

**Submission on Behalf of the LALC FAC ENERGY WORKING GROUP**

**REPRESENTATION ON THE PROPOSED MORGAN AND MORECAMBE OFFSHORE  
WIND FARMS TRANSMISSION ASSETS DEVELOPMENT CONSENT ORDER**

**PLANNING INSPECTORATE REFERENCE NUMBER: EN020028**

**Closing Statement –**

***The Imbalance of Harms over Benefits  
and  
Failure to Assess the Obvious Material Alternative***

This submission is the closing statement of Lancashire Association of Local Councils, Fylde Area Committee Energy Working Group (EWG). It focuses on the imbalance of harms over benefits and the failure to assess the Obvious Material Alternative route, such that the Development Consent Order Application should be refused or the Applicants should be directed to assess the generators to consumers route via Stanah/Hillhouse Technology Enterprise Zone (HTEZ) and the 400kV Heysham Ring.

The Applicants could have avoided their current difficulties with fulfilling the requirements of the Electricity Act 1989 (sections 3A & 9), which mandates the development and maintenance of an efficient, coordinated, and economic system for electricity transmission and distribution (as specified in the Electricity Networks National Policy Statement – EN-5 section 2.2.10). They had—and still have—the option to propose connecting consumers via the Obvious Material Alternative route through Stanah, HTEZ, and the National Grid using the 400kV Heysham Ring by upgrading existing infrastructure.

Adopting this route would be faster, more efficient, and approximately £1.5 billion less expensive than the combined proposals from the Morgan, Morecambe, and EISTP Mooir Vannin projects. The supporting cost data is detailed Annex 1. This nationally significant saving represents the net benefit of a coordinated approach across these projects. It is noted that despite having been given the opportunity to refute the order of these savings, neither the Applicants nor NGET have offered alternatives.

This proposal directly aligns with NESO's recommendations to the Government in "Clean Power 2030: Advice on Achieving Clean Power for Great Britain by 2030," particularly section 5.2:

<https://www.neso.energy/document/346651/download>

“The proposed plans in this report minimise new onshore infrastructure. We are prioritising reinforcement of existing infrastructure and have identified some marine cabling by 2030. This was a core part of the network plans that form the basis for proposals in this report: those plans consider ways to maximise and upgrade the existing network first, and only once this reaches a limit are new lines considered.”

Annex 2 of this closing statement includes section 5.2 in full and expands on the benefits and reduced harms that come from prioritising reinforcement of existing infrastructure—demonstrating the fundamental logic for NESO’s commitment to this strategy.

Therefore, it is logical, nay obvious, to prioritise the use and improvement of current infrastructure. The Applicants have chosen not to pursue this Obvious Material Alternative path, though they still could.

On October 27th, Fylde’s MP Mr Andrew Snowden released correspondence from National Grid. In a letter dated September 26th, 2025 (see Annex 3), National Grid’s Director of Customer and Network Development confirmed that Stanah/Hillhouse “could provide a potential location for a new substation,” although it has yet to be evaluated.

“Linked to this, whilst the adjacent Hillhouse land could provide a potential location for a new substation, our regulatory framework requires such a choice to be evidenced. As such, NGET would have to carry out an extensive selection study, to determine the most appropriate site, according to the principles of cost and efficiency.”

Our submission REP1-083 details the references evidencing Stanah’s repeated shortlisting for Irish Sea shoreline projects. These include the National Grid input to the Offshore Energy Strategic Environmental Assessment, (SEA) Celtic Array, Moorside, Walney Extension, and Walney 2 proposals. As far back as 2008, National Grid in their input to the Offshore Energy SEA (Table 40) recognised that what is now the HTEZ site could host onshore transmission infrastructure associated with the Stanah connection point. Since 2012, the offshore transmission infrastructure for Walney2 has used the HTEZ site and connected to the National Grid via the Stanah point. HTEZ also provides a direct 2km access corridor to the Irish Sea shore, allowing efficient and coordinated connections between generators and consumers. The site’s benefits and feasibility are obvious.

ExA members could have verified this themselves by accepting NPL’s invitation (the HTEZ site owner, see REP1-187).

