MERCURY RENEWABLES

(CARROWLEAGH) LIMITED

FIRLOUGH WIND FARM, CO. MAYO

AND

HYDROGEN PLANT, CO. SLIGO

RESPONSE TO INSPECTOR QUESTION No. 8(a)

'WORST CASE SCENARIO'

PLANNING APPLICATION REFERENCE ABP-317560-23

March 2024

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1. INTRODUCTION

Inspector Question No 8a States:

9.EIAR

8 (a) Please confirm that in a worst-case assessment for each chapter, (save for Chapter 8, which already provided this) to demonstrate that mitigation measures are sufficient in such circumstances.

EPA guidelines 2022 definition of worst case:

Where uncertainty arises then an EIAR needs to describe the 'worst case' scenario of the accumulation of effects that could arise from these other projects.

Clarification was sought from the Board which stated;

"'Worst Case Scenario' is where there is an accumulation of effects, so that it can be demonstrated that the mitigation measures can cope with the worst eventuality. So, for example in traffic, the worst case is that there is more than one large wind farm project using the same road system at the same time. It may not apply for all topics, but if that is the case then it can be clarified that the worst-case scenario does not arise."

Worst Case Scenario in the case of the Project

The Worst Case Scenario in the case of the Project has been defined as:

The construction of the Wind Farm with the largest turbines within the turbine envelope, the Grid Connection, Interconnector and the full Hydrogen Plant capacity being built in a single phase, and coinciding with any of the projects listed in Appendix 2.3 of the EIAR; List of projects for Cumulative Assessment. While there are no large scale projects identified, there are two single (separate) wind turbine projects and a grid connection.

The below table outlines the worst case scenario impact on the EIAR topics. It includes the mitigation to prevent and/or limit impacts and the residual impact that remains. The table shows that during the worst case scenario as outlined above, the impacts on the various technical topics is not significant.

Chapter	Worst Case Scenario	Mitigation Measure	Residual effect
Chapter 2 Project Description	The construction of the Wind Farm with the largest turbines within the turbine envelope, the Grid Connection, Interconnector and the full Hydrogen Plant capacity being built in a single phase and coinciding with any of the projects listed in Appendix 2.3of the EIAR; List of projects for Cumulative Assessment. While there are no large scale projects identified, there are two single (separate) wind turbine projects and a grid connection.	NA	NA
Chapter 4: Population and Human Health	Under the worst case scenario additional construction traffic has the potential to cause an accumulation of effects in relation to tourism events and peak hours.	Prior to the commencement of works, a schedule of works will be prepared to avoid clashing with tourist events. The transportation of abnormal loads will be programmed to avoid peak hours on the road network, thus reducing delays and disruption, and avoid peak tourist periods or events where practicable, for example during the Bunnyconnellan Agricultural Show. Prior to construction and once the Contractors have confirmed their suppliers, the TMP will be updated in consultation with Sligo County Council and Mayo County Council and An Garda Síochána as necessary.	The assessment has not identified any likely significant effects from the Project on population and human health.
Chapter 5: Terrestrial Ecology	Under the worst case scenario, peatland habitat at the Wind Farm Site and other projects located on peatland will be lost. At the Wind Farm Site, past and ongoing turbary activity has reduced the original area of intact blanket bog to a small proportion of what was once present. The majority of the affected habitat, approximately 15.23 ha, is cutover bog, with 0.49 ha of high bog.	Mitigation by design has avoided areas of intact peatland where possible. As habitat loss cannot be mitigated, the loss of bog at the Wind Farm Site will be offset through a Biodiversity Enhancement and Management Plan (BEMP). The BEMP is presented in full in Appendix 5.4.	While the project will result in the loss of an estimated 0.49 ha of relatively intact high bog, an adverse effect rated as of Moderate Significance, and the loss of 15.23 of cutover bog, an adverse effect also rated as of Moderate Significance, the loss of bog will be off-set by the implementation of the Biodiversity Enhancement and Management Plan which will preserve and enhance an area of 10.6 ha of blanket bog.

