

**REPRESENTATION ON THE PROPOSED MORGAN AND MORECAMBE OFFSHORE WIND  
FARMS TRANSMISSION ASSETS DCO**

**PLANNING INSPECTORATE REFERENCE NUMBER: EN020028**

**Submission on behalf of Newton with Clifton and Freckleton Parish Councils**

**Closing statement**

1. This submission is the closing statement of Newton with Clifton and Freckleton Parish Councils. It is accompanied by a 'Statement of Benefits and Harms' comparing the application to the northern route from Rossall Beach to Stanah substation and a further video of large numbers of geese flying over the cable route at Cartmell Lane, Moss Side.

**State of the project at the end of the examination**

2. The parish councils wish to note that at the end of the examination the application is in a poor state with:

- a. 183 new or updated documents submitted by the Applicants at Deadline 6 and published on the examination website three working days before the end of the examination – there is no time for interested parties to read and comment meaningfully on these documents so they should have the status of unexamined;
- b. a huge and growing number of outstanding issues that have not been addressed by the Applicants during the examination;
- c. serious gaps in the environmental assessment of the project leading to the conclusion that the application has not been sufficiently assessed to allow a decision to be made on it.

3. If more documents are submitted by the Applicants at Deadline 7 then these will not have been seen, never mind responded to, by third parties.

**Late information about connection security**

4. It has come to the attention of the parish councils via reports of discussions between Fylde Borough Council and Ofgem that the Applicants' Penwortham connection is given on the basis that the connection will take place by 2030, which is clearly not going to happen. This runs particularly counter to the Applicants continuing to reserve for themselves the ability to *start* either project within seven years, i.e. by 2033 if the decision is made positively and on time next year. If either project starts just before the seven-year deadline and takes the three years shown in the application documents then it will not be complete until 2036 and that is without any construction delays.

5. Claims that it will take several years to make Stanah suitable for the projects to connect to the transmission network, which was the main reason for eliminating it from consideration, should be considered in the context that the Applicants are seeking powers for the projects not to be ready until 2036. Eleven years would give Stanah plenty of time to be upgraded. The other reasons given for not taking Stanah further do not stack up either – it is not surrounded on all sides by residential properties, rather, it is adjacent to properties on two sides at most (see the Ordnance Survey extract appended to the Statement of Benefits and Harms). The environmental impacts of using Stanah would clearly not be greater than going to Penwortham, even if the substation works just at Stanah would have a greater impact than those just at Penwortham, because of the difference between a 2km cable route versus a 30km one, and substations in an industrial area near Stanah that wants them versus a substations in a rural residential area that would be heavily impacted. More details are given in the benefits and harms statement.

6. The coordination between the projects that the Holistic Network Design Review was intended to achieve has had none of the intended beneficial effects. The only coordination is that there is a single application, the cable routes are the same and the substations are close to each other, doubly impacting those affected. While temporal separation between the projects is maintained then the environmental effects will be experienced for more than double the time (as some will continue during the gap between the projects). It has been apparent during the examination that the shared application has caused problems for the joint Applicants as well, exemplified by the failure to secure a Non-Disclosure Agreement with BAe Systems to allow the issue of bird strike to be dealt with, which is likely to be due to the number of parties having to sign it off on the Applicants' side. The Schedule of Changes to the DCO ([REP6-184](#)) since the application was made, which now runs to 168 pages, has generally moved towards making the two projects as separate as possible in terms of their legal powers. This project clearly fails at least three of the four objectives of the Holistic Network Design Review (to minimise cost to consumers, impacts on the environment, impacts on communities and to improve deliverability and operability).

### **Legal obligation to seek alternatives**

7. Natural England, in their Deadline 6 response to the ExA's Rule 17 request ([REP6-190](#)), cannot rule out an Adverse Effect on Integrity (AEol) of the Ribble and Alt Estuary SPA unless further fallback mitigation is proposed by the Applicants (in answer to the first question). They are also concerned that the bird strike management measures may have impacts on the SPA (in answer to the second question). While that situation obtains, the Applicants must demonstrate that there are no alternative solutions for the project, and only then that there are imperative reasons of overriding public interest for continuing with it, by virtue of regulation 64(1) of the Conservation of Habitats and Species Regulations 2017.