It is welcomed, however, that the ExA has publicised their investment of time to personally see the compliant, open space access to HTEZ from Rossall Beach and the established infrastructure from Stanah via the Heysham Ring lines. From that investment, it therefore appears that the ExA agrees that this is an Obvious Material Alternative worthy of assessment. It removes all the harms of the Applicants’ proposals and offers extra benefits such as quicker construction and lower costs. This is achieved by strengthening existing infrastructure and avoiding many tens of kilometres of disruptive all new underground cabling, avoidable destructive Greenbelt development and unnecessary compulsory acquisition of land. With this alternative route, there are no “Very Special Circumstances” or unique reasons to require compulsory Acquisition procedures and so in conflict with the Local and National Planning and regulatory frameworks.

Moreover, NGET’s submissions to the ExA (REP1-089) indicate that the Penwortham site currently lacks capacity and physical space for three new connections alongside other projects, necessitating compulsory purchase of South Ribble Greenbelt land. With Hillhouse now acknowledged by National Grid PLC as a possible substation location, NGET could face challenges and delays if pursuing compulsory acquisition near Penwortham without considering Stanah/HTEZ.

100 Although Applicants claim Stanah/HTEZ was assessed, the NESO Holistic Network Design Review (HNDR - <https://www.neso.energy/document/262681/download>) does not mention Stanah or Stanah/HTEZ, nor display assessment data (verifiable by searching "Stanah" in the report). This omission persists despite Walney 2's infrastructure being hosted at HTEZ and connected to consumers via the National Grid network and Stanah connection point. This is known to NGET and the energy sector, published on network maps e.g. Open Infrastructure Map link : <https://openinframap.org/#8.14/53.763/-2.927>

105 The HNDR report states new substation locations were considered but it did not identify any in the North West or note their advantages—even where environmental issues were flagged. These include unnecessary conflict with the Ribble & Alt marine SPA, Greenbelt destruction, Compulsory Purchase of land, Excess Emissions from cable installation, and neglecting passenger/military operations at Warton and Blackpool with the associated Bird-Strike Risk to Life. According to HNDR's BRAG ratings, if there was a solution which addressed these harms, air operations should be rated RED. Since no rating exists for Warton, the St Annes/Penwortham route should logically have been rated BLACK, undermining its fundamental suitability. It is apparent that from the statements in the HNDR excerpt below, that even now, with emergent knowledge, the inadequacy of the initial assessments undertaken have not been reconsidered.

115 From the HNDR Report, page 152 (<https://www.neso.energy/document/262681/download>) – author's underlining:

120 "Potential interface point sites were initially ranked in terms of potential capacity (including planned capacity) to accept new generation inputs using information provided by the Transmission Owners (TOs).

125 This exercise included all existing and planned substations on the 400kV and 275kV network in the region and the study area was based on TO network information and the economic advantages of connecting close to the coast where possible. This did not preclude potential interfaces at new substation sites. It was noted at the outset that no new planned or potential substation locations were identified, and that these could be added if constraints to existing substations, or merits of potential new locations, warranted the consideration of new interface points.

130 The principal constraints in the North West Region were the environment constraints on the offshore transmission cable routes and landfalls, and no distinct advantages of new substation locations were identified. The interface points considered therefore remained focused only on existing substation sites in the region.

135 These locations, and all other potential interface points, were considered at a 'high level' (i.e. principal considerations) in a workshop in terms of deliverability (Objective 2) and environment and community constraints (Objectives 3 and 4). Environmental and community constraints were presented to focus on the highest level (Red in the BRAG dataset) at this stage, although information on characteristics behind these constraints, and other constraints, were also available.

140 The interface sites selected for further consideration for both the radial and coordinated designs in the North West Region were Middleton, Penwortham, Bodelwyddan and Pentir."

145 The HNDR required delivery by 2030 (HNDR Executive Summary Section 1.1 - “Commitments from the TOs to accelerate delivery of their reinforcement projects once detail of the changes set out in the BESS are confirmed, with the aim of delivering all necessary infrastructure by 2030”) .