Chapter	Worst Case Scenario	Mitigation Measure	Residual effect
	Under the worst case scenario cumulative habitat disturbance impacts could occur should the construction phases of the Project and other projects in the vicinity overlap.	Restricted access to bog At the commencement of works, for each of the turbine locations the required work footprint on the bog will be identified and the area will be marked by a rope fence (using wooden poles) and with appropriate signage. No construction activities will be allowed outside of the agreed work area for the duration of the construction period. The ECoW will inspect the site regularly whilst works are on-going. Excavated peat and subsoil will be removed to the approved deposition area(s), with no storage of peat or any other materials on the adjoining bog areas. The rope fences will remain in place until the works are fully complete. The above is of especial importance at the sites of turbines T3 and T9, which impact areas of high bog, as well as at T1, T10 and T13 which adjoin or are very close to areas of high bog. Protection of high bog The work areas at turbines T3 and T9 will impact areas of high bog. To minimise disturbance from plant machinery, bog mats will be used over the surface where tracking is likely to take place. The use of bog mats is a proven (yet simple) technique that is highly efficient in reducing the impact on the bog surface. Re-vegetation of bare surfaces at work areas An ecological objective is to minimise the area of exposed peat surface and to encourage rapid re-vegetation of disturbed bog surfaces. This will be achieved by the removal of the vegetated bog surface within the work footprint, the storage of this material, and subsequent re-use around the turbine and hardstand margins.	With mitigation measures implemented in full to minimise disturbance to high bog and cutover bog adjoining the work areas, the significance of the disturbance effect can be reduced from a Moderate effect to a Slight effect of medium-term duration.

Chapter	Worst Case Scenario	Mitigation Measure	Residual effect
		First, suitable areas within the site will be identified where the removed material can be stored for the duration of the works or until needed – it is noted that such areas will not be on other vegetated bog surfaces but rather areas of bare or sparsely vegetated peat. Also, it is important that the selected storage areas will not be prone to disturbance for the duration of the required storage period. Two approaches will then be used to 'save' the surface vegetated material. Where practical, the surface will be cut-out as sods or 'turves' to a depth of approximately 20-30 cm using a dumper/digger with a bucket. Care will be taken to keep the turves as intact as possible and the vegetated side upwards (though this is not always possible). The turves will be loaded to a trailer and transported to the pre-identified storage area. The turves will be off-loaded from the trailer and placed side by side and vegetation side upwards. They will be placed in single layers, i.e. not piled on top of each other. Alternatively, where the cutting out of turves will not be practical due to shallow peat or an undulating surface from past turbary, the surface vegetated areas will be scrapped off and removed to storage areas where piles will be formed until ready to re-use when works are complete. Such material will contain root and rhizome material, as well as a seed bank. Should storage of the above materials be for prolonged periods (months), the stored turves and peat piles will need to be watered during dry spells. When ready for placement at the finished turbine/hardstand, the turves or peat piles will be lifted with a dumper and bucket and taken to the destination.	

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		Here they will be off-loaded and placed side by side on the disturbed bog surface with vegetation side up. The turves will be bedded in with the bucket of a dumper so that they form a continuous layer without gaps between them. This approach will provide almost immediate cover of the bare surfaces. Alternatively, the surface peat material from the stored peat piles will be spread over the bare surfaces. All of the above processes will be monitored by the ECoW.	
Chapter 6: Aquatic Ecology	Under the worst case scenario, the release of sediment during the construction phase of the Project and other projects in vicinity could cumulatively negatively impact water quality.	The design principle of maintaining set-backs of 65m for turbines and associated infrastructure from watercourses and utilising existing access tracks within the site will be implemented. Surveys by the ECoW will be carried out along with review of all construction methodologies prior to construction to ensure compliance with all specified mitigation in terms of design and avoidance of impacts on downstream ecology. Sustainable Drainage Systems will be implemented prior to the construction works. Method statements for the watercourse crossing culverts will be prepared and submitted to inland Fisheries Ireland for prior approval. In order to verify the efficacy of pollution prevention and mitigation works during construction, Water Quality Monitoring will be undertaken prior to, during and post completion of construction works in accordance with the parameters and schedules as set out in the Water Quality Management Plan. Monitoring will be undertaken in all watercourses within the catchment of the construction area. Monitoring will be overseen by an independent Environmental Consultant and	It is considered that with the proposed mitigation successfully implemented, the proposed project will result in an overall negligible residual impact upon the aquatic ecological features that lie within the Zone of Influence.

