

The Rt Hon Miatta Fahnbulleh MP
Secretary of State for Energy Security and Net Zero
Department of Energy Security and Net Zero
3-8 Whitehall Place
London
SW1A 2AW

Your ref: EN020026
My Ref: 2026-09-11 Sea Link SoS.docx

My submitted Sea Link document refs:
Interested Party 
Relevant Representation RR3944
[REP3-132]
[REP4-240]
[REP6-256D]
Deadline 7: Response to REP5-137, submitted 6 May 2026

18th September 2026

Dear Madam,

**RESPONSE TO THE SECRETARY OF STATE'S REQUEST FOR INFORMATION, DATED 28 AUGUST 2026
SEA LINK - SUFFOLK**

I am a chartered architect specialising in heritage, townscape and landscape for the last 40 years of practice. Orford has been my family home since 1969. Protecting and enhancing the Suffolk towns, villages and countryside was a commitment of my mother (Vice President of the Suffolk Preservation Society, co-founder of the Alde & Ore Association) with which I assisted and now continue. I support the need to transition to electrical energy but cannot support the harm which would be caused by the strategy and design of Sea Link.

I have made many written and in-person representations to the ExA on the Environmental Assessment topics of Landscape and Visual, Cultural Heritage and Design, including Night-Time lighting – the DCO references are noted above. I have used my experience of assessing these topics for EIAs and appeared as an expert witness at public planning inquiries. My response to your letter specifically addressed item **13 Design** as I do not consider the applicant has adequately addressed the matters raised in the DCO.

Firstly, may I refer you to Ofgem's consultation on its draft **Sea Link Project Assessment** (1 September 2026). This revealed for the first time to the public that NGET has not resolved harmonic distortion problems in the electrical design. This will likely require more large scale plant which has not been included in any DCO documents. NGET submitted its final Project Assessment in January 2026 in the middle of the DCOs public examination but never mentioned the problem. No screening

or scoping of any likely environmental effects has been made public, nor has the ExA ever commented on the problem. Were they aware of it?

Ofgem have refused to accept NGET's proposed mitigation as it would reduce the contracted 2GW to 1.8GW. Ofgem report that "NGET anticipates that additional activity is required elsewhere on the transmission network to resolve this issue and ensure compliance" supplying the 2GW of power.

From Ofgem's description, I anticipate more land being needed either at Saxmundham or elsewhere on the two 400kV pylons downstream. The likely scale, appearance and siting will require further environmental assessment and public consultation. How this fits within the National Policy Statements EN-1, EN-3 and EN-5 and your specific questions is addressed below.

13 Design

This topic has many aspects.

Criteria for Good Design for Energy Infrastructure

Applicant's assessment

Strategy – project splitting and inadequate cumulative assessment

- The location of the proposed converter station at Saxmundham importing or exporting HVDC from Kent is only possible because the Friston DCO permitted NGET a substation to connect to the two 400kV lines out from Sizewell.
- No converter station was needed at Friston as the power cables from EA1N and EA2 were onshored as HVAC
- No converter station would be permissible at Friston due to multiple significant effects from the scale of buildings and siting so close to landscape and heritage assets
- Sea Link is sited where these harmful effects would have slightly less impact and to be as close to this substation as possible to minimise the length of HVAC cabling, power losses and heat gain from the converter to substation
- Friston was only made possible by NGET convincing EA ONE to change its design from Bawdsey to Bramford from HVDC to HVAC, resulting in more underground cables and reduced capacity
- LionLink is now proposed to connect to the Saxmundham converter station and thence to the 400kV grid at Friston.
- Four major projects – EA ONE, Friston, Sea Link and Lionlink have never been assessed for their cumulative environmental effects because NGET has split the planning approval process into individual applications
- The details available to the ExAs for individual cumulative assessment have been minimal and never fixed
- ExAs have been reluctant to bind their successors to their own conclusions
- The consequence is that the combined concentration of NGET's developments in a small area of East Suffolk has never been properly assessed, nor with Sizewell C whose effects are now visible and felt for miles around
- In my opinion, the applicant has failed successively to comply with the Environmental Regulations.

