## **Examining Authority's Question**

## National Grid Electricity Transmission ("NGET") Response

## Cumulative effects with other plans, projects and programmes

Norfolk County Council [RR-0906] raises cross-boundary electricity transmission issues in respect of the 400kV network which runs between Norfolk and Suffolk including the potential for reinforcement and new lines in both Norfolk and Suffolk.

- Please indicate whether there is likely to be any requirement in the wider area for either: (a) reinforcement; of the existing 400 kV network; or (b) new overhead lines (400kV).
- Please explain how the cumulative impact on the 400 kV transmission network in the wider strategic area has been considered by the ES?

Please comment on the need for further evidence and studies setting out the full implications of both Sizewell C and the planned/emerging offshore wind energy projects on the existing 400 kV network across the two Counties.

NGET believes it is able to assist with two of the questions posed by the ExA, and has set out its response to these below. The ExA's third question relates to scope of the Applicant's Environmental Statement and should therefore be answered by the Applicant.

1. Please indicate whether there is likely to be any requirement in the wider area for either: (a) reinforcement; of the existing 400 kV network; or (b) new overhead lines (400kV)

Within the National Grid group there are a number of different business, each operating separately, and each playing a role in the UK energy industry, transporting energy from producers to local network operators. NGET, the interested party in this examination, is an electricity network business and is a subsidiary of National Grid plc. It owns, maintains and manages the regulated electricity transmission network in England and Wales. NGET's network comprises approximately 7,211 kilometres of overhead line, 2,279 kilometres of underground cable and 347 substations.

NGET has had business separation obligations in its licence for a long time, requiring it to be separate from National Grid group businesses operating in the markets of Interconnectors, Carbon Capture and Storage and Offshore Transmission. With effect from 1 April 2019, following the creation of National Grid

Electricity System Operator Ltd ("NGESO"), NGET's business separation obligations were updated to require separation from NGESO.

NGESO's role is to balance the system, making sure supply meets demand, and to move high voltage electricity from where it is generated (such as a wind farm) through the energy system. It operates the system, but is not responsible for the infrastructure (e.g. the pylons and cables) needed to carry the electricity. Using the infrastructure owned by three transmission companies (including NGET) the high voltage electricity is passed onto one of the fourteen Distribution Network Operators ("DNOs") across the country. The DNOs own the local networks; they convert the electricity into a more manageable voltage suitable for domestic use and feed low voltage electricity through to homes and businesses.

NGET and NGESO are legally separate companies operating within the National Grid group as separate businesses. Since separation in 2019, 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.

Identification of the need for network reinforcement is a matter for which NGESO is responsible, and NGET is therefore not able to provide a detailed response in relation to the requirements for such reinforcement. In general terms, however, it is well established that improvements to the electricity transmission network in East Anglia are required over the next decade to accommodate the increased amount of electricity that will come from offshore wind and interconnector developments, as well as Sizewell C. The most recent Network Options Assessment ("NOA") prepared by NGESO (available <a href="here">here</a>) identifies a number of options for addressing this, beginning with upgrades to the existing network.

Options that that require new overhead lines include the proposed new transmission line between Bramford substation in Suffolk and Twinstead Tee in Essex. NGET carried out a public consultation on these proposals between 25 March and 6 May 2021, and anticipates submitting a development consent order application in relation to the final scheme during 2022. Further information on the proposals can be found in the consultation pages on NGET's website here.

The NOA also identifies a potential requirement for a further two new 400kV double circuit transmission lines, in north and south East Anglia, respectively. These projects are at an early stage of development, however, and there are currently no firm proposals in existence for either scheme. Additional work is required to consider options for those projects and it is not yet known when they will come forward.

2. Please comment on the need for further evidence and studies setting out the full implications of both Sizewell C and the planned/emerging offshore wind energy projects on the existing 400 kV network across the two Counties.

As already noted, offshore wind and interconnector developments, as well as Sizewell C, will mean that improvements to East Anglia's transmission system are required in the ten years to 2030. NGESO will make recommendations as to which reinforcement projects should be taken forward through the annual NOA process. NGET will then respond to the NOA in its Network Development Policy ("NDP"). The NDP confirms which network proposals NGET will take forward. The Bramford to Twinstead proposal discussed above was included in NGET's most

recent NDP in June 2020. Further proposals for the improvement of the East Anglia transmission system will be addressed through the NOA and NDP process in the coming years. Art 2, definition of National Grid. NGET agrees with SZC Co.'s response to this questions in its submission "DCO Drafting Note 1". This definition encompasses real estate ownership ("successors in title"), personal estate ownership ("assigns"), agents ("any other person exercising its powers"), and functions such as statutory functions, but not limited to those ("any other person exercising its powers or performing the same functions"). The three categories will not necessarily all be kept together (as the drafting recognises) and the references in the dDCO to National Grid may therefore devolve onto more than one entity. For example, land might be sold by National Grid Electricity Transmission plc (NGET plc) to X and it's transmission functions be transferred to a different body. Are both to have the rights, duties, powers and privileges of NGET? Will it always be intended and acceptable that rights or duties, powers and privileges of (NGET plc) under the DCO can be held by more than one entity at the same time and that different aspects of the business of NGET plc may be held by different entities? At first sight it appears to the ExA that this is undesirable and that it would be better to distinguish between property rights on the one

hand and statutory functions on the other. Are there other types of functions?
Please will the Applicant and National Grid each explain what aspects of the involvement of National Grid Electricity Transmission pleare intended to be covered and explain either why the current drafting is appropriate or what changes should be made?