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		undertaken by the Environmental Manager or by the Ecological Clerk of Works (appropriately qualified and experienced on the required monitoring methods and the use, calibration and maintenance of all monitoring equipment used). The specific monitoring requirements including frequency and parameters, are detailed in the **Chapter 9: Hydrogeology and Hydrology** and in the Water Quality Management Plan. In the event that planning is granted for the proposed development, the CEMP will be updated prior to the commencement of construction to address the requirements of any planning conditions including any additional mitigation measures which are conditioned and will be submitted to the planning authority for written approval. The wastewater arising from the Hydrogen Plant will be treated through constructed wetlands and regulated discharge rates before being discharged to the Dooyeaghny River to the south of the Hydrogen Plant.	
Chapter 7: Ornithology	Under the worst case scenario, peatland habitat at the Wind Farm Site and other projects located on peatland will be lost. At the Wind Farm Site, past and ongoing turbary activity has reduced the original area of intact blanket bog to a small proportion of what was once present. The majority of the affected habitat, approximately 15.23 ha, is cutover bog, with 0.49 ha of high bog. Under the worst case scenario cumulative bird habitat disturbance impacts could occur should the	While habitat loss cannot be mitigated, the loss of bog will be offset through a Biodiversity Enhancement and Management Plan (BEMP). Briefly, the BEMP will preserve and enhance an area of 10.6 ha of blanket bog which has been partly cut. Bird species associated with peatland habitats, including red grouse, merlin, snipe and meadow pipit will benefit. The regrowth of ling heather in the eroded blanket bog habitat would be of particular benefit to the local red grouse population. The present assessment has identified the potential for significant disturbance effects on three breeding	With mitigation measures implemented in full it is considered that the significance of the predicted adverse effects on birds as a result of the Project under a worst case scenario will range from Imperceptible to Slight.

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	construction phases of the Project and other projects in the vicinity overlap.	species of conservation importance as a result of the construction works (see Section 7.4.2.2). These species are red grouse, merlin and snipe. Best available evidence has been reviewed and it is suggested that these species could be disturbed by works, including tree felling, at the following distances: Red grouse 500 m Merlin 500 m Snipe 400 m Should any of these species be recorded breeding within the given distances of the works area through confirmatory surveys before and/or during construction, a buffer zone (using above distances) shall be established around the expected location of the nest (location identified as far as is possible without causing disturbance to the bird) and all works will be restricted within the zone until it can be demonstrated by an ornithologist that the species has completed the breeding cycle in the identified area. Any restricted area that is required to be set up will be marked clearly using hazard tape fencing and all site staff will be alerted through toolbox talks. The above mitigation, as needed, will apply from March to August (inclusive) and will ensure that the works will not have an adverse disturbance effect on the identified species of conservation importance recorded during the baseline surveys or in pre-construction surveys. Confirmatory breeding bird surveys focused on red grouse, merlin and snipe, will take place in the spring/summer prior to construction to establish the breeding status and distribution within the Wind Farm	

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		site to a distance of approximately 500 m from any works area. From the results of monitoring, the likely need for restrictive zones to avoid or minimise the potential for adverse effects on breeding activities will be determined. A range of passerine bird species breed within the Wind Farm Site, including the Red-listed meadow pipit and the Amber-listed skylark and willow warbler. The sheds to be demolished to facilitate the access road to the Hydrogen Plant Site are likely to support breeding species associated with buildings, notably swallow, starling and house sparrow (all Amber-listed), as well as possibly wren. In compliance with Section 40 of the Wildlife Acts 1976 to 2022 as amended, all vegetation required to be cleared to facilitate any works associated with the Project, including tree removal and tree pruning along the Turbine Delivery Route, will be done outside of the restricted period from 1st March to 30th August. Similarly, the sheds will be demolished outside of the restricted period to avoid the destruction of bird's nests. Should it be necessary to remove vegetation during the breeding season, for instance where bramble and ephemeral plant species have become established on ground cleared earlier, this will be surveyed by an ornithologist up to 10 days before any clearance. Should an active nest be located, the area will be restricted from works by a distance where it is considered that the works would not cause disturbance or abandonment of the nest. Such distances, which will vary according to species and local topography, will be determined by the ornithologist. The restriction will be maintained until it is established that any young birds present have fledged. Should an instance arise where	

