



APPENDIX 3-2

**ONSHORE GRID
CONNECTION ROUTE
FEASIBILITY ASSESSMENT**

Grid Connection Options											
	Crag			Fintra Beg Beach			White Strand to Doonbeg Beach			Ballymacrinan	Killard
Approximate Length Onshore	43km	18km	14.5km	36km	19km	17km	25km	21km	20km	<1km	21km
Onshore Routes from Landfall	Road	400kV OHL via Road Network	Off-Road to 400kV OHL	Road	400kV OHL via Road Network	Off-Road to 400kV OHL	Road	400kV OHL via Road Network	Off-Road to Moneypoint Substation	Adjacent to Substation	Local Road to Moneypoint Substation
Technical Constraints	Large length of onshore cabling required for connection into Moneypoint Power Station (~43km)	Short length of onshore cabling required for connection into Moneypoint Power Station. Access to 400kV line along National Road Network (N85)	Short length of onshore cabling required for connection into Moneypoint Power Station	Large length of onshore cabling required for connection into Moneypoint Power Station (~36km)	Short length of onshore cabling required for connection into Moneypoint Power Station. Access to 400kV line along Regional Road Network (R474).	Short length of onshore cabling required for connection into Moneypoint Power Station. Route runs close to adjacent Slievecallar Wind Farm and near Spanish Point Airfield	Short length of onshore cabling required for connection into Moneypoint Power Station. Access to 400kV line along R484, before going off-road and then joining N67.	Short length of onshore cabling required for connection into Moneypoint Power Station. Access to 400kV line along Regional Road Network (R484).	Short length of onshore cabling required for connection into Moneypoint Power Station. Avoids Kilrush	Short length of cable - adjacent to Moneypoint <500m. Onshore limitations are minor, but landfall point within an SAC	Short length of onshore cabling required for connection into Moneypoint Power Station. Avoids Kilrush
Designated Nature and Geological Conservation Sites (SAC SPA, NHA, pNHA)	Routes avoid all Natura Sites, but run close to River Shannon SAC	Route avoid all Natura Sites, but runs close to Inagh River Estuary pNHA	No constraints	Routes avoid all Natura Sites, but run close to River Shannon SAC	No constraints	No constraints	River Shannon and River Fergus Estuaries in close proximity to route.	No constraints	Tullaheer Lough and Bog SAC in close proximity to route	Lower River Shannon SAC River Shannon and River Fergus Estuaries SPA	Tullaheer Lough and Bog SAC and pNHA in close proximity to route
Landscape & Visual Amenity (Local Council Designations)	Heritage and Working Landscape on the Clare Coast	Settled Landscape	Settled Landscape	Heritage Landscape on the Clare Coast	Scenic Route (R474)	Settled Landscape	Heritage and Working Landscape on the Clare Coast	Heritage Landscape on the Clare Coast and Settled Landscape	Heritage Landscape on the Clare Coast and Settled Landscape	Working Landscape, Scenic Route road adjacent to beach	Working Landscape, Heritage Landscape, Settled Landscapes
Ecological Constraints	No constraints	No constraints	No constraints	No constraints	No constraints	No constraints	No constraints	No constraints	No constraints	Article 17 - Estuaries	No constraints
Proximity to Residential Receptors (<100 m)	Dense area of housing particularly near Miltown Malbay, Quilty and Kilrush.	Dense area of housing near Ennistymon.	Housing sparse, can be avoided	Dense area of housing particularly near Miltown Malbay, Quilty and Kilrush.	Dense area of housing particularly near Miltown Malbay.	Dense area of housing particularly near Miltown Malbay, becomes sparse as moves east, can be avoided.	Dense area of housing near Kilrush.	Dense area of housing near Doonbeg.	Sparsely populated, can be avoided	No constraints	Multiple properties located closed to route along local road. Residents would have reduced access during construction of grid.
Archaeology and Cultural Heritage (National Monuments and NIAH sites)	Route avoids SMR sites. Some NIAH sites located in Ennistymon, Miltown Malbay and Kilrush	Route avoids SMR sites. Some NIAH sites located in Ennistymon.	No constraints	Route avoids SMR sites. Some NIAH sites located in Miltown Malbay and Kilrush	Route avoids SMR sites. Some NIAH sites located in Miltown Malbay.	Several SMRs and NIAH sites, can be avoided	Route avoids SMR sites. Some NIAH sites located in Kilrush	Several SMRs and NIAH sites, can be avoided	Several SMRs and NIAH sites, can be avoided	No constraints	Several SMRs, can be avoided
Forestry (Ancient & Native Woodland)	Small section (Feagarroge) near Kilrush - can be avoided	No constraints	No constraints	Small section (Feagarroge) near Kilrush - can be avoided	No constraints	No constraints	Small section (Feagarroge) near Kilrush - can be avoided	No constraints	Small section (Feagarroge) near Kilrush - can be avoided	No constraints	Small section of cable on the Monvana Road (towards Moneypoint) runs adjacent to Ancient Woodland
Hydrology (River and Surface Water Flood Risk)	Multiple watercourses required to be crossed along road network. Loughs avoided	Several watercourses required to be crossed along road network. Loughs avoided	Approximately 2 watercourses to be crossed to access 400kV cable. Loughs avoided	Multiple watercourses required to be crossed along road network. Loughs avoided	Several watercourses required to be crossed along road network. Loughs avoided	Several watercourses required to be crossed. Loughs avoided	Several watercourses required to be crossed along road network. Loughs avoided	Several watercourses required to be crossed along road network. Loughs avoided	Several watercourses required to be crossed. Loughs avoided	Molougha Watercourse runs onto beach, to be avoided	Multiple watercourses are crossed along the road network to Moneypoint. Watercourses have connectivity to Lower River Shannon SAC.
Tourism and Recreation (ProWs attractions and recreational areas)	Have to bring cable through tourist villages and town. Popular beaches for residents, tourists and population along Wild Atlantic Way.	Have to bring cable through tourist town of Lahinch. Popular beaches for residents, tourists and population along Wild Atlantic Way.	No constraints	Have to bring cable through tourist villages and town. Popular beaches for residents, tourists and population along Wild Atlantic Way.	Have to bring cable through Miltown Malbay and along Scenic Route.	N/A	Have to bring cable through tourist villages and town. Popular beaches for residents, tourists and population along Wild Atlantic Way.	Have to bring cable through Doonbeg	No constraints	No constraints	No constraints
Land Use	Road Network	Road Network	Agriculture	Road Network	Road Network	Agriculture	Road Network	Road Network	Agriculture	Road Network	Road Network - will need surveys to determine condition of road and capability of road to hold cables. Looks to be bog ramparts in some places.
Overall Onshore Estimate of Risk for Onshore Route to Substation	Moderate Length of cable required, Proximity to grid connection at Moneypoint main reason why this route is a moderate risk	Low to Moderate Short length of cabling, minor constraints. Route can be reviewed and towns avoided	Low to Moderate Short length of cabling, minor constraints	Moderate Proximity to grid connection at Moneypoint main reason why this route is a moderate risk	Moderate The road network is a Scenic Route as designated in the Clare County Development Plan, however any impacts should be temporary.	Low to Moderate Short length of cabling, minor constraints	Low to Moderate Short length of cabling, minor constraints, on the road network and would benefit from pulling the cable route off road where possible to avoid Kilrush	Low to Moderate Short length of cabling, minor constraints	Low to Moderate Short length of cabling, minor constraints	Moderate to High Route is already not viable due to landfall being located in the Lower Shannon SAC	Low Shortest length of grid connection cabling Avoids local towns and villages