The Secretary of State should take into account the ultimate purposes of the applicant's strategic methods to achieve its infrastructure and the quality of its submitted design.

Electrical design

- In March 2023 National Grid ESO issued **Power Quality in the GB Transmission Network – A System Operability Framework Document**
- Power quality is critical to the performance of plant and equipment connected to the power network
- Poor power quality can reduce efficiency, cause excessive heating or even damage the assets
- Inverter Based Resources such as HVC, wind, solar and battery resources, and their associated resources (such as harmonic filters) may also contribute to the erosion of power quality, or be designed so as to limit this effect
- NGET will have been aware of the technical challenges even before the PEIR consultation
- The 2GW required by Ofgem was a fundamental part of the design brief
- Why has it not been solved three years later?
- The applicant also has to comply with the **Serviced Grid Code**, now c1180 pages of technical and programmatic requirements
- DC Converter Station owners are required ¹ to provide information about the reactive compensation and harmonic filtering equipment required to ensure that their plan and Apparatus (and the OTSUA) complies with the criteria set out in CC.6.1.5 or ECC.6.1.5 (as applicable) – this has not changed since the 2020 version of the Code
- There are 73 further references to harmonics in the current Code
- Why did the NGET submit the DCO application, knowing full well its technical design requirements, but not having solved them?

Design and siting of buildings

- The purpose of a DCO is to control development
- The ExA and SoS have to be satisfied that design has been developed sufficiently that any unresolved details required in final DCO will not change assessments submitted to the ExA by statutory consultees nor the EIA's conclusions
- Application document **7.3** describes the overall development of the project from Suffolk to Kent, their site selections, and design development
- Application document **7.10** explains the co-location of three converter stations with associates landscaping concepts
- Application document **7.12.1 (B) Design Principles** identified the broad objectives and how the design evolved
- Application document **7.11.1 (B) Design Approach** is similar to a Design and Access Statement with the form and appearance of massing options explored with materials and rendered visualisations
- It also includes design development in response to the Suffolk Design Review Panel's comments
- The submitted drawings of the proposed buildings in **2.13.1** show the electrical layouts and building blocks with massing in elevation and section. But none of the details explored and assessed in the above documents are included
- The **Applicant's Closing Summary Statement 9.145** states the Converter Station will have a height of up to 26m. Submitted drawing DCO/S/DE/SS/1207 in document **2.13.1 [APP-037]** has dimensioned the apex as 24m above ground level – will the drawing be amended or approved as submitted?
- The Applicant states that the only design to be finalised will largely be scale and sequencing (para 4.3.7)

¹ **Serviced Grid Code, Issue 6 Revision 45, PC.A.2.4.2, page 42**

- Amending the draft DCO so the design should be “substantially in accordance with Key Design Principles” (**7.12.1 (B) Design Principles**) would be avoid the more detailed assessments of alternatives in **7.11.1 (B) Design Approach**
- As there are multiple choices, accordance with principles would be adopting the lowest common denominator and not the best quality design
- The Applicant has baulked at committing to any character or appearance of the buildings
- This has affected the multiple verified views produced for the Landscape and Visual Assessments for the ES – they only model a maximum volume as the controlling DCO parameter