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		the placement of a restriction would have significant implications for the time frame of the Project, and where no alternative mitigation is available, the ornithologist will prepare a report (to include species, stage of breeding etc.) on the implications of removal of the nest in the context of the Wildlife Acts and consultation will be undertaken with the NPWS. With the above mitigation implemented, the effect of disturbance to nesting passerine species can be avoided or reduced to Not Significant. A requirement for mitigation during the operational phase of the wind farm has not been identified. However, should post construction monitoring identify an impact, such as higher collision rates than predicted for a particular species due perhaps to a change in population distribution since the baseline surveys, mitigation will be considered following best practice available at the time.	
Chapter 8: Soils & Geology	The potential effects of the Project on soils and geology are generally localised so no changes are predicted under the worst case scenario. However, on a national scale soils and peatlands in particular are important in terms of ecological value and carbon value. A cumulative loss of intact peatland is a risk under the worst case scenario.	A process of “mitigation by avoidance” was undertaken by the EIA team during the design of the turbine and associated infrastructure layout for the Wind Farm. This process was also conducted in the design phase of the Hydrogen plant.	Not significant
Chapter 9: Hydrology and Hydrogeology	Under the worst case scenario there would be a number of construction projects occurring in the vicinity of the project at the same time. In the event of accidental or temporary contamination incidents, water quality in downstream receptors can potentially be adversely impacted, particularly during	Contracted operators will draft method statements and risk assessments in line with mitigation outlined in this report and in consultation with relevant guidance Section 9.2.2, prior to commencing works (as part of the watercourse crossing consent application), Relevant guidance referenced here includes:	Considering the mitigation measures outlined in Chapter 9 Hydrology and Hydrogeology and the expected residual effect pending successful implementation of those

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	the construction phase. Such incidents will demand an emergency response on site and escalation of Active Management on site (Appendix 9.7 of the EIAR– Tiles 7-9). Assuming other, similar developments, construction activities and potential adverse impacts in the area, there is the potential for such incidents to have a cumulative impact on water quality to some degree if such incidents occur on multiple sites in a short period of time and within the same hydrological catchments. However, it must be noted that similar sporadic natured impacts are part of baseline conditions at the site, including; land reclamation, excavation of drainage, commercial forestry, agricultural practices. Allowing for worst case whereby a contamination incident occurs, the incident will likely be minor and temporary and therefore will unlikely contribute significantly to cumulative effects in the associated surface water network.	• Inland Fisheries Ireland (IFI) (2016) Guidelines on Protection of Fisheries During Construction Works In and Adjacent to Waters. • Scottish Environmental Protection Agency (SEPA) (2009) Engineering in the Water Environment Good Practice Guide – Temporary Construction Methods • National Roads Authority (2008) Guidelines for the Crossing of Watercourses During the Construction of National Roads Schemes. Any newly installed drain will be fully formed prior to the diversion of existing drainage. All details in relation to monitoring will be included in the Surface Water Management Plan (SWMP). Consultation with relevant stakeholders will be sought prior to the SWMP being reviewed and approved by the planning authority. Prior to commencement of construction, the Environmental Clerk of Works will prepare a register of corrective action and emergency response sub-contractors that can be called upon in the event of an environmental incident, and/or to give training on escalating incident where useful, including e.g., specialist hydrocarbon spill response, specialist hydrological and/or water quality response. A Detailed Discharge & Assimilative Capacity (DACA) and Detailed Water & Wastewater Management Plan will be developed post consent for the Proposed Development incorporating the mitigation and control measures identified, during the detailed design and consenting stage, and prior to construction / operational phase a more detailed assessment of surface water discharge and baseline chemistry will be carried out and	measures i.e. neural impact to receptors, the Proposed Development is not considered to significantly contribute to adverse impacts in the worst case scenario to the associated hydrological network in terms of water quality.