8. They will be unable to do that, because of course there is an alternative solution, namely to go via Rossall and Stanah, that avoids any internationally protected sites. That is legal reason number 1 why the project should not, and arguably cannot, go ahead.

### **Biodiversity Net Gain and bird strike**

9. The Applicants have finally provided figures that show that the project will result in a biodiversity loss in their Biodiversity 'Benefit' Supporting Statement ([REP5-145](#)) – see Table 3 on pages 15-16. While biodiversity net gain is not yet a legal obligation under the Planning Act 2008 regime, public authorities have a duty to consider what actions they can take to further 'the general biodiversity objective' to conserve and enhance biodiversity, by virtue of section 40 of the Natural Environment and Rural Communities Act 2006, as amended by the Environment Act 2021. Approving a project that does not even conserve, never mind enhance, biodiversity habitats would appear to be inconsistent with this duty. That is legal reason number 2 why the project should not go ahead.

10. Applicants are further reminded of their duties by paragraph 2.2.10 of EN-5, where in formulating proposals for new electricity networks infrastructure, to "have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and ...do what [they] reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects." This does not appear to have been fulfilled given the obviously material alternative.

11. In Natural England's answer to the fourth question in [REP6-190](#), they maintain the position that drilling less than 15m below the sand dunes at Lytham Beach (where the Applicants will only commit to 10m) would have impacts on Ground Water Dependant Terrestrial Ecosystems. As the Applicants themselves characterise the sand dunes as irreplaceable habitat (see e.g. [REP5-151](#)) then this would appear to be a further breach of the biodiversity duty. That this issue has only come to light at the end of the examination is particularly concerning.

12. The issue of increased threat of bird strike to Blackpool Airport and Warton Aerodrome from environmental improvements in the area attracting greater numbers of birds remains unresolved, although agreement has been reached with Blackpool Airport's owners. It is clear that this was not spotted as an issue early enough, meaning that for example in their black, red, amber, green (BRAG) assessment of route alternatives the Applicants did not consider bird strike risk when choosing the route ([APP-033](#)).

13. The parish councils are concerned that this issue remains outstanding when it is so important, and are also concerned that in reaching agreement with Blackpool Airport's owners and in order to reach agreement with BAe Systems and the MoD, owners of Warton Aerodrome, the environmental quality of the habitats will be degraded to discourage birds, and thus will become less adequate on the mitigation and BNG habitat front. The updated Outline Wildlife Hazard Management Plan submitted at Deadline 6 ([REP6-144](#)) still lists 'potential measures' to deter birds and says at paragraph 1.2.1.4 of Appendix A that a detailed 'Wildlife Habitat Attractants Risk Assessment' will be carried out post-consent – that is too late, it should form part of the EIA.

### **Adequacy of Environmental Impact Assessment**

14. Regulation 4(2) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, as amended, prohibits a DCO from being granted unless an EIA has been carried out for the application. Regulation 5(2) states that an EIA must identify and describe the direct and indirect significant effects of the project on various factors.

15. It follows that if the EIA has not identified and described such effects (or has adopted a reasonable worst-case approach for any effects that have not been fully assessed) then the application cannot be granted. BAe Systems' Deadline 6 submission ([REP6-206](#)) states on page 2 that they are not currently in a position to confirm that the proposed development complies with policy on bird strike in EN-1 until the residual impacts on aviation have been provided and as mentioned above a risk assessment will only be undertaken post consent. This is one example where it is clear that the effects of the project, in this case in the crucial area of major accidents and disasters, mentioned specifically in regulation 5(4), have not been assessed at this point. The Prime Minister's announcement on 27 October 2025 that Warton will be used for the production of 20 Typhoon fighter jets destined for Türkiye, part of securing 20,000 jobs in a deal worth up to £8bn, should not be threatened by unnecessary bird strike risks.

