20th May 2025

Lancashire Association of Local Councils Fylde Area Committee Energy Working Group
Interested Party Number - 20053845

Summary of
UPDATE TO RELEVANT REPRESENTATION AND
INITIAL COMMENTS ON APPLICANTS' FEEDBACK
ON THE PROPOSED
MORGAN AND MORECAMBE OFFSHORE WIND FARMS TRANSMISSION ASSETS
DEVELOPMENT CONSENT ORDER
PLANNING INSPECTORATE REFERENCE NUMBER: EN020028

The Lancashire Association of Local Councils Fylde Area Committee Energy Working Group **(**EWG) continues to oppose the Morgan and Morecambe Offshore Windfarms Transmission Assets DCO application. It highlights major concerns including project delays, lack of alignment with national grid connection plans, and inefficiencies in the Applicants' proposed route via Penwortham. The EWG argues this approach increases costs, environmental, and community impacts while being inconsistent with planning policy and lacking the economy & efficiency required under the Electricity Act 2008.

The EWG proposes a superior "Material Alternative" using the established Stanah substation and Hillhouse Technology Enterprise Zone (HTEZ), and existing 400kV twin circuit overhead line connecting Stanah with Penwortham, which offers proven infrastructure, cost savings (£903m), and reduced disruption. The current DCO application contradicts the assumptions used by National Grid in the Holistic Network Design Review (HNDR), which were based on a shared substation site—something not present in the Applicants' actual plans.

Moreover, the Applicants have not demonstrated a proper comparative assessment of alternatives, particularly Stanah, despite its consistent shortlisting for other offshore projects. Statements made by the DESNZ Minister to Parliament referencing Stanah are unsupported by HNDR documentation and appear outdated or inaccurate.

The EWG urges the Examining Authority to seek clarification from National Grid, Ofgem, and the Minister on how Stanah/HTEZ was excluded from consideration. It maintains that the Applicants' route lacks justification, introduces unnecessary harm, and fails to represent the lowest whole system cost or a compliant, sustainable energy strategy.

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Introduction

The Lancashire Association of Local Councils, Fylde Area Committee Energy Working Group (EWG) has once again considered what it views to be the principal aspects of the above application and would make the following comments.

This is an updated addition to the Relevant Representation (RR), RR-1261, made by the EWG. regarding the Morgan and Morecambe Offshore Windfarm Transmission Assets Project (the Project), promoted by Morgan Offshore Wind Limited and Morecambe Offshore Windfarm Limited (the Applicants) The EWG supports the realisation of opportunities and avoidance of adverse impacts arising from energy related developments, including in accord with the Government's ambition for: national Economic Growth; Regional Levelling Up; Energy Security; and Sustainable Development at the lowest whole system cost to the consumer.

The responses by the Applicants to RR-1261 are noted, however they do not provide the evidence to change conclusions & recommendations of the EWG.

It is noted that the regulator Ofgem has just approved "the Grid Connections Reforms". It is also noted that Ofgem identifies that there is a backlog of some 750GW of projects to be connected. This is apparently multiple times more energy than the nation requires even by 2050. The notional generation capacity of 1.5GW of the Morgan and 0.48GW of the Morecambe project contribute at best only 0.2% and 0.064% of that backlog. As such, they cannot be considered mathematically nationally significant.

In addition the delivery schedule of the Morecambe and Morgan projects have effectively slipped two years+ compared with the dates their website is forecasting. The latest project schedules presented by the Applicants mean that they will no longer meet the 2030 Clean Power requirement by its own publicity and the scheduling in the Application. In the National Grid RIIO-T3 Business Plan - https://www.riiot3.nationalgrid.com/document/30069/download) . shows that it plans to connect only 450MW of offshore wind energy by 2031 in the North West. A total that is not aligned to be sufficient to connect either of the Morgan or Morecambe projects.

The delays, inconsistencies, lack of compliance and seeming inability to resolve detail, start to make these look like "the Zombie" projects that are perhaps likely to be avoided by the Government.

The EWG, however, continues to offer to support the Applicants to save time, costs and adverse impacts for all, through the utilisation of the local energy infrastructure in favour of their current approach. The Applicants' approach is one of non-compliant, problematic, completely new 30km undergrounding of two separate cable corridor & substation projects in two independent activity

streams over still to be determined multiple years, which may not now be prioritised for connection to the National Grid.

In addition, using the latest costings just published by the IET in relation to Transmission Technologies, it is suggested that adoption of the established northern route via Stanah/ Hillhouse Technology Enterprise Zone (HTEZ) - the Material Alternative route – would save developers and consumers some £903m net, in comparison to the Applicants' current approach.

The Applicants' approach cannot be described as efficient nor economic, in conflict with the National Planning Statements and the Electricity Act 2008. It would be hoped that Applicants' would not be penalised by the DCO process, if they at this early planning stage realised and adopted the benefits for all, of by pursuing the established northern route via Stanah/HTEZ – the Material Alternative.