150 and assumed shared cable corridors, substations, and export cables from applicants (HNDR Section 5.1.16 “Following stakeholder feedback, the design for R4\_5 and R4\_6 was changed from a coordinated design with electrical integration offshore, to radial connections with a shared cable corridor. The connections would share a land substation site, landfall, and cable corridors. The developers had proposed this solution as an alternative to our proposed coordinated design”) —

155 but neither of these approaches is being followed. The Applicants have insisted on retained project delivery schedules that result in completions in 2036/37 and construction of two independent cable corridors and two independent substations and export cabling. No reassessment has been published, further undermining the sustainability of the duty of efficiency, coordination and economy.

160 Mooir Vannin was excluded from HNDR’s scope. This exclusion occurred even as Orsted has indicated their concurrent engagement with NGESO/NGET. This is reported in their East Irish Sea Transmission Project Environmental Impact Assessment (EIA) Scoping Report August 2025 in section 4.3.1.2 (link - <https://eastirishseatransmissionproject.co.uk/documents>) . Coordination opportunities to enhance efficiency, economy and reduce cumulative harm and emissions from further inland trenching rather than reinforcing existing or sharing new infrastructure have been missed. No reassessment of HNDR has since occurred, even though its assumptions and intended scope to ensure efficiency, coordination, and economy are now outdated.

170 NESO states, “The current connections queue currently holds over 750GW of projects — four times what we need for 2030 and twice what we need for 2050. (See:<https://www.neso.energy/news/reforming-connections-unlock-great-britains-economic-growth-and-clean-power-potential>).

175 The Applicants’ proposed maximum contributions represent just 0.064% to 0.19% of this queue, so these cannot reasonably be considered critically significant programs nationally. Their impact on achieving Net-Zero is marginal, and given the insisted four-year gap between projects, they do not credibly help reach 2030 targets. The benefits claimed for these projects in the national context do not outweigh the harms that arise from the approach that the Applicants have chosen to adopt.

180 Given the clear imbalance of unresolved, unacceptable harms versus minimal benefits—and the failure to assess the obvious alternative of reinforcing existing infrastructure via Stanah/HTEZ and Heysham Ring—these applications should be refused or withdrawn. This would allow adoption of the compliant, obviously viable alternative route to achieve a faster, smarter, and £1.5bn cheaper transition to Net-Zero, supporting government targets and consumer interests.

# Assessment of Comparative Costs of Utilising Established and Creating All New Infrastructure Between Fylde Coast & Penwortham NGET Substation

## 190 Total for Morgan, Morecambe and Mooir Vannin OWE projects

*Electricity Act 1989 - Section 9 :General Duties of Licence Holders:  
“to develop and maintain an efficient, co-ordinated and economical system of electricity transmission”*

195 Uses costings provided in [IET A Comparison of Electricity Transmission Technologies: Costs and Characteristics](https://www.theiet.org/media/axwkktkb/100110238_001-rev-j-electricity-transmission-costs-and-characteristics_final-full.pdf) 2025  
link - [https://www.theiet.org/media/axwkktkb/100110238\\_001-rev-j-electricity-transmission-costs-and-characteristics\\_final-full.pdf](https://www.theiet.org/media/axwkktkb/100110238_001-rev-j-electricity-transmission-costs-and-characteristics_final-full.pdf)

Connecting Fylde Coast to Penwortham		Total	Net Savings
1	Costs of All New Cable Under-grounding between Fylde Coast and Penwortham (30km)	£1,698 m	
2	Costs of Northern HTEZ/Stanah Cable Route utilising established infrastructure		
a	Costs connecting Fylde Coast (RB) with Stanah via HTEZ	£181m	
bi	Re-conductoring established 400kV OHL between Stanah & Penwortham	£28m	
2i	Total Established Infrastructure, including reconductoring, connecting RB to Penwortham	£209m	£1,489 m
bii	Additional New 400kV OHL between Stanah & Penwortham	£59m	
2ii	Total Established Infrastructure + New 400kV OHL, connecting Fylde Coast to Penwortham	£240m	£1,458 m

Note :