16. Other areas include impacts on land functionally linked to the Ribble and Alt SPA, the late identification of irreplaceable habitat at the shoreline, visual impacts, where the Applicants will not provide renderings of the substations from key receptors such as residential properties, only committing to provide these at a later stage, which would mean they could not form part of the EIA. Lancashire County Council, in their Deadline 6 submission ([REP6-188](#)) say (at paragraph 3.3) that the Landscape Proposals/Strategy and the Outline Design Principles documents do not address residual effects sufficiently which is a further gap in assessment.

17. That is legal reason number 3 why the project should not go ahead.

### **Amendments to the DCO**

18. The parish councils note that the Applicants have amended the seven-year deadline for commencing each project to tie its start to the coming into force of each windfarm DCO rather than this DCO. Noting that the Morgan windfarm DCO came into force on 22 September 2025 and so, barring quashing of the DCO, that project's transmission assets must commence by 22 September 2032, the Morecambe windfarm DCO has been delayed and currently has a deadline of 20 November 2025; the in force date usually being three weeks later i.e. 11 December 2025 in this case. That difference in dates increases the maximum potential separation of the projects to four years and nearly three months. While the date by which the projects must start has been brought forward, which is somewhat welcome although does not reduce their environmental impacts, the potential separation has increased, which is

unwelcome, as it potentially increases the impacts that exist during any gap between the projects and the overall time for which impacts will occur overall.

19. The parish councils welcome the addition of external appearance to the local planning authority approval of the substations but are disappointed that they are not to be consultees for such approval. In addition there are other areas, such as Community Benefit and highways, where the parish councils would also expect to be consulted directly.

20. The biodiversity net gain requirement (26) is better than before but with the following qualifications: 'biodiversity net gain' is not defined and the 'Outline Biodiversity Management Plan' still only commits to providing BNG for the four permanent infrastructure works and not the rest of the onshore order limits including the other 50 works, when some habitat there will not be restored for at least 30 and if maximum project separation occurs, over 40 years from harm. Furthermore, option (b) remains as complained about at ISH4, i.e. it is a vague substitute for registered offshore units that form part of the official biodiversity gain hierarchy and so the requirement potentially fails to qualify as a valid requirement for that reason.

# EN020028 - Morgan & Morecambe Onshore Transmission Assets

## An Assessment of Benefits & Harms Including a Comparison with the “Obviously Material Alternative Route”

Prepared by Newton with Clifton & Freckleton Parish Councils

### 1. Summary

This note has been prepared by Newton with Clifton and Freckleton Parish Councils as part of their closing submission for consideration by the Examining Authority and other interested parties as a summary of the perceptions gained during the Examination process of the overall benefits and adverse impacts that result from this proposal to bring offshore wind power from the Irish Sea to the National Grid at Penwortham.

The principle, bringing energy ashore onto the Fylde and routing via Penwortham, is not contested. The issue lies with the proposed routing and the failure to make the most use of existing, capable infrastructure, thereby minimising environmental impacts and costs to the Consumer.

It examines the current formal Application, EN020028, as presented and offers our comments on it in the light of the six-month examination. For comparison, the note also examines the same issues but taking account of the ‘Obviously Material Alternative’ that was laid out initially in the Initial Open Hearing ([REP1-183](#)), and which has been discussed several times subsequently.

This alternative provides a rare opportunity to meet all the requirements set by the Secretary of State relating to green energy sources and development of employment opportunities and would be especially welcome in a very deprived area of the country.

The results are summarised in this note, which also contains the detail by which the conclusions are supported in Annex 1. A plan showing the cable route, Hillhouse TEZ and Walney and Stanah substations is shown at Annex 2.

The major conclusion is that there is a significantly cheaper alternative to the current proposed development, with the potential to save an estimated £904m for these two, separate development projects which have an estimated total cost of £1.4bn (REP5-014 & Rep5-016). This alternative has the added benefits that all the key areas of issue and contention with the existing application are removed at a single stroke, i.e.

- The aviation difficulties associated with bird strike hazards and their avoidance.
- The need for occupation of green belt land across the Fylde and the loss of best and most versatile farming land.
- The large biodiversity loss incurred when applying the BNG metric to the full Order Limits.
- Impacts on internationally protected zones, RAMSAR areas, Biological Heritage Sites, both off-shore and on-shore.
- The need for Compulsory Acquisition of land to expand the Penwortham substation to accommodate these two wind farms, reference REP1-089, which was not included in the cost savings quoted.