Design and siting of landscaping

- The Area of Search has been drawn far too narrowly for the is topic
- The inconsistent construction of the Zone of Theoretical Visibility (ZTV) CAD plans in the PEIR and DCO submissions I identified and illustrated in my **[REP6- 256D]** has not be adequately explained by the Applicant
- Any conclusions about the visibility of the Project outside the Area of Search within the National Landscape and the consequent potential effects are still at large. This is a serious question mark on the validity of this aspect of the LVIA
- The Applicant admits that the proposed landscape planting is only mitigation of the harmful effects of the Project (para 4.10.1 in **9.145 Closing Summary**)
- The visual effects may be mitigated from significant adverse to localised significant adverse
- This excludes the change in the countryside character from the imposition of the scale and nature of the vast industrial development of Sea Link, and possibly LionLink with another adjacent similarly-sized site available – all adjacent to the eastern settlement boundary of Saxmundham
- The **Holford Rules** advise avoiding the major areas of highest amenity value by good initial route planning. The project-splitting by the applicant is evidence of strategically avoiding being held to account for the cumulative effects of multiple developments in a small area of rural Suffolk with multiple statutory constraints.
- Holford recommends avoiding routeing close to residential areas and landscapes with local value. This only refers to pylons – the huge buildings will have greater effects than pylons
- The **Horlock Rules** address the effects of buildings and other infrastructure. Although avoidance of designated areas should be avoided, the drilling to onshore cables and subsequent undergrounding of HVDC cables to the Converter Station will leave scars in the landscape.
- The undergrounding of the HVAC cables to the Friston substation will sterilise vegetation above due to the heat generated.

Design of night-time lighting

My report on the Applicant’s **Landscape and Visual Night-time Assessment 9.124** of proposed night-time lighting unfortunately missed the submission deadline by 12 hours, so the ExA have not been able to assess it. I trust the Secretary of State will be advised of its contents and conclusions.

In summary:

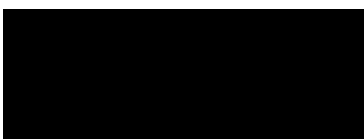
- Highly relevant local and technical policy and guidance on the measurement of existing night glow and calculations of the effects of the proposed lighting have not been adopted nor followed
- The Applicant has produced illustrative lux plots without specifying luminaires or having materials specified to include reflectances in any calculation

- The assessments from the LVIA's adopted verified viewpoints have a limited field of view and do not mention nor assess the hemispherical character of the night sky which is essential for public amenity
- The understanding of night-time character has conflated its values with day-time ones
- CPRE satellite analysis shows the site is in a area of very dark sky which should be preserved. The Applicant has not assessed any effects from the project, especially on wildlife such as bats and owls
- The lack of detailed and competent assessment casts doubt on the adequacy of the Visual Assessment in the ES

Secretary of State decision making

- No reason has been given for not committing to more detailed building design. The Applicant has a good selection of alternative Converter Station massing and cladding design. Compliance with the criteria for good design in NPS EN-1 para 4.7.7 is incomplete
- If the massing has to change or colours and patterns altered, these can be controlled by the DCO and consultation with the County and District Councils
- This would be within the scope of the Rochdale envelope. Not committing to a design now would be a misuse in the future of the Rochdale Envelope. Please refer to Mr Justice Sullivan's judgement on the scope which I have already submitted
- It is possible that the Applicant has only provided Employer's Requirements for a Design and Build contract. Given the sensitivity of the site and the multiple and wide-ranging effects of the project, it will be unacceptable to permit what is currently an outline and not a detailed planning application
- The Applicant complained in **Applicant's Closing Summary Statement 9.145** 6.1.8 that the criticisms in the public consultations has been disproportionate to the project
- The Applicant admits SeaLink is a large and complex application – it should not be surprised at being held to account given the very large quantum of paper to be understood with limited resources
- Judging from the number of corrections, changes and additional documents submitted in response, the Applicant's initial submissions were inaccurate and inadequate
- The Applicant considers the Project was ready for examination (para 6.3.1). But why had it not resolved the harmonics problem, only publicly disclosed this month by Ofgem, and which it knew about when it submitted its Project Assessment in January 2026 in the middle of the examination?
- The potential changes to the design with consequent additional environmental effects may require the examination to be reopened. This will incur time delay, uncertainty, extra cost and stress for local people and businesses.
- The SoS is requested to pause this DCO application until the issues identified by Ofgem, and those above, have been resolved.

Yours faithfully,



Nicholas Bridges