The EWG continues to object to the Project on the grounds set forth in this and its earlier RR (RR-1261). These grounds raise questions about the Applicants' reasoning for the proposed site locations for the Morgan and Morecambe onshore transmission assets, as well as the resultant unnecessary and unacceptable detrimental environmental, community and economic consequences of this decision.

The EWG would wish to potentially provide further updates, as appropriate, on further details and matters with regard to statements made by the Applicants, or as they become available through the course of the Examination

The Applicants acknowledge that there remains multiple outstanding unacceptable adverse impacts at this point in their DCO Application.

These and other unacceptable impacts would not exist if the Applicant had taken an approach that sought to comply with and utilise the portfolio of already provisioned material development infrastructure assets to deliver economic and efficient net zero whole systems at the lowest cost to consumers.

Independence of Projects, Alternatives and Site Selection

- At the first Issue Specific Hearing, the Applicants' representative clarified why there was a range of construction scenarios with the resultant demand by the Applicants to decide upon whether and when there were to be gaps in and then restarting of construction activity. This was driven through the emphasis that the DCO application involved two independent projects.

- It is noted however that in promoting their recommended route, the Applicants refer in section RR-1261 1261.3 of the Applicants' response to the EWG's RR, the document: "NESO : Pathway to 2030 : Holistic Network Design - July 2022" - (HNDR) (link – https://www.neso.energy/document/262681/download).

- In the HNDR at section 5.Regional overview : 5.1 North West Region, 5.1.16 Stakeholder feedback (p64) the following statement is made :-

> *"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**.*
>
> ***We evaluated the developers' proposal** In comparison to our original proposal and found that it performs better from an economic perspective, as the simpler offshore platform designs reduce the infrastructure costs."*

- The design for R4_5 and R4_6 stated in the quotation refer to the Morecambe and Morgan projects respectively. The above quotation, with text bolded here and spacing introduced for ease of highlighting, makes it clear that:

  i. The recommendation for the proposed route was based on an assumption that "the connections would share a land substation site", which is not the case in the Application submitted to the Examination.

  The Holistic Network Design Review (HNDR) recommendation was therefore based upon a wrong headed assumption and subsequent assessment.

  Given the Applicants' emphasis on the demand for independent substation sites and activity streams in their Application, it is not evident from the information presented to date that there was a change in assumptions and assessments. As such, no one could conclude that the Applicants' proposal at that time was not a true representation of their intent. However, the current submission is in conflict with the fundamental assumptions upon which the National Grid came to their recommendation.

ii. It is apparent that some form of costed assessment was conducted by National Grid in coming to their recommended approach.

It is not apparent that National Grid had been provided with the Developers' costings for comparisons of the options that were considered in order to determine the economic and efficient whole system, option, including potential options for connections to the National Grid network e.g. Penwortham, Middleton and - the only National Grid substation on the Fylde Coastal Plain – Stanah.

iii. The proposed route was one that was proposed by the Applicants. This was adopted by National Grid based upon the assumption of a shared land substation site.

There is no indication that Stanah would not have been a more attractive Material Alternative had the Applicants offered this, having consulted with local knowledge. That local knowledge could have readily been gleaned from, say:

- the Nationally Approved Local Development Plans, which would have highlighted land provisioned for development such as land converter substations e.g. the three Nationally Approved Enterprise zone sites on the Fylde Coastal Plain; and/or,
- local energy industry sector expertise, e.g. local National Grid staff associated with the "R4 Penwortham-Stanah National Grid Group", or Orsted the developer of the Walney 2 offshore wind farm connected to Stanah.

This would enable a lowest whole system cost to the consumer, economic and efficient route that is compliant with National and Local planning policy framework. By contrast, this is evidently not the case with the Applicants' current choice of route and approach of independent activity streams and separate substation sites.

In the Applicants' document "Volume 1, Chapter 4: Site Selection and Consideration of Alternatives (AS-026)" at 4.2.2.3 the following statement is made

> *"A key output of the HNDR process was that the preferred connection approach was for the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm to work collaboratively to consent proposals for the offshore wind farms to connect to the National Grid at the POI at Penwortham in Lancashire."*

It is apparent from the HNDR (page 64), this output was as a direct result from the wrong headed assumption of a shared onshore substation site.

Based on that shared substation site assumption, the HNDR Appraisal Summary (p144) was presented as shown below in Table 1 with four "amber" ratings. It is noted that the definition of the "BRAG" Amber as shown in Table 2 below :-

- "Amber = The most protected features and/or areas that are likely to require detailed assessment and/or mitigation and should be avoided if possible."

- It would appear that National Grid adopted a recommendation of route proposed by the Applicants that was already recognised as being non-compliant., with amber ratings for all criteria. There is no reference in the HNDR to an assessment of a route utilising Stanah or a comparison with the routes that were recommended based on the assumptions provided by the Applicants. In fact the HNDR is completely silent on "Stanah", despite showing it clearly on the maps in HNDR Figure 32, just north of Blackpool, and reproduced at Figure A1 in this document.