It was considered that the best way to illustrate the differences in approach between that of the Applicants and the Obviously Material Alternative option would be to set out a comparison of perceived benefits and adverse impacts for both options.

The report that follows presents the findings of the assessment.

## 2. Introduction

It must be stated from the outset that the Fylde Town and Parish Councils, represented by the Transmission Assets Steering Committee (TASC), for whom the title of “Newton with Clifton & Freckleton Parish Councils” has provided the face at the enquiry, fully support the principle of wind generated energy from the Irish Sea being brought ashore in the Fylde for use by the National Grid or local industries.

What we do object to is the presumption by the then National Grid (now NESO/NGET) that only Penwortham can be used as a connection point, thereby ignoring the benefit to be obtained by use of a closer to shore connection site and use of the existing grid infrastructure, even if, as we fully accept, it requires new substations at Stanah/Hillhouse, since ample space is available there and the site owners would welcome their presence.

The alternative fits with guidance of NPS EN-1 Para 2.3.4, which emphasises infrastructure for conversion, transport and storage of energy generation, the latest proposed local development plans for the North Fylde (REP5-185 Appendix – Blackpool & North Fylde Gateway for Clean Energy<sup>1</sup>) and for Lancashire County (Lancashire Growth Plan<sup>2</sup>) which would see new industries associated with the proposed green hydrogen production and storage.

It would also assist in the retention of significant local industries already at Hillhouse that are attempting to make their activities more environmentally friendly, via converting fossil fuel to electricity use. If the energy is not available, which is currently not the case, then these developments are at threat.

The alternative fits with a National Policy that has been recommended to Government by the University of Manchester Dalton Nuclear Laboratory<sup>3</sup>, a copy of which will be submitted under a separate reference.

This has the potential to save approximately £904m to the Consumer just for these two projects, more if the engineering work required and additional compulsory purchase costs associated with the necessary expansion of the Penwortham site were considered in detail. It would still see the power being transmitted via Penwortham, but would reduce the effort in developing that site, which brings its own issues of space constraints.

## 3. System Description

The transmission lines that connect from the North, which are supplemented at present by the power from the two Heysham nuclear plants, form a 400kV ring circuit between Heysham/Middleton and Penwortham. The eastern branch routes alongside the M6 motorway, whilst the western branch routes past Lancaster to Hambleton close to the River Wyre, and thence south to Penwortham.

At Hambleton there is a 400kV Tee junction to the existing distribution substation at Stanah, adjacent to Hillhouse. This Tee has very recently been refurbished and provided with an upgrade to the same standard as

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<sup>1</sup> Brochure - Blackpool North & Fleetwood, Gateway for Clean Energy.

<sup>2</sup> Lancashire Combined County Authority – Lancashire Growth Plan

<sup>3</sup> The University of Manchester Dalton Nuclear Institute – The Road to Net Zero: Renewables and Nuclear Working Together

the main grid and, hence, has the same power carrying capacity, although its output is limited by the current Stanah substation, which we agree needs to be upgraded or replaced.

The guidance of the Security & Quality of Supply Standard (SQSS) confirms that to connect any new power source to the National Grid requires the “Power Quality” of that source to be closely controlled to ensure stability of the Grid system. This control is established by proper design of the substation at which the connection is to be made, with duplex switching and power quality control systems in place to enable safe disconnection in the event of any issue developing before the Grid itself is damaged.

The connection from a power source, such as a wind farm, can be made anywhere on the Grid ring, depending on available space for a substation, as near to the coast as possible, that meets SQSS standards and offers the lowest cost to consumers. The substation may belong to the supplier, aligning with the Electricity Act 1998 requirements.

If that principle is followed, then any Irish Sea wind farms, wishing to connect to the Grid could request the option of siting at Hillhouse and connecting via the 400kV Tee to Hambleton, or to use Penwortham itself. The key decider should be overall system cost, which eventually will be borne by the Consumer.