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		more detailed wastewater management plan will be developed. Continuous monitoring through the life of the project will be used to review and update methodologies wherever appropriate on an ongoing basis, that is; the detailed water and wastewater management plan which will be developed prior to the construction phase of the proposed development will be live document and procedures will be amended where relevant based on ongoing continuous and/or routine monitoring.	
Chapter 10: Air and Climate	During the construction phase of the Development and other developments within 20 kilometres of the proposed turbines, there will be minor exhaust emissions from construction plant and machinery and dust emissions from construction activities. In a worst case scenario if any of these developments were constructed at the same time as this Development there will be short-term slight negative cumulative impact on climate due to exhaust and dust emissions.	Wind Farm Site and Hydrogen Plant Site access roads will be upgraded and built prior to the commencement of construction activities. These roads will be finished with graded aggregate which compacts, preventing dust. • Approach roads and construction areas to and on the Wind Farm Site and Hydrogen Plant Site will be cleaned on a regular basis to prevent build-up of mud and prevent it from migrating around the sites and onto the public road network. • Wheel wash facilities will be provided near the entrances to both sites to prevent mud/dirt being transferred from the site to the public road network. • Public roads along the construction haul route will be inspected and cleaned daily. In the unlikely event that dirt/mud is identified on public roads, the road will be cleaned and the wheel wash facility will be investigated and the problem fixed to prevent this from happening again. • During periods of dry and windy weather, there is potential for dust to become friable and cause nuisance to nearby residences and users of the local road network. This requires wetting material and	Not significant.

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		ensuring water is supplied at the correct levels for the duration of the work activity. For example, weather will be monitored so that the need for damping down activities can be predicted. Water bowsers will be available to spray work areas (wind turbine area, Grid Connection Route and Interconnector Route) and haul roads to suppress dust migration. • Vehicles delivering materials will be covered appropriately when transporting materials that could result in dust, e.g., crushed rock or sand. • Exhaust emissions from vehicles operating within the sites, including trucks, excavators, diesel generators or other plant equipment, will be controlled by the contractor by ensuring that emissions from vehicles are minimised through regular servicing of machinery • Ready-mix concrete will be delivered to the sites and no batching of concrete will take place on either site. Only washing out of chutes will take place at the sites and this will be undertaken at designated concrete washout facilities. • Speed restrictions on access roads will be implemented to reduce the likelihood of dust becoming airborne. Consideration should be given to how on-site speed limits are policed by the Site Foreman and toolbox talks should include this. Lower speed limits should be set for traffic on public roads also, to minimise nuisance to the general public. • Stockpiling of materials will be carried out in such a way as to minimise their exposure to wind where possible. Stockpiles will be covered with geotextiles	

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		layering and damping down will be carried out when weather conditions require it. • Earthworks and exposed areas/soil stockpiles will be re-vegetated to stabilise surfaces as soon as practicable. • Methodology statements will be signed off by a suitably qualified Geotechnical Engineer. An independent, qualified Geotechnical Engineer will be contracted for the detailed design stage of the project and geotechnical services will be retained throughout the construction phase, including monitoring and supervision of construction activities on a regular basis. • A complaints procedure will be implemented where complaints will be reported, logged and appropriate action taken. • All construction vehicles and plant will be maintained in good operational order while on-site, thereby minimising any emissions that arise.	
Chapter 13: Materials Assets	Land Use N/A Telecommunications N/A Electricity Network; Under a worst case scenario the construction of the 2 No. Single turbines and the grid connection project could coincide with the construction of the Grid Connection or Interconnector associated with the Project and have a cumulative impact on the Electricity Network.	Mitigation by design and avoidance will minimise impacts on existing electricity networks. • The Grid Connection will be constructed to the requirements and specifications (CDS-GFS-00-001-R1) of EirGrid and in line with the grid connection offer. • Confirmatory drawings for all existing services will be sought upon consultation with ESB Networks. • Immediately prior to construction taking place, the area where excavation is planned will be surveyed by CAT scan (sub-surface survey technique to locate any below-ground utilities) and all existing	Not significant

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		services will be verified. Temporary warning signs will be erected. • The as-built location of the installed ducts will be surveyed and recorded using a total station/GPS before the trench is backfilled to record the exact location of the ducts. The co-ordinates will be plotted on as-built record drawings for the grid connection cable operational phase. • Clear and visible temporary safety signage will be erected all around the perimeter of the live work area to visibly warn members of the public of the hazards of ongoing construction works.	
	Air Navigation N/A Quarries; Under a worst case scenario several construction projects could coincide with the construction phase of the Project and increase the demand for stone materials on local quarries. However given the scale of the other projects in the worst case scenario this is not a significant impact. Utilities; Under a worst case scenario the backup water supply connection to the Hydrogen Plant could be under construction at the same time as other projects in the vicinity. Given that the other projects in the vicinity are generally of a small scale (mainly one off dwellings) this impact will not be significant.	All works to the electricity network will be done in consultation with ESB and EIRGrid. • Existing tracks have been used where possible and the layout was designed to minimise the length of new track required in order to reduce the requirement for such stone material. • Local quarries have been identified to reduce impact on transportation (Please see Chapter 15: Traffic and Transportation). N/A	Not significant Not significant Not significant
Chapter 14: Cultural Heritage	N/A	N/A	N/A