Table 1

nationalgridESO
Appraisal Summary

Table 39 - Offshore Transmission Summary Appraisal of Recommended Option By Wind Farm Location

Offshore Wind Farm	Recommended Interface Point (or end point)	Technology [2]	Capacity (GW)	No. of Cables [2]	Route Corridor Length (km) [1]	BRAG Rating			
						Technical Offshore Cabling	Offshore Environmental	Onshore to Substation Environmental	Onshore to Substation Community
R4_4	Bodelwyddan	HVAC	1.5	3-4	75				
R4_5	Penwortham	HVAC	0.48	1	60				
R4_6	Penwortham	HVAC	1.5	3	96				
SW_W1	T-Point	HVDC	2	2	180				
T-Point	Pentir	HVDC	2	2	315				
T-Point	Hunterston	HVDC	2	2	55				
SW_N4	Arnish (Lewis)	HVAC	0.74	2-3	40				

The table below is an excerpt from Table 39 of the HNDR. It shows the output of the Offshore Transmission Transmission Summary Appraisal of Recommended Options By Wind Farm Location. It clearly shows that with an total Amber Rating the recommended option of a connection via a land fall at St Annes to Penwortham was already non-compliant. There is no record of the assessment or comparison of a route utilising Stanah.

Table 2

The table below is from Section A2.2.2 Establishment of HND data set of the HNDR provides a description of the "BRAG" ratings as a summary of the assessment outputs shown in Table 1 above.

Table 39 - BRAG Ranking Table

Rank	Environment/Community	Technical
Black	Features or designations which affect the likelihood of an option being achievable to such a degree that the option should not be considered as part of the HND.	Features or constraints that are likely to affect the feasibility of construction and/or buildability of the HND to such a degree that the option should not be considered as part of the design.
Red	Features or designations that are so significant or pose such a high degree of risk to the design that they should be avoided[52], except in exceptional cases which include where potential mitigation (or compensation) is known; where the potential benefits to the design would clearly outweigh the potential harm and/or impacts; or where there are no alternatives.	Features or constraints that are likely to affect the feasibility of construction and/or buildability of the design to such a degree that options affecting them should not be included in the HND without potential solutions to the issues raised.
Amber	The most protected features and/or areas that are likely to require detailed assessment and/or mitigation and should be avoided if possible.	Significant technical constraints that may cause cost increases and/or significant schedule delays; not ideal but likely to be achievable and/or capable of resolution.
Green	Features or designations to be taken into account in constraint assessment/study but which are likely to be capable of resolution.	Informative of approach but medium to low likely technical constraint causing significant cost increase and/or significant schedule delays.

It might be concluded that since an option utilising Stanah/HTEZ would avoid all environmental and community constraints through the utilisation of the established local energy development infrastructure, then applying the National Grid BRAG criteria above to the option utilising Stanah/HTEZ, the community and environmental criteria would be categorised as “Green”.

The established local energy related development infrastructure includes the 138 hectare HTEZ with its physical connectivity with the 2km open space access to the Irish seashore & the National Grid Stanah substation, the site’s experience in hosting other transmission assets (including Walney 2Offshore wind farm) and extensive development land with streamlined planning procedures; the National Grid Stanah substation; and the existing 400kV twin circuit overhead transmission line that links Stanah with both Penwortham and Heysham and beyond to consumers served by the National Grid network.

Also at at section RR-1261 1261.3 of the Applicants' response to the EWG's RR, the Applicants’ rely on a reference to a written statement to Parliament in response to a question by the MP for the Fylde Constituency. This appears to be in preference or due to the inability to present the Applicants’ own analysis as to how they came to propose their preferred approach to National Grid during the HNDR as quoted above.

The information provided by the DESNZ Minister of State in his written statement to Parliament appears to be conflicted with the reality at the time of the HNDR. The written question and answer are reproduced below in full :-

“Question for Department for Energy Security and Net Zero

https://questions-statements.parliament.uk/written-questions/detail/2024-12-12/19898/

Wind Power: Fylde

To ask the Secretary of State for Energy Security and Net Zero, with reference to his oral Answer to the Question from the hon. Member for Fylde of 8 October 2024, Official Report, column 140, whether his Department has made an assessment of the viability of (a) Stanah in Blackpool North and Fleetwood constituency and (b) other alternative routes for connecting the Morgan and Morecambe wind farm to the national grid.

Asked 12 December 2024

The Electricity System Operator (then ESO, now NESO) assessed connection to the Stanah substation for Irish Sea wind farms alongside other substations in the Northwest and North Wales as part of the Holistic Network Design.[1]

ESO identified that Stanah substation would require extension to accommodate the Morgan and Morecambe offshore wind farms. Due to limited space, a new substation would be needed, with associated time and cost. Access was challenging due to residential and recreational surroundings, and there were environmental constraints around Morecambe Bay.

In contrast, Penwortham had a more accessible footprint, fewer constraints, and better electrical connectivity to the wider network.