- 1. **Northern Route** – For All three OWE projects (Mooir Vannin, Morgan & Morecambe) utilising established Infrastructure between
  - Rossall Beach (RB) - Hillhouse Technology Enterprise Zone (HTEZ) – Stanah – Penwortham
    - a) Underground between RB – HTEZ boundary (2km),
    - b) Underground into HTEZ (0.6km)
    - c) OHL Across Hillhouse before Converter Substation (0.85km)
    - d) OHL Across Hillhouse after Converter Substation (0.85km)
    - e) Developer & NGET Substation Infrastructure Hosted on HTEZ
    - f) Reconductoring Established 400kV Overhead Line Stanah to Penwortham (23.5km); or
    - g) Additional 400kV Overhead Line Stanah to Penwortham (23.5km)

Annex 1 continued :-

200 **Assessment of Comparative Costs of Utilising Established and Creating All New Infrastructure Between Fylde Coast & Penwortham NGET Substation**

Uses costings provided in [IET A Comparison of Electricity Transmission Technologies: Costs and Characteristics](#) 2025

1						Costs : Total	Net Savings
2	<b>Costs of All New Cable Under-grounding between Fylde Coast and Penwortham (30km)</b>						
3	Moor Vannin	1.32 GW	£653m				
4	Morgan	1,5 GW		£653m			
5	Morecambe	0.48 GW			£392m		
6						<b>£1698m</b>	
7	<b>Costs of Northern HTEZ/Stanah Cable Route Costs utilising established infrastructure between Fylde Coast and Stanah</b>						
8						sub-total	
9	Moor Vannin	1.32 GW	£69m				
10	Morgan	1,5 GW		£69m			
11	Morecambe	0.48 GW			£43m		
12						£181m	
13							
14	<b>Costs of Upgrade of established 400kV link between Stanah &amp; Penwortham (23.5km)</b>						
15						sub-total	<b>Net Savings</b>
16	Re-conductoring established 400kV Overhead Line					£28m	<b>£209m</b>
17	Additional New 400kV Overhead Line					£59m	<b>£240m</b>

205 Note :

- **1. Northern Route** – For All three OWE projects (Moor Vannin, Morgan & Morecambe) utilising established Infrastructure between
  - Rossall Beach (RB) - Hillhouse Technology Enterprise Zone (HTEZ) – Stanah – Penwortham
    - a) Underground between RB – HTEZ boundary (2km),
    - b) Underground into HTEZ (0.6km)
    - c) OHL Across Hillhouse before Converter Substation (0.85km)
    - d) OHL Across Hillhouse after Converter Substation (0.85km)
    - e) Developer & NGET Substation Infrastructure Hosted on HTEZ
    - f) Reconductoring Established 400kV Overhead Line Stanah to Penwortham (23.5km); or
    - g) Additional 400kV Overhead Line Stanah to Penwortham (23.5km)
- **Further Examples of Options of Resilience Measures**
  - Reconductor established 400kV Overhead Line Stanah to Heysham
  - Create separate connections to Heysham and Penwortham
  - Upgrade DNO 132kV links between Stanah & Penwortham
  - Add green Hydrogen generation, storage and distribution
  - Add further BESS & Gas Peaking Plants at HTEZ
  - Flow Control Devices
  - Substation equipment – Upgrades at Stanah replaces Upgrades at Penwortham
  - Other Options?

Annex 1 continued :-  
The Following tables are also presented in REP2-0264

**Table 1 : Comparative Assessment of Costs Between Northern Route via Hillhouse Stanah and the Morgan & Morgan Applicants' (M&M) Proposals**

IET 2025 Report Link – Costings below use data from this report -

A Comparison of Electricity Transmission Technologies: Costs and Characteristics An independent report by Mott MacDonald in conjunction with the IETLink -  
[https://www.theiet.org/media/axwkkkb/100110238\\_001-rev-j-electricity-transmission-costs-and-characteristics\\_final-full.pdf](https://www.theiet.org/media/axwkkkb/100110238_001-rev-j-electricity-transmission-costs-and-characteristics_final-full.pdf)