Using an existing National Grid line should be considered as priority, as this would always be cheaper than having to trench or tunnel an underground line for some 30km under the Fylde to reach Penwortham.

Use of Hillhouse, where more than adequate space is available, which has favourable Technology Enterprise Zone (TEZ) development status, has a defined priority as use for power generation or related industries and has an owner that would encourage its use, would appear to be preferable to use of Penwortham. The owner of the Hillhouse site made a relevant representation ([RR-1656](#)) to the effect that the development should use Stanah rather than Penwortham.

## 4. Current Proposed System Issues

Whilst Penwortham has already been selected for a much-needed upgrade, due to its position as a major node on the National Grid, from REP1-089 we now recognise that space is limited and there are other projects competing for capacity and space at that location. Expansion beyond what it now has requires Compulsory Acquisition of adjacent lands to enable all the additional development that is stated to be required to cope with the demands faced from the Irish Sea Wind Farms, which then numbered 2 applications at the DCO stage. It will take time to obtain compulsory acquisition powers and subsequently upgrade the substation suitable for accommodating these transmission assets.

Subsequently, a further wind farm, Mooir Vannin, which is at an early stage where initial options are being formulated, is being directed again to Penwortham, further complicating the expansion plans and access issues. One of the proposed landfall sites for this project, and the preferred option from Orsted, is Rossall Beach with a transmission line those routes via Hillhouse but is then directed to Penwortham rather than the nearby Grid.

This further complicates the Penwortham site issues if a separate transmission line is insisted upon for this project, especially as, following the withdrawal of Heysham 1 and 2 power plants from service in 2028 – 2030, there will be further spare Grid capacity on the existing circuit.

## 5. The Assessment

The assessment of Benefits and Harms follows a similar layout to that adopted for the Statement of Common Ground, amended slightly in the light of discussions that took place at Issue Specific Hearing 4 on the 7th and

8th October 2025 at the Village, Blackpool. It presents a summary of the perspective from the viewpoint of the Parish and Town Councils represented by the TASC group by Newton with Clifton and Freckleton Parish Councils.

The assessment includes our view of the “Obviously Material Alternative” based the detail local knowledge, assisted by discussions with local Heavy Electrical Engineering company representatives, based on the existing Hillhouse site, understanding of the Engineering Requirements of the task (as defined by the “Security and Quality of Supply Standard, SQSS”) and use of a Systems Engineering Integration approach.

The detail results are presented in full in Annex 1 and a summary follows below. To assist the Examining Authority, the classification of weighting, ‘very great’, ‘great’, ‘moderate’ or ‘little’ applied to a topic, whether positive or negative, has been used and comes from an example Examination Report for another project that has completed its process<sup>4</sup>. Whilst subjective it does help illustrate the comparison with effect.

<b>Summary Table - Benefits &amp; Harms Comparison</b>				
Issue	<b>Morgan &amp; Morecambe OWFT</b>		<b>Proposed Alternative Route</b>	
	Finding	Weighting	Finding	Weighting
Project Overview - Principle of Development and Climate Change	<b>Positive</b>	<b>Great</b>	<b>Positive</b>	<b>Very Great</b>
Site Selection and consideration of alternatives	<b>Negative</b>	<b>Very Great</b>	<b>Positive</b>	<b>Very Great</b>
Consultation	<b>Negative</b>	<b>Great</b>	<b>Not tested</b>	<b>Not tested</b>
Onshore Ecology and Nature Conservation	<b>Negative</b>	<b>Great</b>	<b>Positive</b>	<b>Great</b>
Historic Environment	<b>Negative</b>	<b>Great</b>	<b>Positive</b>	<b>Great</b>
Landscape and Visual Resources	<b>Negative</b>	<b>Very Great</b>	<b>Positive</b>	<b>Very Great</b>
Socio Economic & Land Use	<b>Negative</b>	<b>Very Great</b>	<b>Positive</b>	<b>Very Great</b>
Hydrology and Flood Risk	<b>Negative</b>	<b>Great</b>	<b>Positive</b>	<b>Great</b>
Traffic and Transport	<b>Negative</b>	<b>Very Great</b>	<b>Positive</b>	<b>Great</b>

<sup>4</sup> Tillbridge Solar Project – Examining Authority’s Report of Findings and Conclusions and Recommendations, 14<sup>th</sup> July, 2025



Noise and Vibration	Negative	Very Great	Positive	Very Great
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## 6. Conclusions

The major conclusion is that there is a significantly cheaper alternative to the current proposed development, which has a cost forecast of approximately £1.4bn for the two projects with the potential to save an estimated £904m for these two, separate development projects.