[1] https://www.neso.energy/publications/beyond-2030/holistic-network-design-offshore-wind

Answered 17 December 2024

By Michael Shanks (Labour, Rutherglen)"

In assessing this statement to Parliament :

i. The written answer references the HNDR, however there is no reference to Stanah being assessed in that document. In fact there is no reference to the term "Stanah" in that document. It is unclear then how the HNDR reference is material to the statement.

ii. Whilst the answer states that Stanah would require extension, it is noted that the HNDR also identified that Penwortham would require extension to accommodate the Morgan and Morecambe offshore wind farms. Section 5.1.3 of the HNDR states that the following works would be required :"*Extension of the existing Penwortham 400 kV substation to establish bays for connection to the offshore network"*.This would essentially be the same as that required for Stanah.

iii. Expansion space is available at the Hillhouse Technology Enterprise Zone (HTEZ). It is not clear what is meant by a new substation. Any associated time and cost impacts would require to be considered against the savings in time and costs by avoiding the 30km of land cabling costs and time. It is not apparent that that assessment has been evidenced.

iv. The statement "*Access was challenging due to residential and recreational surroundings*" does not recognise that access from the Irish Sea has already been demonstrated by the Walney 2 offshore wind farm, and whose land substation is hosted in the HTEZ site, immediately adjacent to the National Grid Stanah substation.

v. In connecting Morecambe or Morgan wind farms via Stanah there is no need to cross into Morecambe Bay, so the statement that *"there were environmental constraints around Morecambe Bay*" is not applicable nor material.

vi. *"In contrast, Penwortham had a more accessible footprint, fewer constraints, and better electrical connectivity to the wider network"*. Research reveals multiple projects where Stanah has been shortlisted as a connection point for connecting offshore cables to the National Grid network. This is where this is specifically in preference to Penwortham for being too distant, or simply that Penwortham is not shortlisted. None of the projects researched concluded that Penwortham was better for the reasons given in the Minister's statement to Parliament. The reviews found are :-

- UK Offshore Energy Strategic Environment Assessment SEA
- North West Coast Connection NWCC
- Celtic Array
- Walney Extension Offshore Wind Farm

- Walney 2 Offshore Wind Farm
- Isle of Man – England Inter-connector

Table 3 below provides further detail and links to information about these projects

Table 3 : The following show multiple projects where Stanah has been shortlisted and/or selected over Penwortham to connect offshore cables with the National Grid Network.

- **2008 - National Grid Input into UK Offshore Energy Strategic Environmental Assessment Impact on Onshore Electricity Transmission System** Issue 1.0 Date of Issue December 2008 . For the NW only Stanah & Heysham considered as Local Connection Points (Table 39 and 40) . At p75 it is highlighted that the north Irish Sea area consists of a 400kV double circuit transmission ring (Heysham ring) that links Hutton, Heysham, Stanah and Penwortham substation sites.

- **2009 - 2016 NW Coast Connections (NWCC) project** document (for connection to Moorside Nuclear Power Station cancelled in 2018) - Stanah, Heysham & Middleton shortlisted. Penwortham was also considered but rejected due to being too far in comparison to Stanah, Heysham & Middleton. Stanah was also subsequently thought to be too far in comparison to Heysham & Middleton. Nothing was noted about any constrained capacity on the grid.
    - 2016 - See Appendix 1 - North West Coast Connections – Consultation on the project's Initial Needs Case and suitability for tendering

- **up to 2014** when project cancelled - **Celtic Array Offshore Wind Energy Project** Only Stanah & Wylfa were considered as connection points. See National Grid North West Coast Connections Project- Strategic Options Report for the North West Region - 19 October 2012 Issue 2, version 0.00

- **2012 completion - Walney2 OWE** - Stanah selected with Transmission Assets hosted on Hillhouse site. See Ofgem Assessment cost - Walney2 OFTO Blue Transmission -
- **2009 - Walney Extension** - Scoping Report shows - Heysham, Stanah & Penwortham considered. Heysham/Middleton ultimately selected.

- **2000 Isle of Man-England Inter-connector** via ENWL DNO network, Stanah and Irish Sea landfall. Some further background

It is also noted that National Grid manages Stanah and Penwortham as a single group (R4). This is presented in the National Grid Electricity Ten Year Statement 2024 - Appendix A - System geographic and schematic drawings - Figure A5: GB Transmission System ETYS* Zones (https://www.neso.energy/document/351911/download). It is not clear therefore why there is a material distinction in the reference to connectivity to the wider network.

vii. It is noted that the statement to Parliament makes no reference to any constraints regarding grid infrastructure capacity associated with Stanah .

In summary, it would appear that no evidence is provided referring to published material to support the written statement to Parliament:

- of a consistent assessment & comparison using up to date information regarding Stanah; or
- that was published in the HNDR reference given in the statement, with other options assessed for connecting the Morgan and Morecambe projects..