1	Route	Trenches/ Pylon Lines	km	Transmission Mode	IET 2025		Cost £m / km	Total Cost £m	Cum Cost £m	Ref	Morecambe £m	Morgan £m
2	Northern Route – Penwortham-Stanah-Hillhouse- Irish Sea											
3	Irish Sea- RB-Hillhouse Boundary - Morecambe	1	2	Low	Underground	£44.32	3	£14.77	£29.55	C	£29.55	
4	Irish Sea- RB-Hillhouse Boundary – Morgan	1	2	Med	Underground	£73.84	3	£24.61	£49.23	D		£49.23
5	into Hillhouse – Morecambe	1	0.6	Low	Underground	£44.32	3	£14.77	£8.86	C	£8.86	
6	into Hillhouse – Morgan	1	0.6	Med	Underground	£73.84	3	£24.61	£14.77	D		£14.77
7	Across Hillhouse before Converter – Morecambe	1	0.85	Low	Overhead	£7.73	3	£2.58	£2.19	A	£2.19	
8	Across Hillhouse before Converter – Morgan	1	0.85	Med	Overhead	£9.17	3	£3.06	£2.60	B		£2.60
9	Across Hillhouse after Converter – Morecambe	1	0.85	Low	Overhead	£7.73	3	£2.58	£2.19	A	£2.19	
10	Across Hillhouse after Converter – Morgan	1	0.85	Med	Overhead	£9.17	3	£3.06	£2.60	B		£2.60
11									£111.98			
12	Stanah to Penwortham	1	23.5		Reconductor	£89.90	75	£1.20	£28.17	G		£28.17
13									£140.15			
14												
15	Hambleton – Heysham	1	25.9		Reconductor	£89.90	75	£1.20	£31.05	G		
16									£171.20			
17												
18	M&M Proposal											
19												
20	St Annes to Penwortham – Morecambe	1	30		underground	£195.80	15	£13.05	£391.60	E	£391.60	
21	St Annes to Penwortham – Morgan	1	30		underground	£326.51	15	£21.77	£653.02	F		£653.02
22									£1,044.62			
24									£m 2 trench sets			
25	Irish Sea-RB-HTEZ-Penwortham – NO Reconductoring								£932.64		£348.81	
26	Saving Irish Sea-RB-HTEZ-Penwortham incl Reconductoring Stanah-Penwortham								£904.47			£555.66
27	Irish Sea-RB-HTEZ-Penwortham incl Reconductoring Stanah-Penwortham & Hambleton–Heysham								£873.42			
										checksum		£904.47

**Table 2 : References for Data Extracted from IET Document and used as analogues in the Morgan & Morecambe routing cost comparison assessment above.**

Ref	IET Page		Ref	Total Build Cost	km	'£m/km	Analogue
				£m			
Overhead							
A	Page 40	Overhead Line – 3 km – Low Rating (2,494 MW)	A	£7.73	3	£2.58	Across HTEZ
B	Page 41	Overhead Line – 3 km – Medium Rating (4,988 MW)	B	£9.17	3	£3.06	Across HTEZ
Underground							
C	Page 51	Underground Cable Buried – 3 km – Low Rating (2,494 MW)	C	£44.32	3	£14.77	Irish Sea-RB-HTEZ
D	Page 52	Underground Cable Buried – 3 km – Medium Rating (4,988 MW)	D	£73.84	3	£24.61	Irish Sea-RB-HTEZ
E	Page 54	Underground Cable Buried – 15 km – Low Rating (2,494 MW)	E	£195.80	15	£13.05	St Annes-Penwortham
F	Page 55	Underground Cable Buried – 15 km – Medium Rating (4,988 MW)	F	£326.51	15	£21.77	St Annes-Penwortham
Reconductoring							
G	Page 106	Reconductoring Using HTLS – 75 km – Additional Capacity of 2,494 MW	G	£89.90	75	£1.20	Stanah-Penwortham

## Annex 2

### Clean Power 2030

<https://www.neso.energy/document/346651/download>

#### 5.2 Wider environmental and local community impacts

##### Impacts of building clean power infrastructure

Power projects have significant impacts on the wider environment and local communities, making it crucial to consider these factors in their development. Conducting thorough environmental impact assessments, engaging with stakeholders and affected local communities and implementing mitigation measures can help minimise negative impacts and enhance projects' sustainability. The planning and consenting process for new generating sites and infrastructure development covers local environmental factors such as noise, vibration, visual impact, flood risk, heritage, ecology and waste management.