Chapter	Worst Case Scenario	Mitigation Measure	Residual effect
Chapter 15: Traffic and Transport	Under the worst case scenario there would be a number of construction projects occurring in the vicinity of the project at the same time. This has the potential to lead to the accumulation of effects of additional traffic on the local road network. This could be in relation to additional construction traffic including HGVs and abnormal load deliveries required to deliver turbine components. There could also be worst case effects should blades need to be replaced in an operational wind farm during the Project's construction phase or operational phase. However, in the unlikely event of such a scenario the replacement blades would have a 3-4 month lead time and deliveries can be co-ordinated. There is also the potential for a worst case scenario where the decommissioning of the Wind Farm coincides with the decommissioning of another wind farm in the region. This however is unlikely and would be known in advance.	The potential effects of the construction of Proposed Development have been identified as being potentially high but temporary in nature. The following mitigation measures are recommended: • A Traffic Management Plan (TMP) has been developed (see Management Plan 7 attached to the CEMP). Prior to construction and once the Contractors have confirmed their suppliers, the TMP will be updated in consultation with Sligo County Council and Mayo County Council and An Garda Síochána as necessary. HGV trips will be scheduled to avoid times when drop offs and pick-ups generally take place at schools, particularly at Stokane on the L-2604-0. All drivers will be made aware of the location and presence of schools and other sensitive receptors at an induction session prior to construction activities taking place and will be made aware of the speed limits of the various roads on the route which are contained in the TMP. This is to ensure compliance with speed limits and school drop off and pick-up zones. • All significant traffic likely to be generated by the Wind Farm will be during the construction of the Proposed Development and will be temporary in nature. It is envisaged that the construction period for the Wind Farm will span a 21-month period with the underground cable being installed over a concurrent 12-month period. The construction-phase Traffic Management Plan will mitigate these impacts. • Use special transporter vehicles with rear wheel steering in delivery of wind turbine components to ensure safe transportation and manoeuvrability on	Not significant

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		the roads. Extendable transporter vehicles will be retracted on return journeys. • Prior to delivery of abnormal loads i.e. turbine components, the Developer or their representatives, will consult with An Garda Síochána and Sligo County Council and Mayo County Council Roads Departments to discuss the requirement for a Garda escort. • The Developer will confirm the intended timescale for deliveries and every effort will be made to avoid peak times such as school drop off times, church services, sporting events, peak traffic times where it is considered this may lead to unnecessary disruption. • Abnormal loads are likely to travel at night and outside the normal construction times as may be required by An Garda Síochána. Due to the distance between Killybegs Port and the Wind Farm Site of c.148 km, the journey is achievable within a 4-5 hour timeframe and the distance between Galway Port and the Wind Farm Site of c 178 km, the journey is achievable within a 5-6 hour timeframe. Accordingly, locations for resting will not be required. Local residents along the affected route will be notified of the timescale for abnormal load deliveries. • The Developer will lodge a bond with Sligo County Council and Mayo County Council prior to commencement of construction in the amount to be agreed with the Council for the possible repair/upkeep of the roads. During the construction period, these roads will be inspected weekly by the Developer's Resident Engineer and the Contractor	

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		will be instructed to repair any defects within the following two weeks. At the end of the construction period, any further defects will be remedied to the satisfaction of Sligo County Council and Mayo County Council. • Wheel cleaning equipment will be used at the exit to the Wind Farm Site and Hydrogen Plant Site to prevent any mud and/or stones being transferred from site to the public road network. All drivers will be required to see that their vehicle is free from dirt and stones prior to departure from the construction sites. • The sites' entry points will also be appropriately signed. Access to the Wind Farm Site and Hydrogen Plant Site will be controlled by on site personnel and all visitors will be asked to sign in and out of the site by security / site personnel on entering and exiting the site. All site visitors will undergo a site induction covering Health and Safety issues at the Wind Farm Site Temporary Construction Compound and Hydrogen Plant Temporary Construction Compound and will be required to wear appropriate Personal Protective Equipment (PPE) while on-site. • In addition, any dust generating activities will be minimised where practical during windy conditions, and drivers will adopt driving practices to minimise the creation of dust. Where conditions exist for dust to become friable, techniques such as damping down of the potentially affected areas will be employed.	