It may be that out of date information was used in respect of another connection project involving Stanah, but it is not certain whether that is the case at this stage. In 2008, the National Grid Input to the UK Offshore Energy Strategic Environment Assessment (SEA), only identified Stanah and Heysham for Local Connection Points in the North West. A summary table was generated showing matters found. This is reproduced in Table 4 below. There was no assessment of the suitability of Penwortham in the 2008, it not having been shortlisted.

This information presented in Table 4 regarding constraints on access and land for expansion is now out of date,. This is demonstrated by the use for exactly these purposes of land on the adjacent Hillhouse site e.g. in 2012 for hosting the Walney 2 transmission assets. In addition, it is not necessary to involve access to Morecambe Bay if Stanah was being assessed for connecting with Morecambe or Morgan projects.

If an assessment and comparison of Stanah was conducted correctly, then there should be evidence of that available for publication. To date that has not been forthcoming.

Any expansion of Stanah or upgrade of the existing 400kV overhead line linking Penwortham with Stanah and beyond to the consumer, would relate to potential capacity requirements. If this is required, having finally assessed the latest situation which may now wish to include the Mooir Vannin offshore wind project transmission assets and other potential generating sources. This may be realised through applying various software & sensor based management to reconductoring the line options, both of which are being demonstrated currently for lines emanating from the Penwortham substation. The latest IET Transmission Technologies report lays out a series of engineering and management options that can be applied.

Table 4

The following is taken from the 2008 **National Grid Input into UK Offshore Energy Strategic Environmental Assessment Impact on Onshore Electricity Transmission System** Issue 1.0 Date of Issue December 2008. It shows matters found regarding the Stanah , one of the two shortlisted connection points for the North West

Table 40: Stanah Local Connection Work	
Existing Configuration	Outdoor 400kV AIS Transformers Feeders
Local Environment	Urban area, adjacent to industrial area – ex-chemical works, brownfield areas. Substation enclosed on 3 sides by domestic housing and a caravan park. Site is <0.5km from the River Wyre which is RAMSAR and SSSI designated.
Onshore Transmission Works & Issues	Need to introduce 400kV GIS substation, site issues to create in space desired. Issues of co-ordination with offshore transmission owner, access routes, future development constraints, planning permissions. System outage issues to permit construction/connection
Offshore Transmission Works & Issues	Space for equipment, may require location of installation on brown-field land North West of substation. Issues of land availability, Cable access routes, program, planning permission and noise levels.
Approximate Length of Cable Route from Coast	~4km directly west to coastline
Impact of Varying Levels of Installed Capacity	2 substation bays required for developments up to 1.1GW, given technology and optimisation assumptions used
Indicative Onshore Transmission Costs	£30m
Estimated Timescales for 'Local' Onshore Transmission Work	5 years

Bringing the assessment up to date to reflect the current access environment for Stanah, it is noted that the principal owner of the HTEZ, NPL, has submitted a RR (RR-1656) on 27th January that

- **Representation by NPL Hillhouse Thornton Facilities Management (NPL Hillhouse Thornton Facilities Management)**

  "We do not consider the cable route and associated Sub Stations between the Wind Farm and the On Shore Electrical Grid connection point at Penwortham to be the most appropriate route. We do not believe that an alternative route for the connection at Stanah, Thornton Cleveleys, has been adequately reviewed. We believe Stanah to be a more appropriate grid connection point."

By utilising Stanah connection point, the HTEZ is available to host transmission substation works for the Applicants and National Grid as deemed appropriate. HTEZ also has extensive utilities and highways infrastructure provision that provides connectivity across the site to 2km across open space to the Irish Sea shore, at an area a short distance north of the established land falls of the Walney 2 and Isle of Man-England Inter-connector cables.

Intensification of Impacts and Inconsistency of Assessment Criteria

In proposing an approach involving a shared corridor but independent project development schedules to National Grid in the HNDR, the Applicants have actively chosen to intensify the adverse impacts on a particular Community. The Applicants' proposal effectively doubles both the direct and indirect impacts on the local Community due to the uncertainties associated with two independent projects being presented as being in one framework.

There is no evidence presented by the Applicants as to how that has been assessed. Nor, how it was concluded as having been more beneficial than the alternatives e.g. to using two separate cable routes and connections to Stanah/Middleton/Heysham/Penwortham and or to reduce the impacts by use of existing infrastructure & compliance with local development plans e.g. Stanah and Hillhouse Technology Enterprise Zone.

It may be considered to be ironic that the Applicants' consultants employed to secure a route and find sites are likely to have even treated as a constraint, the very infrastructure established to connect Penwortham to transmission assets in the Irish Sea. Specifically: at the "Penwortham end" the infrastructure constraint maps will have likely highlighted the 400kV twin circuit overhead lines to Stanah; and by Stanah, the HTEZ hosting Walney 2 transmission assets.

Despite the Applicants having proposed their route to National Grid in the HNDR, it is observed that in the latest RR by National Grid, it is apparent that there are multiple conflicts with National Grid's assets in the vicinity of their Penwortham Substation (see RR-1598) and with the Applicants' proposed approach.

