



DEADLINE 7 - SASES COMMENTS ON NATIONAL GRID (NGET, NGESO & NGV) RESPONSES TO ExQs2

Interested Party: SASES IP Reference Nos. 20024106 and 20024110

Date: 4 March 2021 Issue:

ExQs2 Ref.	Topic	SASES Comments	
National Grid Electricity Transmission ("NGET")			
2.0 Overarching, general and cross-topic questions			
2.0.1	Permitted development rights	See separate Submission in respect of Operational Land submitted at Deadline 7.	
2.0.10	Substations Design Principles Statement	Notwithstanding the technical and engineering limitations associated with substations there is an overriding requirement in NPS EN-1 to achieve "Good Design". The Friston site has high landscape and other sensitivities and NGET are requested to confirm that they will use their best endeavours to produce substation and CSE designs which minimises land footprint and visual impact, making full use of up to date technology and design ideas. Overhead gantries in particular are an item for which significant visual improvement is sought.	
2.0.11	Substation Design Principles Statement	NGET's obligations under the Electricity At 1989 are stated as related to efficiency, coordination and economy. But SASES emphasises that there is a fourth obligation which stems from Schedule 9, which is to have regard to the preservation of the natural environment, and this obligation is of no less importance or priority than the other three.	
		There is a clear linkage between achievement of 'economy' and 'efficiency' and the obligation to achieve "good design" stemming from EN-1 such as be minimising land usage. However it is not clear	

		that NGET have adequate regard for this, and the reference to the need for "temporary accommodation of CSE testing equipment" suggests that the CSEs will be larger than strictly necessary on functional grounds. It is noted that the Northern-most CSE is proposed to contain an additional "circuit breaker" but no documented explanation or justification has been found as to why this additional apparatus and associated CSE land is required in order to satisfy the specific requirement of the Applicant's projects. NGET are requested to provide an explanation for the requirement of a circuit breaker in this location as it gives rise to additional land take, an additional 16m high gantry, an additional set of connections to the OHLs (not shown even in the latest OLMP) and a more complex and visually intrusive pylon design, all highly visible from nearby residential property.
2.0.14	Cumulative Effects Assessment at the substations site	NGET Refers to "information already made available in the context of this examination or other information already made publicly available by the promoters of these projects." SASES considers that such information is sufficient for a cumulative impact assessment to be prepared and refers to its previous submissions on this topic. REP-354 REP3-126 REP4-113
2.10.6	Proposed National Grid substation	SASES has been unable to locate any detailed design information for the proposed NGET substation (either AIS or GIS) including plans and/or elevations (with cross-sections) and without this information no adequate assessment can be made of visual and other impacts of the proposals. This is unacceptable at such a late stage in the Examination process. With regard to the AIS versus GIS choice there is a clear inconsistency between the Applicant's commitment to the use of GIS in its substations regardless of SF6 issues, and NGET's lack of a clear decision, which is all the harder to understand given the potential availability of adequate land area for an AIS version of the NGET substation.
		NGET stated at CAH2 (page 10 of written summary of oral case) that "AIS technology is easier to operate, maintain and repair and as such has lower operational costs which is important in meeting its s.9 duties". It is also understood from generally available literature that AIS switchgear

has lower installation costs than the equivalent GIS equipment. Even if a more environmentally friendly alternative to SF6 were to become available in the requisite timescale there is no evidence that such GIS equipment would be more economic to construct or maintain than current GIS equipment, indeed the opposite seems more likely. SASES view, therefore, is that given available information the proposal that a GIS option be retained by NGET is unjustified and unreasonable given the possibility of adequate land availability for an AIS solution.

SASES reiterates that it is not reasonable for NGET to fail to establish a clear position now on the AIS versus GIS choice and that this is essential to bring certainty to the Applicant's proposals in a number of respects.

National Grid ESO ("NGESO")

No responses provided

National Grid Ventures ("NGV")

2.0.14 Cumulative effects assessment

NGV states that "should consent for the NGET substation [presumably they also mean the cable sealing ends and pylon realignment works] at Friston as proposed by SPR be awarded, consideration will need to be given to the viability of this location offering a connection to the National Transmission System for the Nautilus and Eurolink projects". Clearly that consideration has already taken place some time ago given the content of the NGV July 2019 Nautilus Interconnector Briefing Pack and other documents referred to in SASES written submissions – see references below. The July 2019 Briefing pack states "In order to connect Nautilus to the national grid, discussions have been ongoing with National Grid Electricity Transmission (NGET) and the system operator [presumably this means NGESO]. From this, NGET have provided a connection agreement to use a new 400 kV substation provisionally referred to as "Leiston 400 KV substation". This is the same substation that Scottish Power Renewables (SPR) offshore windfarms East Anglia 1N and 2 are proposed to be linked to." [emphasis added]

NGV further states that "as per NGVs draft SoCG with the Applicant (document reference: ExA.SoCG – 19.D1.V1) at present, neither Nautilus or Eurolink are sufficiently defined to allow for the reasonable assessment of cumulative impacts". This is not the case particularly at the Friston substation site. SASES refers to its previous submissions in relation to cumulative impact:

REP-354

REP3-126

REP4-113

Furthermore that draft SoCG sets out at Figure 1 the area available for potential future expansion of the National Grid substation to accommodate the proposed Nautilus and Eurolink projects.

Consent for the EA1N and EA2 projects including the NG NSIP connection hub has an even greater likelihood of being refused if a proper cumulative impact assessment is prepared. The more information that is available in respect of the Nautilus, Eurolink and other projects the more pressing the necessity for the preparation of a cumulative impact assessment. Self-evidently at the present time it is in the interests of the Applicants, National Grid (NGET,NGESO and NGV) and other developers to ensure such information is not available. Please note SASES is not alleging that such parties have in fact acted in such manner. In any event as set out in SASES written submissions referred to above sufficient information is in fact already available.