The alternative has the added benefits that all the key areas of issue and contention with the existing application are removed at a single stroke, i.e.

- The aviation difficulties associated with bird strike hazards and their avoidance.
- The need for occupation of green belt land across the Fylde and the loss of best and most versatile farming land.
- The large biodiversity loss incurred when applying the BNG metric to the full Order Limits.
- Impacts on internationally protected zones, RAMSAR areas, Biological Heritage Sites, both off-shore and on-shore.
- The need for Compulsory Acquisition of land to expand the Penwortham substation to accommodate these two wind farms, reference REP1-089, which was not included in the cost savings quoted.

The alternative offers a route to growth of the local economy of the area with the regeneration of the Hillhouse site, helping to eliminate a contaminated brownfield site and ensuring that the existing industries can be retained and expanded, thereby securing the future of the local economy of this part of Lancashire.

**Annex 1 – Detail Summary of Benefits & Harms**  
**Comparison of the MMOWFTA and the "Obviously Material Alternative"**

MMOWFTA			Obviously Material Alternative	
Item Title & Brief Description	Benefit	Harm	Benefit	Harm
Project Overview	Provision of Renewable Sourced Power the National Grid (REP5-018 for latest version of the Statement of Reason)		Provision of Renewable Sourced Power to the National Grid at a site where this can be integrated with development proposals for green hydrogen manufacture and storage	None
	A key output of the HNDR process was the recommendation that the generation assets should work collaboratively in connecting the two offshore wind farms to the National Grid Electricity Transmission (NGET) network at Penwortham in Lancashire. (Reference: Pathway to 2030 Holistic Network Design - July 2022)	We have observed limited "collaboration" on the Development Consent Order only. During examination it has become clear that there are two separate projects, with two separate build plans and connection promises to the grid. The collaboration has not benefited the Applicants or third parties in any way. (REP3-100, REP5-010, REP5a-018)	Alternative Route is predicated upon the use of the Hillhouse Technical Enterprise Zone, which was created to support Energy Industry related projects together with utilisation of the existing National Grid infrastructure to the maximum possible. The site was excluded from the HNDR based on an erroneous interpretation of lack of access and availability, both of which are disproved. (REP4-166)	Requires 2km of trenching to reach the Hillhouse Site from the Irish Sea Coast of the Fylde at Rossall
	Powers of compulsory acquisition can only be granted where the Secretary of State is satisfied that there is a compelling case in the public interest and the interests in land for which the powers are granted are either acquired for the development or are required to	Compulsory acquisition required to extend the Penwortham site to cope with the development proposals for National Grid's own purposes combined with the addition of East Irish Sea Wind Farms, currently Morgan & Morecambe, with Mooir Vannin later.	No compulsory purchase required, either at Hillhouse or Penwortham, as all substations can be accommodated on the available areas of Hillhouse TEZ. Such development would be welcomed (RR-1656)	None at Hillhouse or Penwortham.  Compulsory acquisition required for 2km of cables from shore to boundary of Hillhouse Technology Enterprise Zone.