Also in spite of the Applicants have chosen to specify an abnormally large footprint for two separate independent substations they are proposed to be located visibly between each other. This intensifies the scale of the urbanising impact of the substations in the Green Belt and Areas of Separation.

The Applicants described that they set a 5km search radius to locate their converter substations. It would appear that when that failed to secure sites, an ad hoc 8km radius was set. At its extremity of that radius, it just happened that the key critical Rural Fylde Green Belt designated land was deemed to be applicable through an extraordinary approach to a BRAG assessment. It is noted that this is an action for the Applicants' to satisfy the Examination Authority of the efficacy of the assessment.

Given the Material Alternative of the established northern route utilising the local energy related development infrastructure including Stanah and HTEZ, and other smaller sites such as Preston Docklands industrial development area, the Applicants' claim of having Very Special Circumstances" to justify the permanent urbanising of the Greenbelt, in fundamental conflict with the strategic planning of the local development framework, is not considered sound and cannot be upheld.

Conclusions

It is now apparent that the Applicants proposed the route recommended in the output of the HNDR. That proposal was based upon a shared land substation site, which is not in accord with the Applicants' submission. The HNDR showed that even based on a shared substation site the recommended route was not compliant. There is no evidence of any attempt to consider compliant material alternatives, including in the content of the Minister's Written statement to Parliament to which the Applicants referred.

The Applicants have still not demonstrated how they concluded that their proposed route is more compliant than the Material Alternative.

Appendix 1 illustrates the evident beneficial characteristics of the established Material Alternative route. This can connect Penwortham and beyond with the transmission assets in the Irish Sea, utilising the existing infrastructure of the National Grid 400kV twin circuit overhead transmission line, the National Grid Stanah substation and Hillhouse Technology Enterprise Zone (HTEZ).

The Material Alternative Route offers a faster, cheaper, less adversely impactful route,connecting the Morgan & Morecambe arrays to the National Grid, Penwortham and beyond to Consumers.

It is believed that the Examining Authority is proposing to approach National Grid, to understand how they can evidence how they assessed and excluded Stanah/HTEZ in delivering the efficient, economic lowest whole system cost to the consumer.

It is also requested that the Examining Authority asks Ofgem and the DESNZ Minister of State, the Honourable Mr Shanks MP, to provide evidence of the assessment to support their written statement and how that will achieve the lowest cost to the consumer and ejected Stanah/HTEZ from their downs election.

Appendix 1

Summary Images of the Utilisation of Established Energy Development Infrastructure

The following are a summary set of images to highlight the established energy development infrastructure and how it may be utilised for economic, efficient and lowest whole system cost to the consumer in support of delivering the Morgan and Morecambe transmission assets project.

Figure A1 - High-Level Environmental and Community Constraints for North West taken from Figure 32 of the HNDR.

The Stanah substation and its connectivity to the 400kV network and Penwortham can be clearly seen located north of Blackpool. It is also clearly closer to the coast and the Morgan and Morecambe arrays. Than Penwortham It also offers the capability of avoiding all identified High Level Environmental Constraints. By comparison the Applicants' route conflicts with multiple offshore and onshore environmental and community constraints.