In a clean power system, more power needs to be transported over greater distances from generation sites to areas of demand. This requires various technologies, such as overhead lines, underground lines and subsea cables. Each technology has distinct technical characteristics and environmental impacts:

- Overhead lines are usually the cheapest to build but have a visual impact through pylons and wires.
- Undergrounding is more expensive and involves environmental disturbance and potential damage during installation.
- Subsea cables are also costly and require connections to the onshore network, while posing challenges in the marine environment.
- Furthermore, long-term energy infrastructure may occupy valuable sites that could be used for other purposes.

However, it is possible to minimise and mitigate these impacts. Having a clear plan for clean power allows for considering the environment holistically across the programme, making choices that collectively minimise potential negative impacts to the environment and communities and can support solutions that are positive for nature overall.

**The proposed plans in this report minimise new onshore infrastructure. We are prioritising reinforcement of existing infrastructure and have identified some marine cabling by 2030. This was a core part of the network plans that form the basis for proposals in this report: *those plans consider ways to maximise and upgrade the existing network first and only once this reaches a limit are new lines considered*.** Strengthened engagement between developers, local authorities and communities is vital for building trust, addressing community concerns and incorporating them into network plans to minimise overall impact on local people.



### Annex 3

On the 27th of October Fylde's MP Mr Andrew Snowden released correspondence from National Grid's Director of Customer and Network Development in their letter dated 26<sup>th</sup> September 2025

Name & signature of sender is redacted.

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Andrew Snowden MP  
Member of Parliament for Fylde  
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26/09/2025

Dear Mr Snowden,

**RE: Connection point for Morgan, Morecambe and Mooir Vanin offshore wind farm projects**

Thank you for including us in your recent letter to Ofgem regarding the use of Stanah substation as a connection point for offshore wind farm projects in the Irish Sea. I am responding to you on John Pettigrew's behalf, in my capacity as the Director of Customer and Network Development within National Grid Electricity Transmission (NGET).

To open, I wanted to stress that, at National Grid, we are very mindful that the cost of maintaining and upgrading the transmission network is recouped through household energy bills and, as such, do our utmost to ensure that our work provides value for consumers across England and Wales. This principle is also central to the way in which we are regulated, with the Electricity Act of 1989 requiring us to develop proposals that are efficient, co-ordinated and economical.

To that end, when planning our work, National Grid assesses each of our projects on their own merits to ensure that we are enacting solutions that strike an appropriate balance between the three aforementioned factors. Each project must also be aligned to the strategic network planning stipulations set out by the National Energy System Operator (NESO), who own the contract with the connecting party, and approved by Ofgem to ensure that it offers value for consumers.

In looking at the specific instance at hand, Penwortham substation was chosen as the point of connection for the Morgan, Morecambe and Mooir Vanin offshore wind projects as a result of the strategic planning process, which was published as part of the NESO's Holistic Network Design (HND) in 2022. As such, I would suggest that NESO should be included in any further discussions on this topic.

I can, however, provide some insight into why Stanah substation was considered and not deemed an appropriate point of connection.

The first key factor is rooted in the site itself. In essence, Stanah is a small site that was built specifically to supply the lower voltage distribution network in the local area. As such, in its current form, it would not be able to accommodate an offshore wind connection.

In addition, as a result of the homes surrounding the site, it would not be possible to re-configure the existing substation to the appropriate degree to provide any further points of connection to the transmission network. This, therefore, would necessitate the construction of an entirely new substation, which would incur significant cost and potentially delay the aforementioned projects by a number of years.

Linked to this, whilst the adjacent Hillhouse land could provide a potential location for a new substation, our regulatory framework requires such a choice to be evidenced. As such, NGET would have to carry out an extensive selection study, to determine the most appropriate site, according to the principles of cost and efficiency.

Finally, as a result of the way in which the regional network is configured, in addition to building a new substation in the area, we would also have to construct a new overhead line to link the new site back to Penwortham. As such, the cumulative impact for building this new infrastructure, would therefore be significantly greater than the current proposed course of action.



I hope the above is helpful both in underlining National Grid's commitment to providing value for consumers and outlining the thinking that has driven the existing solution. If you have any further questions please do not hesitate to contact my team – I would be more than happy to meet with you, alongside appropriate representatives from Ofgem and NESO, for a detailed discussion.

Yours sincerely,

Director of Customer and Network Development,  
National Grid Electricity Transmission