prepared by East Anglia TWO Limited, East Anglia ONE North Limited (the Applicants) and National Grid Electricity System Operator Limited (NG-ESO). It identifies areas of the East Anglia TWO and East Anglia ONE North Development Consent Order (DCO) applications (the Applications) where matters are agreed or not agreed between the parties.
- 3. The Applicants have had regard to the guidance for the examination of applications for development consent (Department for Communities and Local Government, 2015) when compiling this SoCG.
- 4. This SoCG has been structured to reflect topics of the Applications which are of interest to NG-ESO. NG-ESO is the system operator of the national system and as such the party who offers and enters into the connection agreements. It has an overview role in the design of the national system but the design of specific connections and the planning process for these rests with the relevant transmission owner, in this case National Grid Electricity Transmission plc. Topic specific matters agreed, not agreed and actions to resolve matters between the Applicants and NG-ESO are included within this SoCG.
- 5. The tables presented below represent the SoCG with the Applicants and NG-ESO in respect of the following topics:
  - Site Selection and Assessment of Alternatives:
  - DCO Applications; and
  - Other Matters as Required.
- 6. Throughout the SoCG the phrase "Agreed" identifies any point of agreement between the Applicants and NG-ESO. The phrase "Not Agreed" identifies any point that is not yet agreed between the Applicants and NG-ESO.

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7. NG-ESO is a legally separate business within the National Grid Group and is operator of the national electricity grid in England and Wales. The matters considered within this SoCG apply only to NG-ESO's interests in relation to their role as operator of the national electricity grid. Matters that are not yet agreed will be the subject of ongoing discussion between the Applicants and NG-ESO to reach agreement on each matter wherever possible, or refine the extent of disagreement between parties. The notes column of the SoCG tables provides commentary on these matters.

### 1.2 The Development

- 8. The East Anglia TWO project and East Anglia ONE North project will each comprise the following key offshore components:
  - Offshore wind turbines and their associated foundations:
  - Offshore platforms up to four offshore electrical platforms and their associated foundations supporting some of the windfarm's electrical equipment, and up to one construction, operation and maintenance platform and associated foundations that may cater for personnel and activities required during the construction phase and operation and maintenance of the windfarm;
  - Sub-sea cables between the wind turbines and offshore electrical platforms (inter-array), between separate offshore platforms (platform link cables) and between offshore electrical platforms and the landfall (export cables);
  - Scour protection around foundations and on inter-array, platform link and export sub-sea cables as required; and
  - Potential for one meteorological mast and its associated foundations for monitoring wind speeds during the operational phase of the windfarm.
- 9. The East Anglia TWO project and East Anglia ONE North project will each comprise the following key onshore components:
  - The landfall site with up to two transition bays to connect the onshore and offshore cables;
  - Up to six onshore cables, up to two fibre optic cables and up to two distributed temperature sensing cables installed underground (some or all of which may be installed in ducts) and associated jointing bays installed underground;
  - Onshore substation; and
  - Electrical cable connection between the onshore substation and National Grid substation.

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- 10. National Grid infrastructure will also be required to connect each project to the national electricity grid. Key components of the National Grid infrastructure which is common to both projects will comprise:
  - National Grid substation;
  - Cable sealing end compounds and a cable sealing end (with circuit breaker) compound; and
  - Realignment of the existing overhead lines; including the reconstruction or replacement of up to three existing overhead pylons in proximity to the National Grid substation and the addition of up to one new pylon in close proximity to existing overhead pylons.

### 1.3 Summary of Agreed, Not Agreed and Outstanding Matters

11. **Table 1** provides a summary of the matters agreed, not agreed and those which are outstanding between the Applicants and NG-ESO for each of the relevant SoCG topics areas.

**Table 1 Summary of Agreed, Not Agreed and Outstanding Matters** 

Topic	Summary
Site Selection and Assessment of Alternatives	All matters are agreed.
DCO Consent Application	All matters are agreed.
Other Matters as Required	All matters are agreed.





# 2 Statement of Common Ground

12. **Table 2** provides an overview of consultation undertaken with NG-ESO regarding this SoCG since submission of the Applications.

Table 2 Summary of consultation with NG-ESO regarding this SoCG

Date	Contact Type	Topic
Post-Application		
20 <sup>th</sup> August 2020	Meeting	SoCG meeting 1
15 <sup>th</sup> September 2020	Meeting	SoCG meeting 2
8 <sup>th</sup> October 2020	Meeting	SoCG meeting 3

13. The matters agreed or not agreed between the Applicants and NG-ESO are set out in *Table 3* below for each of the SoCG topic areas.