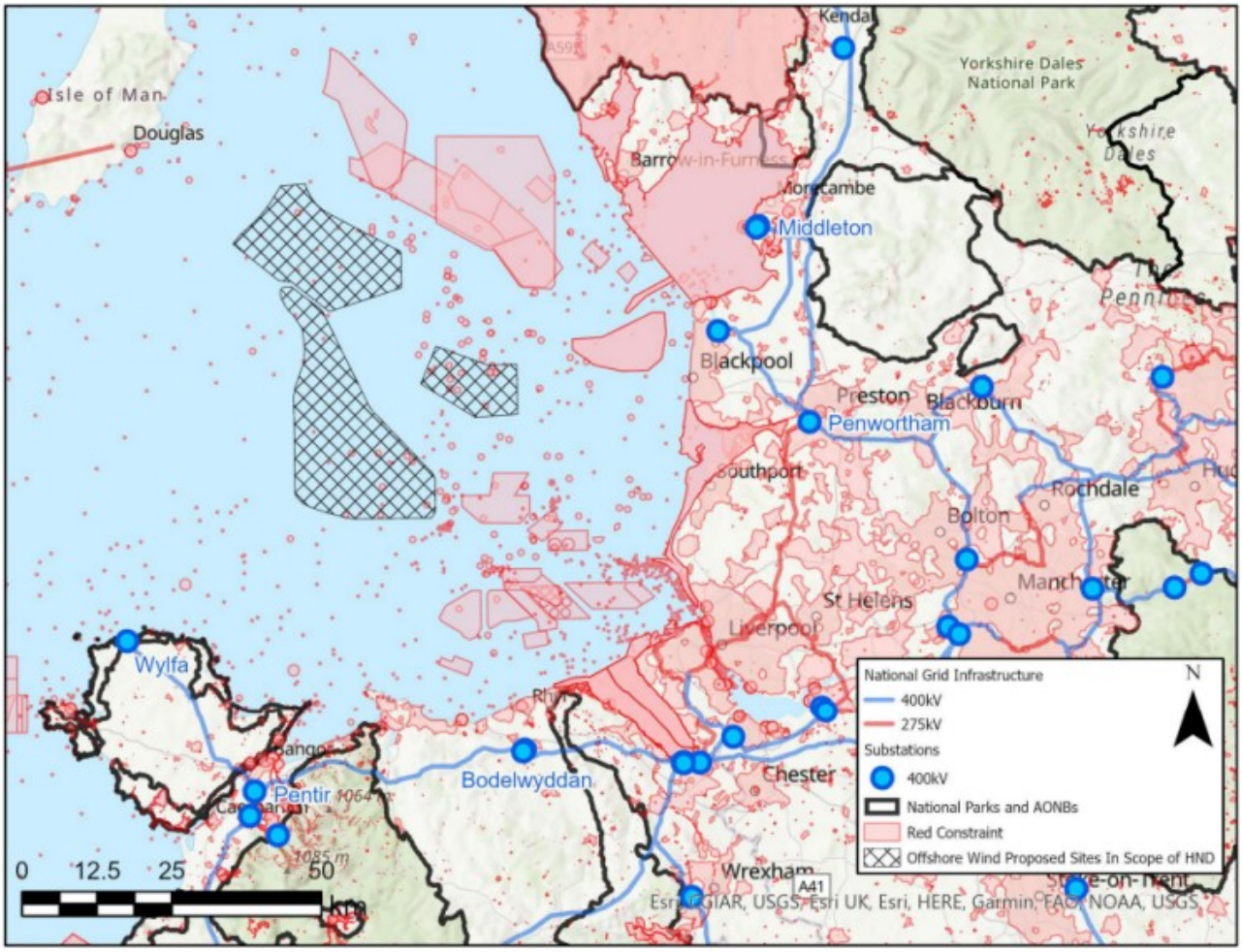
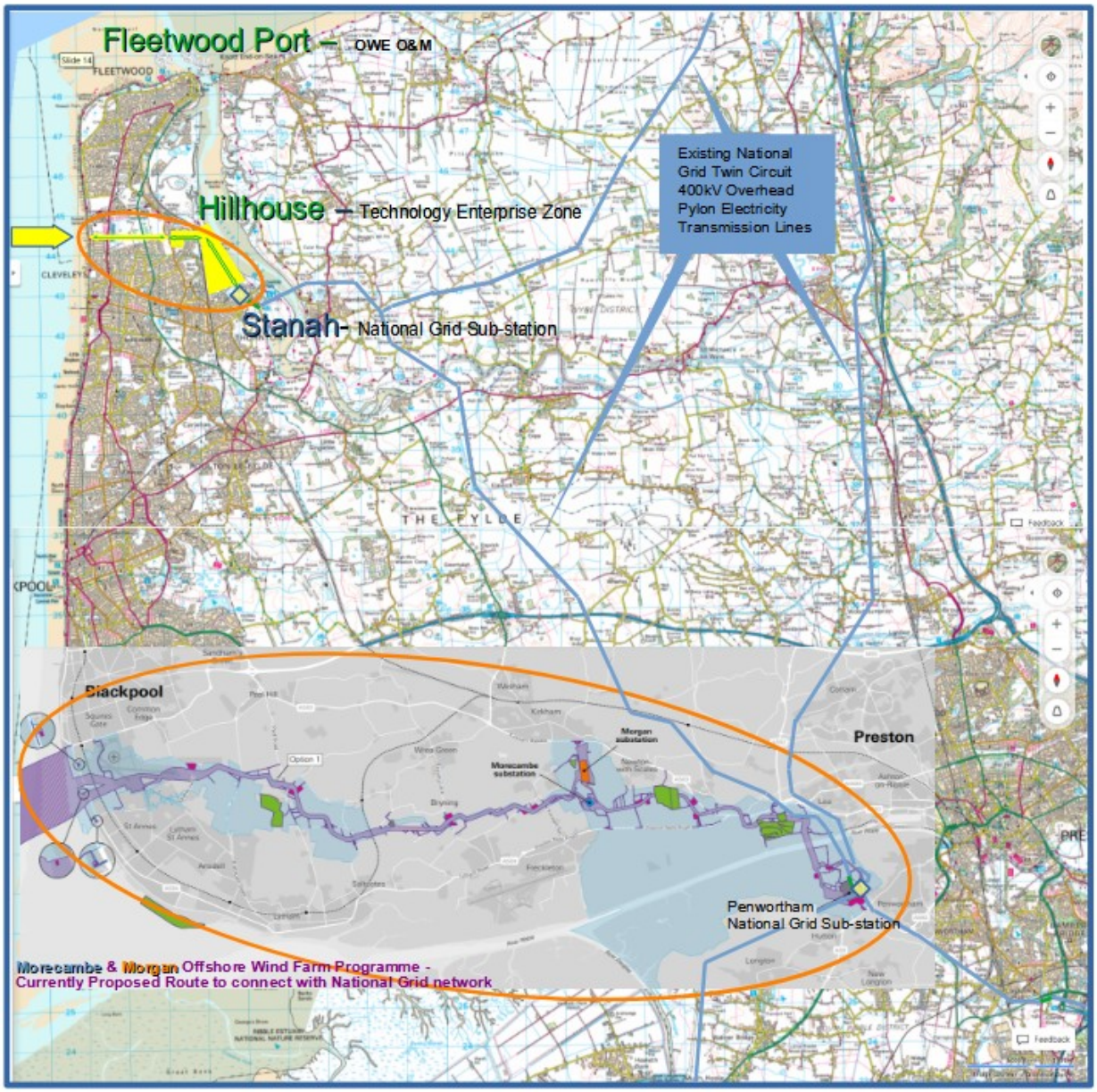