	facilitate or are incidental to the development.	Compulsory acquisition required for 30km of onshore export cables and grid connection cables (see <a href="#">REP6-038</a> , table 3.1)		
	Reduced costs to the End Consumer as required by the Electricity Act, 1998	Costs of 30km of Underground Cabling with Capacity to Carry Power plus the additional substations. Increase of costs to the End Consumer, the Consumers, by £904m, based upon available published evidence (REP2-064) compared with current cost project estimates (REP5-014 and REP5-016) which indicate a total cost for both projects of £1.4bn.	Saving of £904m to the end Customer - after allowance for the work to place new substations at Hillhouse. (REP2-064)	None
	The key components of the Transmission Assets for both the Morgan Offshore Wind Project and the Morecambe Offshore Wind Project include the Offshore Transmission Cables, the Landfall Sites and Junctions and the Onshore Elements of the Export Cables. A key feature was the shared consent process, the shared corridors for connections and shared substation in the original plan (AS-024)	We now have two separate, potentially sequential projects, separated by an undefined period of years with a maximum of four, as defined by the current draft Development Consent Order (or longer if the proposed linkage to the offshore windfarm DCO dates is adopted). This increases the project overall duration; maximises the nuisance created and prevents an orderly recovery to normal use as the land remains under development or recovery actions for very extended periods ( <a href="#">REP6-158</a> )	Onshore arrival at Rossall avoids offshore maritime protected areas. Uses limited Green belt with an approved DCO for a road access to Hillhouse north entrance or could skirt the Green belt boundary to the south. Space available for SQSS compliant substations and all power control and safety systems. Transmission would be via the existing 400kV National Grid circuit between Heysham and Penwortham and the 400kV Tee that currently supplies Stanah, which is adjacent to Hillhouse. Careful engineering design would ensure no substations are needed at Penwortham, saving a CA process there.	None

Site Selection and consideration of alternatives	Sites determined by the HNDR process, which identified the area to the South of Blackpool Airport for coming on shore and Penwortham for the National Grid Connection (Reference: Pathway to 2030 Holistic Network Design - July 2022)	Requires the crossing of Marine Protected areas offshore, and the Ribble & Alt RAMSAR site in two places. Disturbance of protected onshore sites at St.Annes-on-Sea, the coastal dune system, Lytham Moss, Freckleton, Kirkham & Clifton greenbelts, Clifton and Lea Marshes. Sites two large substations in the greenbelt. Compulsory Acquisition of additional space at Penwortham, which is quite tightly constrained by existing developments.	By coming ashore at Rossall, all marine protected environments are avoided. Would allow all substations to be located at Hillhouse, where there is space available and a willing site owner. Utilises the existing National Grid Transmission Lines that currently run from Stanah substation (a distribution unit, currently) to Penwortham via a modern 400kV SQSS compliant circuit. Avoids all onshore sites of concern and avoids the Compulsory Acquisition of additional land at Penwortham that would otherwise be necessary to accommodate all the required new infrastructure.	Requires an HDD installation in a straight line from Rossall Beach to the Hillhouse TEZ or with two bends to avoid the Green belt.
Consultation	Application has followed the defined process	Process has been very poorly applied and local inputs have either been ignored or discounted either because they were not understood or not listened to. See recent representations at ISH4. Despite early verbal meetings suggesting the alternative, prior to DCO, this has never been considered properly. These meetings were unclear as to the need for written consultation input. All such representations were greeted with hostility, on this aspect. (REP6-158)	Not tested	Not tested

Onshore Ecology and Nature Conservation		Permanent damage to farmland currently used for grazing and milk production. There have been long discussions around the impact the development will have on drainage, and the Applicant has not taken account of the <b>Vadose</b> regime in which the proposed cable routes will be sited. Displacement of migrant bird populations, protected species from the normal winter-feeding grounds to areas that have the potential to increase the risk to the local aviation activities on the Fylde. The proposal raises concerns regarding impacts on Bird strike risks especially with the Warton Aerodrome, where normal operation involves low-level, high-energy manoeuvring of military fast jets under development and test. ( <a href="#">REP6-158</a> )	Limited BNG requirements to be met due to use of existing infrastructure. The bird strike issues are eliminated entirely, as are the needs for taking large areas of greenbelt. Redevelopment of Hillhouse TEZ would provide a major benefit by helping to overcome the existing contamination issues at the site and locking this material away permanently beneath the development. The site already has special planning powers, as a TEZ, and has the environmental assessments of the status available.	None
Historic Environment	None	Puts a historic Grade 1 Listed building at risk, at Savick Brook.	Cleans a historically contaminated brownfield site locking the contamination such that it cannot be further nuisance	None
Landscape and Visual Resources	None	The "temporary" construction areas will leave a significant scar for typically between 7 to 30/40 years, due to the chosen method of build and the time taken for habitats to be restored. The development will leave 2 substations of currently unknown design with no visualisations provided, at two widely visible areas of the Fylde, currently the greenbelt between Freckleton, Kirkham and Newton & Clifton. The long-term	Avoids all the negative impacts of the current proposal by use of existing infrastructure.	None