**Table 3 NG-ESO Statement of Common Ground** 

ID	Topic	Statement	East Anglia TWO Limited Position	East Anglia ONE North Limited Position	NG-ESO Position	Notes
Site Sel	ection and Asse	ssment of Alternatives				`
ESO- 001	Site Selection and Assessment of Alternatives	A 2015 report, 'Integrated Offshore Transmission Project (East)' (August 2015) investigated; "Design philosophies for the connection of the three Round 3 offshore wind farms". National Grid (in the scope of activities that now fall within NG-ESO), in conjunction with offshore developers including ScottishPower Renewables, coordinated a study to consider an offshore ring main for the East Anglia, Hornsea and Dogger Bank Round 3 Zones.  The findings of this study outlined a number of issues associated with a potential offshore ring main and concluded that in relation to an offshore ring main:  " the project team does not believe it would be economic and efficient to progress with the development of an integrated design philosophy or delivery of anticipatory assets at this time".  As a consequence of this report an offshore integrated design was not an option considered at the time of the Connection and Infrastructure Options Note (CION) process for the Projects which concluded in summer 2017.	Agreed	Agreed	Agreed	





ID	Topic	Statement	East Anglia TWO Limited Position	East Anglia ONE North Limited Position	NG-ESO Position	Notes
ESO- 002	Site Selection and Assessment of Alternatives	The CION Process is a requirement of the NG-ESO transmission licence and has been used by NG-ESO to evaluate the potential options for connecting offshore transmission systems to the onshore transmission system (the national electricity grid). The CION process led to the identification of what is considered to be most economic and efficient connection option, in line with NG-ESO's obligation under the Electricity Act 1989 to develop and maintain an efficient, coordinated and economical system of the electricity transmission network.  The CION process completed regarding these connections was undertaken appropriately in line with Guidance Note Issue 3 (National Grid 2018).	Agreed	Agreed	Agreed	None
ESO- 003	Site Selection and Assessment of Alternatives	Subject to the granting of DCOs for the Projects, the location of the National Grid infrastructure meets NG-ESO's requirements for operating the national electricity grid.	Agreed	Agreed	Agreed	None
ESO- 004	Site Selection and Assessment of Alternatives	Co-location of the National Grid infrastructure with the onshore substations supports NG-ESO's obligations under Section 9 of the Electricity Act 1989 to develop and maintain an economical and efficient network. These obligations are recognised within paragraph	Agreed	Agreed	Agreed	None

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ID	Topic	Statement	East Anglia TWO Limited Position	East Anglia ONE North Limited Position	NG-ESO Position	Notes
		2.3.5 of National Policy Statement for Electricity Networks Infrastructure (EN-5).				
DCO Co	onsent Application	on				
ESO - 101	DCO Applications	It is considered appropriate to include all necessary National Grid infrastructure required to connect the Projects to the national electricity grid, within the Applications. This is in line with paragraph 4.9.2 of Overarching National Policy Statement for Energy (EN-1) which states that the "Government therefore envisages that wherever possible, applications for new generating stations and related infrastructure should be contained in a single application…".	Agreed	Agreed	Agreed	Whilst NG-ESO was not party to the decision to include all necessary National Grid infrastructure required to connect the Projects to the national electricity grid within the Applications, it supports this decision.
Other M	latters as Requir	ed		·	<u>'</u>	
ESO - 201	Connection to the National Electricity Grid	Connection of the Projects to the national electricity grid does not require any wider reinforcement works to the National Grid infrastructure.	Agreed	Agreed	Agreed	None
ESO- 202	Connection to the National Electricity Grid	Given the respective roles of NG-ESO as system operator and National Grid Electricity Transmission plc (NGET) as a legally separate business within the National Grid Group, it is agreed that NGET are responsible for ensuring:	Agreed	Agreed	Agreed	None

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ID	Topic	Statement	East Anglia TWO Limited Position	East Anglia ONE North Limited Position	NG-ESO Position	Notes
		The details presented within <i>Chapter 6 - Project Description</i> of the Environmental Statement (APP-054) and the extent of the <i>Works Plans (Onshore)</i> (REP7-005) adequately describe and reflect the National Grid infrastructure necessary to ensure the efficient operation of the national electricity grid during operation of the Projects; and				
		The draft DCO (REP7-006) provides the necessary powers and rights to construct and operate the National Grid infrastructure (Work Nos. 34 and 38 to 43 inclusive).				
ESO- 203	Working together	The Applicants will liaise with NG-ESO on a regular basis regarding the Projects' construction programme and commissioning programme to ensure NG-ESO can plan for the efficient operation of the national electricity grid during operation of the Projects.	Agreed	Agreed	Agreed	None
ESO- 204	Future connections	There is no planned strategic connection hub at Leiston and so no network planning assumptions have been made in respect of this.	Agreed	Agreed	Agreed	None





# 3 Signatures

14. The above Statement of Common Ground is agreed between East Anglia TWO Limited, East Anglia ONE North Limited and National Grid Electricity System Operator Limited on the day specified below.

Signed:					
Print Name:	Marc Vincent				
Job Title:	E&W Customer Connections Manager				
Date:	25/03/2021				
Duly authorise	d for and on behalf of National Grid Electricit	y System Operator Limited			
Signed:	·				
Print Name:	Richard Morris				
Job Title:	Senior Project Manager				
Date:	25th March 2021				
Duly authorise	d for and on behalf of East Anglia TWO Limit	ed			
Signed:					
Print Name:	Richard Morris				
Job Title:	Senior Project Manager				
Date:	25th march 2021				
Duly authorised for and on behalf of East Anglia ONE North Limited					