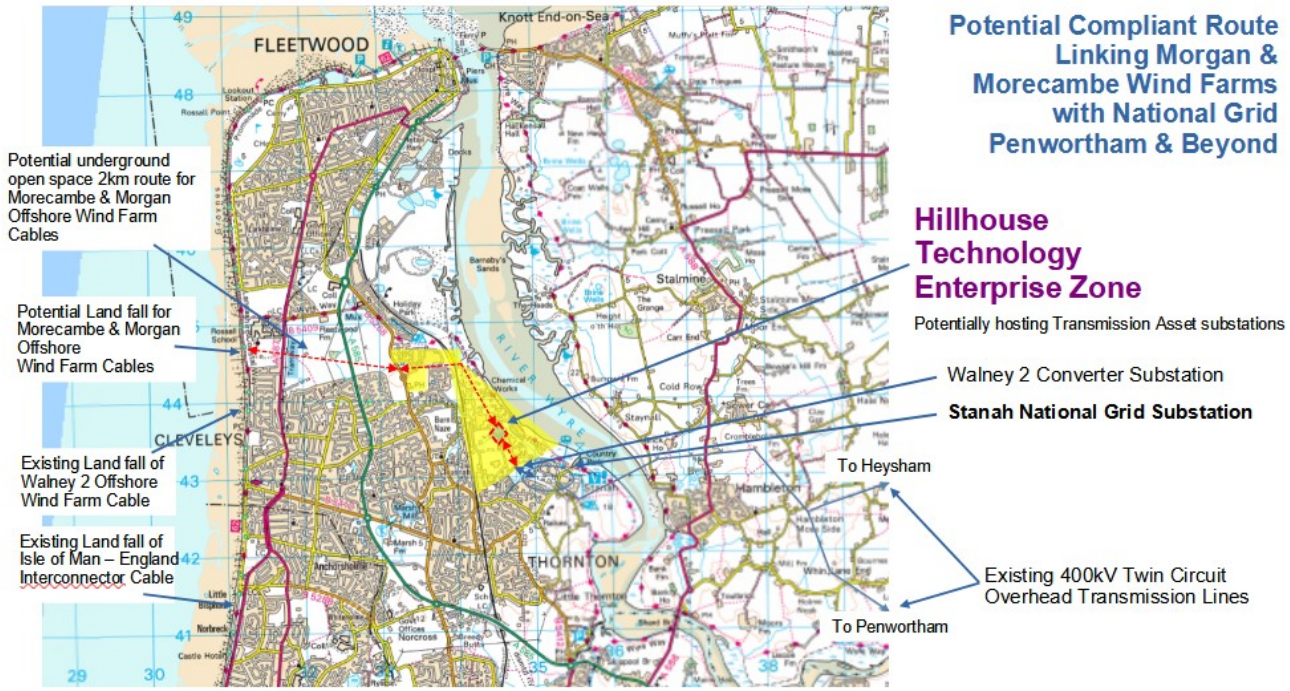
Figure 32 - High-Level Environmental and Community Constraints for North West

Figure A2 – Comparison of routes connecting to Penwortham, utilising the existing infrastructure via Stanah and HTEZ, and the completely new infrastructure as proposed by the Project.

The following figure was also provided in the earlier EWG RR. It shows the order of magnitude difference in scale of the new infrastructure being proposed in the 30km of cable corridors and Greenbelt development of converter substations, as compared to that of only 2km of undergrounding of cables across open space and the utilising of the established energy development infrastructure.



475 **Figure A3 -** Aerial view of Stanah Substation, HTEZ and open space access to the Irish Sea, with annotations of established infrastructure showing connections to the Irish Sea and Walney 2 transmission assets being hosted on HTEZ. In red, a notional route is shown as to how future transmission assets could be directed.



480 **Figure A4 –** Satellite view of HTEZ and environs with annotations of connectivity.

Figure A5 - Plan view of HTEZ highlighting connectivity with National Grid via Stanah substation and open space access to the Irish Sea. This view is annotated from the 2018 Master plan for HTEZ. This is in the process of being updated including the potential to host new transmission assets.

485