		impact of trenching is not fully understood, the underground cables will run at around 90°C, which is expected to produce a permanent effect on soil structure and the resultant ecology.		
Socio Economic & Land Use	The Applicants have presented a Development Plan to support business and education facilities with additional training and apprenticeships, together with an estimate of the levels of employment expected to result.	The plans cover temporary employments associated with the construction phases of the project. With most of this being supplied by contract organisations, it is unclear how much will be local to the area or what duration this would generate. There is no guarantee of stable employment into the future.	Hillhouse houses a number of high-tech companies engaged in advanced manufacturing techniques for parts for the Health Industry and Aviation Manufacturers, both of whom supply parts across the world. These businesses are keen to expand. The site is also designated as a site for the manufacture of green hydrogen, for which the local deposits of Halite are a key resource, as would be the ability to use locally supplied power from wind farms. The pairing of wind farm energy and a green hydrogen plant offers the possibility of balancing the variability of wind with a long-term power source from the hydrogen. A further advantage is that this would negate the need for Curtailment Payments if the National Grid cannot cope with any excess power.	We understand that the lack of available renewably sourced power on the site is threatening some 2500 existing jobs. Failure to adopt this option puts the whole future of the area of North Lancashire at economic risk and subsequent harms of employment and skills loss.

Hydrology and Flood Risk	None	The development is planned to cut through a number of zones designated at Risk Categories 2 and 3 at present, with the latest EA evidence showing these risks will increase significantly over the coming years. Much of the area sits over a vadose zone where the water saturation levels are dependent on weather and tide conditions. Indeed, much of the Fylde marsh areas are subject to continual movement and circulation with considerable variation in the periodicity of these motions, as illustrated by appearance and disappearance of various wartime wrecks which were dumped into the Ribble marshes, which do periodically re-appear on the surface. (REP6-158)	The flood risk on the River Wyre is well understood and Hillhouse is protected accordingly.	None
Traffic and Transport	There are no direct or indirect benefits from the Application	There are both direct and indirect that result from the planned activities. The direct harms are the potential damage to the access routes, the creation of inappropriate access routes (some of which have been recognised following protest and removed or revised). There are issues relating to temporary traffic controls which will be necessary now that the Applicant has deleted the option of road closures. There will still be disturbance and inconvenience created. There are impacts on public rights of way at all levels, all of which impact adversely on the operations of the local community and it is clear that there	Access to Hillhouse is via direct connection to A class roads, with new road proposed for access to the site northern end. Should the adjacent railway be re-established, as was planned for in the near future, this could offer further benefit in terms of site access as there was a freight siding there in the past.	None

		are still ongoing issues with the Applicant over their demanded rights, which are deemed excessive and inappropriate (See CAH3, for example) ( <a href="#">REP6-158</a> )		
Noise and Vibration	None	Issues due to the construction and installation, with the residual noise from the substations once operational being forecast to be around 30dB above ambient level 24 hours a day. This has been raised because of the impact on nearby residents and particularly the schools. Some children may experience their whole school life in the presence of intrusive noise and vibration. ( <a href="#">REP6-158</a> )	None	None



## ANNEX 2 – PLAN SHOWING ALTERNATIVE CABLE ROUTE AND BOUNDARY OF HILLHOUSE TECHNOLOGY ENTERPRISE ZONE

The alternative cable route is shown in purple and can be seen to be 2km in length given the Ordnance Survey light blue 1km grid lines; an alternative and slightly longer route skirting the Green Belt is shown to the south. The boundary of the Hillhouse Technology Enterprise Zone is in blue, and the Walney substation in light green and the Stanah substation in dark red are shown to the south.