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		• To reduce dust emissions, vehicles transporting crushed stone will be covered during both entrance and egress to the site. • A survey of the Killybegs Turbine Delivery Route and Galway Turbine Delivery Route will be undertaken prior to commencement to identify if any new overhead lines or broadband lines will need to be lifted along the route to allow abnormal loads such as tower sections and nacelles to be delivered. • During the construction phase, clear construction warning signs will be placed on the L-2604-0, L-5137-0, L-5137-9, L-1102, L-6612-1, L-6612 and L-5136-0 as necessary, which will advise road users of the presence of a construction site and of the likelihood of vehicles entering and exiting the site or road construction areas. This will help improve road safety. • Works on public roads on the Killybegs Turbine Delivery Route and Galway Turbine Delivery Route, Grid Connection and Interconnector will be strictly in accordance with “Guidance for the Control and Management of Traffic at Road Works – 2nd Edition 2010” as well as “Traffic Signs Manual 2010-Chapter 8- Temporary Traffic Measures and Signs at Roadworks”. • Road Closures will be obtained for Grid Connection and Interconnector works on narrow public roads with passing bays available. A number of options are available in some areas for diverting traffic that will allow flexibility during construction. When the Interconnector is under construction on the L-6612, then the L-1102 may	

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		be utilized to divert traffic. For the Grid Connection works within the L-1102 and L-5136-0, passing bays can be utilised. While traffic diversions are in place, local access will be maintained at all times. All access points (domestic, business, farm) will be considered when finalising the proposed road closures and diversions. Additional measures such as local road widening, traffic shuttle systems and 'Stop-Go' systems will also be considered subject to agreement with Sligo County Council and Mayo County Council. Road closures will be scheduled in consultation with local residents and the Contractor shall endeavour to avoid times of high agricultural activity e.g. silage cutting. • The widening/straightening of haul route L-2604-0, L-5137-0 and L-5137-9 is proposed to be completed in advance of road closures. • The L-1102 and the L-6612-1 shall not be closed at the same time i.e. one should remain open while the other is closed. • Road Opening Licences will be obtained for the Grid Connection trench and chambers within public roads as well as for the widening of public roads. • All vehicles using or while in operation at the Wind Farm Site shall either have roof mounted flashing beacons or will use their hazard lights. • A speed limit of 25 km/h shall apply to all vehicles within the Wind Farm Site. • Provide a footpath adjacent to the upgraded carriageway where works are being undertaken. This footpath should provide a safe method of	

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		permitting pedestrians to access the pre-exiting carriageway at the terminations of the works. • Ensure all visibility envelopes are kept clear of high vegetation. • Provide visibility splays set back a suitable distance from the yield line. • Replace the RUS 001 sign with RUS 006. • Provide signage opposite each entry arm. • Provide a uniform radius from the roundabout entry to the exit. • Reinstate any speed limit signs removed by the works. • Replace the RRM017 with RRM001. • Redesign this arm or roadside treatment to enable road users to differentiate this private access from the public ones.	
Chapter 16: Major Accidents and Natural Disasters	Under the worst case scenario there would be a number of construction projects occurring in the vicinity of the project at the same time. Should a Major Incident or Natural Disaster effect multiple construction projects at the same time then an accumulation of effects could occur. However given the separation distances from the other projects and their scale, it is unlikely that any significant effects will occur.	A Major Accident Prevention Policy has been prepared and will be refined prior to commencement of operations. A comprehensive health and safety assessment is required for all major construction projects in Ireland. This would generally be carried out prior to construction by the selected contractor in accordance with legislation. Emergency situations to be planned for within the ERP will be identified through a series of workshops to be conducted by the Developer. These workshops will be held prior to the commencement of construction works at the Project and will be reviewed annually as part of a wider internal audit process. Prior to the commencement of the construction phase of the Proposed Development, a detailed Traffic	Not significant

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		Management Plan will be prepared by the Contractor for agreement with the relevant local authorities and An Garda Síochána.	